Chapter 7

Mitigation

When the Corps issues a Section 404 permit that authorizes the discharge of dredged or fill material into wetlands, at least some wetlands are likely to be destroyed or degraded, even though the permit applicant has taken measures to avoid and minimize the impacts. For that reason, the Corps has, from the early days of the Section 404 permit program, included conditions in permits that require the permittee to offset those environmental harms by providing ***compensatory mitigation***.

I. Types of Mitigation

There are basically four types of compensatory mitigation:

- **Restoration**
- **Enhancement**
- **Creation**
- **Preservation**

Wetlands Restoration - USDA Photo on Wikimedia

Restoration of wetlands involves re-establishing or rehabilitating wetlands with the goal of returning natural or historic functions to a former wetland or a degraded wetland. *See* 33 C.F.R. § 332.2. Wetlands are re-established or rehabilitated by manipulating the physical, chemical or biological characteristics of a site. *Id.* For instance, a wetland that has been drained may be restored by removing underground drain tiles, plugging open ditches, or building small dikes. *See* Michigan Department of Natural Resources, Wetland Restoration Techniques. Restoration often provides the most cost-effective improvement in wetland function. *See* U.S. Department of Agriculture, Engineering Field Handbook, Part 650, Chapter 13, *Wetland Restoration, Enhancement or Creation* 13-2 (Apr. 2008) [hereinafter "USDA Engineering Field Handbook"]. Sites that will be restored often have wetlands soils and some wetland plants and mainly require re-establishment of the former hydrology and topography.

Enhancement of wetlands involves manipulating the physical, chemical or biological characteristics of an existing wetland to improve a particular function or functions. *See* 33 C.F.R. § 332.2. For instance, enhancement projects might involve diverting a small stream into a wetland to change the water depth or planting different vegetation in the wetland in order to provide habitat for different varieties of fish, birds, or other wildlife. *See* USDA Engineering Field Handbook 13-2. By improving some functions of wetlands, though, enhancement projects might impair other functions. *See* 33 C.F.R. § 332.2. For example, by improving the habitat for some varieties of fish and wildlife, a project may degrade the habitat for others. Enhancement projects do not generally increase the acreage of existing wetlands. *Id.* While restoration and enhancement projects can both take place in degraded wetlands, restoration projects focus on returning the site to a prior condition, while enhancement focuses on changing the functions of the site, without regard to the prior condition of the site. Wetlands enhancement projects generally require more management and are more expensive than wetlands restoration projects. *See* USDA Engineering Field Handbook 13-2.

Creation (or establishment) of wetlands involves manipulating the physical, chemical or biological characteristics of land to establish wetlands in uplands or on lands where wetlands did not previously exist. *See* 33 C.F.R. § 332.2. Wetland creation is the most difficult type of compensatory mitigation because it requires bringing water to a site where it does not naturally occur and establishing vegetation on soils that are not hydric soils. *See* National Oceanographic and Atmospheric Administration, *An Introduction and User's Guide to Wetland Restoration, Creation and Enhancement* 11. Consequently, wetland creation is more expensive and requires more management than other mitigation options. *See* USDA Engineering Field Handbook 13-2. Wetlands are often created for only one function, such as providing wildlife habitat, educational opportunities, or improving water quality of non-point source runoff. *Id.* If successful, though, wetland creation provides an increase in the functions and acreage of wetlands. *See* 33 C.F.R. § 332.2

Preservation of wetlands involves the permanent protection of ecologically important wetlands through the implementation of appropriate legal and physical mechanisms, such as conservation easements or transfer of title. *See* 40 C.F.R. §230.93(h). It does not provide an increase in wetland functions or acreage. *See* 33 C.F.R. § 332.2

The purpose of compensatory mitigation is to develop long term self-sustaining aquatic resources that offset adverse effects and are not dependent on human intervention after the mitigation has been established. *See* U.S. Army Corps of Engineers, Sacramento District, *Mitigation*.

Of the four types of compensatory mitigation, ***restoration*** is generally the preferred option because it has a greater likelihood of success and impacts potentially ecologically important uplands less than wetlands creation, and because it provides greater gains in wetlands functions than wetlands enhancement or preservation. *See* 33 C.F.R. § 332.3(a)(2). ***Preservation*** is limited to preserving ecologically important

wetlands and resources and normally is only accepted as part of a package of mitigation that also includes restoration, enhancement or creation of wetlands resources. *See* 40 C.F.R. §230.93(h).

Thus, when the Corps issues a Section 404 permit that authorizes the destruction or degradation of wetlands, the Corps will generally include conditions in the permit that require the permittee to offset those environmental harms by restoring, enhancing, creating and/or preserving wetlands.

As will be explained further below, the Corps may require the permittee to carry out and manage the mitigation project itself, or it may allow the permittee to provide the required mitigation by purchasing mitigation credits from a mitigation bank that restores, enhances, creates or preserves wetlands or by paying a fee, "in lieu" of doing the mitigation itself, to an organization that been approved by the Corps to restore, enhance, create or preserve wetlands. "***Permitee-responsible mitigation***", "***mitigation banking***" and the ***"in lieu fee programs"*** will be discussed in detail below.

II. Legal Authority for Mitigation

The Clean Water Act does not explicitly state that Section 404 permits must include compensatory mitigation requirements, but the statute provides that the 404(b)(1) Guidelines, which establish the criteria for permit evaluation, should be based on criteria comparable to the ocean dumping criteria in Section 403(c) of the Clean Water Act, and those criteria require avoidance and minimization of impacts. *See* 33 U.S.C. § 1344(b)(1).

Until 2008, the 404(b)(1) Guidelines also did not explicitly require compensatory mitigation, although they required permittees to take "appropriate and practicable steps ... [to] minimize potential adverse impacts ... on the aquatic ecosystem." *See* 40 C.F.R. § 230.10(d). For several decades, therefore, the Corps and EPA used guidance documents, such as memoranda of agreement, action plans, and Regulatory Guidance Letters, to explain and administer the compensatory mitigation requirements in Section 404 permits.

In 2003, however, Congress included a provision in Section 314 of the National Defense Authorization Act for Fiscal Year 2004, P.L. 108-136, 117 Stat. 1392, that required the Corps, within two years, to promulgate regulations governing mitigation and mitigation banking for the Section 404 permitting program. In response, in 2008, a few years late, the Corps and EPA published compensatory mitigation rules. *See* 73 Fed. Reg. 19594 (Apr. 10, 2008). The new rules superseded most of the guidance documents that the agencies previously used to administer the compensatory mitigation requirements. *See* 33 C.F.R. § 332.1(f).

Incidentally, those regulations also suggest that compensatory mitigation can be required in order to ensure that an activity authorized by a Clean Water Act Section 404

permit or a Rivers and Harbors Act Section 10 permit is "not contrary to the public interest." *Id.* § 332.1(d). However, as noted earlier, the Corps rarely relies solely on its "public interest" authority to support decisions involving Section 404 permits.

The Corps has also cited the National Environmental Policy Act (NEPA) as a basis for the mitigation requirements that are included in Section 404 permits. *See* *Memorandum of Agreement Between the Department of the Army and the Environmental Protection Agency: The Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines* § II.A. (Feb. 1990) [hereinafter "1990 MOA"].

Mitigation Resources

Corps Video on Mitigation
National Academy of Sciences Report on Compensatory Mitigation
1990 MOA on Mitigation Between the Corps and EPA
Corps Mitigation Regulations (33 CFR Part 332)
EPA Mitigation Regulations (404(b)(1) Guidelines - especially 40 CFR Part 230, Subpart J) and EPA Fact Sheet on Mitigation
Example of a Restrictive Covenant for Permittee Mitigation (Corps/Md.)
Model Mitigation Plan Checklist (EPA/Corps - 2003)

III. Mitigation Sequencing and Permit Conditions

Mitigation requirements are formulated by the Corps, with input from EPA, the Fish and Wildlife Service and National Marine Fisheries Service, and are included as conditions in Section 404 permits. If EPA, the Fish and Wildlife Service, or the National Marine Fisheries Service disagree with the mitigation requirements that the Corps plans to include in a permit, they can elevate their dispute to higher levels within the agencies pursuant to the 404(q) dispute resolution process described in the last chapter. While the Corps makes the final determination regarding the mitigation conditions included in the permit, EPA retains the authority to veto the permit if it concludes that the mitigation is not adequate. *See* Chapter 8, *infra.*

Since mitigation requirements are included as conditions in the permit, the Corps can bring enforcement actions against the permittee if the permittee does not comply with the mitigation requirements. *See* 33 U.S.C. § 1344(s).

As noted in the last chapter, when the Corps evaluates alternatives to a permit applicant's proposed project under the Section 404(b)(1) Guidelines to determine whether there are practicable alternatives that have less adverse impacts on the aquatic environment, the Corps compares the effects of the alternatives to the effects of the proposed project, without regard to any mitigation. It does not compare the effects of alternatives to the effects of the proposed project, as reduced by mitigation measures. It is only after the Corps determines that there are no practicable alternatives to the

proposed discharge that the Corps addresses mitigation. This approach was first announced in a 1990 Memorandum of Agreement between the Corps and EPA. *See* 1990 MOA, *supra*.

The 1990 MOA creates a ***mitigation sequencing*** process to implement the requirement in the Section 404(b)(1) Guidelines that the Corps must require permittees to take "appropriate and practicable steps ... [to] minimize potential adverse impacts ... on the aquatic ecosystem." *See* 40 C.F.R. § 230.10(d). The three step sequence consists of (1) ***avoidance***; (2) ***minimization***; and (3) ***compensatory mitigation***; in that order.

Mitigation Sequence

- Avoid
- Minimize
- Mitigate

Avoid: As the first step in the process, the Corps must ensure that the proposed discharge avoids impacts to wetlands and the aquatic ecosystem. It does this through the alternatives analysis described above. If there is a practicable alternative to the proposed discharge that would have less adverse impacts on the aquatic environment, the Corps may not issue a permit authorizing the proposed discharge. The 1990 MOA explicitly provided that "Compensatory mitigation may not be used as a method to reduce environmental impacts in the evaluation of the least environmentally damaging practicable alternatives for the purposes of requirements under Section 230.10(a)." *See* 1990 MOA, § II.C.1. The alternatives analysis, therefore, helps ensure that the permittee avoids impacts to wetlands and aquatic resources if practicable.

Minimize: The second step in the mitigation sequence is minimization. Impacts to wetlands and the aquatic environment that cannot be avoided must be minimized. As the 1990 MOA notes, the 404(b)(1) Guidelines provide that appropriate and practicable steps to minimize adverse impacts will be required through project modifications and permit conditions. *See* 40 C.F.R. § 230.10(d) Subpart H of the Guidelines outlines several actions to minimize impacts, including actions concerning the location of the discharge (i.e. confining it to minimize smothering organisms); actions concerning the material to be discharged (i.e. to reduce the potency and availability of pollutants); actions controlling the material after discharge (i.e. capping contaminated material with clean material); actions affecting the method of dispersion (setting limits on the amount of material discharged per unit of time or volume of receiving water); actions affecting plant and animal populations (i.e. avoiding sites having unique habitat value) and others. See 40 C.F.R. Part 230, Subpart H. The Corps includes such requirements as conditions of Section 404 permits.

Mitigate: The final step in the mitigation sequence is ***compensatory mitigation***. Since

a proposed discharge may still cause adverse impacts to the aquatic environment after the Corps has required the permittee to avoid and minimize the impacts, the Corps includes conditions in Section 404 permits to require compensatory mitigation for those remaining adverse effects. The MOA provides "Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been required." *See* 1990 MOA § II.C.3.

In addition to creating the mitigation sequence to be used when evaluating Section 404 permit applications, the 1990 MOA clearly provided that mitigation requirements "shall be conditions" of Section 404 permits and that the Corps should deny Section 404 permits "[i]f the mitigation plan necessary to ensure compliance with the Guidelines is not reasonably implementable or enforceable." *Id.* § III.E.

The 1990 MOA was challenged shortly after the agencies entered into the agreement, but the federal district court hearing the challenge held that the MOA was an interpretive rule, rather than a substantive or legislative rule, and that the challenge to the MOA was not ripe. *See Municipality of Anchorage v. United States*, 21 ELR 20119 (D. Alaska 1990), *aff'd* 980 F.2d 1320 (9th Cir. 1992).

The legality of mitigation sequencing no longer depends on the legality or enforceability of the 1990 MOA, however, as the Corps and EPA incorporated the sequencing requirement into the 2008 mitigation regulations. *See* 33 C.F.R. § 332.1(c). While those regulations superseded most of the other mitigation guidance documents issued by the Corps prior to the regulations, the regulations provided that the 1990 MOA remained in effect, except for portions of the MOA that addressed the amount, type and location of compensatory mitigation projects. *Id.* § 332.1(f)(2).

IV. Amount and Type of Mitigation Required

A. No Net Loss

The presumptions and policies that the Corps uses to determine how much compensatory mitigation and what type of compensatory mitigation are required have evolved over time, but have always left considerable discretion in the hands of the individuals that are reviewing the permit applications. However, the overarching goal to be used in calculating the amount and type of mitigation has remained fairly constant. Beginning with the 1990 MOA, the Corps and EPA indicated that they would "strive", in making decisions regarding compensatory mitigation, "to achieve a goal of ***no overall net loss of values and functions***." *See* 1990 MOA § II.B. However, they stressed that the goal "may not be achieved in each and every permit action." *Id.* In theory, therefore, in most cases, the compensatory mitigation that will be required for each permit should replace the ***values and functions*** (and not simply acreage) of the wetlands that will be destroyed or degraded by the project authorized by the permit. The "no net loss" policy was re-affirmed in Regulatory Guidance Letters in 2001, *see*

U.S. Army Corps of Engineers , RGL 01-01, *Guidance for the Establishment and Maintenance of Compensatory Mitigation Projects Under the Corps Regulatory Program Pursuant to Section 404(a) of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899* (Oct. 31, 2001), and 2002, *see* U.S. Army Corps of Engineers, RGL 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* § 2.c. (Dec. 24, 2002) (clarifying that Districts will strive to achieve the goal on a cumulative basis, even though it may not be achieved for every permit action, and that the Corps will achieve the goal programmatically). While the Corps' 2008 permit regulations did not explicitly codify the "no net loss" policy, the preamble to the regulations indicated that the portions of the 1990 MOA that created the policy were not superseded by the regulations. *See* 70 Fed. Reg. at 19603.

B. On-site and in-kind

While the "no overall net loss of values and functions" goal has not changed, the manner in which it has been implemented in permit decisions has changed over time. The 1990 MOA established preferences for "***on-site***" compensatory mitigation and "***in-kind***" compensatory mitigation. The MOA indicated that compensatory actions "should be undertaken, when practicable, in areas adjacent or continuous to the discharge site." *See* 1990 MOA § II.C.3. In addition, it provided that "[i]f on-site compensatory mitigation is not practicable, off-site compensatory mitigation should be undertaken in the same geographic area if practicable." *Id.* Since the goal of the mitigation was to replace the values and functions of the wetlands destroyed or degraded by the permitted discharge, mitigation measures at or near the site of those wetlands were deemed to be more likely to replace those values and functions. If a wetland is providing flood control for a particular area, for instance, creation of another wetland at a different location is unlikely to serve that same function. The preference for "in-kind" compensation (replacement of a particular type of wetland lost with a similar type of wetland) was based on similar considerations. As noted in Chapter 1, *infra*, a freshwater marsh will likely provide values and functions that may not be replaced by a forested swamp. The policy presumed that wetlands were more likely to replace the values and functions of wetlands destroyed or degraded if the mitigation wetlands were the same type of wetlands as those destroyed or degraded.

On-site and in-kind mitigation may be more likely to replace the values and functions of the wetlands being destroyed or degraded by a section 404 permitted discharge than off-site or out-of-kind mitigation ***if*** the mitigation measures are actually being implemented successfully. However, in 2001, the ***National Research Council of the National Academy of Sciences*** issued a report that suggested that the Corps was not adequately monitoring mitigation projects and that the literature on mitigation at the time suggested that "required mitigation projects often are not undertaken or fail to meet permit conditions." *See* National Research Council. *Compensating for Wetland Losses Under the Clean Water Act* 3 (The National Academies Press, 2001) [hereinafter "NRC

Mitigation Report"]. The Council suggested that the Corps should consider the values and functions that wetlands serve within a watershed when making mitigation decisions, rather than simply focusing on the impacts at or near the site. *Id.* at 3-4. The Council suggested that "a preference for on-site and in-kind mitigation should not be automatic, but should follow from an analytically based assessment of the wetland needs in the watershed and the potential for the compensatory wetland to persist over time." *Id.* The Council's report explained that on-site mitigation measures may frequently be unsuccessful because the hydrology, soils and vegetation at the site may not support the mitigation project, and recommended selection of sites to promote development of self-sustaining mitigation. *Id.* at 4-5. Regarding the preference for "in-kind" mitigation, the report also noted that some types of wetlands, such as fens and bogs, could not be restored based on the knowledge at the time of the report. *Id.* at 4.

The Corps responded to the National Research Council Report by issuing a ***2001 Regulatory Guidance Letter*** that softened the preferences. *See* RGL 01-01, *supra*. The agency was heavily criticized because it made major changes to the 1990 MOA in the RGL without involving EPA or other agencies in the development of the policy, so the agency replaced that Guidance Letter a year later with a new Regulatory Guidance Letter that it developed with input from the other agencies. *See* RGL 02-02, *supra*. The new guidance indicated that mitigation should be used to "maintain wetland functional levels within a watershed" and that off-site mitigation could be used "when it provides more watershed benefit than on-site mitigation." *Id.* § 2.g. Similarly, the guidance indicated that out-of-kind mitigation was appropriate when it was "practicable and provides more environmental or watershed benefit than in-kind compensation." *Id.* § 2.h.

That Guidance was superseded by the 2008 regulations, though, which now establish a hierarchy for selecting compensatory mitigation and which establish a preference for selecting mitigation based on a ***watershed approach***. *See* 33 C.F.R. § 332.3(b)(4). Thus, the 1990 MOA preference for on-site, in-kind mitigation has been replaced by a preference for selecting mitigation on a watershed basis. In situations where a watershed approach is not practicable, though, the regulations maintain a preference for on-site and in-kind mitigation over off-site and out-of-kind mitigation. *Id.* § 332.3(b)(5).

C. Ratios and Timing

Two other important issues that arise concerning compensatory mitigation involve the amount of mitigation that will be required and the timing of the mitigation project. Regarding the ***amount*** of mitigation, the 1990 MOA recognized that implementation of the "no net loss" goal meant that mitigation should provide at least a one to one replacement of the ***values and functions*** of wetlands, and not simply a one to one replacement of ***acreage***. *See* 1990 MOA § II.B. However, the MOA also provided that in the absence of more definitive information on the functions and values of specific wetlands, a minimum ***1 to 1 acreage replacement ratio*** may be used as a reasonable surrogate for no net loss of values and functions. *Id.* Thus, if 10 acres of wetlands were being destroyed or degraded, the Corps could require the permittee to provide 10 acres

of wetlands mitigation in the absence of more definitive information on the values and functions of those wetlands.

Even if it is possible to precisely identify the values and functions that are being lost when a wetland is destroyed or degraded and to precisely identify the values and functions that could be provided by wetlands that may be restored, enhanced, created, or preserved, the ratio adopted by the Corps for mitigation projects will vary depending on the type of project (restoration, enhancement, creation, or preservation) because some types of mitigation projects, like preservation, do not provide any increase in values or functions to offset the values and functions lost, and because some mitigation projects, like restoration, may have greater chances to succeed than others, like wetlands creation.

The ***1990 MOA*** recognized this dynamic, providing that the 1 to 1 ratio "may be greater where the functional values of the area being impacted are demonstrably high and the replacement wetlands are of lower functional value or the likelihood of success of the mitigation project is low [and that] ... the ratio may be less than 1 to 1 for areas where the functional values associated with the area being impacted are demonstrably low and the likelihood of success associated with the mitigation proposal is high." *Id.* Accordingly, while the Corps might require a permittee to restore 10 acres of wetlands to replace 10 acres of wetlands (1:1 ratio), they may require the permittee to create 30 acres (3:1 ratio), instead of restoring 10, to replace those wetlands, since the likelihood of successful wetland creation may be lower than the likelihood of successful restoration.

The Corps re-affirmed the 1990 MOA approach in the 2002 Regulatory Guidance Letter, *see* RGL 02-02, *supra*, but the 2008 regulations superseded both that RGL and the portion of the 1990 MOA that created that approach. The regulations adopt a similar approach, though, and provide little more certainty regarding specific ratios than the prior guidance provided. Specifically, the regulations indicate that the amount of compensatory mitigation must be sufficient to replace "lost aquatic functions", based on "appropriate functional or conditional assessment methods or other suitable metrics." *See* 33 C.F.R. § 332.3(f)(1). Where those methods or metrics aren't available, the regulations provide that "a minimum one to one acreage or linear foot compensation ratio must be used." *Id.* They also require the permit issuer (district engineer) to require a ratio greater than one to one "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." *Id.* § 332.3(f)(2).

While the guidance and regulations leave considerable discretion to the permit issuer to identify specific ratios for compensatory mitigation, in practice, most Districts have

adopted guidance that identify ratios for specific types of mitigation projects. See Margaret Strand, Wetlands Deskbook 93 (Environmental Law institute, 3d ed., 2009).

Regarding the ***timing*** of compensatory mitigation, in light of concerns that many mitigation projects were not being implemented or were not succeeding, the 2001 National Research Council report recommended that "compensatory mitigation should be in place concurrent with, and preferably before, permitted activity" and that "there should be effective legal and financial assurances for long-term site sustainability and monitoring of all compensatory wetland projects". *See* NRC Mitigation Report, *supra*, at 7. The 2008 regulations codified those requirements, (1) providing that "[i]mplementation of the compensatory mitigation project shall be, to the maximum extent practicable, in advance of or concurrent with the activity causing the authorized impacts"; (2) requiring additional compensatory mitigation to offset any losses of wetland functions that occur between the time of the discharge and the implementation of the mitigation, *see* 33 C.F.R. § 332.3(m); and (3) requiring "sufficient financial assurances to ensure a high level of confidence that the compensatory mitigation project will be successfully completed." *Id*. § 332.3(n).

Questions and Comments

1. **Monitoring:** Although the 1990 MOA indicated that monitoring was an important aspect of mitigation, *see* 1990 MOA § III.D, the 2001 National Academy of Sciences National Research Council Report suggested that the Corps was not adequately monitoring and tracking the success of mitigation projects associated with Section 404 permits. *See* NRC Mitigation Report, *supra*, at 3. A 2005 Government Accountability Office (GAO) report also concluded that the Corps was infrequently monitoring and rarely inspecting compensatory mitigation projects. *See* U.S. Government Accountability Office, GAO-05-898, *Corps of Engineers Does Not Have an Effective Oversight Approach to Ensure That Compensatory Mitigation is Occurring* (Sept. 8, 2005). In light of those reports, the Corps' 2008 mitigation regulations require permittees to monitor the mitigation and submit reports pursuant to a monitoring plan approved by the Corps, but the regulations provide flexibility to the Corps to tailor the monitoring requirements and reporting frequency to the specific mitigation project. *See* 33 C.F.R. § 332.6. For a detailed examination of the role that outside organizations have played, or should play, in monitoring and enforcing mitigation requirements, *see* Jessica Owley, *The Increasing Privatization of Environmental Permitting,* 46 Akron L. Rev. 1091 (2013).

2. **Success of mitigation:** Various studies have found that (1) fewer than 30% of the mitigation sites reviewed were successful in replacing the functions of the wetlands sites that they replaced; (2) fewer than 50% of mitigation sites reviewed were ecologically successful; and (3) failure rates for some types of wetlands are significantly higher than the failure rate for other types of wetlands, resulting in a shift in the predominance of various types of wetlands. *See* Rebecca L.

Kihslinger, *Success of Wetland Mitigation Projects*, 30:2 National Wetlands Newsletter 14, 15 (2008). In addition, a recent EPA Office of the Inspector General report criticized EPA for claiming that the agency reported "no net loss" of wetlands in the Section 404 regulatory program for fiscal years 2009-2011 because the agency presumed that mitigation projects for permitted activities will meet performance standards, when many of the projects failed to meet those standards. *See* U.S. Environmental Protection Agency, Office of the Inspector General, Report No. 14-P-0191, *EPA Needs to Clarify its Claim of "No Net Loss" of Wetlands* 1-3 (April 16, 2014). How should the information reported by Rebecca Kihslinger and the information in the Inspector General report affect permitting and mitigation decisions?

3. **Mitigation Planning:** The 2008 mitigation regulations also established planning requirements for mitigation, so that each mitigation project must have a ***mitigation plan*** approved by the Corps including the following elements:

Objectives	Amount, Type and Method (restoration, etc.) of mitigation and the manner in which it addresses the needs of the watershed
Site Selection	Factors considered in selecting the mitigation site
Site Protection Instrument	Legal instruments to be used to protect the mitigation site (e.g. conservation easement)
Baseline information	Description of the mitigation site before mitigation
Determination of credits	Explanation of how the proposed mitigation site provides sufficient compensation for impacts from the permitted activity
Mitigation Work Plan	Detailed work plan for developing the mitigation project
Maintenance Plan	Plan for maintenance after initial construction is completed
Performance standards	Ecologically-based standards to be used to determine whether the mitigation is meeting its objectives
Monitoring Requirements	Plan outlining parameters to be monitored, and the timing of monitoring and reporting
Long Term Management Plan	Plan for long-term sustainability, including financing and identification of the persons responsible for long-term management
Adaptive Management Plan	Strategy to address unforeseen changes in site conditions or other components of the mitigation project
Financial Assurances	Financial assurances for the project (e.g. performance bond)

See 33 C.F.R. § 332.4(c).

4. Shortly after the agencies adopted the 2008 mitigation rule, several members of the National Research Council's Committee on Mitigating Wetland Losses critiqued the rule, discussing discuss the importance of the watershed approach, adaptive management and implementation of the rule. *See* Royal C. Gardner, Joy Zedler, Ann Redmond, R. Eugene Turner, Carol A. Johnston, Victoria R. Alvarez, Karen L. Prestegaard, and William J. Mitsch, *Compensating for Wetland Losses Under the Clean Water Act (Redux): Evaluating the Federal Compensatory Mitigation Regulation,* 33 Stetson L. Rev. 213 (2009). For a detailed examination of the ecosystem focus of the new regulations, *see* J.B. Ruhl, James Salzman & Iris Goodman, *Implementing the New Ecosystem Services Mandate of the Section 404 Compensatory Mitigation Program - A Catalyst for Advancing Science and Policy,* 38 Stetson L. Rev. 251 (2009).

V. Mitigation Banking

Although the Corps initially required permittees to undertake compensatory mitigation projects themselves on land that they owned or would acquire (***permittee responsible mitigation***), other mitigation alternatives have gained popularity over time and the 2008 mitigation regulations established a preference for those other alternatives. The major alternatives to permittee responsible mitigation are ***mitigation banking*** and ***in lieu fee programs*** (which will be discussed later in this chapter).

In ***mitigation banking***, a person or entity restores, enhances, creates or preserves wetlands in a compensatory mitigation project and generates ***credits*** that can be used to satisfy mitigation requirements for a Section 404 permit. ***See*** 33 C.F.R. § 332.2. While the first mitigation banks generated credits that the banker would use to satisfy mitigation requirements for projects that the banker was undertaking, many mitigation banks today are ***entrepreneurial banks***, and sell credits to third parties who are engaged in development projects and need to provide compensatory mitigation as a condition of obtaining a Section 404 permit.

Although the 1990 MOA between the Corps and EPA provided that mitigation banking could be an acceptable form of compensatory mitigation, *see* 1990 MOA § III.C, the MOA limited the situations in which banking could be used, since the MOA created the preference for on-site, in-kind mitigation described above. Entrepreneurial banks, by their nature, will be used to provide mitigation for many different projects and will not generally be on-site of any of those projects. As the preference for on-site, in-kind mitigation softened and the Corps developed mitigation banking guidance, *see* *Federal Guidance for the Establishment, Use and Operation of Mitigation Banks,* 68 Fed. Reg. 58605 (Nov. 28, 1995) [hereinafter "Mitigation Banking Guidance"], mitigation banking became much more popular.

A. Benefits of Mitigation Banking

Mitigation banking provides benefits for ***the environment***, ***the government*** and ***permit applicants***. As noted above, the National Academy of Sciences raised concerns that many of the traditional permittee-responsible mitigation projects were not successful. Mitigation banking addresses that problem because the mitigation banks must meet performance standards before credits are released and can be used to satisfy permit requirements. *See* 33 C.F.R. § 332.8. Thus, it is less likely that the mitigation will result in a loss of wetland functions. In addition, mitigation banks are more likely to generate successful mitigation because they can bring together money and expertise that the individual permittees would not be able to access if they were developing mitigation projects on-site separately. *See* Mitigation Banking Guidance at 58,607. Mitigation banks can provide additional environmental benefits compared to a series of separate, smaller mitigation projects, in that "[i]t may be more advantageous for maintaining the integrity of the aquatic ecosystem to consolidate compensatory mitigation into a single large parcel or contiguous parcels". *Id.*

The Corps and EPA benefit from mitigation banking because it is easier to monitor and enforce mitigation requirements when the mitigation projects are consolidated in a large parcel or contiguous parcels, as opposed to dozens or hundreds of locations around a state. *Id.* Better monitoring and enforcement also benefits the environment, by increasing the likelihood that the mitigation will be successful. While a 2005 GAO report criticized the Corps' monitoring of mitigation banking projects, it concluded that the Corps provided more oversight for those projects than it provided for the permittee-responsible projects. *See* GAO Mitigation Oversight Report, *supra.*

Finally, permit applicants benefit from mitigation banking because applicants can obtain permits quicker and at a lower cost if they can obtain credits from a mitigation bank than if they develop permittee responsible mitigation projects. *See* Mitigation Banking Guidance at 58,607. Applicants will save time because the Corps should be able to review a mitigation project involving purchase of credits from a mitigation bank much more quickly than it could evaluate a site-specific mitigation proposal prepared by the permit applicant. Applicants should be able to save money because the economies of scale involved in developing a mitigation bank should make mitigation credits from banks less expensive than on-site mitigation projects.

Permit applicants also receive another important benefit through mitigation banking. When a permit applicant satisfies its mitigation requirement by purchasing credits from a mitigation bank approved by the Corps of Engineers, the Corps will include that as a condition of the permit and the mitigation banker, rather than the permittee, will be responsible for the success of the mitigation. The permittee will not be required to provide alternative mitigation if the bank's mitigation fails.

Questions and Comments

1. **Size matters**: Although the federal guidance suggested that it *may* be more advantageous to consolidate mitigation into a larger parcel, environmental advocates have pointed out that small, isolated wetlands provide unique ecological and water quality functions and that an assemblage of a series of small wetlands scattered across a wide geographic area can provide habitat benefits that a single large wetland cannot provide. *See* Environmental Law Institute, *Banks and Fees: The Status of Off-Site Wetland Mitigation in the United States* 28 (Sept. 2002) [hereinafter "ELI Mitigation Banking Study"].

2. **Success**: Despite the benefits outlined above, some studies have suggested that mitigation banks are no more successful at replacing wetland values and functions than permittee-responsible mitigation. *See* Rebecca L. Kihslinger, *Success of Wetland Mitigation Projects,* 30:2 National Wetlands Newsletter 14, 15 (2008).

3. **Takings**: What effect might a robust mitigation banking system as an option for compensatory mitigation have on wetland permitting decisions and the likelihood and success of takings challenges based on Section 404 permit denials? *See* Chapter 11, *infra*, for an extended discussion of regulatory takings.

4. **Limitations:** If compensatory mitigation is designed to replace the functions and values of wetlands that are destroyed or degraded by a Section 404 permitted activity, can you see where that might be difficult to do in some cases by relying on mitigation banking? Can mitigation banking be reconciled with the goal of "no net loss"?

B. Historical Development

As noted above, the 1990 MOA authorized mitigation banking as a form of compensatory mitigation, but created some roadblocks to its broad adoption by establishing the on-site, in-kind mitigation preference. In the early years of mitigation banking, most of the mitigation banks were ***single-user*** banks, where an entity that was engaged in a series of development projects that required Section 404 permits would develop a large compensatory mitigation project in advance of those development projects, and would rely on that project to serve as compensatory mitigation for the Section 404 permits that it would need to obtain for the future development projects. While some of those early banks were operated by private developers, most were operated by public entities. By 1992, for instance, almost half of the mitigation banks in existence were developed by state departments of transportation for their road development projects. *See* ELI Mitigation Banking Study at 15. Congress encouraged this trend by making federal highway funding available for such mitigation banks in the Intermodal Surface Transportation Efficiency Act of 1991, Pub. L. 102-240, 105 Stat. 1914 (2001).

Mitigation banking began to gain popularity after the Corps, EPA, the Natural Resources Conservation Agency and NOAA issued federal mitigation banking guidance in 1995. *See* Mitigation Banking Guidance, *supra*. The guidance identified legal authority for mitigation banking and outlined a process for review and approval of mitigation banks, creating much more certainty for prospective mitigation bank developers. *Id.* It also emphasized that the agencies' preference for on-site mitigation should not preclude the use of mitigation banking when banking is environmentally preferable. *Id.* § II.D.4.

In 1998, Congress fueled the growth of mitigation banks further by expressing a preference for their use on federally funded highway projects. *See* Transportation Equity Act for the 21st Century, Pub. L. No. 105-178, 112 Stat. 107 (1998). Between 1993 and 2000, the number of mitigation banks approved by the Corps of Engineers grew from 44 to more than 230. *See* Royal C. Gardner, *Mitigation* in Wetlands Law and Policy: Understanding Section 404 266 (American Bar Association, Section on Environment, Energy and Resources 2005). By 2005, 405 mitigation banks had been approved by the Corps, and 72% of those were entrepreneurial banks. *See* Royal C. Gardner, *Lawyers, Swamps, and Money* 119 (Island Press 2011). Despite the growth in popularity of banks, developers complained that the agency's mitigation guidelines placed them at a disadvantage with respect to traditional permittee-responsible mitigation. According to a 2006 study, permittee-responsible mitigation still accounted for approximately 60% of wetland mitigation at that time, based on mitigation acreage. *Id.* at 140.

In 2008, when the Corps adopted its mitigation regulations, the agency indicated that the rule applied equivalent standards and criteria to all sources of compensatory mitigation, to the maximum extent practicable. *See* 73 Fed. Reg. 19594 (Apr. 10, 2008). However, the final rules largely abandoned the on-site mitigation preference and created a hierarchy of preferred methods of compensatory mitigation, with mitigation banking at the top of the hierarchy. *See* 33 C.F.R. § 332.3(b). The hierarchy proceeds as follows:

- Mitigation Banking
- In Lieu Fee Programs
- Permittee-responsible mitigation under a watershed approach
- Permittee-responsible mitigation through on-site and in-kind mitigation
- Permittee-responsible mitigation through off-ste and out-of-kind mitigation

Id. Within a few years after the regulations were adopted, the number of banks approved by the Corps had grown to over 1000. *See* Royal C. Gardner, *Lawyers, Swamps, and Money* 119 (Island Press 2011).

C. Nuts and Bolts of Mitigation Banking

A mitigation bank can only generate credits that can be used for compensatory mitigation if the bank is authorized to do so by the Corps of Engineers through an approved a ***mitigation banking instrument***. *See* 33 C.F.R. § 332.8.

In order to receive approval from the Corps, the bank must prepare a mitigation plan that includes the same elements described above for permittee-responsible mitigation (i.e. objectives, baseline information , work plan, financial assurances, etc.). *See* 33 C.F.R. § 332.4(c). Mitigation banking instruments are reviewed by an ***interagency review team (IRT)*** that includes representatives of the Corps, EPA, Fish and Wildlife, NOAA, and can include representatives of state, local and tribal resource agencies in appropriate circumstances. *See* 40 C.F.R. § 230.98(b).

When a bank is approved by the Corps, it will be approved with a specific geographic ***service area***, meaning that the credits generated by mitigation from the bank can only be used as compensatory mitigation for projects within that service area. *See* 33 C.F.R. § 332.3(b)(2). Normally, mitigation banks can only sell credits for use within the ***watershed*** in which the bank is located. *Id.* § 332.3(b)(1). While bankers would prefer larger service areas that include more potential customers, it is more likely that the mitigation provided by the bank will offset the impacts of the development for which the mitigation is provided when the bank is located in the same watershed as the development. While banks may be allowed to sell some credits before their mitigation project has been completed, the mitigation banking instrument will outline milestones that the bank must meet before issuing specific amounts of credits. *Id.* § 332.3(b)(1). The regulations provide that a significant share of the credits from the bank should be withheld until the bank fully achieves the ecological performance standards set forth in the banking instrument. *See* 40 C.F.R. § 230.98(o)(8).

Questions and Comments

1. **Cost of credits:** Neither the Corps nor any other agency regulates the cost of mitigation credits sold by banks. The bank can determine the price that it would like to charge for the credits and Section 404 permit applicants can decide whether to buy the credits at that price, buy from another banker at a different price, or develop their own mitigation proposal. The Ecosystem Marketplace estimates that the average cost of mitigation credits in 2008 was $74,535 per acre, although the prices ranged from $3,000 to $653,000 per acre. *See* Ecosystem Marketplace, *U.S. Wetland Banking* They also estimated that developers spent over $1 billion on wetland mitigation credits in 2008. *Id.*

2. **Responsibility:** As noted above, when a permit applicant receives approval from the Corps to satisfy the compensatory mitigation requirements for a Section 404 permit by purchasing credits from a mitigation bank, the bank is then responsible, rather than the permit applicant, for the success of the mitigation. *See* 33 C.F.R.

§ 332.2. Thus, if the mitigation fails, the Corps will not bring an enforcement action against the permittee for violating the permit conditions and will not require the permittee to provide alternate mitigation. Instead, the Corps will likely suspend the mitigation bank's operation and prevent additional credit releases and sales.

3. **Size:** As of 2011, the average size of approved mitigation bank sites was 466 acres, although the average size varied considerably by region. For instance, the average size of banks in Minnesota, which had the most approved and operational banks at that time, was 49 acres, while the average size of banks in Florida was 1,999 acres. *See* Steven Martin and Robert Brumbagh, *Entering a New Era: What Will RIBITS Tell Us About Mitigation Banking?*, 33 Natl. Wetlands Newsletter, 3:16 (2011).

4. In addition to wetland mitigation banking, several other emerging markets, such as water quality trading, species conservation banks, and greenhouse gas trading, can encourage wetland preservation. For an interesting overview of the issues raised by the commodification of wetlands, *see* Fred Bosselman, *Swamp Swaps: The 'Second Nature' of Wetlands,* 39 Envtl. L. 577 (2009). *See also,* James Salzman & J.B. Ruhl, *Currencies and the Commodification of Environmental Law,* 53 Stanford L. Rev. 607 (2000).

5. For a detailed description of the development of mitigation banking and the operation of mitigation banks, *see* Royal C. Gardner, *Banking on Entrepreneurs: Wetlands, Mitigation Banking and Takings,* 81 Iowa L. Rev. 527 (1996).

Mitigation Banking Resources

RIBITS (Corps' Regulatory In Lieu Fee and Bank Information Tracking System - search for mitigation banks, service area, credits available, reports, etc.)
1995 Mitigation Banking Guidance (superseded by the 2008 mitigation regulations
EPA Mitigation Banking Website
2005 GAO Mitigation Oversight Report
ELI Report on Mitigation Banking (2002)
Model Mitigation Banking Instrument (Corps - but predates 2008 regulations)
Example of a Mitigation Banking Restrictive Covenant (Corps/Md.)
The Conservation Fund - Mitigation Bank Training for IRT members (includes many sample documents

Research Problems

Agency Data: The Corps of Engineers maintains an online database of approved mitigation banks (RIBITS) that permit applicants can use to find mitigation credits for their projects. Using that database, answer the following questions:

1. How many commercial mitigation banks in Missouri are currently approved to sell wetland mitigation credits? Remember that single client banks do not ***sell*** credits and remember to focus on banks that sell ***wetland*** credits, as the Corps database also includes banks that sell stream mitigation credits.

2. The Corps of Engineers is requiring a permit applicant in Sturgeon Lake, Minnesota to provide 1 acre of "shallow marsh" wetlands as mitigation for a project on his property on Island Lake Road in Sturgeon Lake, Minnesota. Please identify any mitigation banks that he could contact to buy those credits. It may be helpful to know that the longitude and latitude coordinates of the property where the project will take place are 46.415175, -92.730863.

VI. In Lieu Fee Programs

In lieu fee mitigation programs are the other alternative to traditional permittee-responsible compensatory mitigation. In this scenario, the Corps authorizes the permittee, in lieu of implementing a compensatory mitigation project itself, to pay a third party that is implementing a compensatory mitigation project approved by the Corps. *See* 33 C.F.R. § 332.2. The entity that is performing the mitigation project must be a government or non-profit natural resources management entity. *Id.* Prior to the 2008 regulations, the Corps frequently entered into Memoranda of Agreement with the government or non-profit entities to establish guidelines for the mitigation, *see* Royal C. Gardner, *Money for Nothing? The Rise of Fee Mitigation,* 19 Va. Envt'l. L. J. 1, 23-30 (2000), but the responsibilities of the program sponsors are now governed by the 2008 mitigation regulations. *See* 73 Fed. Reg. 19594 (Apr. 10, 2008). As with mitigation banking, in lieu fee programs involve "off-site" compensatory mitigation projects.

A. Benefits and Concerns

In lieu fee programs are different from mitigation banking programs because, in an in lieu fee program, the government or non-profit entity usually collects money from several permittees before implementing a mitigation project, and there could be a significant delay between the collection of the money and the implementation of the project. *See* ELI Mitigation Banking Study at 8. Unlike mitigation banking, even if in

lieu fee programs ultimately replace the functions of wetlands that are destroyed or degraded by Section 404 permitted activities, there will generally be temporal losses of wetland functions. *Id.* However, in lieu fee programs can be used to restore a variety of wetland types of varying sizes in varying locations, while mitigation banks usually create, restore, enhance and/or preserve a single large site. *Id.* In addition, in lieu fee programs make it easier for the Corps to require mitigation for some small projects, such as those authorized by nationwide permits, for which the Corps might not otherwise require mitigation. *See* Royal C. Gardner, *Lawyers, Swamps, and Money* 129 (Island Press 2011).

For Section 404 permit applicants, in lieu fee programs provide the same benefits as mitigation banking. They make it quicker and cheaper to obtain a permit, *see* U.S. General Accounting Office, GAO-01-325, *Wetlands Protection: Assessments Needed to Determine Effectiveness of In-Lieu Fee Mitigation* 9 (May 2001) [hereinafter "GAO In Lieu Fee Report"], and they provide certainty to the permittee by shifting the responsibility for the success of the mitigation to a third party, the in lieu fee program sponsor.

For the government, to the extent that in lieu fee programs may involve smaller, scattered mitigation projects, as opposed to large, contiguous projects, in lieu fee programs may not provide the same monitoring and enforcement efficiency as mitigation banking. However, by consolidating the mitigation responsibilities in fewer entities with greater resources, the Corps still achieves a greater level of efficiency in monitoring and enforcement than it would in permittee-responsible mitigation, *see* GAO In Lieu Fee Report at 9, and the chances of mitigation success may be greater due to the greater flexibility that is available to the in lieu fee program sponsor in selecting a site for the mitigation project. *See* Environmental Law Institute, *The Status and Character of In Lieu Fee Mitigation in the United States* 3 (June 2006).

While in lieu fee programs provide benefits for the environment, the permit applicant, and the government, they have also been criticized. In a 2001 report, the U.S. General Accounting Office raised concerns that the in lieu fees that were being collected were not being used to implement mitigation projects in a timely manner, that the Corps was not adequately monitoring mitigation projects in the programs, and that the mitigation provided by the projects was not offsetting the impacts authorized by the Section 404 permits. *See* GAO In Lieu Fee Report at 10. Similarly, a 2005 ELI report found that 58 of the 87 in lieu fee programs that were in place at the time of the study did not require that the funds collected be spent on mitigation within a specific time frame. *See* ELI Mitigation Banking Study at 110. Prior to the adoption of the 2008 regulations, in lieu fee programs were also criticized because they frequently authorized preservation as a mitigation method. *Id.* at 119-120 (88% of in lieu fee programs authorized preservation).

B. History and Regulation

The Corps established the first in lieu fee program in the Vicksburg, Mississippi District in 1987, and had established 63 programs throughout the country by September, 2000. *See* GAO In Lieu Fee Report at 7.

In 2000, at about the same time that the GAO was issuing its report criticizing in lieu fee programs, the Corps, EPA, the Fish and Wildlife Service and NOAA issued comprehensive in lieu fee guidance. *See* *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* (Oct. 2000). By 2005, the Corps had approved 87 programs in 27 states. *See* ELI Mitigation Banking Study at 99. According to a 2006 study, in lieu fee programs accounted for about 8.4% of the acreage of compensatory mitigation required in permits at that time. *See* Royal C. Gardner, *Lawyers, Swamps, and Money* 119 (Island Press 2011).

In lieu fee programs were regulated under the federal guidance document until the Corps adopted the mitigation regulations in 2008, which superseded the guidance. *See* 33 C.F.R. § 332.1(f)(1). As noted above, the regulations were structured to provide "equivalent" regulation of all types of compensatory mitigation, but created a hierarchy or preferred mitigation options, which placed in lieu fee programs below mitigation banking, but above permittee-responsible mitigation. *See* 33 C.F.R. § 332.3(b).

The regulations now require in lieu fee programs to be administered pursuant to an in lieu fee program instrument, similar to mitigation banking instruments, *see* 33 C.F.R. § 332.2, to be approved by an interagency review team, similar to mitigation banks, *see* 40 C.F.R. § 230.98(b), and to prepare mitigation plans that address the same 12 factors as the plans prepared by mitigation banks and by permittees engaged in permittee-responsible mitigation (i.e. objectives, baseline information, work plan, financial assurances, etc). *See* 33 C.F.R. § 332.4(c). The regulations also require the Corps to identify a geographic ***service area*** in which credits from in lieu fee programs can be used, usually limited to the watershed in which the mitigation project will take place. *See* 33 C.F.R. § 332.3(b). As with mitigation banking, if a permittee is authorized to satisfy its mitigation requirements by providing funds to an in lieu fee program, the program sponsor, rather than the permittee is then responsible for the success of the mitigation. *See* 33 C.F.R. § 332.2. As noted above, the Corps would then seek relief for any mitigation failure from the in lieu fee program manager through contract law.

Although the regulations treat in lieu fee programs in a manner that is similar to mitigation banking in many respects, there is still one important difference between the programs. Unlike mitigation banks, in lieu fee programs can sell some credits and raise money as soon as the program instrument has been approved and do not have to wait until the mitigation project can demonstrate that it has met various milestones. *See* 33 C.F.R. § 332.8(n). As the mitigation project is implemented and meets milestones, the program sponsors can sell additional advance credits. *Id.*

In Lieu Fee Program Resources

RIBITS (Corps' Regulatory In Lieu Fee and Bank Information Tracking System - search for mitigation banks, service area, credits available, reports, etc.)
2008 Corps/EPA Mitigation Regulations
2000 Federal In Lieu Fee Guidance (superseded)
ELI Report on Mitigation Banking an In Lieu Fee Programs (2002)
ELI Report on the Status and Character of In Lieu Fee Mitigation in the U.S. (2006)
In Lieu Fee Mitigation: Model Instrument Language and Resources (ELI - 2009)
ELI/Stetson Report on In Lieu Programs and Implementation (2019)
ELI In Lieu Fee Training Webinars (2013)
In Lieu Fee Programs Approved by the Corps' Sacramento District

Hypothetical

In a 2006 article, Professors J.B. Ruhl and James Salzman pointed out that when a developer uses mitigation banking, as opposed to on-site, in-kind mitigation, to satisfy mitigation requirements for Section 404 permits, the environmental and public benefits provided by the wetlands that are being destroyed are transferred from the area where the development is taking place to the area where the mitigation bank is located. *See* J.B. Ruhl & James Salzman, *The Effects of Wetland Mitigation Banking on People*, 28 Natl. Wetlands Newsletter 8 (2006). Professors Ruhl and Salzman noted that this often means that development is destroying wetlands in urban areas and replacing them with wetlands in rural areas. *Id.* Mitigation banking, therefore, may raise some environmental justice concerns in its administration.

Consider that as you read the following dialogue between a lawyer and a client regarding mitigation requirements for a Clean Water Act Section 404 permit. The client has applied to the Corps of Engineers for a permit to fill 1 acre of coastal wetlands to build a parking deck in downtown Mobile, Alabama.

Scene: Lawyers Office in downtown Mobile, Alabama

Lawyer: Thanks for stopping by this morning. I know that you're busy, but I just wanted to update you on your permit application.

Client: Great. I've been sitting on that swampland for years. It will be great to finally get some money out of it.

Lawyer: Well, you'll be happy to know that the Corps will probably grant your permit for the parking deck, but we just need to come to some agreement on the mitigation requirements.

Client: OK. So what are my options? The last time we talked about this, you told me that the Corps wanted me to clean up some of the other wetlands near my property or build new ones near my property. I think you said that they wanted 4 acres of wetlands to make up for the 1 that I was filling. Is that still what they want?

Lawyer: They still would prefer that mitigation, but they are also willing to allow you to buy mitigation credits from the South Alabama Mitigation Bank in Citronelle, Alabama. If you bought credits from the mitigation bank, it would cost about $80,000 for the credits.

Client: That sounds better than the $100,000 it was going to cost me to clean up or build swamps near my property.

Lawyer: I agree that credits from the mitigation bank will be less expensive, but I think that there are some other factors that you might want to consider in choosing the mitigation. When we discussed mitigation with the Corps before, they were exploring the on-site options because a lot of the coastal wetlands around Mobile are being developed and they felt that restoration or creation of wetlands on or near your property would help prevent flooding in Mobile and would help protect the shrimp fisheries in the Mobile Bay. The South Alabama Mitigation bank is located about 40 miles north of Mobile, so the wetlands that they have created and restored up there won't really provide any protection to the fisheries or to the folks who might be flooded by storms in the Mobile Bay. That's been happening a lot here in Alabama. Wetlands are being destroyed by development in the cities and being replaced by wetlands in mitigation banks in rural areas. Then, when the flooding hits, the cities get hit hard.

Client: Would my parking deck be affected by flooding?

Lawyer: It's hard to tell, but I think that you've got it designed and located so that any impacts should be minimal. Plus, we've got some good insurance lined up for it.

Client: Well, I don't see why I should worry about the fisheries or flooding, then. Besides, how much of an impact can my project have, anyway? I'm only filling an acre of swamp for my parking deck.

Lawyer: Yes, but lots of people are only filling an acre or a couple acres by the bay. Before you know it, half of our wetlands are gone. Which is why I think that there are benefits to restoring or creating wetlands near your property.

Client: I hired you to represent me and not the citizens of Mobile or the Gulf Coast Shrimpers Union. All I'm concerned about is that I get my permit at the lowest cost without violating any laws. If I buy the mitigation credits, that will be legal, and I won't be sued by anyone when I build my parking deck?

Lawyer: If you buy the mitigation credits, the Corps will issue you the permit and you won't be sued by the government as long as you comply with the permit. The government's regulations actually create a preference for mitigation banking, but they allow on-site mitigation when the mitigation would restore an outstanding resource, like it would in your case. The Clean Water Act allows citizens to sue for some violations of the law, but they won't be able to sue you as long as you have a permit from the Corps to build your parking deck.

You may be able to buy some good will with the Mobile community, though, by restoring or creating some wetlands near your property instead of just buying mitigation credits. If you do a good job on the mitigation, it could really make the area around the parking deck look nice and it might make folks want to park in your parking deck instead of some of the other decks downtown. It could look like a little nature preserve in the middle of an urban jungle.

Client: Location is everything with parking decks. If I'm near where folks need to park, I'll get folks parking in my garage. If I'm not, I won't. I don't think that building some swamps near my garage is going to increase my business. Besides, I've never built swamps. What happens if they don't work the way they're supposed to? Won't the government come after me then?

Lawyer: Well, you're right that if we go with the on-site mitigation option and the restoration or creation doesn't work, the Corps can ask you to provide alternative mitigation. You don't have to worry about that with the mitigation bank. Once you buy the credits from an approved bank and the Corps signs off on that in your permit, you won't be responsible for providing any other mitigation if the mitigation bank's mitigation doesn't work.

Client: Well, it sounds like a no-brainer, then. Let's go with the credits from the mitigation bank and get that permit, so that we can start building the garage.

Lawyer: OK. I'll contact the Corps this afternoon. I'll let you know if anything else comes up.

Questions

1. Is it appropriate for the lawyer to raise concerns about the fisheries or flooding, or business concerns (such as the potential increased use of the garage if the area around the garage looks like a nature preserve) in counseling the client? *See* American Bar Association, Model Rule of Professional Conduct 2.1. (and associated comments); David Dana, *Environmental Lawyers and the Public Service Model of Lawyering,* 74 Or. L. Rev. 57 (1995).

2. If the lawyer strongly disagreed with the client's mitigation choice, would it be appropriate for the lawyer to withdraw from representing the client? *See* American Bar Association, Model Rule of Professional Conduct 1.16 (and associated comments).

Interview

Alexandra Dunn, Executive Director and General Counsel for the Environmental Council of the States, discusses State wetland mitigation programs, in contrast to the federal program. (YouTube Video)

Chapter Quiz

Now that you've finished Chapter 7, why not try a CALI lesson on the material at http://www.cali.org/aplesson/10746 It should only take about 30 minutes.