



# Federal Register

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**Thursday,  
April 10, 2008**

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## **Part II**

### **Department of Defense**

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**Department of the Army, Corps of  
Engineers  
33 CFR Parts 325 and 332**

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### **Environmental Protection Agency**

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**40 CFR Part 230  
Compensatory Mitigation for Losses of  
Aquatic Resources; Final Rule**

**DEPARTMENT OF DEFENSE****Department of the Army, Corps of Engineers****33 CFR Parts 325 and 332****ENVIRONMENTAL PROTECTION AGENCY****40 CFR Part 230**

[EPA-HQ-OW-2006-0020; FRL-8545-4]

RIN 0710-AA55

**Compensatory Mitigation for Losses of Aquatic Resources**

**AGENCIES:** U.S. Army Corps of Engineers, DoD; and Environmental Protection Agency.

**ACTION:** Final rule.

**SUMMARY:** The U.S. Army Corps of Engineers (the Corps) and the Environmental Protection Agency (EPA) are issuing regulations governing compensatory mitigation for activities authorized by permits issued by the Department of the Army. The regulations establish performance standards and criteria for the use of permittee-responsible compensatory mitigation, mitigation banks, and in-lieu programs to improve the quality and success of compensatory mitigation projects for activities authorized by Department of the Army permits.

This rule improves the planning, implementation and management of compensatory mitigation projects by emphasizing a watershed approach in selecting compensatory mitigation project locations, requiring measurable, enforceable ecological performance standards and regular monitoring for all types of compensation and specifying the components of a complete compensatory mitigation plan, including assurances of long-term protection of compensation sites, financial assurances, and identification of the parties responsible for specific project tasks.

This rule applies equivalent standards to permittee-responsible compensatory mitigation, mitigation banks and in-lieu fee mitigation to the maximum extent practicable. Since a mitigation bank must have an approved mitigation plan and other assurances in place before any of its credits can be used to offset permitted impacts, this rule establishes a preference for the use of mitigation bank credits, which reduces some of the risks and uncertainties associated with compensatory mitigation. This rule also significantly revises the requirements for in-lieu fee programs to address

concerns regarding their past performance and equivalency with the standards for mitigation banks and permittee-responsible compensatory mitigation.

**DATES:** The effective date is June 9, 2008.

**ADDRESSES:** Headquarters, U.S. Army Corps of Engineers, Operations and Regulatory Community of Practice, 441 G Street, NW., Washington, DC 20314-1000. Headquarters, U.S. Environmental Protection Agency, Wetlands Division, Mail code 4502T, 1200 Pennsylvania Ave, NW., Washington, DC 20460.

The Corps and EPA have established a docket for this action under Docket ID No. EPA-HQ-OW-2006-0020. All documents in the docket are listed on the <http://www.regulations.gov> web site. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at the Water Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Water Docket is (202) 566-2426.

**FOR FURTHER INFORMATION CONTACT:** Mr. David Olson at 202-761-4922 or by e-mail at [david.b.olson@usace.army.mil](mailto:david.b.olson@usace.army.mil), or Mr. Palmer Hough at 202-566-1374 or by e-mail at [hough.palmer@epa.gov](mailto:hough.palmer@epa.gov). Additional information can also be found at the Corps Headquarters Regulatory Program webpage at: <http://www.usace.army.mil/cw/cecwo/reg/index.html> or the EPA compensatory mitigation webpage at: <http://www.epa.gov/wetlandsmitigation>.

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**I. Background**

Compensatory mitigation involves actions taken to offset unavoidable adverse impacts to wetlands, streams and other aquatic resources authorized by Clean Water Act section 404 permits and other Department of the Army (DA) permits. As such, compensatory mitigation is a critical tool in helping the federal government to meet the longstanding national goal of "no net loss" of wetland acreage and function. For impacts authorized under section 404, compensatory mitigation is not considered until after all appropriate and practicable steps have been taken to first avoid and then minimize adverse impacts to the aquatic ecosystem pursuant to 40 CFR part 230 (i.e., the CWA Section 404(b)(1) Guidelines).

Compensatory mitigation can be carried out through four methods: the *restoration* of a previously-existing wetland or other aquatic site, the *enhancement* of an existing aquatic site's functions, the *establishment* (i.e., creation) of a new aquatic site, or the *preservation* of an existing aquatic site. There are three mechanisms for providing compensatory mitigation: *permittee-responsible compensatory mitigation*, *mitigation banks* and *in-lieu fee mitigation*. Permittee-responsible mitigation is the most traditional form of compensation and continues to represent the majority of compensation acreage provided each year. As its name implies, the permittee retains responsibility for ensuring that required compensation activities are completed and successful. Permittee-responsible mitigation can be located at or adjacent to the impact site (i.e., on-site compensatory mitigation) or at another location generally within the same watershed as the impact site (i.e., off-site compensatory mitigation).

Mitigation banks and in-lieu fee mitigation both involve off-site compensation activities generally conducted by a third party, a mitigation bank sponsor or in-lieu fee program sponsor. When a permittee's compensatory mitigation requirements are satisfied by a mitigation bank or in-lieu fee program, responsibility for ensuring that required compensation is completed and successful shifts from the permittee to the bank or in-lieu fee sponsor. Mitigation banks and in-lieu fee programs both conduct consolidated aquatic resource restoration, enhancement, establishment and preservation projects; however, under

current practice, there are several important differences between in-lieu fee programs and mitigation banks.

First, in-lieu fee programs are generally administered by state governments, local governments, or non-profit non-governmental organizations while mitigation banks are usually (though not always) operated for profit by private entities. Second, in-lieu fee programs rely on fees collected from permittees to initiate compensatory mitigation projects while mitigation banks usually rely on private investment for initial financing. Most importantly, mitigation banks must achieve certain milestones, including site selection, plan approval, and financial assurances, before they can sell credits, and generally sell a majority of their credits only after the physical development of compensation sites has begun. In contrast, in-lieu fee programs generally initiate compensatory mitigation projects only after collecting fees, and there has often been a substantial time lag between permitted impacts and implementation of compensatory mitigation projects. Additionally, in-lieu fee programs have not generally been required to provide the same financial assurances as mitigation banks. For all of these reasons, there is greater risk and uncertainty associated with in-lieu fee programs regarding the implementation of the compensatory mitigation project and its adequacy to compensate for lost functions and services.

As noted in the preamble for the March 2006 proposal, the majority of the existing guidance regarding compensatory mitigation and the use of these three mechanisms for providing compensation exists in a number of national guidance documents released by the Corps and EPA over the past seventeen years (sometimes in association with other federal agencies such as the U.S. Fish and Wildlife Service and the National Marine Fisheries Service). Since these guidance documents were developed at different times, and in different regulatory contexts, concerns have been raised regarding the consistent, predictable and equitable interpretation and application of these guidance documents. In November 2003, Congress called for the development of regulatory standards and criteria for the use of compensatory mitigation in the section 404 program.

Section 314 of the National Defense Authorization Act (NDAA) for Fiscal Year 2004 (section 314) requires the Secretary of the Army, acting through the Chief of Engineers, to issue regulations "establishing performance

standards and criteria for the use, consistent with section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344, also known as the Clean Water Act), of on-site, off-site, and in-lieu fee mitigation and mitigation banking as compensation for lost wetlands functions in permits issued by the Secretary of the Army under such section." This provision also requires that those regulations, to the maximum extent practicable, "maximize available credits and opportunities for mitigation, provide flexibility for regional variations in wetland conditions, functions and values, and apply equivalent standards and criteria to each type of compensatory mitigation."

In response to this directive, the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency (the agencies) published a proposed rule in Part II of the March 28, 2006, issue of the **Federal Register** (71 FR 15520), with a 60-day public comment period. As a result of several requests, the Corps and EPA extended the comment period by an additional 30 days. The comment period ended on June 30, 2006.

In the preamble to the March 2006 proposal, the agencies noted their decision, in light of their respective statutory roles in the section 404 program, to pursue this rulemaking as a joint effort between the Corps and EPA. The preamble also discussed the Corps's decision to develop these standards for all DA permits which could potentially require compensatory mitigation. Thus, in addition to Clean Water Act section 404 permits, these standards also apply to DA permits issued under sections 9 and 10 of the Rivers and Harbors Act of 1899. Finally, the preamble also discussed why these standards should apply to compensatory mitigation for impacts to streams and other open waters in addition to wetlands.

As discussed in the preamble to the March 2006 proposal, in 2001 the National Research Council (NRC) released a comprehensive evaluation of the effectiveness of wetlands compensatory mitigation required under section 404 of the Clean Water Act. This report noted concerns with some past wetland compensatory mitigation and provided recommendations for the federal agencies, states, and other parties to improve compensatory mitigation. This report was an important resource in the development of today's rule.

## II. General Comments and Responses

In response to the proposed rule, approximately 12,000 comments were received, including about 850 distinct comments and 11,150 additional

substantially identical e-mails and letters. Comments were provided by regulated entities, the scientific community, non-governmental organizations, mitigation bankers, in-lieu fee program sponsors, state and local government agencies, and other members of the public.

### A. Overview

Most of the distinct commenters said that this rule is a necessary addition to regulations for implementing the Corps Regulatory Program and some expressed appreciation that the rule incorporates stakeholder feedback and lessons learned. Many commenters expressed general support for the proposed rule because: (1) It will promote predictability and consistency in compensatory mitigation; (2) it will further effective partnerships with private sector mitigation banks; (3) it responds to concerns raised by those participating in the development of Mitigation Action Plan products; (4) many provisions of the rule are consistent with the 2005 Millennium Ecosystem Assessment; (5) it brings greater technical clarity to the process of determining appropriate mitigation; (6) it provides greater focus on accountability through measurable and enforceable ecological performance standards, monitoring, and management; (7) it fosters incorporation of aquatic ecosystem science into compensatory mitigation plans; and (8) it increases public participation in the compensatory mitigation process. Some of these commenters also suggested modifications to the proposed rule, which are discussed in more detail below.

Some commenters, including most of the form letters, opposed the proposed rule or suggested extensive revisions to increase the protection of aquatic resources. The issues most frequently raised, considering both the individual and form letters, were: (1) Interaction of the proposed rule with the existing requirements of the Section 404 (b)(1) Guidelines, (2) compensatory mitigation standards for streams, (3) the amount of discretionary language in the proposed rule, (4) use of the watershed approach for identifying mitigation projects, and (5) the proposed phase-out of in-lieu fee mitigation. These five major issues and our responses to them are discussed below in part II.B. Many other general issues were raised as well, and a number of these are discussed in part II.C. Additional detail, and responses to comments on specific rule provisions, are provided in part VI.

## B. Most Frequently Raised Issues

### 1. Section 404(b)(1) Guidelines

Many commenters stated that, consistent with existing regulations and policy, the rule should emphasize impact avoidance and that compensatory mitigation should not be considered until all efforts have been made to first avoid and then minimize impacts to streams and wetlands. Some commenters also asserted that the proposal would expand the district engineer's existing level of discretion in determining that an applicant has taken all appropriate and practicable steps to first avoid and then minimize impacts to the aquatic ecosystem. Some further asserted that the proposal could be construed to allow permits to be issued even if they cause or contribute to significant degradation of aquatic resources, an action prohibited by the Section 404(b)(1) Guidelines (40 CFR 230.10(c)).

The agencies agree that impacts must be first avoided and then minimized, and that compensatory mitigation should be used only for impacts that cannot be avoided or minimized. The agencies disagree that the rule will weaken or undermine the 404(b)(1) Guidelines, which are codified in regulation and remain unchanged. These requirements are essential to meeting the overall objective of the Clean Water Act to restore and maintain the chemical, physical and biological integrity of the nation's waters. We have clarified that none of them have changed by adding a new paragraph at 33 CFR 332.1(c)(1) [40 CFR 230.91(c)(1)] stating that nothing in these new rules affects the requirement that all DA permits subject to section 404 of the Clean Water Act comply with applicable provisions of the Section 404(b)(1) Guidelines. Thus, this rule does not expand the district engineer's existing level of discretion in determining that an applicant has taken all appropriate and practicable steps to first avoid and then minimize impacts to the aquatic ecosystem. Paragraph (c)(2) of this section has also been modified to clarify that individual section 404 permits will be issued only if compliance with all applicable provisions of the 404(b)(1) Guidelines has been achieved including those which require the permit applicant to take all appropriate and practicable steps to avoid and minimize adverse impacts to the aquatic ecosystem. For general permits, compliance with the Section 404(b)(1) Guidelines is clarified at 40 CFR 230.7.

In addition, a new paragraph at 33 CFR 332.1(f)(2) [40 CFR 230.91(f)(2)] has been added to the final rule which

clarifies which provisions of the 1990 Memorandum of Agreement (MOA) between the Department of the Army and the Environmental Protection Agency on the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines have been superseded by this rule and which provisions remain in effect. Those that remain in effect include the provisions related to impact avoidance and minimization, evaluation of the least environmentally damaging practicable alternatives, and circumstances where the impacts of the proposed project are so significant that discharges may not be permitted regardless of the compensatory mitigation proposed.

Today's rule is focused on the compensation component of the mitigation sequence. Its purpose is to develop a comprehensive set of standards for compensatory mitigation pursuant to section 314 of the NDAA. Fulfilling this directive necessitates a detailed treatment of all critical aspects of compensatory mitigation. This does not affect compliance with other parts of our regulations, including the 404(b)(1) Guidelines. Additional discussion of this issue can be found in part VI of the preamble.

### 2. Compensatory Mitigation Standards for Streams

Many commenters stated that compensatory mitigation for stream impacts should not be addressed in this rule. Some stated that there is no scientific evidence that streams can be established (i.e., stream creation) or that other approaches taken in this rule such as stream restoration can compensate for stream losses. They suggested that the agencies should conduct further research on stream mitigation and demonstrate its success before including standards for stream mitigation in the rule. Some also noted that the statutory language in the NDAA refers only to wetlands.

On the other hand, other commenters expressed support for applying the rule to streams and other open waters. These commenters believe that physical alteration of aquatic resources should be mitigated to the extent practicable to support the objectives of the Clean Water Act and that because section 404 of the Clean Water Act authorizes discharges of dredged or fill material into lakes, streams, and wetlands, mitigation for those impacts should be required (and addressed in this rule) as well.

As noted in the preamble to the March 2006 proposal, we believe this rule should apply to compensatory mitigation for all types of aquatic

resources that can be impacted by activities authorized by DA permits, including streams and other open waters. We recognize that the scientific literature regarding the issue of stream establishment and re-establishment is limited and that some past projects have had limited success (Bernhardt and others 2007).<sup>1</sup> Accordingly, we have added a new paragraph at 33 CFR 332.3(e)(3) [40 CFR 230.93(e)(3)] that specifically notes that there are some aquatic resources types that are difficult to replace and streams are included among these. It emphasizes the need to avoid and minimize impacts to these 'difficult-to-replace' resources and requires that any compensation be provided by in-kind preservation, rehabilitation, or enhancement to the extent practicable. This language is intended to discourage stream establishment and re-establishment projects while still requiring compensation for unavoidable stream impacts in the form of stream corridor restoration (via rehabilitation), enhancement, and preservation projects, where practicable. District engineers will evaluate compensatory mitigation proposals for streams, and assess the likelihood of success before deciding whether the proposed compensation should be required.

We recognize that the science of stream restoration is still evolving and that more research is needed; however, the lack of a fully-developed set of tested hypotheses and techniques does not mean that stream mitigation (particularly via restoration, enhancement and preservation) cannot be successfully performed or that it should not be required where avoidance of impacts is not practicable. As noted by Bernhardt and others (2005),<sup>2</sup> "stream and river restoration can lead to species recovery, improved inland and coastal water quality, and new areas for wildlife habitat and recreational activities." There is a growing body of research that documents successful outcomes for stream restoration projects, examines stream restoration techniques and provides recommendations for effective stream and river restoration.

<sup>1</sup> Bernhardt, E.S., E.B. Sudduth, M.A. Palmer, J.D. Allan, J.L. Meyer, G. Alexander, J. Follstad-Shah, B. Hassett, R. Jenkinson, R. Lave, J. Rumps, and L. Pagano. 2007. Restoring rivers one reach at a time: Results from a survey of U.S. river restoration practitioners. *Restoration Ecology* 15:482-493.

<sup>2</sup> Bernhardt, E.S., M.A. Palmer, J.D. Allan, G. Alexander, K. Barnas, S. Brooks, J. Carr, S. Clayton, C. Dahm, J. Follstad-Shah, D. Galat, S. Gloss, P. Goodwin, D. Hart, B. Hassett, R. Jenkinson, S. Katz, G.M. Kondolf, P.S. Lake, R. Lave, J.L. Meyer, T.K. O'Donnell, L. Pagano, B. Powell, and E. Sudduth. 2005. Synthesizing U.S. river restoration efforts. *Science* 308: 636-637.

Successful outcomes for stream restoration with respect to water quality, habitat creation, species recovery and recreation, have been documented by Baron and others (2002);<sup>3</sup> Buijse and others (2002);<sup>4</sup> Muotka and Pekka (2002);<sup>5</sup> Nakamura and Kunihiro (2006);<sup>6</sup> and Petersen (1999).<sup>7</sup> Criteria and recommendations for ecologically successful stream restoration have been addressed by Hassett and others (2005)<sup>8</sup> Kauffman and others (1997)<sup>9</sup> Lavendel (2002)<sup>10</sup> Palmer and others (2005)<sup>11</sup> and Whalen and others (2002).<sup>12</sup> Assessment of the physical and biological effects of restoration activities has been performed by Reeves and others (1997);<sup>13</sup> Slaney and others (1994)<sup>14</sup> and Solazzi and others (2000).<sup>15</sup> The applicability of specific tools to measure stream restoration success has been investigated by Paller and others (2000)<sup>16</sup> and Lester and

others (2006).<sup>17</sup> Somerville and Pruitt (2004)<sup>18</sup> reviewed existing stream assessment and mitigation protocols and Roni and others (2002)<sup>19</sup> reviewed stream restoration techniques. Shields and others (2003)<sup>20</sup> discussed the unique challenges associated with stream restoration research.

Under this final rule, mitigation plans for all wetland compensatory mitigation projects must contain the following twelve elements: Objectives; site selection criteria; site protection instruments (e.g., conservation easements); baseline information (for impact and compensation sites); credit determination methodology; mitigation work plan; maintenance plan; ecological performance standards; monitoring requirements; long-term management plan; adaptive management plan; and financial assurances (see 33 CFR 332.4(c) [40 CFR 230.94(c)]). Existing literature regarding stream restoration, as well as our experience with past stream mitigation projects supports our decision to require mitigation plans for stream compensatory mitigation projects to contain the same twelve fundamental elements. Some commenters noted that aspects of the mitigation work plan will differ between stream and wetland mitigation projects. Today's rule highlights some of these potential differences by noting additional elements that may be necessary for stream mitigation project work plans. These elements include planform geometry, channel form, watershed size, design discharge, and riparian area plantings and can be found at 33 CFR 332.4(c)(7) [40 CFR 230.94(c)(7)].

Another important modification was made to the section of the rule describing ecological performance standards. Like the proposal, today's rule requires that every mitigation plan include objective and verifiable ecological performance standards to assess whether the compensatory

mitigation project is achieving its objectives. Neither the proposal nor today's rule prescribe the individual variables or metrics that should be used to evaluate each aquatic resource type potentially restored, enhanced, established, or preserved in compensatory mitigation projects. Given the extremely large variation among the aquatic resource types found across the country, and the constant advances in the science of aquatic ecosystem restoration, overly prescriptive requirements would be impractical. However, in recognition of the need to strengthen this provision and to ensure that compensatory mitigation project performance standards reflect the latest advances in the science of stream and wetland restoration, we have modified the final rule at 33 CFR 332.5(b) [40 CFR 230.95(b)] to include a requirement that ecological performance standards be based on the best available science that can be measured or assessed in a practicable manner.

As stream scientists have noted, the proportion of stream restoration projects that have been monitored for performance is low (Bernhardt and others 2005).<sup>21</sup> Today's rule, however, requires monitoring of mitigation projects for a minimum of five years with longer monitoring periods required for aquatic resources with slow development rates. This monitoring requirement will provide new data on stream restoration performance that will serve to increase knowledge and improve stream mitigation over time. (See 33 CFR 332.6 [40 CFR 230.96]). Also, in response to public comment, we removed a provision from 33 CFR 332.6(a) [40 CFR 230.96(a)] that would have allowed the district engineer to waive all monitoring requirements if they were determined not to be practicable.

While section 314 of the NDAA refers only to the development of compensatory mitigation standards for wetlands, we believe that in order to improve the performance and results of all types of compensatory mitigation this rule should include compensatory mitigation standards for all types of aquatic resources that can be impacted by activities authorized by DA permits, including streams and other open waters. Section 404(b) of the Clean Water Act authorizes EPA to develop

<sup>3</sup> Baron, J.S. et al. 2002. Meeting ecological and societal needs for freshwater. *Ecological Applications* 12: 1247–1260.

<sup>4</sup> Buijse, A.D. et al. 2002. Restoration strategies for river floodplains along the large lowland rivers in Europe. *Freshwater Biology* 47: 889–907.

<sup>5</sup> Muotka, T. and P. Laasonen. 2002. Ecosystem recovery in restored headwater streams: The role of enhanced leaf retention. *Journal of Applied Ecology* 39: 145–156.

<sup>6</sup> Nakamura, K. and K. Amano. 2006. River and wetland restoration: Lessons from Japan. *Bioscience* 56(5): 419–129.

<sup>7</sup> Petersen, M.M. 1999. A natural approach to watershed planning, restoration and management. *Water Science and Technology* 39(12): 347–352.

<sup>8</sup> Hassett, B. et al. 2005. Restoring watersheds project by project: Trends in Chesapeake Bay tributary restoration. *Frontiers in Ecology and the Environment* 3(5): 259–267.

<sup>9</sup> Kauffman, J. Boone, R.L. Beschta, N.O., and D. Lytjen. 1997. An ecological perspective of riparian and stream restoration in the western United States. *Fisheries* 22(5): 12–24.

<sup>10</sup> Lavendel, B. 2002. The business of ecological restoration. *Ecological Restoration* 20: 173–178.

<sup>11</sup> Palmer, M.A. et al. 2005. Standards for ecologically successful river restoration. *Journal of Applied Ecology* 42: 207–217.

<sup>12</sup> Whalen, P.J., L.A. Toth, J.W. Koebel, and P.K. Strayer. 2002. Kissimmee River Restoration: A case study. *Water Science and Technology* 45(11): 55–62.

<sup>13</sup> Reeves, G.H., D.B. Hohler, B.E. Hansen, F.H. Everest, J.R. Sedell, T.L. Hickman, and D. Shively. 1997. Fish habitat restoration in the Pacific Northwest: Fish Creek of Oregon. Pages 335–359 in J.E. Williams, C.A. Wood, and M.P. Dombeck, editors. *Watershed Restoration: Principles and Practices*. American Fisheries Society, Bethesda, Maryland.

<sup>14</sup> Slaney, P.A., B.O. Rublee, C.J. Perrin, and H. Goldberg. 1994. Debris structure placements and whole-river fertilization for salmonoids in a large regulated stream in British Columbia. *Bulletin of Marine Science* 55: 1160–1180.

<sup>15</sup> Solazzi, M.F., T.E. Nickelson, S.L. Johnson, and J.D. Rodgers. 2000. Effects of increasing winter rearing habitat on abundance of salmonoids in two coastal Oregon streams. *Canadian Journal of Fisheries and Aquatic Sciences*. 57: 906–914

<sup>16</sup> Paller, M.H., M.J.M. Reichert, J.M. Dean, and J.C. Seigle. 2000. Use of fish community data to evaluate restoration success of a riparian stream. *Ecological Engineering* 15: 171–187.

<sup>17</sup> Lester, R., W. Wright, and M. Jones-Lennon. 2006. Determining Target Loads of Large and Small Wood for Stream Rehabilitation in High-Rainfall Agricultural Regions of Victoria, Australia. *Ecological Engineering* 28: 71–78.

<sup>18</sup> Somerville, D.E. and B.A. Pruitt. 2004. Physical stream assessment: A review of selected protocols for use in the Clean Water Act Section 404 Program. Prepared for the U.S. Environmental Protection Agency, Office of Wetlands, Oceans, and Watersheds, Wetlands Division (Order No. 3W–0503–NATX). Washington, DC, 213 pp.

<sup>19</sup> Roni, P. et al. 2002. A review of stream restoration techniques and a hierarchical strategy for prioritizing restoration in Pacific Northwest watersheds. *North American Journal of Fisheries Management* 22: 1–20.

<sup>20</sup> Shields, F. Douglas, C.M. Cooper Jr., Scott S. Knight and M.T. Moore. 2003. Stream corridor restoration research: A long and winding road. *Ecological Engineering* 20: 441–454.

<sup>21</sup> Bernhardt, E.S., M.A. Palmer, J.D. Allan, G. Alexander, K. Barnas, S. Brooks, J. Carr, S. Clayton, C. Dahm, J. Follstad-Shah, D. Galat, S. Gloss, P. Goodwin, D. Hart, B. Hassett, R. Jenkinson, S. Katz, G.M. Kondolf, P.S. Lake, R. Lave, J.L. Meyer, T.K. O'Donnell, L. Pagano, B. Powell, and E. Sudduth. 2005. Synthesizing U.S. river restoration efforts. *Science* 308: 636–637.

the substantive environmental criteria used by the Corps in making section 404 permit decisions including those associated with all forms of compensatory mitigation. Also, section 501(a) of the Clean Water Act provides EPA with broad authority to conduct any rulemaking necessary to carry out its functions under the Clean Water Act.

While many stream restoration and rehabilitation activities have been conducted across the country, we recognize that not all of them have been successful. Much of the literature suggests that this is due to a lack of the kinds of comprehensive standards for project planning, implementation and management included in this rule. Accordingly, we determined that including stream mitigation in this rule would improve current standards and practices for compensatory mitigation of streams. Today's rule, with the addition of the above referenced modifications, includes the necessary provisions to appropriately treat stream mitigation. Additional discussion of this issue can be found in part VI of the preamble.

### 3. Discretionary Language

Many commenters expressed concern that the proposal leaves too much discretion to district engineers. Some commenters objected to use of "may", "should", and "can" in some rule provisions, and/or to use of the qualifier "appropriate and practicable" for some requirements. Commenters were concerned that such discretion might lead to authorization of inappropriate compensatory mitigation projects, inadequate enforcement and oversight, or excessive litigation.

In contrast, other commenters suggested even greater flexibility, to allow cost-effective compensatory mitigation based on case-specific circumstances.

In response to these comments, we have carefully evaluated all of the discretionary language in the proposed rule, and replaced it with binding and/or more clearly articulated requirements where appropriate. Such modifications were made to a number of key provisions in the rule including those related to mitigation type, the amount of mitigation necessary to offset permitted losses, financial assurances, credit releases, the use of preservation, ecological performance standards, and long-term site protection and management. Also, a number of requirements for in-lieu fee programs have been added to the rule, as part of the decision not to phase them out as originally proposed. (Note that the preamble to the proposed rule included an extensive discussion of and request

for comment on alternatives to the proposed phase-out. The new requirements for in-lieu fee programs reflect many of the comments received.) These specific modifications and additions are discussed in more detail in part VI of the preamble.

With these modifications, we believe that today's rule achieves a proper balance of binding requirements and discretion. The rule will help improve the quality and success of compensatory mitigation, while providing flexibility necessary to ensure that compensatory mitigation requirements for a particular DA permit appropriately offset authorized impacts. Some discretionary language is necessary for this rule because resource types, project impacts, and compensatory mitigation practices vary widely across both projects and regions of the country. District engineers need to take such variations into account, including variations in state and local requirements that affect the implementation and long-term management of compensatory mitigation projects. For example, laws and regulations governing real estate instrument and financial assurances vary from state to state. In addition, practices for restoring, establishing, and enhancing aquatic resources vary by resource type and by region. For these reasons, discretionary language is used where appropriate to promote both regulatory efficiency and project success, and to ensure that required mitigation is practicable.

### 4. Watershed Approach

Many comments addressed the watershed approach included in the proposal. A majority of commenters expressed support for the use of a watershed approach to compensatory mitigation. They noted that use of a watershed approach would improve the sustainability of compensatory mitigation projects and ensure that they are better integrated with the needs of the watershed. However, some commenters believed that additional specificity in the requirements relating to the use of a watershed approach was needed. For example, commenters requested clarification regarding use of the watershed approach in the absence of a watershed plan, parameters needed to implement a watershed approach, and the definition of the terms "watershed," "watershed plan" and "watershed approach."

Other commenters opposed the watershed approach described in the proposed rule. Some were particularly concerned about use of the watershed approach in the absence of a detailed watershed plan, arguing that this could

lead to inappropriate compensatory mitigation decisions and the cumulative loss of wetland functions. Others were more concerned about the analytical burden on permit applicants of developing watershed plans or justifying mitigation projects in terms of wider watershed considerations. Still others thought the concept was too ambiguous to be included in a regulation.

The agencies continue to believe that the watershed approach provides the appropriate framework for making compensatory mitigation decisions, but have made a number of changes to address specific comments. The primary objective of the watershed approach included in today's rule is to maintain and improve the quantity and quality of wetlands and other aquatic resources in watersheds through strategic selection of compensatory mitigation project sites. The watershed approach accomplishes this objective by expanding the informational and analytic basis of mitigation project site selection decisions and ensuring that both authorized impacts and mitigation are considered on a watershed scale rather than only project by project. This requires a degree of flexibility so that district engineers can authorize mitigation projects that most effectively address the case-specific circumstances and needs of the watershed, while remaining practicable for the permittee. In response to the concern about additional burden on permittees, the agencies recognize that the level of data and analysis appropriate for implementing the watershed approach must be commensurate with the scale of the project, and that there will be situations, particularly for projects with small impacts, where it would not be cost-effective to utilize a watershed approach. For this reason, the regulations at § 332.3(c)(1) [§ 230.93(c)(1)], state that the watershed approach is to be used to the extent appropriate and practicable, and the regulations at § 332.3(c)(3)(iii) [§ 230.93(c)(3)(iii)] state that the level of information and analysis must be commensurate with the scope and scale of the authorized impacts and functions lost.

We recognize that there are many different types of watershed plans that have been developed for purposes other than aquatic resource restoration, establishment, enhancement, and/or preservation activities and that such plans may be of limited use in making compensatory mitigation decisions. For example, some watershed plans are conceived to guide development activities or the placement of storm

water infrastructure. Therefore, we have modified § 332.3(c)(1) [§ 230.93(c)(1)] to state that the district engineer will determine whether a given watershed plan is appropriate for use in the watershed approach for compensatory mitigation.

We further recognize that in many areas, watershed plans appropriate for use in planning compensatory mitigation activities have not been developed. Therefore, consistent with the 2001 NRC Report, the watershed approach described in this final rule does not require a formal watershed plan. Although it would always be preferable to have an appropriate watershed plan, we believe that implementing a watershed approach to the degree practicable, even without a watershed plan, can improve compensatory mitigation site selection and project implementation. For example, the use of appropriately sited mitigation banks can support a watershed approach without using watershed plans. In the absence of an appropriate watershed plan, the watershed approach should be based on a structured consideration of watershed needs and how wetlands and other types of aquatic resources in specific locations will address those needs. To implement this approach, district engineers will utilize the considerations specified in § 332.3(c)(2) [§ 230.93(c)(2)] and available information on watershed conditions and needs, as described in § 332.3(c)(3) [§ 230.93(c)(3)].

In response to public input, we have revised the definition of “watershed plan” to clarify the kinds of plans appropriate for use in making compensation decisions. We have also added definitions for the terms “watershed” and “watershed approach” at § 332.2 [§ 230.92]. The appropriate watershed scale to use for the watershed approach will vary by geographic region, as well as by the particular aquatic resources under consideration. Since using a watershed approach is not appropriate in areas without watershed boundaries, such as marine waters, we have also added a provision (§ 332.3(c)(2)(v) [§ 230.93(c)(2)(v)]) to clarify that other types of spatial scales may be more appropriate in those areas. To enhance the use of the watershed approach, we have added a sentence to § 332.3(c)(2)(iv) [§ 230.93(c)(2)(iv)] stating that the identification and prioritization of resource needs should be as specific as possible. We have also added a provision, stating that a watershed approach may include on-site compensatory mitigation, off-site compensatory mitigation, or a combination of on-site and off-site

compensatory mitigation (see § 332.3(c)(2)(iii) [§ 230.93(c)(2)(iii)]).

We have revised § 332.3(c)(3) [§ 230.93(c)(3)] to clarify that district engineers will use available information for the watershed approach. That available information will address watershed conditions and needs and include potential and/or priority sites for compensatory mitigation projects. We have also indicated potential sources of appropriate information, such as wetland maps, soil surveys, aerial photographs, local ecological reports, etc. Public input on the watershed approach and our response to this input including the above mentioned modifications are discussed in more detail in part VI of the preamble.

#### 5. In-Lieu Fee Programs

Many commenters, including many state officials, opposed the proposed phase-out of in-lieu programs. These commenters indicated that in certain areas (especially rural and coastal regions, the West, and Alaska) there are few mitigation banks and little potential for their development, and that permittee-responsible compensatory mitigation is often impractical. In-lieu fee programs are therefore the best (or only) option for compensatory mitigation in these areas. Some commenters also argued that in-lieu fee programs provide important benefits that other types of mitigation do not, such as a more thorough consideration of the needs of a watershed and the most appropriate locations and mitigation types to sustain and enhance its long-term health. Some commenters representing in-lieu fee programs stated that if they were held to all of the same standards as mitigation banks, particularly the requirement to secure project sites before selling any credits, they would have to cease operation and these benefits would be lost.

Many of these commenters also acknowledged problems in the current administration and performance of in-lieu fee mitigation, but stated that these problems were due to existing requirements and policies (or the lack thereof) rather than the in-lieu fee concept itself. They suggested that instead of phasing out in-lieu fee programs, the final rule should include standards that address these problems and ensure that in-lieu fee programs do in fact deliver mitigation that compensates for the impacts associated with the credits they sell. Commenters noted that the NDAA does not require that these standards be exactly the same as those for mitigation banks but rather “equivalent” to the maximum extent practicable. Some standards for in-lieu

fee programs suggested by commenters included: Limiting the number of credits that in-lieu fee programs can sell before they have secured sites, limiting the types of organizations that can be in-lieu fee sponsors, and establishing financial accounting standards to improve their accountability for credit fulfillment. A number of commenters acknowledged that even with significant improvements to in-lieu fee mitigation, mitigation banks would be more likely to minimize project uncertainties and temporal losses of aquatic resource functions. They suggested that the final rule should therefore stipulate that where the service areas of an in-lieu fee program and a mitigation bank overlap, the mitigation bank should be the preferred credit provider.

Other commenters supported the phase-out of in-lieu fee programs as proposed. These commenters pointed out shortfalls associated with current administration of in-lieu fee programs noting, for example, that prices for in-lieu fee credits are often too low and fail to cover all of the costs necessary to deliver the promised mitigation, including expenses for program administration, long-term maintenance of projects, and corrective action. This may result in undercutting of mitigation bank credit prices, since banks, as commercial ventures, must charge prices based on the full cost of producing compensation credits or go out of business. Furthermore, in-lieu fee programs often require fees from multiple permitted projects before they can initiate compensation projects, resulting in substantial delays between permitted impacts and compensation. Several commenters further stated that it was not fair for in-lieu fee programs to be allowed to continue to operate with lower or looser standards than mitigation banks and permittee-responsible mitigation. Commenters also noted that because credit release schedules for mitigation banks are tied to performance, they have a financial incentive to produce timely, successful mitigation that is lacking for in-lieu fee programs.

After carefully considering all comments received, the agencies have decided to retain in-lieu fee programs in today's rule as a separate and distinct mechanism for providing compensatory mitigation for DA permits. We believe they can fulfill an important role in providing effective mitigation in circumstances where mitigation banks and permittee-responsible mitigation are not practicable. At the same time, we have included a number of new requirements for in-lieu fee programs to improve accountability and

performance, based to a large extent on existing practice at the most successful currently-operating in-lieu programs. Specifically, we have added a requirement for a compensation planning framework at § 332.8(c) [§ 230.98(c)] which details how the in-lieu fee program will select and secure project sites and implement mitigation projects in a watershed context. The framework is essentially a watershed plan designed to support resource restoration, and must include an analysis of historic aquatic resource losses and current conditions, a description of the general amounts, types and locations of aquatic resources the program will seek to provide and a prioritization strategy for selecting and implementing compensatory mitigation activities. This type of advanced planning will ensure that in-lieu fee programs are guided by a thorough understanding of the needs, opportunities, and challenges of the areas in which they operate, which will allow them to select and design more successful projects and better estimate full project costs.

The final rule also requires that the in-lieu fee program instrument establish a cap on the number of credits that the program can sell before securing a compensatory mitigation project site and conducting aquatic resource restoration, establishment, enhancement, and/or preservation at that site. These are defined as “advance credits” (see § 332.2 [§ 230.92]) and the rules for their establishment and use are provided at § 332.8(n) [§ 230.98(n)]. The rule also limits sponsorship of in-lieu fee programs specifically to governmental or non-profit natural resource management entities (see definition of “in-lieu fee program” at § 332.2 [§ 230.92]). District engineers and Interagency Review Team (IRT) members should carefully evaluate the capabilities and demonstrated performance of these natural resource management entities prior to approving them as in-lieu fee program sponsors in order to minimize the risks associated with allowing advance credit sales.

We have added a provision at § 332.8(i) [§ 230.98(i)] requiring in-lieu fee programs to establish a program account, including criteria for the management of this account. Funds collected from permittees, including interest on these funds, may only be used for the selection, design, acquisition, implementation, and management of in-lieu fee projects, with a small percentage allowed for administrative costs.

Provisions at § 332.8(d)(6)(iv)(B)–(C) [§ 230.98(d)(6)(iv)(B)–(C)] and

§ 332.8(o)(5)(ii) [§ 230.98(o)(5)(ii)] were included to improve the estimation of in-lieu fee project costs and the establishment of adequate fee schedules. Today’s rule ensures that the review, approval, and oversight of in-lieu fee programs is subject to the same level of interagency and public review as mitigation banks (see § 332.8(d) [§ 230.98(d)]). Similarly, today’s rule requires in-lieu fee projects to develop mitigation plans that meet the same standards as those applicable to mitigation banks and permittee-responsible projects (see § 332.8(j) [§ 230.98(j)]).

Properly organized in-lieu fee programs which comply with the new requirements established by today’s rule should actively support a watershed approach to compensatory mitigation, and will help advance goals for protecting and restoring aquatic resources within watersheds, especially in areas where there are no mitigation banks.

We recognize that even with these improvements to in-lieu fee programs, there will likely be less temporal loss of resources associated with mitigation provided by banks than with mitigation provided by in-lieu fee programs. We have therefore established a hierarchy in § 332.3(b) [§ 230.93(b)] for selecting the type and location of compensatory mitigation with an explicit preference for mitigation bank credits over advance credits from in-lieu fee programs when appropriate bank credits are available for use. Public input regarding in-lieu fee mitigation as well as all of these specific modifications and additions are discussed in more detail in parts III and VI of the preamble.

### C. Other General Comments

Some commenters stated that the proposed rule should be revised to incorporate principles of ecological restoration and landscape ecology. Other commenters said that the proposed rule fails to recognize the dynamic nature of wetlands and provides disincentives for active management of wetland resources in ways that would benefit society. A few commenters remarked that the proposed rule does not adequately address compensatory mitigation for marine habitats or aquatic species.

We have revised the final rule to better incorporate principles of ecological restoration and landscape ecology, for example, at § 332.3(d) [§ 230.93(d)], which specifies detailed factors for the district engineer to use in determining ecological suitability for mitigation project sites. Section 404 directs the Corps to issue permits for

discharges of dredge and fill material, not to promote “active management” of wetlands. To the extent that active management may provide an alternative to permitted discharges, permit applicants should consider such approaches as part of the avoidance and minimization mitigation sequencing. Also, both permitted projects and compensatory mitigation projects may require on-going active management to protect resources, and conditions for such management may be incorporated into DA permits where appropriate. Finally, management of existing wetlands may itself involve discharges requiring DA permits, and in this case permit conditions will address issues related to the management and protection of affected resources, in accordance with applicable regulations, including this rule. We disagree that the rule does not adequately address marine habitats and species. While the specific projects needed to mitigate impacts to marine resources may be different, the procedural and analytical framework established in the final rule applies equally well to freshwater and marine resources.

Several commenters said that the proposed rule did not address concerns raised in recent reports on compensatory mitigation in the Corps Regulatory Program that were issued by the Government Accountability Office (GAO). Some commenters said that the proposed rule incorporates some of GAO’s recommendations, but expressed skepticism that the Corps has the resources to implement those provisions of this rule. These commenters asserted that the Corps needs to make compensatory mitigation compliance a high priority to ensure effective replacement of wetland acreage and function lost as a result of permitted activities.

One GAO report was issued in May 2001, and was entitled “Wetlands Protection: Assessments Needed to Determine Effectiveness of In-Lieu Fee Mitigation.” Another GAO report, “Wetlands Protection: Corps of Engineers Does Not Have an Effective Oversight Approach to Ensure That Compensatory Mitigation Is Occurring” was issued in September 2005. We have incorporated many of the recommendations of these GAO reports into this rule, by requiring the use of enforceable permit conditions, performance standards, and third-party agreements. In addition, this rule states that it supersedes certain agency guidance on compensatory mitigation, specifically the 1995 mitigation banking guidance, the 2000 in-lieu fee guidance, and Regulatory Guidance Letter (RGL)



02–02. That RGL provides guidance on compensatory mitigation projects for aquatic resources impacted by activities authorized by DA permits. This rule also clarifies the requirements for compensatory mitigation, as recommended by GAO. We agree that taking actions to determine compensatory mitigation compliance should be a high priority, and have provided general principles for establishing ecological performance standards and criteria. Corps districts and EPA regional offices will continue to work with other federal and state resource agencies to develop and refine specific performance standards and criteria to evaluate and ensure success of compensatory mitigation projects in their geographic areas of responsibility. These performance standards and criteria will take into account regional variations in aquatic resource characteristics, functions, and services.

A number of commenters discussed *ad hoc* mitigation, which has been defined in various reports as cash donations made by a permittee to satisfy their mitigation requirements. The majority of commenters stated that *ad hoc* mitigation should not be approved unless it meets the requirements specified in the rule. One commenter said that *ad hoc* mitigation is often unsuccessful because there is no evaluation process and no oversight for the compensatory mitigation that is to be completed, and there is no way to track the compensatory mitigation that was to occur. One commenter proposed that *ad hoc* mitigation should be allowed on a one-time basis where a compensatory mitigation opportunity and need arise concurrently, but are not of such a scale as to justify going through the review process in § 332.8 [§ 230.98]. Two of these commenters discussed *ad hoc* mitigation arrangements and stated that the Corps needs to improve record-keeping for *ad hoc* mitigation activities.

The May 2001 GAO report defines *ad hoc* mitigation as involving “mitigation payments from developers to third parties that are neither mitigation banks nor considered by the Corps to be in-lieu fee organizations.” For the purposes of this rule, *ad hoc* mitigation is considered to be a form of permittee-responsible mitigation. For a mitigation bank or in-lieu fee program to be used to provide compensatory mitigation for DA permits, and to have the responsibility for providing the required compensatory mitigation transfer from the permittee to the mitigation bank sponsor or in-lieu fee sponsor, there must be a mitigation banking or in-lieu fee program instrument approved by the

district engineer in accordance with the procedures in this final rule (see § 332.8 [§ 230.98]). Any other compensatory mitigation arrangements are considered to be permittee-responsible mitigation where the permittee retains responsibility for providing the required compensatory mitigation, and this will be reflected in the terms of the DA permit. Permittee-responsible mitigation also includes any *ad hoc* payments made to governmental or non-governmental organizations that are not in accordance with the terms of an approved in-lieu fee program instrument. When a governmental or non-governmental organization accepts an *ad hoc* payment from a permittee, that organization is in essence acting as a contractor to provide the compensatory mitigation for that permittee, and the permittee retains responsibility for any long-term protection and/or management of the compensatory mitigation project.

We also recognize the importance of record-keeping for compensatory mitigation projects, and have established procedures for using permit conditions, instruments, and ledgers to track the implementation and success of those projects. The Corps will also track permitted impacts and compensatory mitigation through databases, such as the OMBIL Regulatory Module (ORM–2), which is the primary automated information system for the Corps Regulatory Program, and the Regional Internet Bank Information Tracking System (RIBITS). All 38 Corps districts are now using ORM–2, which will help standardize data collection in the Corps Regulatory Program. It will also be used to collect data to assess the performance of the Regulatory Program. RIBITS is an automated information system with an interactive Web site. It is currently designed to track the status of mitigation banks and to provide up-to-date information to mitigation bank sponsors and customers. We are also considering modifying RIBITS to track the status of in-lieu fee programs. Use of RIBITS is currently limited to several districts, but we are planning to make RIBITS the standard tool for tracking sale and production of compensatory mitigation credits by third parties.

Several commenters expressed appreciation that the agencies incorporated many of the recommendations made in the 2001 NRC Report. A few commenters acknowledged that the proposed rule prioritized the location and types of compensatory mitigation projects in accordance with the NRC’s recommendations. However, they said that they disagree with the NRC’s

recommendations and suggested that the agencies establish a preference for on-site and in-kind mitigation in the final rule. They said that a preference for on-site and in-kind compensation would better support a “no net loss” goal for aquatic resources.

We disagree that the rule should establish a preference for on-site compensatory mitigation, because the failure rate for such projects is quite high. On-site compensatory mitigation activities, especially wetland restoration or establishment, are particularly sensitive to land use changes. Land use changes often alter local hydrology. Establishing appropriate hydrology patterns (i.e., duration and frequency) to support the desired aquatic habitat type is a key factor in successfully restoring or establishing those habitats. In many cases, there are circumstances in which on-site mitigation is neither practicable nor environmentally preferable. Under the watershed approach, it may be desirable to require some on-site mitigation measures to address water quality and quantify functions, and to require off-site mitigation to compensate for habitat functions.

We do agree that, in general, in-kind mitigation is preferable to out-of-kind mitigation because it is more likely to compensate for the functions and services lost at the impact site. The rule states that the compensatory mitigation should be of a similar type (e.g., Cowardin and/or hydrogeomorphic class) to the affected aquatic resource, unless the district engineer determines using the watershed approach described in the rule (see § 332.3(c) [§ 230.93(c)]) that out-of-kind compensatory mitigation will better serve the aquatic resource needs of the watershed. The term “in-kind” in § 332.2 [§ 230.92] is defined to include similarity in structural and functional type; therefore, the focus of the in-kind preference is on classes of aquatic resources (e.g., forested wetlands, perennial streams). However, all compensatory mitigation projects should provide a high level of functional capacity, even when compensating for degraded or low-quality resources. Replacement ratios may be used to adjust for the relative quality of impact sites and mitigation projects, where appropriate. With this rule, we are moving towards greater reliance on functional and condition assessments to quantify credits and debits, instead of surrogates such as acres and linear feet. We believe that more frequent use of such assessment methods will help improve the quality of aquatic resources in the United States.

For example, in a case where a project proponent is proposing to fill a degraded three acre wetland that provides one unit of wetland function per acre (as determined by a rigorous functional assessment method), the loss of that wetland may in some cases be offset by a compensatory mitigation project that provides fewer acres of high-functioning wetlands (as determined by the same functional assessment method). Conversely, where the impact is to a high-value resource, more than one-to-one replacement on an acreage basis may be necessary just to achieve functional equivalence between the impact and mitigation sites. Note that replacement ratios may also be greater than one-to-one for other reasons, such as to address uncertainty of success or temporal losses.

One commenter said that the Corps should be the principal agency administering the 404 wetlands regulatory program. The commenter stated that the involvement of multiple agencies in wetlands regulation only hinders the overall efforts of the Corps Regulatory Program. This commenter also stated that the Corps should build a stronger, more predictable compensatory mitigation program to both enhance environmental protection and provide a measure of certainty to both regulatory staff and permit applicants.

While we agree that the section 404 regulatory program should be as streamlined and efficient as possible, we do not agree that the involvement of other agencies necessarily hinders that efficiency. Today's rule will foster greater efficiency and predictability in the interagency process by providing clear deadlines for action on all types of compensatory mitigation, particularly banking and in-lieu fee program instruments. We note that the participation of other agencies in the section 404 permit process is required by various laws, regulations, and legally-binding agreements. For example, section 404(b) of the Clean Water Act specifically authorizes EPA to develop guidelines for the identification of disposal sites for dredged or fill material (the 404(b)(1) Guidelines), which provide substantive environmental criteria for avoidance, minimization and compensatory mitigation. The EPA is authorized by section 501(a) of the Clean Water Act to conduct any rulemaking necessary to carry out their functions under that act. As another example, the Fish and Wildlife Coordination Act and other statutes require consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for

activities that control or modify waterbodies.

Many commenters stated that the proposed rule is inconsistent with existing national regulations, and one commenter said that the proposed rule is inconsistent with regulations at 33 CFR 320.4(r), as well as the "Mitigation" general condition for the nationwide permits and other compensatory mitigation guidance documents that apply to the Corps Regulatory Program. This commenter also stated that the 404(b)(1) Guidelines provide no authority for requiring compensatory mitigation for unavoidable adverse impacts after all appropriate and practicable minimization has been required.

The agencies disagree with these comments. The Corps general mitigation policy at 33 CFR 320.4(r) describes types of mitigation, including avoiding, minimizing, rectifying, reducing, or compensating for resource losses. Since that provision was last promulgated in 1986, there have been policy changes that have resulted in the Corps requiring compensatory mitigation for more activities, not just those that result in significant resource losses. For example, when the nationwide permit regulations were revised in 1991, a provision was added (33 CFR 330.1(e)(3)) which stated that compensatory mitigation could be required by a district engineer to ensure that an NWP activity results in minimal adverse environmental effects. The final rule issued today also specifically states that it does not alter the regulations of 33 CFR 320.4(r), and that it supersedes certain guidance documents on compensatory mitigation. What is generally understood to be compensatory mitigation today (i.e., the restoration, establishment, enhancement, and/or preservation of aquatic resources) is in the 404(b)(1) Guidelines as an action to minimize adverse effects on populations of plants and animals (see 40 CFR 230.75(d)). Compensatory mitigation may also be required to satisfy other legal requirements, as a result of the public interest review process, or to compensate for other resource losses. As indicated in the preamble to this rule, today's rule does not affect the determination as to when compensatory mitigation is required, only the requirements for conducting such mitigation once the district engineer determines that it is necessary. As stated in the preamble to the March 28, 2006, proposed rule (71 FR 15524-15525), this rule does not change the threshold for determining when compensatory mitigation is required; instead it focuses on where and how compensatory

mitigation will be provided. The threshold for determining when compensatory mitigation is required for DA permits is generally addressed through 33 CFR 320.4(r) and specifically for the nationwide permits at 33 CFR 330.1(e)(3).

A number of commenters stated that the proposed rule gives preference to certain groups. One commenter said that the proposed rule promotes the interests of non-profit organizations, government agencies, and academics, instead of restoration practitioners and entrepreneurs. One commenter remarked that wetland mitigation and market-based approaches have the potential to expand land conservation practices through private investments and to provide additional economic incentives to help retain working farms and forests. Another commenter said that a market-driven approach will help small developers and allow for increased entrepreneurship in compensatory mitigation. One commenter said that the proposed rule would damage the economic viability of wetland mitigation banking and encourage losses of wetlands in floodplains, which would exacerbate property damage caused by flooding.

Under this rule, any entity, whether a non-profit group, government agency or commercial entrepreneur, has the opportunity to develop and implement compensatory mitigation projects. We believe we have complied with the statute requiring the promulgation of this rule, by maximizing available credits while raising requirements and standards to help ensure ecological performance. When evaluating compensatory mitigation options, district engineers will consider what would be environmentally preferable to offset the authorized impacts. In many instances, the environmentally preferable compensatory mitigation will be in the form of mitigation banks or in-lieu fee programs because they usually involve consolidating compensatory mitigation projects and resources, and providing financial planning and scientific expertise. They may also reduce temporal losses of functions and reduce uncertainty over project success. We have added a provision that in-lieu fee sponsors must be governmental or non-profit organizations. We believe this is appropriate in light of the fact that only in-lieu fee programs are allowed to sell advance credits, before a site has been secured or a specific mitigation project reviewed and approved.

We disagree that the rule will adversely affect the economic viability of mitigation banks and encourage

losses of wetlands in floodplains. By further clarifying the requirements and timelines for mitigation bank approval, and by establishing a preference for mitigation bank credits we believe the final rule will in fact enhance the economic viability of mitigation banks. Since the focus of this rule is on compensatory mitigation, avoidance and minimization of impacts to wetlands located in floodplains is more appropriately addressed through the application of Subpart B of the 404(b)(1) Guidelines, compliance with Executive Order 11988 (Floodplain Management), and compliance with the floodplain management requirements of the Federal Emergency Management Agency and state and local governments.

One commenter said that the rule will slow down the permitting process for new energy projects. Three commenters stated that section 1221 of the Energy Policy Act of 2005 (Pub. L. 109-58), through section 216(h) of the Federal Power Act, requires federal permit decisions associated with transmission facilities to be made in one year, unless it is not possible under other laws. These commenters said that the one-year time frame applies to DA permits.

This final rule will not have an adverse effect on processing times for DA permits that authorize the construction of transmission facilities. The rule promotes the development of mitigation banks and in-lieu fee programs, which can be used to provide compensatory mitigation for energy projects that require DA permits. Securing credits from third-party mitigation providers can help shorten permit processing times, because there is no need to review and approve site-specific mitigation plans for permittee-responsible mitigation. In cases where appropriate third-party mitigation credits are not available, the review and approval of permittee-responsible mitigation projects should be more timely, because this rule establishes clear guidelines and requirements for those compensatory mitigation projects. This rule does not change the circumstances under which compensatory mitigation is required, so additional compensatory mitigation will not be required for energy projects.

#### Wetland Protection

Many commenters said that the proposed rule does not adequately protect the Nation's wetlands, does not support the goal of "no net loss" of wetlands, does not support the objective of the Clean Water Act to maintain the chemical, physical, and biological integrity of wetlands, and will result in a significant loss of wetland acreage

across the country. Several commenters recommended that the final rule include provisions to make it more difficult to fill wetlands to ensure no net loss of wetland acreage and functions. However, one commenter said that although current federal regulations could be improved, those regulations are sufficient to ensure no net loss of wetlands in Florida. One commenter stated that over 33,000 acres of wetlands have been lost last year alone, and, with this much destruction, it is obvious that the agencies are not requiring enough avoidance of wetland impacts. Two commenters said that of the three goals stated in the proposed rule (i.e., to improve quality of mitigation, improve regulatory efficiency, and ensure opportunities for federal agency participation in mitigation banks), only one goal is focused on natural resource protection. These commenters also stated that regulatory efficiency should not be pursued at the expense of wetland protection.

A primary objective of the Clean Water Act is to restore and maintain the chemical, physical and biological integrity of the Nation's waters. Through its permit program, the Corps helps protect the aquatic environment by requiring project proponents to avoid and minimize regulated impacts to wetlands and other waters of the United States to the extent practicable. This rule was specifically promulgated to address compensatory mitigation. For activities that require a section 404 permit, avoidance and minimization are addressed through application of Subparts A through H of the 404(b)(1) Guidelines at 40 CFR part 230. Prior to issuing a permit, the Corps must evaluate the proposed work and its impacts on the aquatic environment and other public interest review factors, and determine whether the proposed work is in the public interest. Compensatory mitigation may be required to ensure that the proposed work is not contrary to the public interest and, if the activity involves discharges of dredged or fill material into waters of the United States, is in compliance with the 404(b)(1) Guidelines. The rule does not change or weaken existing regulatory requirements to avoid and minimize impacts to wetlands.

In fiscal year 2005, the Corps authorized 20,754 acres of wetland impacts, and required 56,693 acres of compensatory mitigation through wetland restoration, establishment, enhancement, and preservation to offset those unavoidable impacts. From fiscal years 2001 to 2005, the mean annual wetland impacts authorized were 23,000 acres, and the mean annual wetlands

compensatory mitigation required was 50,000 acres.

This rule incorporates many of the recommendations of the 2001 NRC Report, as well as appropriate recommendations from other evaluations of wetland compensation, to provide measures to help improve the success of wetland compensatory mitigation projects. By improving the success of these projects, the Corps Regulatory Program will help support the Administration's goal of increasing wetland acreage and quality. We believe that the rule will both improve the quality and success of compensatory mitigation and increase predictability and efficiency in the regulatory program.

Three commenters recommended adding a provision to the rule from the 1990 Mitigation Memorandum of Agreement (MOA) between the Army and EPA stating that no overall net loss of wetlands may not be achieved for each and every permit action, but the Corps would achieve this goal programmatically. One commenter noted that the "no net loss" goal for wetlands is required by statute for the Corps Civil Works Program (see 33 U.S.C. 2317(a)(1)).

That specific provision of the 1990 Mitigation MOA has not been superseded by this final rule. It is important to understand that the 1990 Mitigation MOA applies only to standard permits. It is not practicable or appropriate to require compensatory mitigation for every standard permit, or for every general permit authorization. The requirements of 33 U.S.C. 2317(a)(1) are more accurately presented as achieving an interim goal of "no overall net loss" of the nation's remaining wetlands base as measured by acreage and function, with a long-term goal of increasing the quality and quantity of the nation's wetlands. That provision of the United States Code applies to water resource development projects undertaken through Corps Civil Works program, not to activities authorized by DA permits.

Two commenters stated that developers should not be able to provide wetlands compensatory mitigation through mitigation banks or in-lieu fee programs. One commenter said that wetland buffers reduce adverse impacts of human disturbance on wetland habitats. Two commenters recommended emphasizing voluntary economic incentives and balancing economic needs with those of wetlands protection.

Under this rule, developers will be able to provide compensatory mitigation through mitigation banks, in-lieu fee

programs, or permittee-responsible mitigation. In many cases, the environmentally preferable compensatory mitigation will be provided through mitigation banks or in-lieu fee programs because they typically involve consolidating compensatory mitigation projects and resources, and providing financial planning and scientific expertise. For a particular activity requiring a DA permit, the Corps may consider any appropriate form of compensatory mitigation, as long as it complies with these regulations. We agree that wetland buffers often help ensure the long term viability of wetlands, and the rule promotes the use of such buffers. There are some federal programs that provide economic incentives to protect wetlands, but those programs have limited availability. Section 404 of the Clean Water Act is not structured to provide voluntary economic incentives for avoiding regulated activities in wetlands. Instead, it relies on a regulatory approach to wetland protection.

#### Aquatic Resource Functions, Services, and Values

A number of commenters discussed the concepts of "functions," "services," and "values" that were in the proposed rule. Two commenters suggested removing "values" and "services" from the rule. One commenter said there is disagreement on the definitions of these terms, and the rule should instead require a minimum one-to-one acreage ratio. One commenter said that functional capacity appears to represent natural wetland potential better than society-driven values and services and should be emphasized more. Another commenter said that the rule should explicitly require replacement of lost "values," because a shift from a broad concept of "function and value" to a narrow concept of function alone ignores social services and values that are important to the public interest, such as protection from natural hazards. One commenter said that the phrase "non-use values such as biodiversity" will subject the regulatory agency and the regulated community to uncertainty and litigation as opponents who object to a project challenge the details of an impact. One commenter suggested that functions, values, and services found in a given wetland can best be measured after the wetland conditions are established using biological indices, and that a framework or methodology is needed.

The terms "functions," "services," and "values" have been used in various documents to describe the attributes of

aquatic resources that are being replaced through compensatory mitigation. We included definitions for all three terms in the proposed rule. After considering the comments received in response to these concepts, we have eliminated the term "values" from the final rule because the term "services" is currently being used in the ecological literature to relate to the human benefits that are provided by an ecosystem. The concept of ecosystem services provides a more objective measure than "values" of the importance of the functions performed by the ecosystem to human populations. Ecosystem services is a useful concept for assessing the public interest, an important consideration in the Corps Regulatory Program. Consideration of "services" provided by aquatic resources is usually qualitative, and can be accomplished through evaluations of compensatory mitigation options, including siting those projects near human populations.

Using the concept of "services" also allows us to focus on how the general population benefits from ecological functions, instead of whether potentially affected parties may or may not "value" a particular aquatic resource and the functions it provides. The term "values" is more subjective, since a particular ecosystem service may be perceived to be valuable by some individuals but not others. The term "values" can also be read to imply monetary valuation, which is difficult for most aquatic resource functions and is not generally practical for most decisions. Therefore, we believe the regulatory program is appropriately focused on protecting "functions" (the physical, chemical and biological processes that occur in aquatic resources) and "services" (the benefits to humans that result from these functions). Accordingly, we have eliminated the term "values" from the rule, including the reference to "non-use values such as biodiversity." However, biodiversity is a potential service that some resources may provide.

The agencies have a long-standing policy of achieving no overall net loss for wetland acreage and function. Simply requiring one-to-one acreage replacement may not adequately compensate for the aquatic resource functions and services lost. Presently, there are methods that can be used by district engineers to assess aquatic resource functions or condition, such as hydrogeomorphic assessment methods and indices of biological integrity. There are efforts being undertaken to develop methods to assess ecosystem services, such as those that use indices of

wetland function to reflect the services provided by wetlands.

A number of commenters expressed concern that offsite mitigation can lead to transfer of wetland ecosystem services from urban to rural areas. However, one commenter said that the rule should not be written for the purpose of preventing urban wetland values from migrating to rural areas because local jurisdictions have other means for preventing this (e.g., zoning ordinances, eminent domain). Another commenter stated that because of a shortage of suitable sites in populated areas, it may not be possible to establish ecologically viable mitigation banks in certain heavily urbanized areas. This commenter said that mitigation banks in urban areas should be allowed to generate more credit per unit of restored resource to make these sites financially feasible.

We recognize that aquatic resources in urban settings can provide important functions and services, and we believe it is important that urban areas not become devoid of aquatic resources simply because it is more difficult to successfully restore or establish aquatic habitat in developed areas, or to obtain suitable compensatory mitigation project sites. However, in certain situations self-sustaining and ecologically successful aquatic resource restoration or establishment projects may not be feasible in urban areas because of changes in land use and the resulting impacts to local surface hydrology and groundwater. In these types of situations, the rule allows compensatory mitigation for impacts to urban wetlands to be conducted in rural areas if the applicable requirements of the rule and the Section 404(b)(1) Guidelines are met. Under the watershed approach adopted in the final rule, district engineers may require compensatory mitigation at more than one site. For example, compensatory mitigation may be required on-site to offset losses of water quality and flood storage functions, while off-site compensation may be required to offset losses of habitat functions. The siting of mitigation banks is dependent upon potential mitigation bank sponsors securing land suitable for compensatory mitigation projects. Such land may not be available in urban areas at a price, and a rate of return on that investment, that is acceptable to the sponsor. Credit valuation must be based on the ecological functions and services provided by the compensatory mitigation project, not the difficulty or cost of siting and constructing it. However, where appropriate, district engineers may consider the relative

ecological value of scarce aquatic resources in urban areas (at both the impact and mitigation sites) in determining appropriate compensation ratios. While preservation may be the most appropriate form of compensatory mitigation in urban areas in some cases, we encourage district engineers to look for opportunities to restore or establish aquatic resources in appropriate areas.

#### Mitigation Effectiveness

Many commenters stated that compensatory mitigation projects do not effectively replace natural wetlands, because created wetlands do not support the variety of native biota found in natural ecosystems, and there is no guarantee that they will function as natural wetlands. A large number of commenters also said that the rule fails to address the fact that many aquatic systems cannot be created. The commenters stated that there is no scientific data showing that the functions of headwater streams, and wetlands such as bogs and fens, can be reproduced, and the proposed rule would weaken protections for these waters by sanctioning uncertain mitigation practices. Several commenters stated that the rule does not include major improvements suggested by the scientific community to improve wetlands compensatory mitigation.

We have carefully considered reviews and criticisms of compensatory mitigation projects, especially the 2001 NRC Report, during the development of this rule. We recognize that there are compensatory mitigation projects that do not fully succeed in replacing the functions and services of aquatic resources that are lost or altered as a result of permitted activities. In an effort to improve compensatory mitigation practices in the Corps Regulatory Program, we have incorporated recommendations made in the 2001 NRC Report and other reports. We believe that this final rule accomplishes that objective and will help increase the success and quality of aquatic resource restoration, establishment, and enhancement activities by focusing on effective site selection at a landscape and watershed scale, requiring enforceable permit conditions (including ecological performance standards), requiring monitoring of compensatory mitigation, and undertaking adaptive management to help ensure success. We recognize that some types of aquatic resources are difficult to replace, such as bogs, fens, vernal pools, and streams. In response to these comments, we have added § 332.3(e)(3) [§ 230.93(e)(3)], which emphasizes avoidance and

minimization of impacts to difficult-to-replace resources, and if such avoidance and minimization is not practicable, requires that compensatory mitigation be provided through in-kind preservation, rehabilitation, or enhancement to the extent practical.

#### Mitigation Mechanisms

Several commenters said that the rule inappropriately treats permittee-responsible mitigation, mitigation banks, and in-lieu fee programs as though they are a single vehicle. Two commenters stated that in cases where a mitigation bank is successfully established, it should be preferred over permittee-responsible mitigation, but with the caveat that movement of aquatic resources from urban areas to rural areas should be monitored and possibly prevented. One commenter recommended that consolidated mitigation be allowed for linear facilities such as transmission lines. One commenter suggested the following clarification be included in the preamble to the final rule: "This rule is not intended to inhibit market-based opportunities for trading environmental credits beyond those required for compensatory wetland mitigation." According to that commenter, this would allow private landowners to sell credits for environmental services gained beyond those required for compensatory mitigation for DA permits.

This rule establishes, to the extent practicable, equivalent standards for all types of mitigation, as required by section 314. The administrative and procedural requirements in the final rule vary, because there are fundamental differences among mitigation banks, in-lieu fee programs, and permittee-responsible mitigation. It is not possible to impose exactly the same requirements on these three sources of compensatory mitigation, and fulfill the other requirement of section 314, which is to "maximize available credits and opportunities for mitigation." To maximize available credits, it is necessary to recognize the differences among the three sources, and impose equivalent standards and requirements to the extent practicable. Where it is not practicable to impose identical requirements, the rule adopts comparable alternative requirements to help ensure the ecological success of all types of compensatory mitigation. It is also important to emphasize that the rule applies equivalent *ecological* standards to all three types of compensatory mitigation; the differences are in procedures and timing of requirements. Site selection for third-

party mitigation should focus on the ecological benefits that the mitigation banks or in-lieu fee projects will provide to the watershed. This may or may not result in migration of aquatic resources from urban to rural areas within that watershed.

For linear projects, such as roads and utility lines, district engineers may determine that consolidated compensatory mitigation projects provide appropriate compensation for the authorized impacts, and are environmentally preferable to requiring numerous small permittee-responsible compensatory mitigation projects along the linear project corridor. We do not believe it is necessary to explicitly state that this rule is not intended to inhibit market-based environmental credit trading, as the rule only applies to compensatory mitigation required for DA permits. The ability of private landowners to sell credits for environmental services gained beyond those required for compensatory mitigation for DA permits is more appropriately addressed through other applicable programs.

#### General Comments on Mitigation Banking

Many general comments were received regarding mitigation banking. Some commenters encouraged broader use of banks, many others criticized a perceived preference for mitigation banks in the proposed rule. Several commenters recommended providing greater incentives for Corps districts to process commercial mitigation bank requests. One commenter suggested that this rule include incentives to private landholders to participate in wetland mitigation banking. Many commenters said the rule inappropriately promoted the economic needs of the mitigation banking industry over the needs of watersheds, and that the preference for mitigation banks over other forms of compensatory mitigation is not justified.

We recognize that mitigation banking is an important tool for compensatory mitigation. In this final rule, we have established a preference for mitigation bank credits, since mitigation banks must have an approved mitigation plan and other assurances in place before credits can be provided to permittees (see § 332.3(b)(2) [§ 230.93(b)(2)]). Because of the requirements imposed on mitigation banks, they generally involve less risk and uncertainty than in-lieu fee programs and permittee-responsible mitigation. This preference is based on administrative criteria, not ecological criteria. To the best of our knowledge, there have been few studies by independent parties of the ecological

performance of mitigation banks. The studies that we have reviewed have shown that mitigation banks have experienced many of the same problems as permittee-responsible mitigation (see the environmental assessment completed for this rule for summaries of those studies). The ecological success of mitigation banks, in-lieu fee programs, and permittee-responsible mitigation is dependent on many of the same factors, such as selecting appropriate sites and establishing the proper hydrology. We are not aware of any independent studies on the ecological performance of in-lieu fee projects. As discussed below, in response to comments received as a result of the proposed rule, we are retaining in-lieu fee programs as another form of third-party mitigation, with robust requirements to help ensure that they provide effective compensatory mitigation.

The timelines in this rule for processing proposed mitigation banks and in-lieu fee programs will promote timely decisions on instruments for these third-party mitigation activities. Participation in mitigation banks is not limited to entrepreneurs; private landowners can also submit proposed mitigation banks for consideration. We recognize that mitigation banks are not currently available in many areas of the country, or will be able to provide in-kind compensation for some types of aquatic resources. Therefore, to support a watershed approach for compensatory mitigation, we are retaining in-lieu fee programs as a separate form of third-party mitigation in this final rule, because in-lieu fee programs can provide ecologically beneficial compensatory mitigation in areas not served by mitigation banks. The preference for mitigation banks can be overridden by district engineers on a case-by-case basis if, for example, an approved in-lieu fee program has released credits available, or the permittee is proposing a compensatory mitigation project that will restore an outstanding resource.

Several commenters said that references to economic factors should be removed from consideration of the mitigation service area and there should be a greater consideration of the watershed approach, in order to be more consistent with other forms of compensatory mitigation. Several commenters stated that overdependence on mitigation banks will promote less successful compensatory mitigation projects. They cited a recent study in Ohio that showed that mitigation banks have not provided successful mitigation for permitted impacts. Several other commenters noted that there are too

many areas in the country that are underserved by mitigation banks. One commenter recommended non-profit management of mitigation banking, because non-profit entities can do more work for the actual cost and their ultimate goal is stream restoration, not maximizing the amount of profit.

Mitigation banks and in-lieu fee programs must be sited in such a way as to effectively replace lost aquatic resource functions and services and address key watershed needs within their service areas. However, consideration of economic factors is also important in determining the service area, to make it possible for third-party mitigation sponsors to develop and implement these projects. If service areas are too small to support economically viable mitigation banks or in-lieu fee programs, then we would have to rely on permittee-responsible mitigation. As discussed in the environmental assessment for this rule, permittee-responsible mitigation is generally less likely to be a successful source of compensatory mitigation. However, to ensure the benefits of third-party mitigation, economic factors should not supersede ecological considerations in the final service area determination. The benefits of mitigation banks and in-lieu fee programs are discussed in § 332.3(a)(1) [§ 230.93(a)(1)].

The agencies agree that there are certain advantages to non-profit and governmental agencies as third-party mitigation sponsors. They do not need to earn a profit, and are more likely to act in the public interest. However, commercial banks also have certain advantages. They have a strong financial incentive to provide effective, timely mitigation that may be lacking for non-commercial entities. Under today's final rule, mitigation bank sponsors may be either commercial, non-profit, or governmental entities, while in-lieu fee program sponsorship is limited to governmental and non-profit entities.

Some commenters supported the mitigation banking rules, while others disagreed with the proposal to eliminate in-lieu-fee programs. Several commenters said that the cost of bank credits should be established in the context of the marketplace. One commenter stated that over-promoting mitigation banks could lead to a monopolistic pricing structure. Numerous commenters asserted that the process of establishing a mitigation bank should be streamlined. Some commenters supported the termination of wetland mitigation banks that do not comply with the Clean Water Act.

In this final rule, we have established criteria and standards for both mitigation banks and in-lieu fee programs, to maximize the available credits for use in the Corps regulatory program, as well as the Corps Civil Works Program and military construction activities. Credit costs for mitigation banks will be determined by their sponsors. The rule does attempt to streamline the process for establishing both mitigation banks and in-lieu fee programs, while recognizing the need for thorough and effective IRT and public review before credit sales can begin. To accomplish these goals, the final rule establishes reasonable deadlines for each step in the review and approval process. To continue operating, approved mitigation banks and in-lieu fee programs must comply with the terms of their instruments and these regulations, and district engineers will take appropriate actions if credits are not produced in accordance with approved credit release schedules. This ensures compliance with the Clean Water Act.

#### Regional Issues

A number of commenters expressed concern about how the rule will be implemented at the district or regional level, or with regard to specific issues such as coal mining and port facilities. One commenter welcomed the improved consistency in Corps implementation of a federal mitigation regulation with similar standards, timelines, and laws across states, for administrative reasons rather than biological/ecological differences. One commenter expressed concern that Corps districts will develop stricter requirements than those in the rule and another commenter stated that the rule places too much authority with the district engineer and not enough with state and local officials who are more familiar with local needs. Other commenters stated that the rule could conflict with state or local programs, and if the state enacts stricter standards for mitigation, the Corps must adopt those standards into DA permits. Many commenters noted that mitigation banking is being given preference over other types of mitigation despite state agency efforts to develop rules to encourage site-specific in-kind mitigation. In this way, the proposed rule fails to account for existing state and local regulations. Numerous commenters stated that coordination between state, local, and federal administrators is necessary or the rule may undermine functioning state and local mitigation plans.

The rule provides district engineers the flexibility to address permit-specific situations, while ensuring clear and consistent national standards and requirements. While we expect district engineers to work closely with their state and local partners, particularly on Interagency Review Teams, it is essential that this rule is consistent with Congressional intent as provided by section 314. This rule must also be consistent with the other Corps regulations at 33 CFR parts 320 through 331, which govern the implementation of the Corps Regulatory Program. Of course, it would be desirable to have consistent compensatory mitigation requirements across the various levels of government that have regulatory authority over a particular project, but there are usually differences because of variability among agency authorities, missions, and objectives. State and local governments may impose different requirements to address local or regional needs or concerns. Compensatory mitigation decisions made by district engineers must address federal concerns and authority, and must focus on compliance with the Clean Water Act and other federal requirements. There are likely to be cases where the compensatory mitigation requirements imposed by the Corps are different from those imposed by state or local governments, but in most cases they are likely to be similar. All section 404 permits require section 401 water quality certification by states and tribes. Where states feel that federal requirements are not stringent enough, they may impose more protective requirements in accordance with their water quality standards.

In this final rule, preference is given to mitigation banks, if the authorized impacts occur in the service area of a mitigation bank that has the appropriate number and resource type of credits available. If permittee-responsible mitigation is required by a state or local government with regulatory authorities that are similar to the Corps under section 404 of the Clean Water Act or sections 9 or 10 of the Rivers and Harbors Act of 1899, and the mitigation project will appropriately offset the permitted impacts, then the district engineer may determine that the permittee-responsible mitigation is acceptable for the purposes of the DA permit. We encourage coordination among federal, state, and local governments to avoid duplicate or conflicting compensatory mitigation requirements, as long as those requirements are consistent with federal requirements.

Several commenters cited various successful state programs and said that these programs should not be subject to the additional administrative burden of IRT review and approval of each separate mitigation project, and that their success could be disrupted by application of the rule. A number of commenters discussed the unique regulatory scheme that applies to mining, stated that the rule does not recognize the temporary nature of coal mining impacts on streams, and that the agencies must reconsider application of some of the proposed requirements, particularly those addressing monitoring and long-term assurances, in the context of the mining industry's regulatory environment.

District engineers will continue to work with successful state programs to streamline the review process to the maximum extent possible under these regulations. Third-party mitigation projects will be reviewed by district engineers and other interested members of the IRT. That interagency review is often helpful in providing different areas of expertise to evaluate the potential that each compensatory mitigation project has for successfully offsetting functions lost as a result of impacts authorized by DA permits. Established relationships between state programs and their federal counterparts will not be disrupted by this rule. Corps oversight is necessary to ensure the continued success of these programs. To help take advantage of established relationships, we have added a provision to the final rule that allows the district engineer and any member of the IRT to enter into a memorandum of agreement to perform some or all review functions (see § 332.8(b)(5) [§ 230.98(b)(5)]). However, the district engineer cannot delegate his or her authority for final approval of instruments or other documents.

As for mining activities, this rule does not change how the Corps will evaluate permit applications or assess the need for compensatory mitigation for those activities. What constitutes a temporary impact, and the need for compensatory mitigation, is determined on a case-by-case basis, depending on the specific circumstances of the project. The district engineer will determine the appropriate time interval for distinguishing between temporary and permanent impacts. Monitoring of compensatory mitigation sites is required and monitoring reports must be submitted to the district engineer in accordance with the special conditions of the DA permit or the terms of the mitigation banking or in-lieu fee program instrument. However, the

content and level of detail of monitoring reports is commensurate with the scale, scope, and type of the compensatory mitigation project. Requirements relating to financial assurances and long-term management are determined on a case-by-case basis, depending on the specific circumstances of the project.

#### Need for Clarification

Several commenters stated that the proposed rule does not specifically state whether it applies to general permits. Most of these commenters argued that the rule should apply solely to individual permits, and that nationwide and regional general permits should continue to be governed by 33 CFR part 330, because the requirements of the proposed rule conflict with the more flexible standards that apply to the nationwide permits and will greatly limit their utility. Two commenters stated that the proposed rule should also apply to general permits. One commenter said that the rule should include provisions that would eliminate all general permits that do not comply with the Clean Water Act.

The rule applies to compensatory mitigation required by all DA permits, including individual and general permits. We have made changes to this rule to clarify those provisions that are applied differently to individual permits and general permits. With these modifications, this rule does not conflict with the regulations at 33 CFR part 330, or the NWP general condition governing mitigation (i.e., general condition 20 of the 2007 nationwide permits, as published in the March 12, 2007, issue of the **Federal Register** (72 FR 11193)). District engineers will determine specific compensatory mitigation requirements for each permitted activity based on case-specific considerations, including whether the activity is being authorized under a general or individual permit. This rule does not alter the circumstances under which the district engineers require compensatory mitigation or the threshold for determining when compensatory mitigation is required for a particular activity. The compliance of general permits with section 404(e) of the Clean Water Act is addressed through application of the Corps regulations governing the issuance of general permits, as well as the criteria in the 404(b)(1) Guidelines for issuing general permits (40 CFR 230.7) and concerns about those permits that do not relate to compensatory mitigation are outside the scope of this rule.

One commenter recommended that the rule specify when the term "project"

refers to an authorized or permitted activity. One commenter recommended that the agencies reconsider use of the term “ecological.” Many readers may view this only in terms of species habitat, while in some cases other functions, such as flood control or water quality improvement, may be as or more important than habitat.

To provide clarity in the final rule, we have used the term “project” to refer to compensatory mitigation projects, and used the terms “permitted impacts” and “authorized impacts” when referring to the activities that adversely affect waters of the United States and may require compensatory mitigation. The term “ecological,” as used in this rule, is intended to be interpreted broadly as dealing with interrelationships of organisms (including humans) and their environment. The term “ecological” can refer to other features and functions of aquatic systems besides species habitat. For example, ecological functions provided by aquatic resources also include biogeochemical functions, which can help improve water quality. The agencies agree that water quality and flood control are important ecological services that should be compensated for when adversely impacted by permitted activities.

One commenter stated that the proposed rule has implications for USDA program participants who perform conservation or other activities in wetlands and for wetland activities conducted on National Forest System (NFS) lands. The USDA is exploring how it may facilitate its constituents’ involvement in wetland mitigation activities.

This rule specifies compensatory mitigation requirements for DA permits. Compensatory mitigation projects may be conducted on agricultural lands and NFS lands. District engineers will consider the number and type of compensatory mitigation credits that may be provided through aquatic resource restoration, establishment, enhancement, and/or preservation activities on these lands, over and above any environmental improvements that result from USDA programs (see § 332.3(j) [§ 230.93(j)]). Resources that are restored, established, enhanced or preserved to satisfy the requirements of other federal programs may not also be used for compensatory mitigation for DA permits, although district engineers may evaluate and approve on a case-by-case basis situations where a consolidated project is used to satisfy more than one set of requirements, provided the same resource is not “double counted.” For example, if 10 acres of wetlands were needed as

compensatory mitigation for a DA permit, and 10 acres were needed for some other federal program, a 20 acre project could be authorized to fulfill the requirements of both, but the same 10-acre project could not.

One commenter said that the agencies should use “District Commander” instead of “district engineer” when referring to the person that will implement this rule. The term “District Commander” refers to the person in charge of a particular Corps district. The term “district engineer” refers to the District Commander and any of his or her designees (i.e., persons who are authorized to take actions on his or her behalf). This rule uses the term “district engineer” because most day-to-day regulatory decisions are made by the District Commander’s designees.

One commenter stated that subsurface impacts are not addressed, including subsurface extraction (mining) of oil, gas, ground water, and the aquifer matrix (e.g., rock, sand, shell). The commenter cited an example where a Corps permit involved the removal of thousands of acres (surface area) of aquifer matrix (in that case, limestone), resulting in greatly increased groundwater flow occurring in the vicinity of these mine pits despite erroneous assumptions of low flow by the regulatory agencies.

It is not possible in this preamble to address the details of the particular case the commenter cites. To the extent that DA authorization is required for subsurface extraction activities, district engineers will determine the need for compensatory mitigation on a case-by-case basis.

#### Transition to the New Rule

Several commenters recommended that the agencies clarify that the new regulations apply only to applications submitted after the effective date of the rules. One commenter added that the rule should recognize that applicants in the permitting process have expended substantial resources needed to obtain permits under the current rules, and those resources have been committed in reliance on the current rules governing compensatory mitigation. Therefore, the new requirements should not be applied retroactively to permit applicants who have invested substantial effort in developing data and plans under the previous rules and guidance. One commenter requested a clear statement that the rule does not apply to existing compensatory mitigation projects under Corps permits.

This final rule will apply to permit applications received after the effective date of this rule, unless the district

engineer has made a written determination that applying these new rules to a particular project would result in a substantial hardship to a permit applicant. In such cases, the district engineer will consider whether the applicant can fully demonstrate that substantial resources have been expended or committed in reliance on previous guidance governing compensatory mitigation for DA permits. Final engineering design work, contractual commitments for construction, or purchase or long-term leasing of property will, in most cases, be considered a substantial commitment of resources. Permit applications received prior to the effective date will be processed in accordance with the previous compensatory mitigation guidance.

#### Need for Additional Guidance

Four commenters requested more detailed guidance on how and when riparian areas and upland buffers can be used as compensatory mitigation. Several commenters requested further guidance from agencies to implement the watershed approach consistently across the nation, on issues such as determination of watershed boundaries, information needed in watershed plans, and how to identify the needs of a particular watershed. Other commenters recommended that the agencies develop guidance on compensatory mitigation for open and navigable waters, performance standards, mitigation ratios, financial assurances, the implementation of adaptive management, and credit determination methods. Another commenter suggested that the agencies prepare regional reference manuals that provide guidance on how to best design compensatory projects appropriate to meet the needs of watershed units in that region.

Many of these questions, such as how to determine watershed scale and boundaries, must be answered by district engineers at a regional or local level, to address landscape variability and other factors. Other questions must be answered on a case-by-case basis, after considering the impacts and the compensatory mitigation that may be necessary to offset those impacts. However, we recognize the need to provide more information to the public and agency personnel, and we will continue to develop guidance, as necessary, outside of this rulemaking.

#### Economic Issues

Two commenters expressed concern over the increase in mitigation costs that will result from more stringent



performance standards and the delay of credit releases until performance is achieved. One commenter stated that the requirements of the rule will overly complicate the permitting process and ultimately impact the availability of affordable housing. If the costs of purchasing credits from a mitigation bank are too high, the district engineer should take that into account and allow other off-site or out-of-kind mitigation.

In some cases, the cost of performing compensatory mitigation may increase as a result of implementation of this rule. Since this rule is generally based on existing practice, with improvements to enhance performance and efficiency, we do not believe that it will cause a substantial increase in compliance costs. We believe that ecological performance standards and other aspects of this rule are necessary to improve the success of compensatory mitigation in the Corps Regulatory Program. District engineers will take costs into account when evaluating compensatory mitigation options, since practicability is one consideration when determining compensatory mitigation requirements for DA permits.

One commenter strongly objected to adding any provision in the final rule that would require the Corps to “determine what an adequate price might be” of compensatory mitigation credits as suggested in the discussion section of the proposed regulation.

The Corps will not determine the price of compensatory mitigation credits. The rule states that the cost of compensatory mitigation credits is determined by the sponsor of a mitigation bank or in-lieu fee program. However, the district engineer may evaluate fee schedules for in-lieu fee programs to determine whether those fees satisfy the criteria in § 332.8(n)(5)(ii) [§ 230.98(n)(5)(ii)], and are sufficient for providing the required compensatory mitigation.

#### Implementation Issues

A number of commenters stated that the requirements of the proposed rule will place an enormous burden on the Corps’ staff and resources and may further delay implementation of projects. Numerous commenters asserted that additional resources must be allocated to reviewing monitoring reports, conducting site visits, and taking enforcement action when permittees and mitigation banks do not perform their prescribed mitigation requirements. Other commenters stressed the need to educate potential sponsors on how to operate wetland mitigation banks. Commenters also stated that the rule would place a

disproportionate burden on permittees. However, another commenter stated that project proponents must consider mitigation requirements early in the project planning cycle to implement mitigation in advance of, or concurrent with, a project.

This rule will not place a large incremental burden on Corps staff and other resources because it builds on existing requirements and practices and promotes those that have been successful in the past. To develop this rule, we have considered the recommendations from the 2001 NRC Report and the 2001 and 2005 GAO reports, as well as other studies of compensatory mitigation projects, to establish regulations that will help ensure that compensatory mitigation successfully replaces functions that are lost as a result of permitted activities. Monitoring, site visits, and compliance activities are essential actions for ensuring compensatory mitigation success but they are not new. What is new is the greater clarity and consistency of requirements in these areas that the rule provides. The Corps already conducts compliance inspections on compensatory mitigation projects, including mitigation banks and in-lieu fee programs, as its resources allow and will continue to do so.

We believe that the rule will increase regulatory efficiency by providing clear, consistent requirements, improving the third-party mitigation review process, and encouraging compensatory mitigation planning to be performed in advance of permitted activities through the use of mitigation banks and in-lieu fee programs. We do not believe that this rule will place a substantial burden on permittees. As more credits are generated by third-party mitigation providers, burdens on permittees should be reduced. This rule does not change the circumstances under which compensatory mitigation is required. As in the past, the district engineer will require compensatory mitigation to the extent appropriate and practicable. This rule appropriately balances the need for consistency with the need for flexibility, including its requirements for permittee-responsible mitigation. District engineers will continue to determine on a case-by-case basis what is required to satisfy the requirements of the 404(b)(1) Guidelines and other aspects of the Corps Regulatory Program.

One commenter recommended that permit review staff go to each site before making a decision. Another commenter recommended that the agencies clearly define their roles ahead of time to reduce interagency conflicts, and that if

such conflicts should occur, the Corps should work to resolve them rather than the applicant.

Because of resource constraints, site visits cannot be conducted for each permit application. Districts must prioritize their site visits to determine which sites require on-site evaluations. The Corps is the decision-maker for activities that require DA authorization. The Corps fully considers agency views when making its decisions regarding whether to issue or deny permits. This rule further clarifies the roles and responsibilities of the Corps and other agencies, including the Interagency Review Team, in the review and approval of compensatory mitigation, and provides realistic deadlines for each step in the process. The rule also contains a dispute resolution procedure through which disagreements among Federal agencies regarding third-party mitigation proposals will be addressed expeditiously.

A number of commenters discussed enforcement and compliance with mitigation permit conditions and claimed that there are insufficient staffing levels for these activities. Several commenters recommended that the Corps and state agencies place a stronger emphasis on staffing in order to increase permit compliance and enforcement of mitigation requirements. Several commenters cited the 2005 GAO report’s finding that compliance with mitigation performance standards has been inadequate, which provides a disincentive for parties to comply with mitigation requirements. They stated that third-party mitigation instruments and/or permit conditions often do not adequately specify the mitigation activities to be performed, the standards to be achieved, and the time frames for performance. Several commenters requested clarification of the Corps’ compliance authorities related to mitigation requirements.

The agencies agree that vigorous enforcement and compliance activities are necessary for the success of the regulatory program, including compensatory mitigation. The Corps believes that it has adequate resources in these areas. In the Corps Regulatory Program’s performance measures required by the Administration’s Program Assessment Rating Tool (PART), enforcement and compliance metrics comprise six of the eight performance measures. These performance measures relate to compliance inspections on activities authorized by individual permits and general permits, field inspections of active mitigation sites, compliance inspections or audits on active

mitigation banks and in-lieu fee programs, resolution of non-compliance issues, and resolution of enforcement actions. The inclusion of so many metrics in the PART reflects the high priority placed on enforcement and compliance activities by the Corps regulatory program, which will help address the concerns raised in the two GAO reports. This rule will also address compliance and enforcement issues by more clearly specifying the required information for both permittee-responsible mitigation and third-party mitigation instruments plans. This rule also includes new requirements related to ecological performance standards, monitoring and credit release schedules.

We have clarified the language in the rule that addresses non-compliance with compensatory mitigation permit conditions or third-party mitigation instruments and plans. Permittees responsible for mitigation as a permit condition will be subject to the compliance and enforcement provisions at 33 CFR part 326. If the district engineer determines that a mitigation bank or in-lieu fee program is not meeting performance standards or complying with the terms of the instrument, appropriate actions will be taken, such as requiring adaptive management, decreasing available credits, suspending credit sales altogether, and/or directing that financial assurance resources (e.g., escrow monies) be used to perform remediation or alternative mitigation. As a last resort, if a sponsor does not comply with the terms of its instrument, the district engineer can take appropriate legal action to compel compliance.

Three commenters suggested emphasizing that compliance with new mitigation requirements fully meets requirements of section 404 of Clean Water Act, therefore, there is no need for supplemental mitigation to address the uncertainty of mitigation outcomes.

Although this rule provides standards and requirements for compensatory mitigation for DA permits, there are provisions that allow district engineers to require additional compensatory mitigation when necessary to address the risk and uncertainty associated with compensatory mitigation projects. For example, adaptive management may involve requiring additional compensation if the original compensatory mitigation project does not perform as well as expected. As another example, higher amounts of compensatory mitigation may be required if the aquatic resource restoration, establishment, enhancement, and/or preservation

activity is conducted after the permitted activity, to account for both temporal losses and the risk of failure associated with the prospective mitigation.

A few commenters expressed concern that if developers are responsible for developing watershed plans, and those plans are used by others to implement a watershed approach, this might create an incentive to develop a plan that meets future development expansion needs rather than watershed needs.

This rule does not require prospective permittees to develop watershed plans. District engineers will determine whether an existing watershed plan is appropriate for use in determining compensatory mitigation requirements (see § 332.3(c)(1) [§ 230.93(c)(1)]). In general, watershed plans will be developed by governmental and/or non-profit resource planners, in consultation with watershed stakeholders. The purpose of a watershed plan is to maintain and improve the quality and quantity of aquatic resources within a watershed, not to facilitate development. District engineers will ensure that watershed plans used to determine compensatory mitigation requirements for DA permits have been developed through appropriate processes to satisfy this purpose.

#### Transfer of Responsibility

In the proposal, we requested comments on the appropriate legal mechanism for transferring the responsibility for providing compensatory mitigation from the permittee to a mitigation bank or an in-lieu fee program. We proposed an option of using parallel permit conditions and instrument provisions, that would acknowledge the transfer of responsibility from the permittee to the sponsor. Another option we solicited comments on was co-permitting, where the sponsor would sign the DA permit and assume responsibility for providing compensatory mitigation credits.

Two commenters expressed support for co-permitting, but several other commenters said that co-permitting is not an appropriate mechanism for transferring responsibility. Some commenters said that a sponsor should only sign documents that deal exclusively with the credits, debits, and use of a mitigation bank for compensatory mitigation. Two commenters stated that transfer of responsibility from the permittee to a mitigation bank is an incentive for using mitigation banks. Several commenters supported the use of the suggested permit conditions and instrument provisions provided in the preamble to

the proposed rule, when credits are to be secured from a mitigation bank.

After evaluating these comments, we have determined that the most effective approach for transferring compensatory mitigation responsibilities from a permittee to a mitigation bank or in-lieu fee program sponsor is through the use of permit conditions and instrument provisions. The rules governing this transfer are provided at § 332.3(l) [§ 230.93(l)]. This process requires submittal of appropriate documentation after the permittee has secured the appropriate number and resource type of credits from the sponsor. These requirements are discussed in greater detail in the preamble discussion of § 332.3(l) [§ 230.93(l)].

#### Other Issues

A couple of commenters submitted questions about the Corps permit application, other publications, and record-keeping. Commenters requested better guidance on the information required for permit applications, such as sample drawings and checklists, and recommended electronic filing of permit applications.

Many Corps districts have posted information on their web sites to assist permit applicants. Such information includes tips on providing complete permit applications, as well as sample drawings and checklists. The Corps regulations at 33 CFR 325.1(d) discuss what is required for a complete application for an individual permit. Project proponents should also review the general conditions for the nationwide permits and regional general permits to determine what is necessary for a complete general permit verification request. The Corps is developing an electronic permit application, which will allow its districts to accept permit applications through the Internet. As discussed above, the Corps is implementing a new automated information system to better track impacts authorized by authorized activities, and any required compensatory mitigation.

One commenter said that poor record-keeping has made it difficult to evaluate the successes and failures of individual projects and the regional and national impacts of the program. Commenters also asked that the public have easy access to all relevant planning documents during the public comment period on permits. One commenter recommended creating a clearinghouse for wetlands funding or information needs with a single person to track follow-up and successes. This could provide information to support a watershed approach in specific areas

and possibly to support in-lieu fee programs. One commenter said the rule should not apply to ephemeral washes.

Archiving of monitoring reports for compensatory mitigation projects is done in accordance with district-specific practices and resources. Monitoring reports are part of the administrative record for a permit action or third-party mitigation instrument, and are public information. However, a Corps district may charge reasonable fees for duplication to provide those reports to interested parties. It is impractical to make all planning documents available during public notice comment periods. Typically, not all of this information is provided to the Corps prior to the public comment period. However, the rule requires that public notice for DA permits include a discussion of mitigation plans, including any compensatory mitigation. Public comment can then help inform the development of detailed planning documents. The Corps does not intend at this time to create a clearinghouse for wetlands funding and wetlands-related information; however, the Corps will provide information to the public on mitigation required and fulfilled under the section 404 program. This rule only applies to compensatory mitigation for activities in waters of the United States authorized by DA permits. It does not alter the definition of "waters of the United States" at 33 CFR part 328 or 40 CFR 230.2(s). Discharges of dredged or fill material into features that are not waters of the United States do not require permits under section 404 of the Clean Water Act, and therefore would not require compensatory mitigation that would be subject to this rule. In cases where ephemeral washes are determined to be waters of the U.S., this rule applies; there are no technical reasons for addressing them differently from other waters of the U.S.

Several commenters highlighted general concerns regarding climate change. Some of these commenters cited important ecosystem services provided by wetlands, streams and other aquatic resources such as absorbing storm surges, providing drinking water, and sequestering carbon and noted that these ecosystem services will be of increasing importance as climate patterns shift. A few commenters wanted to know how concerns about climate change were considered in the development of today's rule.

We agree that protecting our Nation's existing aquatic resource base is an important way to help foster ecological and economic resilience as climatic patterns shift. Today's rule reaffirms the existing requirement to avoid and

minimize impacts to the nation's aquatic resources and to require, in cases where it is appropriate and practicable to do so, compensatory mitigation for impacts that cannot be avoided or minimized. Compensatory mitigation projects planned and designed using the watershed approach and the standards provided by today's rule are likely to provide ecosystem functions and services that, in addition to offsetting losses resulting from activities authorized by DA permits, also provide the ecological and economic resilience needed to address climate change. For example, the reestablishment of a forested wetland may also provide carbon sequestration benefits, over the long term, through the growth of trees. As another example, coastal wetland restoration projects could be designed to take into account reasonably foreseeable rises in sea level.

### III. In-Lieu Fee Programs

In the proposed rule we proposed to phase out in-lieu fee programs and require existing in-lieu fee programs to comply with the same standards and requirements as mitigation banks. In the preamble to the proposed rule, we also explained the differences between mitigation banks and in-lieu fee programs, and the agencies expressed concern that providing less stringent oversight or up-front requirements for in-lieu fee programs might not ensure that the compensatory mitigation is performed. Another concern was compliance with section 314 of NDAA, which directs us to apply equivalent standards and criteria to each type of compensatory mitigation to the maximum extent practicable. At the time, the agencies could not find strong grounds for concluding that meeting the same requirements as mitigation banks is not appropriate or practicable for in-lieu fee programs. The agencies also acknowledged that phasing out in-lieu fee programs would pose some challenges for the ability of the Corps Regulatory Program to support the objectives of the Clean Water Act and ensure high-quality mitigation in all parts of the country.

In response to the proposed rule, many commenters, including 29 states, as well as industry groups and environmental organizations, supported retaining in-lieu fee programs as a separate mechanism for providing compensatory mitigation for DA permits. These commenters said that an alternative form of third-party mitigation is needed in areas not serviced by mitigation banks. Many of these commenters also stated that the desired performance of in-lieu fee

programs can be achieved by imposing appropriate rules and standards, with Corps oversight. Some commenters indicated that the proposal to phase out in-lieu fee programs is contrary to section 314, because it wouldn't comply with the statutory requirement for the rule to "maximize available credits." Over 30 commenters described successful in-lieu fee programs.

After carefully considering all comments, for and against, we have decided to retain in-lieu fee programs as a distinct third-party compensation option, subject to equivalent ecological standards as the other types of compensatory mitigation (mitigation banks and permittee-responsible mitigation) but somewhat different administrative and procedural requirements. We agree that in-lieu fee programs are important sources of compensatory mitigation in areas that do not have mitigation banks, because they can provide consolidated compensatory mitigation projects that have greater ecological benefits than small, geographically separated, permittee-responsible mitigation. We also agree that in-lieu fee programs can provide important ecological and societal benefits by focusing primarily on the watershed needs and by siting multiple compensatory mitigation projects in strategic locations in a watershed. We believe that this final rule achieves the statutory mandate of section 314 in that it establishes, to the maximum extent practicable, equivalent standards for all three types of compensatory mitigation.

Commenters suggested various approaches to in-lieu fee programs. One commenter suggested that the agencies delay the effective date of the final rule until more conclusive data are available to support the decision of whether to retain or eliminate in-lieu fee programs. One commenter recommended forming a technical working group to evaluate the effectiveness of in-lieu fee programs and their role in compensatory mitigation. Another commenter recommended comparing poorly performing in-lieu fee programs to more successful programs, to evaluate the differences in organization, oversight, mitigation approach and quality of mitigation, and to develop appropriate standards and requirements. Many commenters proposed rule language to provide accountability and ensure ecological success for in-lieu fee programs.

We do not believe it is necessary to delay issuing a final rule until further studies can be done on in-lieu fee programs. We structured the proposed rule to solicit comment on appropriate

standards and criteria that could be established to ensure that in-lieu fee programs provide successful compensatory mitigation in a timely manner. Many of the requirements that apply to mitigation banks are applied to in-lieu fee programs, although some requirements will not be exactly the same, because of the fundamental differences between mitigation banks and in-lieu fee programs. Where it is necessary to promulgate different requirements for in-lieu fee programs, we believe those requirements will ensure the same level of success for in-lieu fee programs as for the other types of mitigation, and produce mitigation that meets the same high ecological standards. We have examined several successful in-lieu fee programs to establish effective standards and requirements.

In the preamble to the proposed rule, we posed a set of questions on the proposed phase-out of in-lieu fee programs, and solicited public comment on retaining in-lieu fee programs as a distinct regulatory entity. We asked for public comment on 7 specific areas in which requirements for in-lieu fee programs might differ from mitigation banks if they were retained: (1) The degree of up-front planning required before credits could be sold (e.g., in-lieu fee programs might not be required to identify and secure a site and provide detailed site plans for the compensatory mitigation project); (2) the level and types of financial assurances that would be required; (3) the types of projects for which they could be used (e.g., in-lieu fee programs might be limited to providing compensatory mitigation only for nationwide permits and other general permits, or for projects below a specified acreage cutoff, such as 1 acre); (4) the required compensation ratios (e.g., these could be higher for in-lieu fee programs than for mitigation banks); (5) the credit release schedule (e.g., in-lieu fee programs might be permitted to sell more credits at an earlier point in the planning process); (6) the specific types of aquatic resources for which they could be used to compensate (e.g., not allowing in-lieu fee programs for tidal wetlands or in coastal areas); and (7) the types of permitted sponsoring entities (i.e., in-lieu fee programs might be limited to government agencies and/or non-profit land stewardship entities with proven track records). Comments received in response to these questions are provided below. We also solicited comments on other ways in which the requirements for mitigation banks and in-lieu fee programs might differ.

*Degree of up-front planning required before credits can be sold.* Several

commenters stated that in-lieu fee programs should be subject to the same amount of up-front planning as mitigation banks. Other commenters suggested that instead of identifying a specific site (which is required for proposed mitigation banks, except for umbrella banks), in-lieu fee programs should identify specific types of sites (e.g., impounded salt marshes) that their program would target. Another commenter suggested that in-lieu fee programs should submit a full mitigation plan to the district engineer for approval before the start of each project. Commenters representing in-lieu fee programs said that it would be challenging in some cases to identify sites and provide detailed plans before selling credits, and that such a requirement might make it impossible for them to operate.

In recognition of these challenges, the final rule does not require the same level of up-front planning by in-lieu fee programs as it does for banks before credit sales can occur. However, it does require that a comprehensive program instrument be submitted to the Corps, reviewed by the IRT, and approved by the district engineer before any credit sales take place. Several new requirements have been added to the provisions for in-lieu fee program instruments, designed to ensure greater accountability and success in providing mitigation to fulfill credit sales in a timely manner. First, we have added a requirement in the rule for in-lieu programs fees to develop a compensation planning framework that will be used to select, secure, and implement aquatic resource restoration, establishment, enhancement, and/or preservation activities within the service area(s) for the in-lieu fee program. Specific sites may or may not be identified, but selection of the sites must be consistent with the compensation planning framework. The comprehensive planning framework is essentially a watershed plan for the service area of the in-lieu fee program. A mitigation plan that meets the requirements of § 332.4(c) [§ 230.94(c)] and is consistent with the comprehensive planning framework must subsequently be submitted and approved by the district engineer, in consultation with the IRT, for each in-lieu fee project site prior to commencing work. Second, the instrument will specify a limited number of advance credit sales that can occur before specific sites are secured and mitigation plans approved. Once that number of credits is sold, no more advance credits can be sold until an equivalent number

of credits, tied to a specific site and mitigation plan, has been released in accordance with an approved credit release schedule. Third, the instrument must provide for the establishment of an account that will segregate funds received from credit sales and ensure that these funds, including interest earned, are used only to provide the required mitigation, minus a small allowance for administrative costs.

*Required level of financial assurances.* A number of commenters stated that in-lieu fee programs should be required to provide the same level of financial assurances as mitigation banks. Two commenters asserted that these financial assurances would ensure a more successful completion of mitigation projects. Other commenters indicated that providing the same level of financial assurances as banks prior to beginning credit sales would be challenging for in-lieu fee programs, which usually do not have up-front investors, and might prevent them from operating. In addition, government agencies often face legal or procedural restrictions that prevent them from providing the same types of financial assurances that are generally required of banks.

The agencies believe that financial assurances are important to ensure successful initiation and completion of compensatory mitigation projects, but also recognize the challenges faced by in-lieu fee programs in this regard. Therefore, the rule states that the district engineer shall require sufficient financial assurances to ensure a high level of confidence that the compensatory mitigation project will be successfully completed, in accordance with applicable performance standards. There may be cases where financial assurances are not necessary because an alternate mechanism is available to ensure a high level of confidence that the compensatory mitigation will be provided and maintained (e.g., a formal, documented commitment from a government agency or public authority). Consideration of the sponsor's past performance in providing ecologically successful mitigation projects would also influence the district engineer's determination regarding the level of financial assurances necessary to ensure a high level of confidence in successful project completion—this is true for banks as well as in-lieu fee programs.

*Types of projects for which in-lieu fee program credits could be used.* Several commenters stated that in-lieu fee programs should be limited to certain types of projects, such as those resulting in minor impacts. One commenter suggested limiting in-lieu fee programs

to activities that have less than 0.25 acre of impacts, and another commenter recommended restricting in-lieu fee programs to general permit activities resulting in less than one acre of impacts. Another commenter suggested that in-lieu fee programs should be available to provide compensation for impacts from linear transportation projects because those activities undergo environmental reviews and the compensatory mitigation is usually identified in advance of the proposed impacts. One commenter stated that in-lieu fee programs should not be restricted to a specific type or impact size. Two commenters said that in-lieu fee programs should only be used for activities authorized by general permit. A number of commenters stated that use of in-lieu fee programs should not be limited to a specific project size or permit type.

In most cases, in-lieu fee programs implement compensatory mitigation projects after the impacts authorized by DA permits have occurred. Therefore, the timing of compensatory mitigation projects provided by in-lieu fee programs results in some risk and uncertainty. To address that risk and uncertainty, and to reduce temporal losses of aquatic resource functions, we have established a preference hierarchy for mitigation options at § 332.3(b) [§ 230.93(b)]. This hierarchy, which is discussed in greater detail elsewhere in this preamble, generally provides a preference for mitigation bank credits, when the permitted activity is in the service area of an approved bank with the appropriate types of credits available. In the absence of an approved bank, in-lieu fee programs have certain advantages over permittee-responsible mitigation. They generally involve larger parcels, have access to appropriate scientific and technical expertise, may have a proven track record in establishing successful mitigation in the past, and will generally have a more fully developed watershed approach, developed through their required comprehensive planning framework. For these reasons, we do not believe it is appropriate to limit the use of in-lieu fee programs to any particular impact type or size. Rather, we believe the preference hierarchy described above will ensure that a mitigation option is selected with the highest probability of delivering successful, high-quality mitigation among the available choices in a given case.

**Required compensation ratios.** A number of commenters stated that in-lieu fee programs should be required to mitigate at a certain ratio that should take into account temporal loss of

wetland functions when compensatory mitigation is not fully functional at the time the permitted impacts occur. One commenter asserted that increasing the required mitigation ratios for in-lieu fee programs unfairly penalizes applicants in areas that do not have operating mitigation banks. Two commenters recommended higher mitigation ratios where in-lieu fee programs funds are used for preservation.

We have added § 332.3(f)(3) [§ 230.93(f)(3)] to allow district engineers to require additional compensatory mitigation in cases where released credits are not available to provide the appropriate type of compensatory mitigation. This additional compensatory mitigation is to account for the higher risk and uncertainty associated with compensatory mitigation projects that will be implemented after the permitted impacts have occurred. For all sources of compensatory mitigation, the amount of required compensation must be sufficient to replace lost aquatic resource functions. Other factors to be considered when determining the appropriate amount of compensatory mitigation to offset permitted impacts are: The method of compensatory mitigation (i.e., restoration, establishment, enhancement, preservation), the likelihood of success, differences between the functions lost at the impact site and the functions expected to be produced by the compensatory mitigation project, temporal losses of aquatic resource functions, the difficulty of restoring or establishing the desired aquatic resource type and functions, and/or the distance between the affected aquatic resource and the compensation site. The preference for released credits does not unfairly penalize permittees, since it is appropriate to require higher amounts of compensatory mitigation to account for risk and uncertainty. The rationale for the required compensation ratio must be documented in the administrative record for the permit action. In cases where preservation is used to provide compensatory mitigation, district engineers will generally require higher compensation ratios. While the rule does not explicitly differentiate between mitigation banks and in-lieu fee programs in the determination of ratios, the factors to be considered will generally result in higher ratios for in-lieu fee programs.

**Credit release schedule.** One commenter stated that fewer credits should be released to in-lieu fee programs than to mitigation banks. In contrast, other commenters said that in-lieu fee programs should have 100

percent of their credits released in advance, and/or that they should have no limit on advance credit sales.

We do not agree that in-lieu fee programs should be allowed unlimited credit sales prior to providing any mitigation; this would not provide adequate assurance that credits will be fulfilled in a timely manner. However, in recognition of the fundamental differences between mitigation banks and in-lieu fee programs, the final rule does allow an in-lieu fee program to sell a limited number of credits before securing a compensatory mitigation project site and conducting aquatic resource restoration, establishment, enhancement, and/or preservation at that site. Those credits are called "advance credits" and the sponsor can only sell such credits up to the limit specified in its approved instrument—under no circumstances may credits be sold prior to approval of an instrument meeting the requirements of § 332.8 [§ 230.98]. The number of advance credits will be determined by the district engineer, in consultation with the IRT, and will be specified in the instrument by service area. The amount of available advance credits will be based on an evaluation of the compensation planning framework, the size of the service area(s), the resources available to the program (e.g., an independent funding stream for government sponsored in-lieu fee programs) and other considerations identified by the district engineer during consultation with the IRT. If the in-lieu fee program instrument covers more than one service area, the advance credit limit will be specified for each service area. In addition, as each in-lieu fee project is approved by the district engineer (in consultation with the IRT), it will have an associated credit release schedule. As in-lieu fee projects are implemented and credits released, advance credits are converted to released credits and the sponsor can sell additional advance credits in that service area. In certain limited cases, such as when there is insufficient permitted activity in a given service area to support a viable mitigation project within a reasonable time frame, the district engineer may authorize the use of released credits from a different service area to fulfill advance credits sales. This might occur, for example, with a state-wide program managed by a government agency. In such cases, the district engineer should ensure that the approved mitigation compensates for the lost resources to the extent feasible, even though it may be some distance away, or in a different watershed.

*Limiting the establishment and use of in-lieu fee programs to specific types of aquatic resources or geographic regions.* Three commenters stated that in-lieu fee programs should be used only to provide compensatory mitigation for specific aquatic resource types. One commenter suggested that in-lieu fee programs should be retained solely for rapidly developing urban watersheds and coastal watersheds, and two commenters suggested that these programs be used specifically for stream compensatory mitigation. Two commenters said that use of in-lieu fee programs should not be restricted by resource type, but credits from in-lieu fee programs should be accepted only when those credits are different from the credits provided by a mitigation bank operating in the same service area.

In this final rule, we have not limited in-lieu fee programs to providing compensatory mitigation for specific types of aquatic resources or geographic regions, for much the same reasons that we have not limited them to specific project types or sizes. Instead, as discussed above, we have established a preference hierarchy in § 332.3(b) [§ 230.93(b)] that will ensure that mitigation options with the highest likelihood of success and greatest value to the watershed will be selected from the available choices. This flexibility is needed because there is great regional variation in aquatic resource types and watershed needs, and there is also much variability in the types of credits produced by both mitigation banks and in-lieu fee programs. We do not agree that in-lieu fee programs should be limited to certain types of aquatic resources, because in some cases they may provide the greatest assurance of delivering successful, high-quality mitigation for the resource in question, especially in areas where there are no mitigation banks.

*Types of sponsoring entities.* Several commenters suggested that only federal or state governmental entities or non-profit land stewardship organizations be allowed to be in-lieu fee program sponsors, because they have the capacity to provide permanent stewardship of compensatory mitigation project sites. However, one commenter stated that there is no evidence that government agencies or non-profit organizations provide compensatory mitigation that is superior to that provided by for-profit entities.

Through the definition of “in-lieu fee program” provided in § 332.2 [§ 230.92], we have limited sponsorship of in-lieu fee programs to governmental or non-profit natural resources management entities. In this rule, we have

established different requirements for mitigation banks and in-lieu fee programs that reflect basic differences in how those types of compensatory mitigation are provided and managed. In general, mitigation banks are established at single sites, to provide compensatory mitigation for pre-determined types of aquatic resource losses in a single or several neighboring watersheds. In contrast, in-lieu fee programs often provide compensatory mitigation at multiple sites within multiple service areas, and may serve areas where a mitigation bank is not economically viable because there is not sufficient development activity to ensure that enough credits can be sold within a reasonable time frame. For these reasons, in-lieu fee programs have fewer up-front planning requirements than mitigation banks, and are not expected to be operated as commercial ventures. The agencies thus believe it is appropriate to limit sponsorship of in-lieu fee programs to governmental or non-profit land management entities that operate explicitly in the public interest, rather than to serve the needs of investors. We are not aware of any independent studies that have examined the quality and ecological success of compensatory mitigation projects provided by for-profit entities versus governmental or non-profit entities, however we believe the rule provides appropriate safeguards and incentives to ensure that both types of entities (commercial and non-commercial) will provide successful compensatory mitigation given their differing organization, purposes, and constraints.

*Preference for “in-place” compensatory mitigation.* Five commenters stated that in-lieu fee programs should be retained but that the rule should contain a preference for in-place compensatory mitigation. One commenter indicated that in-lieu fee programs and in-place mitigation should have the same level of preference. One commenter said that adding such a provision would promote poor environmental stewardship because in-lieu fee programs would be excluded from areas where there are high credit demands. Another commenter said that a preference for in-place compensation would not be desirable if it led to approved mitigation banks having large service areas, because the compensatory mitigation could be a substantial distance from the location of the permitted impacts. This commenter stated that in-lieu fee programs should be retained in the final rule to provide ecologically appropriate

compensatory mitigation in areas with thin markets for mitigation bank credits.

In § 332.3(b) [§ 230.93(b)] we have established a preference hierarchy for compensatory mitigation options (i.e., mitigation banks, in-lieu fee programs, and permittee-responsible mitigation). We have established a preference for mitigation bank credits, because a secured site, an approved mitigation plan and other assurances must be in place before an initial allocation of credits can be sold or transferred to permittees. Before additional credits can be sold, the mitigation bank must achieve appropriate ecological milestones set out in its credit release schedule. Therefore, mitigation bank credits are generally more likely to be fulfilled sooner (or to be already fulfilled), than in-lieu fee program credits. We recognize, however, that this is not always the case. Some in-lieu fee programs may have the appropriate number and resource type of released credits available, and the final rule allows the district engineer to modify the hierarchy in cases where the reasons underlying it do not apply (e.g., an in-lieu fee program has available released credits that are just as certain and close to fulfillment as credits from a bank). When considering the options in § 332.3(b)(2)–(6) [§ 230.93(b)(2)–(6)], district engineers have the discretion to modify the hierarchy in order to approve the use of the environmentally preferable compensatory mitigation. Another example is when a permittee with a proven track record and access to appropriate scientific expertise proposes a high-value mitigation project, even though credits from an approved in-lieu fee program or mitigation bank are available.

*Differences between the standards for mitigation banks and in-lieu fee programs.* Several commenters noted that the fundamental difference between in-lieu fee programs and mitigation banks is timing. Two of these commenters pointed out that mitigation banks, like in-lieu fee programs, receive credit before compensatory mitigation projects are implemented. Another commenter suggested that in-lieu fee programs should adhere to the same standards as mitigation banks for the implementation of compensatory mitigation projects, but should be allowed to collect funds before acquiring a compensatory mitigation project site. Two commenters stated that the rule should recognize the inherent differences between mitigation banks and in-lieu fee programs but that all sources of compensatory mitigation should be held to standards that assure successful performance. Another

commenter said that if the standards were the same for mitigation banks and in-lieu fee programs, private mitigation banks would dominate the process, resulting in poor geographic distribution of compensatory mitigation, significantly reduced ecological diversity, and less protection and restoration of important aquatic resources.

According to the 2001 NRC Report, the principal difference between mitigation banks and in-lieu fee programs is timing. Mitigation banks and in-lieu fee programs are financed and planned differently, which creates the timing difference observed by the NRC. Since commercial mitigation banks sponsors have up-front financing, they can acquire and plan their mitigation bank sites before submitting their proposals to district engineers for consideration. In contrast, in-lieu fee programs do not generally have this up-front financing available, so they must obtain funds from permittees (under an in-lieu fee program instrument or agreement) before they can acquire and plan in-lieu fee project sites, and implement those projects.

We agree that mitigation banks and in-lieu fee programs should be held to the same standards, to the maximum extent practicable, as required by NDAA section 314. We believe the final rule accomplishes this goal. The standards provided in this rule will help ensure that the compensatory mitigation provided by mitigation banks and in-lieu fee programs both offset the impacts incurred by permittees who secure credits from these third-party mitigation providers. To maximize compensatory mitigation options, the inherent differences between mitigation banks and in-lieu fee programs warrant somewhat different procedural requirements. The most substantial differences relate to timing and financing. We recognize that in-lieu fee programs are usually not able to capitalize compensatory mitigation projects up-front. Instead, they must collect funds from permittees before they can secure a suitable site and develop and implement a compensatory mitigation project. For this reason, in-lieu fee programs, but not banks, are allowed to sell advance credits. Unless an in-lieu fee program has a surplus of credits available in a service area (i.e., released credits), the compensatory mitigation will take place after the permitted impacts have occurred. To help ensure that the collected funds are used in a timely manner to initiate compensatory mitigation projects, we are including a time limit of three growing seasons for fulfillment of

advance credits (see § 332.8(n)(4) [§ 230.98(n)(4)]) and requiring in-lieu fee programs to establish accounts to retain the collected funds. Those funds can only be used for the selection, design, acquisition, implementation, and management of in-lieu fee projects, with a small percentage allowed for administrative costs.

However, the substantive mitigation requirements, as well as many of the procedural requirements are the same for both banks and in-lieu fee programs. Both are subject to the same requirements for plan approval, performance standards, monitoring, adaptive management and long-term stewardship. Proposed mitigation banks and in-lieu fee programs will both be required to undergo review by Interagency Review Teams, both for their instruments and for their specific mitigation project plans, though in the case of mitigation banks these two steps are usually accomplished simultaneously, while for in-lieu fee programs instrument review and approval will usually take place prior to development of a particular project. Public involvement is required in the same way for both types of third-party providers as well. By including equivalent substantive ecological standards while recognizing certain administrative and procedural differences, the rule will also help maximize available credits from sponsors willing to provide third-party mitigation in a range of service areas, from high-development areas that can support economically-viable banks to remote areas that cannot, but that still have occasional mitigation needs. We recognize that in-lieu fee programs have sometimes provided compensatory mitigation for different types of aquatic resources than mitigation banks, and this rule does not interfere with that practice.

*Proposed in-lieu fee regulatory text.* A few commenters proposed in-lieu fee regulatory text. One commenter suggested that the district commander may only consider in-lieu fee preservation as the primary mitigation if no other form of mitigation is available, feasible or practicable. Another commenter proposed that each in-lieu fee program should draft a program agreement that is submitted for public review and comment and the review of the district engineer and the Interagency Review Team (IRT). Under that agreement, fees paid to each in-lieu fee program would be determined by the market rate of mitigation bank credits within a watershed and would be reviewed periodically by the IRT. One commenter suggested that all in-lieu fee

programs should be required to have an approved operating agreement or instrument. This commenter said that an in-lieu fee program should have to project the type and location of impacts and receive advance payments so that the compensatory mitigation would be implemented in advance of permitted impacts. Another commenter suggested that each in-lieu fee program be required to have an approved Memorandum of Understanding and a program manager responsible for administering the program. This commenter also said that district engineers should determine acceptable fee amounts for the required compensatory mitigation and should be the final approval authority for all proposed expenditures of funds collected for compensatory mitigation for DA permits.

We have considered the regulatory text proposed by these commenters. The final rule requires a prospectus, public notice and comment period, and IRT review of proposed in-lieu fee program instruments. The use of preservation as compensatory mitigation will be determined by district engineers on a case-by-case basis in accordance with § 332.3(h) [§ 230.93(h)]. In-lieu fee programs must have approved instruments before they can be used to provide compensatory mitigation for DA permits. We do not believe it is practical to require in-lieu fee programs to receive advance payments so that they could do compensatory mitigation in advance of permitted impacts. If it were possible for in-lieu fee programs to fulfill such a requirement, they could operate as mitigation banks. We do not believe it is appropriate for district engineers to determine credit costs for in-lieu fee programs, but they will review the fees set by sponsors to determine whether they comply with the requirement for full cost accounting to ensure that the required compensatory mitigation is provided and maintained.

#### **IV. Compliance With Section 314 of the NDAA**

Section 314 of the NDAA requires the issuance of standards and criteria for compensatory mitigation that, to the maximum extent practicable, (1) maximize available credits and opportunities for mitigation, (2) provide flexibility for regional variations in wetland conditions, functions and values, and (3) apply equivalent standards and criteria to each type of compensatory mitigation.

With respect to maximizing available credits and opportunities for mitigation, the preference established in today's rule for the use of credits provided by

mitigation banks (see § 332.3(b) [§ 230.93(b)]) should stimulate an increase in the number of mitigation banks and correspondingly the number of bank credits available for use. Also, today's rule provides greater efficiency and predictability to the process of authorizing new mitigation banks and in-lieu fee programs and associated projects by establishing clear standards and criteria for instruments and mitigation plans, and setting reasonable timelines for review and decision-making. These improvements in regulatory efficiency and predictability should serve to stimulate an increase in the number of mitigation banks and in-lieu fee programs, and therefore an overall increase in the number of third-party compensatory mitigation credits available to offset permitted impacts. Additionally, our decision to retain and reform in-lieu fee mitigation, rather than eliminate it, will provide a range of compensation options for permit applicants, and help to ensure that viable options are available in areas not served by banks. Thus, consistent with the NDAA, today's rule maximizes available credits and opportunities for mitigation to the maximum extent practicable.

With respect to providing flexibility for regional variations in wetland conditions, functions and values, as previously noted, we believe that today's rule achieves the proper balance of binding requirements and flexibility necessary to ensure that compensatory mitigation decisions are reasonable and based on case-specific circumstances. An adequate degree of flexibility is necessary for this rule because practices for restoring, establishing, and enhancing aquatic resources vary by resource type and by geographic region. For example, today's rule does not proscribe a one-size-fits-all set of ecological performance standards to evaluate the success of all compensation projects. Instead, the rule recognizes that ecological performance standards will vary depending upon aquatic resource type, geographic region, and compensation method but requires that they be based the best available science that can be measured or assessed in a practicable manner. Thus, consistent with the NDAA, today's rule provides flexibility for regional variations in wetland and aquatic resource conditions, functions and values to the maximum extent practicable.

Additionally, today's rule requires "equivalent" standards, to the maximum extent practicable, for all three mechanisms for providing compensatory mitigation: permittee-responsible compensatory mitigation,

mitigation banks, and in-lieu fee mitigation. Because there are fundamental differences in how these three types of compensatory mitigation are structured and conducted, we do not believe that Congress intended to require the promulgation of identical standards for all three methods of compensation. Instead, we interpret "equivalent" standards to mean standards which are equal in value, force, or meaning (See, e.g., *The American Heritage Dictionary of the English Language, Fourth Edition*). With that goal in mind, today's rule requires that compensation projects provided by all three compensation mechanisms have mitigation plans which include the same 12 fundamental components: objectives; site selection criteria; site protection instruments (e.g., conservation easements); baseline information (for impact and compensation sites); credit determination methodology; mitigation work plan; maintenance plan; ecological performance standards; monitoring requirements; long-term management plan; adaptive management plan; and financial assurances (see 33 CFR 332.4(c) [40 CFR 230.94(c)]). There are minor differences in the specific requirements for these components in order to accommodate the different nature of the three mitigation approaches. There are also procedural and timing differences among the requirements for the three types of mitigation. For example, in-lieu fee programs are allowed to sell a limited number of credits before having an approved site and mitigation plan, while banks are not. However, to compensate for this difference and ensure that the standards are "equivalent" to the maximum extent practicable, in-lieu fee programs are required to develop a compensation planning framework and adhere to strict accountability requirements for all fees collected, requirements which go beyond those applied to banks. We have also included a preference for bank credits over advanced credits from in-lieu fee programs, and limited in-lieu fee program sponsorship to qualified governmental and non-profit resource management agencies. We thus believe that the final rule fulfills the statutory directive to provide "equivalent" standards for the three types of mitigation to the maximum extent practicable. Specific rule provisions that apply to each of the types of compensatory mitigation, and the reasons for their differences, are discussed throughout today's preamble.

## V. Organization of the Final Rule

The proposed compensatory mitigation regulation in 33 CFR part 332 [40 CFR part 230], is organized into the following sections:

Section 332.1 [230.91], *Purpose and general considerations*, describes the basic purpose of the proposed rule and general principles concerning compensatory mitigation.

Section 332.2 [230.92], *Definitions*, provides definitions of important terms relating to compensatory mitigation and the Corps Regulatory Program.

Section 332.3 [230.93], *General compensatory mitigation requirements*, describes general compensatory mitigation requirements for DA permits, including permit conditions and financial assurances. This section also describes the watershed approach to compensatory mitigation.

Section 332.4 [230.94], *Planning and documentation*, describes the review of proposed compensatory mitigation activities, as well as requirements for mitigation plans.

Section 332.5 [230.95], *Ecological performance standards*, describes principles for establishing ecological performance standards for compensatory mitigation projects.

Section 332.6 [230.96], *Monitoring*, describes general requirements for monitoring compensatory mitigation projects.

Section 332.7 [230.97], *Management*, describes general requirements for site protection, sustainability, adaptive management, and long-term management of compensatory mitigation projects.

Section 332.8 [230.98], *Mitigation banks and in-lieu fee programs*, provides requirements that are specifically applicable to mitigation banks and in-lieu fee programs.

## VI. Discussion of Specific Sections of the Final Rule

The final rule is presented in two parallel sections: Changes to Corps regulation in 33 CFR and changes to EPA regulation in 40 CFR. The two sections are almost entirely the same, with minor exceptions. These include: (1) Corps changes to permit application requirements at 33 CFR 325.1; (2) Conforming changes to EPA's existing mitigation regulations at 40 CFR part 230, making appropriate citations for the addition of new §§ 230.91 through 230.98; and (3) References to the Rivers and Harbors Act of 1899, in which the EPA does not have a regulatory role, have been omitted from the text in 40 CFR part 230.



*33 CFR 325.1 Application for Permits*

In the proposed rule, the Corps proposed to modify § 325.1(d) by adding a new paragraph requiring a mitigation statement for section 404 permit applications. Several commenters supported the proposed requirement. One commenter said that geographic coordinates and monitoring data should also be required for this mitigation statement. A number of commenters objected to the proposed requirement. One commenter believed requiring this statement is unnecessary because some impacts to waters of the United States are unavoidable. Another commenter said that determining whether the proposed avoidance and minimization is sufficient, appropriate, or practicable is highly subjective and may invite litigation. This commenter remarked that it is the Corps' responsibility to determine whether appropriate and practicable avoidance, minimization, and compensation has been provided prior to making a decision on a section 404 permit. Several commenters said that this provision should be modified, to clarify that the mitigation statement is to be brief, since it is provided at the beginning of the permit application process and is likely to change as a result of the evaluation process. One commenter stated that this paragraph should be modified to allow the permit applicant to explain why compensatory mitigation should not be required, since many individual permits are issued under section 404 that do not require compensatory mitigation.

This requirement has been adopted in the final rule because it will provide useful information for the permit evaluation process. Section 325.1(d)(7) has been changed to allow permit applicants to explain why they believe compensatory mitigation should not be required for particular activities. The mitigation statement should be brief, because the permit evaluation process is an iterative process, and district engineers often require additional avoidance and minimization as they evaluate permit applications. The Corps does not agree that it would be appropriate to require geographic coordinates or monitoring data with the mitigation statement. The permit application will indicate the location of the proposed work. Monitoring data may be required at a later time, depending on the conditions of the issued permit. See the discussion of section 332.4(b)(1) below for a description of public notice requirements for the mitigation statement.

*33 CFR 332.1 and 40 CFR 230.91 Purpose and General Considerations*

(a) *Purpose.* Many commenters stated that the proposed rule restricts flexibility for mitigation options for both the permit applicant and the Corps, and therefore it is inconsistent with section 314. Many commenters declared that the proposed elimination of in-lieu fee programs conflicts with this statute, because it reduces mitigation opportunities available to permittees as well as the quality and success of compensatory mitigation projects. One commenter said that to comply with the statutory mandate to maximize available credits and opportunities for mitigation, the rule should specify that mitigation banks are the preferred choice when available. A number of commenters believe that the proposed rule unfairly promotes mitigation banking and restricts other compensatory mitigation opportunities.

In response to the comments, we have made substantial changes to this rule to better comply with the statutory mandate. We have retained in-lieu fee programs as a separate mechanism for providing compensatory mitigation, with clear and stringent standards to help ensure performance in replacing aquatic resource functions and services lost as a result of activities authorized by DA permits. We have also established a preference for mitigation bank credits, because of the lower risks associated with mitigation banks. This preference is discussed in greater detail below. In this final rule, we have applied equivalent standards to all sources of compensatory mitigation, to the extent it is practicable to do so, given the fundamental differences among permittee-responsible mitigation, mitigation banks, and in-lieu fee programs.

Many commenters said that the rule should apply equivalent standards and criteria to each type of compensatory mitigation. A number of commenters expressed concern that the proposed rule does not accomplish that objective. One commenter suggested establishing equivalent levels of interagency review for proposed compensatory mitigation projects. Several commenters said that the statute should be interpreted as requiring the establishment of similar levels of accountability for mitigation banks, in-lieu fee programs, and permittee-responsible mitigation. This would allow the retention of in-lieu fee programs as a separate mechanism for providing compensatory mitigation for DA permits. One commenter remarked that the proposed rule goes much further than establishing equivalent

standards and criteria by providing a strong preference for the use of mitigation banks. This commenter said that the proposed rule incorrectly asserts that mitigation banks are always successful and therefore other forms of compensatory mitigation should be held to the same standards as mitigation banks in order to achieve success. One commenter stated that the objective of this rule should be to effectively mitigate for losses of aquatic resources, not to level the playing field between mitigation banks and in-lieu fee programs. Three commenters said that the proposed rule provides equivalent standards for different types of compensatory mitigation, but it needs to focus on improving success, regardless of whether permittee-responsible mitigation, mitigation banks, or in-lieu fee programs are used.

This final rule applies equivalent standards and criteria to all sources of compensatory mitigation, to the maximum extent practicable. It is not practicable to apply exactly the same standards and criteria to mitigation banks, in-lieu fee programs, and permittee-responsible mitigation, nor are the agencies required to do so, as discussed above. There are inherent differences among these sources of compensatory mitigation. As many commenters pointed out, there are many areas of the country where there are no mitigation banks or in-lieu fee programs. Flexibility in compensatory mitigation requirements is needed to account for regional variations in aquatic resources, as well as state and local laws and regulations. There also needs to be flexibility regarding the requirements for permittee-responsible mitigation. Practicability is an important consideration when determining compensatory mitigation requirements. We agree that the final rule should provide similar levels of accountability among the three sources of compensatory mitigation. We strongly agree that the focus should be on ecological success of compensatory mitigation projects, not the source of the compensatory mitigation. The preferences provided in § 332.3(b) [§ 230.93(b)] are based primarily on administrative criteria that take into account risk and uncertainty in providing the required compensatory mitigation. This rule provides tools to help improve ecological success of compensatory mitigation projects, but the rule itself cannot guarantee that success. Ecological success is dependent upon effective project planning, site selection, and implementation.

One commenter said that the agencies should clarify that they may conduct

rulemaking without public notice and comment and still comply with the Administrative Procedure Act.

We acknowledge that, in limited circumstances, agencies can conduct rulemaking without a public notice and comment process. For example, an agency may issue a direct final rule for routine and non-controversial regulations, if the agency believes the rule would not result in adverse comments. It is unlikely that any rulemaking related to compensatory mitigation would result in no adverse comments. In the interest of transparency, the agencies have agreed that any future changes to this rule will involve notice and comment rulemaking.

Many commenters said that stream compensatory mitigation should not be included in this rule. A number of commenters stated that there is no scientific evidence that streams can be created or replaced, or that other approaches taken in this rule can compensate for stream losses. Many of these commenters asserted that the agencies should conduct further research on stream mitigation and demonstrate its success before including standards for stream mitigation in the rule. Some commenters noted that the statute requiring the promulgation of this rule refers only to wetlands. Several commenters expressed support for applying the rule to streams and other open waters. One commenter said that physical alteration of the nation's waters should be mitigated to the extent possible to support the objective of the Clean Water Act. Since section 404 of the Clean Water Act authorizes discharges of dredged or fill material into lakes, streams, and wetlands, mitigation for those impacts should be provided.

We believe that is appropriate to apply this rule to all types of aquatic resources, not just wetlands. This rule addresses the basic requirements of compensatory mitigation projects: planning and documentation, performance standards, monitoring, and management. Stream compensatory mitigation projects also require these basic elements. The final rule recognizes the challenges associated with stream restoration and provides in § 332.3(e)(3) [§ 230.93(e)(3)] that compensation for difficult to replace resources, such as streams, should be provided through in-kind rehabilitation, enhancement or preservation if practicable. The feasibility and appropriateness of compensatory mitigation for a particular aquatic resource type is to be addressed on a case-by-case basis by district engineers. Effective implementation of

this rule, including the ecological performance of compensatory mitigation projects, is dependent upon critical thinking by decision-makers to determine whether a particular compensatory mitigation proposal at a specific site is technically feasible and capable of providing the desired aquatic resource functions and services. Stream restoration and rehabilitation activities have been conducted all across the country, with varying levels of success. There are areas of the country, such as the southeastern coastal plain, where it may be possible to rehabilitate functioning streams if appropriate geologic and hydrologic conditions are present. Compensatory mitigation required by the Corps helps support the objective of the Clean Water Act, by offsetting losses of aquatic resource functions that result from activities authorized by DA permits.

(b) *Applicability.* One commenter said that the proposed rule is inconsistent with 33 CFR 320.4(r), which limits requirements for compensatory mitigation to "significant resource losses."

This final rule does not alter the circumstances when compensatory mitigation is required. The Corps has required compensatory mitigation for minor activities, such as activities authorized by nationwide permits, for many years to ensure that those activities result in minimal individual and cumulative adverse effects on the aquatic environment and are in the public interest. Prior to issuing an individual permit, the Corps determines on a case-by-case basis whether compensatory mitigation is necessary to ensure that the authorized activity is in the public interest and, if it involves a discharge of dredged or fill material, complies with the 404(b)(1) Guidelines.

Several commenters supported the use of areas not subject to regulatory jurisdiction under the Clean Water Act and/or sections 9 and 10 of the Rivers and Harbors Act of 1899 to provide compensatory mitigation for DA permits. One commenter said that using non-jurisdictional areas as compensatory mitigation can support a watershed approach.

We agree with these comments, and have retained this provision in the final rule.

A number of commenters believe that the rule should clarify the Corps' authority to require mitigation in light of the U.S. Supreme Court Decisions in *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers* (2001) and *Rapanos et ux., et al. v. United States* (2006) (Rapanos). Some commenters noted that if the Corps

cannot directly regulate discharges of dredged or fill material into a non-jurisdictional wetland, then the Corps cannot require that particular wetland to be used to mitigate impacts to other wetlands. Such an approach would allow the Corps to indirectly regulate non-jurisdictional wetlands. One commenter stated that the Rapanos decision should apply not only to determining whether a particular water body or wetland is jurisdictional under the Clean Water Act, but it should also guide the development of criteria and standards that inform mitigation decisions.

This rule is not the appropriate venue for addressing Clean Water Act jurisdiction. The Corps does not generally require that any particular wetland or resource be used to provide compensatory mitigation. Rather, the project sponsor proposes a mitigation option and the Corps determines whether the proposed option is adequate to compensate for resource functions and services lost at the impact site. We believe that non-jurisdictional waters can be used to provide compensatory mitigation for activities authorized by DA permits, if the rehabilitation, enhancement, and/or preservation of those waters is determined to be appropriate compensation for authorized impacts. The Rapanos decision is limited to the question of Clean Water Act jurisdiction, not decision-making for compensatory mitigation.

(c) *Sequencing.* Many commenters stated that the rule should emphasize avoidance and minimization, not just compensatory mitigation. They said that compensatory mitigation should not be considered until all efforts have been made to first avoid and then minimize unavoidable impacts to waters of the United States. Many commenters believe that the proposed rule grants district engineers too much discretion to determine that permit applicants have avoided and minimized impacts to aquatic resources. Two commenters said that the rule needs to be rewritten to treat compensatory mitigation as a last resort to ensure protection and enhancement of the nation's streams and wetlands.

This rule addresses only the compensation component of the section 404 mitigation sequence. Avoidance and minimization are addressed through other regulations, such as the Section 404(b)(1) Guidelines for activities involving discharges of dredged or fill material into waters of the United States. Activities involving discharges of dredged or fill material into waters of the United States must comply with all

applicable provisions of the 404(b)(1) Guidelines before a section 404 permit can be issued. For activities that require DA permits pursuant to sections 9 or 10 of the Rivers and Harbors Act of 1899, avoidance and minimization requirements are provided through application of the Corps Regulatory Program's mitigation policy at 33 CFR 320.4(r).

A number of commenters said that the proposed rule is inconsistent with the 404(b)(1) Guidelines as they relate to the consideration of practicable alternatives. They indicated that allowing permit applicants to use compensatory mitigation instead of using practicable alternatives will result in significant adverse impacts to the environment. Two commenters recommended that the rule include measures to be used to avoid impacts to wetlands, and limit permit issuance to those impacts that were truly unavoidable. Several commenters said that the sequencing provision in the proposed rule fails to recognize changes that occur to wetlands over time, and it does not take into account innovative steps in wetland management that can be used to benefit society.

Consideration of practicable alternatives is provided through application of the 404(b)(1) Guidelines for activities that involve discharges of dredged or fill material into waters of the United States. Using compensatory mitigation to minimize adverse effects to the aquatic environment is consistent with the 404(b)(1) Guidelines (see 40 CFR 230.75). Avoidance and minimization are achieved through application of the 404(b)(1) Guidelines for activities that require section 404 permits. We have added a new paragraph (c)(1) to this section to clarify that nothing in this rule affects the requirement that all section 404 permits comply with applicable provisions of the 404(b)(1) Guidelines. Paragraph (c)(2) of this section has been modified to clarify that individual section 404 permits will be issued only when compliance with applicable provisions of the 404(b)(1) Guidelines has been achieved, including those which require the permit applicant to take all appropriate and practicable steps to avoid and minimize adverse impacts to aquatic resources. For general permits, compliance with the 404(b)(1) Guidelines is addressed through application of 40 CFR 230.7. There are many reasons why wetlands change over time, most of which are not under the control of the Corps. Paragraph (c) of this section can only address those changes that result from discharges of dredged or fill material into waters of

the United States, including jurisdictional wetlands.

Several commenters said that the final rule should include exemptions to the mitigation sequencing requirements when the discharge is necessary to avoid environmental harm or can be reasonably expected to result in environmental gains or insignificant impacts. Other commenters expressed concern that strict adherence to mitigation sequencing will prevent the implementation of large scale compensatory mitigation projects. Some commenters asserted that rigid rules for on-site avoidance often result in small areas for compensatory mitigation projects, which are unlikely to function properly.

Potential exemptions to the mitigation sequence are beyond the scope of today's rulemaking. However, we do note that these exemptions to the mitigation sequence are addressed through specific provisions of the 1990 Mitigation Memorandum of Agreement (MOA) between the U.S. EPA and the Department of the Army. Those provisions of the 1990 Mitigation MOA are not affected by this final rule. The 404(b)(1) Guidelines and the provisions of the 1990 Mitigation MOA that are retained after this final rule goes into effect provide sufficient flexibility to allow the development of large scale compensatory mitigation projects. Avoiding waters of the United States to the maximum extent practicable on the project site does not result in small areas for compensatory mitigation that may be required by the district engineer, since this rule does not require on-site compensatory mitigation. This rule takes a watershed approach to compensatory mitigation, and emphasizes that compensatory mitigation projects should be placed in appropriate locations within a watershed.

One commenter stated that the definition of "practicable" should take into account public safety and maintenance. Another commenter suggested that the rule should require the district engineer to consider whether the wetland functions lost as a result of a permitted activity can be practicably replaced.

The definition of "practicable" provides sufficient flexibility to take into account public safety and maintenance when making decisions on applications for DA permits. In § 332.3 [§ 230.93], there are several provisions that require the district engineer to consider the likelihood of success when determining appropriate and practicable compensatory mitigation.

We have also added a new provision at § 332.1(c)(3) [§ 230.91(c)(3)] reminding the public that in some cases that district engineer may determine that a proposed permit cannot be issued because of the lack of appropriate and practicable mitigation options. While the Corps envisions that this will be an unusual situation, it is possible that the impacts at a particular site would be so significant, and the avoidance, minimization and compensation options are so limited, that it is simply not possible to adequately mitigate the project impacts.

(d) *Public interest.* We received no comments on this provision. In the proposed rule, this provision was in paragraph (c) of this section, which discusses the mitigation sequence under the Clean Water Act Section 404(b)(1) Guidelines. Since the public interest review is a different process than mitigation sequencing, we have moved this sentence to a separate paragraph.

(e) *Accounting for regional variations.* Many commenters said that the rule should provide flexibility to address regional issues relating to compensatory mitigation. For example, a number of commenters discussed implementation of section 404 of the Clean Water Act in the State of Alaska, where there is a clear understanding that compensatory mitigation is not always warranted or practicable. Some of these commenters cited the May 13, 1994, "Statements on the Mitigation Sequence and No Net Loss of Wetlands in Alaska" issued by the U.S. EPA and the Department of the Army. These commenters said that the final rule should identify Alaska as a special case in which local flexibility is needed and will be applied. In Alaska, there are limited opportunities to create or restore wetlands because of its environmental conditions.

As discussed elsewhere in this preamble, this rule does not change the circumstances under which compensatory mitigation is required for DA permits. Therefore, it does not change the May 13, 1994, Alaska mitigation statement cited above. We have modified appropriate provisions of this rule to clarify the flexibility and discretion available to district engineers when determining compensatory mitigation requirements for DA permits.

Some commenters cited examples where regional flexibility is needed to maximize available mitigation credits. An important tool for regional flexibility is to be able to use all three mechanisms (permittee-responsible mitigation, mitigation banks, and in-lieu fee programs) for providing compensatory mitigation. One commenter said that there is only one small mitigation bank

in Alaska because of its climate, geography, and limited opportunities for wetland establishment or restoration. Other commenters stated that opportunities to develop mitigation banks in southern Nevada and other areas of the southwest are extremely limited because of the low availability of water. Another commenter noted that in areas where most of the land is owned by the federal government, opportunities to develop mitigation banks are substantially limited.

This rule supports all three mitigation sources used in the Corps Regulatory Program: permittee-responsible mitigation, mitigation banks, and in-lieu fee programs. We acknowledge that there are areas where mitigation banks are unlikely to be established. In such areas, in-lieu fee programs may be established. Permittee-responsible mitigation may also be required if there are no third-party mitigation options and the district engineer determines that compensatory mitigation is necessary to offset losses of aquatic resource functions.

One commenter suggested that each Corps district establish region-specific methodologies for calculating compensatory mitigation needs. According to this commenter, this would allow regional experts to set regional strategies for compensatory mitigation. One commenter said that this rule should provide district engineers with operational standards for regional variations, but only to the extent necessary to promote ecologically sound and successful restoration of wetland functions.

Regional methods for determining compensatory mitigation requirements can be developed by Corps districts and other entities. District engineers are also encouraged to establish regional strategies for compensatory mitigation, through watershed planning or other means. The development of regional methods and watershed plans is a resource-intensive enterprise, and any Corps district efforts towards developing such products are dependent on available resources. We do not believe it would be appropriate to provide operational standards in a national rule, because regional standards are more effectively developed at the local level.

*(f) Relationship to other guidance documents.* Many commenters recommended adding a provision to the rule that clarifies whether previously issued guidance documents relating to compensatory mitigation in the Corps Regulatory Program are superseded by this final rule. These commenters cited the 1995 Mitigation Banking Guidance,

the 2000 In-Lieu Fee Guidance, and the 1990 Mitigation Memorandum of Agreement between the U.S. EPA and the Department of the Army as documents about which such clarification is needed.

We agree that such a provision is appropriate to provide clarity for the regulated public and government agencies. We have added paragraph (f)(1) to this section, which states that this rule replaces the mitigation banking guidance issued on November 28, 1995, the in-lieu fee guidance issued on November 7, 2000, and Regulatory Guidance Letter 02-02 which was issued on December 24, 2002. Since this rule does not address all provisions of the 1990 Mitigation MOA that relate to compensatory mitigation, paragraph (f)(2) discusses which provisions of this MOA are superseded by the rule. This rule supersedes only those provisions of the MOA relating to the amount, type, and location of compensatory mitigation, and the use of preservation as a mitigation component.

Other Corps guidance documents that relate to compensatory mitigation for DA permits, such as local guidance issued by Corps districts, should be revised as necessary so that they are consistent with this final rule.

### *33 CFR 332.2 and 40 CFR 230.92 Definitions*

*Adaptive management.* Two commenters supported the proposed definition of adaptive management. Two commenters suggested that the definition should require consideration of likely risks to compensatory mitigation project sites. Other commenters stated that the definition should clarify that adaptive management involves a strategy that addresses challenges faced in the restoration of dynamic systems. Two commenters said that there is potential to use this definition to relax or modify project-specific performance criteria to account for poor design or unexpected as-built conditions to achieve project goals.

We have modified this definition to account for two aspects of adaptive management: (1) Addressing challenges that are likely to occur with compensatory mitigation projects, and (2) addressing unforeseen changes to those projects. The likely challenges are those that are reasonably foreseeable, which may typically occur for the restoration, establishment, or enhancement of a particular aquatic habitat type in a specific area. For the purposes of this rule, adaptive management does not require anticipation of all potential challenges,

since that would be impossible to accomplish. We have also changed this definition to state that adaptive management requires consideration of the risk, uncertainty, and dynamic nature of compensatory mitigation projects. Consideration of those factors can help proponents optimize the ecological performance of compensatory mitigation projects. The last sentence of this definition has been modified to clarify that the adaptive management process involves the selection of appropriate measures that will provide aquatic resource functions. Another change to the last sentence acknowledges that analysis of monitoring results will be used to identify and implement measures to rectify problems.

*Advance credits.* We have adopted this new definition to define one of the two types of credits that can be provided by in-lieu fee programs. Advance credits are compensatory mitigation credits available for sale by an in-lieu fee program sponsor prior to being fulfilled through implementation of an approved mitigation plan for an in-lieu fee project. An approved in-lieu fee project will have a credit release schedule, and as the milestones in the credit release schedule are achieved, the credits that are produced will be released to fulfill the sponsor's obligation for credit production on behalf of the permittees who secured credits from that sponsor. The number of advance credits that a sponsor may make available to permittees is specified by service area in the in-lieu fee program instrument. In-lieu fee programs cannot sell advance credits until they have an approved instrument specifying the maximum allowable number of advance credits and a schedule for fulfilling any advance credit sales. Considerations for determining the appropriate number of advance credits for a given service area are discussed elsewhere in this preamble.

*Buffer.* Two commenters recommended modifying this definition to include areas providing upland habitat next to aquatic resources, in addition to protecting those resources from disturbance. Another commenter said that this definition should include buffers associated with ephemeral channels. One commenter noted that there is inconsistency in the proposed rule: in one section the term "buffer" includes upland areas, but in another section of the proposed rule it implies that buffers do not include uplands. This commenter recommended using this term consistently throughout the rule to eliminate confusion. One

commenter said that buffers may include wetlands.

Although upland buffers usually provide habitat next to aquatic resources, we do not believe it is necessary to explicitly state that in this definition. Upland buffers can be established and maintained next to ephemeral channels, but we do not believe such clarification is needed. We have modified this definition by adding the word "wetland" since buffers may be comprised of uplands, wetlands, and/or riparian areas. Riparian areas may or may not be wetlands.

**Compensatory mitigation.** Two commenters suggested that this definition should not be limited to aquatic resources. It should also acknowledge ecological improvements in uplands. Another commenter said that the definition should clarify that preservation is always a required component of compensatory mitigation, and in certain circumstances it may be the sole component. One commenter stated that this definition should be expanded to include functional surrogates for hydrology, such as integrated storm water management facilities.

This rule is limited to compensatory mitigation for impacts to aquatic resources, since the Corps regulates activities in waters of the United States, including navigable waters. Mitigation required by district engineers to address impacts to other resources, such as endangered species or historic properties, is governed by other provisions in the Corps regulations. Preservation is not always a required component of compensatory mitigation, although long-term protection through real estate instruments or other mechanisms is usually required for compensatory mitigation project sites. Preservation is one means of providing compensatory mitigation; compensation may also be provided through restoration, enhancement, or establishment, or any combination of those four methods. Preservation is rarely the sole source of compensatory mitigation for a DA permit; in most cases, aquatic resource restoration, establishment, and/or enhancement is required to achieve a minimum of one-to-one replacement of lost aquatic resources and any required preservation augments that replacement. Use of various techniques to offset losses of hydrologic functions, such as integrated storm water management facilities, is considered to be an action to minimize effects in accordance with 40 CFR part 230, Subpart H. District engineer can consider the use of such features when determining the appropriate amount of

compensatory mitigation required for DA permits.

**Compensatory mitigation project.** Two commenters recommended expanding this definition to include ecological improvements in uplands, where appropriate. One commenter said it was unclear whether forms of third-party mitigation other than mitigation banks are considered to be compensatory mitigation projects. One commenter suggested adding in-lieu fee programs to this definition.

This definition has been simplified by replacing the phrase "a restoration, establishment, enhancement, and/or preservation activity" with "compensatory mitigation." In this rule, district engineers have the discretion to include uplands, such as non-wetland riparian areas and buffers, as part of the overall compensatory mitigation project if those features are essential to maintaining the ecological viability of adjoining aquatic resources. We do not believe it is necessary to state this concept in the definition, since it is addressed in § 332.3(i) [§ 230.93(i)]. We have removed the term "third-party" from this definition, and added the phrase "or an in-lieu fee program" to clarify that compensatory mitigation projects include mitigation banks and in-lieu fee programs.

**Condition.** We have adopted this new definition since methods other than functional assessments can be used to evaluate permitted impacts and compensatory mitigation projects. This definition is based on concepts provided in the 2004 report entitled "Review of Rapid Assessment Methods for Assessing Wetland Condition" which was published by the U.S. EPA (EPA/620/R-04/009).

**Credit.** One commenter noted that the proposed definition is based on measures of function. This commenter said that if there are no units of measure included, measures of function cannot be used to calculate credits. Another commenter stated that units of measure are needed to calculate numbers of credits.

We have modified this definition by adding the phrase "or other suitable metric" to the list of examples of potential measures. There are a variety of methods that can be used to determine the number of credits provided by a compensatory mitigation project. In some cases, condition assessments may be used to determine available credits. The units of measure will depend on the method of determining credits. We have also inserted the word "aquatic" before "functions" in the last sentence, to clarify that credits are to be based on

aquatic functions provided by resource restoration, establishment, enhancement, or preservation.

For the purposes of this rule, credits from a mitigation bank or an in-lieu fee project are produced in accordance with a credit release schedule associated with an approved mitigation plan. For permittee responsible mitigation, credits are produced when a compensatory mitigation project is implemented in accordance with the approved mitigation plan.

**DA.** There were no comments received on the proposed definition. This definition is adopted as proposed.

**Days.** There were no comments received on the proposed definition. This definition is adopted as proposed.

**Debit.** One commenter noted that the proposed definition is based on measures of function. This commenter said that if there are no units of measure included, measures of function cannot be used to calculate debits. Another commenter stated that units of measure are needed to calculate numbers of debits.

For the same reasons provided in the preamble discussion of the term "credit," we have modified this definition to refer to other suitable metrics. The units of measure depend on the method of determining debits.

**Enhancement.** One commenter expressed support for the proposed definition. Several commenters requested changes to this definition to provide clarification. They said that it is difficult to distinguish between enhancement, restoration, rehabilitation, and re-establishment. Two commenters suggested that this definition should not be limited to aquatic resources, since ecological improvements could be made to uplands. Two commenters stated that the definition should limit enhancement to increases in function within the normal range of the particular type of ecosystem. Two commenters disagreed that enhancement does not result in an increase in aquatic resource area.

Enhancement differs from restoration, rehabilitation, and re-establishment because the objective of enhancement is usually to improve one or two functions, which may result in a decrease in the performance of other functions. Increasing those particular functions does not change the amount of area occupied by the aquatic resource. In contrast, re-establishment and rehabilitation (which are forms of restoration) are intended to return most, if not all, natural and/or historic functions to a former or degraded aquatic resource. We acknowledge that ecological functions of uplands can be

augmented through enhancement activities, but the scope of this rule is focused on aquatic resources. Enhancement activities are likely to result in limited changes in functional performance, because of inherent limits to functional capacity at a particular compensatory mitigation project site. If a compensatory mitigation activity results in an increase in aquatic resource area, in addition to increases in one or more aquatic resource functions, then it would probably be more appropriately classified as restoration. However, there may be cases where an increase in aquatic resource area is considered to be an adverse effect (e.g., impoundment of a forested wetland and adjacent uplands that kills the trees and changes habitat types). While enhancement does not result in a gain in aquatic resource area for purposes of tracking "not net loss" of wetlands, this does not mean that it cannot be used to compensate for a loss in resource area at the impact site. The district engineer will determine on a case-by-case basis the appropriate type and amount of mitigation to compensate for permitted impacts.

*Establishment (creation).* One commenter said that establishment should not be used in areas with poor hydrology. Two commenters stated that this definition should not be limited to aquatic resources, since ecological improvement can be made to uplands. One commenter recommended using the term "creation" instead of "establishment" because the term "establishment" does not convey the difficulties and risks associated with wetland creation. Another commenter said that deepwater sites are regulated waters and filling those waters to make a wetland is conversion, not establishment (creation).

District engineers will evaluate proposed establishment (creation) projects to determine if there is appropriate hydrology to support the desired aquatic resource. As discussed above, we acknowledge that ecological functions of uplands can be enhanced, but that is outside the scope of this rule. The term "establishment" is used in this rule, to be consistent with the terminology developed by the White House Wetlands Working Group (WHWWG) in 2000 to track wetland gains and losses. The WHWWG terminology continues to be used for wetland reporting, such as the Council on Environmental Quality's reports on implementation of the President's wetlands goals. We acknowledge that deepwater sites are usually considered to be waters of the United States and we

have struck the phrase "or deepwater" from this definition.

*Fulfillment of advance credit sales of an in-lieu fee program.* This definition was developed for use in the regulations governing in-lieu fee programs. The fulfillment of advance credits from in-lieu fee programs is accomplished when an approved mitigation plan for an in-lieu fee project is implemented by the in-lieu fee program sponsor. Each approved mitigation plan for an in-lieu fee project will have a credit release schedule. As each milestone of the credit release schedule is achieved, a number of credits will be produced. The number of credits produced will fulfill that sponsor's obligations for that same number of advance credits. Only after all previously sold advance credits in a service area have been fulfilled can additional released credits from the project be sold. As advance credits within a service area are fulfilled through the approved release of credits for an in-lieu fee project, an equal number of new advance credits in that service area become available to be provided or transferred (sold) to permittees.

*Functional capacity.* There were no comments received on the proposed definition. This definition is adopted as proposed.

*Functions.* A few commenters supported the proposed definition. Many commenters recommended that the agencies provide clarification to this definition. Several commenters said that this definition should either identify which functions are to be measured or define standard protocols for functional assessment methods. One commenter suggested that the assessed functions should include primary and secondary production, nutrient uptake and transformation, nutrient and organic matter input, storage, and export, and organic matter decomposition rates. Another commenter said that the definition should apply only to wetlands, not streams.

District engineers will determine appropriate functional assessments to use for particular permitting situations. We do not believe it is necessary to specify the type of functions provided by aquatic resources, since this definition is intended to have general applicability. We have removed the phrase "aquatic resources and other" from this definition, since the term "functions" applies to physical, chemical, and biological processes that occur in any ecosystem. Even though the focus of the Corps Regulatory Program is on functions provided by aquatic resources, we believe this definition should be based on the

general concept of what an ecosystem function is.

*Impact.* Two commenters said that the proposed rule incorrectly assumes that all impacts are adverse, and that the definition should recognize that some impacts may be beneficial.

We acknowledge that not all impacts authorized by DA permits are adverse, but the focus of this rule is on providing compensatory mitigation for losses of waters of the United States. Activities authorized by DA permits that benefit aquatic resources do not generally require compensatory mitigation. When determining the compensatory mitigation requirements for a particular permit, district engineers should consider environmentally beneficial activities that are provided by components of the overall project. In cases where environmentally beneficial activities or mitigation measures related to the aquatic environment are incorporated into the overall project, a smaller amount of compensatory mitigation may be required to offset the authorized adverse impacts to waters of the United States.

*In-kind.* Several commenters said that the proposed definition is too vague. Two of these commenters stated that in-kind compensation should be structurally and functionally similar. One commenter requested that the definition clarify the difference between "functionally similar" and "structurally similar". Two commenters suggested that the final rule adopt the current definition of in-kind mitigation, which refers to specific ecological types of wetlands.

We have changed the phrase "and/or" to "and" to define in-kind mitigation as being of a similar structural and functional type as the impacted resource. The modification of this definition will also help clarify that in-kind mitigation should provide similar types of structure and functions as the impacted resource, while accommodating high quality compensatory mitigation projects. In-kind mitigation projects should result in resource structure and functional capacity that are comparable to reference aquatic resources. In other words, in-kind mitigation should not consist of replacing a degraded aquatic resource with a degraded compensation resource. An in-kind compensatory mitigation project should result in a high quality aquatic resource. Thus, a mitigation project that was the same class of wetlands as the impacted resource, but with greater species diversity and habitat quality, would be considered appropriate in-kind mitigation.

*In-lieu fee program.* Many commenters said that the rule should define the term “in-lieu fee program.” Several commenters stated that such a definition is necessary to clarify which programs would be subject to new regulations governing in-lieu fee programs.

We have added a definition of this term to the final rule. It is parallel to the definition of “mitigation bank” while recognizing basic differences between mitigation banks and in-lieu fee programs. This definition discusses how an in-lieu fee program is similar to a mitigation bank, but it also clarifies that the rules governing the operation and use of in-lieu fee programs differ from those that govern mitigation banks.

*In-lieu fee program instrument.* We have added a definition of this term that is parallel to the definition of “mitigation banking instrument.”

*Instrument.* We are adding this new definition to clarify that the use of the generic term “instrument” in this final rule may refer to either a mitigation banking instrument or an in-lieu fee program instrument.

*Interagency Review Team.* One commenter suggested modifying this definition to clarify that an Interagency Review Team (IRT) can review documents for more than one mitigation bank. Another commenter said that the term “mitigation bank review team” should be used instead since in-lieu fee programs would be phased out under the proposed rule.

We do not believe it is necessary to change this definition to state that an IRT can review more than one proposed mitigation bank at a time. A different IRT may be established for each proposed mitigation bank or in-lieu fee program, or the same IRT may be involved in all proposed mitigation banks or in-lieu fee programs in an area. Since this final rule provides for both mitigation banks and in-lieu fee programs, it would be inappropriate to revert to using “mitigation bank review team.”

*Mitigation bank.* Three commenters recommended using the word “aquatic” in place of “similar” to clarify that the district engineer can require out-of-kind compensatory mitigation. Two commenters said that this definition should acknowledge that ecological improvements to uplands may be provided through a mitigation bank. One commenter stated that this definition should include language to reflect the fact that a mitigation bank cannot be used to offset impacts to aquatic resources unless certain performance standards have been met.

We have modified the first sentence of this definition by removing the word “aquatic” and adding examples of resource types that could be used as compensatory mitigation for impacts authorized by DA permits: wetlands, streams, riparian areas. This change is consistent with the practice of allowing out-of-kind compensation.

Compensatory mitigation may be provided through the establishment and maintenance of non-wetland riparian areas, which are not aquatic resources. The changes to the first sentence also allow recognition that upland areas may provide important ecological functions within a mitigation bank, and compensatory mitigation credit can be provided by those functions. We do not believe it would be accurate to state in this definition that performance standards must be met before a mitigation bank may be used to provide compensatory mitigation for authorized impacts to aquatic resources. When a mitigation bank is approved, and certain administrative activities are accomplished, a limited number of credits may be released which can be sold or transferred to permittees to fulfill their compensatory mitigation requirements.

*Mitigation banking instrument.* One commenter suggested modifying this definition to allow federal facility management plans, integrated natural resource management plans, or other acceptable documentation to be used as mitigation banking instruments.

Federal facility management plans, integrated natural resource management plans, and similar documents are more appropriately considered as site protection instruments, not mitigation banking instruments. A mitigation banking instrument governs the establishment and operation of a mitigation bank, which involves more issues than how the site will be managed.

*Off-site.* Many commenters requested a more explicit definition of this term. Several commenters said that the term “near” is subjective and should be more clearly defined. One commenter suggested using “hydrologically connected” instead of “near.” Two commenters expressed support for the flexibility provided by the use of the term “or near” in this definition. One commenter said that the term “parcel” should be defined in measurable units, to establish reasonable distances and areas for parcels. Another commenter suggested that the agencies should consider loosening the definition of off-site mitigation instead of allowing for more opportunities for out-of-kind mitigation.

We have removed the phrase “or near” to simplify this definition and to remove ambiguity. Off-site compensatory mitigation is located on a parcel of land other than the parcel containing the impact site or a parcel contiguous to the impact site. The revised definition does not establish minimum distances for a compensatory mitigation project to be considered off-site. The use of in-kind mitigation versus out-of-kind mitigation is more appropriately addressed by district engineers on a case-by-case basis in response to project-specific circumstances, instead of modifying this definition.

*On-site.* Many commenters requested a more explicit definition of this term. Several commenters said that the term “near” should be more clearly defined because it is subjective. One commenter stated that the term “near” should be replaced with “hydrologically connected.” Some commenters expressed support for the flexibility provided by the use of the term “near” in this definition. Two commenters said that the term “parcel” should be defined more clearly.

For the same reasons as provided in the preamble discussion of the changes to the definition of “off-site,” we have modified the definition of “on-site” by removing the phrase “or near.” These changes will help ensure that these two definitions complement each other.

*Out-of-kind.* Two commenters said that the word “or” should replace the phrase “and/or” in this definition, to state that out-of-kind mitigation should be structurally or functionally similar. One commenter remarked that this definition should provide clarification on what are accepted forms of out-of-kind mitigation. Two commenters suggested that this definition refer to specific ecological types of wetlands.

We have removed the phrase “and/or” and replaced it with the word “and” since out-of-kind mitigation differs from the resources impacted by the authorized work in both structure and function. Providing clarification on accepted forms of out-of-kind mitigation is beyond the scope of this definition. Appropriate out-of-kind mitigation will be determined by a district engineer on a case-by-case basis in response to an application for a DA permit. There are a number of classification systems for the various ecological types of aquatic resources. For the purposes of a regulatory definition that applies to a wide variety of aquatic resources, it would not be appropriate to modify this definition to refer to a particular classification system.

*Performance standards.* One commenter requested that the agencies expand this definition to explain, in greater detail, what performance standards are.

We do not believe it would be appropriate to provide greater detail regarding performance standards in this definition. Performance standards will vary by aquatic resource type, and those standards are also likely to vary among geographic regions. Performance standards are also dependent on the techniques used to measure how well a compensatory mitigation project is meeting its objectives. General criteria for establishing appropriate ecological performance standards are provided in § 332.5 [§ 230.95].

*Permittee-responsible mitigation.* There were no comments on this proposed definition. This definition is adopted as proposed.

*Preservation.* Some commenters said that this definition should be clearer, while other commenters stated that the proposed definition is adequate. Two commenters recommended modifying this definition to explicitly state that the preserved site will be permanently protected through appropriate real estate or legal instruments. One of these commenters noted that making such a change would avoid passive mitigation that results in little or no mitigation benefits. Two commenters said that preservation should not be limited to aquatic resources, but should also include ecological improvements in uplands when appropriate. One commenter suggested revising this definition to acknowledge gains in aquatic resource functions, services, and values.

The protection of a compensatory mitigation project site is more appropriately addressed through the rule provisions for site protection in § 332.7(a) [§ 230.97(a)]. This definition merely explains what preservation is, in the context of compensatory mitigation for DA permits. As part of an overall compensatory mitigation project, uplands such as non-wetland riparian areas may be included with preserved aquatic resources, if they help protect or sustain those aquatic resources. Although preservation helps sustain the functions and services provided by the preserved aquatic resources, by preventing direct impacts through land use changes, there is no gain in acreage. There may be a "passive" gain in functions and services over the long-term, if the preservation activity serves to remove or reduce stressors on the resource, however the main purpose of preservation is to prevent a future loss of resources, not to provide a gain. For

this reason, higher compensation ratios are generally required.

*Release of credits.* This definition has been added to describe actions where the district engineer, in consultation with the IRT, determines that credits associated with an approved mitigation plan for a mitigation bank are available for sale, transfer, or debit, or in the case of an in-lieu fee program, for fulfillment of advance credit sales. The credit release schedule for an approved mitigation bank or in-lieu fee project plan will be used to determine the number and resource type of credits that are released, as long as appropriate milestones specified in that schedule are achieved. A proportion of projected credits for a specific mitigation bank or in-lieu fee project may be released upon approval of the mitigation plan.

*Re-establishment.* Three commenters said that this definition should be deleted from this rule. One commenter found this definition useful, while others remarked that this definition is unclear and difficult to distinguish from "restoration" and "enhancement." Two other commenters recommended expanding this definition to include ecological improvements in uplands, instead of limiting it to aquatic resources.

Re-establishment is a form of restoration, where the functions are returned to the site where an aquatic resource previously existed. The other form of restoration is rehabilitation, which results in an improvement in most, if not all, aquatic resource functions at a degraded site. Re-establishment differs from enhancement because enhancement is the augmentation of certain functions in an existing aquatic resource. It is not appropriate to address ecological improvements to uplands in this definition, since it is focused on aquatic resource functions. Ecological improvements to uplands that are conducted as part of a compensatory mitigation project can be considered by the district engineer when determining the amount of credits provided by that compensatory mitigation project.

*Reference aquatic resources.* Three commenters said that the proposed definition contradicts extensive scientific literature that describes the use of reference conditions in ecological assessment. These commenters stated that the range of variability encompassed by anthropogenic disturbances should not be included in this definition. One commenter added that the term "reference condition" is used to describe aquatic systems that are stable and highly functional, and restoration projects should use reference

streams and wetlands as models to establish objectives. Another commenter recommended modifying this definition to describe the use of reference sites.

We have revised this definition to make it consistent with its current application in ecological assessment. Reference aquatic resources represent the full range of variability exhibited by a regional class of aquatic resources. That variability is due to both natural processes and anthropogenic disturbances. The term "reference standard" is used for the subset of reference aquatic resources that are the least disturbed and exhibit the highest levels of functions. Aquatic resources are not stable; instead, they are dynamic ecosystems that change over time. For the purposes of compensatory mitigation for DA permits, reference sites are used to help establish realistic objectives for compensatory mitigation projects, but these sites have other uses as well.

*Rehabilitation.* Many commenters said that the proposed definition is unclear. One commenter recommended eliminating this definition and another commenter stated that the term "enhancement" should be used instead. One commenter supported the proposed definition. Two commenters suggested that this definition should not be limited to aquatic resources, but should also include ecological improvements to uplands where applicable. One commenter recommended modifying the second sentence of this definition to read: "Restoration of an aquatic resource can result in an increase in function with or without an increase in size."

Rehabilitation differs from enhancement in that rehabilitation is intended to result in a general improvement in the suite of the functions performed by a degraded aquatic resource. In contrast, enhancement activities focus on increasing one or two functions, rather than all the functions being performed by an existing aquatic resource. For the purposes of this rule, ecological improvements to uplands are more appropriately addressed through the crediting of compensatory mitigation projects. We do not believe it is necessary to add the suggested sentence to this definition, since rehabilitation does not include re-establishment, which is the other type of restoration. The lack of gain in aquatic resource area is already addressed by the last sentence of the definition of "rehabilitation." We note that, while rehabilitation does not result in a gain in aquatic resource area for purposes of tracking "not net loss" of wetlands, this does not mean that it cannot be used to compensate for a loss



in resource area at the impact site. The district engineer will determine on a case-by-case basis the appropriate type and amount of mitigation to compensate for permitted impacts.

**Restoration.** Several commenters requested clarification of the proposed definition, and one commenter said that the definition should explain how restoration differs from enhancement. One commenter said that rehabilitation should not be considered as a form of restoration because rehabilitation does not result in an increase in wetland acreage, even though it improves wetland functions and/or values. Two commenters stated that this definition should not be limited to aquatic resources, so it should also include ecological improvements to uplands when appropriate.

Restoration differs from enhancement in that it results in either the re-establishment of an aquatic resource or the rehabilitation of a suite of functions at a degraded aquatic resource. In contrast, enhancement activities focus on the improvement of a subset of specific functions of an aquatic resource. Rehabilitation results in a general improvement in the amount of functions performed by aquatic resources, and is considered to be a form of restoration. As stated above, ecological improvements to uplands are more appropriately addressed through crediting of compensatory mitigation projects.

**Riparian areas.** One commenter suggested defining this term more narrowly, to specify the type of vegetation that characterizes riparian areas. One commenter recommended modifying this definition to limit it to open waters, since wetlands are also considered to be waterbodies.

We have modified the first sentence of this definition to clarify that riparian areas are lands adjacent to streams, rivers, lakes, and marine-estuarine shorelines. To simplify this definition, we have also removed the second sentence of the proposed definition.

**Service area.** There were no comments on this proposed definition. This definition is adopted as proposed.

**Services.** Several commenters said that the proposed definition of this term is unclear and too subjective. According to one commenter, using a subjective measure such as services to assess mitigation success will hinder the government's administration of the program. In addition, it will create compliance problems for industry, because they will not be able to effectively plan future activities as a result of this uncertain, subjective measure. Two commenters said that the

definitions of services and values should be combined. Other commenters recommended removing both terms from the final rule. One commenter stated that the reference to aquatic resources should be deleted because services are provided by all types of ecosystems, not just aquatic ecosystems.

This definition has been simplified by deleting the phrase "aquatic resource and other" since services may be provided by any type of ecosystem, including non-aquatic ecosystems. The concept of ecosystem services is important for considering where compensatory mitigation projects should be located. The relative locations of compensatory mitigation projects in the landscape helps address certain public interest factors, such as water quality, flood hazards, and fish and wildlife protection.

**Sponsor.** One commenter suggested that this definition should include an entity responsible for establishing and operating a mitigation bank or in-lieu fee program.

We have changed this definition to clarify that the sponsor is responsible for establishing, and in most cases operating, a mitigation bank or in-lieu fee program. There may be cases where sponsor turns over the long-term management (and ownership) of the mitigation bank site or in-lieu fee project site to another entity, so the word "operating" is modified by the phrase "in most circumstances" to reflect those situations.

**Standard permit.** There were no comments received on the proposed definition. It is adopted as proposed.

**Temporal loss.** We have added a definition of temporal loss which clarifies that temporal loss is the time lag between the loss of aquatic resource functions caused by the permitted impacts and the replacement of aquatic resource functions at the compensatory mitigation site. Temporal loss is one factor that must be considered in determining compensation ratios. The definition also provides that the district engineer may determine that compensation for temporal loss is not necessary when a mitigation project is initiated prior to or concurrent with the permitted impacts, except for resources with long development times (e.g., forested wetlands). This is intended to provide an additional incentive for timely mitigation.

**Values.** Two commenters said that the definitions of services and values should be combined. Several commenters said that the proposed definition of this term is unclear and too subjective, and others indicated that this definition should be deleted. One

commenter stated that using value as a measure of mitigation success reduces the predictability and regulatory certainty needed for industry and government to operate efficiently.

We have deleted this definition, since the term "services" is the current term being used to signify the importance of ecosystem functions to human populations. The use of the term "values" in the Regulatory Program during the past few decades has been similar to the way "services" is used today in most of the academic environmental literature, as well as policy documents. The use of the term "services" instead of "values" will provide a more objective means of assessing how impacted aquatic resources and compensatory mitigation projects relate to people.

In addition, ecosystem services can be more easily described than values. They are usually simply presented in qualitative terms as the benefits that are being provided to people in the watershed or other area of interest. The term "value" can have different meanings (e.g., monetary versus non-monetary values; landowner versus societal values). The valuation of aquatic resources and their functions is a complicated issue, and one that is unnecessary to resolve for this rule. Use of the term "services" will assist in program implementation, since agencies and stakeholders are more likely to reach a common understanding through descriptions of the ecosystem services being provided by a particular site.

**Watershed.** Many commenters recommend adding a definition of "watershed" to the rule. One commenter said that the definition should recognize that watersheds vary from region to region. On the other hand, another commenter stated that the definition should be interpreted and applied in a consistent manner regardless of the geographic location of the compensatory mitigation project. This commenter also suggested that the rule specifically identify the watersheds that are eligible for use as locations for compensatory mitigation projects.

We have adopted a definition for this term, based on the definition provided in EPA's Watershed Plan Handbook, which was published in December 2006. District engineers will determine appropriate watershed scales for compensatory mitigation projects, including services areas for mitigation banks and in-lieu fee programs. We do not believe it would be appropriate to identify specific watersheds in which compensatory mitigation can be conducted. In general, compensatory mitigation projects should be located in

the same watershed as the permitted impacts, at a scale determined to be appropriate by the district engineer based on the factors specified in the rule.

*Watershed approach.* Two commenters asked that the final rule include a definition of this term. We have added a definition of “watershed approach” that is based on concepts in this final rule.

*Watershed plan.* Several commenters said that there should be opportunities for local watershed groups or non-governmental organizations to develop watershed plans. Two commenters stated that this definition should be limited to plans with a specific goal of aquatic resource restoration and preservation to ensure that the watershed plan goals are consistent with federal, tribal, and state regulations. One commenter said that watershed plans should not include priority sites for aquatic resource restoration. On the other hand, another commenter stated that a watershed plan should identify priority sites for restoration and should also have a goal of ecosystem restoration. One commenter said that the proposed rule implies that any available watershed plan should be used to identify compensatory mitigation sites. This commenter stated that such an approach would be inappropriate unless the watershed plan is developed for the purpose of compensatory mitigation, including the protection of both natural and built environments.

We have modified this definition to include appropriate non-governmental organizations, such as local watershed groups, as potential developers of watershed plans. We have also changed this definition to clarify that, for the purposes of this rule, watershed plans are developed for the specific goal of aquatic resource restoration, establishment, enhancement, and preservation. This clarification is necessary because there are many different types of watershed plans, and those plans may be intended to fulfill a wide variety of purposes. We believe it is appropriate for watershed plans to identify priority sites for compensatory mitigation projects. In addition, we have replaced the word “ecological” with the phrase “aquatic resource” to clarify that a watershed plan appropriate for use in implementing this rule should address aquatic resource conditions in a watershed. In the last sentence of this definition, we have replaced the phrase “watershed management plans” with “wetland management plans” to avoid a circular definition. As discussed below in § 332.3(c) [§ 230.93(c)], district engineers will determine whether a

particular watershed plan is appropriate for use in a watershed approach to compensatory mitigation.

Several commenters said that key terms in the proposed rule are either undefined or vaguely defined. A number of commenters suggested additional terms to define in the final rule. These terms include “larger projects” and “smaller projects.” We do not believe it would be appropriate to provide specific definitions to distinguish between large and small projects. The difference between large and small is subjective, and should be at the discretion of the district engineer after considering site-specific and project-specific criteria. Other requested definitions are discussed in more detail below.

One commenter requested a definition of the term “aquatic resource function” since it is used repeatedly throughout the rule. We have provided a general definition of the term “functions” in this section, which applies to aquatic resources as well as other types of ecological resources.

Two commenters asked for a definition of “aquatic resource type” since it is used throughout the rule. Three commenters said that the final rule should define “aquatic resources.” We do not believe it is necessary to define these terms in this rule. Different aquatic resource types may be distinguished through a variety of classification systems. What constitutes an aquatic resource is also dependent on the classification system used. Different regions may have different thresholds for making distinctions among aquatic, mesic, and xeric resources.

Two commenters said that the rule should include a definition of “successful mitigation.” One commenter proposed a set of criteria to be used to determine if the mitigation is successful.

Successful compensatory mitigation projects will be identified by evaluating those projects against their ecological performance standards. Therefore, successful mitigation will be determined on a case-by-case basis.

Two commenters asked for a definition of “mitigation type.” We have defined mitigation types in the final rule: restoration (which includes re-establishment and rehabilitation), establishment, enhancement, and preservation. We have also defined the terms “in-kind” and “out-of-kind.”

One commenter said that the rule should have a definition of “complete prospectus.” A complete prospectus contains the items listed at § 332.8(d)(2) [§ 230.98(d)(2)].

One commenter requested a definition of “umbrella mitigation banking instrument.” We do not believe it is necessary to define this term, because it is described at § 332.8(h) [§ 230.98(h)].

One commenter said that the final rule should include a definition of “unavoidable impacts.” It is not necessary to define this term, since unavoidable impacts are identified on a case-by-case basis when a district engineer evaluates a permit application.

One commenter stated that this rule should provide a definition of “conversion” as it relates to man-made changes to aquatic resources. This commenter also requested that the final rule contain guidelines to determine when a conversion would be ecologically appropriate.

We do not believe it is necessary to define the term “conversion” since it is commonly understood to refer to an action that changes an area from one resource type to another resource type. Establishing guidelines for evaluating conversion is beyond the scope of this rule. For proposed changes to aquatic resources that require DA authorization, district engineers will determine on a case-by-case basis whether those activities constitute conversions and whether proposed conversions are in compliance with applicable regulations.

One commenter suggested adding a definition of “aggregate mitigation site,” to account for cases where a permittee desires to provide a single compensatory mitigation project for multiple impacts to waters of the United States. We do not believe it is necessary to define this term. District engineers can consider compensatory mitigation that has been provided in advance by permittees when evaluating compensatory mitigation options (see 33 CFR 332.3(b) and 40 CFR 230.92(b)).

One commenter said that the rule should include a definition of “degraded.” It would not be appropriate to define this term, since it is subjective. Assessment methods can be used to determine whether a particular resource is degraded, based on a threshold chosen by the district engineer. Best professional judgment may also be used to identify degraded resources in situations where appropriate assessment methods are not available.

One commenter stated that the term “stream” should be defined. We do not believe it is necessary to define this term. District engineers can determine on a case-by-case basis whether a particular waterbody is a stream.

One commenter requested a definition of “ecoregion.” We do not believe it is necessary to define this term. There are a number of classification systems for

identifying ecoregions. Ecoregions may also be identified through local criteria. District engineers will use appropriate criteria if ecoregions are to be used to define service areas for mitigation banks or in-lieu fee programs.

*33 CFR 332.3 and 40 CFR 230.93  
General Compensatory Mitigation  
Requirements*

Three commenters suggested that paragraph (c) of this section should be put in front of paragraph (b) of this section. Two commenters proposed that the Corps automated information system used for compensatory mitigation should include a regional list of rare habitat types.

We do not agree that paragraph (c) of this section, which discusses the watershed approach, should be placed in front of paragraph (b), which presents criteria concerning the type and location of compensatory mitigation. As discussed below, paragraph (b) has a preference hierarchy that includes the watershed approach. Although mitigation banks and in-lieu fee projects should be strategically located in areas that support a watershed approach to compensatory mitigation, the preference hierarchy in paragraph (b) will be first considered when determining the compensatory mitigation required for a DA permit. If a mitigation bank or in-lieu fee program does not have the appropriate number and resource type of credits available, then permittee-responsible mitigation should be determined using the watershed approach described in paragraph (c) of this section. District engineers have the discretion to add appropriate data layers to the Corps automated information system to include information on rare habitat types, but it is not necessary to make that a requirement in this rule.

(a) *General considerations.* One commenter remarked that the proposed rule does not provide criteria, standards, or meaningful guidance to ensure that the district engineer will require mitigation that will protect water quality. Another commenter said that there should be sufficient flexibility in the final rule to support new approaches or strategies that meet the standards identified, but do not fall into one of the existing categories.

Water quality standards are more appropriately addressed through the water quality certification process under section 401 of the Clean Water Act. A district engineer can require water quality management measures as part of the overall compensatory mitigation package required for a particular DA permit. Even though this rule is focused on a watershed approach, it provides

flexibility for district engineers to use innovative approaches or strategies for determining more effective compensatory mitigation requirements that provide greater benefits for the aquatic environment. We have added to this section a provision that allows the district engineer, when evaluating compensatory mitigation options, to consider what would be environmentally preferable, taking into account the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their relative significance within the watershed, and the costs of the compensatory mitigation project.

One commenter stated that the economic cost of mitigation should not be a primary consideration when determining the amount, location, or type of compensatory mitigation required, and that reference to economic costs should be deleted from this section. Several commenters said that the district engineer should not be required to consider economic costs when assessing the success and sustainability of a mitigation project. Another commenter, however, recommended that the final rule require the district engineer to consider economic factors more comprehensively, including not only the economic cost of the compensatory mitigation, but also the full range of costs and benefits to society stemming from the loss of aquatic resources.

Economic costs are an important consideration when determining the practicability of a proposed compensatory mitigation project. In addition to economic costs, existing technology and logistics must also be considered. If a particular compensatory mitigation project is cost-prohibitive, then an alternative compensation project that is more practicable should be required. District engineers will also consider impacts to the public interest, including potential losses of aquatic resource functions and services, when evaluating permit applications and compensatory mitigation proposals, and determining appropriate and practicable compensatory mitigation requirements.

We have added § 332.3(a)(2) [§ 230.93(a)(2)] to provide clarification regarding the potential mechanisms for providing compensatory mitigation. It states that restoration should be the first option considered since the likelihood of success is greater. Restoration also helps reduce impacts to ecologically important uplands, such as mature forests, where compensatory mitigation activities may be proposed because of land availability. The 404(b)(1)

Guidelines prohibit discharges in areas where there may be other significant environmental consequences (see 40 CFR 230.10(a)).

Some commenters recommended that the rule allow compensatory mitigation projects on federal lands where state wildlife agencies lease management rights for fish and wildlife purposes. Others commenters suggested prohibiting compensatory mitigation projects on existing public conservation lands.

We have added § 332.3(a)(3) [§ 230.93(a)(3)], which was moved from § 332.8(a)(2) [§ 230.98(a)(2)] of the proposed rule. We have modified this paragraph to be generally applicable to all compensatory mitigation projects, not just mitigation banks. Compensatory mitigation projects may be located on federal lands, as long as those projects comply with the provisions of this part, including the site protection requirements in § 332.7(a)(4) [§ 230.97(a)(4)].

(b) *Type and location of compensatory mitigation.* Several commenters stated that the established order of preference in the proposed rule (i.e., mitigation bank credits; permittee-responsible mitigation in accordance with a watershed plan or watershed approach; on-site, in-kind permittee-responsible mitigation; and lastly, off-site, out-of-kind permittee-responsible mitigation) is too limiting and creates inefficiency. Many commenters stated that the proposed rule establishes a preference for mitigation banks, and some of these commenters argued that the preference for mitigation banks over in-lieu fee programs cannot be justified. One commenter suggested that this rule stipulate that mitigation banks should not necessarily represent a “first resort” to fulfilling mitigation requirements if there are on-site opportunities that are likely to provide greater ecological benefits. However, another commenter said that section 314 warrants a stronger preference for using approved mitigation banks.

We have substantially revised and reorganized this section of the final rule, and have provided flexibility for district engineers to make compensatory mitigation decisions based on what is environmentally preferable and is most likely to successfully provide the required compensatory mitigation. Sections 332.3(b)(2)–(6) [§ 230.93(b)(2)–(6)] present a preference hierarchy, which was developed through careful consideration of comments received in response to the proposed rule, as well as various studies on the different approaches for providing compensatory mitigation. The hierarchy is based on

administrative and environmental considerations, to reduce risk and uncertainty associated with compensatory mitigation projects, as well as temporal losses of aquatic resource functions and services. Reduction of risk and uncertainty associated with compensatory mitigation projects is achieved by favoring compensatory mitigation that is further along in the planning and approval process or will better support a watershed approach. Since there are time lags associated with all sources of compensatory mitigation (see the 2001 NRC Report), our focus is on reducing temporal losses to the extent practicable. Administrative considerations include the regulations governing mitigation banks, in-lieu fee programs, and permittee-responsible mitigation that are provided in this rule, as well as the timing of actions required for those sources of compensatory mitigation. Environmental considerations include the expected ecological benefits of third-party compensatory mitigation as well as independent studies that have shown that the ecological success of permittee-responsible mitigation is uneven. There have been few independent studies of the ecological success of mitigation banks and in-lieu fee programs, so we have no basis for establishing a preference based solely on third-party mitigation success.

Section 332.3(b)(1) [§ 230.93(b)(1)] discusses general principles for determining the appropriate type and location for compensatory mitigation projects. Some of these principles were taken from § 332.3(b)(4) [§ 230.93(b)(4)] of the proposed rule, which discussed the use of off-site and out-of-kind compensation. Since these basic principles should be applied earlier in the selection process, we have moved those provisions to § 332.3(a)(1) [§ 230.93(a)(1)] of the final rule. Paragraph (b)(1) of this section also states that the compensatory mitigation options provided in paragraphs (b)(2) through (b)(6) should be applied in the order they are given, to make it clear that this is a hierarchy from highest to lowest preference. It is important to understand that this is a preference hierarchy that does not override a district engineer's judgment as to what constitutes the most appropriate and practicable compensatory mitigation based on consideration of case-specific circumstances. In this paragraph, we have added a provision to address compensating for impacts to marine resources. This provision states that compensatory mitigation project sites

for marine resources should be located in the same marine ecological system as the impact site, citing reef complexes and littoral drift cells as examples of marine ecological systems. We have also added provisions indicating that compensation for impacts to aquatic resources in coastal watersheds should be located in a coastal watershed where practicable, and that mitigation projects should not be located where they will increase risks to aviation by attracting wildlife to areas where aircraft-wildlife strikes may occur (e.g., near airports).

Section 332.3(b)(2) [§ 230.93(b)(2)] establishes a preference for the use of mitigation bank credits if the mitigation bank has the appropriate number and resource type of credits available. This preference is based on the requirements in this rule: before credits can be sold or transferred to permittees the sponsor must have an approved instrument, as well as an approved mitigation plan and other assurances in place. Those other assurances are specified in the mitigation banking instrument and usually include securing the mitigation bank site, establishing financial assurances, and finalizing the appropriate site protection mechanisms. Because of these requirements for mitigation banks, there is generally less risk and uncertainty (and less temporal loss) than there is with in-lieu fee programs and permittee-responsibility. Because of the credit release schedule required for mitigation banks, there is some degree of demonstrated success in providing the compensatory mitigation. In addition, the planning and resources involved in developing and implementing a mitigation bank help provide greater assurance that the compensatory mitigation project will provide environmental benefits. However, district engineers can apply these considerations to other sources of compensatory mitigation to override the preference for mitigation bank credits. For example, the district engineer may authorize the use of released credits from an in-lieu fee program since the requirements for release of these credits are comparable to the requirements for release of credits from an approved mitigation bank. In a situation where the permittee has proposed to restore an outstanding resource, and has provided sufficient scientific and technical analysis to demonstrate that such a project will be successful, the district engineer may authorize the use of that compensatory mitigation project instead of mitigation bank credits.

If the permitted impacts are not in the service area of an approved mitigation bank, or are in the service area of an approved mitigation bank, but that

mitigation bank does not have the appropriate number and resource type of credits available, and an approved in-lieu fee program does not have appropriate released credits available, § 332.3(b)(3) [§ 230.93(b)(3)] establishes a preference for in-lieu fee program credits. In-lieu fee programs fall into the next level of the hierarchy because of the levels of planning and review they are required to perform as a result of this rule. In-lieu fee programs are required to develop a compensation planning framework that supports a watershed approach (see § 332.8(c) [§ 230.98(c)]). In-lieu fee programs can also bring substantial expertise to aquatic resource restoration and protection activities, and many in-lieu fee program sponsors are conservation organizations with an interest in long-term management of aquatic resources. This preference may be overridden by a high quality permittee-responsible mitigation project or one that is likely to meet performance standards before the in-lieu fee program sponsor fulfills his or her obligation for advance credits.

If an approved mitigation bank or in-lieu fee program cannot be used to provide the required compensatory mitigation, § 332.3(b)(4) establishes a preference for permittee-responsible mitigation conducted under a watershed approach. In cases where a watershed approach is not practicable for permittee-responsible mitigation, under § 332.3(b)(5) [§ 230.93(b)(5)] the district engineer should consider options for on-site and/or in-kind compensation to fulfill the compensatory mitigation requirements. The last option under the preference hierarchy is for permittee-responsible mitigation through off-site and/or out-of-kind compensatory mitigation (see § 332.3(b)(6) [§ 230.93(b)(6)]).

One commenter said the proposed rule seems excessively rigid, and the limited funds available to public agencies should be used to implement mitigation where it will be most cost-effective. One commenter said that wetland establishment should not be an acceptable form of wetland compensation, as it is too uncertain and has a bad track record. One commenter recommended that this section be re-organized to explain how the watershed approach should be applied to each mitigation location option.

Cost considerations may be used to evaluate whether the proposed compensatory mitigation requirement for a DA permit is practicable. However, the ecological success of the compensatory mitigation project and its effectiveness at offsetting the permitted impacts are also important

considerations. We recognize that wetland establishment may not be successful in many situations, so we have established a preference for restoration in § 332.3(a)(2) [§ 230.93(a)(2)]. The watershed approach is discussed in § 332.3(c) [§ 230.93(c)]. District engineers will apply the watershed approach to the extent practicable when considering compensatory mitigation options, as well as during the review and approval of instruments for mitigation banks and in-lieu fee programs.

The final rule states that compensatory mitigation decisions will be based on what is environmentally preferable, which, in a particular situation, might be on-site compensation. As discussed above, it provides a hierarchy of preferences for satisfying compensatory mitigation requirements for DA permits, starting with mitigation bank credits.

Many commenters supported eliminating the preference for in-kind and on-site compensatory mitigation. Most of these commenters said that compensatory mitigation requirements should be based on ecological criteria, as well as the likelihood of offsetting the permitted impacts, not on a preference for on-site mitigation. Some commenters noted that rigid rules favoring on-site compensation often yield small, poorly functioning compensatory mitigation projects. One commenter noted that federal agencies that review permit applications are often restricted from accepting more environmentally meaningful compensation proposals because of the preference for in-kind, on-site compensatory mitigation projects. Several other commenters, however, recommended that the final rule express a preference for on-site mitigation. Two commenters said that compensatory mitigation wetlands should be located as close as possible to the impacted wetlands, and should be the same wetland type. A few commenters suggested that on-site, in-kind mitigation should be preferred until substantive watershed-level plans are developed to guide compensatory mitigation decisions. Several commenters stated that off-site mitigation should only be considered if other forms of mitigation are likely to be ineffective, and several commenters requested clarification of the circumstances under which off-site or out-of-kind mitigation can be provided. A few commenters stated that district engineers needed to be provided direction for considering off-site mitigation.

We believe that compensatory mitigation requirements should be

guided by ecological and practicability considerations, to help ensure that the required compensation successfully fulfills its objective, to offset aquatic resource functions lost as a result of the permitted impacts. The watershed approach, as well as the other considerations provided in § 332.3 [§ 230.93] will help meet these objectives. Because of its poor record of ecological success, a preference for on-site mitigation cannot be justified. The final rule is supported by the findings of the 2001 NRC Report, which indicated that an automatic preference for on-site, in-kind compensatory mitigation is inconsistent with a watershed approach, since there are circumstances in which on-site or in-kind mitigation is neither practicable nor environmentally preferable. District engineers will use available tools and information to guide their decision-making regarding where compensatory mitigation projects should be located. As additional data are gathered, and new tools are developed, district engineers will use those items as appropriate.

A number of commenters agreed that it may be appropriate to replace certain aquatic resource functions on-site and other functions off-site and that this flexibility is a positive aspect of the rule. However, several commenters suggested that the rule should not allow a combination of off-site and on-site mitigation, as it is overly burdensome and would dilute the overall effectiveness of compensation. One commenter said that compensating for functions at different locations may create situations where each site is not fully functional. Two commenters stated that the rule should allow a single, permittee-sponsored mitigation project to compensate for the aquatic impacts of a linear facility, such as a transmission line, which may affect more than one watershed.

We believe that using a combination of on-site and off-site compensatory mitigation is often necessary or preferable to successfully offset the functions lost at the impact site. This is an important facet of a watershed approach to compensatory mitigation. To be effective, compensatory mitigation projects must be located in appropriate landscape settings. The off-site aquatic habitat restoration or establishment activities should provide the suite of functions performed by that habitat. The on-site mitigation will likely focus on effectively replacing specific functions, such as water quality or water quantity functions. Therefore, from a watershed perspective, there will likely be a net increase in aquatic

resource functions. In general, off-site compensatory mitigation will be located in the same watershed as the impact site. District engineers also have flexibility under this rule to allow compensation for linear projects to be conducted on one or multiple sites, based on environmentally preferable and practicable compensatory mitigation options.

A number of commenters expressed concern that an emphasis on off-site compensatory mitigation can lead to the transfer of wetland ecosystem services from urban to rural areas. Two commenters argued that unless the rule requires applicants to include a description of service values and benefits at the impact site and the compensatory mitigation project site, rural areas will benefit and urban populations will incur the costs. One commenter stated that recent and past studies indicate that the location of mitigation banks is dictated primarily by land costs rather than by sound scientific watershed principles.

We recognize that aquatic resources in urban settings can provide important functions and services, and we believe it is important that urban areas not become devoid of aquatic resources simply because it is more difficult to successfully restore or establish aquatic habitat in developed areas. Compensatory mitigation required by district engineers will be located in areas where it is appropriate and practicable to conduct successful aquatic resource restoration, establishment, and enhancement activities. In some cases, this will result in compensatory mitigation for impacts in urban areas to be conducted in more remote locations; in other cases, it may be appropriate to replace certain aquatic resources in urban areas. Site selection is a primary consideration for compensatory mitigation projects and district engineers will evaluate proposed mitigation projects, including mitigation banks, using the watershed approach to ensure that they contribute to the functions and sustainability of aquatic resources within a watershed. As discussed above, the use of a combination of on-site and off-site compensatory mitigation can be effective in retaining aquatic resource functions and services in urban areas.

*(c) Watershed approach to compensatory mitigation.* Many commenters supported use of a watershed approach for compensatory mitigation. One commenter said that consideration of watershed functions is an orderly, incremental next step to move section 404 permitting towards a watershed-based perspective. One

commenter stated that an ecosystem approach will result in a comprehensive package that best fits the landscape and its needs. Several commenters noted that the use of a watershed approach would increase the flexibility for compensatory mitigation and ensure a project's sustainability. Four commenters encouraged the Corps to use its funding to develop a general and flexible framework for consideration of landscape or watershed needs, rather than formal watershed plans.

We have retained the watershed approach in the final rule, with modifications made in response to specific comments. The watershed approach retains many of the recommendations from the 2001 NRC Report. While the watershed approach provides flexibility for identifying an appropriate compensatory mitigation project, as well as its location in the watershed, a main objective of the watershed approach is to maintain and improve the quantity and quality of wetlands and other aquatic resources in watersheds through strategic selection of compensatory mitigation project sites. As experience is gained in the use of the watershed approach, Corps districts will use that experience to improve decision-making for compensatory mitigation requirements.

One commenter suggested that use of a watershed approach be encouraged, but not required, and a few commenters asserted that the term "watershed approach" is too ambiguous to be a mandatory requirement. Many commenters recommended that the agencies not require use of the watershed approach until there is consensus on how watersheds are defined and the development of planning tools. One commenter said that a state, district, or county cannot be compelled to establish a watershed approach. One commenter stated that the language in § 332.3(c)(3) [§ 230.93(c)(3)] suggests that watershed approach will be taken on a project-by-project basis and contradicts the entire idea of a watershed approach. This commenter added that watershed studies should not be project-specific.

The watershed approach described in the proposed rule is intended to be a general framework for better decision-making for compensatory mitigation requirements for DA permits. The rule language needs to be flexible, so that district engineers can adapt the general framework to more effectively address aquatic resource needs in their regions. We have added a definition of the term "watershed" to § 332.2 [§ 230.92], but the appropriate watershed scale to use for the watershed approach will vary by

region, as well as the particular aquatic resources under consideration. There are a number of planning tools available for use with a watershed approach, and more will be developed as this rule is implemented and further experience is gained from using a watershed perspective. As stated in § 332.3(c)(1) [§ 230.93(c)(1)], the watershed approach is to be used to the extent appropriate and practicable. There will be situations, such as compensatory mitigation requirements for small impacts, where it would not be cost-effective to utilize a watershed approach. Since using a watershed approach is not appropriate in areas without watershed boundaries, such as marine waters, we have added a provision (§ 332.3(c)(2)(v) [§ 230.93(c)(2)(v)]) to clarify that other types of spatial scales may be more appropriate in those areas. This rule does not require the development of watershed studies on a project-by-project basis.

Several commenters supported the idea of a watershed and/or ecosystem approach but said that watershed plans should be prepared before permitted impacts can occur. A few commenters stated that many existing watershed plans are not comprehensive. One commenter noted that it will be difficult to implement the watershed approach in a meaningful way in the majority of developing watersheds that are without watershed plans. Several commenters requested that the rule stipulate that only mitigation banks that conform to approved watershed plans shall be approved by the district engineer and the IRT. Several commenters stated that, in the absence of a watershed plan, a watershed approach will lead to inappropriate mitigation and the cumulative loss of wetland functions. These commenters also noted that the proposed rule did not provide an incentive to undertake real watershed planning, and recommended that the agencies develop criteria and standards for watershed plans that incorporate the recommendations of the National Research Council and the elements of watershed plans discussed in the rule.

As with the 2001 NRC Report, the watershed approach described in this final rule does not require a formal watershed plan. The watershed approach may be based on a structured consideration of watershed needs and how wetlands and other types of aquatic resources in specific locations will address those needs. We realize that in many areas, watershed plans appropriate for use in planning compensatory mitigation activities have not been developed. Although it would

be desirable to have watershed plans designed to more fully support a watershed approach, we believe that a watershed approach can be effectively implemented without watershed plans. Mitigation banks can support a watershed approach without using watershed plans. There are different types of watershed plans that could be developed for purposes other than aquatic resource restoration, establishment, enhancement, and/or preservation activities. For example, some watershed plans are conceived to guide development activities or the placement of storm water infrastructure. Therefore, we have modified § 332.3(c)(1) [§ 230.93(c)(1)] to state that the district engineer will determine whether a watershed plan is appropriate for use in the watershed approach for compensatory mitigation. The final rule does not provide disincentives to develop watershed plans. District engineers are encouraged to work with other government agencies and stakeholders to develop watershed plans to support decision-making in the Corps Regulatory Program, but we also recognize that the development of watershed plans is resource-intensive, and may not be feasible in many areas. Criteria and standards for developing watershed plans appropriate for use in the Corps Regulatory Program may be established at a later time.

Some commenters stated that it is unclear how the watershed approach will be implemented in the absence of a watershed plan. One commenter stated that most watershed management plans are relatively small in scope relative to an economically sustainable service area, and therefore using such plans can thwart regional water quality needs. Others argued that the government, not permit applicants, should develop watershed plans, because most applicants lack the time and resources needed to develop those plans. One commenter said that watershed plans vary considerably from region to region and are usually unable to support evaluations of compensatory mitigation needs. This commenter recommended that EPA and the Corps establish a certification process to assure the format and information content of watershed plans is sufficient to meet the intent of the proposed rule.

To implement a watershed approach in the absence of a watershed plan, district engineers will utilize the considerations specified in § 332.3(c)(2) [§ 230.93(c)(2)] and available information on watershed conditions and needs, as discussed in § 332.3(c)(3) [§ 230.93(c)(3)]. Although many of the watershed plans that have been

























































provide compensatory mitigation for DA permits lies solely with the district engineer. As explained in § 332.8(b) [§ 230.98(b)], the role of the IRT is to provide comments and advice on the establishment and use of mitigation banks and in-lieu fee programs. Although district engineers are encouraged to develop templates for mitigation banking and in-lieu fee program instruments, the development of such templates does not need to be addressed in this rule. The dispute resolution process is not expected to conflict with a watershed approach, since it is an administrative process intended to resolve objections to proposed instruments.

One commenter said that the milestones and time frames established in the proposed rule are adequate to move the process along, while giving time for appropriate comment. One commenter expressed concern that 15 days for the Interagency Review Team to initiate the dispute resolution process is too short.

We have retained the time frames in the dispute resolution process. We believe that 15 days is sufficient for a member agency of the IRT to initiate the dispute resolution process. The IRT members will have already thoroughly reviewed the draft instrument, and had the proposed final instrument for 30 days before this 15-day time period begins. Any remaining issues should already have been identified by that time and evaluated to determine whether they warrant elevation to the agency's headquarters. In § 332.8(e)(3) [§ 230.98(e)(3)], we have added electronic mail as an acceptable means for notifying district engineers that an issue has been forwarded to Headquarters for review.

Two commenters recommended that the dispute resolution process include procedures to address disputes when they are with a co-chair from a tribal, state, or local program. One commenter said a mitigation banking instrument should not be approved over the objections of the state in which the mitigation bank is located. Another commenter suggested that the rule should allow for coordination with states that have separate appeals procedures.

This process is intended to resolve disputes that are within the purview of the Corps to address. If there is a co-chair involved in the approval process, and there is an IRT objection that is solely under the authority of the tribal, state, or local co-chair to address, then the co-chair should address those objections. The co-chair also has the option of not approving the instrument,

so that the mitigation bank or in-lieu fee program cannot be used to provide compensatory mitigation for tribal, state, or local authorizations. District engineers should try to address state objections to proposed mitigation banks and in-lieu fee programs, but final decisions must be based on federal interests, including applicable federal laws, regulations, and executive orders. State appeals procedures do not apply to federal decisions regarding mitigation banks and in-lieu fee programs. A state can choose not to approve a mitigation bank or in-lieu fee program to provide compensatory mitigation for its authorizations.

(f) *Extension of deadlines.* One commenter said that deadlines should be established for review and response, but that these deadlines should have built-in flexibility for extenuating circumstances.

We have revised this paragraph to account for the potential issues that may warrant allowing additional time to reach decisions on third-party mitigation instruments. In § 332.8(f)(1)(i) [§ 230.98(f)(1)(i)], we have added consultation under section 7 of the Endangered Species Act or section 106 of the National Historic Preservation Act as potential reasons for needing more time to process mitigation banking or in-lieu fee program instrument proposals. We have added § 332.8(f)(1)(ii) [§ 230.98(f)(1)(ii)] to include government-to-government consultation with Indian tribes, since it may be necessary to conduct such consultation if a proposed mitigation bank or in-lieu fee program may affect an Indian tribe's interests, such as protected tribal resources, tribal rights, or Indian lands. In § 332.8(f)(1)(ii) [§ 230.98(f)(1)(ii)], in-lieu fee programs and proposed instrument modifications have been added to include these actions as potentially needed deadline extensions.

(g) *Modification of instruments.* Two commenters stated that the proposed mechanism for modifying mitigation banking instruments is a fair and effective way of addressing the grandfathering of operational mitigation banks. Another commenter suggested that the Corps establish an administrative appeal process for mitigation banking instrument modifications.

Since in-lieu fee programs have been added to this rule, we have included the modification of in-lieu fee program instruments in § 332.8(g) [§ 230.98(g)]. We do not believe it is necessary to establish an administrative appeal process for modifications of third-party mitigation instruments.

Several commenters supported the streamlined mitigation bank permit modification process proposed in the rule. One commenter said that the process will not sufficiently reduce permitting burdens and time frames to justify elimination of in-lieu fee programs. One commenter believed that the time frame for IRT review in this process is too long and has the potential to delay decision-making for simple changes to an instrument. One commenter requested that the agencies provide examples of "non-significant" changes that would allow use of the streamlined review process to modify an instrument.

We have retained in-lieu fee programs in this final rule, and the streamlined review process for instrument modifications also applies to certain actions pertaining to in-lieu fee programs. Examples of such actions include adaptive management, credit releases, and changes in credit release schedules. We believe that IRT review of proposed instrument modifications is necessary, and that the time frames are sufficient to ensure that substantive comments can be provided in a timely manner. District engineers have the discretion to determine what changes that are not listed in § 332.8(g) [§ 230.98(g)] warrant use of the streamlined review process. Examples might include minor changes to a mitigation project plan that do not substantively change the character of the project or its ability to provide appropriate mitigation for DA permits. The addition and approval of umbrella mitigation bank sites and in-lieu fee project sites, or the expansion of previously approved mitigation bank or in-lieu fee project sites, must be evaluated through the full instrument amendment process in § 332.8(d) [§ 230.98(d)].

(h) *Umbrella mitigation banking instruments.* Four commenters supported development of umbrella mitigation banking instruments. One commenter did not support the authorization of umbrella mitigation banking instruments, because they usually cover sites that are in different geographic locations and have different site conditions. Several commenters suggested that the rule require the entity proposing an umbrella agreement have at least one site in place, and limit credit releases to sites that have been reviewed and permitted. Several commenters opposed the provision in the rule that requires a major modification to the instrument for additional umbrella mitigation bank sites. These commenters said that this requirement will impede project



development schedules. One commenter stated that the sponsor of an umbrella mitigation banking instrument should not be able to sell credits until the site has been acquired, the mitigation plan approved, and the financial assurances are in place.

In this paragraph, we have clarified that adding more mitigation bank sites to an umbrella mitigation banking instrument requires following the procedures at § 332.8(g)(1) [§ 230.98(g)(1)] for amending an approved instrument. In response to a proposal to add a new site to an umbrella mitigation banking instrument, the district engineer and the IRT will review the proposed mitigation plan. The district engineer, in consultation with the IRT, will determine whether the proposed site is acceptable for providing compensatory mitigation for DA permits within the service area governed by that instrument. The proposed rule, as well as the final rule, requires a mitigation bank site to be included in the initial mitigation banking instrument. The mitigation banking instrument becomes an umbrella instrument when additional compensatory mitigation project sites are added (see § 332.8(h) [§ 230.98(h)]). We have added a sentence to this paragraph that requires credit withdrawal from umbrella mitigation bank sites to be consistent with § 332.8(m) [§ 230.98(m)]. In particular, any additional projects must have an approved plan, a secured site, and appropriate financial assurances in place before any credits can be sold or transferred. After the initial credit release, further releases are tied to achievement of milestones and performance standards in accordance with an approved credit release schedule.

(i) *In-lieu fee project account.* We have added this provision to require in-lieu fee program sponsors to establish program accounts at financial institutions that are a member of the Federal Deposit Insurance Corporation (FDIC). The purpose of the program account is to ensure that the funds collected from permittees by the in-lieu fee program sponsor are used within a reasonable time period to provide compensatory mitigation for DA permits, instead of other activities. Requiring the sponsor to establish the account with a member of the FDIC is intended to protect those funds from being lost through default. The interest and other earnings accruing to the account must remain in the account, to fund in-lieu fee projects. The funds placed into the in-lieu fee program account may only be used for the

selection, design, acquisition, implementation, and management of in-lieu fee projects, with a small percentage being allowed for administrative costs. The percentage that can be used for administrative costs will be determined by the district engineer, in consultation with the IRT. If the sponsor conducts activities, such as educational programs, in addition to aquatic resource restoration, establishment, enhancement, and/or preservation activities that are used to provide compensatory mitigation for DA permits, the in-lieu fee program account must be separate from the accounts that fund those supplemental activities.

Section 332.8(i)(2) [§ 230.98(i)(2)] requires in-lieu fee program sponsors to submit proposed in-lieu fee projects to the district engineer for funding approval. Disbursements from the in-lieu fee program account can only be made after the district engineer provides written approval of a proposed in-lieu fee project. The district engineer's decision will occur after consultation with the IRT. The district engineer does not need to authorize each individual disbursement from the account, but must provide written approval for the project, based on a review of the project mitigation plan, which will include a description of activities and projected costs. Once the project is authorized, funds disbursed from the account must be spent for the project in a manner consistent with the approved project mitigation plan. The terms of the in-lieu fee program account must specify that the district engineer has the authority to direct those funds to alternative compensatory mitigation projects if the sponsor does not provide the compensatory mitigation in accordance with required time frames. As with financial assurances, the Corps lacks statutory authority to accept directly, retain, and draw upon funds that are in the in-lieu fee program account, because of the requirements of the Miscellaneous Receipts Statute (31 U.S.C. 3302(b)). Therefore, the terms of the in-lieu fee program instrument must be carefully crafted to ensure that the district engineer can direct the funds deposited in the in-lieu fee program account to be used for providing compensatory mitigation for DA permits, without the Corps directly accepting or disbursing the funds.

The in-lieu fee program sponsor is also required to provide annual reports to the district engineer and the IRT regarding the in-lieu fee program account (see § 332.8(i)(3) [§ 230.98(i)(3)]). The district engineer may audit the records for the in-lieu fee

program account, to ensure compliance with this rule.

(j) *In-lieu fee project approval.* We added § 332.8(j) [§ 230.98(j)] to provide a process for the review and approval of in-lieu fee projects. The mitigation plans for in-lieu fee projects must include the information required by § 332.4(c)(2) through (c)(14) [§ 230.94(c)(2) through (c)(14)]. The mitigation plan must also include a credit release schedule, which is similar to the credit release schedule required for mitigation banks. The review and approval of in-lieu fee projects will be conducted as instrument modifications in accordance with the procedures at § 332.8(g)(1) [§ 230.98(g)(1)]. In-lieu fee projects may be conducted by other parties on behalf of the in-lieu fee program sponsor, but the project must still be approved by the district engineer and the sponsor remains responsible for compliance with the terms of the instrument and the approved mitigation plan.

Section 332.8(j)(2) [§ 230.98(j)(2)] states that if a DA permit is required for the in-lieu fee project, then the permit should not be issued until the relevant provisions of the mitigation plan have been substantively determined. This will help ensure that the special conditions of the DA permit reflect the provisions of the mitigation plan, including the ecological performance standards, site protection mechanisms, and financial assurances.

(k) *Coordination of mitigation banking instruments and DA permit issuance.* Two commenters supported the provision in the rule that prohibits district engineers from issuing a permit authorizing the construction of a mitigation bank until all relevant provisions of the mitigation banking instrument have been substantively determined. One commenter suggested that this provision be modified so that the section 404 permit process could be concurrent with the review of the mitigation banking instrument. Another commenter said that delaying construction of mitigation banks would exacerbate financial problems that often occur shortly after the mitigation banking instrument is approved.

We have revised this paragraph to include the development of new compensatory mitigation project sites under an umbrella mitigation banking instrument. We have also modified this paragraph to state that the DA permit should not be issued until all relevant provisions of the mitigation plan have been substantively determined, including the ecological performance standards. District engineers are encouraged to conduct the evaluation for a DA permit to construct a mitigation

bank concurrently with the review process for the mitigation banking instrument. Delaying issuance of the DA permit until the content of the mitigation plan has been determined should help reduce costs by avoiding the need to modify the permit and its special conditions to accurately reflect the approved mitigation plan.

(l) *Project implementation.* We added a new § 332.8(l)(1) [§ 230.98(l)(1)] to clarify that a third-party mitigation sponsor must have an approved instrument before collecting funds from permittees to satisfy compensatory mitigation requirements for DA permits.

Section 332.8(l)(2) [§ 230.98(l)(2)] contains the text from the proposed rule, and it has been modified to include in-lieu fee programs. We have added § 332.8(l)(3) [§ 230.98(l)(3)] to stipulate that in-lieu fee program sponsors are responsible for the implementation, long-term management, and any required remediation of in-lieu fee projects, even in cases where those projects are conducted by other parties through requests for proposals or other contracting mechanisms.

(m) *Credit withdrawal from mitigation banks.* One commenter said that the rule should make it clear that for initial debiting of a percentage of the mitigation bank credits to occur, the mitigation bank needs to be constructed within a short time frame. Another commenter stated that if the rule allows mitigation banks to pre-sell credits with appropriate financial securities in place, the mitigation banks will be able to produce more environmental benefits. One commenter recommended adding a provision to limit the number of credits provided through establishment (creation) to no more than 25 percent of the total credits that will be produced by the mitigation bank, because establishment activities are less likely to succeed.

We have added a provision requiring initial implementation of the approved mitigation plan no later than the first full growing season after the date the first credit transaction occurs, to ensure timely construction of the mitigation bank. A purpose of the initial debiting is to provide a source of funds for conducting activities that support the continued development of the mitigation bank. We do not believe it would be appropriate to place a limit on the percentage of credits that can be produced through aquatic resource establishment activities. Such decisions should be made on a case by case basis by the district engineer, after consulting with the IRT. Likelihood of success is one of the factors that the district

engineer and the IRT will consider in making such decisions.

(n) *Advance credits for in-lieu fee programs.* We have added § 332.8(n) [§ 230.98(n)] to provide an analogous standard to the initial debiting for mitigation banks that is provided by § 332.8(m) [§ 230.98(m)]. The limitations in § 332.8(n) [§ 230.98(n)] are also intended to reduce risk and uncertainty for in-lieu fee programs and to ensure timely implementation of in-lieu fee projects. The goal of the requirements in this paragraph is not to place an arbitrary limit on the availability of advance credits within a service area, but rather to ensure that in-lieu fee programs do not sell more advance credits than they can reasonably deliver in the time frame specified in § 332.8(n)(4) [§ 230.98(n)(4)], generally 3 years.

This does not mean that the number of advance credits will necessarily be small. The number of advance credits authorized for an in-lieu fee program will be limited by service area, and specified in the in-lieu fee program instrument. District engineers will determine the number of advance credits allowed per service area, after consulting with the IRT in accordance with the procedures in § 332.8(d) [§ 230.98(d)]. The number of advance credits will be based on an evaluation of the compensation planning framework; the sponsor's past performance for implementing aquatic resource restoration, establishment, enhancement, and/or preservation activities in the proposed service area or other areas; and the projected financing necessary to begin planning and implementation of in-lieu fee projects. For example, in service areas with larger numbers of permitted impacts, and where a sponsor with demonstrated past successes is likely to produce a substantial amount of compensatory mitigation within the time frame specified in § 332.8(n)(4)

[§ 230.98(n)(4)], district engineers can authorize a higher number of advance credits. As another example, if an in-lieu fee program is being established by a sponsor that does not have a history of successfully implementing aquatic resource restoration, establishment, enhancement, and/or preservation projects, the district engineer may authorize a smaller number of advance credits to address potential risks. If an in-lieu fee program sells all of its advance credits and it appears likely that it can fulfill a higher number of advance credits within the required time frame, it may apply for an instrument modification to increase the number of available advance credits.

Section 332.8(n)(2) [§ 230.98(n)(2)] allows the district engineer to require the sponsor to provide confidential supporting information to determine an appropriate limit for advance credits. Such confidential supporting information may include locations of potential in-lieu fee project sites that have been identified by the sponsor. It may be necessary to keep this information confidential to lessen the risk of land speculation activities that could drive up the price of prospective in-lieu fee project sites before the sponsor can collect sufficient fees to secure those sites.

Each approved in-lieu fee project will have an approved mitigation plan, with a credit release schedule. As in-lieu fee projects are implemented by the in-lieu fee sponsor in accordance with approved mitigation plans, credits will be released as milestones in the credit release schedule are achieved. As released credits are produced, these must first be used to fulfill any advance credits that have been sold in the service area, after which any remaining released credits may also be sold. Once advance credits are fulfilled, an equivalent number of new advance credits will become available, which the sponsor may sell as advance credits. Therefore, the advance credit account is a rolling account, and when released credits are produced and previously sold advance credits are fulfilled, the advance credit account will have new advance credits available for sale, but not more than the advance credit limit specified in the instrument (see § 332.8(n)(3) [§ 230.98(n)(3)]).

Within a particular service area, § 332.8(n)(4) [§ 230.98(n)(4)] requires in-lieu fee program sponsors to secure in-lieu fee project sites and conduct the initial physical and biological improvements (e.g., grading and planting) by the third full growing season after the first advance credit for that service area is secured by a permittee. District engineers have the discretion to allow more time to plan and initiate in-lieu fee projects. An example of where this discretion may be appropriate would be a service area where credit demand is lower than expected, and the in-lieu fee program has not been able to collect enough funds to secure an in-lieu fee project site and plan and implement the compensatory mitigation project within the three growing season time period. The district engineer also has the discretion to direct the sponsor to use the funds in the in-lieu fee program account required by § 332.8(i) [§ 230.98(i)] to provide alternative compensatory mitigation to fulfill the

obligations created through the sale or transfer of advance credits. In rare circumstances, the district engineer may allow an in-lieu fee program to fulfill advance credits sold in one service area with released credits from a different service area. This should only occur in situations where the number of unfulfilled advance credits is small, the prospects for collecting more fees in the service area are poor, and the district engineer determines that fulfilling the advance credits in another service area will provide adequate compensation for the previously authorized impacts represented by the advance credits. This may happen in the case of state-wide in-lieu fee programs that have some remote service areas with very small numbers of authorized impacts.

We have added § 332.8(n)(5) [§ 230.98(n)(5)] to address compliance with in-lieu fee program instruments. District engineers will review the operations of approved in-lieu fee programs, to assess their performance. If an in-lieu fee program is not complying with the terms of its instrument, the district engineer may suspend credit sales or take other appropriate action until the sponsor complies with the terms of the instrument. This paragraph also makes it clear that permittees who secure credits from in-lieu fee programs are not responsible for in-lieu fee program compliance.

(o) *Determining credits.* (1) *Units of measure.* Several commenters said that credits should not be expressed as acres or linear feet, because those units do not adequately account for functions and values. Several commenters suggested that the agencies revise this section to relate back to the functional approach provided by the definition of "credit" in § 332.2 [§ 230.92]. Two commenters recommended that the agencies develop appropriate means for quantifying debits for stream impacts and compensatory mitigation credits for stream mitigation. One commenter suggested that the rule establish specific alternative quantitative measures other than acres or stream length units, and provide methods for tracking each of the wetland functions and values that result in credits or debits. Another commenter said that all mitigation bank credit transactions should be based on the accrual of functions, not on areal measures. One commenter stated that all functional assessment studies should be standardized within a watershed, and preferably across regions, districts, or states.

It is not always possible to quantify credits by functional or condition assessments, so there is a need to use other metrics, such as acres or linear

feet. The requirements in § 332.8(o) [§ 230.98(o)] are consistent with the definition of credit in § 332.2 [§ 230.92]. We have modified § 332.8(o)(1) [§ 230.98(o)(1)] to include "other suitable metrics" as potential units for quantifying credits or debits. Appropriate units for quantifying credits and debits will be determined by district engineers on a case-by-case basis. District engineers are encouraged to use science-based assessment methods for determining aquatic habitat condition, such as the index of biological integrity, where practicable. District engineers and other entities, such as scientists, may develop assessment methods for stream impacts and compensatory mitigation that could be used to quantify debits and credits. Stream assessment methods are likely to vary by geographic region, and may be developed locally. The development of an automated information system to track specific aquatic resource functions that are lost as a result of permitted activities, or are produced by compensatory mitigation projects, is outside the scope of this rule, however the Corps is working to improve its tracking of permitted impacts and compensatory mitigation. In many areas of the country, and for certain types of wetlands, there may not be functional or condition assessment methods available, so other measures such as acres, may need to be used to quantify credits and debits. We do not agree that functional assessment methods should be standardized within watershed, districts, or states. Functional assessment methods will vary among resource type, and sometimes by regional categories, such as ecoregion or physiographic region.

(o)(2) *Assessment.* Several commenters supported the use of functional assessments to determine credits. One commenter recommended that functional assessments should be required for all mitigation banks. Another commenter said that functional assessments are just one tool that could be used. Two commenters recommended that the rule prescribe specific methods for conducting functional assessments. One commenter supported the use of functional assessments for both credits and debits. According to one commenter, the agencies have had considerable difficulty successfully tracking compensatory mitigation by type and location (e.g., in-kind, on-site), and functional assessments would greatly increase the complexity of this process. One commenter stated that the district engineer should incorporate the most

current information on restoration and creation techniques and success rates, functional assessment, and other relevant factors when determining the number of credits a mitigation bank will provide. Another commenter recommended that value or socio-economic services should be included in mitigation crediting.

We have modified this paragraph by changing the heading to refer to "assessment" since we have amended the rule to include the use of other suitable metrics, such as condition assessments. The term "condition" is defined in § 332.2 [§ 230.92]. An index of biological integrity is an example of another type of assessment method that can be used to assess and describe the aquatic resource types that will be restored, established, enhanced, and/or preserved by mitigation banks or in-lieu fee programs.

We cannot revise this rule to require the use of functional assessments for all mitigation banks or in-lieu fee programs. In some areas of the country, appropriate functional assessments are not available. Condition assessments or other types of assessment methods may be more appropriate in some regions. The new automated information system being used in the Corps Regulatory Program (ORM 2.0) will help improve the tracking of compensatory mitigation projects by type and location. This automated information system is a spatially-enabled system that will allow tracking of the locations of impact sites and compensatory mitigation sites, as well as the aquatic resource types that are present at impact sites or are required as compensatory mitigation. District engineers, in consultation with the IRT, will evaluate compensatory mitigation proposals for mitigation banks and in-lieu fee programs, to determine the number of credits that are likely to be provided. This evaluation should include the type of compensatory mitigation being conducted (e.g., reestablishment, rehabilitation), the potential for success, the type of aquatic resource being provided, and other relevant aspects of the mitigation bank or in-lieu fee project. Although the services provided by aquatic resource functions are important to consider when determining the type and location of compensatory mitigation projects, there are few methods available for assessing services. Therefore, in most cases consideration of services will be conducted through best professional judgment. As discussed elsewhere in this preamble, there are numerous difficulties in assessing aquatic resource values, and

this rule focuses on functions and services.

(o)(3) *Credit production.* We have modified this paragraph to refer to pre- and post-compensatory mitigation project site conditions, since this section applies to mitigation banks and in-lieu fee projects. We have also changed this paragraph to require the use of functional or condition assessments, or other suitable metrics, to determine the number of credits produced by a mitigation bank or in-lieu fee project. In areas where appropriate assessment methods are not available, or practicable to use, other suitable metrics such as acres or linear feet may be used. We have removed the last two sentences of the proposed text of this paragraph, which stated that, for enhancement activities, the number of credits should only reflect those enhancements produced by the construction of the mitigation bank. These two sentences are no longer necessary, because of the other changes to this paragraph. However, it is still the case that credits for enhancement activities should only include the “functional lift” generated by the activity.

(o)(4) *Credit value.* We have not changed this paragraph in the final rule.

(o)(5) *Credit costs.* We added this provision to clarify that the cost of compensatory mitigation credits provided by a mitigation bank or an in-lieu fee program shall be determined by the sponsor. Section 332.8(o)(5)(ii) [§ 230.98(o)(5)(ii)] requires in-lieu fee programs to use full cost accounting methods, so that the cost per unit credit includes the expected costs associated with the restoration, establishment, enhancement, and/or preservation of aquatic resources in the service area. This paragraph also states that the cost per unit credit for in-lieu fee programs should factor in contingency costs, to address uncertainties in construction and real estate expenses. The cost per unit credit must also reflect resources needed for long-term management and protection of the in-lieu fee project site, as well as any financial assurances that may be necessary to ensure successful completion of those projects. District engineers can evaluate the fee structure of an in-lieu fee program to determine whether the sponsor is complying with this provision. Compliance with these requirements is necessary to ensure that an in-lieu fee program generates sufficient funds so that it can select and implement compensatory mitigation projects in a timely manner. One concern raised about in-lieu fee programs in the past is that they have sometimes underpriced credits, with the result that they may not be able to

deliver the required mitigation. This provision is intended to ensure that in-lieu fee programs develop realistic price schedules, while still leaving determination of credit prices to the program sponsor, rather than the Corps.

(o)(6) *Credits provided by preservation.* One commenter said that preservation and/or enhancement should only be considered in combination with restoration, to ensure no net loss on an acreage basis. A commenter said that credits associated with preservation should be released as soon as possible, since functional capacity is not an issue. One commenter stated that preservation credits should be sparingly granted and should never allow preservation of landscape features of a different type than those adversely affected by the permitted activity.

The regulations governing the use of preservation as compensatory mitigation are provided in § 332.3(h) [§ 230.93(h)]. The use of aquatic resource preservation to provide compensatory mitigation will be determined by the district engineer in accordance with § 332.3 [§ 230.93]. When evaluating the Corps Regulatory Program’s contribution to the Administration’s wetlands goals, it is important to consider the compensatory mitigation requirements imposed on permittees, since the compensatory mitigation requirements for a specific DA permit may consist of a package of compensation activities. In other words, a permittee could provide the required compensatory mitigation through more than one compensation type. When a permittee proposes to use preservation to provide compensatory mitigation, § 332.3(h)(2) [§ 230.98(h)(2)] requires that the preservation be done, to the extent appropriate and practicable, in conjunction with aquatic resource restoration, establishment, and/or enhancement activities. For example, a permittee may provide some of the required compensatory mitigation through a permittee-responsible restoration project, and provide the remaining compensatory mitigation by securing preservation credits from an in-lieu fee program or a mitigation bank. Preservation may also be used as the only form of compensatory mitigation, at the discretion of the district engineer, but this should only be allowed where preservation of specific resources has been identified as a high priority using a watershed approach, and in this case higher compensation ratios should be required.

When using a watershed approach, the district engineer may determine that preservation of out-of-kind aquatic resources is an appropriate means of providing compensatory mitigation.

Two commenters said that the proposed rule is unclear whether preservation is to be applied to an entire mitigation bank, above and beyond any establishment, enhancement, or restoration that is conducted to produce credits at that mitigation bank, or whether it only applies to those areas of the mitigation bank where preservation of existing aquatic resources will occur.

The long-term protection of compensatory mitigation project sites, including mitigation banks and in-lieu fee programs is addressed in § 332.7(a) [§ 230.97(a)]. This is a different issue that the use of preservation as compensatory mitigation. As defined in § 332.2 [§ 230.92], preservation is the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. If there are existing aquatic resources on a mitigation bank site or an in-lieu fee project site, and those aquatic resources will not be enhanced or rehabilitated to produce enhancement or restoration credits, then the district engineer may determine that there are preservation credits being provided, once the appropriate site protection mechanisms are implemented.

We have modified § 332.8(o)(6) [§ 230.98(o)(6)] of the final rule to include other suitable metrics as a means of quantifying preservation credits. We have also added in-lieu fee programs to this paragraph, since the final rule includes those programs as a form of third-party mitigation. We have removed the reference to § 332.3(c) [§ 230.93(c)] because the subsection on the watershed approach does not explicitly discuss watershed functions.

(o)(7) *Credits provided by riparian areas, buffers, and uplands.* Several commenters supported the use of riparian areas, buffers, and uplands to provide credits. One commenter said that buffer credits should only be included if the minimum one-to-one mitigation ratio is increased and the proportion of enhancement and rehabilitation as a component of mitigation is strictly limited. One commenter suggested that buffers in and of themselves should not be used to generate mitigation credits unless they are above and beyond what is required and will contribute substantially to habitat connectivity. Several commenters suggested that the agencies revise this section to relate back to the functional approach provided by the definition of the term “credit” in § 332.2 [§ 230.92]. Several commenters stated that mitigation credits provided through riparian areas, buffers, or uplands should not be expressed as acres or linear feet because those units do not

adequately account for their associated functions and values. Three commenters requested more detailed guidance regarding how and when mitigation credits can be given for buffers.

Section 332.3(f)(1) [§ 230.93(f)(1)] states that the amount of the required compensatory mitigation must be, to the extent appropriate and practicable, sufficient to replace lost aquatic resource functions. In cases where a mitigation bank or in-lieu fee project has released riparian area, buffer, or upland credits, district engineers will determine the appropriateness of those credits in fulfilling the requirements of § 332.3(f)(1) [§ 230.93(f)(1)]. In general, third-party mitigation credits provided by riparian areas, buffers, and uplands will supplement the credits produced through aquatic resource restoration, establishment, enhancement, and/or preservation activities, to provide a compensatory mitigation package that is appropriate for offsetting the permitted losses of aquatic resource functions. As stated in § 332.8(o)(7) [§ 230.98(o)(7)], non-aquatic resources can only be used for compensatory mitigation when they are essential for maintaining the ecological viability of adjoining aquatic resources.

Riparian areas are critical components of stream ecosystems, as well as other open waters. Riparian areas provide important ecological functions, and directly influence the functions of streams, especially in terms of habitat quality and water quality. Therefore, it is important for mitigation banks and in-lieu fee projects containing streams and other open waters to include riparian areas as part of the overall compensatory mitigation project. In such cases, compensatory mitigation credits should also be awarded to those riparian areas. Buffers next to wetlands, and uplands that provide habitat connectivity and other ecological functions, may also generate compensatory mitigation credits because of their contribution to the ecological functions of the overall mitigation bank or in-lieu fee project site.

We have revised the definition of "credit" in § 332.2 [§ 230.92] to be consistent with this paragraph. Although the definition of "credit" refers to the accrual or attainment of aquatic functions at a compensatory mitigation site, riparian areas, buffers, and uplands are often critical for maintaining the integrity and sustainability of aquatic resource functions. Therefore, compensatory mitigation credits can be produced through the restoration, establishment, enhancement, and/or preservation of

riparian areas, buffers, and uplands that support aquatic resources.

In areas where there are no appropriate assessment methods available, or the available methods are impractical to use, acreage and linear measures may be the only means for quantifying the credits produced through the restoration, establishment, enhancement, and/or preservation of riparian areas, buffers, and uplands. District engineers will determine on a case-by-case basis when buffers are essential to maintaining the ecological viability of adjoining aquatic resources, and thus eligible to produce compensatory mitigation credits.

We have modified § 332.8(o)(7) [§ 230.98(o)(7)] of the final rule to include other suitable metrics as a means of quantifying credits for buffers, riparian areas and uplands. We have also added in-lieu fee programs to this paragraph, since the final rule includes those programs as a form of third-party mitigation. We have removed the reference to § 332.3(c) [§ 230.93(c)] because the subsection on the watershed approach does not explicitly discuss watershed functions.

(o)(8) *Credit release schedule.* One commenter recommended that the rule include a provision to ensure that mitigation credit releases are equivalent for all mitigation providers. One commenter said that § 332.8(k)(7)–(8) [§ 230.98(k)(7)–(8)] of the proposed rule should be revised to apply equivalent credit release standards for all sources of mitigation, not just mitigation banks. This commenter also recommended that the rule specify an initial release amount so that the amount does not vary significantly across the country as it does today. One commenter suggested that credit releases prior to the achievement of any performance standards should be restricted to no more than 15 percent of the total estimated credits to be generated by a mitigation bank. Another commenter recommended that the agencies remove the provision that district engineers must approve credit releases because the Corps has the monitoring period to ensure compliance with performance standards and has the ability to prevent future credit sales until satisfactory remediation takes place.

In the final rule, we have developed similar standards for credit releases for mitigation banks and in-lieu fee programs that take into account the fundamental differences between these two forms of third party mitigation. Similar to the credit release schedule for a mitigation bank site, each approved in-lieu fee project will have a credit release schedule. The credit release

schedule for an in-lieu fee project will be based on its approved mitigation plan. In terms of credit release schedules, the difference between mitigation banks and in-lieu fee programs lies with the initial debiting for mitigation banks provided under § 332.8(m) [§ 230.98(m)] and the advance credits allowed for in-lieu fee programs under § 332.8(n) [§ 230.98(n)]. For permittee-responsible mitigation, it is usually not feasible or practicable to require advance compensatory mitigation, although we are reducing the risks associated with permittee-responsible mitigation by requiring, to the maximum extent practicable, implementation of those compensatory mitigation projects in advance or concurrent with the activity causing the authorized impacts (see § 332.3(m) [§ 230.93(m)]). We are also allowing district engineers to not require additional compensation for temporal losses when project sponsors initiate compensation prior to or concurrent with permitted impacts, as a further incentive for timely mitigation.

We do not believe it would be appropriate to specify a particular amount for the initial debiting for mitigation banks. There are a variety of factors that can affect the initial debiting, such as the type of compensatory mitigation being done at the mitigation bank and the assurances that are required to be in place for the initial debiting to occur. It is necessary for district engineers to approve credit releases, to ensure that all applicable criteria are met, and that those credits are acceptable for providing compensatory mitigation for DA permits.

One commenter supported the principle underlying § 332.8(k)(7) [§ 230.98(k)(7)] of the proposed rule, which ties credit release to performance-based milestones, but has experienced disparate practices across the country.

The performance-based milestones that will be used to establish credit release schedules will be based on the specific attributes of the aquatic resource restoration, establishment, enhancement, and/or preservation activity that is being conducted to generate credits at the mitigation bank or in-lieu fee project. Section 332.1(e) [§ 230.91(d)] states that where appropriate, district engineers shall account for regional characteristics when determining performance standards for compensatory mitigation projects. This principle applies to mitigation banks and in-lieu fee projects, as well as permittee-responsible mitigation.

We have revised § 332.8(o)(8) [§ 230.98(o)(8)] to clarify the requirements for credit release schedules. Subparagraph (i) discusses general considerations for credit release schedules. We have removed considerations of initial capital costs needed to establish a mitigation bank, since the credit release schedule is to be based on an approved mitigation plan and its ecological performance standards. We have added subparagraph (ii) to this subsection to describe the credit release schedule for a single-site mitigation bank. We have added subparagraph (iii) to this subsection to address credit release schedules for in-lieu fee projects and umbrella mitigation bank sites, since in-lieu fee projects and umbrella mitigation bank sites are usually identified after the instrument is approved.

In the second sentence of § 332.8(o)(8)(i) [§ 230.98(o)(8)(i)], the final rule states that the credit release schedule should reserve a significant share of the total credits for release only after full achievement of ecological performance standards. What constitutes a significant share is at the discretion of the district engineer, after consulting with the IRT and may vary depending on the nature of the mitigation compensatory project and the risks and uncertainty associated with successful completion of that mitigation project. "Significant share" does not necessarily mean a majority. Rather, for the purposes of this paragraph, the term "significant share" refers to a proportion of projected credits that will provide the sponsor with a significant incentive to complete a mitigation bank or in-lieu fee project and ensure that all performance standards are achieved.

*(o)(9) Credit release approval.* Two commenters recommended that § 332.8(k)(8) [§ 230.98(k)(8)] of the proposed rule establish a time frame for the district engineer to make a final decision on credit release. One commenter said that 45 to 60 days is a more appropriate time frame for the IRT to review a request for credit release. According to another commenter, if the district engineer fails to approve or deny the release of credits within 45 days of submittal of appropriate documentation, the credit release should be deemed approved. One commenter stated that the Corps does not have enough staff to make site visits to determine if the appropriate milestones for a release of credits have been achieved.

We have added a time frame for district engineers to make decisions on requests for credit releases. The time frame is based on the date the comment period for the IRT ends. The last

sentence of § 332.8(o)(9) [§ 230.98(o)(9)] states that district engineers shall make decisions within 30 days of the end of the comment period. The IRT must provide comments within 15 days of receiving documentation showing that appropriate milestones have been achieved, unless the district engineer determines that a site visit is necessary to approve credit releases. In this case, the IRT members have 15 days from the date of the site visit to provide their comments. The timing for site visits may be affected by a variety of factors, such as seasonal conditions that may impair the ability of the district engineer and the IRT members to evaluate the ecological conditions at the mitigation bank site or the in-lieu fee project site. We have revised § 332.8(o)(9) [§ 230.98(o)(9)] to require district engineers to schedule site visits as soon as it is practicable to do so. The need to conduct site visits to evaluate requests for credit releases is at the discretion of the district engineer. The rule allows a total of 45 days for the district engineer to make a decision after distributing documentation to the IRT, or after the site visit, whichever is later. We believe this is a reasonable time frame that appropriately balances the need of the project sponsor for timely credit releases with the need to ensure that performance based milestones have indeed been met before credits are released.

Two commenters said that credits should not be released from a mitigation bank until it is functioning in a manner that replaces the functions and values of the impacted aquatic resource. One commenter said that limiting the time and availability of releases of credits significantly diminishes the value of the mitigation bank and provides significant disincentives to investing in mitigation banks. One commenter suggested that, if projected mitigation credits are released before a performance milestone is reached, the purchaser of the credits should agree to assume responsibility for providing the compensatory mitigation, in the event of a default by the sponsor of the mitigation bank.

As stated in § 332.8(o)(8) [§ 230.98(o)(8)], credit releases are to be tied to performance based milestones, and a significant share of credits should not be released until the ecological performance standards are fully achieved. Linking credit release approval to the functions and values of the aquatic resources impacted by activities authorized by DA permits is impractical to implement. Credit releases must be tied to achievement of the performance based milestones of a mitigation bank site or an in-lieu fee

program site. The number and type of credits that a permittee is required to secure from a mitigation bank or in-lieu fee program sponsor is to be determined by the district engineer at the time of permit issuance, after considering the functions that will be lost as a result of the permitted activity.

The responsibility for providing the required compensatory mitigation is transferred from the permittee to the third-party mitigation sponsor after the permittee takes the necessary steps to secure those credits and the district engineer has received the appropriate documentation in accordance with § 332.3(l) [§ 290.93(l)]. If the mitigation bank or in-lieu fee project does not achieve its performance milestones or standards, the district engineer will take appropriate action, which may include suspending credit sales or terminating the instrument (see § 332.8(o)(10) [§ 230.98(o)(10)]).

*Adjustments to credit totals and release schedules.* In § 332.8(k)(9)(i) [§ 230.98(k)(9)(i)] of the proposed rule, we had a provision that would have allowed a sponsor to submit documentation to the district engineer to request adjustments to credit totals and credit release schedules for mitigation banks that develop aquatic resource functions substantially in excess of the credit totals and credit release schedules specified in the original approved instrument.

Two commenters objected to this proposed provision, stating that it could create an incentive for setting low performance standards and result in credits from the same acreage being sold as compensatory mitigation for more than one project. Two commenters did not agree that there could be a reasonable circumstance in which "excess" credits could be generated by a mitigation bank. According to one commenter, this provision would be difficult to apply fairly since the assessment of whether a compensatory mitigation project site has merely met its anticipated aquatic functions or substantially exceeded them could be quite contentious and subjective. Two commenters recommended that "acres and linear feet" not "functions" should be the basis of credit adjustments because most areas of the country have not developed function assessment methodologies. One commenter said that an administrative appeals process should be available for any adjustments of credits.

In response to these comments, and after considering the potential difficulties in implementation, we have removed this provision from the final rule. In general, the performance

standards for a mitigation bank or in-lieu fee project should reflect high functioning resources. Thus, it is unlikely that the functional lift provided at a site will “exceed” what is required to meet performance standards. The agencies agree that trying to identify “excess” functional lift would be contentious and potentially arbitrary. If a mitigation bank site or an in-lieu fee project site results in substantially more acres or linear feet of established, enhanced, restored or preserved aquatic resource than was originally anticipated when the mitigation plan and associated credit release schedule were approved, the sponsor can request a modification in accordance with the procedures at § 332.8(g) [§ 230.98(g)]. As discussed elsewhere in this preamble, we have not provided an administrative appeal process for third-party mitigation activities.

*(o)(10) Suspension and termination.* Two commenters said that the district engineer should not suspend credit sales for credits already released. One commenter stated that if a mitigation bank is not meeting performance standards or is not in compliance with monitoring requirements, reduction or suspension of credits should be a mandatory penalty, to provide an incentive for mitigation bank sponsors to monitor their sites.

We have modified the proposed § 332.8(k)(9)(ii) [§ 230.98(k)(9)(ii)] so that it applies to mitigation banks and in-lieu fee programs. We have also amended this paragraph to state that the district engineer will take appropriate action if the mitigation bank or in-lieu fee program is not meeting performance standards or complying with the terms of its instrument. Appropriate action may include suspending credit sales, adaptive management, decreasing available credits, utilizing financial assurances, or terminating the instrument.

Except for advance credits for in-lieu fee programs, credit releases should not occur unless the mitigation bank or in-lieu fee project is meeting the applicable milestones specified in the credit release schedule. If those milestones are not being satisfied, the credits do not become available for fulfilling the compensatory mitigation requirements for DA permits. In such cases, adaptive management or other measures may be required to achieve the performance that will result in a credit release. The district engineer needs some flexibility to determine the appropriate response when performance standards are not being met on schedule. In some cases, a little more time may be adequate, in other cases more active adaptive

management may be needed. District engineers will take appropriate action to ensure compliance with monitoring requirements, which, unlike ecological performance standards, are under the full control of the project sponsor. We believe that the provisions at § 332.8(o)(10) [§ 230.98(o)(10)] contain appropriate incentives to ensure performance of third-party mitigation and associated requirements (e.g., monitoring).

*(p) Accounting procedures.* To help clarify the requirements for tracking credit production and credit transactions among sponsors and permittees, we have added a new paragraph to this section. Section 332.8(p)(1) [§ 230.98(p)(1)] contains the requirements that were in § 332.8(l)(1) [§ 230.98(l)(1)] of the proposed rule. It requires mitigation bank sponsors to establish and maintain ledgers to account for all credit transactions. As each approved credit transaction occurs, the sponsor must notify the district engineer. This will help ensure that a mitigation bank credit is not sold or transferred to more than one permittee.

Since this rule includes in-lieu fee programs, we have added § 332.8(p)(2) [§ 230.98(p)(2)] to require in-lieu fee program sponsors to establish and maintain annual report ledgers, as well as individual ledgers for tracking released credits provided by in-lieu fee projects. Annual report ledgers must be done in accordance with the requirements for in-lieu fee program accounts at § 332.8(i)(3) [§ 230.98(i)(3)].

*(q) Reporting. (1) Ledger account.* Two commenters requested that the rule clarify: (1) The information included in the annual report compared to the information included in the updated ledger, and (2) the role of the IRT in reviewing the annual report. One commenter suggested that the ledger account include a description of the type and location of wetlands filled for all credit transactions. One commenter said that ledger accounts should be standardized for easy comparison across mitigation banks.

To assist in the accounting procedures required by § 332.8(p) [§ 230.98(p)], § 332.8(q)(1) [§ 230.98(q)(1)] describes the information required for ledger reports. Ledger reports must show the beginning and ending balances of available credits and permitted impacts (i.e., debits) for each resource type, all credit additions and subtractions, and other changes in credit availability, such as the release of additional credits or the suspension of credit sales. Members of an IRT can review ledger reports, and if they have concerns over the use of credits, they may invoke the procedures

in § 332.8(s) [§ 230.98(s)]. This rule addresses the minimum requirements for ledgers. District engineers can develop ledger templates for use in their districts.

*(q)(2) Monitoring reports.* Three commenters stated that the rule should require annual monitoring reports. One commenter believed that monitoring reports for mitigation banks should be required at least after one, three, and five years. Several commenters suggested that monitoring reports should be made available for public review. Other commenters stated the need for built-in, agreed-upon enforcement penalties for failure to submit accurate, timely, and complete reports as required by the plan and the permit. One commenter asked for clarification for the actions taken in the event of a bankruptcy. One commenter supported the standardization of monitoring reports, including attachments of the raw data so that results can be verified, or more easily checked in the field.

Monitoring requirements, including the frequency for providing monitoring reports to the district engineer and the IRT, will be determined on a case-by-case basis and specified in either the instrument or approved mitigation plans. As stated in § 332.6(c)(3) [§ 230.96(c)(3)], monitoring reports must be provided to interested agencies and the public upon request. Failure to submit required monitoring reports may result in suspension of credit sales or termination of the instrument (see § 332.8(o)(10) [§ 230.98(o)(10)]). The required content of monitoring reports for mitigation banks and in-lieu fee projects will be determined by district engineers, in consultation with the IRTs. Monitoring report templates can be developed by district engineers, to provide a standard format for those documents.

*(q)(3) Financial assurance and long-term management funding report.* To improve the oversight of financial assurances and long-term management funding, we have added a provision to this rule that allows district engineers to require sponsors to provide annual reports showing balances of accounts for financial assurances and long-term management. These reports should also document the status of financial assurances, including when they might expire.

*(r) Use of credits.* Two commenters recommended that the rule include language clarifying that credits that are withdrawn from a mitigation bank, but are not used because the permitted impacts did not occur, may be reinstated into the mitigation bank. One

commenter did not agree that any authorized activity should be eligible to use a mitigation bank to compensate for unavoidable impacts to aquatic resources. One commenter said that selling mitigation credits by wetland type does not provide any additional environmental benefit and will lead to confusion.

We have revised this paragraph to clarify that it is the district engineer's decision whether to allow the use of credits from mitigation banks or in-lieu fee programs to provide compensatory mitigation for a particular activity authorized by a DA permit. If a permittee secures third-party credits from a sponsor, but decides not to proceed with the authorized work, he or she should notify the district engineer. It is at the sponsor's discretion whether to buy back any unused credits. Any such transactions should be documented in the ledger reports required by § 332.8(q)(1) [§ 230.98(q)(1)]. Categorizing credits by aquatic resource type helps account for in-kind mitigation versus out-of-kind mitigation. Other metrics can also be used to track credit types. The instrument should specify how credits are to be categorized for accounting purposes for a mitigation bank or in-lieu fee program.

*(s) IRT concerns with use of credits.* We have modified this paragraph to include in-lieu fee programs. We have added a sentence to the end of this paragraph to stipulate that nothing in these regulations governing mitigation banks and in-lieu programs limits the authorities designated to IRT agencies under existing statutes or regulations.

*(t) Site protection.* One commenter stated that the rule should not require aquatic resources replaced by the mitigation bank to be afforded long-term protection through "real estate instruments." Another commenter said that all compensatory mitigation projects that require a real property protection instrument should also require a long-term funding mechanism to ensure compliance monitoring of the long-term protection instrument.

The goal of the rule is to ensure permanent protection of all compensatory mitigation project sites. Specifically the rule states that the aquatic habitats, riparian areas, buffers, and uplands that comprise the overall compensatory mitigation project must be provided long-term protection through real estate instruments or other available mechanisms. As stated in the rule, any provisions necessary for long-term management, including compliance monitoring, must be addressed in the original permit or instrument.

We added this section to the final rule to clarify that real estate instruments, management plans, or other long-term protection mechanisms used for long-term protection must be finalized before any mitigation bank credits can be released. For in-lieu fee programs, real estate instruments, management plans, or other long-term protection mechanisms used for long-term protection must become finalized before any credits can be released for individual projects and used to fulfill advance credits or sold to permittees.

*(u) Long-term management.* One commenter noted that many long-term management organizations will not commit to managing a compensatory mitigation site until the site is well established, which may be five years after the instrument is signed. Therefore, the party responsible for the long-term management may not be known at the time the instrument is approved. This commenter said that the rule should include a sentence that allows for flexibility in when this party is identified.

Section 332.8(u)(2) [§ 230.98(u)(2)] states that the instrument may contain provisions allowing the sponsor to transfer long-term management responsibilities to another party, such as a public agency, non-governmental organization, or private land manager, with approval from the district engineer. Therefore, this rule provides the flexibility to change the party responsible for the required long-term management.

In § 332.8(u)(1) [§ 230.98(u)(1)] we have added language clarifying that for umbrella mitigation banks and in-lieu fee programs, the legal mechanism and the party responsible for long-term management of the compensatory mitigation project site must be documented in the approved mitigation plans. We have also added a sentence to the end of this paragraph to state that the long-term management plan should include a description of long-term management needs and identify the funding mechanism that will be used to meet those needs.

We have added § 332.8(u)(3) [§ 230.98(u)(3)], which stipulates that funding mechanisms for long-term management must be described in the instrument or approved mitigation plan. Section 332.8(u)(4) [§ 230.98(u)(4)] addresses the acquisition and protection of water rights. For umbrella mitigation banks and in-lieu fee projects, the acquisition and protection of water rights is to be documented in the approved mitigation plans.

*(v) Grandfathering of existing instruments.* Two commenters

supported the proposed grandfathering for existing mitigation banks. Four commenters, however, said that the rule should provide a schedule whereby all existing mitigation banks will be brought into compliance with the new guidelines. According to one commenter, five years may be too short a time period for in-lieu fee programs to effectively transition to a mitigation bank. Another commenter said that the timeline is too restrictive and requests that it be extended.

For mitigation banks, § 332.8(v)(1) [§ 230.98(v)(1)] states that mitigation banks approved before July 9, 2008 may continue to operate under the terms of their existing instruments. However, any modification of that instrument must be consistent with the terms of this part. Such modifications include the expansion of an existing mitigation bank site or the addition of another type of credits to a mitigation bank.

For in-lieu fee programs, § 332.8(v)(2) [§ 230.98(v)(2)] requires that all in-lieu fee programs approved on or after July 9, 2008 must meet the requirements of this part. For in-lieu fee programs operating under instruments approved before July 9, 2008, those programs may continue to operate under their instruments for two years after the effective date of this rule. The purpose of the grandfathering period is to allow time for the in-lieu fee program to conform its instrument to the requirements of today's rule. The district engineer may, in consultation with the IRT, extend the grandfathering period by up to an additional three years where there is good cause, and the in-lieu fee program is providing appropriate compensatory mitigation in a timely manner. An example of good cause would be an extension to allow an existing in-lieu fee program that supports a programmatic general permit or a regional general permit to continue to operate until that general permit expires. We have also added a provision allowing a project constructed under the terms of a previous instrument to continue operating under those terms indefinitely, provided the district engineer determines that the project is providing appropriate mitigation substantially consistent with the terms of this part. This provision is parallel to the grandfathering allowed for existing mitigation banks. The agencies see no value in requiring the terms for a previously constructed in-lieu project to be revised in this situation.

#### Proposed Elimination of In-Lieu Fee Programs

Many commenters, including the representatives of 29 states, stated that



in-lieu fee programs should not be eliminated. A number of commenters said that elimination of in-lieu fee programs would decrease the number of mitigation options and thus lead to less compensatory mitigation. Many commenters stated that in certain areas, especially in rural and coastal regions, the West, and Alaska, there are few mitigation banks and little incentive to establish mitigation banks. In these areas, in-lieu fee programs are the only available option for compensatory mitigation. Many commenters said that in-lieu fee programs offer more flexibility in site selection and can target specific resources, enhancing functions that are outside of a real estate boundary. One commenter also noted that if compensatory mitigation is to be based on a watershed approach, in-lieu fee programs will always be needed in watersheds that do not have mitigation banks. Several commenters said that the under-performance of many current in-lieu fee programs is the result of the structure of existing policies rather than the compensatory mitigation mechanism, and that these problems could be alleviated by making specific and targeted improvements and establishing and enforcing consistent program standards. Some commenters stated that by eliminating in-lieu fee programs, the proposed rule is inappropriately promoting for-profit mitigation banking. Instead of eliminating in-lieu fee programs, these commenters said that equivalent standards should be established that are based on ensuring successful and sustainable aquatic resource functions, not economic viability. Five commenters suggested that the rule stipulate that where the service areas of an in-lieu fee program and a mitigation bank overlap, the mitigation bank should have preference as a credit provider.

After carefully considering the comments received in response to the proposed rule, including the responses to the questions we posed in the preamble to the proposal, we have retained in-lieu fee programs as a separate mechanism for providing compensatory mitigation for DA permits. Several commenters provided suggested regulations for in-lieu fee programs, and we have evaluated that language as we developed this final rule. Where the in-lieu fee program regulations differ from the rules for mitigation banks, we believe we have adopted standards and criteria that will result in successful in-lieu fee programs that will provide compensatory mitigation in a timely manner, with a

high level of accountability. We also recognize that in-lieu fee programs can actively support a watershed approach to compensatory mitigation, and can help advance goals for protecting and restoring aquatic resources within watersheds, especially in areas where there are no mitigation banks. To further this goal, we have added a requirement for in-lieu fee programs to develop a compensation planning framework as part of their instrument that identifies watershed needs and priorities and explains how the in-lieu fee program will target its mitigation activities to those needs and priorities. In § 332.3(b) [§ 230.93(b)], we have established a hierarchy for district engineers to consider compensatory mitigation options, with a preference for mitigation bank credits because those credits are usually more developed at the time the impacts to waters of the United States authorized by the DA permit are expected to occur.

Other commenters supported the elimination of in-lieu fee programs as proposed in the rule. Several commenters said that in-lieu fee arrangements should not have different standards than mitigation banks and permittee-responsible mitigation. One commenter suggested that mitigation providers currently operating under in-lieu fee arrangements should be required to submit applications to become mitigation banks within one year of the final rule. Those in-lieu fee programs that do not submit a proposal on time could no longer accept fees; those that do submit a proposal could continue to operate until two years after the promulgation of the final rule. Some commenters also noted that, unlike in-lieu fee programs, mitigation banks are self-implementing and have a financial incentive to perform. One commenter stated that mitigation banks are more suitable to handle compensatory mitigation needs and have a more sufficient mechanism to ensure accountability and adequate financial assurances and measurable performance standards. Others said that the quality of land used in in-lieu fee programs is poor and that the suspension of such programs would improve the performance and accountability of the mitigation program. Some commenters stated that in-lieu fee programs are not adequately capitalized to complete meaningful projects and must use funds for administrative and operations costs. Another commenter stated that cost estimates for in-lieu fee programs are almost always too conservative and seldom cover additional expenses incurred in the administration of the in-

lieu fee program, maintenance, and management of aquatic resources, or correction of failures.

After evaluating the comments received in response to the proposed rule, we have determined that it is not appropriate to require in-lieu fee programs to be modified to comply with exactly the same standards as mitigation banks. The fundamental difference between mitigation banks and in-lieu fee programs is timing, and the difference in timing is due to the need for in-lieu fee programs to accumulate funds before they can secure sites, design and plan aquatic resource restoration, establishment, enhancement, and/or preservation activities, and implement those activities. Unlike commercial mitigation bank sponsors, in-lieu fee program sponsors usually do not have funds available to secure and develop prospective compensatory mitigation projects. Because mitigation bank projects are usually further along in implementation than in-lieu fee programs or permittee-responsible mitigation, we have established a preference for the use of mitigation bank credits at § 332.3(b)(2) [§ 230.98(b)(2)]. However, in-lieu fee programs can provide other benefits that we believe justify allowing them to operate under slightly different requirements. In particular, they can perform more thorough watershed planning than is often done by banks, and may be able to better target their activities to watershed needs and priorities. There is no basis for the assertion that land used for in-lieu fee projects is of poor quality. There are successful in-lieu fee programs operating in different areas of the country, and we have looked at how those programs are structured when writing this final rule. To provide greater accountability in the use of funds collected in advance of project approval and construction, we have added a provision requiring in-lieu fee programs to segregate funds collected from permittees in a program account, with provisions in the instrument that will allow the district engineer to redirect those funds to other mitigation activities if the program does not provide the required mitigation in a timely manner. This rule acknowledges that there are administrative costs associated with operating in-lieu fee programs, and a small percentage of fees collected from permittees (to be determined by the district engineer and specified in the instrument) can be used to defray those administrative costs.

Commenters suggested various time frames for the proposed phase-out of in-lieu fee programs: One year, two years,

three years, and five years. One commenter said current in-lieu fee program instruments should be allowed to continue as long as is necessary to fully fund already established and approved projects. Another commenter stated that stream in-lieu fee programs should take longer to phase out. Another commenter proposed that the phase-out period include a proportional reduction of activity of in-lieu fee programs on the basis of the percentage of money collected as the time nears for the program to end.

Section 332.8(v)(2) [§ 230.98(v)(2)] addresses the transition for current in-lieu fee programs to the requirements in this rule. It provides 2 years, with a possible extension of up to 3 additional years, for in-lieu fee programs to obtain an approved instrument that meets the requirements of this rule. It also allows projects already constructed under the terms of a prior instrument to continue operating under those terms, provided the project is providing appropriate mitigation that is substantially consistent with the requirements of the rule. We are retaining in-lieu fee programs, so § 332.9 [§ 230.99] has not been included in this final rule.

One commenter proposed that the rule include provisions requiring data collection on the part of in-lieu fee programs so regulators can determine if these programs are functioning in an equitable manner.

The rule significantly expands the tracking and reporting requirements for in-lieu fee programs in order to improve in-lieu fee program performance and accountability (see § 332.8(i) [§ 230.98(i)]).

#### EPA Regulations at 40 CFR Part 230

##### *40 CFR 230.12 Findings of Compliance or Non-Compliance With the Restrictions on Discharge Referencing New Subpart J*

We received no comments, and therefore this provision is adopted as proposed.

##### *40 CFR Part 230 Subpart H—Actions To Minimize Adverse Effects*

We received no comments, and therefore this provision is adopted as proposed.

##### *40 CFR 230.75 Actions Affecting Plant and Animal Populations, Conforming Changes Referencing New Subpart J*

We received no comments, and therefore this provision is adopted as proposed.

#### Comments on Administrative Requirements

One commenter stated that if the rule adopts a broad definition of watershed plan, it would allow guidance documents that may not have been through a regulatory review process to become federal permit requirements. The commenter believes that this would violate the Administrative Procedure Act (APA).

Watershed plans prepared for the purpose of implementing a watershed approach to compensatory mitigation are not a federal permit requirement, either because of this rule, or through special conditions of DA permits. The final rule states that district engineers will use the watershed approach to guide compensatory mitigation decisions, to the extent appropriate and practicable. Mitigation decisions are based on a number of factors in addition to the watershed approach, and the specific compensatory mitigation option required by the district engineer will be determined in accordance with the requirements of this part and other applicable regulations, and will be included as part of the special conditions of the DA permit. Any watershed plan that was used to help guide the selection, however, is not a permit condition.

#### Environmental Assessment/Regulatory Analysis

Two commenters said that the draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) prepared for this rule fail to assess the potentially significant adverse environmental effects of the new rule, and fail to consider a reasonable range of alternatives. One commenter requested that an environmental impact statement be prepared on this proposed rule because it will have a significant adverse impact on the environment by allowing more filling of existing wetlands. Two other commenters requested that an environmental impact statement be prepared to address the long-term cumulative loss of existing wetlands due to the Corps' regulatory program and its reliance on mitigation banking to compensate for wetland losses from non-water dependent activities. However, one commenter stated that the implementation of the rule as proposed does not have environmental impacts, and the draft environmental assessment seems to stretch to find changes in the physical and human environment that may result from implementation of the proposed rule. This commenter also said that the draft environmental assessment relies

too heavily on the watershed approach as the factor that may improve the performance of wetland mitigation. It would be more accurate to identify the "level playing field" aspect of the proposed rule as the key change from current practices. Another commenter noted that the draft environmental assessment for the proposed rule does not include any data on the number of stream impacts permitted or the amount of stream compensatory mitigation required.

We believe that the environmental assessment addresses a sufficient number of alternatives. This rule is intended to improve the performance of compensatory mitigation required for DA permits, which will reduce cumulative wetland losses. Since this rule was developed by examining existing practices, and adopting measures to improve those practices, there are unlikely to be substantive changes to the physical and human environment, other than improved performance of aquatic resource restoration, establishment, enhancement, and preservation activities. By developing, to the extent practicable, equivalent standards for permittee-responsible mitigation, mitigation banks, and in-lieu fee programs, and using a watershed approach, we believe that this rule will improve performance. The Corps has not collected data on stream impacts and compensatory mitigation, so we did not have such data to use in the environmental assessment.

#### E.O. 13132—Federalism

One commenter stated that the proposed rule has federalism impacts that were not addressed in the preamble, as it would seriously limit state authority regarding mitigation.

We do not agree that the final rule limits any state's authority regarding compensatory mitigation. States may continue to apply any compensatory mitigation requirements for state regulatory programs that they determine to be appropriate. This rule establishes requirements for permittees who must perform compensatory mitigation for DA permits, including mitigation banks and in-lieu fee programs. All section 404 permits, including their mitigation requirements, remain subject to state review and approval through the water quality certification required under section 401 of the CWA.

#### Unfunded Mandates Reform Act

One commenter said that the cost of developing a comprehensive watershed assessment and plan is much higher than described in the draft

environmental assessment. This commenter noted that the rule increases flexibility because of the increased number of compensatory mitigation opportunities that are identified, but also increases the costs because of the increased number of sites that must be evaluated to see if they will satisfy the goals and technical parameters for successful compensatory mitigation. This commenter also recommended that this rule be re-evaluated for its compliance with the Unfunded Mandates Reform Act. Another commenter supported additional funding for agencies that will be members of the Interagency Review Team (IRT).

This rule does not require the development of watershed plans. If there is an existing watershed plan, the district engineer may determine that it is appropriate for use in the watershed approach. Requiring more careful consideration of potential compensatory mitigation sites does not constitute an unfunded mandate. Instead, it is merely a means to achieve compliance with permit conditions and third-party mitigation instruments. Although this rule encourages the participation of other agencies on IRTs, such participation is not required, and therefore does not constitute an unfunded mandate.

#### E.O. 13211—Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

One commenter stated that it is not clear that the proposed regulations do not have the potential to have an “adverse effect on energy supply, distribution, or use.” The commenter believes that this particular rule will result in additional consultation and reporting obligations for the applicant, as well as an additional burden to an already strained Corps review staff and resources. Another commenter argued that the proposed rule could significantly impact the viability of energy exploration and development in Alaska by increasing costs of compensatory mitigation, requiring specific kinds of financial assurances, and in general removing the flexibility needed to work effectively in the state.

The final rule does not significantly alter permitting processes for energy projects. It has been developed from existing practices, and does not change the circumstances under which compensatory mitigation is required. This rule provides requirements to help ensure that the required compensatory mitigation meets its objectives and successfully replaces aquatic resource functions that are lost as a result of the

permitted impacts. District engineers still have the flexibility to tailor compensatory mitigation requirements to permit-specific circumstances.

#### National Technology Transfer and Advancement Act

One commenter identified a typographical error in the preamble description of the National Technology Transfer and Advancement Act, which we have corrected.

### VII. Administrative Requirements

#### *Plain Language*

In compliance with the principles in the President’s Memorandum of June 1, 1998 (63 FR 31855), regarding plain language, this preamble is written using plain language. The use of “we” in this notice refers to the Corps and EPA. We have also used the active voice, short sentences, and common everyday terms except for necessary technical terms.

#### *Paperwork Reduction Act*

This action will impose a new information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). Applicants for Clean Water Act section 404 permits will be required, under 33 CFR 325.1(d)(7) of the final rule, to submit a statement explaining how impacts associated with the proposed activity are to be avoided and minimized. This statement must also describe any proposed compensatory mitigation for impacts to waters of the United States, or include an explanation of why compensatory mitigation should not be required. In addition, in-lieu fee program sponsors must provide additional information as part of their application for an instrument, beyond what was previously required. Specifically, they must include a compensation planning framework, and information describing their program account. Both in-lieu fee programs and mitigation banks are also subject to new annual reporting requirements, including a ledger report and, at the discretion of the district engineer, reporting on financial assurances and long-term management. Some other reporting requirements, such as monitoring reports and most of the information required to apply for an instrument, are substantially the same as existing requirements.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget (OMB) control number. For the Corps Regulatory Program under section 10 of

the Rivers and Harbors Act of 1899, section 404 of the Clean Water Act, and section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, the current OMB approval number for information collection requirements is maintained by the Corps of Engineers (OMB approval number 0710–0003, which expires on April 30, 2008). As a result of the new information collection requirement in the final rule, we will modify our standard permit application form in accordance with the requirements of the Paperwork Reduction Act. The Corps is currently preparing a revised ICR that includes the new requirements in this final rule, along with an estimate of their associated burden. The new burden associated with this rule includes the estimated number of hours needed to: (1) Prepare a compensation planning framework for a proposed in-lieu fee program, (2) provide a description of the in-lieu fee program account, (3) prepare annual reports required for mitigation banks and in-lieu fee programs, such as financial assurance and long-term management funding reports, and (4) provide annual monitoring reports for mitigation banks and in-lieu fee projects.

We estimate that it will take approximately 80 hours for a prospective in-lieu fee sponsor to develop a compensation planning framework. A description of a proposed in-lieu fee program account will take approximately 12 hours to complete. We estimate that, over the next three years, there will be eight existing in-lieu fee programs per year that will convert to the requirements of this rule and two new in-lieu fee programs proposed per year, resulting in an annual burden of 920 hours to produce those documents. We estimate that an average of 8 hours will be needed to produce an annual report for a mitigation bank or in-lieu fee program. To produce a monitoring report for a mitigation bank or in-lieu fee project, we estimate that 80 hours will be needed. We also estimate that there will be 391 existing mitigation banks, 25 new mitigation banks, 58 existing in-lieu fee programs, and 2 new in-lieu fee programs that would be required to produce annual reports and monitoring reports each year. Based on an estimate of the number of existing and new mitigation banks and in-lieu fee programs, we estimate that the annual burden for producing these annual reports and monitoring reports will be 42,000 hours.

We are in the process of preparing a new information collection request that will include the information collection burden associated with the approval

and oversight of mitigation banks and in-lieu fee programs. These requirements to do not become effective until approved by OMB.

#### *Executive Order 12866*

Under Executive Order 12866 (58 FR 51735, October 4, 1993), we must determine whether the regulatory action is “significant” and therefore subject to review by OMB and the requirements of the Executive Order. The Executive Order defines “significant regulatory action” as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, we have determined that the final rule is a “significant regulatory action” and the draft was submitted to OMB for review.

The regulatory analysis required by E.O. 12866 has been prepared for this final rule. The regulatory analysis is available on the internet at: <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/citizen.htm>. It is also available by contacting Headquarters, U.S. Army Corps of Engineers, Operations and Regulatory Community of Practice, 441 G Street, NW., Washington, DC 20314–1000.

#### *Executive Order 13132*

Executive Order 13132, entitled “Federalism” (64 FR 43255, August 10, 1999), requires the Corps to develop an accountable process to ensure “meaningful and timely input by state and local officials in the development of regulatory policies that have Federalism implications.” The final rule does not have Federalism implications. We do not believe that the final rule will have substantial direct effects on the states, on the relationship between the federal government and the states, or on the distribution of power and responsibilities among the various levels of government. The final rule does not impose new substantive

requirements. In addition, the final rule will not impose any additional substantive obligations on state or local governments. State and local governments that administer in-lieu fee programs to provide compensatory mitigation for impacts to wetlands and other aquatic resources can modify their in-lieu fee programs to conform with the requirements of this final rule. Therefore, Executive Order 13132 does not apply to this final rule. However, in the spirit of Executive Order 13132, we specifically requested comment from state and local officials on the proposed rule, and fully considered those comments when preparing this final rule.

#### *Regulatory Flexibility Act, as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996, 5 U.S.C. 601 et seq.*

The Regulatory Flexibility Act generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice-and-comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations and small governmental jurisdictions.

For purposes of assessing the impacts of this final rule on small entities, a small entity is defined as: (1) A small business based on Small Business Administration size standards; (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; or (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

The statutory basis for the final rule is section 314 of the National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136), which is discussed above. After considering the economic impacts of the final rule on small entities, we certify that this action will not have a significant impact on a substantial number of small entities. Small entities subject to the final rule include those small entities that need to obtain DA permits pursuant to section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act of 1899.

This rulemaking will not significantly change compensatory mitigation requirements, or change the number of permitted activities that require compensatory mitigation. This rule

further clarifies mitigation requirements established by Corps and EPA, and is generally consistent with current agency practices. Some provisions of the rule may result in increases in compliance costs, other provisions may result in decreases in compliance costs, but most of the provisions in the rule are expected to result in little or no changes in compliance costs. To the extent that it promotes mitigation banking and in-lieu fee programs, the rule may lower compensatory mitigation costs for small projects by making credits more widely available. For a more detailed analysis of potential economic impacts of this rule, please see the regulatory analysis in the Environmental Assessment prepared for the final rule.

#### *Unfunded Mandates Reform Act*

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for federal agencies to assess the effects of their regulatory actions on state, local, and tribal governments and the private sector. Under section 202 of the UMRA, the agencies generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with “federal mandates” that may result in expenditures to state, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating a rule for which a written statement is needed, section 205 of the UMRA generally requires the agencies to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows an agency to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the agency publishes with the final rule an explanation why that alternative was not adopted. Before an agency establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed, under section 203 of the UMRA, a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of regulatory proposals with significant federal intergovernmental mandates, and informing, educating, and advising

small governments on compliance with the regulatory requirements.

The final rule is generally consistent with current agency practice and we have therefore determined that it does not contain a federal mandate that may result in expenditures of \$100 million or more for state, local, and tribal governments, in the aggregate, or the private sector in any one year. Therefore, the final rule is not subject to the requirements of sections 202 and 205 of the UMRA. For the same reasons, we have determined that the final rule contains no regulatory requirements that might significantly or uniquely affect small governments. Therefore, the final rule is not subject to the requirements of section 203 of UMRA.

#### *Executive Order 13045*

Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), applies to any rule that: (1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that we have reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, we must evaluate the environmental health or safety effects of the proposed rule on children, and explain why the regulation is preferable to other potentially effective and reasonably feasible alternatives.

The final rule is not subject to this Executive Order because it is not economically significant as defined in Executive Order 12866. In addition, it does not concern an environmental or safety risk that we have reason to believe may have a disproportionate effect on children.

#### *Executive Order 13175*

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 6, 2000), requires agencies to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." The phrase "policies that have tribal implications" is defined in the Executive Order to include regulations that have "substantial direct effects on one or more Indian tribes, on the relationship between the federal government and the tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes."

The final rule does not have tribal implications. It is generally consistent with current agency practice and will

not have substantial direct effects on tribal governments, on the relationship between the federal government and the tribes, or on the distribution of power and responsibilities between the federal government and tribes. Therefore, Executive Order 13175 does not apply to this final rule. However, in the spirit of Executive Order 13175, we specifically requested comment from tribal officials on the proposed rule, and have fully considered those comments when preparing the final rule.

#### *Environmental Documentation*

The Corps has prepared a final Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI) for the final rule. The final EA and the FONSI are available at: <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/citizen.htm>. It is also available by contacting Headquarters, U.S. Army Corps of Engineers, Operations and Regulatory Community of Practice, 441 G Street, NW., Washington, DC 20314-1000.

#### *Congressional Review Act*

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. We will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States.

#### *Executive Order 12898*

Executive Order 12898 requires that, to the greatest extent practicable and permitted by law, each federal agency must make achieving environmental justice part of its mission. Executive Order 12898 provides that each federal agency conduct its programs, policies, and activities that substantially affect human health or the environment in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under such programs, policies, and activities because of their race, color, or national origin.

The final rule is not expected to negatively impact any community, and therefore is not expected to cause any

disproportionately high and adverse impacts to minority or low-income communities.

#### *Executive Order 13211*

The final rule is not a "significant energy action" as defined in Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

#### *National Technology Transfer and Advancement Act*

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law No. 104-113, section 12(d), (15 U.S.C. 272 note), directs us to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs us to provide Congress, through the Office of Management and Budget (OMB), explanations when we decide not to use available and applicable voluntary consensus standards.

This action does not require the use of any particular technical standards. To the extent that functional and condition assessment methods are used to assess impacts to aquatic resources and determine appropriate compensation, district engineers are encouraged to use voluntary consensus methods where available.

#### **List of Subjects**

##### *33 CFR Part 325*

Administrative practice and procedure, Intergovernmental relations, Environmental protection, Navigation, Water pollution control, Waterways.

##### *33 CFR Part 332*

Administrative practice and procedure, Intergovernmental relations, Navigation (water), Water pollution control, Water resources, Watersheds, Waterways.

##### *40 CFR Part 230*

Environmental Protection, Water pollution control.

## Corps of Engineers

### 33 CFR Chapter II

■ For the reasons stated in the preamble, the Corps amends 33 CFR chapter II as set forth below:

#### PART 325—PROCESSING OF DEPARTMENT OF THE ARMY PERMITS

■ 1. The authority citation for part 325 continues to read as follows:

**Authority:** 33 U.S.C. 401 *et seq.*; 33 U.S.C. 1344; 33 U.S.C. 1413.

■ 2. Amend § 325.1 by redesignating paragraphs (d)(7), (d)(8), and (d)(9) as paragraphs (d)(8), (d)(9), and (d)(10), respectively, and adding new paragraph (d)(7) as follows:

##### § 325.1 Applications for permits.

\* \* \* \* \*

(d) \* \* \*

(7) For activities involving discharges of dredged or fill material into waters of the United States, the application must include a statement describing how impacts to waters of the United States are to be avoided and minimized. The application must also include either a statement describing how impacts to waters of the United States are to be compensated for or a statement explaining why compensatory mitigation should not be required for the proposed impacts. (See § 332.4(b)(1) of this chapter.)

\* \* \* \* \*

■ 3. Add part 332 to read as follows:

#### PART 332—COMPENSATORY MITIGATION FOR LOSSES OF AQUATIC RESOURCES

Sec.

332.1 Purpose and general considerations.

332.2 Definitions.

332.3 General compensatory mitigation requirements.

332.4 Planning and documentation.

332.5 Ecological performance standards.

332.6 Monitoring.

332.7 Management.

332.8 Mitigation banks and in-lieu fee programs.

**Authority:** 33 U.S.C. 401 *et seq.*; 33 U.S.C. 1344; and Pub. L. 108–136.

##### § 332.1 Purpose and general considerations.

(a) *Purpose.* (1) The purpose of this part is to establish standards and criteria for the use of all types of compensatory mitigation, including on-site and off-site permittee-responsible mitigation, mitigation banks, and in-lieu fee mitigation to offset unavoidable impacts to waters of the United States authorized through the issuance of

Department of the Army (DA) permits pursuant to section 404 of the Clean Water Act (33 U.S.C. 1344) and/or sections 9 or 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401, 403). This part implements section 314(b) of the 2004 National Defense Authorization Act (Pub. L. 108–136), which directs that the standards and criteria shall, to the maximum extent practicable, maximize available credits and opportunities for mitigation, provide for regional variations in wetland conditions, functions, and values, and apply equivalent standards and criteria to each type of compensatory mitigation. This part is intended to further clarify mitigation requirements established under U.S. Army Corps of Engineers (Corps) and U.S. Environmental Protection Agency (U.S. EPA) regulations at 33 CFR part 320 and 40 CFR part 230, respectively.

(2) This part has been jointly developed by the Secretary of the Army, acting through the Chief of Engineers, and the Administrator of the Environmental Protection Agency. From time to time guidance on interpreting and implementing this part may be prepared jointly by U.S. EPA and the Corps at the national or regional level. No modifications to the basic application, meaning, or intent of this part will be made without further joint rulemaking by the Secretary of the Army, acting through the Chief of Engineers and the Administrator of the Environmental Protection Agency, pursuant to the Administrative Procedure Act (5 U.S.C. 551 *et seq.*).

(b) *Applicability.* This part does not alter the regulations at § 320.4(r) of this title, which address the general mitigation requirements for DA permits. In particular, it does not alter the circumstances under which compensatory mitigation is required or the definitions of “waters of the United States” or “navigable waters of the United States,” which are provided at parts 328 and 329 of this chapter, respectively. Use of resources as compensatory mitigation that are not otherwise subject to regulation under section 404 of the Clean Water Act and/or sections 9 or 10 of the Rivers and Harbors Act of 1899 does not in and of itself make them subject to such regulation.

(c) *Sequencing.* (1) Nothing in this section affects the requirement that all DA permits subject to section 404 of the Clean Water Act comply with applicable provisions of the Section 404(b)(1) Guidelines at 40 CFR part 230.

(2) Pursuant to these requirements, the district engineer will issue an individual section 404 permit only upon

a determination that the proposed discharge complies with applicable provisions of 40 CFR part 230, including those which require the permit applicant to take all appropriate and practicable steps to avoid and minimize adverse impacts to waters of the United States. Practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. Compensatory mitigation for unavoidable impacts may be required to ensure that an activity requiring a section 404 permit complies with the Section 404(b)(1) Guidelines.

(3) Compensatory mitigation for unavoidable impacts may be required to ensure that an activity requiring a section 404 permit complies with the Section 404(b)(1) Guidelines. During the 404(b)(1) Guidelines compliance analysis, the district engineer may determine that a DA permit for the proposed activity cannot be issued because of the lack of appropriate and practicable compensatory mitigation options.

(d) *Public interest.* Compensatory mitigation may also be required to ensure that an activity requiring authorization under section 404 of the Clean Water Act and/or sections 9 or 10 of the Rivers and Harbors Act of 1899 is not contrary to the public interest.

(e) *Accounting for regional variations.* Where appropriate, district engineers shall account for regional characteristics of aquatic resource types, functions and services when determining performance standards and monitoring requirements for compensatory mitigation projects.

(f) *Relationship to other guidance documents.* (1) This part applies instead of the “Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks,” which was issued on November 28, 1995, the “Federal Guidance on the Use of In-Lieu Fee Arrangements for Compensatory Mitigation Under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act,” which was issued on November 7, 2000, and Regulatory Guidance Letter 02–02, “Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899” which was issued on December 24, 2002. These guidance documents are no longer to be used as compensatory mitigation policy in the Corps Regulatory Program.

(2) In addition, this part also applies instead of the provisions relating to the amount, type, and location of compensatory mitigation projects,

including the use of preservation, in the February 6, 1990, Memorandum of Agreement (MOA) between the Department of the Army and the Environmental Protection Agency on the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines. All other provisions of this MOA remain in effect.

### § 332.2 Definitions.

For the purposes of this part, the following terms are defined:

*Adaptive management* means the development of a management strategy that anticipates likely challenges associated with compensatory mitigation projects and provides for the implementation of actions to address those challenges, as well as unforeseen changes to those projects. It requires consideration of the risk, uncertainty, and dynamic nature of compensatory mitigation projects and guides modification of those projects to optimize performance. It includes the selection of appropriate measures that will ensure that the aquatic resource functions are provided and involves analysis of monitoring results to identify potential problems of a compensatory mitigation project and the identification and implementation of measures to rectify those problems.

*Advance credits* means any credits of an approved in-lieu fee program that are available for sale prior to being fulfilled in accordance with an approved mitigation project plan. Advance credit sales require an approved in-lieu fee program instrument that meets all applicable requirements including a specific allocation of advance credits, by service area where applicable. The instrument must also contain a schedule for fulfillment of advance credit sales.

*Buffer* means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

*Compensatory mitigation* means the restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

*Compensatory mitigation project* means compensatory mitigation implemented by the permittee as a requirement of a DA permit (i.e., permittee-responsible mitigation), or by

a mitigation bank or an in-lieu fee program.

*Condition* means the relative ability of an aquatic resource to support and maintain a community of organisms having a species composition, diversity, and functional organization comparable to reference aquatic resources in the region.

*Credit* means a unit of measure (e.g., a functional or areal measure or other suitable metric) representing the accrual or attainment of aquatic functions at a compensatory mitigation site. The measure of aquatic functions is based on the resources restored, established, enhanced, or preserved.

*DA* means Department of the Army.

*Days* means calendar days.

*Debit* means a unit of measure (e.g., a functional or areal measure or other suitable metric) representing the loss of aquatic functions at an impact or project site. The measure of aquatic functions is based on the resources impacted by the authorized activity.

*Enhancement* means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

*Establishment* (creation) means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area and functions.

*Fulfillment of advance credit sales of an in-lieu fee program* means application of credits released in accordance with a credit release schedule in an approved mitigation project plan to satisfy the mitigation requirements represented by the advance credits. Only after any advance credit sales within a service area have been fulfilled through the application of released credits from an in-lieu fee project (in accordance with the credit release schedule for an approved mitigation project plan), may additional released credits from that project be sold or transferred to permittees. When advance credits are fulfilled, an equal number of new advance credits is restored to the program sponsor for sale or transfer to permit applicants.

*Functional capacity* means the degree to which an area of aquatic resource performs a specific function.

*Functions* means the physical, chemical, and biological processes that occur in ecosystems.

*Impact* means adverse effect.

*In-kind* means a resource of a similar structural and functional type to the impacted resource.

*In-lieu fee program* means a program involving the restoration, establishment, enhancement, and/or preservation of aquatic resources through funds paid to a governmental or non-profit natural resources management entity to satisfy compensatory mitigation requirements for DA permits. Similar to a mitigation bank, an in-lieu fee program sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the in-lieu program sponsor. However, the rules governing the operation and use of in-lieu fee programs are somewhat different from the rules governing operation and use of mitigation banks. The operation and use of an in-lieu fee program are governed by an in-lieu fee program instrument.

*In-lieu fee program instrument* means the legal document for the establishment, operation, and use of an in-lieu fee program.

*Instrument* means mitigation banking instrument or in-lieu fee program instrument.

*Interagency Review Team (IRT)* means an interagency group of federal, tribal, state, and/or local regulatory and resource agency representatives that reviews documentation for, and advises the district engineer on, the establishment and management of a mitigation bank or an in-lieu fee program.

*Mitigation bank* means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing compensatory mitigation for impacts authorized by DA permits. In general, a mitigation bank sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the mitigation bank sponsor. The operation and use of a mitigation bank are governed by a mitigation banking instrument.

*Mitigation banking instrument* means the legal document for the establishment, operation, and use of a mitigation bank.

*Off-site* means an area that is neither located on the same parcel of land as the impact site, nor on a parcel of land contiguous to the parcel containing the impact site.

*On-site* means an area located on the same parcel of land as the impact site,

or on a parcel of land contiguous to the impact site.

*Out-of-kind* means a resource of a different structural and functional type from the impacted resource.

*Performance standards* are observable or measurable physical (including hydrological), chemical and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

*Permittee-responsible mitigation* means an aquatic resource restoration, establishment, enhancement, and/or preservation activity undertaken by the permittee (or an authorized agent or contractor) to provide compensatory mitigation for which the permittee retains full responsibility.

*Preservation* means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

*Re-establishment* means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

*Reference aquatic resources* are a set of aquatic resources that represent the full range of variability exhibited by a regional class of aquatic resources as a result of natural processes and anthropogenic disturbances.

*Rehabilitation* means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

*Release of credits* means a determination by the district engineer, in consultation with the IRT, that credits associated with an approved mitigation plan are available for sale or transfer, or in the case of an in-lieu fee program, for fulfillment of advance credit sales. A proportion of projected credits for a specific mitigation bank or in-lieu fee project may be released upon approval of the mitigation plan, with additional credits released as milestones specified in the credit release schedule are achieved.

*Restoration* means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

*Riparian areas* are lands adjacent to streams, rivers, lakes, and estuarine-marine shorelines. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality.

*Service area* means the geographic area within which impacts can be mitigated at a specific mitigation bank or an in-lieu fee program, as designated in its instrument.

*Services* mean the benefits that human populations receive from functions that occur in ecosystems.

*Sponsor* means any public or private entity responsible for establishing, and in most circumstances, operating a mitigation bank or in-lieu fee program.

*Standard permit* means a standard, individual permit issued under the authority of section 404 of the Clean Water Act and/or sections 9 or 10 of the Rivers and Harbors Act of 1899.

*Temporal loss* is the time lag between the loss of aquatic resource functions caused by the permitted impacts and the replacement of aquatic resource functions at the compensatory mitigation site. Higher compensation ratios may be required to compensate for temporal loss. When the compensatory mitigation project is initiated prior to, or concurrent with, the permitted impacts, the district engineer may determine that compensation for temporal loss is not necessary, unless the resource has a long development time.

*Watershed* means a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.

*Watershed approach* means an analytical process for making compensatory mitigation decisions that support the sustainability or improvement of aquatic resources in a watershed. It involves consideration of watershed needs, and how locations and types of compensatory mitigation projects address those needs. A landscape perspective is used to identify the types and locations of compensatory mitigation projects that will benefit the watershed and offset losses of aquatic resource functions and services caused by activities authorized by DA permits. The watershed approach may involve consideration of landscape scale, historic and potential aquatic

resource conditions, past and projected aquatic resource impacts in the watershed, and terrestrial connections between aquatic resources when determining compensatory mitigation requirements for DA permits.

*Watershed plan* means a plan developed by federal, tribal, state, and/or local government agencies or appropriate non-governmental organizations, in consultation with relevant stakeholders, for the specific goal of aquatic resource restoration, establishment, enhancement, and preservation. A watershed plan addresses aquatic resource conditions in the watershed, multiple stakeholder interests, and land uses. Watershed plans may also identify priority sites for aquatic resource restoration and protection. Examples of watershed plans include special area management plans, advance identification programs, and wetland management plans.

### **§ 332.3 General compensatory mitigation requirements.**

(a) *General considerations.* (1) The fundamental objective of compensatory mitigation is to offset environmental losses resulting from unavoidable impacts to waters of the United States authorized by DA permits. The district engineer must determine the compensatory mitigation to be required in a DA permit, based on what is practicable and capable of compensating for the aquatic resource functions that will be lost as a result of the permitted activity. When evaluating compensatory mitigation options, the district engineer will consider what would be environmentally preferable. In making this determination, the district engineer must assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project. In many cases, the environmentally preferable compensatory mitigation may be provided through mitigation banks or in-lieu fee programs because they usually involve consolidating compensatory mitigation projects where ecologically appropriate, consolidating resources, providing financial planning and scientific expertise (which often is not practical for permittee-responsible compensatory mitigation projects), reducing temporal losses of functions, and reducing uncertainty over project success. Compensatory mitigation requirements must be commensurate with the amount and type of impact that is associated with a particular DA permit. Permit applicants are responsible for proposing an



appropriate compensatory mitigation option to offset unavoidable impacts.

(2) Compensatory mitigation may be performed using the methods of restoration, enhancement, establishment, and in certain circumstances preservation. Restoration should generally be the first option considered because the likelihood of success is greater and the impacts to potentially ecologically important uplands are reduced compared to establishment, and the potential gains in terms of aquatic resource functions are greater, compared to enhancement and preservation.

(3) Compensatory mitigation projects may be sited on public or private lands. Credits for compensatory mitigation projects on public land must be based solely on aquatic resource functions provided by the compensatory mitigation project, over and above those provided by public programs already planned or in place. All compensatory mitigation projects must comply with the standards in this part, if they are to be used to provide compensatory mitigation for activities authorized by DA permits, regardless of whether they are sited on public or private lands and whether the sponsor is a governmental or private entity.

(b) *Type and location of compensatory mitigation.* (1) When considering options for successfully providing the required compensatory mitigation, the district engineer shall consider the type and location options in the order presented in paragraphs (b)(2) through (b)(6) of this section. In general, the required compensatory mitigation should be located within the same watershed as the impact site, and should be located where it is most likely to successfully replace lost functions and services, taking into account such watershed scale features as aquatic habitat diversity, habitat connectivity, relationships to hydrologic sources (including the availability of water rights), trends in land use, ecological benefits, and compatibility with adjacent land uses. When compensating for impacts to marine resources, the location of the compensatory mitigation site should be chosen to replace lost functions and services within the same marine ecological system (e.g., reef complex, littoral drift cell). Compensation for impacts to aquatic resources in coastal watersheds (watersheds that include a tidal water body) should also be located in a coastal watershed where practicable. Compensatory mitigation projects should not be located where they will increase risks to aviation by attracting

wildlife to areas where aircraft-wildlife strikes may occur (e.g., near airports).

(2) *Mitigation bank credits.* When permitted impacts are located within the service area of an approved mitigation bank, and the bank has the appropriate number and resource type of credits available, the permittee's compensatory mitigation requirements may be met by securing those credits from the sponsor. Since an approved instrument (including an approved mitigation plan and appropriate real estate and financial assurances) for a mitigation bank is required to be in place before its credits can begin to be used to compensate for authorized impacts, use of a mitigation bank can help reduce risk and uncertainty, as well as temporal loss of resource functions and services. Mitigation bank credits are not released for debiting until specific milestones associated with the mitigation bank site's protection and development are achieved, thus use of mitigation bank credits can also help reduce risk that mitigation will not be fully successful. Mitigation banks typically involve larger, more ecologically valuable parcels, and more rigorous scientific and technical analysis, planning and implementation than permittee-responsible mitigation. Also, development of a mitigation bank requires site identification in advance, project-specific planning, and significant investment of financial resources that is often not practicable for many in-lieu fee programs. For these reasons, the district engineer should give preference to the use of mitigation bank credits when these considerations are applicable. However, these same considerations may also be used to override this preference, where appropriate, as, for example, where an in-lieu fee program has released credits available from a specific approved in-lieu fee project, or a permittee-responsible project will restore an outstanding resource based on rigorous scientific and technical analysis.

(3) *In-lieu fee program credits.* Where permitted impacts are located within the service area of an approved in-lieu fee program, and the sponsor has the appropriate number and resource type of credits available, the permittee's compensatory mitigation requirements may be met by securing those credits from the sponsor. Where permitted impacts are not located in the service area of an approved mitigation bank, or the approved mitigation bank does not have the appropriate number and resource type of credits available to offset those impacts, in-lieu fee mitigation, if available, is generally preferable to permittee-responsible

mitigation. In-lieu fee projects typically involve larger, more ecologically valuable parcels, and more rigorous scientific and technical analysis, planning and implementation than permittee-responsible mitigation. They also devote significant resources to identifying and addressing high-priority resource needs on a watershed scale, as reflected in their compensation planning framework. For these reasons, the district engineer should give preference to in-lieu fee program credits over permittee-responsible mitigation, where these considerations are applicable. However, as with the preference for mitigation bank credits, these same considerations may be used to override this preference where appropriate. Additionally, in cases where permittee-responsible mitigation is likely to successfully meet performance standards before advance credits secured from an in-lieu fee program are fulfilled, the district engineer should also give consideration to this factor in deciding between in-lieu fee mitigation and permittee-responsible mitigation.

(4) *Permittee-responsible mitigation under a watershed approach.* Where permitted impacts are not in the service area of an approved mitigation bank or in-lieu fee program that has the appropriate number and resource type of credits available, permittee-responsible mitigation is the only option. Where practicable and likely to be successful and sustainable, the resource type and location for the required permittee-responsible compensatory mitigation should be determined using the principles of a watershed approach as outlined in paragraph (c) of this section.

(5) *Permittee-responsible mitigation through on-site and in-kind mitigation.* In cases where a watershed approach is not practicable, the district engineer should consider opportunities to offset anticipated aquatic resource impacts by requiring on-site and in-kind compensatory mitigation. The district engineer must also consider the practicability of on-site compensatory mitigation and its compatibility with the proposed project.

(6) *Permittee-responsible mitigation through off-site and/or out-of-kind mitigation.* If, after considering opportunities for on-site, in-kind compensatory mitigation as provided in paragraph (b)(5) of this section, the district engineer determines that these compensatory mitigation opportunities are not practicable, are unlikely to compensate for the permitted impacts, or will be incompatible with the proposed project, and an alternative,

practicable off-site and/or out-of-kind mitigation opportunity is identified that has a greater likelihood of offsetting the permitted impacts or is environmentally preferable to on-site or in-kind mitigation, the district engineer should require that this alternative compensatory mitigation be provided.

(c) *Watershed approach to compensatory mitigation.* (1) The district engineer must use a watershed approach to establish compensatory mitigation requirements in DA permits to the extent appropriate and practicable. Where a watershed plan is available, the district engineer will determine whether the plan is appropriate for use in the watershed approach for compensatory mitigation. In cases where the district engineer determines that an appropriate watershed plan is available, the watershed approach should be based on that plan. Where no such plan is available, the watershed approach should be based on information provided by the project sponsor or available from other sources. The ultimate goal of a watershed approach is to maintain and improve the quality and quantity of aquatic resources within watersheds through strategic selection of compensatory mitigation sites.

(2) *Considerations.* (i) A watershed approach to compensatory mitigation considers the importance of landscape position and resource type of compensatory mitigation projects for the sustainability of aquatic resource functions within the watershed. Such an approach considers how the types and locations of compensatory mitigation projects will provide the desired aquatic resource functions, and will continue to function over time in a changing landscape. It also considers the habitat requirements of important species, habitat loss or conversion trends, sources of watershed impairment, and current development trends, as well as the requirements of other regulatory and non-regulatory programs that affect the watershed, such as storm water management or habitat conservation programs. It includes the protection and maintenance of terrestrial resources, such as non-wetland riparian areas and uplands, when those resources contribute to or improve the overall ecological functioning of aquatic resources in the watershed. Compensatory mitigation requirements determined through the watershed approach should not focus exclusively on specific functions (e.g., water quality or habitat for certain species), but should provide, where practicable, the suite of functions typically provided by the affected aquatic resource.

(ii) Locational factors (e.g., hydrology, surrounding land use) are important to the success of compensatory mitigation for impacted habitat functions and may lead to siting of such mitigation away from the project area. However, consideration should also be given to functions and services (e.g., water quality, flood control, shoreline protection) that will likely need to be addressed at or near the areas impacted by the permitted impacts.

(iii) A watershed approach may include on-site compensatory mitigation, off-site compensatory mitigation (including mitigation banks or in-lieu fee programs), or a combination of on-site and off-site compensatory mitigation.

(iv) A watershed approach to compensatory mitigation should include, to the extent practicable, inventories of historic and existing aquatic resources, including identification of degraded aquatic resources, and identification of immediate and long-term aquatic resource needs within watersheds that can be met through permittee-responsible mitigation projects, mitigation banks, or in-lieu fee programs. Planning efforts should identify and prioritize aquatic resource restoration, establishment, and enhancement activities, and preservation of existing aquatic resources that are important for maintaining or improving ecological functions of the watershed. The identification and prioritization of resource needs should be as specific as possible, to enhance the usefulness of the approach in determining compensatory mitigation requirements.

(v) A watershed approach is not appropriate in areas where watershed boundaries do not exist, such as marine areas. In such cases, an appropriate spatial scale should be used to replace lost functions and services within the same ecological system (e.g., reef complex, littoral drift cell).

(3) *Information Needs.* (i) In the absence of a watershed plan determined by the district engineer under paragraph (c)(1) of this section to be appropriate for use in the watershed approach, the district engineer will use a watershed approach based on analysis of information regarding watershed conditions and needs, including potential sites for aquatic resource restoration activities and priorities for aquatic resource restoration and preservation. Such information includes: current trends in habitat loss or conversion; cumulative impacts of past development activities, current development trends, the presence and

needs of sensitive species; site conditions that favor or hinder the success of compensatory mitigation projects; and chronic environmental problems such as flooding or poor water quality.

(ii) This information may be available from sources such as wetland maps; soil surveys; U.S. Geological Survey topographic and hydrologic maps; aerial photographs; information on rare, endangered and threatened species and critical habitat; local ecological reports or studies; and other information sources that could be used to identify locations for suitable compensatory mitigation projects in the watershed.

(iii) The level of information and analysis needed to support a watershed approach must be commensurate with the scope and scale of the proposed impacts requiring a DA permit, as well as the functions lost as a result of those impacts.

(4) *Watershed scale.* The size of watershed addressed using a watershed approach should not be larger than is appropriate to ensure that the aquatic resources provided through compensation activities will effectively compensate for adverse environmental impacts resulting from activities authorized by DA permits. The district engineer should consider relevant environmental factors and appropriate locally developed standards and criteria when determining the appropriate watershed scale in guiding compensation activities.

(d) *Site selection.* (1) The compensatory mitigation project site must be ecologically suitable for providing the desired aquatic resource functions. In determining the ecological suitability of the compensatory mitigation project site, the district engineer must consider, to the extent practicable, the following factors:

(i) Hydrological conditions, soil characteristics, and other physical and chemical characteristics;

(ii) Watershed-scale features, such as aquatic habitat diversity, habitat connectivity, and other landscape scale functions;

(iii) The size and location of the compensatory mitigation site relative to hydrologic sources (including the availability of water rights) and other ecological features;

(iv) Compatibility with adjacent land uses and watershed management plans;

(v) Reasonably foreseeable effects the compensatory mitigation project will have on ecologically important aquatic or terrestrial resources (e.g., shallow sub-tidal habitat, mature forests), cultural sites, or habitat for federally- or

state-listed threatened and endangered species; and

(vi) Other relevant factors including, but not limited to, development trends, anticipated land use changes, habitat status and trends, the relative locations of the impact and mitigation sites in the stream network, local or regional goals for the restoration or protection of particular habitat types or functions (e.g., re-establishment of habitat corridors or habitat for species of concern), water quality goals, floodplain management goals, and the relative potential for chemical contamination of the aquatic resources.

(2) District engineers may require on-site, off-site, or a combination of on-site and off-site compensatory mitigation to replace permitted losses of aquatic resource functions and services.

(3) Applicants should propose compensation sites adjacent to existing aquatic resources or where aquatic resources previously existed.

(e) *Mitigation type.* (1) In general, in-kind mitigation is preferable to out-of-kind mitigation because it is most likely to compensate for the functions and services lost at the impact site. For example, tidal wetland compensatory mitigation projects are most likely to compensate for unavoidable impacts to tidal wetlands, while perennial stream compensatory mitigation projects are most likely to compensate for unavoidable impacts to perennial streams. Thus, except as provided in paragraph (e)(2) of this section, the required compensatory mitigation shall be of a similar type to the affected aquatic resource.

(2) If the district engineer determines, using the watershed approach in accordance with paragraph (c) of this section that out-of-kind compensatory mitigation will serve the aquatic resource needs of the watershed, the district engineer may authorize the use of such out-of-kind compensatory mitigation. The basis for authorization of out-of-kind compensatory mitigation must be documented in the administrative record for the permit action.

(3) For difficult-to-replace resources (e.g., bogs, fens, springs, streams, Atlantic white cedar swamps) if further avoidance and minimization is not practicable, the required compensation should be provided, if practicable, through in-kind rehabilitation, enhancement, or preservation since there is greater certainty that these methods of compensation will successfully offset permitted impacts.

(f) *Amount of compensatory mitigation.* (1) If the district engineer determines that compensatory

mitigation is necessary to offset unavoidable impacts to aquatic resources, the amount of required compensatory mitigation must be, to the extent practicable, sufficient to replace lost aquatic resource functions. In cases where appropriate functional or condition assessment methods or other suitable metrics are available, these methods should be used where practicable to determine how much compensatory mitigation is required. If a functional or condition assessment or other suitable metric is not used, a minimum one-to-one acreage or linear foot compensation ratio must be used.

(2) The district engineer must require a mitigation ratio greater than one-to-one where necessary to account for the method of compensatory mitigation (e.g., preservation), the likelihood of success, differences between the functions lost at the impact site and the functions expected to be produced by the compensatory mitigation project, temporal losses of aquatic resource functions, the difficulty of restoring or establishing the desired aquatic resource type and functions, and/or the distance between the affected aquatic resource and the compensation site. The rationale for the required replacement ratio must be documented in the administrative record for the permit action.

(3) If an in-lieu fee program will be used to provide the required compensatory mitigation, and the appropriate number and resource type of released credits are not available, the district engineer must require sufficient compensation to account for the risk and uncertainty associated with in-lieu fee projects that have not been implemented before the permitted impacts have occurred.

(g) *Use of mitigation banks and in-lieu fee programs.* Mitigation banks and in-lieu fee programs may be used to compensate for impacts to aquatic resources authorized by general permits and individual permits, including after-the-fact permits, in accordance with the preference hierarchy in paragraph (b) of this section.

(h) *Preservation.* (1) Preservation may be used to provide compensatory mitigation for activities authorized by DA permits when all the following criteria are met:

(i) The resources to be preserved provide important physical, chemical, or biological functions for the watershed;

(ii) The resources to be preserved contribute significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability

of the watershed, the district engineer must use appropriate quantitative assessment tools, where available;

(iii) Preservation is determined by the district engineer to be appropriate and practicable;

(iv) The resources are under threat of destruction or adverse modifications; and

(v) The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust).

(2) Where preservation is used to provide compensatory mitigation, to the extent appropriate and practicable the preservation shall be done in conjunction with aquatic resource restoration, establishment, and/or enhancement activities. This requirement may be waived by the district engineer where preservation has been identified as a high priority using a watershed approach described in paragraph (c) of this section, but compensation ratios shall be higher.

(i) *Buffers.* District engineers may require the restoration, establishment, enhancement, and preservation, as well as the maintenance, of riparian areas and/or buffers around aquatic resources where necessary to ensure the long-term viability of those resources. Buffers may also provide habitat or corridors necessary for the ecological functioning of aquatic resources. If buffers are required by the district engineer as part of the compensatory mitigation project, compensatory mitigation credit will be provided for those buffers.

(j) *Relationship to other federal, tribal, state, and local programs.* (1) Compensatory mitigation projects for DA permits may also be used to satisfy the environmental requirements of other programs, such as tribal, state, or local wetlands regulatory programs, other federal programs such as the Surface Mining Control and Reclamation Act, Corps civil works projects, and Department of Defense military construction projects, consistent with the terms and requirements of these programs and subject to the following considerations:

(i) The compensatory mitigation project must include appropriate compensation required by the DA permit for unavoidable impacts to aquatic resources authorized by that permit.

(ii) Under no circumstances may the same credits be used to provide mitigation for more than one permitted activity. However, where appropriate, compensatory mitigation projects, including mitigation banks and in-lieu fee projects, may be designed to

holistically address requirements under multiple programs and authorities for the same activity.

(2) Except for projects undertaken by federal agencies, or where federal funding is specifically authorized to provide compensatory mitigation, federally-funded aquatic resource restoration or conservation projects undertaken for purposes other than compensatory mitigation, such as the Wetlands Reserve Program, Conservation Reserve Program, and Partners for Wildlife Program activities, cannot be used for the purpose of generating compensatory mitigation credits for activities authorized by DA permits. However, compensatory mitigation credits may be generated by activities undertaken in conjunction with, but supplemental to, such programs in order to maximize the overall ecological benefits of the restoration or conservation project.

(3) Compensatory mitigation projects may also be used to provide compensatory mitigation under the Endangered Species Act or for Habitat Conservation Plans, as long as they comply with the requirements of paragraph (j)(1) of this section.

(k) *Permit conditions.* (1) The compensatory mitigation requirements for a DA permit, including the amount and type of compensatory mitigation, must be clearly stated in the special conditions of the individual permit or general permit verification (see 33 CFR 325.4 and 330.6(a)). The special conditions must be enforceable.

(2) For an individual permit that requires permittee-responsible mitigation, the special conditions must:

- (i) Identify the party responsible for providing the compensatory mitigation;
- (ii) Incorporate, by reference, the final mitigation plan approved by the district engineer;
- (iii) State the objectives, performance standards, and monitoring required for the compensatory mitigation project, unless they are provided in the approved final mitigation plan; and
- (iv) Describe any required financial assurances or long-term management provisions for the compensatory mitigation project, unless they are specified in the approved final mitigation plan.

(3) For a general permit activity that requires permittee-responsible compensatory mitigation, the special conditions must describe the compensatory mitigation proposal, which may be either conceptual or detailed. The general permit verification must also include a special condition that states that the permittee cannot commence work in waters of the United

States until the district engineer approves the final mitigation plan, unless the district engineer determines that such a special condition is not practicable and not necessary to ensure timely completion of the required compensatory mitigation. To the extent appropriate and practicable, special conditions of the general permit verification should also address the requirements of paragraph (k)(2) of this section.

(4) If a mitigation bank or in-lieu fee program is used to provide the required compensatory mitigation, the special conditions must indicate whether a mitigation bank or in-lieu fee program will be used, and specify the number and resource type of credits the permittee is required to secure. In the case of an individual permit, the special condition must also identify the specific mitigation bank or in-lieu fee program that will be used. For general permit verifications, the special conditions may either identify the specific mitigation bank or in-lieu fee program, or state that the specific mitigation bank or in-lieu fee program used to provide the required compensatory mitigation must be approved by the district engineer before the credits are secured.

(l) *Party responsible for compensatory mitigation.* (1) For permittee-responsible mitigation, the special conditions of the DA permit must clearly indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation project.

(2) For mitigation banks and in-lieu fee programs, the instrument must clearly indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation project(s). The instrument must also contain a provision expressing the sponsor's agreement to assume responsibility for a permittee's compensatory mitigation requirements, once that permittee has secured the appropriate number and resource type of credits from the sponsor and the district engineer has received the documentation described in paragraph (l)(3) of this section.

(3) If use of a mitigation bank or in-lieu fee program is approved by the district engineer to provide part or all of the required compensatory mitigation for a DA permit, the permittee retains responsibility for providing the compensatory mitigation until the appropriate number and resource type of credits have been secured from a sponsor and the district engineer has received documentation that confirms that the sponsor has accepted the

responsibility for providing the required compensatory mitigation. This documentation may consist of a letter or form signed by the sponsor, with the permit number and a statement indicating the number and resource type of credits that have been secured from the sponsor. Copies of this documentation will be retained in the administrative records for both the permit and the instrument. If the sponsor fails to provide the required compensatory mitigation, the district engineer may pursue measures against the sponsor to ensure compliance.

(m) *Timing.* Implementation of the compensatory mitigation project shall be, to the maximum extent practicable, in advance of or concurrent with the activity causing the authorized impacts. The district engineer shall require, to the extent appropriate and practicable, additional compensatory mitigation to offset temporal losses of aquatic functions that will result from the permitted activity.

(n) *Financial assurances.* (1) The district engineer shall require sufficient financial assurances to ensure a high level of confidence that the compensatory mitigation project will be successfully completed, in accordance with applicable performance standards. In cases where an alternate mechanism is available to ensure a high level of confidence that the compensatory mitigation will be provided and maintained (e.g., a formal, documented commitment from a government agency or public authority) the district engineer may determine that financial assurances are not necessary for that compensatory mitigation project.

(2) The amount of the required financial assurances must be determined by the district engineer, in consultation with the project sponsor, and must be based on the size and complexity of the compensatory mitigation project, the degree of completion of the project at the time of project approval, the likelihood of success, the past performance of the project sponsor, and any other factors the district engineer deems appropriate. Financial assurances may be in the form of performance bonds, escrow accounts, casualty insurance, letters of credit, legislative appropriations for government sponsored projects, or other appropriate instruments, subject to the approval of the district engineer. The rationale for determining the amount of the required financial assurances must be documented in the administrative record for either the DA permit or the instrument. In determining the assurance amount, the district engineer shall consider the cost of providing

replacement mitigation, including costs for land acquisition, planning and engineering, legal fees, mobilization, construction, and monitoring.

(3) If financial assurances are required, the DA permit must include a special condition requiring the financial assurances to be in place prior to commencing the permitted activity.

(4) Financial assurances shall be phased out once the compensatory mitigation project has been determined by the district engineer to be successful in accordance with its performance standards. The DA permit or instrument must clearly specify the conditions under which the financial assurances are to be released to the permittee, sponsor, and/or other financial assurance provider, including, as appropriate, linkage to achievement of performance standards, adaptive management, or compliance with special conditions.

(5) A financial assurance must be in a form that ensures that the district engineer will receive notification at least 120 days in advance of any termination or revocation. For third-party assurance providers, this may take the form of a contractual requirement for the assurance provider to notify the district engineer at least 120 days before the assurance is revoked or terminated.

(6) Financial assurances shall be payable at the direction of the district engineer to his designee or to a standby trust agreement. When a standby trust is used (e.g., with performance bonds or letters of credit) all amounts paid by the financial assurance provider shall be deposited directly into the standby trust fund for distribution by the trustee in accordance with the district engineer's instructions.

(o) *Compliance with applicable law.* The compensatory mitigation project must comply with all applicable federal, state, and local laws. The DA permit, mitigation banking instrument, or in-lieu fee program instrument must not require participation by the Corps or any other federal agency in project management, including receipt or management of financial assurances or long-term financing mechanisms, except as determined by the Corps or other agency to be consistent with its statutory authority, mission, and priorities.

#### **§ 332.4 Planning and documentation.**

(a) *Pre-application consultations.* Potential applicants for standard permits are encouraged to participate in pre-application meetings with the Corps and appropriate agencies to discuss potential mitigation requirements and information needs.

(b) *Public review and comment.* (1) For an activity that requires a standard DA permit pursuant to section 404 of the Clean Water Act, the public notice for the proposed activity must contain a statement explaining how impacts associated with the proposed activity are to be avoided, minimized, and compensated for. This explanation shall address, to the extent that such information is provided in the mitigation statement required by § 325.1(d)(7) of this chapter, the proposed avoidance and minimization and the amount, type, and location of any proposed compensatory mitigation, including any out-of-kind compensation, or indicate an intention to use an approved mitigation bank or in-lieu fee program. The level of detail provided in the public notice must be commensurate with the scope and scale of the impacts. The notice shall not include information that the district engineer and the permittee believe should be kept confidential for business purposes, such as the exact location of a proposed mitigation site that has not yet been secured. The permittee must clearly identify any information being claimed as confidential in the mitigation statement when submitted. In such cases, the notice must still provide enough information to enable the public to provide meaningful comment on the proposed mitigation.

(2) For individual permits, district engineers must consider any timely comments and recommendations from other federal agencies; tribal, state, or local governments; and the public.

(3) For activities authorized by letters of permission or general permits, the review and approval process for compensatory mitigation proposals and plans must be conducted in accordance with the terms and conditions of those permits and applicable regulations including the applicable provisions of this part.

(c) *Mitigation plan.* (1) *Preparation and Approval.* (i) For individual permits, the permittee must prepare a draft mitigation plan and submit it to the district engineer for review. After addressing any comments provided by the district engineer, the permittee must prepare a final mitigation plan, which must be approved by the district engineer prior to issuing the individual permit. The approved final mitigation plan must be incorporated into the individual permit by reference. The final mitigation plan must include the items described in paragraphs (c)(2) through (c)(14) of this section, but the level of detail of the mitigation plan should be commensurate with the scale and scope of the impacts. As an

alternative, the district engineer may determine that it would be more appropriate to address any of the items described in paragraphs (c)(2) through (c)(14) of this section as permit conditions, instead of components of a compensatory mitigation plan. For permittees who intend to fulfill their compensatory mitigation obligations by securing credits from approved mitigation banks or in-lieu fee programs, their mitigation plans need include only the items described in paragraphs (c)(5) and (c)(6) of this section, and the name of the specific mitigation bank or in-lieu fee program to be used.

(ii) For general permits, if compensatory mitigation is required, the district engineer may approve a conceptual or detailed compensatory mitigation plan to meet required time frames for general permit verifications, but a final mitigation plan incorporating the elements in paragraphs (c)(2) through (c)(14) of this section, at a level of detail commensurate with the scale and scope of the impacts, must be approved by the district engineer before the permittee commences work in waters of the United States. As an alternative, the district engineer may determine that it would be more appropriate to address any of the items described in paragraphs (c)(2) through (c)(14) of this section as permit conditions, instead of components of a compensatory mitigation plan. For permittees who intend to fulfill their compensatory mitigation obligations by securing credits from approved mitigation banks or in-lieu fee programs, their mitigation plans need include only the items described in paragraphs (c)(5) and (c)(6) of this section, and either the name of the specific mitigation bank or in-lieu fee program to be used or a statement indicating that a mitigation bank or in-lieu fee program will be used (contingent upon approval by the district engineer).

(iii) Mitigation banks and in-lieu fee programs must prepare a mitigation plan including the items in paragraphs (c)(2) through (c)(14) of this section for each separate compensatory mitigation project site. For mitigation banks and in-lieu fee programs, the preparation and approval process for mitigation plans is described in § 332.8.

(2) *Objectives.* A description of the resource type(s) and amount(s) that will be provided, the method of compensation (i.e., restoration, establishment, enhancement, and/or preservation), and the manner in which the resource functions of the compensatory mitigation project will address the needs of the watershed,

ecoregion, physiographic province, or other geographic area of interest.

(3) *Site selection.* A description of the factors considered during the site selection process. This should include consideration of watershed needs, on-site alternatives where applicable, and the practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the compensatory mitigation project site. (See § 332.3(d).)

(4) *Site protection instrument.* A description of the legal arrangements and instrument, including site ownership, that will be used to ensure the long-term protection of the compensatory mitigation project site (see § 332.7(a)).

(5) *Baseline information.* A description of the ecological characteristics of the proposed compensatory mitigation project site and, in the case of an application for a DA permit, the impact site. This may include descriptions of historic and existing plant communities, historic and existing hydrology, soil conditions, a map showing the locations of the impact and mitigation site(s) or the geographic coordinates for those site(s), and other site characteristics appropriate to the type of resource proposed as compensation. The baseline information should also include a delineation of waters of the United States on the proposed compensatory mitigation project site. A prospective permittee planning to secure credits from an approved mitigation bank or in-lieu fee program only needs to provide baseline information about the impact site, not the mitigation bank or in-lieu fee project site.

(6) *Determination of credits.* A description of the number of credits to be provided, including a brief explanation of the rationale for this determination. (See § 332.3(f).)

(i) For permittee-responsible mitigation, this should include an explanation of how the compensatory mitigation project will provide the required compensation for unavoidable impacts to aquatic resources resulting from the permitted activity.

(ii) For permittees intending to secure credits from an approved mitigation bank or in-lieu fee program, it should include the number and resource type of credits to be secured and how these were determined.

(7) *Mitigation work plan.* Detailed written specifications and work descriptions for the compensatory mitigation project, including, but not limited to, the geographic boundaries of the project; construction methods,

timing, and sequence; source(s) of water, including connections to existing waters and uplands; methods for establishing the desired plant community; plans to control invasive plant species; the proposed grading plan, including elevations and slopes of the substrate; soil management; and erosion control measures. For stream compensatory mitigation projects, the mitigation work plan may also include other relevant information, such as planform geometry, channel form (e.g., typical channel cross-sections), watershed size, design discharge, and riparian area plantings.

(8) *Maintenance plan.* A description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed.

(9) *Performance standards.* Ecologically-based standards that will be used to determine whether the compensatory mitigation project is achieving its objectives. (See § 332.5.)

(10) *Monitoring requirements.* A description of parameters to be monitored in order to determine if the compensatory mitigation project is on track to meet performance standards and if adaptive management is needed. A schedule for monitoring and reporting on monitoring results to the district engineer must be included. (See § 332.6.)

(11) *Long-term management plan.* A description of how the compensatory mitigation project will be managed after performance standards have been achieved to ensure the long-term sustainability of the resource, including long-term financing mechanisms and the party responsible for long-term management. (See § 332.7(d).)

(12) *Adaptive management plan.* A management strategy to address unforeseen changes in site conditions or other components of the compensatory mitigation project, including the party or parties responsible for implementing adaptive management measures. The adaptive management plan will guide decisions for revising compensatory mitigation plans and implementing measures to address both foreseeable and unforeseen circumstances that adversely affect compensatory mitigation success. (See § 332.7(c).)

(13) *Financial assurances.* A description of financial assurances that will be provided and how they are sufficient to ensure a high level of confidence that the compensatory mitigation project will be successfully completed, in accordance with its performance standards (see § 332.3(n)).

(14) *Other information.* The district engineer may require additional

information as necessary to determine the appropriateness, feasibility, and practicability of the compensatory mitigation project.

### § 332.5 Ecological performance standards.

(a) The approved mitigation plan must contain performance standards that will be used to assess whether the project is achieving its objectives. Performance standards should relate to the objectives of the compensatory mitigation project, so that the project can be objectively evaluated to determine if it is developing into the desired resource type, providing the expected functions, and attaining any other applicable metrics (e.g., acres).

(b) Performance standards must be based on attributes that are objective and verifiable. Ecological performance standards must be based on the best available science that can be measured or assessed in a practicable manner. Performance standards may be based on variables or measures of functional capacity described in functional assessment methodologies, measurements of hydrology or other aquatic resource characteristics, and/or comparisons to reference aquatic resources of similar type and landscape position. The use of reference aquatic resources to establish performance standards will help ensure that those performance standards are reasonably achievable, by reflecting the range of variability exhibited by the regional class of aquatic resources as a result of natural processes and anthropogenic disturbances. Performance standards based on measurements of hydrology should take into consideration the hydrologic variability exhibited by reference aquatic resources, especially wetlands. Where practicable, performance standards should take into account the expected stages of the aquatic resource development process, in order to allow early identification of potential problems and appropriate adaptive management.

### § 332.6 Monitoring.

(a) *General.* (1) Monitoring the compensatory mitigation project site is necessary to determine if the project is meeting its performance standards, and to determine if measures are necessary to ensure that the compensatory mitigation project is accomplishing its objectives. The submission of monitoring reports to assess the development and condition of the compensatory mitigation project is required, but the content and level of detail for those monitoring reports must be commensurate with the scale and scope of the compensatory mitigation

project, as well as the compensatory mitigation project type. The mitigation plan must address the monitoring requirements for the compensatory mitigation project, including the parameters to be monitored, the length of the monitoring period, the party responsible for conducting the monitoring, the frequency for submitting monitoring reports to the district engineer, and the party responsible for submitting those monitoring reports to the district engineer.

(2) The district engineer may conduct site inspections on a regular basis (e.g., annually) during the monitoring period to evaluate mitigation site performance.

(b) *Monitoring period.* The mitigation plan must provide for a monitoring period that is sufficient to demonstrate that the compensatory mitigation project has met performance standards, but not less than five years. A longer monitoring period must be required for aquatic resources with slow development rates (e.g., forested wetlands, bogs). Following project implementation, the district engineer may reduce or waive the remaining monitoring requirements upon a determination that the compensatory mitigation project has achieved its performance standards. Conversely the district engineer may extend the original monitoring period upon a determination that performance standards have not been met or the compensatory mitigation project is not on track to meet them. The district engineer may also revise monitoring requirements when remediation and/or adaptive management is required.

(c) *Monitoring reports.* (1) The district engineer must determine the information to be included in monitoring reports. This information must be sufficient for the district engineer to determine how the compensatory mitigation project is progressing towards meeting its performance standards, and may include plans (such as as-built plans), maps, and photographs to illustrate site conditions. Monitoring reports may also include the results of functional, condition, or other assessments used to provide quantitative or qualitative measures of the functions provided by the compensatory mitigation project site.

(2) The permittee or sponsor is responsible for submitting monitoring reports in accordance with the special conditions of the DA permit or the terms of the instrument. Failure to submit monitoring reports in a timely manner may result in compliance action by the district engineer.

(3) Monitoring reports must be provided by the district engineer to interested federal, tribal, state, and local resource agencies, and the public, upon request.

#### § 332.7 Management.

(a) *Site protection.* (1) The aquatic habitats, riparian areas, buffers, and uplands that comprise the overall compensatory mitigation project must be provided long-term protection through real estate instruments or other available mechanisms, as appropriate. Long-term protection may be provided through real estate instruments such as conservation easements held by entities such as federal, tribal, state, or local resource agencies, non-profit conservation organizations, or private land managers; the transfer of title to such entities; or by restrictive covenants. For government property, long-term protection may be provided through federal facility management plans or integrated natural resources management plans. When approving a method for long-term protection of non-government property other than transfer of title, the district engineer shall consider relevant legal constraints on the use of conservation easements and/or restrictive covenants in determining whether such mechanisms provide sufficient site protection. To provide sufficient site protection, a conservation easement or restrictive covenant should, where practicable, establish in an appropriate third party (e.g., governmental or non-profit resource management agency) the right to enforce site protections and provide the third party the resources necessary to monitor and enforce these site protections.

(2) The real estate instrument, management plan, or other mechanism providing long-term protection of the compensatory mitigation site must, to the extent appropriate and practicable, prohibit incompatible uses (e.g., clear cutting or mineral extraction) that might otherwise jeopardize the objectives of the compensatory mitigation project. Where appropriate, multiple instruments recognizing compatible uses (e.g., fishing or grazing rights) may be used.

(3) The real estate instrument, management plan, or other long-term protection mechanism must contain a provision requiring 60-day advance notification to the district engineer before any action is taken to void or modify the instrument, management plan, or long-term protection mechanism, including transfer of title to, or establishment of any other legal claims over, the compensatory mitigation site.

(4) For compensatory mitigation projects on public lands, where federal facility management plans or integrated natural resources management plans are used to provide long-term protection, and changes in statute, regulation, or agency needs or mission results in an incompatible use on public lands originally set aside for compensatory mitigation, the public agency authorizing the incompatible use is responsible for providing alternative compensatory mitigation that is acceptable to the district engineer for any loss in functions resulting from the incompatible use.

(5) A real estate instrument, management plan, or other long-term protection mechanism used for site protection of permittee-responsible mitigation must be approved by the district engineer in advance of, or concurrent with, the activity causing the authorized impacts.

(b) *Sustainability.* Compensatory mitigation projects shall be designed, to the maximum extent practicable, to be self-sustaining once performance standards have been achieved. This includes minimization of active engineering features (e.g., pumps) and appropriate siting to ensure that natural hydrology and landscape context will support long-term sustainability. Where active long-term management and maintenance are necessary to ensure long-term sustainability (e.g., prescribed burning, invasive species control, maintenance of water control structures, easement enforcement), the responsible party must provide for such management and maintenance. This includes the provision of long-term financing mechanisms where necessary. Where needed, the acquisition and protection of water rights must be secured and documented in the permit conditions or instrument.

(c) *Adaptive management.* (1) If the compensatory mitigation project cannot be constructed in accordance with the approved mitigation plans, the permittee or sponsor must notify the district engineer. A significant modification of the compensatory mitigation project requires approval from the district engineer.

(2) If monitoring or other information indicates that the compensatory mitigation project is not progressing towards meeting its performance standards as anticipated, the responsible party must notify the district engineer as soon as possible. The district engineer will evaluate and pursue measures to address deficiencies in the compensatory mitigation project. The district engineer will consider whether the compensatory mitigation project is

providing ecological benefits comparable to the original objectives of the compensatory mitigation project.

(3) The district engineer, in consultation with the responsible party (and other federal, tribal, state, and local agencies, as appropriate), will determine the appropriate measures. The measures may include site modifications, design changes, revisions to maintenance requirements, and revised monitoring requirements. The measures must be designed to ensure that the modified compensatory mitigation project provides aquatic resource functions comparable to those described in the mitigation plan objectives.

(4) Performance standards may be revised in accordance with adaptive management to account for measures taken to address deficiencies in the compensatory mitigation project. Performance standards may also be revised to reflect changes in management strategies and objectives if the new standards provide for ecological benefits that are comparable or superior to the approved compensatory mitigation project. No other revisions to performance standards will be allowed except in the case of natural disasters.

(d) *Long-term management.* (1) The permit conditions or instrument must identify the party responsible for ownership and all long-term management of the compensatory mitigation project. The permit conditions or instrument may contain provisions allowing the permittee or sponsor to transfer the long-term management responsibilities of the compensatory mitigation project site to a land stewardship entity, such as a public agency, non-governmental organization, or private land manager, after review and approval by the district engineer. The land stewardship entity need not be identified in the original permit or instrument, as long as the future transfer of long-term management responsibility is approved by the district engineer.

(2) A long-term management plan should include a description of long-term management needs, annual cost estimates for these needs, and identify the funding mechanism that will be used to meet those needs.

(3) Any provisions necessary for long-term financing must be addressed in the original permit or instrument. The district engineer may require provisions to address inflationary adjustments and other contingencies, as appropriate. Appropriate long-term financing mechanisms include non-wasting endowments, trusts, contractual arrangements with future responsible parties, and other appropriate financial

instruments. In cases where the long-term management entity is a public authority or government agency, that entity must provide a plan for the long-term financing of the site.

(4) For permittee-responsible mitigation, any long-term financing mechanisms must be approved in advance of the activity causing the authorized impacts.

#### **§ 332.8 Mitigation banks and in-lieu fee programs.**

(a) *General considerations.* (1) All mitigation banks and in-lieu fee programs must have an approved instrument signed by the sponsor and the district engineer prior to being used to provide compensatory mitigation for DA permits.

(2) To the maximum extent practicable, mitigation banks and in-lieu fee project sites must be planned and designed to be self-sustaining over time, but some active management and maintenance may be required to ensure their long-term viability and sustainability. Examples of acceptable management activities include maintaining fire-dependent habitat communities in the absence of natural fire and controlling invasive exotic plant species.

(3) All mitigation banks and in-lieu fee programs must comply with the standards in this part, if they are to be used to provide compensatory mitigation for activities authorized by DA permits, regardless of whether they are sited on public or private lands and whether the sponsor is a governmental or private entity.

(b) *Interagency Review Team.* (1) The district engineer will establish an Interagency Review Team (IRT) to review documentation for the establishment and management of mitigation banks and in-lieu fee programs. The district engineer or his designated representative serves as Chair of the IRT. In cases where a mitigation bank or in-lieu fee program is proposed to satisfy the requirements of another federal, tribal, state, or local program, in addition to compensatory mitigation requirements of DA permits, it may be appropriate for the administering agency to serve as co-Chair of the IRT.

(2) In addition to the Corps, representatives from the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, NOAA Fisheries, the Natural Resources Conservation Service, and other federal agencies, as appropriate, may participate in the IRT. The IRT may also include representatives from tribal, state, and local regulatory and resource

agencies, where such agencies have authorities and/or mandates directly affecting, or affected by, the establishment, operation, or use of the mitigation bank or in-lieu fee program. The district engineer will seek to include all public agencies with a substantive interest in the establishment of the mitigation bank or in-lieu fee program on the IRT, but retains final authority over its composition.

(3) The primary role of the IRT is to facilitate the establishment of mitigation banks or in-lieu fee programs through the development of mitigation banking or in-lieu fee program instruments. The IRT will review the prospectus, instrument, and other appropriate documents and provide comments to the district engineer. The district engineer and the IRT should use a watershed approach to the extent practicable in reviewing proposed mitigation banks and in-lieu fee programs. Members of the IRT may also sign the instrument, if they so choose. By signing the instrument, the IRT members indicate their agreement with the terms of the instrument. As an alternative, a member of the IRT may submit a letter expressing concurrence with the instrument. The IRT will also advise the district engineer in assessing monitoring reports, recommending remedial or adaptive management measures, approving credit releases, and approving modifications to an instrument. In order to ensure timely processing of instruments and other documentation, comments from IRT members must be received by the district engineer within the time limits specified in this section. Comments received after these deadlines will only be considered at the discretion of the district engineer to the extent that doing so does not jeopardize the deadlines for district engineer action.

(4) The district engineer will give full consideration to any timely comments and advice of the IRT. The district engineer alone retains final authority for approval of the instrument in cases where the mitigation bank or in-lieu fee program is used to satisfy compensatory mitigation requirements of DA permits.

(5) *MOAs with other agencies.* The district engineer and members of the IRT may enter into a memorandum of agreement (MOA) with any other federal, state or local government agency to perform all or some of the IRT review functions described in this section. Such MOAs must include provisions for appropriate federal oversight of the review process. The district engineer retains sole authority for final approval of instruments and



other documentation required under this section.

(c) *Compensation planning framework for in-lieu fee programs.* (1) The approved instrument for an in-lieu fee program must include a compensation planning framework that will be used to select, secure, and implement aquatic resource restoration, establishment, enhancement, and/or preservation activities. The compensation planning framework must support a watershed approach to compensatory mitigation. All specific projects used to provide compensation for DA permits must be consistent with the approved compensation planning framework. Modifications to the framework must be approved as a significant modification to the instrument by the district engineer, after consultation with the IRT.

(2) The compensation planning framework must contain the following elements:

(i) The geographic service area(s), including a watershed-based rationale for the delineation of each service area;

(ii) A description of the threats to aquatic resources in the service area(s), including how the in-lieu fee program will help offset impacts resulting from those threats;

(iii) An analysis of historic aquatic resource loss in the service area(s);

(iv) An analysis of current aquatic resource conditions in the service area(s), supported by an appropriate level of field documentation;

(v) A statement of aquatic resource goals and objectives for each service area, including a description of the general amounts, types and locations of aquatic resources the program will seek to provide;

(vi) A prioritization strategy for selecting and implementing compensatory mitigation activities;

(vii) An explanation of how any preservation objectives identified in paragraph (c)(2)(v) of this section and addressed in the prioritization strategy in paragraph (c)(2)(vi) satisfy the criteria for use of preservation in § 332.3(h);

(viii) A description of any public and private stakeholder involvement in plan development and implementation, including, where appropriate, coordination with federal, state, tribal and local aquatic resource management and regulatory authorities;

(ix) A description of the long-term protection and management strategies for activities conducted by the in-lieu fee program sponsor;

(x) A strategy for periodic evaluation and reporting on the progress of the program in achieving the goals and objectives in paragraph (c)(2)(v) of this

section, including a process for revising the planning framework as necessary; and

(xi) Any other information deemed necessary for effective compensation planning by the district engineer.

(3) The level of detail necessary for the compensation planning framework is at the discretion of the district engineer, and will take into account the characteristics of the service area(s) and the scope of the program. As part of the in-lieu fee program instrument, the compensation planning framework will be reviewed by the IRT, and will be a major factor in the district engineer's decision on whether to approve the instrument.

(d) *Review process.* (1) The sponsor is responsible for preparing all documentation associated with establishment of the mitigation bank or in-lieu fee program, including the prospectus, instrument, and other appropriate documents, such as mitigation plans for a mitigation bank. The prospectus provides an overview of the proposed mitigation bank or in-lieu fee program and serves as the basis for public and initial IRT comment. For a mitigation bank, the mitigation plan, as described in § 332.4(c), provides detailed plans and specifications for the mitigation bank site. For in-lieu fee programs, mitigation plans will be prepared as in-lieu fee project sites are identified after the instrument has been approved and the in-lieu fee program becomes operational. The instrument provides the authorization for the mitigation bank or in-lieu fee program to provide credits to be used as compensatory mitigation for DA permits.

(2) *Prospectus.* The prospectus must provide a summary of the information regarding the proposed mitigation bank or in-lieu fee program, at a sufficient level of detail to support informed public and IRT comment. The review process begins when the sponsor submits a complete prospectus to the district engineer. For modifications of approved instruments, submittal of a new prospectus is not required; instead, the sponsor must submit a written request for an instrument modification accompanied by appropriate documentation. The district engineer must notify the sponsor within 30 days whether or not a submitted prospectus is complete. A complete prospectus includes the following information:

(i) The objectives of the proposed mitigation bank or in-lieu fee program.

(ii) How the mitigation bank or in-lieu fee program will be established and operated.

(iii) The proposed service area.

(iv) The general need for and technical feasibility of the proposed mitigation bank or in-lieu fee program.

(v) The proposed ownership arrangements and long-term management strategy for the mitigation bank or in-lieu fee project sites.

(vi) The qualifications of the sponsor to successfully complete the type(s) of mitigation project(s) proposed, including information describing any past such activities by the sponsor.

(vii) For a proposed mitigation bank, the prospectus must also address:

(A) The ecological suitability of the site to achieve the objectives of the proposed mitigation bank, including the physical, chemical, and biological characteristics of the bank site and how that site will support the planned types of aquatic resources and functions; and  
(B) Assurance of sufficient water rights to support the long-term sustainability of the mitigation bank.

(viii) For a proposed in-lieu fee program, the prospectus must also include:

(A) The compensation planning framework (see paragraph (c) of this section); and

(B) A description of the in-lieu fee program account required by paragraph (i) of this section.

(3) *Preliminary review of prospectus.* Prior to submitting a prospectus, the sponsor may elect to submit a draft prospectus to the district engineer for comment and consultation. The district engineer will provide copies of the draft prospectus to the IRT and will provide comments back to the sponsor within 30 days. Any comments from IRT members will also be forwarded to the sponsor. This preliminary review is optional but is strongly recommended. It is intended to identify potential issues early so that the sponsor may attempt to address those issues prior to the start of the formal review process.

(4) *Public review and comment.* Within 30 days of receipt of a complete prospectus or an instrument modification request that will be processed in accordance with paragraph (g)(1) of this section, the district engineer will provide public notice of the proposed mitigation bank or in-lieu fee program, in accordance with the public notice procedures at 33 CFR 325.3. The public notice must, at a minimum, include a summary of the prospectus and indicate that the full prospectus is available to the public for review upon request. For modifications of approved instruments, the public notice must instead summarize, and make available to the public upon request, whatever documentation is appropriate for the modification (e.g., a

new or revised mitigation plan). The comment period for public notice will be 30 days, unless the district engineer determines that a longer comment period is appropriate. The district engineer will notify the sponsor if the comment period is extended beyond 30 days, including an explanation of why the longer comment period is necessary. Copies of all comments received in response to the public notice must be distributed to the other IRT members and to the sponsor within 15 days of the close of the public comment period. The district engineer and IRT members may also provide comments to the sponsor at this time, and copies of any such comments will also be distributed to all IRT members. If the construction of a mitigation bank or an in-lieu fee program project requires a DA permit, the public notice requirement may be satisfied through the public notice provisions of the permit processing procedures, provided all of the relevant information is provided.

(5) *Initial evaluation.* (i) After the end of the comment period, the district engineer will review the comments received in response to the public notice, and make a written initial evaluation as to the potential of the proposed mitigation bank or in-lieu fee program to provide compensatory mitigation for activities authorized by DA permits. This initial evaluation letter must be provided to the sponsor within 30 days of the end of the public notice comment period.

(ii) If the district engineer determines that the proposed mitigation bank or in-lieu fee program has potential for providing appropriate compensatory mitigation for activities authorized by DA permits, the initial evaluation letter will inform the sponsor that he/she may proceed with preparation of the draft instrument (see paragraph (d)(6) of this section).

(iii) If the district engineer determines that the proposed mitigation bank or in-lieu fee program does not have potential for providing appropriate compensatory mitigation for DA permits, the initial evaluation letter must discuss the reasons for that determination. The sponsor may revise the prospectus to address the district engineer's concerns, and submit the revised prospectus to the district engineer. If the sponsor submits a revised prospectus, a revised public notice will be issued in accordance with paragraph (d)(4) of this section.

(iv) This initial evaluation procedure does not apply to proposed modifications of approved instruments.

(6) *Draft instrument.* (i) After considering comments from the district engineer, the IRT, and the public, if the

sponsor chooses to proceed with establishment of the mitigation bank or in-lieu fee program, he must prepare a draft instrument and submit it to the district engineer. In the case of an instrument modification, the sponsor must prepare a draft amendment (e.g., a specific instrument provision, a new or modified mitigation plan), and submit it to the district engineer. The district engineer must notify the sponsor within 30 days of receipt, whether the draft instrument or amendment is complete. If the draft instrument or amendment is incomplete, the district engineer will request from the sponsor the information necessary to make the draft instrument or amendment complete. Once any additional information is submitted, the district engineer must notify the sponsor as soon as he determines that the draft instrument or amendment is complete. The draft instrument must be based on the prospectus and must describe in detail the physical and legal characteristics of the mitigation bank or in-lieu fee program and how it will be established and operated.

(ii) For mitigation banks and in-lieu fee programs, the draft instrument must include the following information:

(A) A description of the proposed geographic service area of the mitigation bank or in-lieu fee program. The service area is the watershed, ecoregion, physiographic province, and/or other geographic area within which the mitigation bank or in-lieu fee program is authorized to provide compensatory mitigation required by DA permits. The service area must be appropriately sized to ensure that the aquatic resources provided will effectively compensate for adverse environmental impacts across the entire service area. For example, in urban areas, a U.S. Geological Survey 8-digit hydrologic unit code (HUC) watershed or a smaller watershed may be an appropriate service area. In rural areas, several contiguous 8-digit HUCs or a 6-digit HUC watershed may be an appropriate service area. Delineation of the service area must also consider any locally-developed standards and criteria that may be applicable. The economic viability of the mitigation bank or in-lieu fee program may also be considered in determining the size of the service area. The basis for the proposed service area must be documented in the instrument. An in-lieu fee program or umbrella mitigation banking instrument may have multiple service areas governed by its instrument (e.g., each watershed within a state or Corps district may be a separate service area under the instrument); however, all

impacts and compensatory mitigation must be accounted for by service area;

(B) Accounting procedures;

(C) A provision stating that legal responsibility for providing the compensatory mitigation lies with the sponsor once a permittee secures credits from the sponsor;

(D) Default and closure provisions;

(E) Reporting protocols; and

(F) Any other information deemed necessary by the district engineer.

(iii) For a mitigation bank, a complete draft instrument must include the following additional information:

(A) Mitigation plans that include all applicable items listed in § 332.4(c)(2) through (14); and

(B) A credit release schedule, which is tied to achievement of specific milestones. All credit releases must be approved by the district engineer, in consultation with the IRT, based on a determination that required milestones have been achieved. The district engineer, in consultation with the IRT, may modify the credit release schedule, including reducing the number of available credits or suspending credit sales or transfers altogether, where necessary to ensure that all credit sales or transfers remain tied to compensatory mitigation projects with a high likelihood of meeting performance standards;

(iv) For an in-lieu fee program, a complete draft instrument must include the following additional information:

(A) The compensation planning framework (see paragraph (c) of this section);

(B) Specification of the initial allocation of advance credits (see paragraph (n) of this section) and a draft fee schedule for these credits, by service area, including an explanation of the basis for the allocation and draft fee schedule;

(C) A methodology for determining future project-specific credits and fees; and

(D) A description of the in-lieu fee program account required by paragraph (i) of this section.

(7) *IRT review.* Upon receipt of notification by the district engineer that the draft instrument or amendment is complete, the sponsor must provide the district engineer with a sufficient number of copies of the draft instrument or amendment to distribute to the IRT members. The district engineer will promptly distribute copies of the draft instrument or amendment to the IRT members for a 30-day comment period. The 30-day comment period begins 5 days after the district engineer distributes the copies of the draft instrument or amendment to the IRT.

Following the comment period, the district engineer will discuss any comments with the appropriate agencies and with the sponsor. The district engineer will seek to resolve issues using a consensus based approach, to the extent practicable, while still meeting the decision-making time frames specified in this section. Within 90 days of receipt of the complete draft instrument or amendment by the IRT members, the district engineer must notify the sponsor of the status of the IRT review. Specifically, the district engineer must indicate to the sponsor if the draft instrument or amendment is generally acceptable and what changes, if any, are needed. If there are significant unresolved concerns that may lead to a formal objection from one or more IRT members to the final instrument or amendment, the district engineer will indicate the nature of those concerns.

(8) *Final instrument.* The sponsor must submit a final instrument to the district engineer for approval, with supporting documentation that explains how the final instrument addresses the comments provided by the IRT. For modifications of approved instruments, the sponsor must submit a final amendment to the district engineer for approval, with supporting documentation that explains how the final amendment addresses the comments provided by the IRT. The final instrument or amendment must be provided directly by the sponsor to all members of the IRT. Within 30 days of receipt of the final instrument or amendment, the district engineer will notify the IRT members whether or not he intends to approve the instrument or amendment. If no IRT member objects, by initiating the dispute resolution process in paragraph (e) of this section within 45 days of receipt of the final instrument or amendment, the district engineer will notify the sponsor of his final decision and, if the instrument or amendment is approved, arrange for it to be signed by the appropriate parties. If any IRT member initiates the dispute resolution process, the district engineer will notify the sponsor. Following conclusion of the dispute resolution process, the district engineer will notify the sponsor of his final decision, and if the instrument or amendment is approved, arrange for it to be signed by the appropriate parties. For mitigation banks, the final instrument must contain the information items listed in paragraphs (d)(6)(ii), and (iii) of this section. For in-lieu fee programs, the final instrument must contain the information items listed in paragraphs

(d)(6)(ii) and (iv) of this section. For the modification of an approved instrument, the amendment must contain appropriate information, as determined by the district engineer. The final instrument or amendment must be made available to the public upon request.

(e) *Dispute resolution process.* (1) Within 15 days of receipt of the district engineer's notification of intent to approve an instrument or amendment, the Regional Administrator of the U.S. EPA, the Regional Director of the U.S. Fish and Wildlife Service, the Regional Director of the National Marine Fisheries Service, and/or other senior officials of agencies represented on the IRT may notify the district engineer and other IRT members by letter if they object to the approval of the proposed final instrument or amendment. This letter must include an explanation of the basis for the objection and, where feasible, offer recommendations for resolving the objections. If the district engineer does not receive any objections within this time period, he may proceed to final action on the instrument or amendment.

(2) The district engineer must respond to the objection within 30 days of receipt of the letter. The district engineer's response may indicate an intent to disapprove the instrument or amendment as a result of the objection, an intent to approve the instrument or amendment despite the objection, or may provide a modified instrument or amendment that attempts to address the objection. The district engineer's response must be provided to all IRT members.

(3) Within 15 days of receipt of the district engineer's response, if the Regional Administrator or Regional Director is not satisfied with the response he may forward the issue to the Assistant Administrator for Water of the U.S. EPA, the Assistant Secretary for Fish and Wildlife and Parks of the U.S. FWS, or the Undersecretary for Oceans and Atmosphere of NOAA, as appropriate, for review and must notify the district engineer by letter via electronic mail or facsimile machine (with copies to all IRT members) that the issue has been forwarded for Headquarters review. This step is available only to the IRT members representing these three federal agencies, however other IRT members who do not agree with the district engineer's final decision do not have to sign the instrument or amendment or recognize the mitigation bank or in-lieu fee program for purposes of their own programs and authorities. If an IRT member other than the one filing the original objection has a new objection

based on the district engineer's response, he may use the first step in this procedure (paragraph (e)(1) of this section) to provide that objection to the district engineer.

(4) If the issue has not been forwarded to the objecting agency's Headquarters, then the district engineer may proceed with final action on the instrument or amendment. If the issue has been forwarded to the objecting agency's Headquarters, the district engineer must hold in abeyance the final action on the instrument or amendment, pending Headquarters level review described below.

(5) Within 20 days from the date of the letter requesting Headquarters level review, the Assistant Administrator for Water, the Assistant Secretary for Fish and Wildlife and Parks, or the Undersecretary for Oceans and Atmosphere must either notify the Assistant Secretary of the Army (Civil Works) (ASA(CW)) that further review will not be requested, or request that the ASA(CW) review the final instrument or amendment.

(6) Within 30 days of receipt of the letter from the objecting agency's Headquarters request for ASA(CW)'s review of the final instrument, the ASA(CW), through the Director of Civil Works, must review the draft instrument or amendment and advise the district engineer on how to proceed with final action on that instrument or amendment. The ASA(CW) must immediately notify the Assistant Administrator for Water, the Assistant Secretary for Fish and Wildlife and Parks, and/or the Undersecretary for Oceans and Atmosphere of the final decision.

(7) In cases where the dispute resolution procedure is used, the district engineer must notify the sponsor of his final decision within 150 days of receipt of the final instrument or amendment.

(f) *Extension of deadlines.* (1) The deadlines in paragraphs (d) and (e) of this section may be extended by the district engineer at his sole discretion in cases where:

(i) Compliance with other applicable laws, such as consultation under section 7 of the Endangered Species Act or section 106 of the National Historic Preservation Act, is required;

(ii) It is necessary to conduct government-to-government consultation with Indian tribes;

(iii) Timely submittal of information necessary for the review of the proposed mitigation bank or in-lieu fee program or the proposed modification of an approved instrument is not accomplished by the sponsor; or

(iv) Information that is essential to the district engineer's decision cannot be reasonably obtained within the specified time frame.

(2) In such cases, the district engineer must promptly notify the sponsor in writing of the extension and the reason for it. Such extensions shall be for the minimum time necessary to resolve the issue necessitating the extension.

(g) *Modification of instruments.* (1) *Approval of an amendment to an approved instrument.* Modification of an approved instrument, including the addition and approval of umbrella mitigation bank sites or in-lieu fee project sites or expansions of previously approved mitigation bank or in-lieu fee project sites, must follow the appropriate procedures in paragraph (d) of this section, unless the district engineer determines that the streamlined review process described in paragraph (g)(2) of this section is warranted.

(2) *Streamlined review process.* The streamlined modification review process may be used for the following modifications of instruments: changes reflecting adaptive management of the mitigation bank or in-lieu fee program, credit releases, changes in credit releases and credit release schedules, and changes that the district engineer determines are not significant. If the district engineer determines that the streamlined review process is warranted, he must notify the IRT members and the sponsor of this determination and provide them with copies of the proposed modification. IRT members and the sponsor have 30 days to notify the district engineer if they have concerns with the proposed modification. If IRT members or the sponsor notify the district engineer of such concerns, the district engineer shall attempt to resolve those concerns. Within 60 days of providing the proposed modification to the IRT, the district engineer must notify the IRT members of his intent to approve or disapprove the proposed modification. If no IRT member objects, by initiating the dispute resolution process in paragraph (e) of this section, within 15 days of receipt of this notification, the district engineer will notify the sponsor of his final decision and, if the modification is approved, arrange for it to be signed by the appropriate parties. If any IRT member initiates the dispute resolution process, the district engineer will so notify the sponsor. Following conclusion of the dispute resolution process, the district engineer will notify the sponsor of his final decision, and if the modification is approved, arrange

for it to be signed by the appropriate parties.

(h) *Umbrella mitigation banking instruments.* A single mitigation banking instrument may provide for future authorization of additional mitigation bank sites. As additional sites are selected, they must be included in the mitigation banking instrument as modifications, using the procedures in paragraph (g)(1) of this section. Credit withdrawal from the additional bank sites shall be consistent with paragraph (m) of this section.

(i) *In-lieu fee program account.* (1) The in-lieu fee program sponsor must establish a program account after the instrument is approved by the district engineer, prior to accepting any fees from permittees. If the sponsor accepts funds from entities other than permittees, those funds must be kept in separate accounts. The program account must be established at a financial institution that is a member of the Federal Deposit Insurance Corporation. All interests and earnings accruing to the program account must remain in that account for use by the in-lieu fee program for the purposes of providing compensatory mitigation for DA permits. The program account may only be used for the selection, design, acquisition, implementation, and management of in-lieu fee compensatory mitigation projects, except for a small percentage (as determined by the district engineer in consultation with the IRT and specified in the instrument) that can be used for administrative costs.

(2) The sponsor must submit proposed in-lieu fee projects to the district engineer for funding approval. Disbursements from the program account may only be made upon receipt of written authorization from the district engineer, after the district engineer has consulted with the IRT. The terms of the program account must specify that the district engineer has the authority to direct those funds to alternative compensatory mitigation projects in cases where the sponsor does not provide compensatory mitigation in accordance with the time frame specified in paragraph (n)(4) of this section.

(3) The sponsor must provide annual reports to the district engineer and the IRT. The annual reports must include the following information:

(i) All income received, disbursements, and interest earned by the program account;

(ii) A list of all permits for which in-lieu fee program funds were accepted. This list shall include: The Corps permit number (or the state permit number if

there is no corresponding Corps permit number, in cases of state programmatic general permits or other regional general permits), the service area in which the authorized impacts are located, the amount of authorized impacts, the amount of required compensatory mitigation, the amount paid to the in-lieu fee program, and the date the funds were received from the permittee;

(iii) A description of in-lieu fee program expenditures from the account, such as the costs of land acquisition, planning, construction, monitoring, maintenance, contingencies, adaptive management, and administration;

(iv) The balance of advance credits and released credits at the end of the report period for each service area; and

(v) Any other information required by the district engineer.

(4) The district engineer may audit the records pertaining to the program account. All books, accounts, reports, files, and other records relating to the in-lieu fee program account shall be available at reasonable times for inspection and audit by the district engineer.

(j) *In-lieu fee project approval.* (1) As in-lieu fee project sites are identified and secured, the sponsor must submit mitigation plans to the district engineer that include all applicable items listed in § 332.4(c)(2) through (14). The mitigation plan must also include a credit release schedule consistent with paragraph (o)(8) of this section that is tied to achievement of specific performance standards. The review and approval of in-lieu fee projects will be conducted in accordance with the procedures in paragraph (g)(1) of this section, as modifications of the in-lieu fee program instrument. This includes compensatory mitigation projects conducted by another party on behalf of the sponsor through requests for proposals and awarding of contracts.

(2) If a DA permit is required for an in-lieu fee project, the permit should not be issued until all relevant provisions of the mitigation plan have been substantively determined, to ensure that the DA permit accurately reflects all relevant provisions of the approved mitigation plan, such as performance standards.

(k) *Coordination of mitigation banking instruments and DA permit issuance.* In cases where initial establishment of the mitigation bank, or the development of a new project site under an umbrella banking instrument, involves activities requiring DA authorization, the permit should not be issued until all relevant provisions of the mitigation plan have been substantively determined. This is to

ensure that the DA permit accurately reflects all relevant provisions of the final instrument, such as performance standards.

(1) *Project implementation.* (1) The sponsor must have an approved instrument prior to collecting funds from permittees to satisfy compensatory mitigation requirements for DA permits.

(2) Authorization to sell credits to satisfy compensatory mitigation requirements in DA permits is contingent on compliance with all of the terms of the instrument. This includes constructing a mitigation bank or in-lieu fee project in accordance with the mitigation plan approved by the district engineer and incorporated by reference in the instrument. If the aquatic resource restoration, establishment, enhancement, and/or preservation activities cannot be implemented in accordance with the approved mitigation plan, the district engineer must consult with the sponsor and the IRT to consider modifications to the instrument, including adaptive management, revisions to the credit release schedule, and alternatives for providing compensatory mitigation to satisfy any credits that have already been sold.

(3) An in-lieu fee program sponsor is responsible for the implementation, long-term management, and any required remediation of the restoration, establishment, enhancement, and/or preservation activities, even though those activities may be conducted by other parties through requests for proposals or other contracting mechanisms.

(m) *Credit withdrawal from mitigation banks.* The mitigation banking instrument may allow for an initial debiting of a percentage of the total credits projected at mitigation bank maturity, provided the following conditions are satisfied: the mitigation banking instrument and mitigation plan have been approved, the mitigation bank site has been secured, appropriate financial assurances have been established, and any other requirements determined to be necessary by the district engineer have been fulfilled. The mitigation banking instrument must provide a schedule for additional credit releases as appropriate milestones are achieved (see paragraph (o)(8) of this section). Implementation of the approved mitigation plan shall be initiated no later than the first full growing season after the date of the first credit transaction.

(n) *Advance credits for in-lieu fee programs.* (1) The in-lieu fee program instrument may make a limited number of advance credits available to

permittees when the instrument is approved. The number of advance credits will be determined by the district engineer, in consultation with the IRT, and will be specified for each service area in the instrument. The number of advance credits will be based on the following considerations:

(i) The compensation planning framework;

(ii) The sponsor's past performance for implementing aquatic resource restoration, establishment, enhancement, and/or preservation activities in the proposed service area or other areas; and

(iii) The projected financing necessary to begin planning and implementation of in-lieu fee projects.

(2) To determine the appropriate number of advance credits for a particular service area, the district engineer may require the sponsor to provide confidential supporting information that will not be made available to the general public. Examples of confidential supporting information may include prospective in-lieu fee project sites.

(3) As released credits are produced by in-lieu fee projects, they must be used to fulfill any advance credits that have already been provided within the project service area before any remaining released credits can be sold or transferred to permittees. Once previously provided advance credits have been fulfilled, an equal number of advance credits is re-allocated to the sponsor for sale or transfer to fulfill new mitigation requirements, consistent with the terms of the instrument. The number of advance credits available to the sponsor at any given time to sell or transfer to permittees in a given service area is equal to the number of advance credits specified in the instrument, minus any that have already been provided but not yet fulfilled.

(4) Land acquisition and initial physical and biological improvements must be completed by the third full growing season after the first advance credit in that service area is secured by a permittee, unless the district engineer determines that more or less time is needed to plan and implement an in-lieu fee project. If the district engineer determines that there is a compensatory mitigation deficit in a specific service area by the third growing season after the first advance credit in that service area is sold, and determines that it would not be in the public interest to allow the sponsor additional time to plan and implement an in-lieu fee project, the district engineer must direct the sponsor to disburse funds from the in-lieu fee program account to provide

alternative compensatory mitigation to fulfill those compensation obligations.

(5) The sponsor is responsible for complying with the terms of the in-lieu fee program instrument. If the district engineer determines, as a result of review of annual reports on the operation of the in-lieu fee program (see paragraphs (p)(2) and (q)(1) of this section), that it is not performing in compliance with its instrument, the district engineer will take appropriate action, which may include suspension of credit sales, to ensure compliance with the in-lieu fee program instrument (see paragraph (o)(10) of this section). Permittees that secured credits from the in-lieu fee program are not responsible for in-lieu fee program compliance.

(o) *Determining credits.* (1) *Units of measure.* The principal units for credits and debits are acres, linear feet, functional assessment units, or other suitable metrics of particular resource types. Functional assessment units or other suitable metrics may be linked to acres or linear feet.

(2) *Assessment.* Where practicable, an appropriate assessment method (e.g., hydrogeomorphic approach to wetlands functional assessment, index of biological integrity) or other suitable metric must be used to assess and describe the aquatic resource types that will be restored, established, enhanced and/or preserved by the mitigation bank or in-lieu fee project.

(3) *Credit production.* The number of credits must reflect the difference between pre- and post-compensatory mitigation project site conditions, as determined by a functional or condition assessment or other suitable metric.

(4) *Credit value.* Once a credit is debited (sold or transferred to a permittee), its value cannot change.

(5) *Credit costs.* (i) The cost of compensatory mitigation credits provided by a mitigation bank or in-lieu fee program is determined by the sponsor.

(ii) For in-lieu fee programs, the cost per unit of credit must include the expected costs associated with the restoration, establishment, enhancement, and/or preservation of aquatic resources in that service area. These costs must be based on full cost accounting, and include, as appropriate, expenses such as land acquisition, project planning and design, construction, plant materials, labor, legal fees, monitoring, and remediation or adaptive management activities, as well as administration of the in-lieu fee program. The cost per unit credit must also take into account contingency costs appropriate to the stage of project planning, including uncertainties in

construction and real estate expenses. The cost per unit of credit must also take into account the resources necessary for the long-term management and protection of the in-lieu fee project. In addition, the cost per unit credit must include financial assurances that are necessary to ensure successful completion of in-lieu fee projects.

(6) *Credits provided by preservation.* These credits should be specified as acres, linear feet, or other suitable metrics of preservation of a particular resource type. In determining the compensatory mitigation requirements for DA permits using mitigation banks or in-lieu fee programs, the district engineer should apply a higher mitigation ratio if the requirements are to be met through the use of preservation credits. In determining this higher ratio, the district engineer must consider the relative importance of both the impacted and the preserved aquatic resources in sustaining watershed functions.

(7) *Credits provided by riparian areas, buffers, and uplands.* These credits should be specified as acres, linear feet, or other suitable metrics of riparian area, buffer, and uplands, respectively. Non-aquatic resources can only be used as compensatory mitigation for impacts to aquatic resources authorized by DA permits when those resources are essential to maintaining the ecological viability of adjoining aquatic resources. In determining the compensatory mitigation requirements for DA permits using mitigation banks and in-lieu fee programs, the district engineer may authorize the use of riparian area, buffer, and/or upland credits if he determines that these areas are essential to sustaining aquatic resource functions in the watershed and are the most appropriate compensation for the authorized impacts.

(8) *Credit release schedule.* (i) *General considerations.* Release of credits must be tied to performance-based milestones (e.g., construction, planting, establishment of specified plant and animal communities). The credit release schedule should reserve a significant share of the total credits for release only after full achievement of ecological performance standards. When determining the credit release schedule, factors to be considered may include, but are not limited to: The method of providing compensatory mitigation credits (e.g., restoration), the likelihood of success, the nature and amount of work needed to generate the credits, and the aquatic resource type(s) and function(s) to be provided by the mitigation bank or in-lieu fee project. The district engineer will determine the

credit release schedule, including the share to be released only after full achievement of performance standards, after consulting with the IRT. Once released, credits may only be used to satisfy compensatory mitigation requirements of a DA permit if the use of credits for a specific permit has been approved by the district engineer.

(ii) For single-site mitigation banks, the terms of the credit release schedule must be specified in the mitigation banking instrument. The credit release schedule may provide for an initial debiting of a limited number of credits once the instrument is approved and other appropriate milestones are achieved (see paragraph (m) of this section).

(iii) For in-lieu fee projects and umbrella mitigation bank sites, the terms of the credit release schedule must be specified in the approved mitigation plan. When an in-lieu fee project or umbrella mitigation bank site is implemented and is achieving the performance-based milestones specified in the credit release schedule, credits are generated in accordance with the credit release schedule for the approved mitigation plan. If the in-lieu fee project or umbrella mitigation bank site does not achieve those performance-based milestones, the district engineer may modify the credit release schedule, including reducing the number of credits.

(9) *Credit release approval.* Credit releases for mitigation banks and in-lieu fee projects must be approved by the district engineer. In order for credits to be released, the sponsor must submit documentation to the district engineer demonstrating that the appropriate milestones for credit release have been achieved and requesting the release. The district engineer will provide copies of this documentation to the IRT members for review. IRT members must provide any comments to the district engineer within 15 days of receiving this documentation. However, if the district engineer determines that a site visit is necessary, IRT members must provide any comments to the district engineer within 15 days of the site visit. The district engineer must schedule the site visit so that it occurs as soon as it is practicable, but the site visit may be delayed by seasonal considerations that affect the ability of the district engineer and the IRT to assess whether the applicable credit release milestones have been achieved. After full consideration of any comments received, the district engineer will determine whether the milestones have been achieved and the credits can be released. The district engineer shall

make a decision within 30 days of the end of that comment period, and notify the sponsor and the IRT.

(10) *Suspension and termination.* If the district engineer determines that the mitigation bank or in-lieu fee program is not meeting performance standards or complying with the terms of the instrument, appropriate action will be taken. Such actions may include, but are not limited to, suspending credit sales, adaptive management, decreasing available credits, utilizing financial assurances, and terminating the instrument.

(p) *Accounting procedures.* (1) For mitigation banks, the instrument must contain a provision requiring the sponsor to establish and maintain a ledger to account for all credit transactions. Each time an approved credit transaction occurs, the sponsor must notify the district engineer.

(2) For in-lieu fee programs, the instrument must contain a provision requiring the sponsor to establish and maintain an annual report ledger in accordance with paragraph (i)(3) of this section, as well as individual ledgers that track the production of released credits for each in-lieu fee project.

(q) *Reporting.* (1) *Ledger account.* The sponsor must compile an annual ledger report showing the beginning and ending balance of available credits and permitted impacts for each resource type, all additions and subtractions of credits, and any other changes in credit availability (e.g., additional credits released, credit sales suspended). The ledger report must be submitted to the district engineer, who will distribute copies to the IRT members. The ledger report is part of the administrative record for the mitigation bank or in-lieu fee program. The district engineer will make the ledger report available to the public upon request.

(2) *Monitoring reports.* The sponsor is responsible for monitoring the mitigation bank site or the in-lieu fee project site in accordance with the approved monitoring requirements to determine the level of success and identify problems requiring remedial action or adaptive management measures. Monitoring must be conducted in accordance with the requirements in § 332.6, and at time intervals appropriate for the particular project type and until such time that the district engineer, in consultation with the IRT, has determined that the performance standards have been attained. The instrument must include requirements for periodic monitoring reports to be submitted to the district engineer, who will provide copies to other IRT members.

(3) *Financial assurance and long-term management funding report.* The district engineer may require the sponsor to provide an annual report showing beginning and ending balances, including deposits into and any withdrawals from, the accounts providing funds for financial assurances and long-term management activities. The report should also include information on the amount of required financial assurances and the status of those assurances, including their potential expiration.

(r) *Use of credits.* Except as provided below, all activities authorized by DA permits are eligible, at the discretion of the district engineer, to use mitigation banks or in-lieu fee programs to fulfill compensatory mitigation requirements for DA permits. The district engineer will determine the number and type(s) of credits required to compensate for the authorized impacts. Permit applicants may propose to use a particular mitigation bank or in-lieu fee program to provide the required compensatory mitigation. In such cases, the sponsor must provide the permit applicant with a statement of credit availability. The district engineer must review the permit applicant's compensatory mitigation proposal, and notify the applicant of his determination regarding the acceptability of using that mitigation bank or in-lieu fee program.

(s) *IRT concerns with use of credits.* If, in the view of a member of the IRT, an issued permit or series of issued permits raises concerns about how credits from a particular mitigation bank or in-lieu fee program are being used to satisfy compensatory mitigation requirements (including concerns about whether credit use is consistent with the terms of the instrument), the IRT member may notify the district engineer in writing of the concern. The district engineer shall promptly consult with the IRT to address the concern. Resolution of the concern is at the discretion of the district engineer, consistent with applicable statutes, regulations, and policies regarding compensatory mitigation requirements for DA permits. Nothing in this section limits the authorities designated to IRT agencies under existing statutes or regulations.

(t) *Site protection.* (1) For mitigation bank sites, real estate instruments, management plans, or other long-term mechanisms used for site protection must be finalized before any credits can be released.

(2) For in-lieu fee project sites, real estate instruments, management plans, or other long-term protection mechanisms used for site protection

must be finalized before advance credits can become released credits.

(u) *Long-term management.* (1) The legal mechanisms and the party responsible for the long-term management and the protection of the mitigation bank site must be documented in the instrument or, in the case of umbrella mitigation banking instruments and in-lieu fee programs, the approved mitigation plans. The responsible party should make adequate provisions for the operation, maintenance, and long-term management of the compensatory mitigation project site. The long-term management plan should include a description of long-term management needs and identify the funding mechanism that will be used to meet those needs.

(2) The instrument may contain provisions for the sponsor to transfer long-term management responsibilities to a land stewardship entity, such as a public agency, non-governmental organization, or private land manager.

(3) The instrument or approved mitigation plan must address the financial arrangements and timing of any necessary transfer of long-term management funds to the steward.

(4) Where needed, the acquisition and protection of water rights should be secured and documented in the instrument or, in the case of umbrella mitigation banking instruments and in-lieu fee programs, the approved mitigation site plan.

(v) *Grandfathering of existing instruments.* (1) *Mitigation banking instruments.* All mitigation banking instruments approved on or after July 9, 2008 must meet the requirements of this part. Mitigation banks approved prior to July 9, 2008 may continue to operate under the terms of their existing instruments. However, any modification to such a mitigation banking instrument on or after July 9, 2008, including authorization of additional sites under an umbrella mitigation banking instrument, expansion of an existing site, or addition of a different type of resource credits (e.g., stream credits to a wetland bank) must be consistent with the terms of this part.

(2) *In-lieu fee program instruments.* All in-lieu fee program instruments approved on or after July 9, 2008 must meet the requirements of this part. In-lieu fee programs operating under instruments approved prior to July 9, 2008 may continue to operate under those instruments for two years after the effective date of this rule, after which time they must meet the requirements of this part, unless the district engineer determines that circumstances warrant

an extension of up to three additional years. The district engineer must consult with the IRT before approving such extensions. Any revisions made to the in-lieu fee program instrument on or after July 9, 2008 must be consistent with the terms of this part. Any approved project for which construction was completed under the terms of a previously approved instrument may continue to operate indefinitely under those terms if the district engineer determines that the project is providing appropriate mitigation substantially consistent with the terms of this part.

Dated: March 28, 2008.

**John Paul Woodley, Jr.,**  
*Assistant Secretary of the Army, (Civil Works),  
Department of the Army.*

## Environmental Protection Agency

### 40 CFR Chapter I

■ For the reasons stated in the preamble, the Environmental Protection Agency amends 40 CFR part 230 as set forth below:

#### **PART 230—SECTION 404(b)(1) GUIDELINES FOR SPECIFICATION OF DISPOSAL SITES FOR DREDGED OR FILL MATERIAL**

■ 1. The authority citation for part 230 continues to read as follows:

**Authority:** Secs. 404(b) and 501(a) of the Clean Water Act of 1977 (33 U.S.C. 1344(b) and 1361(a)).

#### **§ 230.12 [Amended]**

■ 2. In § 230.12(a)(2) remove the reference “subpart H” and add in its place the reference “subparts H and J”.

#### **Subpart H—[Amended]**

■ 3. In subpart H the Note following the subpart heading is amended by adding a sentence to the end to read as follows:

#### **Subpart H—Actions To Minimize Adverse Effects**

**Note:** \* \* \* Additional criteria for compensation measures are provided in subpart J of this part.

■ 4. In § 230.75 add a new sentence after the second sentence in paragraph (d) to read as follows:

#### **§ 230.75 Actions affecting plant and animal populations.**

\* \* \* \* \*

(d) \* \* \* Additional criteria for compensation measures are provided in subpart J of this part. \* \* \*

\* \* \* \* \*

■ 5. Add Subpart J to part 230 to read as follows:

**Subpart J—Compensatory Mitigation for Losses of Aquatic Resources**

Sec.

- 230.91 Purpose and general considerations.  
 230.92 Definitions.  
 230.93 General compensatory mitigation requirements.  
 230.94 Planning and documentation.  
 230.95 Ecological performance standards.  
 230.96 Monitoring.  
 230.97 Management.  
 230.98 Mitigation banks and in-lieu fee programs.

**Subpart J—Compensatory Mitigation for Losses of Aquatic Resources****§ 230.91 Purpose and general considerations.**

(a) *Purpose.* (1) The purpose of this subpart is to establish standards and criteria for the use of all types of compensatory mitigation, including on-site and off-site permittee-responsible mitigation, mitigation banks, and in-lieu fee mitigation to offset unavoidable impacts to waters of the United States authorized through the issuance of permits by the U.S. Army Corps of Engineers (Corps) pursuant to section 404 of the Clean Water Act (33 U.S.C. 1344). This subpart implements section 314(b) of the 2004 National Defense Authorization Act (Pub. L. 108–136), which directs that the standards and criteria shall, to the maximum extent practicable, maximize available credits and opportunities for mitigation, provide for regional variations in wetland conditions, functions, and values, and apply equivalent standards and criteria to each type of compensatory mitigation. This subpart is intended to further clarify mitigation requirements established under the Corps and EPA regulations at 33 CFR part 320 and this part, respectively.

(2) This subpart has been jointly developed by the Secretary of the Army, acting through the Chief of Engineers, and the Administrator of the Environmental Protection Agency. From time to time guidance on interpreting and implementing this subpart may be prepared jointly by EPA and the Corps at the national or regional level. No modifications to the basic application, meaning, or intent of this subpart will be made without further joint rulemaking by the Secretary of the Army, acting through the Chief of Engineers and the Administrator of the Environmental Protection Agency, pursuant to the Administrative Procedure Act (5 U.S.C. 551 *et seq.*).

(b) *Applicability.* This subpart does not alter the circumstances under which compensatory mitigation is required or the definition of “waters of the United States,” which is provided at § 230.3(s).

Use of resources as compensatory mitigation that are not otherwise subject to regulation under section 404 of the Clean Water Act does not in and of itself make them subject to such regulation.

(c) *Sequencing.* (1) Nothing in this section affects the requirement that all DA permits subject to section 404 of the Clean Water Act comply with applicable provisions of this part.

(2) Pursuant to these requirements, the district engineer will issue an individual section 404 permit only upon a determination that the proposed discharge complies with applicable provisions of 40 CFR part 230, including those which require the permit applicant to take all appropriate and practicable steps to avoid and minimize adverse impacts to waters of the United States. Practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. Compensatory mitigation for unavoidable impacts may be required to ensure that an activity requiring a section 404 permit complies with the Section 404(b)(1) Guidelines.

(3) Compensatory mitigation for unavoidable impacts may be required to ensure that an activity requiring a section 404 permit complies with the Section 404(b)(1) Guidelines. During the 404(b)(1) Guidelines compliance analysis, the district engineer may determine that a DA permit for the proposed activity cannot be issued because of the lack of appropriate and practicable compensatory mitigation options.

(d) *Accounting for regional variations.* Where appropriate, district engineers shall account for regional characteristics of aquatic resource types, functions and services when determining performance standards and monitoring requirements for compensatory mitigation projects.

(e) *Relationship to other guidance documents.* (1) This subpart applies instead of the “Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks,” which was issued on November 28, 1995, the “Federal Guidance on the Use of In-Lieu Fee Arrangements for Compensatory Mitigation Under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act,” which was issued on November 7, 2000, and Regulatory Guidance Letter 02–02, “Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899” which was issued on December 24, 2002. These guidance documents are no longer to be

used as compensatory mitigation policy in the Corps Regulatory Program.

(2) In addition, this subpart also applies instead of the provisions relating to the amount, type, and location of compensatory mitigation projects, including the use of preservation, in the February 6, 1990, Memorandum of Agreement (MOA) between the Department of the Army and the Environmental Protection Agency on the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines. All other provisions of this MOA remain in effect.

**§ 230.92 Definitions.**

For the purposes of this subpart, the following terms are defined:

*Adaptive management* means the development of a management strategy that anticipates likely challenges associated with compensatory mitigation projects and provides for the implementation of actions to address those challenges, as well as unforeseen changes to those projects. It requires consideration of the risk, uncertainty, and dynamic nature of compensatory mitigation projects and guides modification of those projects to optimize performance. It includes the selection of appropriate measures that will ensure that the aquatic resource functions are provided and involves analysis of monitoring results to identify potential problems of a compensatory mitigation project and the identification and implementation of measures to rectify those problems.

*Advance credits* means any credits of an approved in-lieu fee program that are available for sale prior to being fulfilled in accordance with an approved mitigation project plan. Advance credit sales require an approved in-lieu fee program instrument that meets all applicable requirements including a specific allocation of advance credits, by service area where applicable. The instrument must also contain a schedule for fulfillment of advance credit sales.

*Buffer* means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

*Compensatory mitigation* means the restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and



practicable avoidance and minimization has been achieved.

*Compensatory mitigation project* means compensatory mitigation implemented by the permittee as a requirement of a DA permit (i.e., permittee-responsible mitigation), or by a mitigation bank or an in-lieu fee program.

*Condition* means the relative ability of an aquatic resource to support and maintain a community of organisms having a species composition, diversity, and functional organization comparable to reference aquatic resources in the region.

*Credit* means a unit of measure (e.g., a functional or areal measure or other suitable metric) representing the accrual or attainment of aquatic functions at a compensatory mitigation site. The measure of aquatic functions is based on the resources restored, established, enhanced, or preserved.

*DA* means Department of the Army.

*Days* means calendar days.

*Debit* means a unit of measure (e.g., a functional or areal measure or other suitable metric) representing the loss of aquatic functions at an impact or project site. The measure of aquatic functions is based on the resources impacted by the authorized activity.

*Enhancement* means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

*Establishment* (creation) means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area and functions.

*Fulfillment of advance credit sales of an in-lieu fee program* means application of credits released in accordance with a credit release schedule in an approved mitigation project plan to satisfy the mitigation requirements represented by the advance credits. Only after any advance credit sales within a service area have been fulfilled through the application of released credits from an in-lieu fee project (in accordance with the credit release schedule for an approved mitigation project plan), may additional released credits from that project be sold or transferred to permittees. When advance credits are fulfilled, an equal number of new advance credits is

restored to the program sponsor for sale or transfer to permit applicants.

*Functional capacity* means the degree to which an area of aquatic resource performs a specific function.

*Functions* means the physical, chemical, and biological processes that occur in ecosystems.

*Impact* means adverse effect.

*In-kind* means a resource of a similar structural and functional type to the impacted resource.

*In-lieu fee program* means a program involving the restoration, establishment, enhancement, and/or preservation of aquatic resources through funds paid to a governmental or non-profit natural resources management entity to satisfy compensatory mitigation requirements for DA permits. Similar to a mitigation bank, an in-lieu fee program sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the in-lieu program sponsor. However, the rules governing the operation and use of in-lieu fee programs are somewhat different from the rules governing operation and use of mitigation banks. The operation and use of an in-lieu fee program are governed by an in-lieu fee program instrument.

*In-lieu fee program instrument* means the legal document for the establishment, operation, and use of an in-lieu fee program.

*Instrument* means mitigation banking instrument or in-lieu fee program instrument.

*Interagency Review Team* (IRT) means an interagency group of federal, tribal, state, and/or local regulatory and resource agency representatives that reviews documentation for, and advises the district engineer on, the establishment and management of a mitigation bank or an in-lieu fee program.

*Mitigation bank* means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing compensatory mitigation for impacts authorized by DA permits. In general, a mitigation bank sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the mitigation bank sponsor. The operation and use of a mitigation bank are governed by a mitigation banking instrument.

*Mitigation banking instrument* means the legal document for the establishment, operation, and use of a mitigation bank.

*Off-site* means an area that is neither located on the same parcel of land as the

impact site, nor on a parcel of land contiguous to the parcel containing the impact site.

*On-site* means an area located on the same parcel of land as the impact site, or on a parcel of land contiguous to the impact site.

*Out-of-kind* means a resource of a different structural and functional type from the impacted resource.

*Performance standards* are observable or measurable physical (including hydrological), chemical and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

*Permittee-responsible mitigation* means an aquatic resource restoration, establishment, enhancement, and/or preservation activity undertaken by the permittee (or an authorized agent or contractor) to provide compensatory mitigation for which the permittee retains full responsibility.

*Preservation* means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

*Re-establishment* means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

*Reference aquatic resources* are a set of aquatic resources that represent the full range of variability exhibited by a regional class of aquatic resources as a result of natural processes and anthropogenic disturbances.

*Rehabilitation* means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

*Release of credits* means a determination by the district engineer, in consultation with the IRT, that credits associated with an approved mitigation plan are available for sale or transfer, or in the case of an in-lieu fee program, for fulfillment of advance credit sales. A proportion of projected credits for a specific mitigation bank or in-lieu fee project may be released upon

approval of the mitigation plan, with additional credits released as milestones specified in the credit release schedule are achieved.

*Restoration* means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

*Riparian areas* are lands adjacent to streams, rivers, lakes, and estuarine-marine shorelines. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality.

*Service area* means the geographic area within which impacts can be mitigated at a specific mitigation bank or an in-lieu fee program, as designated in its instrument.

*Services* mean the benefits that human populations receive from functions that occur in ecosystems.

*Sponsor* means any public or private entity responsible for establishing, and in most circumstances, operating a mitigation bank or in-lieu fee program.

*Standard permit* means a standard, individual permit issued under the authority of section 404 of the Clean Water Act.

*Temporal loss* is the time lag between the loss of aquatic resource functions caused by the permitted impacts and the replacement of aquatic resource functions at the compensatory mitigation site. Higher compensation ratios may be required to compensate for temporal loss. When the compensatory mitigation project is initiated prior to, or concurrent with, the permitted impacts, the district engineer may determine that compensation for temporal loss is not necessary, unless the resource has a long development time.

*Watershed* means a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.

*Watershed approach* means an analytical process for making compensatory mitigation decisions that support the sustainability or improvement of aquatic resources in a watershed. It involves consideration of watershed needs, and how locations and types of compensatory mitigation projects address those needs. A landscape perspective is used to identify the types and locations of compensatory mitigation projects that will benefit the watershed and offset losses of aquatic resource functions and services caused by activities authorized

by DA permits. The watershed approach may involve consideration of landscape scale, historic and potential aquatic resource conditions, past and projected aquatic resource impacts in the watershed, and terrestrial connections between aquatic resources when determining compensatory mitigation requirements for DA permits.

*Watershed plan* means a plan developed by federal, tribal, state, and/or local government agencies or appropriate non-governmental organizations, in consultation with relevant stakeholders, for the specific goal of aquatic resource restoration, establishment, enhancement, and preservation. A watershed plan addresses aquatic resource conditions in the watershed, multiple stakeholder interests, and land uses. Watershed plans may also identify priority sites for aquatic resource restoration and protection. Examples of watershed plans include special area management plans, advance identification programs, and wetland management plans.

#### **§ 230.93 General compensatory mitigation requirements.**

(a) *General considerations.* (1) The fundamental objective of compensatory mitigation is to offset environmental losses resulting from unavoidable impacts to waters of the United States authorized by DA permits. The district engineer must determine the compensatory mitigation to be required in a DA permit, based on what is practicable and capable of compensating for the aquatic resource functions that will be lost as a result of the permitted activity. When evaluating compensatory mitigation options, the district engineer will consider what would be environmentally preferable. In making this determination, the district engineer must assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project. In many cases, the environmentally preferable compensatory mitigation may be provided through mitigation banks or in-lieu fee programs because they usually involve consolidating compensatory mitigation projects where ecologically appropriate, consolidating resources, providing financial planning and scientific expertise (which often is not practical for permittee-responsible compensatory mitigation projects), reducing temporal losses of functions, and reducing uncertainty over project success. Compensatory mitigation requirements must be commensurate with the amount and type of impact that

is associated with a particular DA permit. Permit applicants are responsible for proposing an appropriate compensatory mitigation option to offset unavoidable impacts.

(2) Compensatory mitigation may be performed using the methods of restoration, enhancement, establishment, and in certain circumstances preservation. Restoration should generally be the first option considered because the likelihood of success is greater and the impacts to potentially ecologically important uplands are reduced compared to establishment, and the potential gains in terms of aquatic resource functions are greater, compared to enhancement and preservation.

(3) Compensatory mitigation projects may be sited on public or private lands. Credits for compensatory mitigation projects on public land must be based solely on aquatic resource functions provided by the compensatory mitigation project, over and above those provided by public programs already planned or in place. All compensatory mitigation projects must comply with the standards in this part, if they are to be used to provide compensatory mitigation for activities authorized by DA permits, regardless of whether they are sited on public or private lands and whether the sponsor is a governmental or private entity.

(b) *Type and location of compensatory mitigation.* (1) When considering options for successfully providing the required compensatory mitigation, the district engineer shall consider the type and location options in the order presented in paragraphs (b)(2) through (b)(6) of this section. In general, the required compensatory mitigation should be located within the same watershed as the impact site, and should be located where it is most likely to successfully replace lost functions and services, taking into account such watershed scale features as aquatic habitat diversity, habitat connectivity, relationships to hydrologic sources (including the availability of water rights), trends in land use, ecological benefits, and compatibility with adjacent land uses. When compensating for impacts to marine resources, the location of the compensatory mitigation site should be chosen to replace lost functions and services within the same marine ecological system (e.g., reef complex, littoral drift cell). Compensation for impacts to aquatic resources in coastal watersheds (watersheds that include a tidal water body) should also be located in a coastal watershed where practicable. Compensatory mitigation projects

should not be located where they will increase risks to aviation by attracting wildlife to areas where aircraft-wildlife strikes may occur (e.g., near airports).

(2) *Mitigation bank credits.* When permitted impacts are located within the service area of an approved mitigation bank, and the bank has the appropriate number and resource type of credits available, the permittee's compensatory mitigation requirements may be met by securing those credits from the sponsor. Since an approved instrument (including an approved mitigation plan and appropriate real estate and financial assurances) for a mitigation bank is required to be in place before its credits can begin to be used to compensate for authorized impacts, use of a mitigation bank can help reduce risk and uncertainty, as well as temporal loss of resource functions and services. Mitigation bank credits are not released for debiting until specific milestones associated with the mitigation bank site's protection and development are achieved, thus use of mitigation bank credits can also help reduce risk that mitigation will not be fully successful. Mitigation banks typically involve larger, more ecologically valuable parcels, and more rigorous scientific and technical analysis, planning and implementation than permittee-responsible mitigation. Also, development of a mitigation bank requires site identification in advance, project-specific planning, and significant investment of financial resources that is often not practicable for many in-lieu fee programs. For these reasons, the district engineer should give preference to the use of mitigation bank credits when these considerations are applicable. However, these same considerations may also be used to override this preference, where appropriate, as, for example, where an in-lieu fee program has released credits available from a specific approved in-lieu fee project, or a permittee-responsible project will restore an outstanding resource based on rigorous scientific and technical analysis.

(3) *In-lieu fee program credits.* Where permitted impacts are located within the service area of an approved in-lieu fee program, and the sponsor has the appropriate number and resource type of credits available, the permittee's compensatory mitigation requirements may be met by securing those credits from the sponsor. Where permitted impacts are not located in the service area of an approved mitigation bank, or the approved mitigation bank does not have the appropriate number and resource type of credits available to offset those impacts, in-lieu fee

mitigation, if available, is generally preferable to permittee-responsible mitigation. In-lieu fee projects typically involve larger, more ecologically valuable parcels, and more rigorous scientific and technical analysis, planning and implementation than permittee-responsible mitigation. They also devote significant resources to identifying and addressing high-priority resource needs on a watershed scale, as reflected in their compensation planning framework. For these reasons, the district engineer should give preference to in-lieu fee program credits over permittee-responsible mitigation, where these considerations are applicable. However, as with the preference for mitigation bank credits, these same considerations may be used to override this preference where appropriate. Additionally, in cases where permittee-responsible mitigation is likely to successfully meet performance standards before advance credits secured from an in-lieu fee program are fulfilled, the district engineer should also give consideration to this factor in deciding between in-lieu fee mitigation and permittee-responsible mitigation.

(4) *Permittee-responsible mitigation under a watershed approach.* Where permitted impacts are not in the service area of an approved mitigation bank or in-lieu fee program that has the appropriate number and resource type of credits available, permittee-responsible mitigation is the only option. Where practicable and likely to be successful and sustainable, the resource type and location for the required permittee-responsible compensatory mitigation should be determined using the principles of a watershed approach as outlined in paragraph (c) of this section.

(5) *Permittee-responsible mitigation through on-site and in-kind mitigation.* In cases where a watershed approach is not practicable, the district engineer should consider opportunities to offset anticipated aquatic resource impacts by requiring on-site and in-kind compensatory mitigation. The district engineer must also consider the practicability of on-site compensatory mitigation and its compatibility with the proposed project.

(6) *Permittee-responsible mitigation through off-site and/or out-of-kind mitigation.* If, after considering opportunities for on-site, in-kind compensatory mitigation as provided in paragraph (b)(5) of this section, the district engineer determines that these compensatory mitigation opportunities are not practicable, are unlikely to compensate for the permitted impacts,

or will be incompatible with the proposed project, and an alternative, practicable off-site and/or out-of-kind mitigation opportunity is identified that has a greater likelihood of offsetting the permitted impacts or is environmentally preferable to on-site or in-kind mitigation, the district engineer should require that this alternative compensatory mitigation be provided.

(c) *Watershed approach to compensatory mitigation.* (1) The district engineer must use a watershed approach to establish compensatory mitigation requirements in DA permits to the extent appropriate and practicable. Where a watershed plan is available, the district engineer will determine whether the plan is appropriate for use in the watershed approach for compensatory mitigation. In cases where the district engineer determines that an appropriate watershed plan is available, the watershed approach should be based on that plan. Where no such plan is available, the watershed approach should be based on information provided by the project sponsor or available from other sources. The ultimate goal of a watershed approach is to maintain and improve the quality and quantity of aquatic resources within watersheds through strategic selection of compensatory mitigation sites.

(2) *Considerations.* (i) A watershed approach to compensatory mitigation considers the importance of landscape position and resource type of compensatory mitigation projects for the sustainability of aquatic resource functions within the watershed. Such an approach considers how the types and locations of compensatory mitigation projects will provide the desired aquatic resource functions, and will continue to function over time in a changing landscape. It also considers the habitat requirements of important species, habitat loss or conversion trends, sources of watershed impairment, and current development trends, as well as the requirements of other regulatory and non-regulatory programs that affect the watershed, such as storm water management or habitat conservation programs. It includes the protection and maintenance of terrestrial resources, such as non-wetland riparian areas and uplands, when those resources contribute to or improve the overall ecological functioning of aquatic resources in the watershed.

Compensatory mitigation requirements determined through the watershed approach should not focus exclusively on specific functions (e.g., water quality or habitat for certain species), but should provide, where practicable, the

suite of functions typically provided by the affected aquatic resource.

(ii) Locational factors (e.g., hydrology, surrounding land use) are important to the success of compensatory mitigation for impacted habitat functions and may lead to siting of such mitigation away from the project area. However, consideration should also be given to functions and services (e.g., water quality, flood control, shoreline protection) that will likely need to be addressed at or near the areas impacted by the permitted impacts.

(iii) A watershed approach may include on-site compensatory mitigation, off-site compensatory mitigation (including mitigation banks or in-lieu fee programs), or a combination of on-site and off-site compensatory mitigation.

(iv) A watershed approach to compensatory mitigation should include, to the extent practicable, inventories of historic and existing aquatic resources, including identification of degraded aquatic resources, and identification of immediate and long-term aquatic resource needs within watersheds that can be met through permittee-responsible mitigation projects, mitigation banks, or in-lieu fee programs. Planning efforts should identify and prioritize aquatic resource restoration, establishment, and enhancement activities, and preservation of existing aquatic resources that are important for maintaining or improving ecological functions of the watershed. The identification and prioritization of resource needs should be as specific as possible, to enhance the usefulness of the approach in determining compensatory mitigation requirements.

(v) A watershed approach is not appropriate in areas where watershed boundaries do not exist, such as marine areas. In such cases, an appropriate spatial scale should be used to replace lost functions and services within the same ecological system (e.g., reef complex, littoral drift cell).

(3) *Information Needs.* (i) In the absence of a watershed plan determined by the district engineer under paragraph (c)(1) of this section to be appropriate for use in the watershed approach, the district engineer will use a watershed approach based on analysis of information regarding watershed conditions and needs, including potential sites for aquatic resource restoration activities and priorities for aquatic resource restoration and preservation. Such information includes: Current trends in habitat loss or conversion; cumulative impacts of

past development activities, current development trends, the presence and needs of sensitive species; site conditions that favor or hinder the success of compensatory mitigation projects; and chronic environmental problems such as flooding or poor water quality.

(ii) This information may be available from sources such as wetland maps; soil surveys; U.S. Geological Survey topographic and hydrologic maps; aerial photographs; information on rare, endangered and threatened species and critical habitat; local ecological reports or studies; and other information sources that could be used to identify locations for suitable compensatory mitigation projects in the watershed.

(iii) The level of information and analysis needed to support a watershed approach must be commensurate with the scope and scale of the proposed impacts requiring a DA permit, as well as the functions lost as a result of those impacts.

(4) *Watershed Scale.* The size of watershed addressed using a watershed approach should not be larger than is appropriate to ensure that the aquatic resources provided through compensation activities will effectively compensate for adverse environmental impacts resulting from activities authorized by DA permits. The district engineer should consider relevant environmental factors and appropriate locally-developed standards and criteria when determining the appropriate watershed scale in guiding compensation activities.

(d) *Site selection.* (1) The compensatory mitigation project site must be ecologically suitable for providing the desired aquatic resource functions. In determining the ecological suitability of the compensatory mitigation project site, the district engineer must consider, to the extent practicable, the following factors:

(i) Hydrological conditions, soil characteristics, and other physical and chemical characteristics;

(ii) Watershed-scale features, such as aquatic habitat diversity, habitat connectivity, and other landscape scale functions;

(iii) The size and location of the compensatory mitigation site relative to hydrologic sources (including the availability of water rights) and other ecological features;

(iv) Compatibility with adjacent land uses and watershed management plans;

(v) Reasonably foreseeable effects the compensatory mitigation project will have on ecologically important aquatic or terrestrial resources (e.g., shallow sub-tidal habitat, mature forests),

cultural sites, or habitat for federally- or state-listed threatened and endangered species; and

(vi) Other relevant factors including, but not limited to, development trends, anticipated land use changes, habitat status and trends, the relative locations of the impact and mitigation sites in the stream network, local or regional goals for the restoration or protection of particular habitat types or functions (e.g., re-establishment of habitat corridors or habitat for species of concern), water quality goals, floodplain management goals, and the relative potential for chemical contamination of the aquatic resources.

(2) District engineers may require on-site, off-site, or a combination of on-site and off-site compensatory mitigation to replace permitted losses of aquatic resource functions and services.

(3) Applicants should propose compensation sites adjacent to existing aquatic resources or where aquatic resources previously existed.

(e) *Mitigation type.* (1) In general, in-kind mitigation is preferable to out-of-kind mitigation because it is most likely to compensate for the functions and services lost at the impact site. For example, tidal wetland compensatory mitigation projects are most likely to compensate for unavoidable impacts to tidal wetlands, while perennial stream compensatory mitigation projects are most likely to compensate for unavoidable impacts to perennial streams. Thus, except as provided in paragraph (e)(2) of this section, the required compensatory mitigation shall be of a similar type to the affected aquatic resource.

(2) If the district engineer determines, using the watershed approach in accordance with paragraph (c) of this section that out-of-kind compensatory mitigation will serve the aquatic resource needs of the watershed, the district engineer may authorize the use of such out-of-kind compensatory mitigation. The basis for authorization of out-of-kind compensatory mitigation must be documented in the administrative record for the permit action.

(3) For difficult-to-replace resources (e.g., bogs, fens, springs, streams, Atlantic white cedar swamps) if further avoidance and minimization is not practicable, the required compensation should be provided, if practicable, through in-kind rehabilitation, enhancement, or preservation since there is greater certainty that these methods of compensation will successfully offset permitted impacts.

(f) *Amount of compensatory mitigation.* (1) If the district engineer

determines that compensatory mitigation is necessary to offset unavoidable impacts to aquatic resources, the amount of required compensatory mitigation must be, to the extent practicable, sufficient to replace lost aquatic resource functions. In cases where appropriate functional or condition assessment methods or other suitable metrics are available, these methods should be used where practicable to determine how much compensatory mitigation is required. If a functional or condition assessment or other suitable metric is not used, a minimum one-to-one acreage or linear foot compensation ratio must be used.

(2) The district engineer must require a mitigation ratio greater than one-to-one where necessary to account for the method of compensatory mitigation (e.g., preservation), the likelihood of success, differences between the functions lost at the impact site and the functions expected to be produced by the compensatory mitigation project, temporal losses of aquatic resource functions, the difficulty of restoring or establishing the desired aquatic resource type and functions, and/or the distance between the affected aquatic resource and the compensation site. The rationale for the required replacement ratio must be documented in the administrative record for the permit action.

(3) If an in-lieu fee program will be used to provide the required compensatory mitigation, and the appropriate number and resource type of released credits are not available, the district engineer must require sufficient compensation to account for the risk and uncertainty associated with in-lieu fee projects that have not been implemented before the permitted impacts have occurred.

(g) *Use of mitigation banks and in-lieu fee programs.* Mitigation banks and in-lieu fee programs may be used to compensate for impacts to aquatic resources authorized by general permits and individual permits, including after-the-fact permits, in accordance with the preference hierarchy in paragraph (b) of this section. Mitigation banks and in-lieu fee programs may also be used to satisfy requirements arising out of an enforcement action, such as supplemental environmental projects.

(h) *Preservation.* (1) Preservation may be used to provide compensatory mitigation for activities authorized by DA permits when all the following criteria are met:

(i) The resources to be preserved provide important physical, chemical, or biological functions for the watershed;

(ii) The resources to be preserved contribute significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the district engineer must use appropriate quantitative assessment tools, where available;

(iii) Preservation is determined by the district engineer to be appropriate and practicable;

(iv) The resources are under threat of destruction or adverse modifications; and

(v) The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust).

(2) Where preservation is used to provide compensatory mitigation, to the extent appropriate and practicable the preservation shall be done in conjunction with aquatic resource restoration, establishment, and/or enhancement activities. This requirement may be waived by the district engineer where preservation has been identified as a high priority using a watershed approach described in paragraph (c) of this section, but compensation ratios shall be higher.

(i) *Buffers.* District engineers may require the restoration, establishment, enhancement, and preservation, as well as the maintenance, of riparian areas and/or buffers around aquatic resources where necessary to ensure the long-term viability of those resources. Buffers may also provide habitat or corridors necessary for the ecological functioning of aquatic resources. If buffers are required by the district engineer as part of the compensatory mitigation project, compensatory mitigation credit will be provided for those buffers.

(j) *Relationship to other federal, tribal, state, and local programs.* (1) Compensatory mitigation projects for DA permits may also be used to satisfy the environmental requirements of other programs, such as tribal, state, or local wetlands regulatory programs, other federal programs such as the Surface Mining Control and Reclamation Act, Corps civil works projects, and Department of Defense military construction projects, consistent with the terms and requirements of these programs and subject to the following considerations:

(i) The compensatory mitigation project must include appropriate compensation required by the DA permit for unavoidable impacts to aquatic resources authorized by that permit.

(ii) Under no circumstances may the same credits be used to provide

mitigation for more than one permitted activity. However, where appropriate, compensatory mitigation projects, including mitigation banks and in-lieu fee projects, may be designed to holistically address requirements under multiple programs and authorities for the same activity.

(2) Except for projects undertaken by federal agencies, or where federal funding is specifically authorized to provide compensatory mitigation, federally-funded aquatic resource restoration or conservation projects undertaken for purposes other than compensatory mitigation, such as the Wetlands Reserve Program, Conservation Reserve Program, and Partners for Wildlife Program activities, cannot be used for the purpose of generating compensatory mitigation credits for activities authorized by DA permits. However, compensatory mitigation credits may be generated by activities undertaken in conjunction with, but supplemental to, such programs in order to maximize the overall ecological benefits of the restoration or conservation project.

(3) Compensatory mitigation projects may also be used to provide compensatory mitigation under the Endangered Species Act or for Habitat Conservation Plans, as long as they comply with the requirements of paragraph (j)(1) of this section.

(k) *Permit conditions.* (1) The compensatory mitigation requirements for a DA permit, including the amount and type of compensatory mitigation, must be clearly stated in the special conditions of the individual permit or general permit verification (see 33 CFR 325.4 and 330.6(a)). The special conditions must be enforceable.

(2) For an individual permit that requires permittee-responsible mitigation, the special conditions must:

(i) Identify the party responsible for providing the compensatory mitigation;

(ii) Incorporate, by reference, the final mitigation plan approved by the district engineer;

(iii) State the objectives, performance standards, and monitoring required for the compensatory mitigation project, unless they are provided in the approved final mitigation plan; and

(iv) Describe any required financial assurances or long-term management provisions for the compensatory mitigation project, unless they are specified in the approved final mitigation plan.

(3) For a general permit activity that requires permittee-responsible compensatory mitigation, the special conditions must describe the compensatory mitigation proposal,

which may be either conceptual or detailed. The general permit verification must also include a special condition that states that the permittee cannot commence work in waters of the United States until the district engineer approves the final mitigation plan, unless the district engineer determines that such a special condition is not practicable and not necessary to ensure timely completion of the required compensatory mitigation. To the extent appropriate and practicable, special conditions of the general permit verification should also address the requirements of paragraph (k)(2) of this section.

(4) If a mitigation bank or in-lieu fee program is used to provide the required compensatory mitigation, the special conditions must indicate whether a mitigation bank or in-lieu fee program will be used, and specify the number and resource type of credits the permittee is required to secure. In the case of an individual permit, the special condition must also identify the specific mitigation bank or in-lieu fee program that will be used. For general permit verifications, the special conditions may either identify the specific mitigation bank or in-lieu fee program, or state that the specific mitigation bank or in-lieu fee program used to provide the required compensatory mitigation must be approved by the district engineer before the credits are secured.

(1) *Party responsible for compensatory mitigation.* (1) For permittee-responsible mitigation, the special conditions of the DA permit must clearly indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation project.

(2) For mitigation banks and in-lieu fee programs, the instrument must clearly indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation project(s). The instrument must also contain a provision expressing the sponsor's agreement to assume responsibility for a permittee's compensatory mitigation requirements, once that permittee has secured the appropriate number and resource type of credits from the sponsor and the district engineer has received the documentation described in paragraph (l)(3) of this section.

(3) If use of a mitigation bank or in-lieu fee program is approved by the district engineer to provide part or all of the required compensatory mitigation for a DA permit, the permittee retains responsibility for providing the compensatory mitigation until the

appropriate number and resource type of credits have been secured from a sponsor and the district engineer has received documentation that confirms that the sponsor has accepted the responsibility for providing the required compensatory mitigation. This documentation may consist of a letter or form signed by the sponsor, with the permit number and a statement indicating the number and resource type of credits that have been secured from the sponsor. Copies of this documentation will be retained in the administrative records for both the permit and the instrument. If the sponsor fails to provide the required compensatory mitigation, the district engineer may pursue measures against the sponsor to ensure compliance.

(m) *Timing.* Implementation of the compensatory mitigation project shall be, to the maximum extent practicable, in advance of or concurrent with the activity causing the authorized impacts. The district engineer shall require, to the extent appropriate and practicable, additional compensatory mitigation to offset temporal losses of aquatic functions that will result from the permitted activity.

(n) *Financial assurances.* (1) The district engineer shall require sufficient financial assurances to ensure a high level of confidence that the compensatory mitigation project will be successfully completed, in accordance with applicable performance standards. In cases where an alternate mechanism is available to ensure a high level of confidence that the compensatory mitigation will be provided and maintained (e.g., a formal, documented commitment from a government agency or public authority) the district engineer may determine that financial assurances are not necessary for that compensatory mitigation project.

(2) The amount of the required financial assurances must be determined by the district engineer, in consultation with the project sponsor, and must be based on the size and complexity of the compensatory mitigation project, the degree of completion of the project at the time of project approval, the likelihood of success, the past performance of the project sponsor, and any other factors the district engineer deems appropriate. Financial assurances may be in the form of performance bonds, escrow accounts, casualty insurance, letters of credit, legislative appropriations for government sponsored projects, or other appropriate instruments, subject to the approval of the district engineer. The rationale for determining the amount of the required financial assurances must

be documented in the administrative record for either the DA permit or the instrument. In determining the assurance amount, the district engineer shall consider the cost of providing replacement mitigation, including costs for land acquisition, planning and engineering, legal fees, mobilization, construction, and monitoring.

(3) If financial assurances are required, the DA permit must include a special condition requiring the financial assurances to be in place prior to commencing the permitted activity.

(4) Financial assurances shall be phased out once the compensatory mitigation project has been determined by the district engineer to be successful in accordance with its performance standards. The DA permit or instrument must clearly specify the conditions under which the financial assurances are to be released to the permittee, sponsor, and/or other financial assurance provider, including, as appropriate, linkage to achievement of performance standards, adaptive management, or compliance with special conditions.

(5) A financial assurance must be in a form that ensures that the district engineer will receive notification at least 120 days in advance of any termination or revocation. For third-party assurance providers, this may take the form of a contractual requirement for the assurance provider to notify the district engineer at least 120 days before the assurance is revoked or terminated.

(6) Financial assurances shall be payable at the direction of the district engineer to his designee or to a standby trust agreement. When a standby trust is used (e.g., with performance bonds or letters of credit) all amounts paid by the financial assurance provider shall be deposited directly into the standby trust fund for distribution by the trustee in accordance with the district engineer's instructions.

(o) *Compliance with applicable law.* The compensatory mitigation project must comply with all applicable federal, state, and local laws. The DA permit, mitigation banking instrument, or in-lieu fee program instrument must not require participation by the Corps or any other federal agency in project management, including receipt or management of financial assurances or long-term financing mechanisms, except as determined by the Corps or other agency to be consistent with its statutory authority, mission, and priorities.

#### **§ 230.94 Planning and documentation.**

(a) *Pre-application consultations.* Potential applicants for standard

permits are encouraged to participate in pre-application meetings with the Corps and appropriate agencies to discuss potential mitigation requirements and information needs.

(b) *Public review and comment.* (1) For an activity that requires a standard DA permit pursuant to section 404 of the Clean Water Act, the public notice for the proposed activity must contain a statement explaining how impacts associated with the proposed activity are to be avoided, minimized, and compensated for. This explanation shall address, to the extent that such information is provided in the mitigation statement required by 33 CFR 325.1(d)(7), the proposed avoidance and minimization and the amount, type, and location of any proposed compensatory mitigation, including any out-of-kind compensation, or indicate an intention to use an approved mitigation bank or in-lieu fee program. The level of detail provided in the public notice must be commensurate with the scope and scale of the impacts. The notice shall not include information that the district engineer and the permittee believe should be kept confidential for business purposes, such as the exact location of a proposed mitigation site that has not yet been secured. The permittee must clearly identify any information being claimed as confidential in the mitigation statement when submitted. In such cases, the notice must still provide enough information to enable the public to provide meaningful comment on the proposed mitigation.

(2) For individual permits, district engineers must consider any timely comments and recommendations from other federal agencies; tribal, state, or local governments; and the public.

(3) For activities authorized by letters of permission or general permits, the review and approval process for compensatory mitigation proposals and plans must be conducted in accordance with the terms and conditions of those permits and applicable regulations including the applicable provisions of this part.

(c) *Mitigation plan.* (1) *Preparation and Approval.* (i) For individual permits, the permittee must prepare a draft mitigation plan and submit it to the district engineer for review. After addressing any comments provided by the district engineer, the permittee must prepare a final mitigation plan, which must be approved by the district engineer prior to issuing the individual permit. The approved final mitigation plan must be incorporated into the individual permit by reference. The final mitigation plan must include the items described in paragraphs (c)(2)

through (c)(14) of this section, but the level of detail of the mitigation plan should be commensurate with the scale and scope of the impacts. As an alternative, the district engineer may determine that it would be more appropriate to address any of the items described in paragraphs (c)(2) through (c)(14) of this section as permit conditions, instead of components of a compensatory mitigation plan. For permittees who intend to fulfill their compensatory mitigation obligations by securing credits from approved mitigation banks or in-lieu fee programs, their mitigation plans need include only the items described in paragraphs (c)(5) and (c)(6) of this section, and the name of the specific mitigation bank or in-lieu fee program to be used.

(ii) For general permits, if compensatory mitigation is required, the district engineer may approve a conceptual or detailed compensatory mitigation plan to meet required time frames for general permit verifications, but a final mitigation plan incorporating the elements in paragraphs (c)(2) through (c)(14) of this section, at a level of detail commensurate with the scale and scope of the impacts, must be approved by the district engineer before the permittee commences work in waters of the United States. As an alternative, the district engineer may determine that it would be more appropriate to address any of the items described in paragraphs (c)(2) through (c)(14) of this section as permit conditions, instead of components of a compensatory mitigation plan. For permittees who intend to fulfill their compensatory mitigation obligations by securing credits from approved mitigation banks or in-lieu fee programs, their mitigation plans need include only the items described in paragraphs (c)(5) and (c)(6) of this section, and either the name of the specific mitigation bank or in-lieu fee program to be used or a statement indicating that a mitigation bank or in-lieu fee program will be used (contingent upon approval by the district engineer).

(iii) Mitigation banks and in-lieu fee programs must prepare a mitigation plan including the items in paragraphs (c)(2) through (c)(14) of this section for each separate compensatory mitigation project site. For mitigation banks and in-lieu fee programs, the preparation and approval process for mitigation plans is described in § 230.98.

(2) *Objectives.* A description of the resource type(s) and amount(s) that will be provided, the method of compensation (i.e., restoration, establishment, enhancement, and/or preservation), and the manner in which

the resource functions of the compensatory mitigation project will address the needs of the watershed, ecoregion, physiographic province, or other geographic area of interest.

(3) *Site selection.* A description of the factors considered during the site selection process. This should include consideration of watershed needs, on-site alternatives where applicable, and the practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the compensatory mitigation project site. (See § 230.93(d).)

(4) *Site protection instrument.* A description of the legal arrangements and instrument, including site ownership, that will be used to ensure the long-term protection of the compensatory mitigation project site (see § 230.97(a)).

(5) *Baseline information.* A description of the ecological characteristics of the proposed compensatory mitigation project site and, in the case of an application for a DA permit, the impact site. This may include descriptions of historic and existing plant communities, historic and existing hydrology, soil conditions, a map showing the locations of the impact and mitigation site(s) or the geographic coordinates for those site(s), and other site characteristics appropriate to the type of resource proposed as compensation. The baseline information should also include a delineation of waters of the United States on the proposed compensatory mitigation project site. A prospective permittee planning to secure credits from an approved mitigation bank or in-lieu fee program only needs to provide baseline information about the impact site, not the mitigation bank or in-lieu fee project site.

(6) *Determination of credits.* A description of the number of credits to be provided, including a brief explanation of the rationale for this determination. (See § 230.93(f).)

(i) For permittee-responsible mitigation, this should include an explanation of how the compensatory mitigation project will provide the required compensation for unavoidable impacts to aquatic resources resulting from the permitted activity.

(ii) For permittees intending to secure credits from an approved mitigation bank or in-lieu fee program, it should include the number and resource type of credits to be secured and how these were determined.

(7) *Mitigation work plan.* Detailed written specifications and work descriptions for the compensatory

mitigation project, including, but not limited to, the geographic boundaries of the project; construction methods, timing, and sequence; source(s) of water, including connections to existing waters and uplands; methods for establishing the desired plant community; plans to control invasive plant species; the proposed grading plan, including elevations and slopes of the substrate; soil management; and erosion control measures. For stream compensatory mitigation projects, the mitigation work plan may also include other relevant information, such as planform geometry, channel form (e.g., typical channel cross-sections), watershed size, design discharge, and riparian area plantings.

(8) *Maintenance plan.* A description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed.

(9) *Performance standards.* Ecologically-based standards that will be used to determine whether the compensatory mitigation project is achieving its objectives. (See § 230.95.)

(10) *Monitoring requirements.* A description of parameters to be monitored in order to determine if the compensatory mitigation project is on track to meet performance standards and if adaptive management is needed. A schedule for monitoring and reporting on monitoring results to the district engineer must be included. (See § 230.96.)

(11) *Long-term management plan.* A description of how the compensatory mitigation project will be managed after performance standards have been achieved to ensure the long-term sustainability of the resource, including long-term financing mechanisms and the party responsible for long-term management. (See § 230.97(d).)

(12) *Adaptive management plan.* A management strategy to address unforeseen changes in site conditions or other components of the compensatory mitigation project, including the party or parties responsible for implementing adaptive management measures. The adaptive management plan will guide decisions for revising compensatory mitigation plans and implementing measures to address both foreseeable and unforeseen circumstances that adversely affect compensatory mitigation success. (See § 230.97(c).)

(13) *Financial assurances.* A description of financial assurances that will be provided and how they are sufficient to ensure a high level of confidence that the compensatory mitigation project will be successfully

completed, in accordance with its performance standards (see § 230.93(n)).

(14) *Other information.* The district engineer may require additional information as necessary to determine the appropriateness, feasibility, and practicability of the compensatory mitigation project.

#### **§ 230.95 Ecological performance standards.**

(a) The approved mitigation plan must contain performance standards that will be used to assess whether the project is achieving its objectives. Performance standards should relate to the objectives of the compensatory mitigation project, so that the project can be objectively evaluated to determine if it is developing into the desired resource type, providing the expected functions, and attaining any other applicable metrics (e.g., acres).

(b) Performance standards must be based on attributes that are objective and verifiable. Ecological performance standards must be based on the best available science that can be measured or assessed in a practicable manner. Performance standards may be based on variables or measures of functional capacity described in functional assessment methodologies, measurements of hydrology or other aquatic resource characteristics, and/or comparisons to reference aquatic resources of similar type and landscape position. The use of reference aquatic resources to establish performance standards will help ensure that those performance standards are reasonably achievable, by reflecting the range of variability exhibited by the regional class of aquatic resources as a result of natural processes and anthropogenic disturbances. Performance standards based on measurements of hydrology should take into consideration the hydrologic variability exhibited by reference aquatic resources, especially wetlands. Where practicable, performance standards should take into account the expected stages of the aquatic resource development process, in order to allow early identification of potential problems and appropriate adaptive management.

#### **§ 230.96 Monitoring.**

(a) *General.* (1) Monitoring the compensatory mitigation project site is necessary to determine if the project is meeting its performance standards, and to determine if measures are necessary to ensure that the compensatory mitigation project is accomplishing its objectives. The submission of monitoring reports to assess the development and condition of the

compensatory mitigation project is required, but the content and level of detail for those monitoring reports must be commensurate with the scale and scope of the compensatory mitigation project, as well as the compensatory mitigation project type. The mitigation plan must address the monitoring requirements for the compensatory mitigation project, including the parameters to be monitored, the length of the monitoring period, the party responsible for conducting the monitoring, the frequency for submitting monitoring reports to the district engineer, and the party responsible for submitting those monitoring reports to the district engineer.

(2) The district engineer may conduct site inspections on a regular basis (e.g., annually) during the monitoring period to evaluate mitigation site performance.

(b) *Monitoring period.* The mitigation plan must provide for a monitoring period that is sufficient to demonstrate that the compensatory mitigation project has met performance standards, but not less than five years. A longer monitoring period must be required for aquatic resources with slow development rates (e.g., forested wetlands, bogs). Following project implementation, the district engineer may reduce or waive the remaining monitoring requirements upon a determination that the compensatory mitigation project has achieved its performance standards. Conversely the district engineer may extend the original monitoring period upon a determination that performance standards have not been met or the compensatory mitigation project is not on track to meet them. The district engineer may also revise monitoring requirements when remediation and/or adaptive management is required.

(c) *Monitoring reports.* (1) The district engineer must determine the information to be included in monitoring reports. This information must be sufficient for the district engineer to determine how the compensatory mitigation project is progressing towards meeting its performance standards, and may include plans (such as as-built plans), maps, and photographs to illustrate site conditions. Monitoring reports may also include the results of functional, condition, or other assessments used to provide quantitative or qualitative measures of the functions provided by the compensatory mitigation project site.

(2) The permittee or sponsor is responsible for submitting monitoring reports in accordance with the special conditions of the DA permit or the terms



of the instrument. Failure to submit monitoring reports in a timely manner may result in compliance action by the district engineer.

(3) Monitoring reports must be provided by the district engineer to interested federal, tribal, state, and local resource agencies, and the public, upon request.

#### § 230.97 Management.

(a) *Site protection.* (1) The aquatic habitats, riparian areas, buffers, and uplands that comprise the overall compensatory mitigation project must be provided long-term protection through real estate instruments or other available mechanisms, as appropriate. Long-term protection may be provided through real estate instruments such as conservation easements held by entities such as federal, tribal, state, or local resource agencies, non-profit conservation organizations, or private land managers; the transfer of title to such entities; or by restrictive covenants. For government property, long-term protection may be provided through federal facility management plans or integrated natural resources management plans. When approving a method for long-term protection of non-government property other than transfer of title, the district engineer shall consider relevant legal constraints on the use of conservation easements and/or restrictive covenants in determining whether such mechanisms provide sufficient site protection. To provide sufficient site protection, a conservation easement or restrictive covenant should, where practicable, establish in an appropriate third party (e.g., governmental or non-profit resource management agency) the right to enforce site protections and provide the third party the resources necessary to monitor and enforce these site protections.

(2) The real estate instrument, management plan, or other mechanism providing long-term protection of the compensatory mitigation site must, to the extent appropriate and practicable, prohibit incompatible uses (e.g., clear cutting or mineral extraction) that might otherwise jeopardize the objectives of the compensatory mitigation project. Where appropriate, multiple instruments recognizing compatible uses (e.g., fishing or grazing rights) may be used.

(3) The real estate instrument, management plan, or other long-term protection mechanism must contain a provision requiring 60-day advance notification to the district engineer before any action is taken to void or modify the instrument, management plan, or long-term protection

mechanism, including transfer of title to, or establishment of any other legal claims over, the compensatory mitigation site.

(4) For compensatory mitigation projects on public lands, where Federal facility management plans or integrated natural resources management plans are used to provide long-term protection, and changes in statute, regulation, or agency needs or mission results in an incompatible use on public lands originally set aside for compensatory mitigation, the public agency authorizing the incompatible use is responsible for providing alternative compensatory mitigation that is acceptable to the district engineer for any loss in functions resulting from the incompatible use.

(5) A real estate instrument, management plan, or other long-term protection mechanism used for site protection of permittee-responsible mitigation must be approved by the district engineer in advance of, or concurrent with, the activity causing the authorized impacts.

(b) *Sustainability.* Compensatory mitigation projects shall be designed, to the maximum extent practicable, to be self-sustaining once performance standards have been achieved. This includes minimization of active engineering features (e.g., pumps) and appropriate siting to ensure that natural hydrology and landscape context will support long-term sustainability. Where active long-term management and maintenance are necessary to ensure long-term sustainability (e.g., prescribed burning, invasive species control, maintenance of water control structures, easement enforcement), the responsible party must provide for such management and maintenance. This includes the provision of long-term financing mechanisms where necessary. Where needed, the acquisition and protection of water rights must be secured and documented in the permit conditions or instrument.

(c) *Adaptive management.* (1) If the compensatory mitigation project cannot be constructed in accordance with the approved mitigation plans, the permittee or sponsor must notify the district engineer. A significant modification of the compensatory mitigation project requires approval from the district engineer.

(2) If monitoring or other information indicates that the compensatory mitigation project is not progressing towards meeting its performance standards as anticipated, the responsible party must notify the district engineer as soon as possible. The district engineer will evaluate and pursue measures to

address deficiencies in the compensatory mitigation project. The district engineer will consider whether the compensatory mitigation project is providing ecological benefits comparable to the original objectives of the compensatory mitigation project.

(3) The district engineer, in consultation with the responsible party (and other federal, tribal, state, and local agencies, as appropriate), will determine the appropriate measures. The measures may include site modifications, design changes, revisions to maintenance requirements, and revised monitoring requirements. The measures must be designed to ensure that the modified compensatory mitigation project provides aquatic resource functions comparable to those described in the mitigation plan objectives.

(4) Performance standards may be revised in accordance with adaptive management to account for measures taken to address deficiencies in the compensatory mitigation project. Performance standards may also be revised to reflect changes in management strategies and objectives if the new standards provide for ecological benefits that are comparable or superior to the approved compensatory mitigation project. No other revisions to performance standards will be allowed except in the case of natural disasters.

(d) *Long-term management.* (1) The permit conditions or instrument must identify the party responsible for ownership and all long-term management of the compensatory mitigation project. The permit conditions or instrument may contain provisions allowing the permittee or sponsor to transfer the long-term management responsibilities of the compensatory mitigation project site to a land stewardship entity, such as a public agency, non-governmental organization, or private land manager, after review and approval by the district engineer. The land stewardship entity need not be identified in the original permit or instrument, as long as the future transfer of long-term management responsibility is approved by the district engineer.

(2) A long-term management plan should include a description of long-term management needs, annual cost estimates for these needs, and identify the funding mechanism that will be used to meet those needs.

(3) Any provisions necessary for long-term financing must be addressed in the original permit or instrument. The district engineer may require provisions to address inflationary adjustments and other contingencies, as appropriate. Appropriate long-term financing

mechanisms include non-wasting endowments, trusts, contractual arrangements with future responsible parties, and other appropriate financial instruments. In cases where the long-term management entity is a public authority or government agency, that entity must provide a plan for the long-term financing of the site.

(4) For permittee-responsible mitigation, any long-term financing mechanisms must be approved in advance of the activity causing the authorized impacts.

**§ 230.98 Mitigation banks and in-lieu fee programs.**

(a) *General considerations.* (1) All mitigation banks and in-lieu fee programs must have an approved instrument signed by the sponsor and the district engineer prior to being used to provide compensatory mitigation for DA permits.

(2) To the maximum extent practicable, mitigation banks and in-lieu fee project sites must be planned and designed to be self-sustaining over time, but some active management and maintenance may be required to ensure their long-term viability and sustainability. Examples of acceptable management activities include maintaining fire dependent habitat communities in the absence of natural fire and controlling invasive exotic plant species.

(3) All mitigation banks and in-lieu fee programs must comply with the standards in this part, if they are to be used to provide compensatory mitigation for activities authorized by DA permits, regardless of whether they are sited on public or private lands and whether the sponsor is a governmental or private entity.

(b) *Interagency Review Team.* (1) The district engineer will establish an Interagency Review Team (IRT) to review documentation for the establishment and management of mitigation banks and in-lieu fee programs. The district engineer or his designated representative serves as Chair of the IRT. In cases where a mitigation bank or in-lieu fee program is proposed to satisfy the requirements of another federal, tribal, state, or local program, in addition to compensatory mitigation requirements of DA permits, it may be appropriate for the administering agency to serve as co-Chair of the IRT.

(2) In addition to the Corps, representatives from the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, NOAA Fisheries, the Natural Resources Conservation Service, and other federal

agencies, as appropriate, may participate in the IRT. The IRT may also include representatives from tribal, state, and local regulatory and resource agencies, where such agencies have authorities and/or mandates directly affecting, or affected by, the establishment, operation, or use of the mitigation bank or in-lieu fee program. The district engineer will seek to include all public agencies with a substantive interest in the establishment of the mitigation bank or in-lieu fee program on the IRT, but retains final authority over its composition.

(3) The primary role of the IRT is to facilitate the establishment of mitigation banks or in-lieu fee programs through the development of mitigation banking or in-lieu fee program instruments. The IRT will review the prospectus, instrument, and other appropriate documents and provide comments to the district engineer. The district engineer and the IRT should use a watershed approach to the extent practicable in reviewing proposed mitigation banks and in-lieu fee programs. Members of the IRT may also sign the instrument, if they so choose. By signing the instrument, the IRT members indicate their agreement with the terms of the instrument. As an alternative, a member of the IRT may submit a letter expressing concurrence with the instrument. The IRT will also advise the district engineer in assessing monitoring reports, recommending remedial or adaptive management measures, approving credit releases, and approving modifications to an instrument. In order to ensure timely processing of instruments and other documentation, comments from IRT members must be received by the district engineer within the time limits specified in this section. Comments received after these deadlines will only be considered at the discretion of the district engineer to the extent that doing so does not jeopardize the deadlines for district engineer action.

(4) The district engineer will give full consideration to any timely comments and advice of the IRT. The district engineer alone retains final authority for approval of the instrument in cases where the mitigation bank or in-lieu fee program is used to satisfy compensatory mitigation requirements of DA permits.

(5) *MOAs with other agencies.* The district engineer and members of the IRT may enter into a memorandum of agreement (MOA) with any other federal, state or local government agency to perform all or some of the IRT review functions described in this section. Such MOAs must include provisions for appropriate federal

oversight of the review process. The district engineer retains sole authority for final approval of instruments and other documentation required under this section.

(c) *Compensation planning framework for in-lieu fee programs.* (1) The approved instrument for an in-lieu fee program must include a compensation planning framework that will be used to select, secure, and implement aquatic resource restoration, establishment, enhancement, and/or preservation activities. The compensation planning framework must support a watershed approach to compensatory mitigation. All specific projects used to provide compensation for DA permits must be consistent with the approved compensation planning framework. Modifications to the framework must be approved as a significant modification to the instrument by the district engineer, after consultation with the IRT.

(2) The compensation planning framework must contain the following elements:

(i) The geographic service area(s), including a watershed-based rationale for the delineation of each service area;

(ii) A description of the threats to aquatic resources in the service area(s), including how the in-lieu fee program will help offset impacts resulting from those threats;

(iii) An analysis of historic aquatic resource loss in the service area(s);

(iv) An analysis of current aquatic resource conditions in the service area(s), supported by an appropriate level of field documentation;

(v) A statement of aquatic resource goals and objectives for each service area, including a description of the general amounts, types and locations of aquatic resources the program will seek to provide;

(vi) A prioritization strategy for selecting and implementing compensatory mitigation activities;

(vii) An explanation of how any preservation objectives identified in paragraph (c)(2)(v) of this section and addressed in the prioritization strategy in paragraph (c)(2)(vi) satisfy the criteria for use of preservation in § 230.93(h);

(viii) A description of any public and private stakeholder involvement in plan development and implementation, including, where appropriate, coordination with federal, state, tribal and local aquatic resource management and regulatory authorities;

(ix) A description of the long-term protection and management strategies for activities conducted by the in-lieu fee program sponsor;

(x) A strategy for periodic evaluation and reporting on the progress of the program in achieving the goals and objectives in paragraph (c)(2)(v) of this section, including a process for revising the planning framework as necessary; and

(xi) Any other information deemed necessary for effective compensation planning by the district engineer.

(3) The level of detail necessary for the compensation planning framework is at the discretion of the district engineer, and will take into account the characteristics of the service area(s) and the scope of the program. As part of the in-lieu fee program instrument, the compensation planning framework will be reviewed by the IRT, and will be a major factor in the district engineer's decision on whether to approve the instrument.

(d) *Review process.* (1) The sponsor is responsible for preparing all documentation associated with establishment of the mitigation bank or in-lieu fee program, including the prospectus, instrument, and other appropriate documents, such as mitigation plans for a mitigation bank. The prospectus provides an overview of the proposed mitigation bank or in-lieu fee program and serves as the basis for public and initial IRT comment. For a mitigation bank, the mitigation plan, as described in § 230.94(c), provides detailed plans and specifications for the mitigation bank site. For in-lieu fee programs, mitigation plans will be prepared as in-lieu fee project sites are identified after the instrument has been approved and the in-lieu fee program becomes operational. The instrument provides the authorization for the mitigation bank or in-lieu fee program to provide credits to be used as compensatory mitigation for DA permits.

(2) *Prospectus.* The prospectus must provide a summary of the information regarding the proposed mitigation bank or in-lieu fee program, at a sufficient level of detail to support informed public and IRT comment. The review process begins when the sponsor submits a complete prospectus to the district engineer. For modifications of approved instruments, submittal of a new prospectus is not required; instead, the sponsor must submit a written request for an instrument modification accompanied by appropriate documentation. The district engineer must notify the sponsor within 30 days whether or not a submitted prospectus is complete. A complete prospectus includes the following information:

(i) The objectives of the proposed mitigation bank or in-lieu fee program.

(ii) How the mitigation bank or in-lieu fee program will be established and operated.

(iii) The proposed service area.

(iv) The general need for and technical feasibility of the proposed mitigation bank or in-lieu fee program.

(v) The proposed ownership arrangements and long-term management strategy for the mitigation bank or in-lieu fee project sites.

(vi) The qualifications of the sponsor to successfully complete the type(s) of mitigation project(s) proposed, including information describing any past such activities by the sponsor.

(vii) For a proposed mitigation bank, the prospectus must also address:

(A) The ecological suitability of the site to achieve the objectives of the proposed mitigation bank, including the physical, chemical, and biological characteristics of the bank site and how that site will support the planned types of aquatic resources and functions; and

(B) Assurance of sufficient water rights to support the long-term sustainability of the mitigation bank.

(viii) For a proposed in-lieu fee program, the prospectus must also include:

(A) The compensation planning framework (see paragraph (c) of this section); and

(B) A description of the in-lieu fee program account required by paragraph (i) of this section.

(3) *Preliminary review of prospectus.* Prior to submitting a prospectus, the sponsor may elect to submit a draft prospectus to the district engineer for comment and consultation. The district engineer will provide copies of the draft prospectus to the IRT and will provide comments back to the sponsor within 30 days. Any comments from IRT members will also be forwarded to the sponsor. This preliminary review is optional but is strongly recommended. It is intended to identify potential issues early so that the sponsor may attempt to address those issues prior to the start of the formal review process.

(4) *Public review and comment.* Within 30 days of receipt of a complete prospectus or an instrument modification request that will be processed in accordance with paragraph (g)(1) of this section, the district engineer will provide public notice of the proposed mitigation bank or in-lieu fee program, in accordance with the public notice procedures at 33 CFR 325.3. The public notice must, at a minimum, include a summary of the prospectus and indicate that the full prospectus is available to the public for review upon request. For modifications of approved instruments, the public

notice must instead summarize, and make available to the public upon request, whatever documentation is appropriate for the modification (e.g., a new or revised mitigation plan). The comment period for public notice will be 30 days, unless the district engineer determines that a longer comment period is appropriate. The district engineer will notify the sponsor if the comment period is extended beyond 30 days, including an explanation of why the longer comment period is necessary. Copies of all comments received in response to the public notice must be distributed to the other IRT members and to the sponsor within 15 days of the close of the public comment period. The district engineer and IRT members may also provide comments to the sponsor at this time, and copies of any such comments will also be distributed to all IRT members. If the construction of a mitigation bank or an in-lieu fee program project requires a DA permit, the public notice requirement may be satisfied through the public notice provisions of the permit processing procedures, provided all of the relevant information is provided.

(5) *Initial evaluation.* (i) After the end of the comment period, the district engineer will review the comments received in response to the public notice, and make a written initial evaluation as to the potential of the proposed mitigation bank or in-lieu fee program to provide compensatory mitigation for activities authorized by DA permits. This initial evaluation letter must be provided to the sponsor within 30 days of the end of the public notice comment period.

(ii) If the district engineer determines that the proposed mitigation bank or in-lieu fee program has potential for providing appropriate compensatory mitigation for activities authorized by DA permits, the initial evaluation letter will inform the sponsor that he/she may proceed with preparation of the draft instrument (see paragraph (d)(6) of this section).

(iii) If the district engineer determines that the proposed mitigation bank or in-lieu fee program does not have potential for providing appropriate compensatory mitigation for DA permits, the initial evaluation letter must discuss the reasons for that determination. The sponsor may revise the prospectus to address the district engineer's concerns, and submit the revised prospectus to the district engineer. If the sponsor submits a revised prospectus, a revised public notice will be issued in accordance with paragraph (d)(4) of this section.

(iv) This initial evaluation procedure does not apply to proposed modifications of approved instruments.

(6) *Draft instrument.* (i) After considering comments from the district engineer, the IRT, and the public, if the sponsor chooses to proceed with establishment of the mitigation bank or in-lieu fee program, he must prepare a draft instrument and submit it to the district engineer. In the case of an instrument modification, the sponsor must prepare a draft amendment (e.g., a specific instrument provision, a new or modified mitigation plan), and submit it to the district engineer. The district engineer must notify the sponsor within 30 days of receipt, whether the draft instrument or amendment is complete. If the draft instrument or amendment is incomplete, the district engineer will request from the sponsor the information necessary to make the draft instrument or amendment complete. Once any additional information is submitted, the district engineer must notify the sponsor as soon as he determines that the draft instrument or amendment is complete. The draft instrument must be based on the prospectus and must describe in detail the physical and legal characteristics of the mitigation bank or in-lieu fee program and how it will be established and operated.

(ii) For mitigation banks and in-lieu fee programs, the draft instrument must include the following information:

(A) A description of the proposed geographic service area of the mitigation bank or in-lieu fee program. The service area is the watershed, ecoregion, physiographic province, and/or other geographic area within which the mitigation bank or in-lieu fee program is authorized to provide compensatory mitigation required by DA permits. The service area must be appropriately sized to ensure that the aquatic resources provided will effectively compensate for adverse environmental impacts across the entire service area. For example, in urban areas, a U.S. Geological Survey 8-digit hydrologic unit code (HUC) watershed or a smaller watershed may be an appropriate service area. In rural areas, several contiguous 8-digit HUCs or a 6-digit HUC watershed may be an appropriate service area. Delineation of the service area must also consider any locally-developed standards and criteria that may be applicable. The economic viability of the mitigation bank or in-lieu fee program may also be considered in determining the size of the service area. The basis for the proposed service area must be documented in the instrument. An in-lieu fee program or umbrella mitigation banking instrument

may have multiple service areas governed by its instrument (e.g., each watershed within a State or Corps district may be a separate service area under the instrument); however, all impacts and compensatory mitigation must be accounted for by service area;

(B) Accounting procedures;

(C) A provision stating that legal responsibility for providing the compensatory mitigation lies with the sponsor once a permittee secures credits from the sponsor;

(D) Default and closure provisions;

(E) Reporting protocols; and

(F) Any other information deemed necessary by the district engineer.

(iii) For a mitigation bank, a complete draft instrument must include the following additional information:

(A) Mitigation plans that include all applicable items listed in § 230.94(c)(2) through (14); and

(B) A credit release schedule, which is tied to achievement of specific milestones. All credit releases must be approved by the district engineer, in consultation with the IRT, based on a determination that required milestones have been achieved. The district engineer, in consultation with the IRT, may modify the credit release schedule, including reducing the number of available credits or suspending credit sales or transfers altogether, where necessary to ensure that all credits sales or transfers remain tied to compensatory mitigation projects with a high likelihood of meeting performance standards;

(iv) For an in-lieu fee program, a complete draft instrument must include the following additional information:

(A) The compensation planning framework (see paragraph (c) of this section);

(B) Specification of the initial allocation of advance credits (see paragraph (n) of this section) and a draft fee schedule for these credits, by service area, including an explanation of the basis for the allocation and draft fee schedule;

(C) A methodology for determining future project-specific credits and fees; and

(D) A description of the in-lieu fee program account required by paragraph (i) of this section.

(7) *IRT review.* Upon receipt of notification by the district engineer that the draft instrument or amendment is complete, the sponsor must provide the district engineer with a sufficient number of copies of the draft instrument or amendment to distribute to the IRT members. The district engineer will promptly distribute copies of the draft instrument or amendment to the IRT

members for a 30 day comment period. The 30-day comment period begins 5 days after the district engineer distributes the copies of the draft instrument or amendment to the IRT. Following the comment period, the district engineer will discuss any comments with the appropriate agencies and with the sponsor. The district engineer will seek to resolve issues using a consensus based approach, to the extent practicable, while still meeting the decision-making time frames specified in this section. Within 90 days of receipt of the complete draft instrument or amendment by the IRT members, the district engineer must notify the sponsor of the status of the IRT review. Specifically, the district engineer must indicate to the sponsor if the draft instrument or amendment is generally acceptable and what changes, if any, are needed. If there are significant unresolved concerns that may lead to a formal objection from one or more IRT members to the final instrument or amendment, the district engineer will indicate the nature of those concerns.

(8) *Final instrument.* The sponsor must submit a final instrument to the district engineer for approval, with supporting documentation that explains how the final instrument addresses the comments provided by the IRT. For modifications of approved instruments, the sponsor must submit a final amendment to the district engineer for approval, with supporting documentation that explains how the final amendment addresses the comments provided by the IRT. The final instrument or amendment must be provided directly by the sponsor to all members of the IRT. Within 30 days of receipt of the final instrument or amendment, the district engineer will notify the IRT members whether or not he intends to approve the instrument or amendment. If no IRT member objects, by initiating the dispute resolution process in paragraph (e) of this section within 45 days of receipt of the final instrument or amendment, the district engineer will notify the sponsor of his final decision and, if the instrument or amendment is approved, arrange for it to be signed by the appropriate parties. If any IRT member initiates the dispute resolution process, the district engineer will notify the sponsor. Following conclusion of the dispute resolution process, the district engineer will notify the sponsor of his final decision, and if the instrument or amendment is approved, arrange for it to be signed by the appropriate parties. For mitigation banks, the final instrument must contain

the information items listed in paragraphs (d)(6)(ii), and (iii) of this section. For in-lieu fee programs, the final instrument must contain the information items listed in paragraphs (d)(6)(ii) and (iv) of this section. For the modification of an approved instrument, the amendment must contain appropriate information, as determined by the district engineer. The final instrument or amendment must be made available to the public upon request.

(e) *Dispute resolution process.* (1) Within 15 days of receipt of the district engineer's notification of intent to approve an instrument or amendment, the Regional Administrator of the U.S. EPA, the Regional Director of the U.S. Fish and Wildlife Service, the Regional Director of the National Marine Fisheries Service, and/or other senior officials of agencies represented on the IRT may notify the district engineer and other IRT members by letter if they object to the approval of the proposed final instrument or amendment. This letter must include an explanation of the basis for the objection and, where feasible, offer recommendations for resolving the objections. If the district engineer does not receive any objections within this time period, he may proceed to final action on the instrument or amendment.

(2) The district engineer must respond to the objection within 30 days of receipt of the letter. The district engineer's response may indicate an intent to disapprove the instrument or amendment as a result of the objection, an intent to approve the instrument or amendment despite the objection, or may provide a modified instrument or amendment that attempts to address the objection. The district engineer's response must be provided to all IRT members.

(3) Within 15 days of receipt of the district engineer's response, if the Regional Administrator or Regional Director is not satisfied with the response he may forward the issue to the Assistant Administrator for Water of the U.S. EPA, the Assistant Secretary for Fish and Wildlife and Parks of the U.S. FWS, or the Undersecretary for Oceans and Atmosphere of NOAA, as appropriate, for review and must notify the district engineer by letter via electronic mail or facsimile machine (with copies to all IRT members) that the issue has been forwarded for Headquarters review. This step is available only to the IRT members representing these three federal agencies, however, other IRT members who do not agree with the district engineer's final decision do not have to sign the instrument or amendment or

recognize the mitigation bank or in-lieu fee program for purposes of their own programs and authorities. If an IRT member other than the one filing the original objection has a new objection based on the district engineer's response, he may use the first step in this procedure (paragraph (e)(1) of this section) to provide that objection to the district engineer.

(4) If the issue has not been forwarded to the objecting agency's Headquarters, then the district engineer may proceed with final action on the instrument or amendment. If the issue has been forwarded to the objecting agency's Headquarters, the district engineer must hold in abeyance the final action on the instrument or amendment, pending Headquarters level review described below.

(5) Within 20 days from the date of the letter requesting Headquarters level review, the Assistant Administrator for Water, the Assistant Secretary for Fish and Wildlife and Parks, or the Undersecretary for Oceans and Atmosphere must either notify the Assistant Secretary of the Army (Civil Works) (ASA(CW)) that further review will not be requested, or request that the ASA(CW) review the final instrument or amendment.

(6) Within 30 days of receipt of the letter from the objecting agency's Headquarters request for ASA(CW)'s review of the final instrument, the ASA(CW), through the Director of Civil Works, must review the draft instrument or amendment and advise the district engineer on how to proceed with final action on that instrument or amendment. The ASA(CW) must immediately notify the Assistant Administrator for Water, the Assistant Secretary for Fish and Wildlife and Parks, and/or the Undersecretary for Oceans and Atmosphere of the final decision.

(7) In cases where the dispute resolution procedure is used, the district engineer must notify the sponsor of his final decision within 150 days of receipt of the final instrument or amendment.

(f) *Extension of deadlines.* (1) The deadlines in paragraphs (d) and (e) of this section may be extended by the district engineer at his sole discretion in cases where:

(i) Compliance with other applicable laws, such as consultation under section 7 of the Endangered Species Act or section 106 of the National Historic Preservation Act, is required;

(ii) It is necessary to conduct government-to-government consultation with Indian tribes;

(iii) Timely submittal of information necessary for the review of the proposed

mitigation bank or in-lieu fee program or the proposed modification of an approved instrument is not accomplished by the sponsor; or

(iv) Information that is essential to the district engineer's decision cannot be reasonably obtained within the specified time frame.

(2) In such cases, the district engineer must promptly notify the sponsor in writing of the extension and the reason for it. Such extensions shall be for the minimum time necessary to resolve the issue necessitating the extension.

(g) *Modification of instruments.* (1) *Approval of an amendment to an approved instrument.* Modification of an approved instrument, including the addition and approval of umbrella mitigation bank sites or in-lieu fee project sites or expansions of previously approved mitigation bank or in-lieu fee project sites, must follow the appropriate procedures in paragraph (d) of this section, unless the district engineer determines that the streamlined review process described in paragraph (g)(2) of this section is warranted.

(2) *Streamlined review process.* The streamlined modification review process may be used for the following modifications of instruments: changes reflecting adaptive management of the mitigation bank or in-lieu fee program, credit releases, changes in credit releases and credit release schedules, and changes that the district engineer determines are not significant. If the district engineer determines that the streamlined review process is warranted, he must notify the IRT members and the sponsor of this determination and provide them with copies of the proposed modification. IRT members and the sponsor have 30 days to notify the district engineer if they have concerns with the proposed modification. If IRT members or the sponsor notify the district engineer of such concerns, the district engineer shall attempt to resolve those concerns. Within 60 days of providing the proposed modification to the IRT, the district engineer must notify the IRT members of his intent to approve or disapprove the proposed modification. If no IRT member objects, by initiating the dispute resolution process in paragraph (e) of this section, within 15 days of receipt of this notification, the district engineer will notify the sponsor of his final decision and, if the modification is approved, arrange for it to be signed by the appropriate parties. If any IRT member initiates the dispute resolution process, the district engineer will so notify the sponsor. Following conclusion of the dispute resolution

process, the district engineer will notify the sponsor of his final decision, and if the modification is approved, arrange for it to be signed by the appropriate parties.

(h) *Umbrella mitigation banking instruments.* A single mitigation banking instrument may provide for future authorization of additional mitigation bank sites. As additional sites are selected, they must be included in the mitigation banking instrument as modifications, using the procedures in paragraph (g)(1) of this section. Credit withdrawal from the additional bank sites shall be consistent with paragraph (m) of this section.

(i) *In-lieu fee program account.* (1) The in-lieu fee program sponsor must establish a program account after the instrument is approved by the district engineer, prior to accepting any fees from permittees. If the sponsor accepts funds from entities other than permittees, those funds must be kept in separate accounts. The program account must be established at a financial institution that is a member of the Federal Deposit Insurance Corporation. All interests and earnings accruing to the program account must remain in that account for use by the in-lieu fee program for the purposes of providing compensatory mitigation for DA permits. The program account may only be used for the selection, design, acquisition, implementation, and management of in-lieu fee compensatory mitigation projects, except for a small percentage (as determined by the district engineer in consultation with the IRT and specified in the instrument) that can be used for administrative costs.

(2) The sponsor must submit proposed in-lieu fee projects to the district engineer for funding approval. Disbursements from the program account may only be made upon receipt of written authorization from the district engineer, after the district engineer has consulted with the IRT. The terms of the program account must specify that the district engineer has the authority to direct those funds to alternative compensatory mitigation projects in cases where the sponsor does not provide compensatory mitigation in accordance with the time frame specified in paragraph (n)(4) of this section.

(3) The sponsor must provide annual reports to the district engineer and the IRT. The annual reports must include the following information:

(i) All income received, disbursements, and interest earned by the program account;

(ii) A list of all permits for which in-lieu fee program funds were accepted. This list shall include: the Corps permit number (or the state permit number if there is no corresponding Corps permit number, in cases of state programmatic general permits or other regional general permits), the service area in which the authorized impacts are located, the amount of authorized impacts, the amount of required compensatory mitigation, the amount paid to the in-lieu fee program, and the date the funds were received from the permittee;

(iii) A description of in-lieu fee program expenditures from the account, such as the costs of land acquisition, planning, construction, monitoring, maintenance, contingencies, adaptive management, and administration;

(iv) The balance of advance credits and released credits at the end of the report period for each service area; and

(v) Any other information required by the district engineer.

(4) The district engineer may audit the records pertaining to the program account. All books, accounts, reports, files, and other records relating to the in-lieu fee program account shall be available at reasonable times for inspection and audit by the district engineer.

(j) *In-lieu fee project approval.* (1) As in-lieu fee project sites are identified and secured, the sponsor must submit mitigation plans to the district engineer that include all applicable items listed in § 230.94(c)(2) through (14). The mitigation plan must also include a credit release schedule consistent with paragraph (o)(8) of this section that is tied to achievement of specific performance standards. The review and approval of in-lieu fee projects will be conducted in accordance with the procedures in paragraph (g)(1) of this section, as modifications of the in-lieu fee program instrument. This includes compensatory mitigation projects conducted by another party on behalf of the sponsor through requests for proposals and awarding of contracts.

(2) If a DA permit is required for an in-lieu fee project, the permit should not be issued until all relevant provisions of the mitigation plan have been substantively determined, to ensure that the DA permit accurately reflects all relevant provisions of the approved mitigation plan, such as performance standards.

(k) *Coordination of mitigation banking instruments and DA permit issuance.* In cases where initial establishment of the mitigation bank, or the development of a new project site under an umbrella banking instrument, involves activities requiring DA

authorization, the permit should not be issued until all relevant provisions of the mitigation plan have been substantively determined. This is to ensure that the DA permit accurately reflects all relevant provisions of the final instrument, such as performance standards.

(l) *Project implementation.* (1) The sponsor must have an approved instrument prior to collecting funds from permittees to satisfy compensatory mitigation requirements for DA permits.

(2) Authorization to sell credits to satisfy compensatory mitigation requirements in DA permits is contingent on compliance with all of the terms of the instrument. This includes constructing a mitigation bank or in-lieu fee project in accordance with the mitigation plan approved by the district engineer and incorporated by reference in the instrument. If the aquatic resource restoration, establishment, enhancement, and/or preservation activities cannot be implemented in accordance with the approved mitigation plan, the district engineer must consult with the sponsor and the IRT to consider modifications to the instrument, including adaptive management, revisions to the credit release schedule, and alternatives for providing compensatory mitigation to satisfy any credits that have already been sold.

(3) An in-lieu fee program sponsor is responsible for the implementation, long-term management, and any required remediation of the restoration, establishment, enhancement, and/or preservation activities, even though those activities may be conducted by other parties through requests for proposals or other contracting mechanisms.

(m) *Credit withdrawal from mitigation banks.* The mitigation banking instrument may allow for an initial debiting of a percentage of the total credits projected at mitigation bank maturity, provided the following conditions are satisfied: the mitigation banking instrument and mitigation plan have been approved, the mitigation bank site has been secured, appropriate financial assurances have been established, and any other requirements determined to be necessary by the district engineer have been fulfilled. The mitigation banking instrument must provide a schedule for additional credit releases as appropriate milestones are achieved (see paragraph (o)(8) of this section). Implementation of the approved mitigation plan shall be initiated no later than the first full growing season after the date of the first credit transaction.

(n) *Advance credits for in-lieu fee programs.* (1) The in-lieu fee program instrument may make a limited number of advance credits available to permittees when the instrument is approved. The number of advance credits will be determined by the district engineer, in consultation with the IRT, and will be specified for each service area in the instrument. The number of advance credits will be based on the following considerations:

(i) The compensation planning framework;

(ii) The sponsor's past performance for implementing aquatic resource restoration, establishment, enhancement, and/or preservation activities in the proposed service area or other areas; and

(iii) The projected financing necessary to begin planning and implementation of in-lieu fee projects.

(2) To determine the appropriate number of advance credits for a particular service area, the district engineer may require the sponsor to provide confidential supporting information that will not be made available to the general public. Examples of confidential supporting information may include prospective in-lieu fee project sites.

(3) As released credits are produced by in-lieu fee projects, they must be used to fulfill any advance credits that have already been provided within the project service area before any remaining released credits can be sold or transferred to permittees. Once previously provided advance credits have been fulfilled, an equal number of advance credits is re-allocated to the sponsor for sale or transfer to fulfill new mitigation requirements, consistent with the terms of the instrument. The number of advance credits available to the sponsor at any given time to sell or transfer to permittees in a given service area is equal to the number of advance credits specified in the instrument, minus any that have already been provided but not yet fulfilled.

(4) Land acquisition and initial physical and biological improvements must be completed by the third full growing season after the first advance credit in that service area is secured by a permittee, unless the district engineer determines that more or less time is needed to plan and implement an in-lieu fee project. If the district engineer determines that there is a compensatory mitigation deficit in a specific service area by the third growing season after the first advance credit in that service area is sold, and determines that it would not be in the public interest to allow the sponsor additional time to

plan and implement an in-lieu fee project, the district engineer must direct the sponsor to disburse funds from the in-lieu fee program account to provide alternative compensatory mitigation to fulfill those compensation obligations.

(5) The sponsor is responsible for complying with the terms of the in-lieu fee program instrument. If the district engineer determines, as a result of review of annual reports on the operation of the in-lieu fee program (see paragraphs (p)(2) and (q)(1) of this section), that it is not performing in compliance with its instrument, the district engineer will take appropriate action, which may include suspension of credit sales, to ensure compliance with the in-lieu fee program instrument (see paragraph (o)(10) of this section). Permittees that secured credits from the in-lieu fee program are not responsible for in-lieu fee program compliance.

(o) *Determining credits.* (1) *Units of measure.* The principal units for credits and debits are acres, linear feet, functional assessment units, or other suitable metrics of particular resource types. Functional assessment units or other suitable metrics may be linked to acres or linear feet.

(2) *Assessment.* Where practicable, an appropriate assessment method (e.g., hydrogeomorphic approach to wetlands functional assessment, index of biological integrity) or other suitable metric must be used to assess and describe the aquatic resource types that will be restored, established, enhanced and/or preserved by the mitigation bank or in-lieu fee project.

(3) *Credit production.* The number of credits must reflect the difference between pre- and post-compensatory mitigation project site conditions, as determined by a functional or condition assessment or other suitable metric.

(4) *Credit value.* Once a credit is debited (sold or transferred to a permittee), its value cannot change.

(5) *Credit costs.* (i) The cost of compensatory mitigation credits provided by a mitigation bank or in-lieu fee program is determined by the sponsor.

(ii) For in-lieu fee programs, the cost per unit of credit must include the expected costs associated with the restoration, establishment, enhancement, and/or preservation of aquatic resources in that service area. These costs must be based on full cost accounting, and include, as appropriate, expenses such as land acquisition, project planning and design, construction, plant materials, labor, legal fees, monitoring, and remediation or adaptive management activities, as well as administration of the in-lieu fee

program. The cost per unit credit must also take into account contingency costs appropriate to the stage of project planning, including uncertainties in construction and real estate expenses. The cost per unit of credit must also take into account the resources necessary for the long-term management and protection of the in-lieu fee project. In addition, the cost per unit credit must include financial assurances that are necessary to ensure successful completion of in-lieu fee projects.

(6) *Credits provided by preservation.* These credits should be specified as acres, linear feet, or other suitable metrics of preservation of a particular resource type. In determining the compensatory mitigation requirements for DA permits using mitigation banks or in-lieu fee programs, the district engineer should apply a higher mitigation ratio if the requirements are to be met through the use of preservation credits. In determining this higher ratio, the district engineer must consider the relative importance of both the impacted and the preserved aquatic resources in sustaining watershed functions.

(7) *Credits provided by riparian areas, buffers, and uplands.* These credits should be specified as acres, linear feet, or other suitable metrics of riparian area, buffer, and uplands respectively. Non-aquatic resources can only be used as compensatory mitigation for impacts to aquatic resources authorized by DA permits when those resources are essential to maintaining the ecological viability of adjoining aquatic resources. In determining the compensatory mitigation requirements for DA permits using mitigation banks and in-lieu fee programs, the district engineer may authorize the use of riparian area, buffer, and/or upland credits if he determines that these areas are essential to sustaining aquatic resource functions in the watershed and are the most appropriate compensation for the authorized impacts.

(8) *Credit release schedule.* (i) *General considerations.* Release of credits must be tied to performance based milestones (e.g., construction, planting, establishment of specified plant and animal communities). The credit release schedule should reserve a significant share of the total credits for release only after full achievement of ecological performance standards. When determining the credit release schedule, factors to be considered may include, but are not limited to: The method of providing compensatory mitigation credits (e.g., restoration), the likelihood of success, the nature and amount of work needed to generate the credits, and

the aquatic resource type(s) and function(s) to be provided by the mitigation bank or in-lieu fee project. The district engineer will determine the credit release schedule, including the share to be released only after full achievement of performance standards, after consulting with the IRT. Once released, credits may only be used to satisfy compensatory mitigation requirements of a DA permit if the use of credits for a specific permit has been approved by the district engineer.

(ii) For single-site mitigation banks, the terms of the credit release schedule must be specified in the mitigation banking instrument. The credit release schedule may provide for an initial debiting of a limited number of credits once the instrument is approved and other appropriate milestones are achieved (see paragraph (m) of this section).

(iii) For in-lieu fee projects and umbrella mitigation bank sites, the terms of the credit release schedule must be specified in the approved mitigation plan. When an in-lieu fee project or umbrella mitigation bank site is implemented and is achieving the performance-based milestones specified in the credit release schedule, credits are generated in accordance with the credit release schedule for the approved mitigation plan. If the in-lieu fee project or umbrella mitigation bank site does not achieve those performance-based milestones, the district engineer may modify the credit release schedule, including reducing the number of credits.

(9) *Credit release approval.* Credit releases for mitigation banks and in-lieu fee projects must be approved by the district engineer. In order for credits to be released, the sponsor must submit documentation to the district engineer demonstrating that the appropriate milestones for credit release have been achieved and requesting the release. The district engineer will provide copies of this documentation to the IRT members for review. IRT members must provide any comments to the district engineer within 15 days of receiving this documentation. However, if the district engineer determines that a site visit is necessary, IRT members must provide any comments to the district engineer within 15 days of the site visit. The district engineer must schedule the site visit so that it occurs as soon as it is practicable, but the site visit may be delayed by seasonal considerations that affect the ability of the district engineer and the IRT to assess whether the applicable credit release milestones have been achieved. After full consideration of any comments

received, the district engineer will determine whether the milestones have been achieved and the credits can be released. The district engineer shall make a decision within 30 days of the end of that comment period, and notify the sponsor and the IRT.

(10) *Suspension and termination.* If the district engineer determines that the mitigation bank or in-lieu fee program is not meeting performance standards or complying with the terms of the instrument, appropriate action will be taken. Such actions may include, but are not limited to, suspending credit sales, adaptive management, decreasing available credits, utilizing financial assurances, and terminating the instrument.

(p) *Accounting procedures.* (1) For mitigation banks, the instrument must contain a provision requiring the sponsor to establish and maintain a ledger to account for all credit transactions. Each time an approved credit transaction occurs, the sponsor must notify the district engineer.

(2) For in-lieu fee programs, the instrument must contain a provision requiring the sponsor to establish and maintain an annual report ledger in accordance with paragraph (i)(3) of this section, as well as individual ledgers that track the production of released credits for each in-lieu fee project.

(q) *Reporting.* (1) *Ledger account.* The sponsor must compile an annual ledger report showing the beginning and ending balance of available credits and permitted impacts for each resource type, all additions and subtractions of credits, and any other changes in credit availability (e.g., additional credits released, credit sales suspended). The ledger report must be submitted to the district engineer, who will distribute copies to the IRT members. The ledger report is part of the administrative record for the mitigation bank or in-lieu fee program. The district engineer will make the ledger report available to the public upon request.

(2) *Monitoring reports.* The sponsor is responsible for monitoring the mitigation bank site or the in-lieu fee project site in accordance with the approved monitoring requirements to determine the level of success and identify problems requiring remedial action or adaptive management measures. Monitoring must be conducted in accordance with the requirements in § 230.96, and at time intervals appropriate for the particular project type and until such time that the district engineer, in consultation with the IRT, has determined that the performance standards have been attained. The instrument must include

requirements for periodic monitoring reports to be submitted to the district engineer, who will provide copies to other IRT members.

(3) *Financial assurance and long-term management funding report.* The district engineer may require the sponsor to provide an annual report showing beginning and ending balances, including deposits into and any withdrawals from, the accounts providing funds for financial assurances and long-term management activities. The report should also include information on the amount of required financial assurances and the status of those assurances, including their potential expiration.

(r) *Use of credits.* Except as provided below, all activities authorized by DA permits are eligible, at the discretion of the district engineer, to use mitigation banks or in-lieu fee programs to fulfill compensatory mitigation requirements for DA permits. The district engineer will determine the number and type(s) of credits required to compensate for the authorized impacts. Permit applicants may propose to use a particular mitigation bank or in-lieu fee program to provide the required compensatory mitigation. In such cases, the sponsor must provide the permit applicant with a statement of credit availability. The district engineer must review the permit applicant's compensatory mitigation proposal, and notify the applicant of his determination regarding the acceptability of using that mitigation bank or in-lieu fee program.

(s) *IRT concerns with use of credits.* If, in the view of a member of the IRT, an issued permit or series of issued permits raises concerns about how credits from a particular mitigation bank or in-lieu fee program are being used to satisfy compensatory mitigation requirements (including concerns about whether credit use is consistent with the terms of the instrument), the IRT member may notify the district engineer in writing of the concern. The district engineer shall promptly consult with the IRT to address the concern. Resolution of the concern is at the discretion of the district engineer, consistent with applicable statutes, regulations, and policies regarding compensatory mitigation requirements for DA permits. Nothing in this section limits the authorities designated to IRT agencies under existing statutes or regulations.

(t) *Site protection.* (1) For mitigation bank sites, real estate instruments, management plans, or other long-term mechanisms used for site protection must be finalized before any credits can be released.



(2) For in-lieu fee project sites, real estate instruments, management plans, or other long-term protection mechanisms used for site protection must be finalized before advance credits can become released credits.

(u) *Long-term management.* (1) The legal mechanisms and the party responsible for the long-term management and the protection of the mitigation bank site must be documented in the instrument or, in the case of umbrella mitigation banking instruments and in-lieu fee programs, the approved mitigation plans. The responsible party should make adequate provisions for the operation, maintenance, and long-term management of the compensatory mitigation project site. The long-term management plan should include a description of long-term management needs and identify the funding mechanism that will be used to meet those needs.

(2) The instrument may contain provisions for the sponsor to transfer long-term management responsibilities to a land stewardship entity, such as a public agency, non-governmental organization, or private land manager.

(3) The instrument or approved mitigation plan must address the financial arrangements and timing of any necessary transfer of long-term management funds to the steward.

(4) Where needed, the acquisition and protection of water rights should be secured and documented in the instrument or, in the case of umbrella mitigation banking instruments and in-lieu fee programs, the approved mitigation site plan.

(v) *Grandfathering of existing instruments.* (1) *Mitigation banking instruments.* All mitigation banking instruments approved on or after July 9, 2008 must meet the requirements of this part. Mitigation banks approved prior to July 9, 2008 may continue to operate under the terms of their existing instruments. However, any modification to such a mitigation banking instrument on or after July 9, 2008, including authorization of additional sites under an umbrella mitigation banking instrument, expansion of an existing site, or addition of a different type of resource credits (e.g., stream credits to a wetland bank) must be consistent with the terms of this part.

(2) *In-lieu fee program instruments.* All in-lieu fee program instruments

approved on or after July 9, 2008 must meet the requirements of this part. In-lieu fee programs operating under instruments approved prior to July 9, 2008 may continue to operate under those instruments for two years after the effective date of this rule, after which time they must meet the requirements of this part, unless the district engineer determines that circumstances warrant an extension of up to three additional years. The district engineer must consult with the IRT before approving such extensions. Any revisions made to the in-lieu-fee program instrument on or after July 9, 2008 must be consistent with the terms of this part. Any approved project for which construction was completed under the terms of a previously approved instrument may continue to operate indefinitely under those terms if the district engineer determines that the project is providing appropriate mitigation substantially consistent with the terms of this part.

Dated: March 28, 2008.

**Stephen L. Johnson,**  
*Administrator, U.S. Environmental Protection Agency.*

[FR Doc. E8-6918 Filed 4-9-08; 8:45 am]

**BILLING CODE 6560-50-P**