

Response to Comments on Proposed Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (250-RICR-150-15-2)

Prepared by the Rhode Island Department of Environmental Management

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Response to Comments on the Proposed Rules:

Introduction:

State law pertaining to freshwater wetlands (R.I. Gen. Laws §§ 2-1-18 through 2-1-28) was amended in 2015 to strengthen the protection of freshwater wetland resources while streamlining the regulatory framework applicable to projects and activities proposed near wetlands. Implementation of the law requires both the RI Department of Environmental Management (DEM) and the RI Coastal Resources Management Council (CRMC) to undertake rulemaking within their respective programs. The amended state law was based on the findings and recommendations of a Legislative Task Force (LTF) previously established by the Regulatory Reform Act (R.I. Gen. Laws § 42-64.13-10). The LTF was composed of a variety of stakeholders and charged with evaluating the adequacy of protection of Rhode Island freshwater wetlands considering both the state and municipal level, evaluating if gaps in that protection existed based on current scientific data and recommending changes in state law or regulations that could foster a business climate to grow the economy while ensuring better protection of our natural resources.

DEM and CRMC have closely collaborated to draft revisions to their respective existing freshwater wetland rules to fulfill the statutory mandates. Due to the changes in terminology, including the definition of what constitutes a wetland, the Agencies are pursuing the repeal and replacement of the existing rule. Rule development included numerous workgroup meetings, presentations and a public workshop on the Preliminary draft rules held in September 2019. The proposed Rules reflect revisions by the Agencies in response to that public feedback. A public workshop to provide a briefing on the proposed draft Rules was held November 23, 2020. Public notice of the proposed repeal and replacement of the DEM Rules and Regulations Governing the Administration of the Freshwater Wetlands Act was issued November 23, 2020 with public comment accepted through January 22, 2021. Separate public hearings on the proposed replacement and repeal were held January 6, 2021. Transcripts are available.

DEM has carefully reviewed the hearing testimony and written comments pertaining to the proposed Rules. A majority of the public input, 64% of comments received, supported the strengthening of wetland protection including advocacy for larger buffer zone designations. The RI Builders Association and RI Realtors Association objected to aspects of the additional protection in the rule citing concerns about impacts on the production of housing, other construction and the economy. Several practitioners and other stakeholders commented on procedural or technical provisions in the Rules. Comments were submitted on both new language and existing rule language. It is evident from the comments that there is some confusion resulting from the changes in terminology distinguishing the jurisdictional area,

wetland resources, buffer zone and buffers. DEM has responded to this with clarifications in the responses herein, but will also be updating and developing guidance documents and conducting training workshops as part of the transition to the new Rules. This document summarizes the comments and DEM responses and is organized to follow the sections of the proposed Rule. Response to comment on the associated cost-benefit analysis is also included. In response to the input, DEM has made minor technical changes and wording clarifications in the text of final Rule.

General Comment – Consistency with Science:

Comment 1: The RI Builders’ Association (RIBA) submitted comments stating the Rules reflect an increase in jurisdiction that is without a significant basis in science.

Response 1: The foundation for the both the statutory changes and the proposed Rules is the Legislative Task Force report which made both scientific findings and then recommendations. Although we acknowledge RIBA expressed objections to the report (Ex A.), DEM finds there is ample scientific literature that provides a strong basis for both the expanded jurisdiction as prescribed by law and the buffer zone designations being proposed. State law reflects this assessment of the available science by stating:

Whereas it has been established through scientific study that activities conducted in lands adjacent to freshwater wetlands can exert influence on their condition, functions, and values and subsequently these lands should be protected; and

Whereas it has been established through scientific study that maintaining lands adjacent to freshwater wetlands as naturally vegetated buffers protects the functions and values of wetlands and that such buffers in and of themselves perform vital ecological functions; and

Whereas it has been established through scientific study that freshwater wetlands and buffers maintained in a natural condition can provide benefits to water quality through the filtering and uptake of water pollutants, retention of sediment, stabilizing shorelines, and other natural processes; ...

The contention the Rules are not grounded in sound science is not supported by either the law or the work that led to its adoption.

Comment 2: Several commenters expressed that the available science provides justification for DEM to require stronger protection than that proposed and/or that the Rules are not following the science in this regard. Some commenters emphasized importance of protecting existing forested buffers. (Save the Bay, N. Karraker, L. Joubert, S. Coren, C. Trocki, Back Country Hunters and Anglers, WPWA, J. Avizinis)

Response 2: DEM agrees that there is scientific research identifying the environmental protection value of larger buffers. The state law establishes and limits the jurisdiction of the Agencies. The Legislative Task Force report includes a recommendation stating that “In certain cases (to adequately protect

important functions and values) the buffer zones may be the same as the jurisdictional area.” Neither the report nor the revised law directs this be done broadly. Rather, the rule-making process inherently requires consideration of and a balancing of interests including assessment of the societal costs and benefits of the proposed Rule. In the case of this Rule, DEM had to balance what is gained in environmental protection with the potential economic or fiscal impacts on property owners and businesses that may undertake new projects; e.g. expansion of use. DEM believes it has achieved a reasonable balance by adopting a tiered approach that assigns the variable protective buffers based on consideration of the watershed needs, wetland characteristics and existing land use. DEM considers assigning larger buffer zones in those areas where there is little opportunity to protect intact buffer due to existing alteration to be overly burdensome to the property owner.

2.1 Authority and Purpose

Comment 3: Commenter (L. Joubert, URI NEMO Program) commented that the proposed Rules don’t address certain recommendations of the Legislative Task Force.

Response 3: DEM respectfully disagrees. While commenter suggested otherwise, consistent with the applicable state law, DEM has established jurisdictional areas of 200 feet around all rivers and streams regardless of size (width) and from drinking water supply reservoirs, as well as 100 feet from all vegetative wetlands and standing bodies of water. Regarding allowing municipal petitions and a potential jurisdictional area of up to 300 feet, DEM is limited by the state law that does not provide the Agencies with the authority to implement that particular Task Force Recommendation.

Comment 4: Comment from Save The Bay (K. McPherson) that DEM is not fully exercising the limited authority it was given in 2015 to review alterations within 100 feet of land surrounding freshwater wetlands and 200 feet around rivers and streams.

Response 4: DEM respectfully disagrees and believes Save The Bay may be misinterpreting the new terms in the proposed Rules. As noted in Rule 2.5.5 and Rule 2.5.6, all projects and activities subject to the proposed Rules that occur within the full jurisdictional area (JA), which includes the areas cited by Save the Bay, are required to obtain approval, such as a permit, under these Rules with the exception of those projects and activities that are specified as exempt. The Agencies are obligated to and will be reviewing new projects and activities proposed within the full JA, which we note has been expanded, to ensure any impacts to wetland resources are minimized consistent with the state law and the new Rules.

Comment 5: Several commenters suggested rule changes that are inconsistent with the authority provided by the revised state law. These included comments that: (1) Municipal authorities should retain authority to be more stringent than the state rules (MJ Sorrentino), (2) provisions involving the jurisdiction as applicable to certain qualifying farmers should be expanded to apply to all farmers (RI Farm Bureau) and to forestry operations (RI Forest Conservator’s Organization), (3) DEM should require realtors to provide copies of certain sections of the rules to homebuyers at the time of a property sale (Friends of Warwick Pond, Phil D’Ercole) and (4) the time period for municipalities to provide input on

applications should be significantly increased (Wood-Pawcatuck Watershed Association (WPWA), Town of Hopkinton).

Response 5: State law does not provide the Agencies with the authority to implement the suggested changes.

Comment 6: RIBA provided contradictory comments concerning the expanded jurisdiction of the Agencies both accepting it, citing it as an issue of concern and suggesting the limits applied to farmers be applied more broadly.

Response 6: The expansion in jurisdiction of the state agencies is prescribed by state law and consistent with the Legislative Task Force Report that was a foundation for the statutory changes. RIBA was a participant in the Task Force process and understood that state agency jurisdiction was increased in conjunction with eliminating overlapping municipal authorities.

Comment 7: RIBA's submitted comments that represented their understanding that the 100/200 foot jurisdictional areas were "meant to give DEM flexibility in the event a community had substantive concern for a water body type". (October 2016 attachment).

Response 7: DEM respectfully disagrees with this representation. The Task Force Report found that the 1971 Wetlands Act as amended contained significant gaps and was not adequate to protect some wetlands. The expanded jurisdiction provides authority to address the gaps in protection.

Comment 8: RIBA submitted comments suggesting the Rules will further limit development of additional housing and impose severe restrictions on existing structures.

Response 8: This contention by RIBA appears to be a misunderstanding of how the proposed freshwater wetlands Rules will be applied. DEM believes RIBA is overestimating the impact of the proposed rules by presuming all buffer zone area is completely off-limits to further alteration. This is not the case, as some buffer zone area is already altered, and the Rule does not *prohibit* all potential projects in these zones. Existing uses of property in a designated buffer zone are able to continue (violations excepted) without being affected by the Rules. Modified exemptions actually provide regulatory relief to existing developed properties with respect to additions and accessory structures. The new buffer standard does incentivize applicants to comply by avoiding disturbance of vegetated buffer in the designated buffer zones. However, for those property owners unable to satisfy the buffer standard, the Rules provide a variance procedure which requires that impacts to wetlands, buffers and floodplains, be avoided and minimized – which is the policy that is applied today in perimeter and riverbank wetland areas. Where sufficient buildable area exists on a lot and it is demonstrated that *unavoidable* impacts to the buffer have been minimized with the result being insignificant wetland impacts, then a variance would typically be expected to be granted. DEM experience indicates most projects can be designed to comply with state policy and rules related to avoidance and minimization and that the denial of wetland permit applications occurs very infrequently. As noted in the previously mentioned cost-benefit analysis, DEM's review of actual subdivision applications filed between 2016 and 2018 found that 8 of 9 subdivisions would not be adversely affected and would have been able to comply with the new buffer standard with limited site design adjustments. Only one subdivision had the potential to actually have 1-2 lots affected

under the new Rules. This constituted barely 1% of the 223 lots authorized. More recently, DEM reviewed 15 diverse applications randomly selected from all three regions of the state and similarly found that that all but one would have been able to comply with the buffer standard. The effect of the proposed Rule on 14 applications sites was minimal – what was proposed would still be possible under the new Rules with minor site design changes required in some cases. DEM found the only application that was potentially affected was a large 24 lot subdivision. With the increased buffer to the adjacent swamp, the project layout would need adjustments to minimize impacts and potentially several lots would not have been authorized as presented. With some reconfiguration, DEM estimates that the project may have faced limitations on 1 or potentially 2 lots but notes that the variance procedure would have provided an option for the project to demonstrate it had insignificant impacts. DEM expects the new rules will influence the site design of new projects, but we do not find that there is a basis for concluding from a statewide perspective that housing production or the pace of construction in general will be negatively impacted. Also see comment 74 for further explanation of how the terms buffer and buffer zone are applied.

Comment 9: RIBA submitted an analysis by SWCA Environmental Consultants that commented on “Jurisdictional Buffers” noting that the land adjacent to freshwater wetlands is non-wetland but this land is being regulated as if it a jurisdictional wetland. He notes the terms and approaches in other New England states differ from RI.

Response 9: The Agencies agree the approach and some of the terminology in the proposed Rules differ from other New England states - all of which it is noted that continue to have greater municipal government involvement in permitting. The consultant appears to lack an understanding of the long-standing legal framework for regulating freshwater wetlands in RI which currently defines certain uplands as perimeter and riverbank wetland resource areas. Regarding the proposed Rules, consistent with the new law, the Agencies have clarified terminology by limiting the definition of freshwater wetlands to the applicable resources, e.g. swamps, streams, etc., defining a jurisdictional area (JA) to identify those lands in which the Rules apply and designating buffer zones within the JA to protect vegetated buffers as well as the adjacent wetland resources.

2.2 Administrative Findings

Comment 10: In response to the reference to cumulative impacts, Save The Bay commented that DEM should enumerate specific criteria that would be used to evaluate cumulative impacts in order to prevent resource degradation due to overdevelopment.

Response 10: The inclusion of criteria to evaluate cumulative impacts would require further program and rule development. The Agencies are not prepared to add such criteria in this rule-making action.

Comment 11: Save The Bay and WPWA recommended additional language regarding the adverse impacts of dams on habitat and water quality impairments be added to the finding in Rule 2.2(B)(6). Similarly, RIBA submitted a comment from consultant SWCA expressing similar sentiment regarding the benefits of defunct dam removal.

Response 11: DEM agrees that dams have contributed to the alteration of streamflow and sediment transport and habitat fragmentation in riverine ecosystems. The intent of the finding being referenced is to acknowledge the necessary public safety rationale of dam removal or modification and it represents minor changes to existing language in the Rules. From that perspective, no change will be made at this time, but may be considered at an appropriate point in the future.

Comment 12: RIBA submitted a comment from the consultant SWCA that makes that statement that the “upland buffer zone to freshwater wetlands is performing functions that directly benefit the health, welfare and general well-being of people and the environment” is not scientifically sound.

Response 12: DEM does not agree with the commenter who appears to be misinterpreting the finding statement. The Agencies understanding of the ecosystem services provided by buffers is based on sound science. It is broadly accepted that naturally vegetated buffers provide protection to the adjacent resource. For example, this may occur by reducing pollutant transport, regulating temperature in surface waters and providing habitat for species that utilize wetlands for portions of their lifecycle. Both the Legislative Task Force Report and related statutory language acknowledge the separate but inter-related beneficial functions of wetlands, buffers and floodplains.

Comment 13: RIBA submitted a comment from the consultant SWCA that the findings in Rule 2.2(A) and (B)(3) are problematic and require clarification. The commenter interprets the finding as indicating that we are equating the freshwater wetland buffer with the wetland itself.

Response 13: DEM disagrees that the findings are problematic. The language is acknowledging that the wetlands resources, the adjacent buffers, and floodplains contribute to functions that merit protection. The terms are defined separately in the Rules. That said, it is state policy, as stated in law, to preserve the purity and integrity of wetlands, buffers and floodplains through regulation in the jurisdictional areas as authorized.

Comment 14: RIBA submitted a comment from the consultant SWCA that the findings in Rule 2.2(A) and (B)(3)(b) referring to recreation and aesthetic values be deleted.

Response 14: DEM disagrees. State law and existing rules have long recognized the recreational and aesthetic values of freshwater wetland resources and as a result there are established review criteria in the current regulatory program that address impacts to these values. DEM does acknowledge there are additional state programs that address the referenced subjects; e.g. historic preservation, archeology, etc., more holistically than the proposed Rules, however, that does not justify the elimination of the finding and any associated rules.

Comment 15: RIBA submitted a comment from the consultant SWCA that the finding in Rule 2.2(B)(4) regarding cumulative impacts was problematic and identifies the goal as appropriate mitigation or restoration so there is no net loss of functions and values, thus avoiding adverse cumulative impacts.

Response 15: Commenter identifies an issue, cumulative impacts, that is challenging to address in the regulatory framework. DEM shares the goal of no-net loss of wetland functions and consistent with state law has adopted policies that require the avoidance and minimization of impacts. The current regulations include a section “Mitigation measures” which consistent with the updated code of

regulations will be retained and appropriately presented as a guidance document. The suggestion of requiring further mitigation or restoration is acknowledged but would entail further program development and future rulemaking in order to be implemented. Although compensatory mitigation is not a practice that is encouraged by DEM, DEM has accepted, and may continue to accept, the practice as appropriate on a case-by-case basis as a last resort when alterations to jurisdictional area cannot be avoided.

2.4 Definitions

Comments on Definitions included in Proposed Rules

Comment 16: The American Council of Engineering Companies-RI Chapter (ACEC-RI), submitted by D. Davison, commented that the definition of “Alter” has a general statement that it includes work outside of regulated wetlands, that the language is so vague that it could be interpreted to encompass any development beyond the jurisdictional limits, and that it should be clearly stated that any project beyond the jurisdictional area that obtains a Construction Activity Permit is not required to obtain a Wetlands Permit. The commenter also pointed out that currently, section 2.5.6 uses “may” as opposed to “is not required.”

Response 16: The definition of “Alter” as proposed has been in place for decades and is essentially unchanged, except as needed to reflect the new terminology put in place by the revisions to the RI Fresh Water Wetlands Act. The definition has functioned well to define all alterations that may impact the functions and values of freshwater wetlands pursuant to these Rules. That being said, it is acknowledged that the use of “may” in Rule 2.5.6(B)(1) may raise questions for applicants. With respect to land development, the freshwater wetland rules cross-reference other stormwater related rules. The DEM Office of Water Resources has internally integrated its programs so that applicants undergo one engineering review related to stormwater management regardless of which program receives the initial application. The intent of rule is to recognize applications for projects that involve an acre or more of disturbance and located out of jurisdictional area would be considered authorized if submitted and processed under the Construction General Permit which is a federally required component of the DEM RI Pollution Discharge Elimination System (RIPDES) Program. Review of such projects, however, may in some instances identify wetland alterations that will occur, which would result in such projects being subject to and referred to the Freshwater Wetlands Program for further permitting. Either way, whether obtained through the RIPDES Program or through Freshwater Wetlands (and either pathway, technically, is possible) approval is still required under the Freshwater Wetlands Act. We therefore cannot alter the wording here as suggested to say, “approval is not required if authorization is obtained under...”.

Comment 17: Save the Bay commented that the definition of “Alter” or “alteration” be amended to include compacting soil within, digging, and other alterations associated with off-road vehicle use within freshwater wetland, buffer, floodplain, area subject to flooding, and area subject to storm flowage as this type of use or activity within a wetland is incredibly destructive.

Response 17: The DEM believes that the presence of the phrases “include, but are not limited to,...” and “...or other activities that individually or cumulatively change the character of any freshwater wetland...” is sufficiently inclusive to consider disturbance resulting from ATV use, or other similarly disturbing activities, as alterations.

Comment 18: RI Realtors (P. Tedesco), commented regarding the lack of a definition for “storm flowage,” while acknowledging the use of the term “Area subject to storm flowage” in the cost-benefit analysis. RIBA submitted a comment from consultant SWCA that an “Area subject to storm flowage” will be difficult to identify and quantify on project sites and that surface water that is present on lawn or fields after a large rainstorm event may qualify as storm flowage.

Response 18: The term “Area subject to storm flowage” is a clearly defined term that has been in place since the inception of the Freshwater Wetlands Act in 1971. The definition is consistent with the statute, R.I. Gen. Laws § 2-1-20(2), and is also clearly differentiated from both the terms “Floodplain” and “Area subject to flooding.” DEM has and will continue to provide guidance on these terms for applicants.

Comment 19: RIBA submitted a comment from the consultant SWCA that the definition of “Area subject to flooding” will be difficult to identify and quantify on project sites. The commenter recommended that the definition should be linked with the 100-year floodplain or use the “Floodplain” definition (Rule 2.4(A)(29)).

Response 19: The term “Area subject to flooding” is a clearly defined term and it is clearly differentiated from both the terms “Floodplain” and “Area subject to storm flowage.” DEM provides further guidance (fact sheets) on these terms for applicants.

Comment 20: Save the Bay commented that the definition of “Buffer” be amended by inserting [has been] as follows “Buffers means an area of undeveloped vegetated land adjacent to a freshwater wetland that is to be retained in its natural undisturbed condition, or [has been], or is created to resemble a naturally occurring vegetated area” as restored buffer should be specifically included in the definition.

Response 20: The definition of “Buffer” is consistent with the statute, R. I. Gen. Laws, 2-1-20(4) and DEM does not believe further modification is appropriate.

Comment 21: RIBA provided comment from consultant SWCA that the definition of “Buffer” includes only “undeveloped vegetated” land adjacent to freshwater wetlands. The commenter continued that the definition needs additional clarity, and ideally, a State-wide fixed distance.

Response 21: It is the opinion of the DEM that the definitions provided in the proposed Rules, and further described (with numerical criteria) in the proposed Rule 2.23, while lengthy, are clear, with numerical values (buffer zone widths) clearly assigned. Given the various natural resources protected

under this Rule and variable jurisdictional authority (rivers versus swamp), a single fixed distance was not deemed a feasible option. Rather, consistent with the law, the proposed Regions and the designated “Buffer zone” values reflect consideration of existing land use, watershed needs and wetlands characteristics.

Comment 22: National Grid (J. Callahan), commented that the definition of “Cumulative impact” should be amended as follows: “In evaluating cumulative impact, the DEM shall consider the positive benefits to the environment from a renewable energy project.”

Response 22: Given the various considerations of both beneficial and adverse impacts that may be relevant to the assessment of cumulative impacts, it is inappropriate to single out renewable energy projects in the definition. Furthermore, in application of the rules, such considerations are taken into account not in determining the cumulative impact of a project on a wetland resource, but rather when determining whether the resulting impacts of a project may be approved, possibly through a variance process.

Comment 23: L. Steere, of Applied Bio-Systems, Inc., asked whether a beaver dam would also be included in the definition of “Dam” or “damming” or if it would be listed in another rule section as they are a structure of concern for many property owners.

Response 23: This definition does not include beaver dams since the definition specifically states, “...made by humans.” Beaver dams are not listed in another rule section.

Comment 24: National Grid, commented that the definition of “Freshwater wetlands” should be amended consistent with the provided edits, to improve upon its clarity.

Response 24: The suggested edits provided by the commenter do not adhere to the standard definition-writing format of “*Term means...*” provided to the Agencies by the RI Secretary of State. The DEM, however, will re-word the definition of “Freshwater wetlands” slightly to improve clarity, consistent with the statute and the standard rule formatting, while retaining all aspects of the definition that must be included.

Comment 25: B. Faneuf, of Ecosystem Solutions, Inc., commented on the definition of “Growing season” and questioned the period of April 1 to November 15 and asked whether it should be revisited considering climate change. The commenter also asked whether a growing season for a coastal zone should be differentiated from an inland zone or perhaps southern RI versus northern RI?

Response 25: The history of this range of dates is unknown, however, it is recognized that this phrase appears in certain wetlands definitions in the law to describe their water regimes or the period during which hydrophytic vegetation is present. While it is probably not critical to change this range, the DEM will flag this for future consideration.

Comment 26: Ecosystems Solutions, Inc., asked whether DEM wants to keep buttonbush (*Cephalanthus occidentalis*) in the “Marsh” definition and suggested that this way a swamp is also a marsh and a marsh can also be a swamp?

Response 26: This definition is consistent with the statute, R.I. Gen. Laws § 2-1-20(10) and the statute and the Rules include buttonbush (*Cephalanthus occidentalis*). Buttonbush is an obligate wetlands shrub that may be present in marshes and in swamps.

Comment 27: Ecosystems Solutions, Inc., referred the DEM to the definition of “Agriculture” in the Mass. Wetlands Protection Act regulations 310 CMR 10.00 as it is specific and in the commenter’s opinion works well.

Response 27: As the commenter noted, the normal farming and ranching activities are specified in the statute R.I. Gen. Laws § 2-1-22(i)(1). DEM will continue to provide additional guidance to farmers on interpretation of this provision as needed.

Comment 28: The RI Farm Bureau (H. Wright) submitted a comment objecting to the definition of farmer in the applicable state law as it applies to providing permitting exemptions.

Response 28: DEM Rules must adhere to the statutory definition and the specific requirements it imposes. Also see Comment 5.

Comment 29: Ecosystems Solutions, Inc., recommended that the definition of “Pollutant” switch the word ‘dirt’ with ‘soil,’ and add asphalt, brick, and concrete. The commenter also recommended adding a definition of solid waste or a reference to its location in another set of regulations, and lastly that the examples in the definition of “Pollutant” match those in the definition of “Alter” or “alteration.”

Response 29: After a word-search of the term “Pollutant” in the proposed Rules, and its usage, it is the DEM’s opinion that the definition as provided is sufficient.

Comment 30: Ecosystems Solutions, Inc., provided multiple questions or comments regarding the definition of “Pond” including: why the ¼ acre size requirement was removed; should “in most years” be added to modify 6-months; how will ponds and vernal pools be differentiated; concern that the definition of “open standing water” has been eliminated as it may be helpful; and the defined terms “lotic” and “lentic” be added to aid in the identification of run-of-the-river ponds. ACEC-RI commented that the definition of “Pond” should include a minimum surface area.

Response 30: The definition of “Pond” is consistent with the statute, R.I. Gen. Laws § 2-1-20(54). The prior use of a ¼ acre threshold for perimeter wetland was eliminated. DEM will be updating its guidance on distinguishing ponds from other type of wetland resources and will address the issue of size.

Comment 31: Ecosystems Solutions, Inc., commented about the definition of “River” and suggested that human-made canals should have an exclusion.

Response 31: The definition of “River” is largely existing language and is consistent with the statute, R.I. Gen. Laws § 2-1-20(13). DEM does not see a need for a change at this time.

Comment 32: Ecosystems Solutions, Inc., commented about the definition of “Stream” including that the DEM consider working in the phrase “due to a hydraulic gradient” and defining the phrase “defined channel.” The commenter questioned why the word “intermittent” was removed, the DEM’s interest in linking to the USGS StreamStats for minimum flow requirements, and if flow through a culvert or under a bridge is considered stream?

RIBA consultant SWCA asked the DEM to consider defining “Stream” as shown on a USGS map as an intermittent watercourse (see definition 2.4(A)(60) “River” means...).

Response 32: “Stream” is defined in the statute, R.I. Gen. Laws § 2-1-20(15). DEM will amend the definition in the Rules to better align with the wording in the statute, by removing the word “defined.” In general, freshwaters that flow under a bridge or through a culvert under a road would be considered a river or stream. However, there are situations where this may not be case given the integration with stormwater infrastructure and a site-specific determination may be needed. DEM is familiar with the USGS StreamStats tool but has not referenced it in the proposed rules.

Comment 33: Ecosystems Solutions, Inc., asked whether DEM wants to keep buttonbush (*Cephalanthus occidentalis*) in the definition of “Swamp.” He further commented that this way a swamp is also a marsh, and a marsh can also be a swamp.

Response 33: This definition is from the statute, R.I. Gen. Laws § 2-1-20(16) and should not be changed in the Rule. Buttonbush (*Cephalanthus occidentalis*) is named in the statute and is retained in the Rules. Buttonbush is an obligate wetlands shrub that may be present in marshes and in swamps.

Comment 34: ACEC-RI commented that the definition of “Swamp” should provide a minimum surface area.

Response 34: The definition of “Swamp” is consistent with the statute, R.I. Gen. Laws § 2-1-20(54). The prior use of a 3-acre threshold for perimeter wetland was eliminated. DEM will be updating its guidance on identifying wetland resources and will address the issue of size.

Comment 35: Ecosystems Solutions, Inc., provided multiple comments on the definition of “Vernal pool” including the opinion that the definition is gray; that the phrase “in most years” should be defined; and that guidance will be needed regarding the delineation of vernal pools.

Response 35: This definition is consistent with the statute, R.I. Gen. Laws § 2-1-20(17) and DEM does not see a need for a change. The DEM anticipates developing vernal pool specific guidance and may also consider pursuing revisions to the definition in the future to add specificity.

Comment 36: RI Realtors, commented that the rulemaking excludes the impact of the regulation of vernal pools. The comment continues that the precise borders of vernal pools can be challenging to establish due to their ephemeral nature yet, the draft regulations could restrict all construction within a 50-foot radius.

Response 36: The impact of changes to buffer protection for vernal pools was in fact discussed in the cost-benefit analysis. Procedures for delineation of these resources are described in proposed Rule 2.21.2 Specific Criteria - Flowing and Standing Water Freshwater Wetlands as well as DEM guidance documents. As proposed, the designated buffer zones may be 100 feet or 50 feet depending upon the extent of undeveloped land around a pool. Vernal pools are not yet mapped on a statewide basis. Overall, using available data, DEM has estimated there are likely 480 acres of isolated vernal pools statewide and with a corresponding 2,556 acres of designated buffer zones of which 32% and 23% consists of conserved lands in River Protection Regions 1 and 2 respectively.

Comment 37: RIBA consultant SWCA provided several comments under the heading Vernal Pool Setbacks including that the percent undeveloped land within 100 feet, which is a determining factor for a vernal pool's buffer zone width, may, and likely will change over time. He pointed out that for many pools embedded within other freshwater wetlands there already is a proposed buffer and these distances are not clear in the regulations. The commenter suggested that the definition should be clarified to identify the method to identify the boundary of the pool or depression, the number of egg masses or species present to confirm a pool and how the undeveloped land will be calculated, amongst other comments. The consultant further suggested that distinctions may need to be made for areas which contain egg masses, but which are not suitable vernal pools, such as tire ruts and power line access roads.

Response 37: The definition is consistent with the statute. The methodology for defining the edge of a vernal pool is provided in the proposed Rule 2.21.2. The designated Buffer zone widths where a vernal pool may be located within another freshwater wetlands are described in proposed Rule 2.23(F) Statewide Buffer Zone Designations. Further guidance regarding vernal pools will be developed as part of rule implementation. The DEM believes that the proposed buffer zones for vernal pools are clear and predictable.

Comment 38: Ecosystems Solutions, Inc., could not locate the proposed Rule 2.21.5 and asked whether the term and definition "Width during normal flow" are still needed? The commenter went on to ask what other definitions or sections of the rules the term relates to and why?

Response 38: Rule 2.21.5 is within the first appendix (Rule 2.21 Specific Criteria ...) of the public noticed Rules. The term is included as it is still relevant to the definition of “Freshwater wetlands for farmers conducting normal farming and ranching activities,” as defined in Rule 2.4(A)(33).

Comments on Suggested New Terms:

Comment 39: ACEC-RI commented that the DEM should consider the addition of a new term and definition for “Culvert Replacement.”

Response 39: As used in the Rules, and as may be contextually clarified in other portions of the Rules that refer to “drainage pipes”, culverts are understood to be structures that convey flow under a road or railroad from one side to the other, while drainage pipes convey stormflow from a road or other paved surface and directs it along or off of that surface. In the context of the Rules-and specifically the exemptions-the DEM believes the terminology as proposed is appropriate and adequate.

Comment 40: National Grid commented that the DEM should consider the addition of new terms and definitions for “Public Utility” and “Public Utility Best Management Practices” as provided.

Response 40: The suggested definition for Public Utility is “shall have the definition set forth in R.I. Gen. Laws § 39-1-2(a)(20).” A review of that definition indicates that it would not be workable in the Rules and would be simultaneously too broad (it includes railroads, dams, reservoirs, and many other items) and too restrictive (it excludes certain “smaller” utilities that, for purposes of our utility exemptions, that DEM would wish to include). There does not appear to be a need to define a “Public Utility” for the Rules to address items of concern that would apply to any utility. As to the proposed inclusion and definition of the term “Public Utility Best Management Best Management Practices”, the definition anticipates the publication of a utility-specific Best Management Practice document, which is not currently available and not clearly necessary at this point in time. Best Management Practices should be a universal concept and, while there is some merit to publishing project-specific BMP’s for different project or activity types e.g. Wetlands BMP Manual, and the Forestry BMP manual published by the DEM Division of Forestry), doing so is not thought to be critical in order to move forward with these proposed Rules.

Comment 41: National Grid commented that the DEM should consider addition of the new term “Public Utility Infrastructure” in place of the current term “Utility” and define it to include items such as poles, structures, substations or facilities.

Response 41: This would be a significant change and might be expected to expand the scope of exemptions in ways that would alter freshwater wetlands beyond the intent of an exemption.

Comment 42: Ecosystems Solutions, Inc. commented that the DEM should consider the addition of the new term and a definition of “Stormwater Management System.”

Response 42: This term is not found anywhere in the proposed Rule. It may be defined in other Rules. There is no need to define it in the wetlands Rules.

2.5 Applicability and Regulated Activities

Comment 43: Save the Bay commented that concrete or poly-lined ponds (in Rule 2.5.1(B)) in some cases are freshwater wetlands and functions and values may be present. An example was given. This commenter supports identifying man-made garden ponds and fishponds as non-wetlands.

Response 43: While it is acknowledged that certain concrete or poly-lined ponds can resemble a natural pond and may support some recognized wetland functions and values, DEM does not believe that it is intent of the Freshwater Wetlands Act to regulate such man-constructed features as freshwater wetlands. With respect to the specific example provided, although the pond in Diamond Hill Park was enclosed by a concrete wall, it is our understanding that the pond itself was an impounded portion of a watercourse, with a gravel and mud substrate, not a lined structure. It would still be regulated as a pond under the proposed Rules.

Comment 44: Applied Biosystems, Inc. asked if a permitted ditch or stormwater control feature develops wetland plants will it always be accepted for its permitted use and not later classified as wetland because of plants?

Response 44: Yes, the intent of this Rule 2.5.1(B) is that these constructed stormwater conveyance and treatment systems are not considered freshwater wetlands, even if they support wetland plant growth. Some of these constructed stormwater control features are in fact designed to resemble and function as vegetated wetlands (e.g. wet vegetated treatment systems). A permit may be required, however, for their construction, modification, or removal when located within a jurisdictional area.

Comment 45: Save the Bay, commented that the DEM should consider removing “uplands” from the definition of “puddles” in the Rule 2.5.1(B)(7) given that puddles in upland that persist for days after precipitation or only in spring can provide habitat for eastern spadefoot toads or American toads. Furthermore, the commenter advises that these may be historically altered vernal pools in a yard setting or indicators where wetlands may be if not in a maintained condition.

Response 45: The DEM believes that puddles that may form on upland areas after a rain event and that are neither dominated by wetland characteristics or meet the definition of vernal pools are not freshwater wetlands and thus not subject to regulation under the statute. It is acknowledged that some such puddles may attract toads, but generally are not persistent long enough to support the successful development of eggs to viable metamorphs.

Comment 46: RIBA consultant SWCA commented regarding Rule 2.5.4 Projects that Lie on or Cross the Jurisdictional Boundary recommending that the DEM and CRMC have different (freshwater) wetlands rules, and the merging of these regulations would provide clarity and streamlined permitting process, particularly for those roadway, utility, or other infrastructure projects that cross these jurisdictions.

Response 46: The DEM and CRMC freshwater wetland jurisdictional boundary was established by the Agencies in response to prior amendments to R.I. Gen. Laws to reduce duplicative freshwater wetlands permitting in the coastal zone. It has been in place and effective for applicants and the Agencies for over 20 years. The DEM Rule 2.5.4 describes procedures for projects that lie on or cross the jurisdictional boundary which inevitably occurs on occasion. The interagency MOA that supports the implementation of the jurisdictional boundary will be updated by the Agencies following the promulgation of the Rules.

Comment 47: Save the Bay, commented that the DEM should consider amending the Prohibitions Rule 2.5.5 to include the phrase “operate motor vehicles within.”

Response 47: Although irresponsible operation of motor vehicles within freshwater wetlands may result in damage and alterations to freshwater wetlands, operation of the vehicle itself is not an activity that the Program would directly regulate and accordingly it is not recommended that this phrase be added. There are numerous instances where operation of motor vehicles in wetlands create minimal to no damage, including by farmers, construction vehicles, logging vehicles, motorboats, etc. Requiring a permit to “operate a motor vehicle in a wetland” is not a tenable or reasonable use of regulatory authority and damage resulting from such use, if it results in alteration to wetland, would be subject to enforcement under the Rules.

Comment 48: Save the Bay expressed concern that Rule 2.5.6(B)(1) for projects over one acre of disturbance will eliminate review by DEM wetlands biologists for large projects outside of the jurisdictional area that may have indirect alterations to wetlands.

Response 48: As the subject Rule is proposed, it applies only to projects that are proposed entirely outside of the established Jurisdictional Area (JA). Although projects adjacent to freshwater wetlands can result in indirect impacts from such aspects of the project as noise and artificial lighting, this Rule specifically limits the consideration of indirect impacts from projects outside of the JA to that of stormwater impacts. With respect to stormwater impacts, the requirements of the Freshwater Wetlands Program and the RIPDES Construction General Permit (CGP) are identical. Engineers of the stormwater staff will be performing the same review to the same standards for water quality and storm flow whether the project is submitted through the Freshwater Wetlands Program or whether it is directly submitted through the RIPDES CGP. This is considered a streamlining measure that will provide for a simpler, quicker review with no reduction in protection of freshwater wetlands.

Comment 49: RIBA commented that the Rule 2.5.7 Applicability to Farming and Ranching Activities should clearly note if maintenance of drainage ditches, subsurface drainage, irrigation and livestock

ponds, and existing agriculture within freshwater wetlands are permissible. The commenter also noted that forestry practices need clarification.

Response 49: Normal farming and ranching activities are described and defined in the statute-see R.I. Gen. Laws §2-1-22(i)(1) & (3). The definition in the Rule is consistent with the statute and clearly includes maintenance of existing drainage structures, which would include ditches, and the operation and maintenance of existing farm ponds. (Note that many maintenance items are considered exempt regardless of whether an applicant meets the definition of “farmer” or is otherwise covered in other sections of the proposed Rules.) Subsurface drainage may also be exempt depending on the particular circumstances. Agricultural activities meeting the definition of “existing” are not affected by these Rules. The DEM Division of Agriculture and Forestry is available to provide further guidance as needed on the scope of normal farming and ranching activities. Regarding forestry, the RIDEM Division of Forestry administers several programs that provide guidance and describe activities that are part of forestry. Exemptions related to forestry are outlined in Rule 2.6.2 Limited Cutting of Vegetation.

2.6 Exempt Activities

General Comment 50: RIBA submitted comments that the existing list of exempt activities should be re-evaluated to encompass all necessary exemptions and advised the DEM that the Determination process may be a suitable mechanism to determine whether a project is exempt.

Response 50: The DEM has extensively evaluated the list of exempt activities and has proposed additional exemptions based on this evaluation. Applicability of an exemption is intended to be self-determined by an applicant, but a written determination may be obtained from DEM through a Request for Regulatory Applicability.

General Comment 51: RIBA commented on expanding exemptions for “water-dependent” activities, recreational facilities, airport or highway expansions, stormwater and water quality structures, etc.

Response 51: The purpose of the Rule 2.6 Exempt Activities is to identify projects or activities that, due to their limited extent or clear lack of impact to freshwater wetlands, are not required to seek a wetlands permit in order to proceed. Many water-dependent activities, including some cited by the commenter, are in fact included in the exemptions where such activities are expected to have minimal to no impact on wetlands. Some of the newly proposed exemptions also include water-dependent activities. However, most water-dependent activities can be expected to result in alterations and impacts to freshwater wetlands which would require review through the permitting process, just as they do now under the current Regulations. Several exemptions for limited maintenance and repair activities, such as to the facilities or structures identified by the commenter, have been expanded in the proposed Rule 2.6. Airport or highway expansion projects are not limited projects or activities.

Comment 52: Save the Bay commented that the DEM should amend the proposed language in Rule 2.6.2(A)(2) on Limiting Cutting of Vegetation to exclude healthy (undiseased) trees as healthy trees in buffer zones have a variety of functions and values.

Response 52: The DEM recognizes the importance of healthy trees within buffer zones. The proposed allowance for removal of healthy leaning or overhanging trees has been added to facilitate public safety for property owners, including for municipalities and the RI Department of Transportation, as even healthy trees can pose a threat to property and life.

Comment 53: Save the Bay commented that in Rule 2.6.2(A)(5)(b) regarding forest operation and management practices in response to an emergency, the DEM should consider that standing dead trees (snags) and woody debris on the forest floor provide valuable wildlife habitat and provide complex strata for a wide variety of species interactions. The comment recommends working with the Division of Forestry to allow or some remaining snag trees and woody debris in buffers in conjunction with forest management practices.

Response 53: The DEM recognizes the values of standing dead trees and woody debris in forests, and the Forestry Division works with property owners and practitioners to ensure protective practices are followed. Foresters may leave snags and woody debris undisturbed as there may not be an economic incentive to remove them. It should also be noted that the applicability of this exemption is limited.

Comment 54: Save the Bay commented regarding Rule 2.6.2(A)(12) cutting of trees and shrubs in floodplain, and advised that forested floodplains slow and meter flood flows better than non-forested floodplains, and in the event of a significant flood the stems of trees and shrubs will physically slow the stormwater down much more effectively than a cleared area. The comment advised that this type of clearing should not be an exempt activity.

Response 54: The DEM recognizes the contribution of forested floodplains toward the reduction of the velocity of flood waters, however, asserts that this value decreases with increased distance from a watercourse. Usually once flooding reaches beyond all jurisdictional limits the floodplain is primarily acting as storage and not providing any reasonable velocity control. Accordingly, the suggested change to the rule is not deemed necessary.

Comment 55: Save the Bay and WPWA commented regarding Rule 2.6.3(A)(2) replacement of culverts. The comment asks the DEM to remove sections 2.6.3(A)(2)(a) through (d) as “replacement in kind” encourages improperly sized culverts to be replaced and not redesigned to address flooding, climate resilience and wildlife movement.

Response 55: DEM agrees the factors cited should be considered when designing culvert replacements. In lieu of deleting the text, which may still be appropriate for certain culvert replacements, the DEM will consider development of a General Permit for “out-of-kind” replacement of culverts by municipalities, with a condition being that the replacement culvert may not result in significant upstream or

downstream hydrologic changes. As proposed, a draft General Permit for a category of projects or activities will be subject to public notice and a 45-day comment period before its adoption, including a notification to the municipal contact people.

Comment 56: National Grid commented regarding Rule 2.6.3(A) Limited Maintenance and Repair. The commenter proposed additional exemptions that would expand the scope for repairs and replacement of utilities to also include maintenance, repair and replacement of any utility infrastructure so long as it is located within a right-of-way or “otherwise disturbed area,” including replacement of “structures, equipment, substations or facilities”.

Response 56: The described work is too broad to be appropriate for a change in the text and could include work that clearly would have potential negative impacts on freshwater wetlands through displacement of floodplain, changes in stormwater runoff, or other significant impacts (replacement of a water supply dam or hydroelectric facility might fit this definition). There are several exemptions related to utilities in the Rules, and DEM believes that they cover the scope of what the DEM considers to be projects with minimal to no impacts on freshwater wetlands.

Comment 57: RIBA commented regarding Rule 2.6.3(A)(20) specifically questioning why parking lot repaving of more than 10,000 square feet should fall under the wetlands rules versus town regulation.

Response 57: Repaving of an existing parking lot that is located within a Jurisdictional Area and that entails disturbance of over 10,000 square feet would trigger the existing Redevelopment Standard in separate Stormwater Rules, 250-RICR-150-10-8 which are cross-referenced in proposed Rule 2.7.1(G).

Comment 58: RIBA commented regarding Rules 2.6.5 and 2.6.6 stating that these rules are preventing outdoor lighting on private properties and questioning how this protects freshwater wetlands and how the provisions will be enforced.

Response 58: The provision to restrict artificial lighting of *wetlands and buffers* in new projects associated with developed properties relates to the known impacts of artificial lighting on nocturnal species utilizing wetland and buffer habitat. Best management practices direct lighting away from the natural resource. The Rule does not prohibit all lighting on a property and DEM exercises its discretion with respect to enforcement.

Comment 59: Save the Bay commented regarding Rules 2.6.5(A) and 2.6.6(A) and proposed identifying bogs and other rare wetland types for a 100-foot setback distance (equal to the full jurisdictional area) under these exemptions for single family, non-residential, and accessory structures.

Response 59: These exemptions are applicable to already *developed properties* and limited to work within areas that are already disturbed. Existing vegetated buffer, wetlands, including rare wetland types, that may be on the site are protected as conditions of the exemption. Given the limited applicability, a larger setback is not deemed necessary and if imposed would be unnecessarily

burdensome to property owners. The DEM does not want to require a permit for these limited exempt activities simply because the resource is a bog or another rare wetland type.

Comment 60: Save the Bay commented regarding Rule 2.6.5 (A)(8) and advised that the text “Other accessory structures” be replaced with “Stormwater management features” for clarity.

Response 60: The DEM does not agree with the proposed comment as “other accessory structure” is consistent wording and it allows for the addition of other non-stormwater features in the future. Furthermore, “accessory structure” is a defined term in the Rule 2.4(A).

Comment 61: National Grid commented regarding Rule 2.6.6 Non-Residential Buildings or Multifamily Residences and Accessory Structures and proposed an addition to this exemption that would allow for expansion or modification of less than or equal to a 25,000 square foot footprint.

Response 61: This exemption applies to buildings and other accessory structures and the proposal to allow up to 25,000 square feet of expansion, as well as allow alteration of buffer, even while following specified BMP’s, would clearly have significant potential for detrimental impacts to freshwater wetlands and is inconsistent with the intent of an exempt activity. This suggested change will not be adopted.

Comment 62: National Grid commented regarding Rule 2.6.9 Utility Emergencies. The commenter proposed adding the word “pipes” to facilitate their repair or replacement via this exemption.

Response 62: The DEM agrees that this makes sense and is consistent with both the way we have interpreted “equipment” in this Rule, as well as with the definition of “Utility”. This minor edit will be adopted as recommended as a clarification.

Comment 63: National Grid commented regarding Rule 2.6.10 New Utility Lines. The commenter proposed a number of amendments regarding this exemption, most of which are not recommended to be adopted.

Response 63: The expansion of the exemption to any “public utility infrastructure” is inconsistent with the intent that this exemption which applies only to limited, linear utility connections or installations. The inclusion of terms such as “to the extent reasonably practical” introduces uncertainty and a need for a judgement call on the part of the property owner on what should be a clear and predictable exemption. Some terms are introduced here that have been discussed elsewhere in this response and that are not recommended for adoption.

Some suggested amendments proposed by the commenter, however, are consistent with the intent of the Rules or are improvements over the currently proposed language. The following will be adopted: 1) in Rule 2.6.10(A) the addition of “pipes” and the first instance of adding “on, above, or beneath” with respect to railroad corridors; and 2) modification in Rule 2.6.10(B) to read “new or replacement utility lines and pipes...” is a consistent change.

Comment 64: Save the Bay commented regarding Rule 2.6.15 temporary recreational and other structures, recommending that the exemption specify that public events or festivals within wetlands and buffers 1) must minimize noise and light disturbances after dusk and before dawn, and 2) provide a time limitation of no more than one week or seven consecutive days.

Response 64: Requiring such an event to minimize noise and light disturbance as proposed is a difficult condition to adhere to and given the temporary nature of the allowed exempt activity, not of significant concern. The DEM believes 30 days is reasonable and may be necessary to cover month-long events and recognizes that shorter events will not likely keep temporary structures in place any longer than is necessary, due to logistics and expenses that may be involved.

Comment 65: Save the Bay commented regarding Rule 2.6.18(A)(2) Restoration Planting Projects, suggesting that clearing an area “not to exceed a radius that is twice the diameter of the root ball” is an unrealistic area within which to clear invasive vegetation to ensure non-native invasive species do not overwhelm small plantings during the first few growing seasons. The commenter suggested changing this to read “not to exceed a radius of five feet. Another commenter, E. Boettger, NRCS, questioned the difference between the proposed Rule 2.6.18(A)(2) and Rule 2.6.23 Control of Invasive Plants as they both refer to requirements regarding the cutting of invasive plants, and it is confusing to know which rule section to adhere to.

Response 65: The phrase “or invasive vegetation” will be deleted from the Rule 2.6.18(A)(2) to remove potential overlap and confusion with the Rule 2.6.23 Control of Invasive Plants. This does not substantively change the intent of this section and DEM does not see a need for other changes.

Comment 66: E. Boettger, NRCS, commented regarding the proposed Rule 2.6.18 - Restoration Planting Projects. The commenter suggested that the proposed language will impact NRCS projects as well as projects that use the RI Sediment and Erosion Handbook. The NRCS recommends use of native species, but because of costs and practicality of use in certain circumstances, the agency doesn’t restrict the use of naturalized or introduced species. Some flexibility in the criteria would be beneficial so NRCS does not have to revise their standards, such as for stability control and stormwater restoration projects.

Response 66: The DEM agrees and will clarify Rule 2.6.18(A)(4) and (6) to better reflect its original intent to prevent the spreads of invasives. The text will be modified by adopting the use of *non-invasive* plant species with the preference for native plants (in (4)) and a suitable conservation seed mix with a preference for native seed mix (in (6)).

Comment 67: Save the Bay commented regarding Rule 2.6.18 (A)(8) pointing out that restrictions on time of year soil disturbances for turtle nesting only appear in the Restoration Planting section of the exempt activities and asked that they be included for all exempt and permitted activities that may result in soil disturbance.

Response 67: The DEM does not agree that it is reasonable to apply the soil restriction limitations to all of the exempt activities as the dates may coincide with the time period during which many of the exempt activities may ordinarily be undertaken. It is not a constraint for many restorations as the recommended planting season is commonly outside of the soil restriction timeframe.

Comment 68: Two entities commented on Rule 2.6.23 Control of Invasive Plants, namely RIBA and NRCS. The commenters questioned the applicability of the proposed Rule 2.6.23(A)(4) due to its construct and advised about the disposal of invasive plant materials.

Response 68: DEM has clarified the text. The purpose of Rule 2.6.23(A)(3) is to establish the review and authorization process by the DEM Water Quality/Wetland Restoration Team (Team) for invasive plant control projects or activities proposed within freshwater wetlands, buffers and buffer zones (as defined in Rule 2.4(A)). The buffer is vegetated land (native or invasive) within the designated buffer zone. Proposed invasive control projects or activities within jurisdictional area that are not in freshwater wetlands, not in buffer, and not in buffer zone will be exempt and will not require Team authorization. The Rule 2.6.23 will be revised to add the word “or” following 2.6.23(A)(3)(b). With respect to the addition of a requirement that invasive plants that have been removed not be disposed of in freshwater wetlands or buffer, the Team presently includes this stipulation within its authorization letters.

Comment 69: Based on experiences, several conservation-oriented commenters, including but not limited to the RI Land Trust Council and Town of Hopkinton, expressed concerns about the requirements, costs, and time involved in permitting recreational trail projects, especially those with elements proposed within freshwater wetlands, buffers, or buffer zones. Commenters advised that the proposed new exemption Rule 2.6.24(A), while appreciated, is narrow and will not get at the issues that arise with trail projects. In two instances, commenters suggested new rule language or a standard protocol for design and permitting of trail projects. Another offered to work with the DEM to develop typical drawings of trail types that could be approved for use within buffers. The RIBA consultant advised that this Rule should be reevaluated so that land trusts and conservation lands may provide access to and through freshwater wetlands, especially for educational purposes.

Response 69: Trail design, construction, and usage across freshwater wetlands or buffers, including surface waters, may result in impacts to the resources that should be either well-defined or reviewed by the Wetlands Permitting Program. In 2019, DEM undertook a review of the wetlands permitting program via a LEAN exercise that identified possible future process changes that would facilitate low impact project aligned with DEM’s mission. However, DEM determined that completely exempting new trail development from review is not appropriate. The DEM’s Wetland’s BMP Manual is a guidance document and while helpful, it is not a substitute for site-specific trail planning and design that avoids and minimizes impacts to freshwater wetlands functions and values. The DEM will be considering new, easier procedures addressing trail projects as appropriate for development of a General Permit with conditions in the future and seek further stakeholder engagement at that time. Any proposed general permit will be subject to public notice and comment before promulgation by the Agencies.

2.7 Standards Applicable to Regulated Projects and Activities and Variance Procedures

Buffer Standards – General Comments

Comment 70: RIBA submitted, as Exhibits A-C in its comment package, past correspondence that occurred during the Task Force Process and rule development. DEM was the recipient of some of the correspondence which made various recommendations concerning buffer sizes etc.

Response 70: During rule development DEM considered the input from RIBA along with other stakeholders. With respect to buffers, the changes that evolved from the initial preliminary version of the rules were responsive in part to RIBA concerns which RIBA acknowledges in its letter of March 2019. Specifically, DEM reduced the proposed buffer zone for certain rivers in River Protection Region 1 (formerly Region A) from 200 feet to 150 feet, raised the threshold for increased buffer zones on lakes from 5 acres to 10 acres and adjusted other thresholds related to vegetated wetlands, e.g. swamps. Given the statutory mandate, DEM did not agree with RIBA proposals that would have reduced protection in many areas of the state. In addition, while RIBA has repeatedly put forth that the use of technologies or best management practices (BMPs) to enhance treatment of stormwater and on-site wastewater discharges should allow for reduced buffer protection, this stance appears to only consider the water quality aspect of buffer functions. RIBA does not appear to fully recognize or acknowledge the wildlife habitat functions and values inherent in a naturally vegetated buffer zone. DEM foresees a role for enhanced BMPs to treat stormwater or I/A OWTSs to be considered in developing properties that face site constraints, but their availability does not justify reducing the level of buffer protection. Similarly, past RIBA comments on the minimum setbacks for On-site Wastewater Treatment Systems (OWTS), ***which DEM notes have not been changed***, failed to acknowledge the other functions and values of wetland buffers that clearly provide a scientifically sound rationale for their protection. DEM also respectfully disagrees with RIBA's contention that large lot zoning already provides substantial environmental protection given that zoning ordinances alone do not sufficiently prevent habitat fragmentation or the potential for other land alteration with impacts to wetland resources. Accordingly, such zoning does not negate the need for the State to more stringently regulate the lands that are in closest proximity to freshwater wetlands.

Comment 71: RIBA comments include a representation that DEM is engaged in land use planning.

Response 71: It should be abundantly clear that RI state law mandates local comprehensive planning and provides municipalities the authority to govern land use through zoning. With the possible exception of its role in the siting of certain types of state regulated facilities, e.g. waste facilities, DEM does not engage in land use planning. Rather, consistent with state law and policy, DEM reviews municipal comprehensive plans for their consistency with state environmental protection policies. With respect to the subdivision of land, the allowable number of lots is ultimately determined by the applicable zoning and site conditions; e.g. site suitability for OWTS.

Comment 72: RIBA comments contend the proposed Rules will further restrict development in the western portion of the state where large lot zoning of 3-5 acres/lot is prevalent.

Response 72: Noting that zoning is the purview of municipalities, and as noted in Comment 8, DEM does anticipate the proposed Rules may influence the design of subdivisions, however there is no evidence that the proposed buffer protections will excessively restrict future development as represented in the comments. Land area designated as buffer zones is an allowable part of the calculation of the area of a lot. Local zoning and subdivision ordinances in many communities provide flexibility that helps avoid environmental impacts while optimizing development value through clustering, conservation development and other provisions. In contrast to RIBA's view, large lot zoning affords flexibility in designing a subdivision to more easily avoid impacts to existing buffers than some of the properties zoned for much smaller lots. See Comment 8 on the analysis of subdivisions applications.

Comment 73: Save the Bay commented about the Rule 2.7.1(B)(3) Freshwater Wetlands Buffer Standard and advocated it be changed to be more protective given the shortcomings of the jurisdictional area in protecting all functions and values of wetlands. It commented that it is imperative that "all projects and activities shall be designed and carried out to avoid alteration of the buffer [remove buffer zones]." Projects should be designed to avoid wetland alterations, and therefore buffer alterations, to the maximum extent.

Response 73: As noted in Comment 2, DEM was required to establish wetland buffer standards by taking into account at a minimum, existing land use, watershed and wetland resource characteristics, and the type of activity including acceptable best management practices". This inherently requires a balancing of interests and DEM believes it has achieved a reasonable approach to achieving strengthened resource protection through the restriction of land disturbance in a targeted and limited manner that does not unduly affect property owners. Applying a restrictive buffer standard across the entire JA statewide was not deemed an approach that would be consistent with the statutory mandate nor the LTF report upon which the law was based.

Comment 74: RIBA submitted site plans in its Exhibit G to serve as examples of how the buffer zone designation will negatively impact the potential for development. In each example, it was represented the project could have been "impossible or substantially reduced" under application of the new Rules.

Response 74: DEM reviewed this exhibit and finds that RIBA is misinterpreting how the buffer zone and setbacks will be applied. After carefully reviewing the projects, including the permitting records associated with each, it is DEM's determination that all the projects would have been able to be permitted under the new Rules with either no or minor changes to their original plan and therefore that RIBA is significantly overstating the impact of the proposed Rules. In the examples of CVS and Denny's Restaurant, Wickford Harbor Estates-Conservation Design, and Reynolds Farm, the buffer zone is erroneously labeled as buffer, but the distinction is important. The buffer zone designation represents an area in which the vegetated buffer that exists should be conserved and which in some situations may need to be created. The buffer zone is a mechanism in the Rules that provides a means to standardize buffer protection in lieu of site by site evaluations. The buffer standard specifies projects should **avoid**

alteration of buffer within the buffer zone. It is fully recognized by DEM that some of the land area designated within the buffer zone has already been altered. **Such lands do not qualify as buffer.** For example, in application 05-0255 (CVS and Denny's) the area that the buildings and new roadways would be constructed on are a part of the buffer zone but are not buffer because that part of land is not vegetated and was previously altered. The assignment of buffers also appears to be in error by extending it to the limit of the jurisdiction area. Furthermore, the green areas on the RIBA submitted site plans appear to be setbacks from the buffer zone when in fact the Rule requires the setback width be from the **actual buffer**. Finally, in the examples of: Melody Hill Country Club, Lake Washington Drive, Spring Grove Road, and Paris Iron Road it is represented that under the new Rules there would be a setback of 100 feet, therefore making the projects impossible because all the work is within the setback. That however is not the case, because what RIBA depicts as a setback is actually the full jurisdictional area. After measuring out the new buffer zones for those sites, DEM found that only the Melody Hill Country Club project has its limit of disturbance inside the buffer zone. This project would still be possible by either moving the work downwards or moving forward with a variance. For the other three projects it was found that no work occurs inside the buffer zone; therefore, the projects would be just as feasible under the proposed Rules as they were under the current regulations.

Comment 75: RIBA comments included recommendations for greater use of performance standards that provide numerical thresholds or targets and consideration of buffer widths from other states.

Response 75: The proposed rules reflect a framework of standards, review criteria and variance criteria. As discussed in Comments 89, 91 and 94, DEM believes that flexibility in the application of the review criteria results in a more appropriate application of state regulatory authority than specifying a variety of numerical criteria. That said, there are aspects of proposed projects for which performance standards are specified and which are referenced in other regulations; e.g. stormwater design requirements, OWTS Rules.

Regarding other states, there are differences in the statutory basis and how wetland regulatory programs have developed in each New England state and this in turn results in some variability among rules and policy on wetland buffer protection. The differences include how terminology is used and how protection is administered including the role of municipalities. The [Legislative Task Force reports](#) offers a general summary of wetland regulatory frameworks in others states. Since 1974, RI has regulated the land areas within 50 feet of wetlands, including lakes/ponds, depending upon their sizes and within 100 or 200 feet of rivers and streams depending on their widths. While not named as buffers, these areas are designated as resources to be protected and in which resource impacts should be avoided and minimized. Among the 24 Rhode Island municipalities that adopted more stringent protection at the local level, the most common setback distance established was 100 feet from wetlands.

While Rhode Island's recent change in state law centralizes the review of freshwater wetland impacts through permitting at the state level, in all other New England states municipalities retain and exercise their own local authority over activities that may alter wetlands. In the neighboring states of MA and CT as well as ME, communities are mandated to implement provisions of state wetland or shoreland protection laws under the oversight of state agencies. In VT and NH it appears to be more discretionary.

The VT, ME and MA prioritize wetlands for state protection and leave protection of some wetlands, mostly smaller, to local governments. In all these states, municipalities are able to develop local requirements which may be more stringent than that of their state and a published evaluation for MA indicates that 70% or more have done so. The proposed Rhode Island approach of setting clear buffer standards on a statewide basis further differs from aspects of the other state programs that use a “case by case” review of applications to determine where vegetated buffer will be retained on a property.

As required by the amended wetlands law (2015), the development of new buffer standards was done taking into account existing land use, watershed protection needs and wetland characteristics. In reviewing the scientific basis for buffers, the Legislative Task Force (LTF) concluded there were gaps in RI’s freshwater wetland protection and that protecting the land around wetland resources was necessary to fully protect the functions and values of wetlands. Certain resources have been prioritized by the Agencies for stronger protection in a manner reflective of the LTF report findings that were the foundation of the 2015 statutory changes. The consideration of existing land use also led to the designation of lesser buffer zone protection in areas where significant land alteration has already taken place and therefore intact vegetated buffers generally do not exist. DEM proposed rules reflect buffer zone designations ranging from 25’ to 100’ for swamps, marshes, bogs and other wetland types, 25’-100’ for lakes and ponds (other than drinking water supply reservoirs); 50’ to 200’ for perennial rivers and 50’ to 100’ for streams. Overall, Rhode Island’s proposed buffer zones fall within the range of distances being applied in other New England states with recognition that there is variability and examples of jurisdictions (state and municipal) requiring both greater and less protection.

Buffer Standards and Rule Complexity

Comment 76: The RI Forest Conservator’s Organization (RIFCO) commented on the increase in jurisdiction and the complexity of the new rules with respect to variable buffer zones. The ACEC-RI commented that the increased complexity will result in higher costs to satisfy the requirements for all new application types. RIBA commented that the proposed rules assign “Buffers” of varying widths and recommended DEM create a no-build state-wide buffer setback to freshwater wetlands and consider the 25-foot setback as described in section 2.7.1(B)(4)(b)(2)(AA).

Response 76: The intentional increase in jurisdiction is specified in state law and DEM is obligated to regulate activities within the expanded jurisdictional areas. DEM understands the Rules are a significant change from the longstanding current regulatory scheme. In order to provide for strengthened protection through the establishment of a buffer standard while balancing other societal needs including economic growth, DEM determined a simple, single statewide buffer distance was not a viable approach. Such an approach would have either not achieved the protection goals, if set at a distance such as 25 feet, or resulted in burdensome regulation if maximized statewide. An expectation of variability was recognized in the statute in language that specifically requires that in assigning buffer standards, “... the department shall take into account, at a minimum, existing land use, watershed and wetland resource characteristics, and the type of activity including acceptable best management practices” (R.I. Gen. Laws § 2-1-20.1(d)). To comply with the statutory intent, DEM has used a tiered

approach that allowed the level of buffer protection to be tailored to the resource and conditions. While this introduces some additional complexity, it has the advantage of allowing for increased protection to be applied strategically. The Buffer standard establishes numeric “Buffer zone” values that are clearly designated within Rule 2.23. Where beneficial to clarity, named lists of waterbodies are used and accompanied by defaults. The “Buffer zones” are the mechanism by which the “Buffer” area of undeveloped vegetated land (or area to be restored) is identified and regulated on a site-specific basis. Where the property in question is undeveloped, the numerical width of the buffer will be standard and predictable. DEM acknowledges in some situations additional field work may be required to distinguish the type of wetland present on a property, although describing the wetland resources is an inherent part of the current application process. DEM disagrees that costs will rise for all applicants. We note the process for some applicants, in particular those not affecting buffer conditions, will be less complex with the implementation of general permits and the wetlands permit that does not require a variance. DEM will be updating and providing further guidance to applicants and training for practitioners to support the transition to the new regulatory framework.

Buffer Standards in Urban Region

Comment 77: Several commenters (Save The Bay, GrowSmart, N. Karraker, J. Avizinis) provided input that the buffer zones in the Urban Region should be increased to be more equivalent to those in other parts of the state, noting the importance of green spaces in cities and citing this in part as an environmental justice issue. They commented a 25-foot buffer around urban ponds and 50 feet around urban rivers or streams was insufficient to protect water quality, including from urban stormwater. Grow Smart RI DEM noted “Urban Environmental Design Manual” states that the minimum buffer for urban rivers should be 100 feet.

Response 77: In developing the buffer standards, DEM was directed by state law to consider the watershed needs, wetland characteristics and existing land use among other factors. DEM recognizes that larger buffers provide more effective protection of the functions and values of wetland resources and is well aware of the recommended 100-foot distance as a minimum to protect water quality; e.g. Urban Design Manual. However, in development of the buffer standards and the review of exiting land use, it was evident that the opportunities to broadly apply larger buffer zones in the more densely developed parts of the state and actually protect unfragmented buffer were generally less available. Vegetated buffers of 100 feet were often not present. Imposing larger buffer zones on land that is altered by existing development would result in inefficient and unnecessary regulations. Restoration of water quality in urban environments is challenging and DEM expects a variety of other water pollution control actions will be needed to achieve substantial progress. DEM plans on tracking buffer gains and losses and will be able to revisit the buffer zones designations in the future should data suggest there is an unacceptable loss of vegetated buffer actually occurring in the urban region.

Buffer Standards - Consideration of Groundwater

Comment 78: Commenters from URI (L. Joubert), and the Towns of Little Compton (Mushen, Steers and McNaughton) and Jamestown provided written and oral statements expressing concern for protection

of groundwater and seeking greater consideration of groundwater protection in the establishment of wetland buffer standards.

Response 78: DEM recognizes that surface waters, wetlands and groundwater are interrelated components of the water cycle. However, the commenters have not provided a sufficient technical rationale; e.g. supporting data, for the expansion of wetland buffers in areas of the state reliant on well and on-site wastewater systems (OWTS) for the purpose of protecting groundwater. DEM understands wetlands facilitate the flow of water between groundwater systems and surface water systems. They commonly represent areas of groundwater discharge to the surface. Some wetlands may also function periodically to recharge groundwater depending on the gradient of the groundwater table, topography of the land surface and seasonal climatic changes. DEM's experience and understanding regarding groundwater contamination in Rhode Island implicates various types of pollutant discharges and wetlands have generally not played a significant role in mitigating their impacts. State policy to protect groundwater quality is well established and DEM shares the commenters' interest in protecting groundwater quality especially in areas where drinking water is supplied by public and private wells. Preventing the cumulative impacts from on-site septic systems on groundwater quality is a valid management concern, but DEM believes it is more effectively and appropriately addressed through other strategies including requiring advanced treatment at the source. Therefore, at this time, DEM does not find it appropriate to increase wetland buffers further on the basis of providing groundwater protection.

Comment 79: Save the Bay commented about the Rule 2.7.1(B)(4) Creation of New Buffer on Existing Disturbed Property. One comment asks the DEM to change "may be required" to "shall be required" in (4)(a) and asserts that buffer restoration is far less likely to happen unless it is a requirement. A second comment asserts that the 25-foot buffer target for River Protection Regions 1 and 2 (in (4)(b)(2)(AA)) is not based on the findings of the Wetlands Legislative Task Force and that if there is room on a parcel for more buffer protection or creation then the DEM should require it.

Response 79: The creation of new buffer will be required at the discretion of the DEM depending upon site conditions, hence the wording "may be required." As proposed, 25 feet (in Rule 2.7.1(B)(4)) is a minimum target buffer width in the Regions 1 and 2.

Comment 80: Save the Bay continued to comment on Rule 2.7.1(B)(4). The commenter advised the DEM to consider including management requirements for creation of new buffers to avoid proliferation of non-native invasive species, to consider incorporating other elements of a buffer into the restoration other than trees (leaf litter, shrubs, saplings, woody debris), and to specify that created buffers must not be mown, mulched, trimmed, raked, or otherwise maintained other than for exclusion of invasive nonnative species.

Response 80: The DEM anticipates developing guidance in support of the buffer creation Rule 2.7.1(B)(4) and will take these recommendations into consideration at that time.

Comment 81: RIBA’s consultant SWCA, recommended adding “planting native vegetation” to the Rule 2.7.1(B)(4)(c) about buffer revegetation.

Response 81: Another commenter expressed concern about the requirements elsewhere in the Rules on the use of native plants. As such, the Rules will provide flexibility by clarifying the text and express preference for, but not require, the use of native non-invasive plants. The DEM anticipates developing guidance in support of buffer creation and will discuss further at that time.

Infill lots

Comment 82: Save the Bay provided comment on the Rule 2.7.1 (B)(5)(a)(3) Residential Infill Lot Buffer Standard asserting that one acre is too large for a residential infill lot buffer standard and that 25,000 square feet, or approximately half an acre, is more appropriate as the maximum size lot that should use this Rule. The commenter advised that this section should not be extended to include lots that only have development on one side.

Response 82: Based on its experience, DEM selected the one acre as a reasonable limit because it will allow the beneficial flexibility of the infill lot standard to be applied to many of the currently platted lots in this situation including those that may have atypical configurations; long and narrow. DEM points out that it only applies when the buffer standard can’t be met. Changing the threshold would impose additional regulatory burdens that DEM views as unnecessary.

Comment 83: RIBA (M. Marcus, SWCA), commented that he would expect landowners to clear land prior to the effective date of the Rules to preserve their right to build houses and to avoid the residential infill lot standard.

Response 83: DEM acknowledges there is always a possibility of landowners taking actions on their properties in advance of a rule change. DEM has provided a transition period to reduce potential disruptions to persons actively planning and designing projects or engaged in the local permitting with state permitting anticipated. Land clearing in the expanded jurisdictional area may also be regulated by municipalities.

Setback Standards

Comment 84: Save the Bay commented about the Rule 2.7.1(C)(1) Setback Standard and pointed out that the Coastal Resources Management Council’s (CRMC) setback standard is 25 feet. The commenter advised that the setback should be increased to 25 feet to be consistent with CRMC, and so that valuable coastal wetlands do not lose 5 feet of setback when CRMC is required to reduce setback standards to be consistent with the DEM. Accessory structures should have a setback distance of no less than the buffer plus 10 feet, so as to be consistent with the current freshwater wetland review policy.

Response 84: In earlier draft versions of these Rules the DEM proposed a twenty-five (25) foot Setback Standard and a setback distance of the buffer plus ten (10) feet for accessory structures consistent with the current practice. The Agencies reduced the proposed setback distances for freshwater wetlands in response to input from other stakeholders. The CRMC setback distances for coastal wetlands are part of a separate rule and have not changed; their freshwater wetland setbacks will be the same as proposed by DEM.

Comment 85: Little Compton and Jamestown submitted written and oral comment regarding an objection to setback distances being less than that required by their local ordinances. Several commenters wrote to support the Town positions.

Response 85: Little Compton ordinances specify a 100- foot setback for structures and OWTS, while Jamestown has adopted a 150- foot setback for OWTS. In both towns, the ordinance allows clearing to the limit of the DEM specified buffer which for wetlands (swamps) is limited to 50 feet but may often be less as specified by the approved limit of disturbance in a DEM freshwater wetland permit. From DEM's perspective, the proposed buffer standards offer stronger protection of the wetland resources through the designation of a buffer zone - an increased area of protection for larger swamps (50' to 75') which in combination with the DEM specified setback for a structure of 20 feet from the buffer would equate to a combined to 95' feet of separation when feasible on undeveloped lots. DEM believes the buffer standard will result in less vegetated buffer being cleared or disturbed on a site which in turn enhances functions and values such as provision of habitat and water quality protection. Regarding OWTS setbacks, the Legislative Task Force concluded existing state OWTS setbacks are adequately protective of the State's water resources. DEM is aware of special concern in areas where the density of existing development and potential for additional development, including what are characterized as sub-standard lots, has resulted in degradation of groundwater that is utilized as a drinking water supply. However, as noted above, DEM believes other strategies including reducing pollutant discharges at the source would be more appropriate to mitigate conditions.

Comment 86: The Town of Little Compton commented that the Setbacks should not differ by structure type.

Response 86: DEM believes the varying setbacks related to structure type are appropriate as they generally correspond with the potential for causing impacts. This approach allows property owners greater flexibility to utilize their property as desired in a manner is reasonably protective of the resource. With respect to OWTS, be advised the 50-foot minimum setback to the wetland specified in the OWTS rules is still applicable in addition to the setback from the buffer specified in the proposed Rules.

Comment 87: The Town of Little Compton, commented that the minimum distance from the wetland edge be increased to 50 feet for residential infill lots in areas of the State whose residents rely on wells and OWTS in a fractured bedrock setting.

Response 87: The minimum setback of an OWTS from a wetland of 50 feet as specified in separate DEM rules still applies statewide so DEM does not view this as a necessary change. Where the vegetated buffer is allowed to be less than 50 feet in accordance with the infill lot standard, the installation of an OWTS is still required to be 50 feet from a wetland. Any proposed distance less than 50 feet would trigger the requirements for an OWTS variance.

Review Criteria

Comment 88: The RIBA consultant SWCA commented that the proposed Rules avoid describing what a significant wetland impact is, which leaves applicants and designers subject to the discretion of the DEM project reviewer. The commenter continues that, as written, it is not possible for an applicant to design a project ensuring approval. As a comparison, Massachusetts has a standard of up to 5000 square feet of freshwater wetlands alteration, if there is at least 1:1 mitigation.

Response 88: The DEM respectfully disagrees with the characterization of applicant expectations and the proposed review standards. The Massachusetts standard allowing 5000 square feet of wetlands impact with 1:1 compensation, which has allowed numerous small, incremental losses of wetlands with associated cumulative impacts with demonstrably inadequate mitigation, would result in reduced protections for freshwater wetlands if applied in RI. This is contrary to the stated purpose and intent in the Statute. Proposed Rule 2.11.3 establishes the process by which the DEM will review applications for projects that are not exempt and are not covered by a General Permit. It states that any project that meets all “Standards” specified in Rule 2.7.1 would be permitted. Projects that do not meet standards, but that do not result in “Significant alterations” and that satisfy all “Variance Criteria” (including requirements for meeting impact avoidance and minimization and satisfying all review criteria, all requirements that have been in place for over 25 years and that most of the regulated community is familiar with) would also be permitted. Proposed Rule 2.11.3(C) provides description of what alterations would be considered “Significant,” and this guidance also has not changed significantly in over 25 years. It appears that the commenter prefers a permitting process based on numerical standards, rather than qualitative science-based standards as proposed. The DEM believes that the qualitative approach is valid and reasonably predictable. Since the overwhelming majority of projects submitted to the DEM for wetland permitting are approved, it appears that the standards are predictable and understandable. The proposed Rules merely makes certain reviews more predictable while maintaining the same review standards with which the regulated public is familiar.

Comment 89: Regarding the Rule 2.7.2(B)(1) to (26) Review Criteria, the commenter, SWCA for RIBA, recommends the use of a numeric metric standard to define “significant” rather than a qualitative standard. It is recommended that the DEM adopt a numerical area or length of wetland alteration, under which work would be considered “minimal.”

Response 89: DEM does not believe the suggested approach would be beneficial to either protecting wetlands or to applicants. The problems with such standards are twofold. First, relying on a strict numerical standard assumes that all wetlands, and all portions thereof, are identical, which is

ecologically untrue. Second, standards work both ways, and may put an applicant in a position of being unable to stay under the arbitrary numeric standard and have their alteration deemed “significant” despite it being, from a biological or engineering perspective, minor due to its landscape position or the type of wetland involved. Both of these issues are better addressed with scientifically valid qualitative standards that are evaluated by qualified wetlands professionals trained to assess such impacts.

Variances from Standards

Comment 90: Save the Bay commented that the title of the proposed Rule 2.7.3 should be amended to “Variances from Standards Applicable to Freshwater Wetland Permits” to clarify that variances do not apply to Applications for Significant Alteration.

Response 90: The DEM does not agree with this recommendation. The Rules governing Applications for a Significant Alteration in Rule 2.12.5(C) cross-reference the standards and review criteria in Rule 2.7 as well as the variance criteria in the Rule 2.7.3. DEM believes it’s appropriate to consider the variance criteria including those that relate to avoiding and minimizing impacts as part of the evaluation of a Significant Alteration Permit Application. The proposed Rule is written with the assumption that a variance will be required, since it is assumed that projects needing review under this application type, do not meet one or more standards.

Comment 91: Save the Bay, further commented that the proposed Rule 2.7.3 fails to clearly incorporate threshold findings upon which most environmental regulatory variance are based. The commenter suggested changes to this rule section for the Department’s consideration.

Response 91: The Variance Rule does in fact require an applicant demonstrate that their project will not result in significant adverse impacts, as required in proposed Rule 2.7.3(A)(3) which references the requirement that all Review Criteria are to be satisfied.

The proposed wording of Rules 2.7.1(E) and (F) provides a stricter standard with respect to flooding and flow impacts than is provided under the Review Criteria outlined in proposed Rule 2.7.2(B). As one example, the Standard under proposed Rule 2.7.1(E) is that a project must not result in “any net reduction in flood storage capacity.” Meeting that standard is not always possible; and an applicant may choose to demonstrate through calculation that any net decrease in flood storage capacity will still satisfy the Review Criteria Standard of proposed Rule 2.7.2(B)(16) which would allow a net reduction so long as it can be shown that such reductions will not impair the wetlands ability to protect property from flooding or flood flows. Applicants should still have the opportunity to show that, even if they cannot meet the standard, they have designed a solution to mitigate for the impact to the extent that the public health and welfare is still protected.

Regarding variances related to the protection of rare species and habitat, DEM acknowledges it may be difficult to provide a justification that satisfies the applicable criteria. However, DEM anticipates there will conceivably be projects where a judgement is called for, such as when a proposed dam removal will

improve habitat for a Species of Concern, but at the expense of habitat that may be provided for a rare species that may be present in the impoundment. DEM is unlikely to grant a variance to this standard without a very good reason but recognizes that such good reasons may on occasion be presented.

Comment 92: Save the Bay provided comment on the Rule 2.7.3(C) Alternative Configuration of Vernal Pool Buffer Zone” asserting that it has the potential to weaken the buffer zone for vernal pools. The commenter asked that the rule section be removed to better allow reviewing biologists to recommend layouts that minimize alterations to the maximum extent possible.

Response 92: The DEM agrees that the phrase “on the subject property” may limit mitigation options, thereby potentially weakening proposed buffer protection for vernal pools. As proposed the Rules allow an applicant that cannot meet the buffer standard to seek a variance from the standard. The process for seeking a variance allows an applicant to explore options for their project including mitigation on other properties, unless you are seeking a variance from the buffer standard for encroachment into the buffer of a vernal pool. Removal of the phrase will remove this limitation.

Comment 93: ACEC-RI commented on the predictability of the proposed Rules including that the predictability of a permit application outcome will decrease significantly and the process of applying for variance comes with no method for an applicant to assess the outcome in advance. The commenter asserts that the variance process will result in increased subjectivity and less predictability over the current program. The RI Realtors also commented with concerns about the variance process.

Response 93: Within proposed Rule 2.7.1, the DEM has set forth clear standards that an applicant is expected to meet to obtain a permit. An applicant that demonstrates that their project will meet all standards will receive a permit. There is no such straightforward and predictable process in the current Regulations. If a variance is required, an applicant will need to demonstrate that they have taken appropriate measures to avoid and minimize impacts to freshwater wetlands and that, in doing so, a project satisfies all review criteria outlines in proposed Rule 2.7.2. In this respect, the variance process is identical to the review process for nearly every proposed project that is submitted to the DEM under the current Regulations and is therefore no less predictable than under current Regulations. Rules sections 2.7.3(A)(4) through (A)(7) and 2.7.3.(B)(1)(c) and (d) are acknowledged as new requirements as part of the proposed Variance process, but these items provide clear instruction and guidance on what the applicant needs to provide in order to obtain a permit through a variance. The DEM believes these to be reasonable and reasonably predictable, and certainly not significantly less predictable than under the current Regulations. To support the transition to the new rules, DEM will also produce additional guidance and provide training for practitioners.

Comment 94: Regarding the Rule 2.7.3 Variances, the RIBA consultant SWCA commented that the proposed Rules will likely result in many variances due to the expansion of jurisdictional buffers and reduced work areas. The commenter suggested that variances for stormwater, erosion control, and water quality should always be an option for projects that cannot meet the standards.

Response 94: Under the proposed rules, DEM organized one section of the rule to outline the standards and review criteria that apply to the permitting process. DEM believes this is an improvement in clarity compared to the current Rules which do not articulate “standards” as such. The current process has been characterized by stakeholders in the past as unpredictable since the requirements to get a permit are scattered throughout the Rules. The proposed Rules attempt to provide more clarity by consolidating, to the extent possible, all such requirements as “Standards” in one Rule 2.7.1, so that all expectations of an applicant are placed in one section. For many such standards, once established, there must arguably be provided a process by which an applicant can seek to get a permit despite being unable to meet the clear standard. This is the proposed “Variance” process, which is proposed to largely mimic a variance process already in place and used by the CRMC.

Although many projects may be expected to pursue variances due to an inability to meet the standards, the process to do so will be similar to the review process that currently exists for every single project under current Rules. Furthermore, the DEM expects that many projects will in fact be able to meet all standards, with the result that such projects will clearly and predictably be permitted with minimal review other than to ensure the standards are met - a process that does not exist under the current Rules unless a project is completely outside of all jurisdictional wetlands and otherwise not resulting in alterations to those wetlands.

As for not allowing any variances for certain standards, the DEM asserts that no variances should be granted to those standards. More specifically, for the standards under proposed Rule 2.7.1(G) and (H), those standards refer directly to the requirements of the Stormwater Design, Management and Installation Rules, 250-RICR-150-10-8. Inherent in those Rules are provisions for flexibility where the “standard” is to meet the requirements to the “maximum extent practicable”, or allowances to seek a waiver of a standard through a professional justification. Accordingly, the DEM believes there is sufficient flexibility within the Stormwater Rules for a project to satisfy those Rules and thereby meet the standard. With respect to the “Water Quality Standard”, proposed Rule 2.7.1(I), the DEM is clear here that it will not permit a violation of its own water quality standards or allow significant degradation of any surface or groundwater. It is expected that applicants will design their projects to avoid such impacts, not seek ways to allow such impacts to water quality. For these reasons, these three standards are not subject to the variance process.

Comment 95: National Grid proposed that special consideration be given to renewable energy projects to provide relief from the variance process.

Response 95: DEM does not agree referencing a specific group of projects as suggested would be an appropriate change to the framework of standards and variances being proposed.

Buffer Zones: Wetlands and Vernal Pools

Comment 96: Save the Bay commented on the inherent diversity and functions and values of wetland complexes and advised that the condition (Rule 2.23(F)(2)) by which an additional 25 feet would be

added to the designated buffer zone (when another wetland type is identified within 50 feet of the wetlands' edge) be removed in favor of increased buffer zones for all wetland complexes.

Response 96: The DEM agrees with the commenter about the diversity and the functions and values tied to wetlands complexes and previously did consider a buffer tier solely for complexes. Based on internal discussions, DEM remains concerned about the commenter's approach and the challenges of identifying and mapping complexes, including field access by applicants or consultants onto neighboring properties that are not the subject of the application, as well as the additional size class measurements that may be necessary to establish and measure. The DEM believes the proposed approach is more straightforward and will be easier to implement, including aerial photograph review supplemented by targeted field inspections within 50 feet of wetland edges where applicable and accessible. The DEM believes this will provide added buffer protection for wetlands complexes.

Comment 97: RIBA commented on the designated buffer (zones) for swamps based on vegetation and size. The commenter asserted that the buffer zones would need to be identified by a wetlands biologist, surveyed, and confirmed by DEM prior to defining a property's potential land use, thereby adding time delays and costs, in addition to workload for DEM staff.

Response 97: The DEM agrees that in many cases the proposed Rules will likely require assistance from consultant wetlands biologists early on as part of due diligence for land acquisition as well as planning and design of development projects. The rules may prompt more application requests being prepared and filed with the DEM or CRMC to *Verify Freshwater Wetlands Edges*. DEM believes that the early identification of a property's freshwater wetlands, buffers and other jurisdictional area is proper planning and will aid overall in the application review and approval process.

Comment 98: RI Realtors, commented that the rulemaking excludes the impact of the regulation of vernal pools. The comment continues that the precise borders of vernal pools can be challenging to establish due to their ephemeral nature yet, the draft Rules could restrict all construction within a 50-foot radius.

Response 98: The impact of changes to buffer protection for vernal pools was discussed in the cost-benefit analysis. Procedures for delineation of these resources are described in proposed Rule 2.21.2 Specific Criteria - Flowing and Standing Water Freshwater Wetlands. As proposed, the designated buffer zones may be 100 feet or 50 feet depending upon the extent of undeveloped land around a pool. Vernal pools are not yet mapped on a statewide basis. Overall, using available data, DEM has estimated there are likely 480 acres of isolated vernal pools statewide and with a corresponding 2,556 acres of designated buffer zones of which 32% and 23% consists of conserved lands in River Protection Regions 1 and 2 respectively.

Comment 99: The Towns of Little Compton and Jamestown and residents M. Sorrentino, D. Wiley, M. Fella, N. Levine, D. Thompson, D. Haffenreffer, A. Goldstone and K. Wattles commented that buffer

(zones) for deciduous swamps be increased from the proposed 75 feet to 100 feet for areas of the State whose residents rely on wells and OWTS in a fractured bedrock setting.

Response 99: DEM understands the Towns interest in protecting groundwater quality but does not believe the additional setback from swamps is warranted given the purpose of the rules is to protect the wetland resource. Additional information would be needed to document a clear nexus between wetland condition and the presence of wells and OWTS in order to provide an appropriate scientific basis for making such a change. Also see the prior response discussion in this document about *Consideration of Groundwater*. DEM also notes that in standardizing freshwater wetlands regulation statewide, it was not unexpected that there could be some increases and some reductions in protection as compared to the existing municipal bylaws or ordinances that will be rescinded.

Comment 100: M. Sorrentino, a Jamestown resident, commented in support of new or larger buffers for swamps, marshes, bogs, vernal pools and some ponds. The commenter also noted that RI should require an ecosystem approach so that wetlands are not seen in isolation, but rather as part of a complex system which also includes the upland systems.

Response 100: DEM agrees wetlands functions as part of larger ecosystems and their role in that system was considered when developing the buffer standards; e.g. the need to protect riverine corridors important for wildlife. Ecosystem protection is reflected in other DEM programs and activities including strategies for protection of wildlife and their habitats and land conservation.

Comment 101: Several commented regarding the proposed vernal pool buffer zone widths and methodology. Save the Bay commented that all vernal pools must be designated a 100-foot buffer zone and the designated 50-foot buffer zone be eliminated (Rule 2.23(H)(3)(i)) as vernal pool species travel hundreds of feet to vernal pools for breeding, including across multiple land uses. Dr. N. Karraker commented similarly that the designated vernal pool buffer zones are inadequate in all three regions given that indicator species travel considerable distances into the upland habitat (and between wetlands and upland areas). She added that the travel makes confirmation of indicator species within a vernal pool difficult to confirm. WPWA also commented in support of significantly larger buffer zones. RIBA commented on the proposed buffer zone increase for vernal pools from 0 feet to 50 or 100 feet, is dependent upon what the commenter asserts is confusing criteria.

Response 101: It is recognized that vernal pool indicator species, including those identified in these Rules (2.4(A)(76)), require seasonally flooded wetland depressions and large areas of upland to meet their life needs. In accordance with the statute and these Rules, the contiguous jurisdictional area associated with vernal pools is 100 feet. Initial drafts of these Rules proposed to maximize the buffer zone at 100 feet, however, in response to informal stakeholder comment, the DEM considered different options for settings that have already been developed and has proposed tiering the buffer zone widths as a function of the percent undeveloped vegetated land (suitable upland habitat) within 100 feet. The DEM plans to develop and provide vernal pool related guidance.

Comment 102: Dr. N. Karraker commented in support of the tiered buffer zone framework in Region 1 and Region 2 but commented it was not clear not clear why, with the exception of some swamps, vegetated wetlands and vernal pools are designated the same level of buffer zone protection in all three regions as one wetland type is not more ecologically valuable than another type.

Response 102: The wetland resources designated with a 100-foot buffer were judged by the DEM to be more generally vulnerable to disturbance as well as less abundant in RI. DEM notes that about 66% of the total acreage of freshwater wetlands consist of deciduous swamps.

Buffer zones – River protection

Comment 103: Several commenters (Save the Bay, WPWA, L. Joubert, Backcountry Hunters & Anglers, Hopkinton Conservation Commission and M. Mack) commented in support of stronger buffer protection for rivers including advocacy for increasing buffer zone designations within the proposed River Protection Region 1 and River Protection Region 2 to 200 feet citing science the LTF literature review report. The need to protect headwater streams was also cited.

Response 103: DEM appreciates the advocacy for protecting riverine resources and agrees larger buffers are more protective in particular of wildlife habitat functions. The LTF Report acknowledged a 100 foot buffer as a minimum for protection of water quality and that has been achieved or exceeded across River Protection Regions 1 and 2. As noted in the above comment, the development of buffer standards required a balancing of interests including consideration of existing land use among other factors. DEM believes it has achieved a reasonable approach to achieving strengthened resource protection through the tiered framework which provides a mechanism to designate a significant number of river miles in the state with additional protection and maximize river buffer protection in those watersheds which have the lesser amount of existing alteration and fragmentation. Commenters have not provided a sufficient rationale for equating the functions and values of all rivers in River Protection Region 2 to the rivers already designated for greater protection in Tables 2.23(H)(5) and (6). In Region 2, the Department specifically calls for all or parts of the Blackstone, Branch, Pawcatuck, and Saugatucket Rivers to be given a 200' buffer (Table 2.23(H)(5)) in part because of the opportunity to protect intact riverine buffer.

Comment 104: RIBA comments expressed concern with river buffer zones of 200 feet on all rivers in Region Protection Region 1.

Response 104: DEM notes the buffer zones on rivers range from 150' to 200' for rivers in this region. The buffer zone designation for streams is maintained at 100 feet. DEM determined this region of the state contains much of the high value wetland habitat in RI. A larger portion of the Conservation Opportunity Areas identified in the Rhode Island Wildlife Action Plan are within this region. The federal designation of wild and scenic rivers within the Wood-Pawcatuck River Watershed further reflects the important habitat that is present. A significant portion of the riverine buffer zones consist of other

wetlands. Based on its evaluation, under the tiered protection approach DEM deemed it appropriate to strengthen buffer protection for many of the rivers in the region.

Comment 105: Three commenters, namely, Grow Smart RI, Save the Bay, and the Wood-Pawcatuck Watershed Association, provided general comments about cold water rivers. The comments urged DEM to apply a 200-foot buffer zone to all cold-water rivers. The Wood-Pawcatuck Wild & Scenic Stewardship Council also submitted a comment suggesting that unassessed rivers capable of supporting cold water fisheries should be given protections as if they have been designated cold and pending additional data. The comments did not provide sufficient rationale for increasing the designated buffer zones.

Response 105: As proposed, all designated cold-water rivers in Region 1 that are not otherwise designated a 200-foot buffer zone will by default be designated a 150-foot buffer (Rule 2.23(H)(7)). Designated cold water rivers in Region 2 are assigned a 150-foot buffer pursuant to Rule 2.23(H)(8). Note that of the 569 river miles in Region 2, 125 river miles have not been assessed for cold water status. When new data becomes available regarding the cold-water status of a river, DEM will update the classification as appropriate via the RI Water Quality Regulations.

Comment 106: Four commenters, namely, Save the Bay, the Hopkinton Conservation Commission, the Wood-Pawcatuck Wild and Scenic Rivers Stewardship Council, and Lorraine Joubert (URI NEMO Program) commented on proposed buffer zone designations for specific rivers or river segments. In all cases the commenters asked the DEM to increase the proposed buffer zone widths, in some cases wider than would otherwise be the maximum for the region. The DEM received comments on the following rivers or rivers segments:

REGION 1: Brushy Brook; Canonchet Brook; Davis Brook-Tanner Brook; Grassy Pond Brook; Log House Brook; Mile Brook; Parmenter Brook; Pawcatuck River; Tomaquag Brook; Town Farm Brook; Wine Brook; and Wine Bottle Brook. Others in Region 1 including Alewife Brook, Baker Brook, McGowan Brook, Mink Brook, and Rake Factory Brook.

REGION 2: Peepetoad Brook; Hunt Brook; Tarkiln Brook; Mowry Paine Brook; Shincott Brook; Nine Foot Brook; Cutler Brook; Dry Brook; Hunt River; Mastuxet Brook; and all branches of the Pawtuxet River and the Branch River, North Smithfield.

URBAN REGION: All sections of the Blackstone River and the South Branch of the Pawtuxet River; Buckeye Brook; Cherry Brook; Pawcatuck River; Runnins River; Ten Mile River; Woonasquatucket River; and West River.

Response 106: DEM scientists analyzed each of the rivers and river segments raised in comments via reviews of digital aerial photographs to determine the current statuses of their riparian areas, i.e., cold or warm water, extent of alteration or channelization, presence of undeveloped or unfragmented habitat, nexus with bordering freshwater wetlands, etc. From the perspective of applying the buffer

standard on a statewide basis consistently, DEM determined that the buffer zones as proposed for each of the rivers listed above are appropriately designated in the proposed Rule 2.23, with the exception of one identified in the next comment. Additionally, DEM notes the following:

- The analyses revealed that four of the watercourses (or segments identified by the commenter) are not “Rivers” as defined in the statute and proposed Rules. (portion of Mile Brook, portion of Tomaquag Brook, Town Farm Brook, Wine Bottle Brook.)
- Peeptoad Brook and Hunt Brook are designated with a 200-foot buffer zone as tributaries to the Scituate Reservoir.
- The Pawcatuck River maintains a 200-foot buffer zone in Region 2 as indicated in Table 2.23 (H)(5).
- Protection is being strengthened by increasing buffer zone designations to 150 feet from 100 feet for the following: Alewife Brook, Baker Brook, Brushy Brook, south fork of Canonchet Brook, Davis Brook, Grassy Pond Brook, Mastuxet Brook, McGowan Brook, Mink Brook, Mowry Paine Brook, Parmenter Brook, Rake Factory Brook, Shincott Brook, Tanner Brook, and portions of Tarklin Brook and Wine Brook.
- The designation of the buffer zone for Log House Brook is limited to the river segment that is blue-line on the U.S.G.S topographic maps.
- The watersheds of other rivers in Region 2 reflect greater fragmentation or land use alteration and it would be inconsistent with the statewide application of the buffer standard to increase the buffer zone to 200 feet.

Comment 107: L. Joubert, URI NEMO Program, commented that the Cocumcussoc Brook, North Kingstown, is a cold-water stream within a largely undeveloped watershed in Region 2. She advised that it is the only stream (defined River) in the Wickford Harbor watershed that contributes clean water during storm events and its protection should be maximized via a 200-foot buffer zone.

Response 107: The DEM agrees with the assessment of Cocumcussoc Brook by the commenter and believes it would be consistent with the buffer standard as applied statewide to increase the designation to 200 feet. This is a substantive change that will require a future rulemaking action.

Buffer Standards - Lakes and Ponds

Comment 108: Save the Bay submitted comments that certain lakes be removed from the list that assigns a 50-foot buffer zone in order to designate a larger buffer zone of 100 feet.

Response 108: We appreciate Save The Bay advocating for optimizing additional protection of individual lakes, but following review of the specific suggestions DEM is not proposing any changes for reasons of consistency in designating buffer zones. DEM used a GIS analysis of land use development along the lake shoreline to determine which lakes would receive the larger buffer zone. It is acknowledged some of these lakes with developed shorelines also have portions with intact buffer and, as Save The Bay has

mentioned, portions of these areas are already protected in some manner through public ownership. In the tiered approach to buffer standards, the strengthening of protection was balanced against the reasonableness of the regulations imposed on property owners when significant alteration has already occurred. Regarding Flat River Reservoir, DEM will promulgate in separate rulemaking an additional map to clarify which buffer zone is applicable to the different portions of the reservoir. To avoid additional complexity and issues of fairness, DEM assigned a single buffer zone distance to all ponds and lakes other than Flat River Reservoir which has an especially unique configuration.

Comment 109: Save The Bay commented that in light vernal pools potentially being misidentified as small ponds, the buffer zone should be increased in River Protection Region 1 and 2.

Response 109: DEM is aware of the similarities and potential for erroneous identifications among vernal pools and other small aquatic sites that serve as amphibian breeding areas. DEM will be developing guidance concerning vernal pools and as needed will provide training to promote proper identifications and prevent errors. Changing the buffer zone across much of the state for this purpose is not appropriate given its impact on property owners.

Comment 110: Save The Bay commented on what should qualify as a highway pond indicating it should be enclosed by adjacent roads and exit ramps.

Response 110: DEM will clarify this in guidance. Highway ponds are intended to be ponds either enclosed by roads and ramps or constructed as part of the highway road system.

Comment 111: RIBA submitted comment that questioned the need for additional pond/lake buffer protection.

Response 111: A recommended minimum vegetated buffer of 100 feet is reflected in the LTF Report and other guidance documents including the RIDEM Urban Design Manual. Protection of shoreland vegetation is understood by both researchers and managers to be important in reduce pollutant transport into ponds and lakes, provides shoreland and shallow-water habitat, including shading, and stabilizes banks. Urbanization has impaired water quality in many of RI's lakes and ponds and strengthening buffer protection will help prevent further degradation. In addition to water supply reservoirs, DEM has applied the larger buffer to those ponds and lakes around which significant intact buffer exists.

Comment 112: RIBA commented that "highly developed shorelines" was not defined and commented some lakes should be listed including Waterman Lake.

Response 112: DEM used a GIS analysis to evaluate the land use around lakes. Where the majority (50% or more of the shoreline) was found to consist of developed properties, the lake was considered highly urbanized for the purpose of these Rules. Waterman Lake did not meet this threshold.

Rare Species Protection

Comment 113: Dr. N. Karraker asked how DEM will know if rare animals or plants occupy a site given there is no RI endangered species law and the Natural heritage database is outdated. Who will conduct surveys to document their presence?

Response 113: The DEM anticipates a similar level of effort on the part of applicants and the Wetlands Program as presently conducted to assess the presence of rare animals, rare plants or rare wetland types within the authority of the wetlands statute and these Rules. We will continue to rely upon existing RI-specific references as described within Rule 2.3(A) and (B) and supporting databases.

2.8 Application Types and General Requirements

Comment 114: ACEC-RI commented that electronic or scanned signatures should be acceptable and in the past denial of copied applications resulted in unnecessary delays.

Response 114: The current process for accepting and logging in new applications to the program is poorly set up to review and verify the validity of electronic signatures. The DEM is exploring alternatives to its internal application procedures to improve workflow and accountability, including assessing how to predictably and legally accept electronic signatures. There is nothing in the proposed Rules as written that would prevent the DEM from instituting such a process change in the future.

Comment 115: The RIBA consultant SWCA provided comment on the Rule 2.8.5(A)(1) regarding wetland edge delineation forms. The commenter advised that data forms, such as those used by the New England Army Corps of Engineers, should be used to document the vegetation, soils and hydrology identified for the establishment of the wetland edge.

Response 115: The DEM provides wetland edge delineation forms which address all items cited by the commenter and requires submittal of the forms with any request to verify the delineation. The forms are noted in Rule 2.9.3. They are not noted in Rule 2.8.5 because they are only applicable when an applicant is specifically requesting verification of a delineated edge pursuant to Rule 2.9.3, whereas Rule 2.8.5 applies generally to all wetland delineation for all applications.

Comment 116: The RIBA consultant SWCA referenced Rule 2.8.5(A)(2) and commented on the delineation of the edges of rivers and streams.

Response 116: The criteria for delineating or depicting the edge of watercourses is provided in Rule 2.21.2.

Comment 117: ACEC-RI commented that the staking requirements in Rule 2.8.6(A) should be limited to work within Jurisdictional Areas and not project wide. The commenter recommended that it is not necessary to stake all utilities and pipelines within a roadway, and that as written, the staking requirements are excessive.

Response 117: The wording in proposed Rule 2.8.6(A) indicates that site work is required “as applicable.” There are certainly instances where site work is not applicable, such as the need to stake utilities and pipelines within a proposed roadway where the roadway is also staked and identified as required. Although limiting project staking solely to areas within or adjacent to jurisdictional areas may be appropriate and applicable for small lots, larger lots that have not been previously assessed by the DEM for the presence and location of freshwater wetlands would likely require labeled staking of relevant features throughout the property to facilitate inspection by the DEM and to allow it to locate any unidentified freshwater wetlands as well as accurately notify the applicant of their location. In this respect, such staking facilitates effective communication in both directions between applicants and DEM staff. Each site is different, and the Department’s staff is always available to provide guidance to applicants for adequately meeting this requirement.

Comment 118: ACEC-RI commented that it is not evident if State agencies, other than DEM, are exempt from permit fees. The proposed Rules state that no municipality or DEM needs to pay a filing fee.

Response 118: Other than the DEM, no other State agencies are exempt from fees. From time to time, the DEM may enter a Memorandum of Agreement with another State agency to facilitate alternate means of paying the required fees.

Comment 119: Save the Bay commented that applicants should be required (instead of strongly advised - Rule 2.8.7(D)(4)) to retain the services of qualified professionals for 1) identification and delineation of wetland edges; 2) evaluation of wetlands functions, values, and impacts; and 3) General Permit applications.

Response 119: The DEM has considered additional requirements to utilize licensed or certified professionals for wetland identification and evaluations of functions and values, but prefers to provide applicants with information that will assist them in hiring competent professionals rather than dictating who they must hire from a smaller pool of professionals whom may have been certified from other organizations. This position may be re-evaluated in the future. With respect to requiring professionals for General Permits, the DEM recognizes the potential need for such requirements in some circumstances and would incorporate those requirements in the General Permit as appropriate.

Comment 120: Regarding Rule 2.8.7(D) Requirements regarding use of professionals, the commenter, SWCA, suggested that the DEM consider adding certified professional titles, such as Professional Wetlands Scientist, Certified Wildlife Biologist, etc., in addition to the wording “qualified professionals.”

Response 120: The DEM believes this rule section adequately addresses requirements important to ensure adequate submittals to the DEM. As part of rule implementation, the DEM will be reviewing the written recommendations (facts sheets) available for applicants seeking to hire professionals for future updates or improvements.

2.8.11 Coordination with Municipalities

Comment 121: RIBA submitted comments objecting to the level of municipal interaction including a statement that “RIDEM should not be involved with...promotion of Low Impact Development” and the “petition process will impede the purpose of the law”.

Response 121: DEM disagrees with the RIBA comments which are inconsistent with well-established state law and policy. Specifically, the law mandating that DEM and CRMC update the stormwater manual adopted in 2007 directed the following:

*§ 45-61.2-2 Implementation. – The Department of Environmental Management (DEM), in conjunction with the Coastal Resources Management Council (CRMC) shall, by July 1, 2008, amend the Rhode Island Stormwater Design & Installation Standards manual. The changes shall include, but not be limited to, incorporation into existing regulatory programs that already include the review of stormwater impacts the following requirements: (a) Maintain pre-development groundwater recharge and infiltration on site to the maximum extent practicable; (b) Demonstrate that post-construction stormwater runoff is controlled, and that post-development peak discharge rates do not exceed pre-development peak discharge rates¹; and (c) **Use low impact-design techniques as the primary method of stormwater control to the maximum extent practicable .***

DEM and CRMC have obligations to promote LID and have done so through collaboration with partners to provide training, outreach and technical assistance.

Similarly, the petition process was a recommendation of the LTF Report and a mandate of the revised Freshwater Wetlands Act – with which RIBA should be familiar. The process allows municipalities to bring forth new scientific information that demonstrates a need for more protection for a type of wetland. If accepted by DEM, it would be implemented through additional rule-making consistent with the state law that governs that process; e.g. Administrative Procedures Act. State law requires broad public notice of rule-making but does not compel individual notices to potentially affected property owners. Such a requirement, while applicable in some of DEM’s permit processes for specific projects, is not practicable for a rule of statewide applicability.

Comment 122: RIBA commented the notification of municipalities of all permits slows down the permit process and should be limited to formal permits.

Response 122: Both the LTF report and resulting state law make clear there would be interaction between the state and municipalities in order to afford input and facilitate coordination of decision-making. DEM acknowledges municipalities may have local knowledge of site conditions that are pertinent to review of a permit application. The municipal notification procedure in the rule is appropriate and mandated by law.

Comment 123: The American Planning Association, Rhode Island Chapter (APA, M. DeLuca) submitted comments on the section of the rule governing municipal coordination objecting to changes that struck certain language and as a result refocuses the section on the DEM permitting process.

Response 123: DEM understands the concern raised by APA. The removed text served as guidance to applicants and was deleted to conform to the new policy governing the content of rules developed by the Secretary of State and Office of Regulatory Reform that draws a stronger distinction between rule and guidance. DEM agrees that proper coordination up-front can reduce conflicts. Proposed deletion of said provision does not negate due diligence on the part of the applicant and it is in the applicant's interest to research and understand all applicable local regulations. DEM will reinforce and encourage coordination with local ordinances through updated guidance documents for applicants. DEM further notes that state law governing the local land development approval process already provides for and establishes this coordination. Applicants may request, and municipalities have the authority to require, that the applicant participate in a pre-application consultation with the municipality at the idea stage (or informal concept plan) of a project proposal, in accordance with provisions in RI Gen. Laws 45-23 and 45-24, in order to advise on local requirements and procedures.

Comment 124: APA commented that having a local official attend a DEM pre-application meeting is highly valuable and should be encouraged. This type of guidance could help the applicant and DEM staff better understand the context of a proposal in relation to local regulations very early in the planning stages for a large development. APA suggested a new section of text to allow DEM to invite local officials to pre-application meetings for major land development or subdivision project also requiring local Development Plan Review.

Response 124: DEM agrees that participation by local officials is often very valuable. However, as above, the old provision was judged to be guidance and hence has been struck in accordance with state policy on the content of rules. Removing this guidance from the rules does not negate the option for an applicant to request or invite municipal officials to a DEM pre-application meeting. The service of a DEM pre-application meeting will still be provided by RIDEM's Office of Customer and Technical Assistance (OCTA). In lieu of adding a section to the rule, as a matter of policy DEM will encourage applicants to invite local officials to pre-application meetings and update written guidance to reinforce that practice.

Comment 125: APA commented on the rule which specifies documentation of local Master Plan approval or alternative for major subdivisions or land development projects be submitted as part of a freshwater wetlands application to DEM raising a concern about coordination of decision-making. Separately, a planning official from South Kingstown noted requiring advance Master Plan approval might result in planning officials not having the full amount of information they need for decision-making.

Response 125: DEM generally agrees with that review of large and complex projects to determine the allowable land use should be initiated at the local level given their authority to govern land use. APA has represented that there are additional projects of this nature that merit the similar scrutiny to those subject to Master Plan Approval. As expanding this provision would likely be judged to be a substantive change, modification to this section of rule will be addressed at a future date following further review

and consultation with local planning officials. Concerns about having a lack of information during the review for master plan approval can be addressed by municipal authorities requiring a wetland edge verification as part of its application when warranted. Because this provision may not be necessary in all circumstances, DEM views it as inappropriate to mandate it through the state rules.

Comment 126: ACEC commented in objection to this provision indicting it was not necessary and would add time delays to permitting. The State filing should be independent of a local permit process to avoid time delays and the associated costs.

Response 126: This is not a new requirement for the applicant, but is a new administrative submission requirement of DEM for a number of reasons. The Development Review Act (RIGL 45-23) established the order of approvals in recognition of the finding that State and federal laws increasingly require the interaction of local land development regulatory authorities with those of the federal and state agencies and adjacent municipalities. Proposed Rule 2.8.11. A. is consistent with the intent of the General Assembly per RIGL 45-23-29 (c) (4) regarding the local procedure for integrating the approvals of state regulatory agencies into the local review and approval process for land development and subdivisions including the multi-step Master Plan Approval process. By definition, the Master plan is an overall plan for a proposed project site outlining general, rather than detailed, development intentions. It's the first approval in the local process. It describes the basic parameters of a major development proposal, rather than giving full engineering details. In contrast, a DEM application requires an engineered plan, which comes after approval of a concept plan (Master Plan). By definition, a preliminary plan, which is the next approval stage after a master plan on the municipal level, is the required stage of land development and subdivision review which requires detailed engineered drawings and all required state and federal permits. The provision is necessary in order to ensure that the municipality has been afforded the level of concept review to which it is entitled per RIGL 45-23-40. Additionally, RIGL 45-23-40 (d) establishes that a public informational meeting will be held on the Master Plan, and that at the public informational meeting, the applicant will present the proposed development project. RIGL 45-23-40 (d) further establishes that the planning board must allow oral and written comments from the general public. All public comments are to be made part of the public record of the project application. If an applicant submits an engineered plan to RIDEM without having had conceptual master plan review and approval process by the municipality, it will have bypassed the democratic open meetings process to which all interested citizens have a right to witness and/or participate at that conceptual stage.

The provision is further necessary in order to demonstrate that the proposed plan meets the requirements of the local municipality which affect site layout and design; and that the proposed plan has been conceptually approved by the municipality, consistent with RIGL 45-23-40, in order to avoid conflicts between state approvals and local requirements. This constitutes an efficient means of coordination with municipalities.

This provision should add no additional time to the application procedure, as it is an existing required step in the order of the approval process. Once the conceptual Master plan is approved by the municipality, the applicant proceeds to have the design agreed to by the interested parties

engineered, which takes time, before submitting for a state permit. Therefore, the time it takes for the municipality to write and send the master plan approval decision, which is specified in state law (20 days plus one business day), does not typically add additional time to the permit process. Master plan approval grants the applicant a certain level of assurances and vesting rights in the approved project for up to 4 years, as specified in state law.

Comment 127: APA commented and suggested additional text that would make it mandatory that the local notification be directed to the Planning Board Administrative Officer.

Response 127: The proposed rule provides flexibility to the municipality to name its contacts which DEM believes should be retained. DEM agrees sharing information with local planning officials is appropriate and as the rules are implemented will consider adjusting the policy on communication contacts should the need arise.

Comment 128: Save the Bay commented regarding Rule 2.8.11(D) that written comments from municipalities should be treated as substantive comments as municipalities have lost much of their wetlands oversight.

Response 128: The Statute makes clear the degree of interaction a municipality is afforded and the proposed Rule 2.12.4(C)(3) should not exceed this. Objections of a substantive nature are defined in this rule to ensure comments relate to the functions and values of freshwater wetlands and the impacts thereto. Comments related to other issues that are not protected under the Statute or that are outside the regulatory scope of the DEM as afforded by the Statute should not be considered substantive even if made by a municipality. We believe the proposed and current definitions and standards of what constitute substantive objections afford municipalities sufficient ability to effectively comment on proposed projects within their borders.

2.10 General Permits

Comment 129: Several commenters expressed support for and acknowledged the reduced regulatory burden of the proposed general permit process. (Back Country Hunters and Anglers, National Grid, Save The Lakes)

Response 129: DEM agrees that this permitting option is appropriate for projects with predictable and limited potential for impacts. General permits will be tailored with specific requirements and conditions that will protect freshwater wetland resources, buffers and floodplains.

Comment 130: ACEC-RI commented that it's premature to adopt the rules without preparation of the general permits.

Response 130: The rules establish the regulatory framework for issuing general permits. The DEM will be prioritizing the issuance of general permits as part of implementing the rules.

Comment 131: Save the Bay commented regarding the proposed Rule 2.10 General Permits indicating a need for a transparent, streamlined process for wetland restoration projects involving culvert removal for the purpose of daylighting streams, improving fish passage, removing fill and invasive plant removal.

Response 131: The DEM is considering numerous project types for inclusion for coverage under a General Permit and may take these under consideration.

Comment 132: Save the Bay commented regarding the proposed Rule 2.10(B) recommending a trained wetland professional be involved in the preparation of a general permit application.

Response 132: The DEM intends to include requirements for preparation of application materials by a professional where such requirements are deemed appropriate.

2.11 Application for a Freshwater Wetlands Permit

Comment 133: The RIBA consultant SWCA recommended that the Rule 2.11.4 Permit Requirements, Conditions, and Renewals, include a provision for projects implemented during the valid period of permit issuance, but not yet completed. The requirement should clarify whether projects in construction, but not yet completed, require permit renewal.

Response 133: DEM Freshwater Wetland Permits are proposed to be issued for a period of five years with the option of a one-year renewal. The point of this comment appears to be aimed at including a condition that allows construction to continue on a project even after the permit expires, so long as construction was initiated prior to the expiration of the permit. The rules do not provide for this and instead require renewal of the permit for continued work.

2.12 Application for a Significant Alteration

Comment 134: The RIBA consultant SWCA commented that the Rule 2.12 Application for Significant Alteration, should define or quantify “Significant alteration” to improve engineering design and planning.

Response 134: The term “Significant alteration” is defined in proposed Rule 2.4(A)(65) and further guidance is provided in proposed Rule 2.11.3(C).

Comment 135: The RIBA consultant SWCA provided two comments regarding Rule 2.12.2 Application Submittal Requirements. The first is that the evaluation of recreation and aesthetics functions and values be limited only to public lands, and the second comment suggests that the DEM recommend a specific evaluation methodology for assessing wetland functions and values. The commenter suggests that an approved methodology preferred by the DEM would be useful.

Response 135: The DEM recognizes that freshwater wetlands provide the potential to support recreation and aesthetics regardless of ownership. It is inappropriate to limit the review to public lands as private lands may provide or contribute to the recreational and aesthetic values of wetlands. Numerous recreational functions and values may be available at the permission of private landowners or supported by the protection of freshwater wetlands on private property, such as education, birdwatching, and hunting. Regarding the second comment, the DEM prefers to offer flexibility to applicants on how they perform such assessments, so long as the minimum requirements are met for content, rather than mandate one or more specific methodologies.

Comment 136: The commenter, Ecosystems Solutions, Inc., offered opinion that the permitting process should end with a Certification of Compliance/Conformance as opposed to a “notice of completion” with a requirement for an as-built plan and a letter from a Professional Engineer stating any and all non-conformances before possible issuance of the “COC.” The commenter recommended that the “COC” should be recorded in the land evidence records for the subject property.

Response 136: The commenter is referring to the “Notice of Completion of Work” described in Section 2-1-22 of the Freshwater Wetlands Act and proposed Rule 2.12.6(I) and (J). To the extent that these are applicable only to Applications for a Significant Alteration, the suggestion -while it has some merit- would result in an increase in workload for the DEM that it does not have the capacity to take on. Furthermore, the Notice of Completion of Work identified in the law is the only such Notice that the Statute specifies as eligible for recordation in land evidence records. There is no authority given for recording other similar notices into land evidence records as recommended here.

Through appropriate permit conditions, DEM already has the ability to require, where appropriate, a certification that the project has been constructed in conformance with approved plans, as well as require submittal of as-built site plans. No additional rule change would be needed to continue or enhance this practice, as DEM deemed appropriate. Resulting enforcement is, as always, discretionary and also covered by the proposed Rules. However, requiring sale of a property be contingent on the issuance of a COC as suggested here requires legislation or regulation revisions that DEM has no authority over. This proposal is not recommended to be adopted.

2.13 Application Relating to Farmers

Comment 137: NRCS, commented regarding the proposed Rule 2.13.5(A)(1) - Agricultural Practices by Other Persons. The commenter recommended that listing an USDA-approved conservation plan is not needed or may complicate the description of “in regular use” for the following reasons: 1. Any field or pasture NRCS would write a plan for would already meet the definition of field and pasture given above in the description; 2. It could potentially create issues where a person abandoned a field or pasture that had a USDA-approved conservation plan that was completed prior to abandonment, and therefore the plan would no longer be applicable; and 3. The general reference to a conservation plan does no good without defining the resource concerns the plan is trying to address (using this general approach, the landowner could state they have a conservation plan simply with a high tunnel listed in it without

addressing any management issues). Finally, conservation practices within a USDA-approved conservation plan have a lifespan and may become invalid.

Response 137: After consultation with the commenter, the Freshwater Wetlands Program better understands the potential limitations in relying on a conservation plan document. As such, the proposed description of “in regular use” within Rule 2.13.5(A)(1) has been revised; the words “or any field or pasture managed under a USDA-approved conservation plan” have been removed. The resulting rule will read: *In regular use shall mean fields that are tilled, planted, or produce crops at least once within a twenty-four (24) month period or pastures that are maintained to manage the growth of woody vegetation.*

2.14 Other Application Types

Comment 138: The RIBA consultant SWCA provided comment on the Rule 2.14.2 Application for Permit Renewal, advising that it is not clear if all previously granted wetland permits remain valid following the effective date of the new regulations.

Response 138: The proposed Rules will not affect the validity of any unexpired permit issued under the existing Regulations.

2.21 Specific Criteria for Identifying Freshwater Wetlands and Floodplain Edges

Comment 139: The RIBA consultant SWCA agrees with the use of the 1987 Manual (USACE) in Rule 2.21 Specific Criteria for Identifying Freshwater Wetlands and recommends use of the New England Corps data forms as well.

Response 139: The DEM believes that the delineation forms it has developed for this purpose are adequate.

Comment 140: The RIBA consultant SWCA advised that the listed field indicators for ordinary high water are not always apparent in the field.

Response 140: The DEM believes the provided guidance in Rule 2.21.2(A)(1) is sufficient.

Comment 141: The commenter (SWCA) advised regarding Rule 2.21.2(A)(2) that it is difficult to identify the edges of beaver ponds as they are ephemeral and subject to change.

Response 141: While it is recognized that the transient nature of beaver ponds may involve establishment of varying buffer and buffer zone limits (and in some cases varying jurisdictional area), this has not been problematic in the past. All wetland areas and types may change naturally over time, and to a large extent the DEM can only review or issue determinations based on the characteristics

present at a specific moment in time. This issue could be revisited in the future if problems arise frequently with beaver ponds.

2.23 Statewide Buffer Zone Designations

Comment 142: L. Steere of Applied Bio-Systems, Inc. commented regarding Rule 2.23(F)(5) that it would be helpful guidance to have a percent of understory that is great mountain laurel Rhododendron.

Response 142: The DEM will be developing guidance and address this topic.

Miscellaneous Other Comments:

Comment 143: Comments were received concerning the aspects of the rule-making process including notification and timing during the holiday period and the potential exclusion of certain participants. One comment suggested starting the process over. (Trocki, Sorrentino) The RI Realtors Association submitted comment questioning the level of notification to property owners. RIBA supported RIRA 's concern.

Response 143: The proposed Rules have been in development for several years with input received from a variety of interests. As noted in the introduction, DEM worked with advisory groups to seek input in order to draft the rules that were formally proposed. In addition, DEM made a number of specific presentations to various stakeholder groups and held two public workshops that were broadly advertised via press releases and communications with all municipalities and other stakeholder groups. The workshops were well attended with over 100 persons at each. DEM met the notification requirements of the state Administrative Procedures Act which are different than those required for local zoning changes.

Comment 144: The Narrow River Preservation Association (R. Grant) commented on the need for a law to regulate the use of fertilizers in watershed recognized by the RI Rivers Council.

Response 144: DEM agrees the use of fertilizers can contribute to degradation of water quality conditions and accordingly promotes best management practices for their use on a voluntary basis. The comment on further needed change to state law is beyond the scope of the proposed Rules.

Comment 145: Save the Bay commented that the DEM should consider developing a database or map of stormwater control features that are not freshwater wetlands.

Response 145: The suggestion of creating a database of stormwater management infrastructure has merit. DEM is pursuing database enhancements that once implemented could facilitate the future geospatial tracking of stormwater BMPs captured through new permitting. Data available from mapping of existing stormwater infrastructure varies but is continually being improved by on-going efforts related to the MS4 program including work by RIDOT and municipalities. At present, it would be a significant

effort to develop and fully populate such a database and additional resources would be needed to accelerate progress. The existence of such a database is not a prerequisite for effective implementation of the proposed Rules.

Comment 146: Commenters (L. Joubert) raised the issue of DEM resources noting that the Agency will likely need additional resources to effectively implement both permitting and enforcement aspects of the revised Freshwater Wetland Rules. ACEC-RI commented with concerns about DEM staffing levels, the increased workload and impacts on permitting time frames.

Response 146: As required, DEM had prepared a fiscal note related to these Rules projecting a need for additional staff and related expenses associated with the expansion of jurisdiction. While incorporating certain streamlining changes will serve to limit workload, as permit application volumes increase, additional staffing will be needed to maintain reasonable permit decision time frames. Similarly, given the expansion in responsibility, additional staffing will be needed to support timely and effective investigations and responses to complaints and reports of alleged violations.

Comment 147: L. Joubert and RI Forest Conservator's Organization recommended DEM develop or update guidance on best management practices that reduce or minimize unavoidable impacts to wetlands. BMPs should be required based on site specific conditions. BMP guidance should be developed with municipal input.

Response 147: DEM has developed guidance materials that are currently available to guide applicants. As part of rule implementation, existing guidance will need to be updated and new guidance created. The DEM Office of Water Resources plans to collaborate with the DEM Forestry Program to update the guide for Best Management Practices for Water Quality Protection for silviculture.

Response to Comments on the Cost-benefit Analysis and Small Business Impacts

Small Business Impact & Flexibility Analysis

Comment 148: RIBA commented that an Economic Impact Statement is required prior to any adoption of any rule that may have an adverse impact on small businesses and that the information in the Cost-Benefit Analysis was insufficient for this purpose.

Response 148: Impacts to small businesses from the proposed Rules will be both positive and adverse. The basis for the finding of adverse impact to small businesses relates to the expanded jurisdiction of the agencies which is prescribed by state law. Due to the change in the land area that would be regulated, DEM found there is the potential for some small business owners that are located in the newly expanded jurisdictional area to have to incur new costs which were considered an adverse impact. DEM is mandated to develop rules to regulate in the jurisdictional area and therefore lacks any flexibility that would have completely mitigated the effects of the expansion in jurisdiction. DEM has developed and filed with the Office of Regulatory Reform a Small Business Impact statement as an

addendum to the Cost-Benefit analysis to clarify its assessment of small business impacts in further detail.

As noted in the cost-benefit analysis, the proposed Rules do not have any effect on *existing* small business operations. The Rules become applicable only when a small business owner desires to pursue a new project or activity that is subject to regulation. It was not practical to accurately estimate the total number of business owners that might undertake future projects to redevelop or expand. DEM relied on prior permit volume data to derive an estimate. DEM further notes that throughout rule development, provisions to limit economic impacts on businesses as well as other property owners were incorporated into the Rules. For example, among those provisions, DEM expanded certain exemptions that reduced the regulatory burden for existing developed property owners with respect to limited expansions on their properties. These changes may translate into positive impacts for small businesses, e.g. cost savings, when undertaking applicable new projects.

Cost-Benefit Analysis

Comment 149: ACEC- RI submitted a comment interpreting the “the societal benefits are based on the assumption that the newly regulated areas will be lost within ten (10) years if the new rules are not adopted.”

Response 149: The societal benefits are based an assumption that it is reasonable to equate the value of enhanced buffer protection of wetlands with the value of the ecosystem services that would be lost if the buffer protection was not implemented. The value of ecosystem services is derived from annual estimates which reflect the on-going provision of such services. The rules will secure protection of these services, and therefore their values, upon adoption and the estimates are therefore not tied to when development occurs. DEM used wetland monitoring data to estimate that *portion* of the ecosystem services values that will be preserved as a result of enhanced buffer protection provided via the rules. In developing this approach, with input from ORR, it was deemed appropriate to phase in the benefits over the first ten years as an adjustment to reduce potential over-estimation in recognition that a portion of the benefits would accrue through buffer restoration.

Comment 150: RIBA submitted reviews by economists of the Cost-Benefit Analysis citing deficiencies and indicating a more robust detailed analysis is needed to guide decision-making.

Response 150: DEM fulfilled the obligations of the applicable Executive Order and law regarding preparation of a cost-benefit analysis. DEM was not provided with funding to conduct new studies to support economic analyses and was therefore limited to using available data to prepare estimates of societal costs and benefits. DEM spoke with resource economists and researchers at URI and EPA-Narragansett and reviewed literature but found there no prior studies specific to Rhode Island that related directly to the topic of wetland buffers. The analysis was developed with guidance from the Office of Regulatory Reform (ORR) regarding the development of the methods used in the analysis including the use of assumptions. DEM agrees there are limitations in the analysis and that there may be other various other ways to approach assessing potential economic impacts. However, DEM does not agree the assessment is so flawed that rulemaking should be paused. As described in the review by

Bauer (2017) the presence of buffers on a property has resulted in variable impacts (both positive and negative) which makes this assessment more challenging. A similar finding was acknowledged in Kiel (2007) citing that in some cases the protected resource is attributed to have a beneficial “amenity” effect on house pricing. DEM has acknowledged the uncertainties and limitations of its estimates including noting assumptions and citing where available data does not exist; e.g. statewide mapping of vernal pools does not exist. DEM notes that state law RIGL 42-35-2.9 (3) (iv) provides that if an agency has made a good-faith effort to comply with this section, a rule is not invalid solely if there are errors or paucity of data in the regulatory analysis of the proposed rule.” DEM efforts to prepare the analysis were done in good faith to comply with the applicable law working within its acknowledged resource limitations.

Comment 151: RIBA submitted comments from economists noting concerns with the transfer of benefits method, that it was unclear why the three studies were selected, and that additional analysis to demonstrate the comparable groups have similar attributes should be done.

Response 151: After meeting with resource economists and researchers, DEM identified the transfer of benefits approach as the best means conceptually for addressing the societal benefits of strengthening wetland protection. DEM is aware of the considerable research on-going relative to quantifying ecosystem services as well as the issues involved in applying a transfer of benefit approach in an appropriate manner. Among the limited number of studies available, DEM selected the three studies from NJ, DE and MA because they fall within the same EPA designated Level I Ecoregion as Rhode Island – which is the Eastern Temperate Forests (with the exception of a portion of Massachusetts that lies within the Northern Forest Ecoregion.) DEM would expect the prevalent ecosystem characteristics from the areas that are subject of the studies to be similar to RI including sufficient similarities with respect to wetland types. In lieu of a detailed assessment of demographics and cost factors and given resource limitations, a simplifying assumption was made that it would be reasonable to use the values from these studies in the approach.

Comment 152: RIBA submitted comments from economists on the lack of consideration of other costs in the Cost-Benefit Analysis. They cited population, job creation, housing supply, income and tax revenues.

Response 152: DEM finds the RIBA has overstated the restrictions on land development and misconstrued the application of the Rules. As a result, it appears the reviews by the economists are also based on erroneous assumptions about restriction of housing development and other types of construction. While the Rules designate a **buffer zone**, the Rules do not prohibit applications for projects and activities within this zone. The standard applied is that alteration to **buffer** (vegetated) should be avoided. The rules are structured to provide an incentive to comply with the buffer standard through a streamlined permitting process. DEM recognizes there will be some properties that may be located wholly or largely within designated buffer zones. In such cases and when projects otherwise require unavoidable impacts to **buffers**, a variance procedure is available and long-standing policy to avoid and minimize impacts to wetlands would be applied in a manner similar to that imposed through today’s Preliminary Determination application process. DEM data on Preliminary Determination and Significant Alteration applications have shown most projects are designed adequately to avoid and minimize impacts and this results in very few permit denials. DEM notes that portions of the buffer zones are already altered and the Rules, through expanded exemptions and future general permits, will

facilitate – not overly restrict – appropriate scale projects on such properties. DEM expects the new Rules to influence site design, including the layout of future subdivisions, but not dramatically restrict land development, including housing production, as suggested. While environmental considerations may play a role, the allowable number of housing units on a parcel of land is governed by local zoning. As noted in the Cost-Benefit Analysis, a review of actual sub-division applications relative to the proposed Rules identified only 1-2 lots may have been negatively affected among 223 lots that had been approved under existing regulations. In most cases, local land use planning techniques including clustering, conservation development and others can be used to effectively avoid impacts to wetlands and buffers and support the density of development allowed by zoning. As noted earlier in Comment 74, in contrast to RIBA’s assessment, DEM’s review of RIBA site plans revealed all the projects cited would be allowed to proceed under the new Rules. DEM reviewed an additional 15 more recent applications randomly selected from across the state and again found only a limited impact on one subdivision (1-2 lots of 24 affected) without considering a request for a variance which would be available. As a result of our assessment and experience, DEM does not find that the Rules will result in sufficient disruption to land development to merit further analysis of downstream impacts on job creation, income, population growth and housing production. From a statewide perspective, DEM finds there is no evidence that the rules as intended to be applied will reduce overall housing production. Should there be those instances when environmental constraints on one property perhaps reduce the number of allowable housing units, then substitution effects might mean that construction activities shift to other properties in the state. Significant changes in job creation, population and income are expected to be governed by the larger macroeconomic trends affecting RI and the Region’s economy. Regarding tax revenues, DEM has not attempted to forecast changes due to the potentially opposing impacts on housing values, the complexity of accounting for the corresponding change in overlapping local ordinances and the other factors that affect real estate values.

Comment 153: RIBA submitted comments that the Cost- Benefit Analysis failed to consider inter-industry linkages and multiplier effects. The comment was made with the assumption land development will be significantly constrained and result in a loss of housing production. Commenters identify that the societal costs of the rule are therefore underestimated.

Response 153: DEM does not agree with the underlying assumption that land development will be sufficiently constrained such as to merit a more complex consideration of the inter-industry linkages and multiplier effects. DEM estimates that with the expansion prescribed by law, the Agencies have jurisdiction for the purpose of freshwater wetland protection over about 31% of Rhode Island’s area (excluding coastal waters). Of this area, 16% consists of wetland resources including surface freshwaters. The rules will not affect development in the remaining majority of RI’s land area. It has been DEM’s experience that the volume of permitting activity reflecting construction generally correlates with macro-economic trends. As discussed in Comment 155 above, it is erroneous to construe the designated buffer zones as confiscated lands or a land taking. The buffer zone is a mechanism in the rule to protect vegetated buffers and encourage the restoration of buffer. However, it is also recognized that portions of those areas are already altered. The buffer standard is applied to avoid and minimize alteration of actual vegetated “buffer”. There is flexibility for new construction in areas that are already altered. For lands to be newly developed, the variance procedure exists for those properties which are buildable lots, but which require some disturbance of the buffer in order to be developed. The premise that there will be an overall loss of housing production on buildable land is inconsistent with DEM experience in which the denial of permits under the current permitting program is very infrequent. A review of DEM data for permit applications between 1/1/2016 and 3/31/2021, indicated only 33 of 1296 applications for preliminary determinations and joint PDs were found to have

potential significant alterations of wetlands and directed into that permit process. Among the 67 significant alteration applications received during this period, only two were denied. Applicants have been able to design projects in adherence with state policy to avoid and minimize wetland alterations. Many communities have site design provisions that allow for cluster development or other low impact land development designs that can optimize the production of allowable housing units while addressing site constraints such as wetland areas. Based on expectations for how the rules will be implemented as well as past experience, DEM does not find there is a clear basis for attempting to estimate a potential multiplier effect based on a presumed loss of housing production over time.

Comment 154: RIBA submitted a comment on use of a linear assumption on the cost impact to property owners.

Response 154: Given its constraints, it was necessary for DEM to make certain assumptions in the analysis. DEM does not dispute the relationship concerning property values may not be linear. As noted, in the cost-benefit analysis, the review of the most relevant literature indicated that there the presence of buffer restrictions on properties yield opposing effects on property values and it is difficult to predict the impact without more site-specific information. The economic studies aiming to isolate the effect of wetland regulation on housing prices from other factors have yielded mixed results. The study referenced in developing the cost estimation method, by Kiel, noted its finding of a 4% decline in property value when wetlands were present was inconsistent with other studies that found an amenity benefit or no impact on the sale price of a house. DEM chose to develop a method based on the assumption that the Kiel study results would be applicable to RI.

Comment 155: RIBA submitted a comment on the use of permit volume data from 2016-2018 suggesting these are not an adequate reflection of reality.

Response 155: DEM permit volumes are known to fluctuate. Between 2010 and 2020, the average freshwater wetlands permit volume was 220 with a range of 158 to 279. More recently, the adjusted annual wetland permit volumes from 2016 -2018 were 228, 250 and 266 respectively which averages to 248. There was an uptick in 2019 and 2020 which produced a five- year average of 257. Permit volumes for 2020 were 263 despite the emergence of the pandemic. The recent year average is somewhat higher but within 15% of the data used. For purposes of the cost-benefit analysis, DEM believes the data used are reasonably representative of the permitting workload given the year to year variability that occurs.

Comment 156: RIBA submitted a comment expressing opinion that the cost assumptions are biased to reduce costs.

Response 156: Throughout the development of the cost-benefit analysis DEM pursued a good-faith effort, in consultation with the Office of Regulatory Reform, to identify and develop approaches to characterize the relevant costs and benefits associated with the proposed rule. Suggested areas of cost impacts, including the nexus of reduced home borrowing based on assumed lower property values, were incorporated. A number of assumptions had to be made due to the lack of data and research and these introduce uncertainty and potential error into the results. However, the assumptions were not made to intentionally bias the results one way or the other.

Comment 157: RIBA submitted a comment from economists citing a lack of explanation for the twenty-year time horizon used in the analysis.

Response 157: Federal Office of Management and Budget Circular A-4 on page 15 notes that “The time frame for your analysis should cover a period long enough to encompass all the important benefits and costs likely to result from the rule.” Environmental regulations typically have upfront costs and long-term benefits. This cost-benefit analysis assumes that it will take 10 years for the full benefit estimated using the value transfer method to phase in. This phase in accounts for both the need of newly regulated wetlands to rejuvenate, and the benefit of preventing degradation of wetlands that would have happened absent this regulation. However, the benefits of protected wetlands resources continue to accrue to the state even after this phase-period. DEM chose to utilize a long-term timeframe of 20 years to fully capture these benefits.

Comment 158: RIBA and ACEC-RI submitted a comment from economists cite a lack of explanation for the varied discount rate applied in the analysis.

Response 158: Federal OMB Circular A-4 on page 33 recommends using discount rates of both 3% and 7% in cost-benefit analyses. Seven percent, the circular notes, is an expected rate of return for capital and is appropriate when costs or benefits are related to the allocation of capital. The circular goes on to note that a 3% rate reflects a “social rate of time preference,” meaning that private consumers typically discount future cash flows less (i.e. put relatively more weight on current dollars) than their capital allocating counterparts.

Comment 159: RIBA and ACEC submitted a comment that questioned the basis for using the different discount rates - 3% and 7%?

Response 159: With guidance from the Office of Regulatory Reform, DEM chose to apply a 7% discount rate to costs and a 3% discount rate to benefits. The costs quantified in the analysis – potential loss in property value due to increased regulations – are tied to the allocation of capital and are a good fit for a 7% discount rate. The benefits – which include flood protection, water quality, ecological preservation, and increased opportunity for recreations – are likely to accrue to a large swath of Rhode Island residents. Given these variable and diffuse benefits, a discount rate of 3% was chosen to better reflect the preferences of society as a whole. DEM considered applying both 7% and 3% discounts rates to costs and benefits alike. However, this analysis already varies multiple assumptions to create ranges of potential costs and benefits. DEM believed that adding another variable into that sensitivity analysis would make the results difficult to parse. DEM’s analysis does provide the timetable of benefits (Table 5-9) and costs (Table 5-19) before discounts rate were applied, which allows the public to compute their own net present value.

Comment 160: RIBA submitted comments objecting to use of ranges of numbers in light of uncertainties.

Response 160: Federal OMB Circular A-4 notes that “It is usually necessary to provide a sensitivity analysis to reveal whether, and to what extent, the results of the analysis are sensitive to plausible changes in the main assumptions and numeric inputs.” Given the uncertainties in both the cost and benefit assumptions in this analysis, DEM chose to vary multiple assumptions to create the ranges of costs and benefits presented in the analysis. The economics and science of monetarily valuing wetlands

resources is still an emerging field. Compounding that, DEM's geographic data about current and proposed wetlands buffer zones is imperfect (for example, the state lacks a definitive map of vernal pools). Finally, the long-time horizon of the analysis and the interplay of these proposed regulations with other regulatory, economic, and environmental trends makes it difficult to definitively assess costs and benefits. All of these issues indicated that a sensitivity analysis with fairly large ranges of potential costs and benefits was justified.

Comment 161: ACEC-RI questioned DEM's analysis that the cost to prepare applications will decrease with the rules citing additional evaluations and complexity.

Response 161: Current regulations require applicants for DEM Preliminary Determinations (PD) to identify and describe the freshwater wetlands on their site and discuss measures proposed to avoid and minimize impacts. DEM is proposing to change the permitting options to include both General Permits and a less extensive permit option when the buffer zone standard is met. Contrary to ACEC-RI's comment, DEM is planning to modify application submittal requirements which per the rule will be specified in the general permit. It is DEM's intention that the General Permit application process will provide a streamlined, less expensive option for projects of predictable, limited potential impacts to wetlands, buffers or floodplains. The submittal for a wetlands permit without a variance will also be less extensive than the current PD application by eliminating the need, in most cases, for the more extensive narrative description of the design elements and practices proposed to avoid and minimize impacts to the wetlands, buffers, floodplains, areas subject to flooding and areas subject to storm flowage. DEM acknowledges some additional field inspection and evaluation may be needed on certain sites that contain wetlands complexes and/or multiple wetland resources. DEM will be providing additional guidance and provide training on the new Rules to practitioners and applicants to ensure applicants are aware of and can benefit from changes that streamline the permitting process.

Comment 162: RIBA submitted a comment from an economist that represented DEM is suggesting "the solution to the current housing affordability crisis is rich."

Response 162: This comment submitted by an economist for RIBA takes content in the cost-benefit analysis completely out of context. In the description of the regional approach, the Cost-Benefit Analysis simply acknowledges the need for more affordable housing and cites housing need projections prepared by the HousingWorkRI program which are also used by other state programs. It notes that the reduced buffer standards in Urban Region are aligned to be supportive of growth in this region which HousingWorkRI has projected has the greatest needs. Accordingly, from this text there is no basis for the comment that DEM is *suggesting a solution* to the housing affordability crisis. In the balancing of interests considered in developing the rules, DEM is simply pointing out that the reduced buffer zones may be beneficial to future growth in areas of highest documented need for affordable housing as well as in a manner consistent with state land use policy (State Guide Plan Element 2025).