Response to Public Comments on Proposed Adoption of New CRMC *Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast* (650-RICR-20-00-9)

Prepared by the Coastal Resources Management Council

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Introduction

Freshwater wetland laws at R.I. Gen. Laws §§ 2-1-18 through 2-1-28 were amended in 2015 to strengthen the protection of freshwater wetland resources and to streamline the regulatory framework applicable to projects and activities proposed in proximity to freshwater wetlands statewide. The amended state laws require both the RI Coastal Resources Management Council (CRMC) and the RI Department of Environmental Management (DEM) to commence rulemaking within their respective programs. The 2015 amendments to state laws were based on the findings and recommendations of a Legislative Task Force (LTF) previously established by the Regulatory Reform Act of 2013 (R.I. Gen. Laws § 42-64.13-10). The LTF was composed of a diverse variety of stakeholders representing a broad range of interests including building, development, realtors, municipalities, consultants, and environmental organizations. The LTF was charged with evaluating the adequacy of existing regulations at the time to protect freshwater wetlands statewide and to consider both state agency regulations and municipal ordinances, evaluating whether any gaps existed in that protection based on current scientific data, and developing recommendations for revising state law or regulations that could foster a business climate to grow the economy while also ensuring better protection of the State's freshwater wetland resources.

The CRMC and DEM have closely coordinated and collaborated to draft new freshwater wetland regulations 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 their respective existing freshwater wetland rules. The development of the new draft rules 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. Another public workshop to provide a briefing on the proposed draft Rules was held November 23, 2020 and further revisions to the draft rules were made in response to public input. Public notice of the proposed repeal and replacement of the DEM *Rules and Regulations Governing the Administration of the Freshwater Wetlands Act* were issued November 23, 2020 with public comment accepted through January 22, 2021. DEM received approximately 40 written comments during the period. DEM held public hearings on the proposed replacement and repeal of its freshwater wetland rules on January 6, 2021. In response to the submitted public comments and testimony from the January 6 public hearing, DEM made minor technical revisions and clarification to text within their final rules. DEM subsequently filed their final rules on July 19, 2021 with the Secretary of State following post-adoption approval by the Office of Regulatory Reform. The final DEM freshwater wetland rules are scheduled to be effective on January 15, 2022. See: https://rules.sos.ri.gov/regulations/inactive/part/250-150-15-2.

In anticipation of potential changes to DEM's freshwater wetland rules in early 2021, the CRMC postponed rulemaking for its proposed new freshwater wetland rules so that any substantive revisions to the draft rules could be addressed prior to issuing public notice. The CRMC made the same technical revisions to its proposed rules during June and July 2021 in coordination with DEM rule revisions so that the respective agencies' freshwater wetland rules were consistent. Following approval from the Office of Regulatory Reform on September 4, 2021 the CRMC issued public notice for rulemaking on September 27, 2021 with the 30-day public comment period ending on October 27, 2021. The CRMC received only two written comments as follows: RI Builders Association (RIBA) dated October 12, 2021 and Save The Bay (STB) dated October 19, 2021. In both cases the written comments submitted to the CRMC are identical to the written comments submitted by both parties to DEM dated January 21, 2021 (STB) and January 22, 2021 (RIBA). Both sets of comments object to adoption of the proposed agencies' respective regulations. One entity, RIBA, argues that the proposed rules are too restrictive and the other entity, STB, argues that the proposed rules are not protective enough of freshwater resources.

The CRMC held a public hearing on October 19, 2021 to provide an opportunity for the public to offer comment and testimony on the proposed CRMC freshwater wetland rules. Nevertheless, <u>there was no public comment offered during the CRMC public hearing</u>. The CRMC staff has carefully reviewed the two written comments concerning the proposed rules. The RI Builders Association objected to aspects of the additional protection in the rules citing concerns about impacts on the production of housing, other construction and the economy. 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. CRMC has responded to these issues within the responses below, but will also be working in collaboration with the DEM to develop guidance documents and conducting training workshops for the regulated public and consulting professionals as part of the transition to the new statewide freshwater wetland rules during 2022. This document summarizes the RIBA and STB comments and the corresponding CRMC responses. A response to RIBA's comments on the associated **cost-benefit analysis** is also included at the end of this document and it is the response provided by DEM, as that agency developed the cost-benefit analysis to apply statewide encompassing both DEM and CRMC jurisdictional areas.

<u>Comments from Rhode Island Builders Association (RIBA)</u>

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

Response: The foundation for increasing the freshwater wetlands jurisdictional area in both the statutory provisions and the proposed Rules is the 2014 LegislativeTask Force (LTF) report which made both scientific findings and recommendations. The CRMC acknowledges that RIBA expressed objections to the report as noted in RIBA Exhibit A, however, CRMC finds there is ample scientific literature that provides a strong basis for both the expanded state regulatory jurisdiction for freshwater wetlands as prescribed by existing state law and the buffer zone designations being proposed in the new Rules. Existing state law at R.I. Gen. Laws § 2-1-18 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 theselands should be protected; and

Whereas it has been established through scientific study that maintaining lands adjacent to freshwaterwetlands 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 uptakeof 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 existing state law or the LTF work that led to its adoption.

Comment RIBA 2: 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 should be applied more broadly.

Response: 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 in 2015. RIBA was a participant in the LTF process and understood that state agency jurisdiction was to be increased in conjunction with eliminating any overlapping municipal authorities.

Comment RIBA 3: RIBA's submitted comments that represented their understanding that the 100/200 footjurisdictional areas were "meant to give DEM flexibility in the event a community had substantive concern for a water body type". (RIBA Exhibit B, Letter dated Oct. 26, 2016).

Response: CRMC respectfully disagrees with this representation of DEM or CRMC regulatory jurisdiction. The LTF report found that the1971 Wetlands Act as amended contained significant gaps and was not adequate to protect some wetlands. The expanded freshwater wetlands jurisdiction as provided in state law provides agency authority to address the gaps in protection.

Comment RIBA 4: RIBA submitted comments alleging that the Rules will further limit development of additional housing and impose severe restrictions on existing structures.

Response: This allegation by RIBA appears to be a significant misunderstanding of how the proposed freshwater wetlands Rules will be implemented. CRMC believes RIBA is overestimating the impact of the proposed rules bypresuming all buffer zone area is completely off-limits to further alteration. This is simply not the case, as some buffer zone area is already altered, and the Rules do **not** prohibit all potential projects within these zones. Existing property uses within a designated buffer zone are able to continue (with exception of cited violations) without being affected by the Rules. The new exemptions within Rule 9.6

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 same policy that is applied under current rules 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 typicallybe expected to be granted. CRMC experience indicates most projects can be designed to comply with regulatory standards for avoidance and minimization and that the denial of wetland permit applications occurs very infrequently. As noted in the previously mentioned cost-benefit analysis, DEM'sreview 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 comprised 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 – in that what was proposed would still be permissible 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. CRMC and DEM expect 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.

Comment RIBA 5: RIBA submitted an analysis from the consultant SWCA (RIBA Exhibit E) on "Jurisdictional Buffers" noting that the land adjacent to freshwater wetlands is non-wetland, but the land is being regulated as if it was jurisdictional wetland. It notes the terms and approaches in other NewEngland states differ from RI.

Response: CRMC and DEM agree that the approach and some of the terminology in the proposed Rules differ from other New England states. However, we note these other states continue to have greater municipal government involvement in permitting. The RIBA analysis 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. Consistent with existing state law CRMC and DEM 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.

Comment RIBA 6: RIBA Exhibit E makes a 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: CRMC does not agree with the comment which 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 and confirmed by scientific studies that naturally vegetated buffers provide protection to the adjacent resources. For example, this occurs by reducing pollutant transport, regulating temperature in surface waters and providing habitat for species that utilize wetlands for portions of their lifecycle. Both the LTF report and related statutory language acknowledge the separate but inter- related beneficial functions of wetlands, buffers and floodplains.

Comment RIBA 7: RIBA Exhibit E indicates that the findings in Rule 9.2(A) and(B)(3) are problematic and require clarification. The commenter interprets the finding as indicating that the Agencies are equating the freshwater wetland buffer with the wetland itself.

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

Comment RIBA 8: RIBA Exhibit E indicates that the findings in Rule 9.2(A) and (B)(3)(b) referring to recreation and aesthetic values be deleted.

Response: CRMC disagrees. State law and the existing freshwater wetland 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 regulations that address impacts to these values. CRMC 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 RIBA 9: RIBA Exhibit E stating that the finding in Rule 9.2(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: The issue of cumulative impacts is challenging to address in the regulatory framework. CRMC shares the goal of no-net loss of wetland functions consistent with state law and has previously adopted regulations that require the avoidance and minimization of

impacts. The current CRMC freshwater wetland regulations at § 2.9(B)(1)(d)(3) includes "Mitigation measures" that will be retained and appropriately presented as a guidance document consistent with the requirements of the updated RI Code of Regulations. 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 routine practice by CRMC, the agency may continue to accept the practice as appropriate on a case-by-case basis and as a last resort when alterations to wetland resources cannot be avoided.

Comment RIBA 10: RIBA Exhibit E states that the definition of "Area subject to flooding" will be difficult to identify and quantify on project sites, and recommended that the definition should be linked with the 100-year floodplain or use the "Floodplain" definition at § 9.4(A)(30).

Response: 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." CRMC will provide further guidance (fact sheets) on these terms for applicants.

Comment RIBA 11: RIBA Exhibit E indicates that the definition of "Buffer" includes only "undeveloped vegetated" land adjacent to freshwater wetlands, and that the definition needs additional clarity, and ideally, a State-wide fixed distance.

Response: It is the opinion of the CRMC that the definitions provided within the proposed Rules, and further described with numerical criteria in the proposed Rule 9.23, 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, the proposed Regions and the designated "Buffer zone" values reflect consideration of existing land use, watershed needs and wetlands characteristics consistent with state law.

Comment RIBA 12: RIBA Exhibit E 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, will likely change over time. It was pointed out that for many vernal pools embedded within other freshwater wetlands there already is a proposed buffer and these distances are not clear in the regulations. The comments 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. It was 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: The definition of vernal pool is consistent with existing state law. The methodology for defining the edge of a vernal pool is provided in the proposed Rule 9.21.2. The designated Buffer zone widths where a vernal pool may be located within another freshwater wetlands are described in proposed Rule 9.23(F) Statewide Buffer Zone Designations. Further guidance regarding vernal pools will be developed as part of rule implementation. CRMC

believes that the proposed buffer zones for vernal pools are clear and predictable.

Comment RIBA 13: RIBA Exhibit E provided comments regarding Rule 9.5.4 (Projects that Lie on or Cross theJurisdictional Boundary) and suggested that the CRMC and DEM and have different (freshwater) wetlands rules, and then suggested the merging of the two Agencies regulations would provide clarity and streamlined permitting process, particularly for those roadway, utility, or other infrastructure projects that cross these jurisdictions.

Response: The CRMC and DEM freshwater wetland jurisdictional boundary was established by the Agencies in response to prior amendments to R.I. Gen. Laws to reduce duplicative freshwater wetlandspermitting in the coastal zone. The statewide freshwater wetlands jurisdictional boundary has been in place and effective for applicants and the Agencies for over 20 years. CRMC Rule 9.5.4 describes procedures for projects that lie on or cross the jurisdictional boundary which inevitably occurs on occasion. The CRMC - DEM interagency MOA executed in 2000 supports the implementation of the jurisdictional boundary and it will be updated by the Agencies following promulgation of their respective freshwater wetland rules.

Comment RIBA 14: RIBA commented that the Rule 9.5.7 (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 comment also noted that forestry practices needed clarification.

Response: Normal farming and ranching activities are described and defined in existing state law at R.I. Gen. Laws §2-1-22(i)(1) & (3). The definition of such within the Rules 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 particularcircumstances. Agricultural activities meeting the definition of “existing” are not affected by these new Rules. Moreover, all farming activity within CRMC jurisdiction is subject to the exclusive authority of DEM for activities relating to farmers pursuant to R.I. Gen. Laws §§ 2-1-22(i), 2-1-22 (j) and 46-23-6(2)(iv). The DEM Division of Forestry administers several programs that provide guidance and describe activities that are part of forestry. Exemptions related to forestry are in outlined in Rule 9.6.2 (Limited Cutting of Vegetation.)

Comment RIBA 15: RIBA submitted comments that the existing list of exempt activities should be re-evaluated to encompass all necessary exemptions and advised the Agencies that the determination process maybe a suitable mechanism to determine whether a project is exempt.

Response: The Agencies have extensively evaluated the list of exempt activities and have proposed additional exemptions within the new proposed rules. Applicability of an exemption is intended to be self-determined by an applicant, but a written determination may be obtained

from CRMC through a Request for Regulatory Applicability (See Rule 9.9).

Comment RIBA 16: RIBA suggested expanding exemptions for "water-dependent" activities, recreational facilities, airport or highway expansions, stormwater and water quality structures, etc.

Response: The purpose of Rule 9.6 (Exempt Activities) is to specify projects or activities that, in the agencies determination are limited in extent or there is 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 RIBA, are in fact included in the exemptions where such activities are expected to have minimal to no impact on wetlands. Some of the new Agency proposed exemptions also include water-dependent activities. However, many water-dependent activities can be expected to result in alterations and impacts to freshwater wetlands that 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 RIBA, have been expanded in proposed Rule 9.6. Airport or highway expansion projects are not limited projects or activities.

Comment RIBA 17: RIBA commented regarding Rule 9.6.3(A)(20) specifically questioning why parking lot repaving of more than 10,000 square feet should fall under the wetlands rules versus municipal regulation.

Response: The 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 the State Stormwater Rules (250-RICR-150-10-8) which are cross-referenced in proposed Rule 9.7.1(G).

Comment RIBA 18: RIBA commented regarding Rules 9.6.5 and 9.6.6 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: 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 at issue. The Rule does not prohibit all lighting on a property and CRMC exercises its discretion in consideration of and with respect to enforcement.

Comment RIBA 19: RIBA commented on Rule 9.6.23 Control of Invasive Plants and questioned the applicability of the proposed Rule 9.6.23(A)(4) due to its construct and advised about the disposal of invasive plant materials.

Response: The Agencies have clarified the text. The purpose of Rule 9.6.23(A)(3) is to establish the review and authorization process by the CRMC for invasive plant control projects or activities proposed within freshwater wetlands, buffers and buffer zones, as defined in Rule

9.4(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 are exempt and will not require CRMC authorization. Rule 9.6.23 now includes the word “or” following 2.6.23(A)(3)(b).

Comment RIBA 20: RIBA Exhibits A-C show past correspondence that occurred during the Task Force Process and initial draft rule development. DEM was the primary recipient of some of the correspondence, but was shared with CRMC staff, which made various recommendations concerning buffer sizes etc.

Response: During rule development the Agencies 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, the Agencies 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 only considers 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. The Agencies foresee a role for enhanced BMPs to treat stormwater or Innovative/Alternative OWTS to be considered in developing properties that have site constraints, but their availability does not justify reducing the level of freshwater wetland buffer protection. Similarly, past RIBA comments on the minimum setbacks for On-site Wastewater Treatment Systems (OWTS), ***which DEM indicates 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. The Agencies also respectfully disagree with RIBA’s argument 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 land area in closest proximity to freshwater wetlands.

Comment RIBA 21: RIBA comments include a representation that the Agencies are engaged in land use planning.

Response: It should be abundantly clear that existing 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, the Agencies do not engage in land use planning. Rather, consistent with state law and policy, both CRMC and DEM review municipal comprehensive plans for their consistency with state environmental protection policies and regulations. 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 RIBA 22: RIBA contends the proposed Rules will further restrict development in the western portion of the state where large lot zoning of 3-5 acres per lot is prevalent.

Response 22: Zoning is the purview of municipalities, and as noted above the Agencies anticipate the proposed Rules may influence the design of subdivisions. Nevertheless, there is no evidence that the proposed wetland buffer protections will excessively restrict future development as suggested by RIBA. Land area designated as buffer zones is an allowable part of the calculation of lot area pursuant to R.I. Gen. Laws § 45-23-44. 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 opinion, 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.

Comment RIBA 23: RIBA Exhibit G shows examples as to RIBA's interpretation as to how the buffer zone designation will negatively impact the potential for development, based on previously permitted projects. In each example, it was represented the project could have been "impossible or substantially reduced" under application of the new Rules.

Response: In review of the examples, the Agencies conclude RIBA is misinterpreting how the buffer zone and setbacks will be applied. Following careful review of RIBA's example projects, including the permitting records associated with each, the Agencies have determined that all the projects would have been able to be permitted under the new proposed Rules with either minor alterations or no changes to their original plan. Therefore RIBA is significantly overstating the impact of the proposed Rules. In the RIBA examples of CVS and Denny's Restaurant, Wickford Harbor Estates-Conservation Design, and Reynolds Farm, the buffer zone is erroneously labeled as buffer, and this distinction is very 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, similar to what is presently done for CRMC coastal jurisdiction, in lieu of site by site evaluations. The buffer standard specifies that projects should avoid alteration of buffer within the buffer zone. The Agencies fully recognize 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 DEM 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 by RIBA is 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 RIBA examples of Melody Hill Country Club, Lake Washington Drive, Spring Grove Road, and Paris Iron Road it is

represented by RIBA 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 view, however, is not supported by the Rules because what RIBA depicts as a setback is actually the full jurisdictional area. After measuring out the buffer zones under the new Rules for those sites, the Agencies found that only the Melody Hill Country Club project has its limit of disturbance inside the buffer zone. Nevertheless, this project would still be possible by plan revision to avoid a variance or seek a variance under the new Rules. For the other three projects it was found that no work occurs inside the buffer zone; therefore, the projects would be just as permissible under the new proposed Rules as they are under the current freshwater wetland regulations.

Comment RIBA 24: Comments included recommendations for greater use of performance standards that provide numerical thresholds or targets and consideration of buffer widths from other states.

Response: The proposed rules reflect a framework of standards, review criteria and variance criteria. As discussed previously, the Agencies 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.

There are differences in the other states statutory basis for 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.

Rhode Island's 2015 change in state law centralizes the review of freshwater wetland impacts through state permitting, which is what RIBA lobbied for, while 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, CT and ME, communities are mandated to implement provisions of state wetland or shore land protection laws under the oversight of state agencies. In VT and NH it appears to be more discretionary.

Comment RIBA 25: RIBA commented that the proposed rules assign "Buffers" of varying widths and recommended the Agencies create a no-build state-wide buffer setback to freshwater wetlands and consider the 25-foot setback as described in section 9.7.1(B)(4)(b)(2)(AA).

Response: The intentional increase in jurisdiction is specified in state law and the Agencies are obligated to regulate activities within the expanded jurisdictional areas. The Agencies understand the new proposed Rules are a significant change from the longstanding current regulatory scheme. However, in order to provide for strengthened protection, as required by state law, through the establishment of a buffer standard while balancing other societal needs including economic growth, the Agencies determined that a simple, single statewide buffer distance was not a feasible 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 Agencies "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." See R.I. Gen. Laws § 2-1-20.1(d). To comply with the statutory intent, the Agencies have 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 9.23. 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. The Agencies acknowledge 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 freshwater wetland application process. The Agencies disagree 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. The Agencies will be updating and providing further guidance to applicants and training for practitioners to support the transition to the new regulatory framework.

Comment RIBA 26: RIBA recommended adding "planting native vegetation" to the Rule 9.7.1(B)(4)(c) about buffer revegetation.

Response: The Rules provide flexibility and express preference for, but not require, the use of native non-invasive plants. The Agencies anticipate developing guidance in support of buffer creation and will discuss further at that time.

Comment RIBA 27: RIBA commented that they 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 proposed residential infill lot standard.

Response: The Agencies acknowledge there is always a possibility of landowners taking actions on their properties in advance of a rule change. The Agencies have 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 and of itself within the expanded jurisdictional area may also be regulated by municipalities.

Comment RIBA 28: RIBA commented that the proposed Rules avoid describing what a significant wetland impact is, which leaves applicants and designers subject to the discretion of the Agencies. The comments continue that, as written, it is not possible for an applicant to design a project ensuring approval, and 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: The Agencies respectfully disagree 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 within existing state law. Proposed Rule 9.11.3 establishes the process by which the CRMC 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 9.7.1 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 9.11.3(C) provides description of what specific alterations would be considered "Significant," and this guidance also has not changed appreciably in over 25 years. It appears that the RIBA 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, supported by state law and reasonably predictable. Since the overwhelming majority of projects submitted to the Agencies for freshwater 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 already familiar.

Comment RIBA 29: Regarding the Rule 9.7.2(B)(1) to (26) Review Criteria, RIBA, recommends the use of a numeric metric standard to define "significant" rather than a qualitative standard. It is recommended that the Agencies adopt a numerical area or length of wetland alteration, under which work would be considered "minimal."

Response: The Agencies do 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, and inconsistent with state law. 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.

Comment RIBA 30: Regarding the Rule 9.7.3 Variances, RIBA commented that the proposed Rules will likely result in many variances due to the expansion of jurisdictional buffers and reduced work areas. The comment suggests that variances for stormwater, erosion control, and water quality should always be an option for projects that cannot meet the standards.

Response: Under the proposed rules, the Agencies organized one section of the rule to outline the standards and review criteria that apply to the permitting process. The Agencies believe 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 provide more clarity by consolidating, to the extent possible, all such requirements as "Standards" in one Rule 9.7.1, 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 similar to the long-standing variance process used by the CRMC.

Although many projects may be expected to pursue variances due to an inability to meet the proposed 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 Agencies expect 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 Agencies assert that no variances should be granted to those standards. More specifically, for the standards under proposed Rule 9.7.1(G) and (H), those standards refer directly to the requirements of the statewide Stormwater Rules at 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 Agencies believe there is sufficient flexibility within the Stormwater Rules for a project to satisfy those Rules and thereby meet the standard.

Comment RIBA 31: RIBA commented on the proposed buffer zone increase for vernal pools from 0 feet to 50 or 100 feet, and asserts is dependent upon confusing criteria.

Response: It is recognized that vernal pool indicator species, including those identified in these Rules at 9.4(A)(76), require seasonally flooded wetland depressions and large areas of upland to meet their life needs. In accordance with the statute and these proposed 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 stakeholder comment, the Agencies considered different options for settings that have already been developed and has proposed a tiered approach to the buffer zone widths as a function of the percent undeveloped vegetated land (suitable upland habitat) within 100 feet. The Agencies plan to develop and provide vernal pool related guidance.

Comment RIBA 32: RIBA comments expressed concern with river buffer zones of 200 feet on all rivers in Protection Region 1.

Response: The Agencies note 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. The Agencies determined this region of the state contains much of the high value wetland habitat in RI. In addition, 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 the Agencies deemed it appropriate to strengthen buffer protection for many of the rivers in Protection Region 1.

Comment RIBA 33: RIBA submitted comment that questioned the need for additional pond/lake buffer protection.

Response: 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 shore land vegetation is understood by both researchers and managers to be important in reducing pollutant transport into ponds and lakes, providing shore land and shallow-water habitat, including shading, and stabilizing 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, the Agencies have applied the larger buffer to those ponds and lakes around which significant intact buffer exists.

Comment RIBA 34: RIBA commented that "highly developed shorelines" was not defined and commented some lakes should be listed including Waterman Lake.

Response: The Agencies 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.

Comment RIBA 35: RIBA provided comment on Rule 9.8.5(A)(1) regarding wetland edge delineation forms. The comment 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: The Agencies provide wetland edge delineation forms which address all items

cited by the comment and requires submittal of the forms with any request to verify the delineation. The forms are noted in proposed Rule 9.9.3. 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 RIBA 36: RIBA referenced Rule 9.8.5(A)(2) and commented on the delineation of the edges of rivers and streams.

Response: The criteria for delineating or depicting the edge of water courses is provided in Rule9.21.2.

Comment RIBA 37: RIBA suggested in regard to Rule 9.8.7(D) Requirements regarding use of professionals, that the Agencies consider adding certified professional titles, such as Professional Wetlands Scientist, Certified Wildlife Biologist, etc., in addition to the wording "qualified professionals."

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

Comment RIBA 38: RIBA submitted comments objecting to the level of municipal interaction including a statement that the Agencies "should not be involved with…promotion of Low Impact Development" and the "petition process will impede the purpose of the law."

Response: The Agencies disagree with RIBA's comments which are inconsistent with well-established state law and policy. Specifically, the law mandating that DEM and CRMC update the statewide 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 siteto 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 municipal petition process in the proposed Rules at § 9.16 was a recommendation of the LTF Report and a mandate of the revised Freshwater Wetlands Act. The petition process allows municipalities to

bring forth new scientific information that demonstrates a need for more protection for a particular wetland type. If accepted by the Agencies, it would be implemented through additional rule-making consistent withthe 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 the Agencies' permit processes for specific projects, is not practicable for a rule of statewide applicability.

Comment RIBA 39: RIBA commented the notification of municipalities of all permits slows down the permit process and should be limited to formal permits.

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

Comment RIBA 40: RIBA recommended that the Rule 9.11.4 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: CRMC Freshwater Wetland Permits are proposed to be issued for a period of three years with the option of four (4) one-year renewals consistent with the CRMC Management Procedures at 650-RICR-10-00-1.5.12. We believe RIBA's 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. Neither current nor existing Agency rules provide for this circumstance and instead require renewal of the permit for continued work beyond expiration of the original permit.

Comment RIBA 41: RIBA commented that Rule 9.12 Application for SignificantAlteration, should define or quantify "Significant alteration" to improve engineering design and planning.

Response: The term "Significant alteration" is defined in proposed Rule 9.4(A)(65) and further guidance is provided in proposed Rule 9.11.3(C).

Comment RIBA 42: RIBA provided two comments regarding Rule 9.12.2 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 Agencies recommend a specific evaluation methodology for assessing wetland functions and values. The comments suggest that an approved methodology preferred by the Agencies would be useful.

Response: The Agencies recognize that freshwater wetlands provide the potential to support recreation and aesthetics regardless of ownership. It is inappropriate to limit the review to only public lands, as private lands may also 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, bird-watching, and hunting. Regarding the second comment, the Agencies prefer 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 RIBA 43: RIBA provided comment on the Rule 9.14.2 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: The proposed Rules will not affect the validity of any unexpired permit issued under the existing Regulations.

Comment RIBA 44: RIBA agrees with the use of the 1987 Manual (USACE) in Rule 9.21 Specific Criteria for Identifying Freshwater Wetlands and recommends use of the New England Corps data forms as well.

Response: The Agencies believe that the state delineation forms developed for this purpose are adequate.

Comment RIBA 45: RIBA advised that the listed field indicators for ordinary high water are not always apparent in the field.

Response: The provided guidance in Rule 9.21.2(A)(1) is sufficient.

Comment RIBA 46: The comment regarding Rule 9.21.2(A)(2) suggested that it is difficult to identify the edges of beaver ponds as they are ephemeral and subject to change.

Response: 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 Agencies 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 frequent problems arise with beaver ponds.

Comment RIBA 47: RIBA comment questioning the level of notification to property owners.

Response: The proposed Rules have been in development for several years with input received from a variety of interests. As noted in the introduction, the Agencies worked with advisory groups to seek input in order to draft the rules that were formally proposed. In addition, the Agencies 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. The Agencies met the notification requirements of the state Administrative Procedures Act, which are different than those required for local zoning changes.

Comment RIBA48: RIBA commented on the designated buffer (zones) for swamps based on vegetation and size. The comment asserts that the buffer zones would need to be identified by a wetlands biologist,surveyed, and confirmed by Agency staff prior to defining a property's potential land use, thereby adding time delays and costs, in addition to workload for Agency staff.

Response: The Agencies agree 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*. The agencies believe, however, 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.

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

Small Business Impact & Flexibility Analysis

Comment RIBA 49: RIBA commented that an Economic Impact Statement is required prior to any adoptionof 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: 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, the Agencies 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. The Agencies are mandated to develop rules to regulate in the jurisdictional area and therefore lacks anyflexibility that would have completely mitigated the effects of the expansion in jurisdiction. The Agencies have developed and filed with the Office of Regulatory Reform a Small Business Impact statement as an addendum to the Cost-Benefit analysis to clarify the assessment of small business impacts in furtherdetail.

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. The Agencies relied on prior permit volume data to derive an estimate. The Agencies further note 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, The Agencies 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 RIBA 50: 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: The Agencies fulfilled the obligations of the applicable Executive Order and law regarding preparation of a cost-benefit analysis. The Agencies were not provided with funding or other resources to conduct new studies to support economic analyses and were therefore limited to using available data to prepare estimates of societal costs and benefits. The Agencies spoke with resource economists and researchers at URI and EPA 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. The Agencies agree there are limitations in the analysis and that there may be other various other ways to approach assessing potential economic impacts. However, the Agencies do 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 is some cases the protected resource is attributed to have a beneficial “amenity” effect on house pricing. The Agencies acknowledge the uncertainties and limitations of the estimates including noting assumptions and citing where available data does not exist; e.g. statewide mapping of vernal pools does not exist. The Agencies note that R.I. Gen. Laws § 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.” The Agencies efforts to prepare the analysis were done in good faith to comply with the applicable law working within the acknowledged resource limitations.

Comment RIBA 51: 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: After meeting with resource economists and researchers, the Agencies 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 on-going research 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, the Agencies 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). The Agencies 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 RIBA 52: 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: The Agencies find that 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. The Agencies recognize 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 in the Rules and long-standing policy to avoid and minimize impacts to wetlands would be applied in a manner similar to that imposed through the current Preliminary Determination application process. State agency 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. The agencies note 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. The Agencies expect 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 above, in contrast to RIBA's assessment, the Agencies' review of RIBA site plans revealed all the projects cited would be allowed to proceed under the new Rules. The Agencies 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 is available in the new rules. As a result of the Agencies' assessment and experience, we do 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, the Agencies find there is no substantive evidence that the new Rules will reduce overall housing production.

Should there be those instances when environmental constraints on one property perhaps reduce the overall 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. The Agencies have not attempted to forecast changes to tax revenues 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 RIBA 53: 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. Commentersidentify that the societal costs of the rule are therefore underestimated.

Response: The Agencies do not agree with the underlying assumption that land development will be sufficiently constrained as to merit a more complex consideration of the inter-industry linkages and multiplier effects. The Agencies estimate 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 land area. Of this area, 16% consists of freshwater wetland resources including surface freshwaters. The rules will not affect development in the remaining majority of RI's land area. It has been the Agencies' experience that the volume of permitting activity reflecting construction generally correlates with macro-economic trends. As discussed 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 that 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 Agency experience in which the denial of permits under the current permitting program is very rare. 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 existing state regulations to avoid and minimize wetland alterations, and we expect the same under the new Rules. 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 freshwater wetland areas. Based on expectations for how

the rules will be implemented, aswell as past experience, the Agencies do not find there is a clear basis for attempting to estimate a potential multiplier effect based on RIBA's presumed loss of housing production over time.

Comment RIBA 54: RIBA submitted a comment on use of a linear assumption on the cost impact to propertyowners.

Response: It was necessary for the Agencies to make certain assumptions in the analysis given the constraints, we do not dispute that 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 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 Kiel study referenced in developing the cost estimation method 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. The Agencies chose to develop a method based on the assumption that the Kiel study results would be applicable to RI.

Comment RIBA 55: RIBA submitted a comment on the use of permit volume data from 2016-2018 suggesting these are not an adequate reflection of reality.

Response: Agency permit volumes are known to fluctuate. Between 2010 and 2020, the average DEM 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 248 over the three year period. 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, the Agencies believe the data used are reasonably representative of the permitting workload given the year to year variability that occurs.

Comment RIBA 56: RIBA submitted a comment expressing opinion that the cost assumptions are biased to reduce costs.

Response: Throughout the development of the cost-benefit analysis the Agencies 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 costimpacts, 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 RIBA 57: RIBA submitted a comment from economists citing a lack of explanation for the twenty-year time horizon used in the analysis.

Response: 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. The Agencies chose to utilize a long-term time frame of 20 years to fully capture these benefits.

Comment RIBA 58: RIBA submitted a comment from economists that cite a lack of explanation forthe varied discount rate applied in the analysis.

Response: 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 tonote 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 RIBA 59: RIBA submitted a comment that questioned the basis for using the different discount rates - 3% and 7%.

Response: With guidance from the Office of Regulatory Reform, the Agencies 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 a7% 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. The Agencies 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. The Agencies believed that adding another variable into that sensitivity analysis would make the results difficult to parse. The Agencies' 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 RIBA 60: RIBA submitted comments objecting to use of ranges of numbers in light of uncertainties.

Response: 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, the Agencies 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, state geographic data about current and proposed wetlands buffer zones is imperfect. For example, the state lacks a definitive statewide 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 RIBA 61: RIBA submitted that represented the Agencies are suggesting "the solution to the current housing affordability crisis is rich."

Response: The comment takes content within the Agency 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 HousingWorkRI, which are also used by other state programs. It notes that the reduced buffer standards in the Urban Region are aligned to be supportive of growth in this region that HousingWorkRI has projected has the greatest needs. Accordingly, there is no basis for the comment that the Agencies are ***suggesting a solution*** to the housing affordability crisis. In the balancing of interests considered in developing the rules, the Agencies are 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. See State Guide Plan Element 2025.

Comments from Save The Bay (STB)

Comment STB1: Save the Bay expressed that the available science provides justification for the Agencies to require stronger protection than that proposed and/or that the Rules are not following the science.

Response: The Agencies agree that there is scientific research identifying the environmental protection valueof larger buffers. 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 Rules. In the case, the Agencies 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. The Agencies believe they have 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. The

Agencies consider 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.

Comment STB2: Comment that the Agencies are not fully exercising the limited authority given in 2015 to review alterations within 100 feet of land surrounding freshwater wetlands and 200 feet around rivers and streams.

Response: The Agencies respectfully disagree and believes Save The Bay may be misinterpreting the new terms in the proposed Rules. As noted in Rules 9.5.5 and 9.5.6, 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 ofthose 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 STB3: With respect to cumulative impacts, Save The Bay commented that the Agencies should enumerate specific criteria that would be used to evaluate cumulative impacts in order to prevent resource degradation due to over development.

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

Comment STB4: Save The Bay recommended additional language regarding the adverse impacts of dams on habitat and water quality impairments be added to the finding in Rule 9.2(B)(6).

Response: The Agencies agree that dams have contributed to the alteration of streamflow and sediment transport and habitat fragmentation in riverine ecosystems. The intent of the finding being referencedis 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 STB5: 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 destructive.

Response: The Agencies believe 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 STB6: 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 thedefinition.

Response: The definition of "Buffer" is consistent with the statute, R. I. Gen. Laws § 2-1-20(4) and the Agencies do not believe further modification is appropriate.

Comment STB7: Save the Bay commented that concrete or poly-lined ponds in Rule 9.5.1(B) in some cases are freshwater wetlands and functions and values may be present.

Response: While it is acknowledged that certain concrete or poly-lined ponds can resemble a naturalpond and may support some recognized wetland functions and values, the Agencies do 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 STB8: Save the Bay, commented that the Agencies should consider removing "uplands" from the definition of "puddles" in the Rule 9.5.1(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, STB 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: The Agencies believe 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 somesuch puddles may attract toads, but generally are not persistent long enough to support the successful development of eggs to viable metamorphs.

Comment STB9: Save the Bay, commented that the Agencies should consider amending the Prohibitions Rule 9.5.5 to include the phrase "operate motor vehicles within."

Response: Although irresponsible operation of motor vehicles within freshwater wetlands may resultin damage and alterations to freshwater wetlands, operation of the vehicle itself is not an activity that the Rules 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 STB10: Save the Bay expressed concern that Rule 9.5.6(B)(1) for projects over one acre of disturbance will eliminate review by Agency wetland biologists for large projects outside of the jurisdictional area that may have indirect alterations to wetlands.

Response: 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. Agency engineer staff will be performing the same review to the same standards for water quality and stormflow 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 STB11: Save the Bay commented that the Agencies should amend the proposed language in Rule 9.6.2(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: The Agencies recognize 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 STB12: Save the Bay commented that in Rule 9.6.2(A)(5)(b) regarding forest operation and management practices in response to an emergency, the Agencies 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. STB 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: The DEM recognizes the values of standing dead trees and woody debris in forests, and the Forestry Division works with property owners and practioners 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 STB13: Save the Bay commented regarding Rule 9.6.2(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 Agencies recognize 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 STB14: Save the Bay commented on Rule 9.6.3(A)(2) replacement of culverts. The comment asks the Agencies to remove sections 9.6.3(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: The Agencies agree that 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 Agencies 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 municipality.

Comment STB15: Save the Bay commented regarding Rules 9.6.5(A) and 9.6.6(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: 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 Agencies do not want to require a permit for these limited exempt activities simply because the resource is a bog or another rare wetland type.

Comment STB16: Save the Bay commented regarding Rule 9.6.5 (A)(8) and advised that the text "Other accessory structures" be replaced with "Stormwater management features" for clarity.

Response: The Agencies do 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 within Rule 9.4(A).

Comment STB17: Save the Bay commented regarding Rule 9.6.15 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: 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 Agencies believe 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 STB18: Save the Bay commented regarding Rule 9.6.18(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.

Response: The phrase "or invasive vegetation" was deleted from Rule 9.6.18(A)(2) to remove potential overlap and confusion with Rule 9.6.23 Control of Invasive Plants. This does not substantively change the intent of this section and the Agencies do not see a need for other changes.

Comment STB19: Save the Bay commented regarding Rule 9.6.18 (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: The Agencies do 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 STB20: Save the Bay commented about the Rule 9.7.1(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: As noted above, the Agencies were 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 the Agencies believe they have 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.

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 "caseby 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 prioritizedby 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 takenplace and therefore intact vegetated buffers generally do not exist. The Agencies 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.

Comment STB21: Save The Bay 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 aroundurban 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: In developing the buffer standards, the Agencies were directed by state law to consider the watershed needs, wetland characteristics and existing land use among other factors. The Agencies recognize 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 landuse, 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 the Agencies expect a variety of other water pollution control actions will be needed to achieve substantial progress. The Agencies

plan 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.

Comment STB22: Save the Bay commented about the Rule 9.7.1(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 Agencies should require it.

Response: The creation of new buffer will be required at the discretion of the Agencies depending upon site conditions, hence the wording "may be required." As proposed, 25 feet (in Rule 9.7.1(B)(4)) is a minimum target buffer width in the Regions 1 and 2.

Comment STB23: 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: The Agencies anticipate developing guidance in support of buffer creation in Rule 9.7.1(B)(4) and will take these recommendations into consideration at that time.

Comment STB24: Save the Bay provided comment on the Rule 9.7.1 (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: Based on experience, the Agencies selected 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 such as 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 STB25: Save the Bay commented about the Rule 9.7.1(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: In earlier draft versions of these Rules the Agencies 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 (650-RICR-20-00-1) and have not changed; CRMC freshwater wetland setbacks will be the same at proposed by DEM for consistency in freshwater wetland rules application statewide.

CommentSTB26: Save the Bay commented that the title of the proposed Rule 9.7.3 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: The Agencies do not agree with this recommendation. The Rules governing Applications for a Significant Alteration in Rule 9.12.5(C) cross-reference the standards and review criteria in Rule 9.7 as well as the variance criteria in the Rule 9.7.3. The Agencies believe 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 STB27: Save the Bay, further commented that the proposed Rule 9.7.3 fails to clearly incorporate threshold findings upon which most environmental regulatory variance are based, and suggested changes to this rule section for the Agencies' consideration.

Response: The Variance Rule does in fact require an applicant demonstrate that their project will notresult in significant adverse impacts, as required in proposed Rule 9.7.3(A)(3) which references the requirement that all Review Criteria are to be satisfied. The proposed wording of Rules 9.7.1(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 9.7.2(B). As one example, the Standard under proposed Rule 9.7.1(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 maychoose to demonstrate through calculation that any net decrease in flood storage capacity will still satisfy the Review Criteria Standard of proposed Rule 9.7.2(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, the Agencies acknowledge it may be difficult to provide a justification that satisfies the applicable criteria. However, the Agencies anticipate there will conceivably be projects where a judgment 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 rarespecies that may be present in the impoundment. The agencies are unlikely to grant a variance to this standard

without a very good reason, but recognizes that valid reasons may occasionally be presented.

Comment STB28: Save the Bay provided comment on the Rule 9.7.3(C) Alternative Configuration of VernalPool 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: The Agencies agree that the phrase "on the subject property" may limit mitigation options, thereby potentially weakening proposed buffer protection for vernal pools. As proposed the Rules allowan applicant that cannot meet the buffer standard to seek a variance from the standard. The process forseeking 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.

CommentSTB29: Save the Bay commented on the inherent diversity and functions and values of wetland complexes and advised that the condition (Rule 9.23(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 wetland edge) be removed in favor of increased buffer zones for all wetland complexes.

Response: The Agencies agree with the comment 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, the Agencies remain concerned about the STB approach and the challenges of identifyingand 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 benecessary to establish and measure. The Agencies believe the proposed Rule 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 Agencies believe this will provide added buffer protection for wetlands complexes.

Comment STB30: 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 9.23(H)(3)(i)) as vernal pool species travel hundreds of feet to vernal pools for breeding, including across multiple land uses.

Response: It is recognized that vernal pool indicator species, including those identified in Rule 9.4(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 stakeholder comment, the Agencies considered different options for settings that have already been developed and has proposed a tiered approach for buffer zone widths as a function of the

percent undeveloped vegetated land (suitable upland habitat) within 100 feet. The Agencies plan to develop and provide vernal pool related guidance.

Comment STB31: Save the Bay commented in support of stronger buffer protectionfor 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: The Agencies appreciate the advocacy for protecting riverine resources and agrees larger buffersare 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 standardsrequired a balancing of interests including consideration of existing land use among other factors. The Agencies believe they have 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. Comments 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 9.23(H)(5) and (6). In Region 2, the Agencies specifically call for all or parts of the Blackstone, Branch, Pawcatuck, and Saugatucket Rivers to be given a 200' buffer (Table 9.23(H)(5)) in part because of the opportunity to protect intactriverine buffer.

Comment STB32: Save the Bay provided comments about cold water rivers. The comments urged the Agencies to apply a 200-foot buffer zone to all cold-water rivers. The comments did not provide sufficient rationale for increasing the designated buffer zones.

Response: 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 9.23(H)(7)). Designated cold water rivers in Region 2 are assigned a 150-foot buffer pursuant to Rule 9.23(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, the Agencies will update the classification as appropriate via the RI Water Quality Regulations.

Comment STB33: Save the Bay commented on proposed buffer zone designations for specific rivers or river segments. In all cases the commenters asked the Agencies to increase the proposed buffer zone widths, in some cases widerthan would otherwise be the maximum for the region. The Agencies received comments on the following rivers or rivers segments:

REGION 1: Brushy Brook; Canonchet Brook; Davis Brook-Tanner Brook; Grassy Pond Brook; Log HouseBrook; 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: Peeptoad 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: Agency 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, the Agencies determined that the buffer zones as proposed for each of the rivers listed above are appropriately designated in the proposed Rule 9.23, with the exception of one identified in the next comment. Additionally, the Agencies note the following:

- The analyses revealed that four of the watercourses (or segments identified by the comment) 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 9.23(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 STB34: 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: The Agencies appreciate Save The Bay advocating for optimizing additional protection of individual lakes, but following review of the specific suggestions the Agencies are not proposing any changes for reasons of consistency in designating buffer zones. The agencies 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 noted,

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, the Agencies 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, the Agencies assigned a single buffer zone distance to all ponds and lakes other than Flat River Reservoir, which has an especially unique configuration.

Comment STB35: 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: The Agencies are aware of the similarities and potential for erroneous identifications among vernal pools and other small aquatic sites that serve as amphibian breeding areas. The Agencies 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 STB36: Save The Bay commented on what should qualify as a highway pond indicating it should be enclosed by adjacent roads and exit ramps.

Response: The Agencies will clarify this issue 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 STB37: Save the Bay commented that applicants should be required (instead of strongly advised - Rule 9.8.7(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 Agencies have 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 Agencies recognize the potential need for such requirements in some circumstances and would incorporate those requirements in the General Permit as appropriate.

Comment STB38: Save the Bay commented regarding Rule 9.8.11(D) that written comments from municipalities should be treated as substantive comments as municipalities have lost much of their wetlands oversight.

Response: Existing state law makes clear the degree of interaction a municipality is afforded and the proposed Rule 9.12.4(C)(3) is consistent with the statute. Substantive objections 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 state law or that are outside the regulatory scope of the Agencies 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 with sufficient ability to effectively comment on proposed projects within their borders.

Comment STB39: Save the Bay commented regarding the proposed Rule 9.10 General Permits indicating a need for a transparent, streamlined process for wetland restoration projects involving culvert removal for the purpose of day-lighting streams, improving fish passage, removing fill and invasive plant removal.

Response 131: The Agencies are considering numerous project types for inclusion for coverage under aGeneral Permit and may take these under consideration.

Comment STB40: Save the Bay commented regarding the proposed Rule 9.10(B) recommending a trained wetland professional be involved in the preparation of a general permit application.

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

Comment STB41: Save the Bay commented that the Agencies should consider developing a database or map of stormwater control features that are not freshwater wetlands.

Response: The suggestion of creating a database of stormwater management infrastructure has merit. The Agencies are pursing database enhancements that once implemented could facilitate the future geospatial tracking of stormwater BMPs captured through new permitting. Data available from mappingof existing stormwater infrastructure varies, but is continually being improved by on-going efforts relatedto 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 implementationof the proposed Rules.