Response to Comments Public Notice: March 3, 2015 Proposed Revision of New England District Compensatory Mitigation Guidance 10 November, 2016

Sixteen commenters responded to the 3 March 2015 draft version of the proposed revision of New England District Compensatory Mitigation Guidance (Guidance). Below are the comments on the public notice and the Corps' responses (in *italics*) to these comments.

As an introduction, there are several notable changes in the revised guidance, both as initially proposed and from further improvements following many of the comments received:

- It has been restructured so the overall compensatory mitigation guidance is the primary portion of the document and resource-specific modules, including associated mitigation plan checklist and checklist directions for each, are included in their own appendix.
- The resource modules for vernal pools and streams have been vastly improved and extended. Detailed methods for calculating appropriate compensatory mitigation for impacts to these resources are included.
- Some of the existing compensation recommendations have changed, including use of multipliers instead of ratios, removal of ranges of multipliers, better detailing of secondary impact mitigation, and an increase in the multiplier for wetland preservation.

1. Some typographical errors were noted, as well as requests for internet links. Typographical errors have been corrected. As for internet links, we noted in this latest guidance that "due to the speed and frequency with which these links become obsolete, they provided more confusion than benefit." Therefore, an internet search by the user will provide quick access to the information sought.

2. There were several recommendations for clarification of statements and language changes in specific portions of the proposed Guidance. *Clarification was provided with adjusted language in most cases, and many of the language changes have been accepted, as appropriate. Where recommendations were made to reword direct quotes from other sources (e.g., the Mitigation Rule), these were not made.*

3. Regarding In-Lieu Fee (ILF) programs, one commenter was concerned that while credits from ILF programs, where available, are identified in the Mitigation Rule as preferred over permittee-responsible mitigation (PRM), it may not be appropriate for all forms of compensatory mitigation, such as for impacted Submerged Aquatic Vegetation (SAV) sites. Another commenter stated that, especially for long, linear projects, use of

ILF program credits can be cost-prohibitive, and these cost considerations should be part of the District's guidance.

As established in the Mitigation Rule (33 CFR 332.3(b)), use of ILF credits, where available, is "generally preferable" to PRM. Language in the Guidance provides permit applicants the opportunity to make the case where PRM may be more appropriate, which is considered on a project-specific basis. In addition, 33 CFR 332.3(a) includes costs of compensatory mitigation project as one of the items the District Engineer must consider in making the determination of the environmentally preferable option.

4. One commenter stated that it was not feasible to plan for future land use decisions when planning mitigation sites, and stated that direction for "appropriate watershed plans" was needed.

Most cities and towns in New England have land use planning tools and maps for consideration in advance of any project proposal, and project proponents are urged to do the best possible planning with the information available. Where watershed plans are available for consideration in project preparation, applicants are urged to work with the Corps in incorporating watershed plan concepts or priorities in the proposal.

5. Five commenters were concerned that requiring an increased replacement multiplier to address temporal loss as well as the "safety factor" that is built in to the multipliers are not based in science, can amount to double-dipping in the event of failure of a mitigation site that needs to be redone, and are overly burdensome to the applicant. There are many functions that are area sensitive, and an increased compensatory mitigation multiplier is necessary for restoring the original level of function impacted. There is always at least some risk and uncertainty at restoration, creation, and enhancement sites, and it has been observed, and included in national guidance, that a margin of safety is often necessary to account for portions of the compensatory mitigation site which may not adequately develop wetland functions or may not develop them at all (e.g., a proposed 5-acre mitigation site which only develops 4 acres of wetlands). Having a higher ratio increases the likelihood that a larger overall area will provide the intended replacement for aquatic resource functions. This is not a new approach to our mitigation guidance and has been in place since at least June 2004 and has been in national compensatory mitigation guidance since at least 1990. Regarding the scientific bases for increased compensatory mitigation, a scientific and policy background was provided in the original establishment of recommended ratios in this District in December 2007.

- 6. Comments related to preservation as mitigation are as follows:
 - a) One commenter wanted the language regarding preservation "to be acceptable in some, but not all circumstances" to return to language from the previous Guidance that it is "acceptable in rare circumstances." Another commenter stated that the new language was an improvement and helped support the use of preservation as a core mitigation strategy.
 - b) One commenter found issue with the Guidance stating that preservation is a mitigation means of last resort, yet it is apparently the primary goal in ILF

programs in at least New Hampshire and Maine, therefore, why can it not be a main focus of PRM?

- c) One commenter stated that the multipliers for use of preservation for both wetlands and uplands as mitigation should be higher than proposed. Another commenter stated that there is no scientific justification for the increase in the multiplier for preservation.
- d) Finally, one commenter stated that requiring that a site be under a demonstrable threat would have the unfortunate result of good sites that are not under threat being overlooked.

In accordance with the 33 CFR 332.2(a)(2), preservation is listed last as an option for compensatory mitigation "in certain circumstances," since there are no gains in aquatic resource function with that option. However, preservation as mitigation is a useful strategy in New England, where the other methods of mitigation are limited in many areas; language has been added to this section to provide clarification on when preservation-only projects may be suitable, including for PRM. Furthermore, the language regarding proof that a site is under a demonstrable threat is also from the Mitigation Rule and is a requirement for use of preservation as compensatory mitigation.

7. One commenter noted that the fundamental principle of the Guidance (and underlying Mitigation Rule) is that compensatory mitigation must replace lost aquatic resource functions, but the Guidance defaults to acreage as an estimate of function. Functions lost at an impact site and proposed to be gained at a compensation site should be measured.

We are not opposed to the use of such an approach; however, there is currently no method of quantitative functional assessment available. Development of such a tool in the District is currently under way.

8. Four commenters raised the issue of potential conflict with state/local/tribal programs, two stating that Massachusetts general laws require wetland replication be located in the same general area as the lost area, potentially resulting in the requirement that an applicant provide both this on-site mitigation as well as purchase of ILF credits, per Corps' policy. Other comments stated that there should be clarification between the requirements under Individual Permits versus Regional General Permits, which don't always require compensatory mitigation.

This Guidance applies to all permit actions; the decision to require compensatory mitigation is project-specific and dependent on many factors. These are left to the District Engineer's discretion. This document is intended to provide guidance to develop appropriate compensatory mitigation when it is required. There are six New England states and each state program is different from the others and from the federal Clean Water Act. Compensatory mitigation must be developed by each program to meet its needs. If state-required compensation does not adequately provide for impacts to federally-protected resources, additional compensation would be necessary. The opposite is also true, if federally-required compensation does not adequately compensate for impacts to state-protected resources.

9. One commenter recommended maintaining the ranges for the mitigation ratios.

The ranges were eliminated from the Mitigation Guidance because it already incorporates flexibility in determining appropriate levels of compensatory mitigation based on the condition of the site. In reality, during review of projects under the ranges, applicants would lobby for the lowest end of the range, while reviewing agencies would lobby for the top of the range, ultimately landing somewhere in the middle on most projects. Therefore, the ranges did not have much utility but providing for argument during permit review. Therefore, the multipliers established with this Guidance allow for flexibility in final permit decisions.

10. Two commenters stated that requiring 10 years of monitoring for scrub shrub and forested mitigation sites is excessive and expensive and should only be added when corrective action is required during the first five years.

The Mitigation Rule requires a minimum of five years of monitoring to determine if a site has met its performance objectives, and states that a "longer monitoring period **must** be required for aquatic resources with slow development rates (e.g., forested wetlands, bogs)." The Rule also states that the DE may reduce or eliminate the additional monitoring requirements upon determination that the compensatory mitigation site has met its performance objectives. It has been the experience of the District, as well as elsewhere in the country, that 10 years of monitoring is required for these systems before they have fully met their performance objectives.

11. Seven commenters had feedback on the multiplier tables and wondered about the scientific basis behind the multipliers and justification for requiring mitigation for temporary and secondary impacts.

If a permit is required for some portion of a project, the Corps is required to evaluate secondary impacts to aquatic resources and, **on a project-specific basis**, determine if compensatory mitigation should be required for these secondary impacts to aquatic resources. Where there are direct impacts to aquatic resources involving the discharge of dredged or fill material, secondary impacts that are also determined to result in the loss of aquatic resource function may require compensatory mitigation.

The Corps regulations at 33 CFR 320.4(r)(1)(ii) state in part that "[f]or Section 404 applications, mitigation shall be required to ensure that the project complies with the 404(b)(1) Guidelines," which require the Corps to evaluate all primary **and secondary** impacts of a project on the aquatic environment (40 CFR 230.11(h)). For determining mitigation compliance with the 404(b)(1) Guidelines, the 1990 "Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation under the Clean Water Act Section 404(b)(1) Guidelines" (Mitigation MOA) is used. The Mitigation MOA in turn notes that "[a]ppropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been required."

In addition to the Clean Water Act, the Corps must comply with the National Environmental Policy Act (NEPA), which requires the Corps to evaluate all direct and indirect effects of a project on the environment (40 CFR 1508.8). NEPA equates effects and impacts, and also notes compensatory mitigation as compensating for impacts by replacing or providing substitute resources or environments.

In those instances where temporary impacts would result from a permit authorization, those impacts must also be considered when developing compensatory mitigation requirements. While temporary impacts may minimize overall project impacts, they are not always without permanence, especially where soil compaction or introduction of invasive species may occur.

Regarding the scientific bases for these recommendations (as well as similar ones which have been in national compensatory mitigation guidance since at least 1990), a scientific and policy background was provided in the original establishment of the initial ratios in this District in December 2007. After assessing failure to replace impacted functions rates at well over 50%, the District is trying to ensure more effective compensatory mitigation is provided.

12. One commenter questioned how the secondary impact of fragmentation can be measured in order to determine a multiplier percentage.

In most cases, the secondary impacts from fragmentation will have to be assessed qualitatively, using sound professional judgment, since empirical data is not available and may be too burdensome for the applicant to generate.

13. A few comments were provided to improve the Wetland Module. *Per Response #2 above, many of the suggestions were accepted.*

14. Comments provided on the Stream Module included suggestions for improvement and clarification, as a number of commenters found the tables confusing. One commenter wanted to see Dam Removal added as a mitigation option. One commenter suggested that the Vermont Stream Geomorphic Assessment Phase 2 Handbook be used rather than the NRCS SVAP2 protocol.

Many of the suggestions for clarification have been accepted and the Tables have been improved. Because this is New England-wide guidance, the District recommends the SVAP2 protocol since it does not require extensive training or knowledge of aquatic biology to apply. Language was modified in the Guidance to allow for use of another methodology as long as the applicant coordinates with the Corps before moving forward with it.

15. There were many comments on the Vernal Pool Module, most of which found issue with the highly complex equation used to determine the multiplier for impacts. Two commenters stated that the monitoring protocol was too prescriptive and potentially damaging to the vernal pool habitat, depending on when and how it was conducted. Many comments were also provided to improve the overall Module.

The Vernal Pool Module was significantly modified in the final version, taking into account the comments provided, including elimination of the draft equation, simplification of the approach to determining how much compensatory mitigation was

required and minor modification to monitoring protocol to minimize intrusion on the resource.

16. One commenter stated that the definition of Vernal Pool did not match that in the Maine General Permit (GP) and should be modified to avoid confusion or conflict. Since the drafting of this Guidance, the Maine GP has been updated, and its definition of Vernal Pool has been updated.

17. There were many comments on the Submerged Aquatic Vegetation (SAV) module, including that the difficulty with restoring or establishing these communities should be highlighted, that the use of conservation moorings should be downplayed, that test plots must be established as one of the first steps in any mitigation proposal and that any applicant involved with a compensatory mitigation project involving SAV must hire a qualified consultant.

All of the above comments were incorporated into the final Guidance in some fashion.

18. Three commenters mentioned that the effects of climate change must be taken into account with consideration of SAV impacts and landscape position of compensatory mitigation sites, especially with respect to sea level rise.

As a matter of course, the Corps has begun taking the effects of climate change into account during review and consideration of Department of the Army permit authorizations. Direction to staff along these lines continues to evolve as the science and understanding of these effects improve.

19. One commenter suggested that the preferred form of compensatory mitigation for SAV impacts should be enhancement/rehabilitation through out-of-kind mitigation measures, not habitat restoration by planting, based on their experience. They stated that an ILF program for this specific resource would, if properly designed and implemented, be highly effective.

Because ILF program credits, where available, are identified as generally preferred over PRM, an ILF program could be developed for this resource. This approach would be acceptable as the Guidance is currently written. However, since such a program does not currently exist, the Guidance was modified to provide the best compensatory mitigation approach possible. It should also be noted that some of the ILF programs in New England already have the capacity to address SAV impacts.

20. One commenter stated that the Guidance to Project Managers in this document, as well as general instruction to PMs, should clearly provide instructions on what information and documentation must be provided by an applicant to make their case that PRM would be preferable to ILF program credits in a given situation.

Because every project along with any required compensatory mitigation is ultimately reviewed on a case-by-case basis, it would be very difficult to provide specific guidance on what should be considered to prove that PRM would be preferable to ILF program credits. The items that must be considered are included in the Mitigation Guidance document. 21. One commenter requested that hard bottom and cobble habitats in shallow estuarine and coastal marine environments should be included in the "Other Aquatic Resources Module" and that mitigation guidance should be developed for these habitats as impacts to them often go unmitigated.

The District acknowledges the importance of these resources, along with other unique aquatic resources, for which mitigation guidance has not been developed. Appendix I has been maintained as a place-holder, where these resources will be addressed in future versions of the Guidance.

22. One commenter stated that the Corps should develop a subcommittee of scientists, regulated entities, and conservation groups to develop a revised guidance document that is understandable, implementable and scientifically sound. *The comment process provided under the public notice allows for ample input from all affected by the Guidance. Furthermore, the District accepts comments continuously, especially during implementation of the Guidance, from all users for consideration in the next update to the Guidance.*