

January 18, 2019

Ms. Mary Ann Tilton, Administrator
NH Department of Environmental Sciences
Water Division, Wetlands Bureau
29 Hazen Drive
Concord, NH 03302

RE: 2018 Draft Wetland Rules – The Nature Conservancy’s Comments

Dear Administrator Tilton:

The Nature Conservancy appreciates the opportunity to provide comments on the latest version¹ of the Draft New Hampshire Wetland Rules (DNHWR) that have been prepared for public review.

The mission of The Nature Conservancy (TNC) is to conserve the lands and waters on which all life depends. TNC is the leading conservation organization with active chapters in every state and in more than 70 countries. We address the most urgent conservation challenges at the largest scale by pursuing non-confrontational, pragmatic, market-based solutions. We have worked with partners, beginning in 1961, to conserve over 290,000 acres of land in New Hampshire. With more than 20,000 supporters in New Hampshire, we are deeply invested in the protection of New Hampshire’s natural resources, including wetlands.

The Nature Conservancy’s Interest in the draft Wetland Rules

TNC is particularly concerned about wetland conservation in the state given the critical services and the associated values (including economic and cultural) these features provide for both people and nature. These services include: (1) helping to maintain clean and abundant water for the state’s residents; (2) reducing the risk of downstream flooding for our homes and communities; (3) maintaining the aesthetic appeal of our landscape and, in turn, contributing to the identity of New Hampshire for residents and tourists; (4) providing recreational opportunities including hiking, fishing, boating, and hunting; (5) serving as critical habitat for our native flora and fauna, including for a suite of species and natural communities that are reliant on these habitats for their persistence; and (6) providing vital nursery habitat for many of our commercial fish species.

We also recognize how vulnerable the state’s wetlands are to stressors associated with human use of our landscape, and the vital role that rules and regulation play in assuring that future generations in New Hampshire have the same opportunities we do; whether it’s drinking clean water or our children swimming in a river free from contaminants, New Hampshire’s wetlands lie at the heart of what makes this state a special place to live or visit. Conversely, looking at other areas of New England makes it clear that long-term conservation of wetlands is not a given. As more people move to New Hampshire and our communities expand, we will continue to see a reduction in our wetland acreage, with many of the remaining areas of habitat showing a reduction in the functions and values they provide. As we lose these critical functions, we will need to look to other more expensive engineered solutions to providing the same services. For example, costly upgrades to water treatment facilities to manage increasingly contaminated source water do not replace the full suite of functions and values, such as recreation, wildlife habitat and flood attenuation, provided by our natural wetland systems.

¹ OLS Notice Numbers 2018-184, 2018-185, 2018-186, 2018-187, 2018-188, 2018-189, 2018-190, 2018-191, 2018-192

Reaction to the Draft Rule Package

The latest draft of the rules offers inadequate protection of our wetlands and the critical functions they provide. The proposed streamlining of the permitting process and expedited approvals for most permits, will increase the proportion of projects that require little to no scrutiny, greatly reducing opportunities for local input from the conservation commissioners and thereby denying the voice of the community; and, effectively reducing the amount of oversight by increasing the reliance upon BMP's largely crafted by those submitting applications, and hence the stakeholders that will benefit from fewer regulations and oversight of their actions. It was made clear at the beginning of the current rule making process that the new rules should not change the jurisdiction of current law, but, the proposed lower scrutiny rules clearly reduce wetland protections.

The proposed wetland rules are extremely difficult to follow, particularly where there is frequent use of cross-referencing. This is particularly true in Chapter 900. Not only does this limit the ability of an applicant to understand the process, but it represents a challenging barrier to local authorities such as town Conservation Commissions in interpreting and supporting the regulatory process.

We fully recognize the challenge of carefully balancing protection of our natural resources with allowing continued economic growth in the state. Moreover, we believe that in many cases these two objectives are not mutually exclusive, i.e. through responsible planning and appropriate regulatory oversight, we can facilitate economic growth without degrading our natural resources. However, striking this balance requires that our state wetland rules guarantee sufficient scrutiny for proposed development to avert wetland loss and degradation.

We understand the need for the state's wetland rules to be clear and not overly-burdensome for applicants, and the pressure the Department is under to minimize the regulatory process through approaches such as expediting permits. However, we firmly believe that requiring applicants to provide sufficient information for a comprehensive evaluation of the project and allowing department staff and local municipalities the time needed to carefully review applications is essential for projects that have the potential to damage our natural environment and degrade critical shared water resources into the foreseeable future. As articulated in our comments, we believe that the current draft revisions to the wetland rules moves too far towards minimizing the requirements of applicants, with this emphasis coming at the expense of our natural resources.

We remain very concerned that the current draft rules, with few exceptions, are inadequate to protect our wetland resources and that they remove many of the checks and balances that historically protected against undue wetland losses and impacts. For example, the emphasis to streamline the process has resulted in rules that will reduce the burden of protection on the developer while simultaneously eliminating the ability of communities, through conservation commissioners, to have a say in the possible impacts. Our conservation commissioners are the only local voice with the power to review applications to the Wetland Bureau and intervene if necessary. Yet, a critical consequence of the changes found in the draft rules is to remove the ability of conservation commissions to review and respond to many permit applications. The revised rules effectively remove the voice of the people and eliminate scrutiny for impacts to the resource and public good. We strongly support requiring that applicants for standard permits consult with the local commissioners at a minimum of 30 days prior to filing for a permit. In effect, the rules have removed oversight for the permitting process and ill-conceived projects will be shuffled through the system with little regard to their local and regional impacts.

We steadfastly believe that every restoration project should be developed in consultation with the NHDES and classified as CAT1. The rule making committee is missing an opportunity in this process to create a separate, and more appropriate, permitting process for restoration projects. Given that the intent of

restoration is to provide the greatest ecological improvement possible, these projects are often located near rare, threatened or endangered species or exemplary natural communities. By considering these projects using the same criteria as other wetland applications, there appears to be a risk that criteria designed to avoid wetland impacts may serve to discourage restoration.

Below we provide specific comments relating to individual chapters of the wetland rules. Some of the issues we outline below were surfaced in our previous comments submitted to the agency (April 20th and September 7th 2018), but remain unresolved in the revised draft rules.

Chapter 200

This chapter details the procedures and requirements for hearings, appeals and waiver requests. The granting of waivers needs to be more transparent and requests for waivers should not be granted during the pre-application process. Public notices should be required for all waiver requests and all waivers requested and granted should be included in the actual permit.

- Env-Wt 204.05(a)(2): The public and environmental benefit of a rule should not be outweighed by the economic or operational costs to an applicant. While we understand that there are costs to applicants to be in compliance with the rules, the purpose of the state's wetland laws and regulations are to first protect the resource. The operational costs to an applicant to comply with rules should not outweigh the public's interest to protect the resource. Further, the rules do not provide requirements or an explanation for how the Department would decide between public and environmental benefits vs. applicant costs to provide a waiver to the rules.

Chapter 300

This chapter details the requirements for obtaining permits and other authorizations including identifying which activities/projects require a permit, what type of permit is needed for different levels of scrutiny, and what information needs to be included in a permit application. Overall, we have some concerns regarding the review time, process, and breadth of projects proposed as eligible for a Statutory Permit by Notice or streamlined review process (Lower Scrutiny Approvals and Expedited Permits)

- Env-Wt 307.06(h): In regard to the limitations on tidal dredging, we request that if the site is known to be a recruitment site for oyster spat that the site-specific date be adjusted to include June 1-September 15th to accommodate oyster recruitment and spat development.
- Env 307.13(b): As a land owner, we do not support the reduction of setbacks to abutting property from 20 feet to 10 feet. Despite the best of intentions, dredging, filling or construction activities can and often do have effects on the surrounding landscape. Requiring that applicants provide written approval from an abutter before undertaking these activities within 20 feet of a property line seems a minimal requirement. 10 feet provides insufficient distance.
- Env-Wt 308.05(b)(2): We would like to see a requirement that non-state-agency applicants for Statutory Permits-by-Notification (SPN) document relevant BMP's and provide a brief narrative description of how these are incorporated in their design as part of the application. We do not believe the current requirement for applicants to simply affirm they are aware of, and will adhere to, relevant BMPs is sufficient. One reason we believe requiring this information is important is the inclusion in the rules of repair or replacement of culverts or stream crossing structures up to and including 48" in diameter as an activity eligible for SPN (Env-Wt 308.04(f)). Put simply, this allows inclusion of large-scale and potentially important projects as SPN without the level of stringent review found in standard permit applications. The current application process puts the

burden on NH DES to ascertain if a project conforms with all applicable requirements. Our concern is that, given the intent of the SPN process and limited resources at NH DES, staff may not have the time to adequately review BMP's vis a vis project design, thus may defer to seeing a check mark from the applicant affirming adherence to BMPs as sufficient for project approval. Requiring the applicant to document this information places the burden on them, and greatly increases the likelihood that BMP's will be followed.

- Env-Wt 309.06 and throughout: If it is to be used as the principle reference guide for applicants, we would like to see the BMP manual "Best Management Practices for Routine Roadway Maintenance Activities in New Hampshire" explicitly discussed and incorporated in design criteria – including increased precipitation as a consequence of a changing climate. There is abundant evidence that not only will NH experience more severe storm events, but that the consequences for existing aquatic infrastructure and surrounding areas can be severe. Inclusion of specific recommendations for incorporating climate change in design criteria would be benefitted by broadening the authorship of the BMP manual to include those with specific expertise in this field, for example academic partners at the University of New Hampshire

We would also like to require that SPN applicants for the repair or replacement of culverts or stream crossing structures as specified in 308.04(f) are required to consult the NH Aquatic Restoration Mapper and ascertain: (1) if the relevant structure has been assessed as part of this program; and (2) affirm, or more preferably provide relevant data, indicating that if the structure has been assessed, it has been found to have at least a "mostly compatible" Geomorphic Compatibility Score, and not be a complete barrier to aquatic organism passage. This requirement should be included under 308.05(b)(2). If either of these criteria are not met, we do not think repair or replacement should be allowed as SPN, with this rule needing to be clarified in 309.06 and the BMP manual.

- Env-Wt 309.08(b): The deadline of 5 calendar days for applicants to submit completed notification forms for Routine Roadway and Maintenance Activities to the local governing body and to the municipal conservation commission prior to commencement of the work is completely insufficient. We understand that the intent of Statutory Permits-by-Notification (SPN) and Lower Scrutiny Approval is to expedite the review process and reduce the burden on applicants for well-designed low-impact projects. Furthermore, we understand that NH DOT and NH DES have co-authored a comprehensive list of BMP's in the form of the "Routine Roadway Maintenance Activities in New Hampshire". However, municipalities play a vital role in helping to protect New Hampshire's wetland resources and have local knowledge and considerations that should be accounted for in the review process. New Hampshire has delegated considerable authority to local municipalities, while recognizing that many small municipalities have limited capacity to administer this authority. For local municipalities to have any opportunity to play their role in protecting natural resources including wetlands, they need sufficient time to review information, meet as committees, and respond. In the case of SPN, we recognize that there is not a requirement for approval by local municipalities. However, it is in the Department's best interest to ensure that they can learn of any potential impacts from an SPN application for routine activities before they occur. We recommend requiring applicants to submit completed notification forms to local municipalities at least 30 calendar days prior to commencement of work. This does not seem an overly burdensome request, particularly given the scale of some of these routine projects eligible for SPN applications including culverts up to 48" in diameter.
- Env-Wt 310.02: We are concerned that the requirement for the Department to review expedited applications for completeness and compliance within 10 working days of receipt and provide notification of denial within one working day place an undue and unrealistic burden on the agency

and may lead to projects being approved when they shouldn't be. Furthermore, any chance of this being an effective approach will be further diluted without increases in monetary and human resources available to the agency. We understand that only CAT1 projects are eligible for expedited review, but this still encompasses projects that have the potential to impact wetland resources. Unless the Department is provided with the additional resources necessary to handle the predictably large volume of expedited permit requests, we cannot see how this process will ensure resource protection.

- Env-Wt 310.09(c): We strongly support the requirement that applicants for standard permits consult with the local Conservation Commission at least 30 days prior to filing. Not only will this expedite the review process by addressing potential concerns prior to filing, but it will also lead to better environmental outcomes.
- Env-Wt 311.07(b)(1): Not clear what “water-dependent” means in this context
- Env-Wt 313.03(b): We appreciate the elevated protection through the presumption of no need for impacts to salt marshes and other tidal wetlands, bogs and freshwater marshes, and other special resource areas.

Chapter 400

This chapter sets forth the criteria for delineating and classifying jurisdictional areas; and the criteria for classifying the various kinds of projects that impact jurisdictional areas.

- Env-Wt 407.02(m). Add reference to SLR, storm surge, and flood risk per language included in Chapter 600.
- Env-Wt 407.03 and 407.04: We would like to ensure that in-stream habitat restoration projects undertaken with the supervision of NHFG are encouraged through the draft rules. It appears that a “chop-and-drop” project such as the effort on Nash Stream led by Trout Unlimited and the NHFG would classify as a tier 3 project, which would likely have made the project untenable. It is our understanding that these types of projects would need a Project Type Exemption to be eligible for a lower level of scrutiny in the review process.

Chapter 500

This chapter establishes project-specific requirements for non-coastal areas.

- Env-Wt 514.02(b)(1): We are concerned about the inclusion of “an abnormal event such as flooding” as justification for projects looking to reclaim land lost to erosion through the use of hard-scape methods of bank stabilization. While the frequency and severity of flood events in New Hampshire has been influenced by human activity in the form of anthropogenic climate change, attributing any one flood event to this cause is not possible. Flooding is a natural and beneficial aspect of many wetland/riverine systems, as is a dynamic process of erosion and deposition, particularly in our rivers and streams.
- ENV-Wt 525.05 (a) (1): As currently written, the draft rules would prohibit The Nature Conservancy and the University of New Hampshire from applying and holding permits for restoration projects. For more than a decade, The Conservancy and The University of New Hampshire (UNH) have been working with local, state and federal partners to restore acres of oyster reefs in the Great Bay Estuary. These activities are designed to improve water quality and restore critical habitat in an important natural system. Both The Conservancy and UNH have the technical, scientific and organizational expertise to conduct, and be held responsible for these

restoration activities. We would ask that the language of this section be amended to allow both TNC and UNH to be eligible to apply for permits. Our suggestion for amended language would read: Receives financial support and direct supervision of a New Hampshire state agency, the US Environmental Protection Agency, the US Army Corps of Engineers, the US Natural Resources Conservation Service, the US Fish and Wildlife Service, *The University of New Hampshire*, or *The Nature Conservancy*;

- Env-Wt 529.02(b): The term “significant wetland function” is not defined in Chapter 100, except in the context of a “Significant function wetland”; we presume that the functions that convey the latter definition as described in Env-Wt 103.54 are those considered “significant”, but this is not clear. We would like to see as clear and non-subjective a definition as possible of significant wetland function. We would also like to see cumulative impacts considered in assessing loss in wetland function/values as in section 313.02(g)(6) "The cumulative impact that would result if all persons owning or abutting a portion of the affected jurisdictional area were also allowed to alter the jurisdictional area in proportion to the extent of their property rights".
- Env-Wt 529.04(b): We do not believe that the department should grant a permit to new residential or commercial development occurring in 100-year flood zones, particularly given the increased frequency and severity of flooding we are experiencing due to anthropogenic climate change.
- Env-Wt 529.04(f): Given the critical importance of ensuring water quality protections, we would prefer that this section of the draft rules provide greater specificity in terms of the width of setbacks and the types of water quality protection measures required to protect private and public drinking water supplies, source water protection areas, and fisheries. We suggest requiring applicants to refer to the High Priority Water Supply Lands (HPWSL) data being developed by the drinking water and groundwater bureau.
- Env-Wt 529.04(g): We would like to see inclusion of an additional sentence regarding migratory pathways along the lines of “Particular attention should be paid to avoiding placing roadways associated with residential or commercial development that run between adjacent wetlands or bisect wetland and upland habitat. Roads/driveways in these locations are known to lead to high mortality of migrating wetland species such as turtles and amphibians”.

Chapter 600

This chapter pertains to protection of New Hampshire’s coastal lands and tidal waters/wetlands. Overall, we felt that this chapter represented a progressive view towards conserving the public trust, public health and safety, and natural resource functions of coastal New Hampshire, particularly through explicitly considering Sea Level Rise (SLR), a potential increase in the frequency and severity of storm surges, and a similar increase in flood risk. However, we suggest the department review language throughout this chapter for consistency (for example, some sections reference sea level rise, whereas others consider this factor as well as storm surges and flooding resulting from 100-year storm events; in most places, all three of these factors could be appropriately referenced).

- Env-Wt 603.05(b): We suggest specifying the sea level rise scenarios applicants should use.
- Env-Wt 603.06: We suggest the department consider having GRANIT set up a landing page for coastal wetland permitting that only displays the requested layers, or only show the paths to the requested layers, not all layers. Also, the reference to 603.04(b)(1) is a circular reference. 603.06 references layers, not maps.
- Env-Wt 603.08(a)(3): We suggest changing the language regarding the requirement to reference SLR in the Project Design Narrative from “(3) Acknowledges or addresses predicted sea level rise” to “identifies how the project will accommodate predicted sea level rise and avoid damage from storm surges and flooding resulting from a 100-year event.”

- Env-Wt 610-05: We see requiring a standard permit for bio-installation such as living shorelines and oyster reefs compared to classification of in-kind replacement of hardened shoreline structures per Env-Wt 610.04 as minimum impact as providing a disincentive to the former. We suggest categorizing bio-installation projects developed in consultation with NH DES staff as minimum impact project.
- Env-Wt 610.03(b)(2): We appreciate the requirement that projects in sand dunes shall comply with local and regional resiliency planning ordinances and guidelines but suggest that the rules either reference a digital repository for these resources maintained by NH DES or provide examples of key resources.

Chapter 800. –Chapter 800 details the rules governing wetland mitigation. In general, we feel these rules are well-crafted, with the following suggestions for modification:

- Env-Wt 801.03: On-site mitigation should not just be practicable, it should be effective in replacing and/or restoring lost functions and values. We want to discourage non-meaningful mitigation efforts on-site that are more cost-effective for the applicant.
 - a. We suggest requiring the applicant to solicit mitigation projects first from the municipality in which the project is proposed, then in downstream communities that will be affected by the impacts, followed by upstream communities that protect downstream communities. This would more directly link mitigation to the affected communities and watersheds, and encourage applicants to consider how site-level impacts have broader consequences.
- Env-Wt 803.02(b)(3): need to revise from a singular "a functional value" to "functional values". Though not seemingly a meaningful change, someone could argue that the rules only require a mitigation package that replaces only one of many lost functions and values.
- Env-Wt 803.03(a)(3): The meaning of "Geography in.... the project area"—is unclear; this language could relate to extent in acres/SF or location and should be clarified.
- Env-Wt 803.06(a): Consider adding: "(3) is located within a priority area from a statewide or regional conservation plan." A list of recognized conservation plans is maintained by the Wetland Mitigation Program. This could also be added to 803.09(a). And under (b): As referenced in our feedback on 801.03(a) above, we suggest encouraging applicants to look not just within the town but in the downstream watershed that will be impacted by the proposed project.
- Env-Wt 803.07(b): The language in this section should be edited for clarity. Does this mean that the department does not require the applicant to exceed the ratios but will accept mitigation proposals that do? It needs to be clear that mitigation is required to at least meet the mitigation ratios, as referenced in 803.08(a) and (b).
- Env-Wt 803.07(c): It's not clear if the rates for wetland and stream construction include five years of post-construction monitoring costs. We believe they should, since ARM funded projects require monitoring and should be able to fund that work. If not, the effective mitigation to impact ratio is diminished and we will not achieve in-lieu fee mitigation goals that should come out equal at the very least.

Chapter 900

This chapter covers the rules governing stream crossings and the certified culvert maintainer program. In general, this chapter would benefit from editing for clarity; the frequent use of cross-referencing makes it difficult to follow the rules. We are also concerned regarding the lack of consideration for an increase in the frequency and severity of large precipitation events in the current rules. While Tier 1 crossings are required to meet a 50-year design storm, and Tiers 2-4 a 100-year 24-hour design, we could not readily find what data the applicant or PE was required to use to draw these determinations. Moreover, the NH Stream Crossing Guidelines (page 9, section 1(f)) acknowledge expected trends with climate change, but provide no further information. Given that this document is referenced as providing guidance to applicants for stream crossings, this omission is challenging. We were pleased to see recognition of the need for particular care in undertaking tidal stream crossings through the classification of such structures as Tier 4, and the associated requirements for applicants governed by this classification.

- Env-Wt 901.03(e): We are concerned about exempting low-impact stream crossings for access to a property for single-family residential property or building lot without understanding the definition of low-impact in this situation.
- Env-Wt 902.25: The definition of “Self-mitigating” is confusing. We suggest clarifying the definition. We also have some concerns regarding providing an open-ended definition of what amounts to self-mitigating measures or features (i.e. the use of “...include but are not limited to...” and suggest providing an inclusive list of the types of approaches that would meet this requirement.
- Env-Wt 903.01 (a) Table 903-1: The language describing whether Compensatory Mitigation is required for non-tidal surface waters within designated river corridors, 100-year flood plain, or fluvial erosion zone (“*Yes, at least for impacts to resources other than stream*”) seems vague, specifically the use of the term “at least”, and should be clarified.
- Env-Wt 903.04: We suggest providing full terms rather than acronyms for SPN (Statutory Permit by Notification), LSA (Lower Scrutiny Approval), and EXP (Expedited Permit); although these terms and acronyms are explained in Chapter 300, it requires some effort to find them.
- Env-Wt 903.06(e): We strongly support the requirement that applicants provide a demonstration that all design and construction considerations outlined in the “NH Stream Crossing Guidelines” standards have been checked, not least because formally referencing a set of standards has proven to be an important requisite for accessing post-disaster recovering funding (https://streamcontinuity.org/resources/crossings_toolkit/impl_codes_standards.htm). We would like the department to consider requiring all stream crossings including Tier 1, SPN, LSA, and EXP permits to reference these standards.
- Env-Wt 903.06(f): We would like to see inclusion of a requirement that tidal crossings include an evaluation of how the proposed project addresses the crossing ration, i.e. the width of the upstream and downstream channels to the width of the crossing structure, with a narrative explanation if the project is unable to meet a target ratio of $\leq 1/$.
- Env-Wt 904.05(c)(3). We would like to see a requirement that the applicant receives written confirmation from NHB or NHFG that a tier 3 application will cause no harm to protected plant species/wildlife species or their habitats before downgrading to a tier 1 or 2.
- Env-Wt 904.07(c)(2): We would like to see the “or” at the end of 904.07(c)(2) replaced with “and”, i.e. Tier 2-4 crossings should be designed and constructed to be of sufficient size to meet all of the criteria listed, rather than allowing federal, state, or local requirements to result in crossings of insufficient size to prevent an increase in flooding or affect flows and sediment transport.

- Env-Wt 904.08 and 904.09: We would like a requirement that in-kind repair, rehabilitation, or replacement of structures will only qualify if a professional engineer certifies that they are not forming a complete barrier to aquatic organism passage. Allowing structures to be restored in-kind when they are known to be preventing passage of aquatic organisms such as native fish does not meet the purposes language provided in Env-Wt 901.01(b)
- We could not find a definition of “aquatic organism passage” in either Chapter 100 or 900. Assuming we haven’t missed this, providing such a definition seems warranted. The description provided by the state of Vermont in their stream Alteration General Permit may provide useful guidance: *“Providing for aquatic organism passage (AOP) as a component of the stream connectivity requires the consideration of current and future conditions, such that, when the stream alteration activity is completed, the stream will maintain the substrate composition, bed forms, flow velocities, turbulence, and depth similar to adjacent stream reaches. Technical guidance for designing stream crossings for aquatic organism passage is at: <http://www.vtfishandwildlife.com/common/pages/DisplayFile.aspx?itemId=111510>”.*

Thank you for the opportunity to provide written comments on the draft New Hampshire Wetland Rules.

Respectfully yours,



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