Wetland and Stream Mitigation: A Handbook for Land Trusts

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Cover photographs (left-right):
Campbell Creek Estuary (Great Land Trust, Alaska). Photo Credit: Carl Johnson
Lynch Canyon Irrigation System (Solano Land Trust, California)
Pineywoods Mitigation Bank (Texas Land Conservancy)

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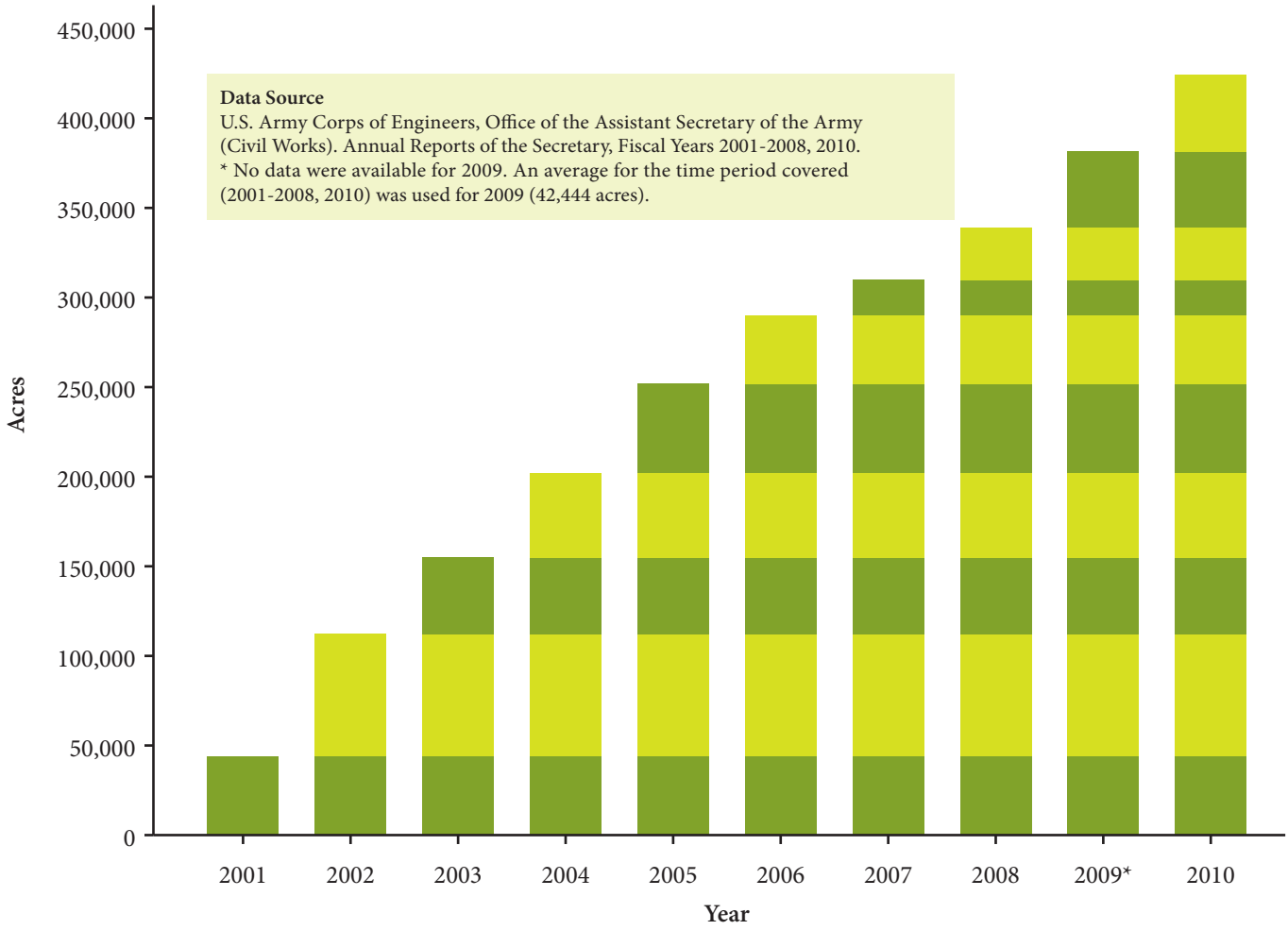
The federal wetland regulatory program – and its state counterparts – requires compensation for certain impacts to wetlands, streams, and other aquatic systems. Approximately $2.9 billion is spent on these compensatory activities every year.[1] The acreage affected can be significant. The U.S. Army Corps of Engineers requires around 45,000 acres of compensatory mitigation a year.[2] Federal regulations require that this acreage is permanently protected and managed and that a permanent source of funding is provided to support necessary management activities.

As a result, the nation's stock of mitigation lands continues to grow (see Chart 1). Who owns these lands? Who manages them? And who pays for these activities? Should your land trust get involved in the restoration, protection, or long-term stewardship of these sites? This handbook addresses these questions.

Chart 1: Cumulative Acres of Mitigation Lands Conserved, 2001-2010



Compensatory mitigation is a complicated process, and there are multiple parties involved in each project. There is also considerable overlap in the language used in both the compensatory mitigation and land trust arenas. Long-term stewardship. Long-term management. Easement stewardship. These terms may have different meanings depending on whether you are a nonprofit land trust, a mitigation provider, or a federal or state regulator (see Chart 2 for definitions).

[1] ENVIRONMENTAL LAW INSTITUTE, MITIGATION OF IMPACTS TO FISH AND WILDLIFE HABITAT: ESTIMATING COSTS AND IDENTIFYING OPPORTUNITIES (2007), http://www.watershedinstitute.biz/index.html.

[2] U.S. ARMY CORPS OF ENGINEERS, ANNUAL REPORTS OF THE SECRETARY, FISCAL YEARS 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, AND 2010, available at http://cdm15141.contentdm.oclc.org/cdm/compoundobject/collection/p16021coll6/id/22.

Chart 2: What Is Stewardship?

A clarification of terms in use in this Handbook

The words "steward" and "stewardship" mean different things to different people. Some think of the "steward" as the entity that holds and monitors the conservation easement. Others think of the "steward" as the entity that carries out all management and maintenance on a compensatory site after performance standards have been met. In some cases, these responsibilities are carried out by the same entity. In this handbook, we distinguish between these roles and use precise terminology to avoid confusion. To describe the full range of stewardship activities, we use the following terms throughout:

Long-Term Stewardship	Umbrella term for all activities on the site after performance standards have been met. Long-term stewardship refers to the full range of activities that take place on a compensatory mitigation site after that site has met its performance standards. These activities may be undertaken by a single entity or by multiple entities, including land trusts. At most compensatory mitigation sites, there will be more than one "long-term steward," with each occupying one or more of the roles identified below. Long-term stewardship activities include: long-term management and maintenance of the site, easement stewardship and defense, and long-term endowment management. Long-term stewardship does NOT include active-phase site monitoring (which occurs before performance standards are met).
Active-Phase Site Monitoring	Site assessment until performance standards have been met. Active-phase monitoring evaluates whether the site meets its performance standards. The monitoring period may not be less than five years from the point at which the mitigation work is complete, though that period may be shortened or extended (and the start of the long-term management period accelerated or delayed accordingly) depending on how the site is performing. Active-phase monitoring requires the submission of monitoring reports to the lead agency. The monitoring itself consists of observation, sampling and other functional assessment methodologies. These duties are outlined in the "monitoring requirements" section of the mitigation plan or instrument. The mitigation rule also requires a maintenance plan, which addresses site up-keep during the monitoring period. Associated terms in the mitigation rule: monitoring, monitoring requirements, maintenance plan, maintenance requirements, monitoring report, monitoring period, adaptive management plan.

Long-Term Management and Maintenance	The routine assessment and active management of the site after performance standards have been met. Long-term management and maintenance responsibilities will vary depending on the needs of the site but may include more intensive activities like controlled burning, invasive species control, and management of active site features, such as pumps, as well as more minimal activities (which sometimes fall instead to easement stewards), such as maintaining fences and signs. Long-term management and maintenance may require submission of monitoring reports to the lead agency. All of these responsibilities are detailed in the "long-term management plan," which is a component of the mitigation plan or instrument. The long-term management plan may also be incorporated into the easement by reference. Associated terms in the mitigation rule: management, long-term management, long-term management needs, long-term management provisions, long-term management responsibilities, long-term management strategy, long-term stewardship entity, long-term management entity, long-term management plan.
Easement Stewardship and Defense	The management, monitoring, and enforcement of the easement in perpetuity, and other activities generally considered part of easement stewardship, such as maintaining landowner relationships. Easement stewardship and defense primarily involve regular monitoring of the project site for uses in violation of the easement. In the event of a violation, easement stewardship and defense include pursuing legal action. Under the terms of the easement, the easement steward may agree to perform minor management activities on the site—for example, maintaining signs or fences—but this is more likely when there is no long-term manager that might otherwise perform these duties. An easement steward may also be required to submit easement monitoring reports to the lead agency. The full duties of easement stewardship will generally be contained within the easement itself (though the easement may also reference activities outside the duties of easement stewardship, such as mitigation work or long-term management). Associated terms in the mitigation rule: site protection, site protection mechanism, site protection instrument, ownership arrangements, long-term protection, long-term protection mechanism, real estate instruments, easement, easement monitoring, easement enforcement, land stewardship entity.

Long-Term Stewardship Fund Management	The management and distribution of financial resources set aside to fund long-term stewardship activities. Mitigation providers are required to deliver funds to support the long-term stewardship of compensatory mitigation sites. The long-term funding mechanism can be managed by a variety of entities, such as the mitigation provider, the entity that holds the site in fee, the entity that holds an easement on the property, or the party responsible for long-term management and maintenance. The long-term funding mechanism may also be divided into separate streams of funding (e.g., one stream for long-term management and maintenance and another for easement monitoring and defense), and these streams may be maintained by separate entities. Associated terms in the mitigation rule: financial assurances, long-term financing mechanisms, long-term financing, financial instruments, funding mechanism, long-term management funds, long-term management funding.

Regardless of the complicated nature of the program and the inherent risks, land trusts around the country are engaging in these projects. With thorough due diligence and a solid understanding of how the regulatory program works, compensatory mitigation can help your organization meet its conservation goals. This handbook will help land trusts advance the quality of the mitigation sites selected, the long-term functionality of the sites, and the long-term stewardship of these sites and guide them through the process of thoroughly evaluating and managing their liability.

1.1 Purposes of This Handbook

This handbook has multiple purposes. One goal is to advance and professionalize the long-term stewardship of compensatory mitigation sites.[3] The majority of "losses of waters" that occur through the federal wetland and stream regulatory program are permanent and so too should be the compensation required to offset these losses. Land trusts are the nation's stewardship professionals, so who better to provide long-term stewardship of these sites? But with these mitigation programs and projects come significant staffing demands and varying degrees of exposure to risk. So while we hope that qualified land trusts will help support the long-term stewardship of mitigation sites, one of the central purposes of this handbook is to provide the land trust community with a framework to rigorously evaluate the liabilities associated with this program. Effective and responsible engagement in mitigation also means you should be ready to say no when the risks of taking on the property outweigh the benefits.

This handbook also recognizes a range of roles that land trusts can play in compensatory mitigation beyond stewardship, including serving as a mitigation provider, guiding site selection, carrying out compensation on your own lands, and participating in restoration projects.

Where possible, we draw from *Land Trust Standards and Practices* (see Box 1) to help you evaluate and select appropriate projects, manage finances responsibly, and apply sound stewardship practices. However, mitigation projects differ significantly from traditional land conservation projects in many meaningful ways. We also interviewed more than 20 land trusts of varying size from around the country for this handbook and we draw

[3] Compensatory mitigation is required for a variety of impacts to the environment, including federally threatened and endangered species. This handbook, however, addresses only that compensation that is required under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.

heavily from their experiences – their conservation successes, regulatory challenges, and financial missteps – to articulate practical pointers for involvement in a range of compensatory mitigation programs and projects.

Box 1: Land Trust Standards and Practices and Land Trust Accreditation

Land Trust Standards and Practices are the ethical and technical guidelines for the responsible operation of a land trust. The Land Trust Alliance first developed *Land Trust Standards and Practices* in 1989 at the urging of land trusts who believe a strong land trust community depends on the credibility and effectiveness of all its members and who understand that employing best practices is the surest way to secure lasting conservation. The 2004 revisions were prepared by a team of land trust leaders and reviewed by hundreds of conservationists to capture and share the experiences of land trusts from across the country.

Land Trust Standards and Practices are organized into 12 standards and supporting practices to advance the standards. Standards 1-7 deal with organizational issues, and Standards 8-12 cover land and easement transactions and stewardship. Throughout this handbook we refer to *Land Trust Standards and Practices* and guide you to this resource for additional information.

The Land Trust Accreditation Commission was created as an independent program of the Land Trust Alliance in 2006. The Commission's charge is to operate an accreditation program to build and recognize strong land trusts, foster public confidence in land conservation and help ensure the long-term protection of land. The Commission verifies land trust implementation of *Land Trust Standards and Practices* by evaluating applicants on a sampling of the practices known as accreditation indicator practices. For more information, visit the Commission's website at www.landtrustaccreditation.org.

1.2 Roadmap for Handbook

This handbook is divided into eleven chapters. Readers may wish to pick and choose from the sections that are relevant to their needs and concerns.

Section 2 is a primer on Section 404 of the Clean Water Act. It provides the reader with an overview of the policies that guide administration of the wetlands regulatory program, a discussion of how permitting and compensatory mitigation decisions are made by the U.S. Army Corps of Engineers and its regulatory partners, and an overview of the different components of a mitigation plan.

Section 3 is an overview of the different phases of a compensatory mitigation project. If your land trust is evaluating whether to engage in a compensatory mitigation project, understanding what stage of the process the project is currently in is key.

Section 4 discusses the different roles that a land trust can play in compensatory mitigation – from a mitigation provider to an easement holder. These different roles present different opportunities and challenges for the land trust, many of which are introduced here.

Section 5 provides a framework for your land trust to assess its participation in a compensatory mitigation project. It focuses on the opportunities that compensatory mitigation programs and projects may offer, as well as the challenges and liabilities.
Sections 6, 7, and 8 are technical guides to specific components of the compensatory mitigation program: site

protection instruments, long-term management plans, and long–term financing mechanisms.

The last two sections of the handbook (Sections 10 and 11) includes a glossary, lists additional resources on Land Trust Standards and Practices, and provides references to additional information on the § 404 program. Finally, Appendix A includes a series of questions your organization should consider when reviewing mitigation program or project documentation.

2.1 Purpose and Goals of the Section 404 and Section 10 Programs

In 1972, Congress passed amendments to the Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA), establishing a new section of the act and a new regulatory program. This new section, Section 404, requires landowners to secure a permit from the U.S. Army Corps of Engineers (the Corps) for activities that would lead to a "discharge of dredged or fill material"[4] into "waters of the United States," including wetlands. For example, if in the course of a development project, a landowner wants to fill or disturb a wetland or stream, he or she must get a permit before doing so.

Authority for oversight of the § 404 program is split between the Corps and the U.S. Environmental Protection Agency (EPA) (collectively, "the agencies"). The Corps is generally the first stop and point of contact for permittees and mitigation providers. It carries out the day-to-day permitting activities of the program in its 38 district offices (with the exception of Michigan and New Jersey, which have "assumed" administration of the § 404 program[5]). Congress charged EPA with writing the environmental standards by which the Corps evaluates permits (referred to as the § 404(b)(1) Guidelines[6]). It also has the authority to veto permits issued by the Corps, a mechanism that is used sparingly.

Two additional agencies – the U.S. Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration's Fisheries Service (NOAA Fisheries) – play a role in evaluating and commenting upon the impact that projects may pose to fish and wildlife.

Two national goals guide operation of the § 404 program. The first is the Clean Water Act's goal of restoring and maintaining the "chemical, physical, and biological integrity" of the nation's waters.[7] The second is the goal of "no overall net loss" of wetland acres and functions (often referred to as the "no net loss goal"), which dates back to 1989.[8] The no net loss goal has been reaffirmed multiple times since then in an array of federal regulations and guidance, most significantly in rules on compensatory mitigation issued by the Department of Defense and EPA in 2008.[9] The agencies' commitment to the no net loss goal is key to understanding their attitude toward the use of preservation and restoration as compensation methods. *For more on how the no net loss goal influences the role of restoration, creation, enhancement, and preservation in compensatory mitigation, see Section 2.3.1, Mitigation Methods on page 18.*

The Army Corps of Engineers also administers Section 10 of the Rivers and Harbors Act, which requires a permit for any construction that will create an obstruction to a navigable water.[10] This includes construction of such structures as wharfs, piers, or jetties. Compensation may be required for activities authorized under § 10. In such cases, the Army Corps relies upon the same regulations to guide its decisions as it does for decisions made under § 404. However, compensatory mitigation is generally required for the loss of waters of the U.S., which is governed by § 404. So although the compensatory mitigation projects addressed throughout this handbook may come about as a result of a § 10 or § 404, we refer to § 404 permits as a shorthand, but recognize that the permit may have been issued under § 10.

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4 CWA, 33 U.S.C. § 1344 (2000).

5 U.S. Environmental Protection Agency, State or Tribal Assumption of the Section 404 Permit Program, http://water.epa.gov/type/wetlands/outreach/fact23.cfm (last visited Aug. 29, 2012) [hereinafter EPA State or Tribal Assumption].

6 Guidelines for Specification of Disposal Sites for Dredged or Fill Material, 40 C.F.R. pt. 230 (2012).

7 33 U.S.C. § 1251(a) (2000).

8 The national goal of achieving no net loss of wetland acres and functions was first expressed in the report, "Protecting Americas Wetlands: An Action Agenda the Final Report of the National Wetlands Policy Forum." WORLD WILDLIFE FUND (1988). The report recommended that "the nation establish a national wetlands protection policy to achieve no overall net loss of the nation's remaining wetlands base, as defined by acreage and function, and to restore and create wetlands, where feasible, to increase the quality and quantity of the nation's wetlands resource base." On June 6, 1989, President George H.W. Bush officially articulated no net loss as a national policy goal in a speech to Ducks Unlimited.

9 Compensatory Mitigation Rule, 33 C.F.R. pt. 332 (2008).

10 Rivers and Harbors Act of 1899, 33 U.S.C. § 401 et seq. (1983).

2.2 The Impact Side: How the Corps Evaluates a Proposed Permit and Determines How Much Compensation Is Required

The § 404 permit process begins when an applicant – such as a state agency seeking to build a highway, a builder or developer seeking to develop houses or a shopping mall, or a homeowner seeking to expand the footprint of his or her home – submits a permit application to the Corps. Although your land trust's interest in the § 404 program may only relate to compensatory mitigation, it is important to understand how compensation fits into the larger permit decision-making process. Understanding this process will help you address concerns you may have about the public's perception that your engagement in compensatory mitigation helps facilitate development. This understanding will also underscore for you the important fact that compensatory mitigation is required as a matter of *law* and *regulation*, and thus differs in critical respects from other purely philanthropic work in which you may be engaged.

2.2.1 The Mitigation Sequence

How does a program that allows permittees to fill wetlands and streams achieve the lofty Clean Water Act and no net loss goals? The program primarily does so through *mitigation and compensatory mitigation*. In 1990, the agencies set out a three-part sequence that the Corps must follow when evaluating permits.11 Prior to issuing a § 404 permit, the Corps must make a determination that potential impacts have been *avoided* "to the maximum extent practicable" and *minimized* "to the extent appropriate and practicable."[12] Once potential impacts to wetlands, streams, and other aquatic resources are avoided and minimized, the remaining impacts must be *offset or compensated for,* again, to the extent "appropriate and practicable."[13]

This three-part sequence is referred to as the mitigation sequence. The third step of the sequential process – the offset component – is known as compensatory mitigation. Although the third step is often referred to simply as "mitigation," it is important to note that technically, "mitigation" means all three steps: avoid, minimize, and compensate.

What do avoidance and minimization generally entail? After the applicant submits a permit application to the Army Corps' district office, it must provide an explanation of how he or she intends to avoid and minimize impacts to aquatic resources at the project site. At the time the permit application is submitted, the applicant must also provide a brief description of how it proposes to compensate for any remaining impacts to wetlands, streams, or other aquatic resources.[14]

The Corps and the applicant then begin what is often an iterative process to satisfy the avoidance and minimization requirements. This process can lead to more and different avoidance and minimization measures than those that were originally outlined in the application. Typically, the avoidance and minimization process involves the following steps:

Avoidance

- The Alternatives Test: This test is designed to identify the "least environmentally damaging

[11] 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 (1990)[hereinafter 1990 MITIGATION MOA], available at http://water.epa.gov/lawsregs/guidance/wetlands/mitigate.cfm.

[12] *Id.* at 9211-12 (§ II.C.).

[13] *Id.*

[14] U.S. ARMY CORPS OF ENGINEERS, INSTRUCTIONS FOR PREPARING A DEPARTMENT OF THE ARMY PERMIT APPLICATION, available at http://www.usace.army.mil/Portals/2/docs/civilworks/permitapplicationinstructions.pdf.

practicable alternative" or "LEDPA." Applicants may not be issued a permit if there is a "practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem…"[15] When the Corps receives an application for a project that will impact a wetland or stream, the agency must determine if such an alternative exists. Under its regulations, the Corps must presume that there are non-wetland alternative sites on which to locate non-water dependent projects.[16] The Corps also presumes that alternatives that do not impact wetlands or streams are less damaging to the aquatic ecosystem and are environmentally preferable. An alternative is "practicable" if it is available and reasonable with regard to scope, cost, existing technology, and logistics. Finally, in order to grant the permit, the Corps must make a finding that the proposed project is the LEDPA.[17]

- Other Environmentally Significant Impacts: The Corps may not issue the permit if the proposed activity will result in a violation of state water quality standards or toxic effluent standards, jeopardize a threatened or endangered species, or violate requirements imposed to protect a marine sanctuary.[18]

- Anti-Degradation Provision: The Corps may not issue the permit if the proposed activity will cause or contribute to significant degradation of the waters of the United States. Significant degradation may include individual or cumulative impacts to human health and welfare; fish and wildlife; ecosystem diversity, productivity, and stability; and recreational, aesthetic, or economic values.[19]

Minimization: After impacts have been avoided as much as possible, the Corps must ensure that remaining impacts are then minimized as much as possible.[20] Minimization actions may address the planning and design stages, as well as the construction or implementation phases. Minimization actions may include changing the location of the impact on the site, reducing the size of the impact on the site, reducing temporary impacts during construction (e.g., stormwater management techniques) or changing the effects of the project on plants, animals, and human uses.[21]

Although, on average, the Corps authorizes 70 percent of all the permits requested by applicants, by the time the Corps approves impacts to wetlands or streams, it is likely that the project looks quite different from that which was originally proposed. (The Corps denies very few permit requests. In 2010, less than 1 percent of the permits submitted were denied. In the same year, 29 percent of the permit requests were withdrawn.)[22]

There is much technical jargon associated with the first two steps in the mitigation sequence, but your land trust need not master the details. If your organization is considering playing a role in a compensatory mitigation project, your part in the process likely concerns only the third step – compensation. It is important to recognize that before compensation is even considered, every project applicant has already jumped through significant hoops to avoid and minimize the project's impacts.

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15 40 C.F.R. § 230.10(a).

16 This is referred to as a "rebuttable presumption": "Where the activity associated with a discharge which is proposed for a special aquatic site . . . does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose…practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise." 40 C.F.R. § 230.10(a)(3).

17 § 230.10(a).

18 § 230.10(b).

19 § 230.10(c).

20 All "appropriate and practicable steps" must be taken to minimize impacts. § 230.10(d). "Practicable" is defined as "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." § 230.3.

21 § 230.70-77.

22 U.S. Army Corps of Engineers.

The Corps has considered how those impacts affect water quality, endangered species, and how they fit into historic wetland and stream losses. Once these considerations are taken into account – and only after they have been taken into account – does the Corps discuss compensation for the remaining impacts.[23] No matter how dazzling the compensation project is, it didn't get the applicant out of his or her avoidance and minimization requirements.[24] As a result, if a land trust is providing compensation for impacts or holding an easement on a compensation site, the organization is in no way facilitating development. The project will proceed with or without the land trust's involvement. The questions are: who will carry out that compensation, where will it be located, and who will care for the compensation site in perpetuity?

2.2.2 Calculating the Amount of Compensation Required for "Unavoidable Impacts"

After the applicant has gone through the avoidance and minimization procedures, they discuss their compensatory mitigation proposal with the Corps.[25] Compensatory mitigation is defined as follows:

> The restoration (re-establishment or rehabilitation), establishment (creation), 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.[26]

The amount and type of compensatory mitigation that is required is included in the Special Conditions of the permit.[27] Compensation may also be referred to as an offset – stated differently, compensation is used as a mechanism to offset permitted impacts. The amount of compensation is driven by the degree to which ecological functions are degraded or lost at the impact site. Losses at the impact site are expressed as debits.

Debits are defined as:

> 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.[28]

Debits can be estimated using sophisticated functional assessment methods or by relying on acreage or linear foot-based ratios.

2.2.2.1 Using Functional Assessment Methods to Determine the Amount of Compensation Needed

Ideally, the Corps will use a science-based "functional or condition assessment method" to evaluate the

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[23] Applicants may identify a compensatory mitigation proposal, but the Corps will not consider whether it offsets unavoidable losses of waters until avoidance and minimization are complete.

[24] The availability of compensation opportunities may not be taken into account during the alternatives analysis and identification of the LEDPA. The 1990 Mitigation MOA states that "[c]ompensatory 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)." Guidance issued by the Corps in 1993 further reinforced this position: "It is not appropriate to consider compensatory mitigation in determining whether a proposed discharge will cause only minor impacts for purposes of the alternatives analysis required by Section 230.10(a)." 1990 MITIGATION MOA, supra note 11, at II. C. 2.

[25] It is the applicant's responsibility to propose compensatory mitigation. The Corps is tasked with evaluating the proposal. 33 C.F.R. § 332.3(a)(1).

[26] § 332.2.

[27] § 332.3(k)(1).

[28] § 332.2.

impact site and compare it to the proposed compensation site, thereby using like measures to determine if the compensation will adequately replace lost aquatic resource functions. These assessment methods, which are tailored to geographically specific aquatic resource types, are available in many parts of the country.[29] They can be complicated, but permittees often enlist the expertise of a qualified consultant to carry them out. Many states have developed their own methods that are required or used widely across the state.

2.2.2.2 Using Mitigation Ratios to Determine the Amount of Compensation Needed

In instances where appropriate function or condition assessments do not exist or are not practicable to use, the Corps often use acres (e.g., for wetlands) or linear feet (e.g., for streams) as the tool to quantify or measure potential losses at the impact site and potential benefits at the compensation site. In such instances, the Corps is *required* to use a minimum one-to-one acreage ratio for wetlands (e.g., one acre of wetland mitigation for each acre of wetland impact) and a minimum one-to-one linear foot ratio for streams (e.g., one linear foot of stream mitigation for each linear foot of stream impact) to offset unavoidable losses.[30] However, federal regulations also require that ratios must be adjusted to account for risk and a wide range of uncertainties associated with a mitigation project.

Higher ratios are used if there are doubts about the likelihood of the compensation project being successful, there are differences between the functions being lost at the impact site and those being replaced by the compensation site, the compensation method doesn't support no net loss (i.e., preservation), there is a long lag time between the time the impact occurs and the time the compensation project will be complete and ecologically successful, or if the compensation site is particularly far away from the impact site.[31] Accounting for these additional factors will typically increase mitigation ratios.

For example, if a permittee is going to impact a common and relatively easy to replace wetland type, say scrub-shrub wetland, they may be required to offset 50 acres of loss with 50 acres of scrub-shrub wetland (a 1:1 mitigation ratio). But, if the type of aquatic resource being impacted is particularly rare, high quality, or difficult to restore, the Corps *would likely* require a mitigation ratio greater than one-to-one. For example, the Corps might require two acres of compensation for every one acre of forested wetlands impacted by a permittee (a mitigation ratio of 2:1).

Although EPA, FWS, NOAA Fisheries, and state natural resource agencies may comment upon the permit and the proposed mitigation, the Corps is generally the lead regulator and decision-maker during this part of the process. The amount of compensation required may be calculated by the Corps using a mitigation ratio or using a functional assessment method that has been developed by or in partnership with the Corps. At the end of the process, if the permit is approved, the permittee proposes compensatory mitigation and the Corps approves or rejects the proposal. The amount and type of compensation that the permittee is required to provide are specified in the permit.

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[29] For a review of existing assessment methods as of 1999 see C.C. BARTOLDUS, A COMPREHENSIVE REVIEW OF WETLAND ASSESSMENT PROCEDURES: A GUIDE FOR WETLAND PRACTITIONERS (Environmental Concern, Inc. 1999). For a discussion and review of rapid assessment methods see M.S. FENNESSY, A.D. JACOBS & M.E. KENTULA, U.S. ENVIRONMENTAL PROTECTION AGENCY, EPA/620/R-04/009, REVIEW OF RAPID METHODS FOR ASSESSING WETLAND CONDITION (2004). For a review of stream assessment protocols see D.E. SOMERVILLE & B.A. PRUITT, EPA 943-S-12-002, PHYSICAL STREAM ASSESSMENT: A REVIEW OF SELECTED PROTOCOLS FOR USE IN THE CLEAN WATER ACT SECTION 404 PROGRAM (2004); D.E. SOMERVILLE, EPA 843-S-12-003, STREAM ASSESSMENT AND MITIGATION PROTOCOLS: A REVIEW OF COMMONALITIES AND DIFFERENCES (2010).

[30] 33 C.F.R. § 332.3(f)(1).

[31] § 332.3(f)(2).

2.3 The Compensation Side: How Impacts Are Offset

If a developer undertakes an activity that leads to the loss of wetland or stream acres and functions, the developer now needs to replace those lost acres and functions. How are those wetland and stream acres/feet and functions generated?

Wetland and stream offsets are expressed as credits. Credits are defined as:

> 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.[32]

Mitigation providers generate credits through the four methods defined in the following section (restoration, establishment, enhancement, and preservation). The amount of credits each compensatory mitigation site will generate may depend upon the method of mitigation used, the assessment tool used, and in some cases may entail some negotiation between the mitigation provider and the Corps. Generally speaking, the Corps either uses established credit ratios or a functional assessment method to determine the number of credits that a compensatory mitigation project would yield. Different districts may use different credit determination methods. Some districts have clearly articulated the credit ratios or functional assessment method they use in district-specific "Standard Operating Procedures" (SOPs), which serve as mitigation guidelines.[33] Others include that information in stand-alone mitigation guidelines.[34] Some districts negotiate these matters for each individual compensation project. At the end of this process, the Corps notifies the mitigation provider of the number of credits (or functional units in some cases) that the project is likely to generate. When the Corps makes a permit decision it must ensure that any *debits* from the impact site are appropriately offset by ***credits*** generated by associated compensatory mitigation sites. *For examples on how credit ratios are applied to compensation sites, see Section 2.3, "The Compensation Side," on page 18.*

2.3.1 Mitigation Methods: Restoration, Establishment, Enhancement and Preservation

What actions do mitigation providers take to generate credits? The agencies have identified four methods that can be used to meet a permittee's compensatory mitigation obligations: restoration, establishment (creation), enhancement, and preservation. *See Chart 3 for definitions of the compensation methods.*

Recall, that the no net loss goal relates to the replacement of area ***and*** functions. These different compensation methods differ in their ability to replace area and functions and, therefore, to contribute to the no net loss goal (see Chart 3). These disparities are addressed by the agencies by favoring wetland and stream restoration – which provides a net increase in both acres and functions – over the other compensation methods and using credit ratios that assign more credits to methods that provide greater assurances of replacing lost wetlands and streams.

For example, if a compensation project is designed to restore a wetland where one once existed, that project supports a gain in both acres and functions. Such a project may entail carrying out work on a farm field that was once a wetland, which was drained for farming in the 1890s. By removing the drainage control

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[32] § 332.2.

[33] See, e.g., U.S. ARMY CORPS OF ENGINEERS, CHARLESTON DISTRICT, RD-SOP-02-01, REGULATORY DIVISION - STANDARD OPERATING PROCEDURE (2002), available at http://www.sac.usace.army.mil/assets/pdf/regulatory/sop02-01.pdf.

[34] See, e.g., U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DISTRICT, NEW ENGLAND DISTRICT COMPENSATORY MITIGATION GUIDANCE (2010), available at http://www.nae.usace.army.mil/Regulatory/Mitigation/CompensatoryMitigationGuidance.pdf.

structures and planting wetland-dependent plants the wetland returns. These wetland acres are returned to the landscape and, if successful, the restored wetland provides functions that were not previously provided. If the project is completed as compensation for a wetland fill of equal or fewer acres, that project supports the no net loss goal. This is restoration (re-establishment) and restoration is the sweet spot for regulators.

2.3.1.1 The Role of Preservation

Why don't the agencies generally support or favor the preservation of high quality wetland and streams to fully offset authorized impacts? Wetland loss, stream impacts, riparian area degradation – the evidence is undeniable. As a nation, we have lost the majority of our naturally occurring wetlands and a significant amount of our streams of high ecological value. Seven states have lost more than 80 percent of their original wetland acreage.[35] As those in the land trust community know all too well, it is critical that we protect the best that we have left and do so as quickly as possible. But at the same time, if we allow for wetland or stream losses without replacing them, our vital aquatic resources will continue to be eroded through a death by a thousand cuts. And so, with the full understanding that undisturbed wetlands and streams remain at risk, the federal agencies nonetheless prefer to compensate impacts with restoration rather than preservation.

This preference for restoration over preservation appears in the regulations, but preservation is allowed in some circumstances. In 2008, the agencies stipulated that when preservation is used as compensation, *all* of the following criteria must be met:

1. The resources to be preserved provide important physical, chemical, or biological functions for the watershed
2. The resources to be preserved contribute significantly to the ecological sustainability of the watershed
3. Preservation is determined by the district engineer to be appropriate and practicable
4. The resources are under threat of destruction or adverse modifications
5. 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)[36]

Even when preservation is allowed, the agencies stress that it should be carried out in conjunction with restoration, creation, or enhancement.[37] In reality, most of the compensatory mitigation projects that the Corps approves include a mix of mitigation methods. A project may restore a degraded wetland, preserve existing wetland acreage, and enhance the functions of an existing wetland all within the boundaries of a single compensatory mitigation project.

In other words, the federal agencies generally do not support compensatory mitigation projects that are based entirely on preservation. The one exception to the "no preservation-only" position is when a preservation project is identified as a high priority site using a watershed approach to compensatory mitigation decision-making. *The watershed approach is discussed further in Section 2.4.2, "The Watershed Approach," on page 34 .* The Corps' willingness to accept preservation projects does vary from Corps district to Corps district. *For more information on the role of district-specific policies, see Section 2.5, "Corps District Mitigation Policies and the Role of States," on page 37.*

[35] T.E. DAHL & C.R. JOHNSON, U.S. FISH & WILDLIFE SERVICE, WETLANDS: STATUS AND TRENDS IN THE CONTERMINOUS UNITED STATES, MID-1970'S TO MID-1980'S (1991).
[36] 33 C.F.R. § 332.3(h)(1).
[37] § 332.3(h)(2).

2.3.1.2 Applying Credit Ratios Based on the Compensation Method

The Corps' primary tool for incentivizing restoration and enhancement over other forms of compensation that do not advance the no net loss goal, such as preservation, is to apply credit ratios. So if preservation is allowed – as part of a project or the entire project – the preservation portion of the project will receive fewer credits for those acres than would restoration acreage. For example, if a mitigation provider develops a site with 100 acres of restored wetlands, the Corps may allocate one credit for every two acres of restored wetlands (a credit ratio of 2:1) or 50 credits. If, on the other hand, that same 100 acres is preserved, high quality wetlands, the Corps may award one credit for every 20 acres of preserved wetlands (a credit ratio of 20:1) or 5 credits. As you can see, in this example, one acre of preservation is worth only a tenth of a restoration acre, which may make mitigation providers more inclined to generate credits using restoration.

2.3.2 Mitigation Mechanisms and Agency Oversight

There are three mechanisms supported by the Corps and EPA for permittees to meet their compensatory mitigation requirements:

1. Permittee-responsible mitigation
2. Purchasing credits from an approved mitigation bank
3. Making a payment to an approved in-lieu fee program

The last two mechanisms are often referred to as third-party compensatory mitigation because the responsibility for conducting the actual compensation, and the liability for ensuring project success, is transferred to a party other than the developer. *See Chart 4 for definitions of the mitigation mechanisms.*

Before the Corps will issue a permit, the agency must determine the amount and type of compensation a permittee must provide and the two entities must agree on the mitigation mechanism that will be used. This information must be included in the Special Conditions of the permit.[38]

Although there are significant differences between these mechanisms, all three require the mitigation provider (the permittee, banker, or in-lieu fee provider) to secure sufficient financial assurances to guarantee that offsets can be provided in the event that the provider is unwilling or unable to successfully compete the compensation project. The agencies also require the provider to utilize a site protection instrument that will ensure the long-term protection of the site, to develop a mitigation plan that outlines detailed information about the mitigation work plan and the long-term management plan, and to select sites using a watershed approach. The three mitigation mechanisms differ, however, in many significant ways.

[38] § 332.3(k)(1).

Chart 3: Compensatory Mitigation Methods
Restoration (re-establishment and rehabilitation)
Definition: Restoration is "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 purposes of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation." Re-establishment is "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." Rehabilitation is "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."
Policy: "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."
No net loss role: Re-establishment results "in a gain in aquatic resource area and functions." Rehabilitation results "in a gain in aquatic resource function, but does not result in a gain in aquatic resource area."
Establishment (creation)
Definition: Establishment is "the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site."
No net loss role: Establishment "results in a gain in aquatic resource area and functions."
Enhancement
Definition: Enhancement is "the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s)."
No net loss role: 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."
Preservation
Definition: Preservation is "the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources….includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms."
Policy: Preservation "may be used to provide compensatory mitigation…when all of the following criteria are met: (1) The resources to be preserved provide important physical, chemical, or biological functions for the watershed; (2) The resources to be preserved contribute significantly to the ecological sustainability of the watershed…; (3) Preservation is determined by the district engineer to be appropriate and practicable; (4) The resources are under threat of destruction or adverse modifications; and (5) 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)." "Where preservation is used to provide compensatory mitigation…[it] 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…, but credit ratios shall be higher."
No net loss role: Preservation "does not result in a gain of aquatic resource area or functions."

It is also important to note the different agencies that are involved in the various aspects of the § 404 program. On the impact side, the Corps issues permits and makes compensatory mitigation determinations. Other state and federal agencies may comment on all aspects of proposed permits, including proposed compensatory mitigation plans, and EPA has some particular authorities. On the compensation side, the Corps oversees permittee-responsible compensation and determines whether the applicant's proposed compensation project is sufficient to offset the permitted impacts. For banks and in-lieu fee programs, the Corps still takes the lead, but additional federal and state natural resource agency partners play a more significant role. *For more on the role of state authority, see Section 2.3.2, "Mitigation and Agency Oversight," on page 20.*

Chart 4: Mitigation Mechanism Definitions	
Permittee-Responsible Mitigation	"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."
Mitigation Bank	"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 [Department of the Army] 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."
In-Lieu Fee Mitigation	"A program involving the restoration, establishment, enhancement, and/or preservation of aquatic resources through funds paid to a governmental or nonprofit natural resources management entity to satisfy compensatory mitigation requirements for [Department of the Army] 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."

2.3.2.1 Permittee-Responsible Mitigation

With permittee-responsible mitigation, the permittee is responsible for identifying a site and carrying out the restoration, establishment, enhancement, and/or preservation activities itself (or hires a consultant to do so). The permittee proposes the project to the Corps and works with the agency to come to agreement on the project. The Corps determines if the proposed project sufficiently offsets the permitted impacts and is likely to be sustainable.

During and after implementation of the project, the permittee must monitor and manage the site, carry out any required remediation, and arrange for the site's long-term protection. In many cases, the permittee contracts out some or all of these activities – site identification, project implementation, monitoring and management. However, all of the liability related to the project remains with the permittee. The Corps is generally the primary federal agency involved in oversight of permittee-responsible mitigation projects, although state agencies may play a significant role if they have parallel permitting authority. *For more on the role of state authority, see Section 2.5, "Corps District Mitigation Policies and the Role of States," on page 37.*

2.3.2.2 The Interagency Review Team

Unlike permittee-responsible mitigation, which is approved and primarily overseen by the Corps, a body called an Interagency Review Team (IRT) carries out review and approval of banks and in-lieu fee programs. The IRT is a group of representatives from the Corps, EPA, FWS, and NOAA Fisheries. Where appropriate, other federal agencies may also play a role. Finally, as many state natural resource agencies also regulate aquatic resources, the Corps may include representatives from state, tribal, or local agencies on the IRT. *For more on the role played by state natural resources agencies, see Section 2.5, "Corps District Mitigation Policies and the Role of States," on page 37.*[39]

The composition of the IRT varies by district, but the Corps representative always chairs the IRT. The Corps is instructed under compensatory mitigation regulations to strive to make consensus-based decisions on approval of banks and in-lieu fee programs[40] when banks or in-lieu fee programs are being established to satisfy § 404 compensatory mitigation requirements. However, the Corps alone "retains final authority for approval of the [mitigation bank or in-lieu fee program] instrument."[41]

2.3.2.3 Mitigation Banks

With mitigation banking, a third party – a private entrepreneur, state or local government agency, or nonprofit conservation organization – proactively selects a site, secures approval of a banking instrument from the Corps and IRT, and carries out the compensatory mitigation activities. Through this process, mitigation credits or offsets are generated and "banked" for later sale to permittees.

During the process of securing approval of a bank, the banker will work with the IRT to estimate the number of credits that the bank is *likely* to generate. Once the banker has met three milestones – protected the site, secured financial assurances, and had the banking instrument approved – the IRT allows the banker to sell a pre-defined amount of credits. Release of additional credits is tied to achievement of "performance-based milestones," such as completing construction activities, completing plantings, or demonstrating survival rates of planted vegetation or the presence of wetland hydrology.[42] The banker is responsible for all monitoring, maintenance, and remedial activities. In addition, the banker must either identify in the banking instrument the entity – e.g., a land trust or governmental conservation agency – that will be responsible for long-term management of the site, or assume those responsibilities himself, while reserving the right in the instrument to transfer responsibility at a later date and with Corps approval.[43] The instrument must also spell out how long-term management and stewardship activities (such as easement monitoring and defense and site monitoring and maintenance) will be financed.[44]

2.3.2.4 In-Lieu Fee Mitigation

With in-lieu fee mitigation, a sponsor develops an instrument in coordination with the Corps and IRT and, once the program is approved, may begin to accept fees (up to a pre-defined amount) in advance of securing a compensation site and financial assurances or conducting any mitigation activities. Unlike mitigation banking, which requires a significant amount of up-front capitalization to secure a site and develop a

[39] § 332.8(b)(2).
[40] § 332.8(d)(7).
[41] § 332.8(b)(4).
[42] § 332.8(o)(8).
[43] § 332.7(d)(1).
[44] § 332.7(d)(3).

mitigation plan, in-lieu fee mitigation is a form of compensatory mitigation particularly well suited (and restricted to) sponsorship by government agencies and nonprofit conservation organizations.[45]

In-lieu fee sponsors, however, are subject to rigorous planning requirements before their programs can be approved and they can start accepting fees. One unique component that must be included in the in-lieu fee instrument is the "Compensation Planning Framework" – a watershed approach analysis (see Chart 5). The framework is used to guide the selection of specific compensation projects. In-lieu fee programs allow the sponsor to carry out individual compensation projects as fees are collected in specific service areas. Each individual project, however, must go through review and approval by the IRT. As with all forms of compensatory mitigation, each individual in-lieu fee project site must also be protected with appropriate real estate instruments and have dedicated long-term management funding in place.

Chart 5: Compensatory Planning Framework: 10 Elements

- Geographic service area
- Description of threats
- Analysis of historic resource loss
- Analysis of current resource conditions
- Goals and objectives
- Prioritization strategy
- Preservation justification
- Description of stakeholder involvement
- Strategy for periodic evaluation and reporting

2.4 Providing Compensation That Is Permanent and Sustainable

In 2008, the Department of the Army and the EPA adopted rules governing compensatory mitigation carried out under § 404 and § 10. Development of the rule was prompted by a requirement in a defense authorization bill that the Corps issue regulations that, "to the maximum extent practicable," establish equivalent standards and criteria for all three compensatory mitigation mechanisms (permittee-responsible mitigation, mitigation banks, and in-lieu fee mitigation).[46] The rule is also designed to support the selection of compensatory mitigation sites that will yield "ecologically successful and sustainable compensatory mitigation projects."[47] Finally, the agencies also set forth to establish regulations that would yield permanent protection of these sites.[48]

These goals are achieved through many of the rule's provisions. For example, the rule requires that all compensatory mitigation projects – whether they are permittee-responsible, banks, or in-lieu fee – have mitigation plans associated with them that include the same 12 elements. The rule also includes new requirements for compensatory mitigation to be carried out in the context of the "watershed approach" and it outlines criteria for site selection – two components intended to yield compensation projects that are ecologically successful and sustainable. The Corps and EPA also require all mitigation projects to specify in their documentation the party or parties responsible for project implementation, performance, and long-term management.

[45] § 332.2.
[46] National Defense Authorization Act of FY2004, Pub. L. No. 108-136, § 314, 117 Stat. 1392, 1430-1431 (2003).
[47] Compensatory Mitigation Rule, 73 Fed. Reg. 19594, 19632 (Apr. 10, 2008) (Preamble to the Final Rule).
[48] Compensatory Mitigation Rule, 73 Fed. Reg. at 19646.

2.4.1 The Mitigation Plan

Mitigation plans are required for proposed projects under any of the three compensatory mitigation mechanisms. For permittee-responsible mitigation, the mitigation plan is submitted to the Corps as part of the permit approval process. The mitigation plan may be part of the permit in the Special Conditions section or it may be referenced in the Special Conditions section and provided as an attachment. For banks, the mitigation plan is first submitted early on in the instrument approval process – as a component of the draft instrument. After the draft bank instrument goes through full review by the IRT, a final instrument and final mitigation plan are submitted to the Corps. For an in-lieu fee program, the instrument is first approved and the sponsor begins collecting fees. Once the sponsor has collected sufficient fees in one or more service area to carry out effective compensation projects, it must secure approval from the IRT for each individual project. Separate mitigation plans are then submitted for each individual project. Each mitigation plan goes through a public review and comment phase and then a formal IRT review before it is approved.[49]

If your land trust plans to play a role in an existing mitigation project, it is essential that you review the mitigation plan. *Which* sections of the mitigation plan are relevant, however, depends on the point at which you become involved in the project and the role you will play. These different temporal considerations and roles are described in Sections 3 and 4. Sections 6, 7, and 8 go into depth on the key mitigation plan components of relevance to land trusts.

Mitigation plans must include the following 12 elements. However, the Corps may require that additional information be included in the mitigation plan, as necessary.

2.4.1.1 Element 1: Objectives

The objectives section of the mitigation plan must include a description of:

- The resource type(s) that will be provided
- Amounts(s) of compensation that will be provided
- The method(s) of compensation that will be used (i.e., restoration, protection, enhancement, and/or preservation)
- A description of how the project will address the needs of the watershed[50]

This section is important and should be tightly tied to the performance standards that are developed for each compensatory mitigation project. *For more on performance standards, see Element 8 below.* The objectives are the big picture of the project – the kinds of environmental outcomes the provider is attempting to achieve on the ground. The performance standards are the measures against which you evaluate your success.

[49] 33 C.F.R. §§ 332.4(c)(1)(iii), 332.8(i)(2).
[50] § 332.4(c)(2).

2.4.1.2 Element 2: Site Selection

The site selection section of the mitigation plan must outline the factors considered during site selection, including:

- Consideration of watershed needs
- On-site alternatives, where applicable
- The practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the site [51]

Additional guidance is provided on how to evaluate whether proposed compensation projects are "ecologically suitable for providing the desired aquatic resource functions."[52] In determining what is ecologically suitable, the rule states that the Corps must consider the following factors:

- Hydrological conditions, soil characteristics, and other physical and chemical characteristics
- Watershed-scale features, such as aquatic habitat diversity, habitat connectivity, and other landscape-scale functions
- The size and location of the compensatory mitigation site relative to hydrologic sources (including the availability of water rights) and other ecological features
- Compatibility with adjacent land uses and watershed management plans
- Reasonably foreseeable effects that the compensatory mitigation project will have on ecologically important aquatic or terrestrial resources, cultural sites, or habitat for federally or state-listed threatened and endangered species
- Other relevant factors, such as 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, water quality goals, floodplain management goals, and the relative potential for chemical contamination of the aquatic resources[53]

To evaluate the ecological suitability of the site, the Corps will draw on any available information, including that provided by the applicant.

The rule also stresses that proposed sites should be "adjacent to existing aquatic resources" or "where aquatic resources previously existed."[54] The second part of this statement emphasizes the agency's preference for projects that rely upon restoration, rather than preservation, creation, or enhancement.

2.4.1.3 Element 3: Site Protection Instrument

The mitigation plan must include a section on site protection that describes "the legal arrangements and instrument, including site ownership, that will be used to ensure the long-term protection of the

[51] § 332.4(c)(3).
[52] § 332.3(d)(1).
[53] § 332.3(d)(1).
[54] § 332.3(d)(2).

compensatory mitigation project site."[55] *For more on site protection, see Section 6, "Site Protection Instruments: Technical Guide," on page 85.*

The 2008 Compensatory Mitigation Rule aims to "ensure permanent protection of all compensatory mitigation project sites."[56] This means that after a permittee has completed his or her compensation requirement, the mitigation site is protected in perpetuity. After a bank has met all of its ecological performance standards, sold all of its credits, and completed all of the required monitoring, the project site is provided long-term protection. And, after an in-lieu fee project has successfully met all of its ecological performance standards and has completed all of the required monitoring, the in-lieu fee site is protected in perpetuity.

The agencies have determined that the site can be permanently protected by relying upon "conservation easements held by entities such as federal, tribal, state, or local resource agencies, nonprofit conservation organizations, or private land managers; the transfer of title to such entities; or by restrictive covenants."[57] If, however, the compensation project is located on public land, then the permanent protection may be provided through federal facility management plans or integrated natural resource management plans.[58]

Protection mechanisms must also:

- "prohibit incompatible uses (e.g., clear cutting or mineral extraction) that might otherwise jeopardize the objectives of the compensatory mitigation project."[59]
- "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."[60]

In addition, the rule recommends that a conservation easement or restrictive covenant "should, where practicable, establish in an appropriate third party (e.g., governmental agency or nonprofit resource management organization) the right to enforce site protections and provide the third party the resources necessary to monitor and enforce these site protections."[61] Providing for a third-party enforcer, in addition to the entity holding the easement or benefitting from the covenant, doubles the strength of these instruments. For conservation easements, third-party enforcement rights may be given to the Corps. *For more information on third-party enforcement rights see Section 6 generally and Section 6.2, "Mitigation Easement Language."*

Finally, for permittee-responsible compensation sites, the site protection instrument must be approved by the Corps "in advance of, or concurrent with, the activity causing the authorized impacts."[62] In the case of mitigation bank sites, the long-term protection instrument "must be finalized before any credits can be released."[63] For in-lieu fee project sites, the protection mechanism must be "finalized before advance credits can become released credits."[64]

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55 § 332.4(c)(4).
56 Compensatory Mitigation Rule, 73 Fed. Reg. at 19646 (Preamble).
57 33 C.F.R. § 332.7(a)(1).
58 *Id.*
59 § 332.7(a)(2).
60 § 332.7(a)(3).
61 § 332.7(a)(1).
62 § 332.7(a)(5).
63 § 332.8(t)(1).
64 § 332.8(t)(2).

2.4.1.4 Element 4: Baseline Information

The baseline information section of the mitigation plan must provide a description of the ecological characteristics of the proposed site. This may include:

- A description of historic and existing plant communities
- A description of historic and existing hydrology
- A description of soil conditions
- A map showing the locations of the impact and mitigation sites or the geographic coordinates for these sites
- A description of other site characteristics appropriate to the type of resource proposed as compensation
- A delineation of waters of the United States on the proposed compensatory mitigation project site[65]

2.4.1.5 Element 5: Determination of Credits

The mitigation plan must include a section that describes how credits are determined and the number of credits that are anticipated to be generated at the site. *For more information on credit generation, see Section 2.3, "The Compensation Side," on page 18.* Specifically, this section must outline:

- The number of credits to be provided
- A rationale for the number of credits to be provided

For permittee-responsible mitigation projects, the section must also 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

If a permittee intends to satisfy its compensatory mitigation requirements through banks or in-lieu fee programs, the credit determination section must specify:

- The number and resource type of credits to be secured and how these were determined[66]

2.4.1.6 Element 6: Mitigation Work Plan

The mitigation work plan section provides details on the specific activities that will be carried out on the site. It must include information on:

- The geographic boundaries of the project
- The construction methods, timing, and sequence
- Source(s) of water, including connections to existing waters and uplands

[65] § 332.4(c)(5).
[66] § 332.4(c)(6).

- 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
- Erosion control measures

For stream compensatory mitigation projects, the work plan may also include other relevant information, such as:

- Planform geometry
- Channel form (e.g., typical channel cross-sections)
- Watershed size
- Design discharge
- Riparian area plantings[67]

2.4.1.7 Element 7: Maintenance Plan

The maintenance plan refers to activities that are carried out during the active phase of a project when the compensatory mitigation provider is actively striving to meet performance standards. This section of the mitigation plan does not relate to maintenance activities carried out during the long-term stewardship phase of the project. The maintenance plan must describe:

- The maintenance activities that will be undertaken once the initial construction is complete
- A schedule for carrying out the maintenance activities[68]

2.4.1.8 Element 8: Performance Standards

Performance standards are defined as "observable or measurable physical (including hydrological), chemical and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives."[69] The mitigation plan must outline the performance standards that will be used to determine whether the project is achieving its objectives.[70] Many components of a mitigation project are tied to performance standards, including the amount of financial assurances that can be required for a mitigation project,[71] when financial assurances can be phased out,[72] the parameters of the site that the mitigation provider will need to monitor and the length of the monitoring period,[73] and, for banks and in-lieu fee programs, the release of credits.[74]

[67] § 332.4(c)(7).
[68] § 332.4(c)(8).
[69] § 332.2.
[70] § 332.4(c)(9).
[71] § 332.3(n)(1).
[72] § 332.3(n)(4).
[73] § 332.6(b).
[74] § 332.8(o)(8).

The Compensatory Mitigation Rule does not dictate specific standards that must be used for compensatory mitigation projects. In the words of the Corps and EPA, it does not "proscribe a one-size-fits-all set of ecological performance standards to evaluate the success of all compensation projects."[75] Instead, the rule lays out some general criteria for developing performance standards. It is up to individual Corps districts to develop these performance standards, often during negotiations over individual compensatory mitigation projects. The Corps and EPA reason that allowing the standards to be developed at the local level enable the agencies to "take into account regional variations in aquatic resource characteristics, functions, and services."[76]

What "general criteria" do the Corps and EPA provide for establishing "appropriate ecological performance standards"?[77] According to the rule, the performance standards:

- "Should" relate to the objectives of the compensatory mitigation project so the project can be objectively evaluated to determine if it is developing into the desired resource type
- "Must" be based on attributes that are objective and verifiable
- "Must" be based on the best available science that can be measured or assessed in a practicable manner
- "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
- "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[78]

2.4.1.9 Element 9: Monitoring (and Reporting) Requirements

Monitoring is used to determine if the project is meeting its performance standards and what, if any, remedial actions may be needed. Mitigation providers must report the monitoring results to the Corps and, in some instances, the state regulatory agency. This section of the mitigation plan must outline monitoring and reporting requirements for the project, including 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
- The length of the monitoring period:
    - Should be sufficient to demonstrate that the project has met performance standards, but not less than five years
    - Must be longer for aquatic resources with slow development rates (e.g., forested wetlands, bogs)
- The party responsible for conducting the monitoring

[75] Compensatory Mitigation Rule, 73 Fed. Reg. at 19616 (Preamble).
[76] Id. at 19601.
[77] 33 C.F.R. § 332.2
[78] § 332.5(b).

- The frequency for submitting monitoring reports to the Corps
- The party responsible for submitting monitoring reports to the Corps[79]

Mitigation banks and in-lieu fee sponsors have several additional recordkeeping and reporting requirements.[80]

Both bank and in-lieu fee sponsors must:

- Submit monitoring reports on a schedule and for a period as defined by project-specific mitigation plan(s)[81]
- Submit an annual financial assurances and long-term management funding report that shows beginning and ending financial balances, deposits into and withdrawals from the financial assurances account, deposits into and withdrawals from the long-term management account, and information on the amount of required financial assurances[82]

For banks, the bank sponsor must also:

- Maintain a ledger that accounts for all credit transactions[83]
- Provide notification to the Corps whenever a credit transaction occurs[84]

In-lieu fee program sponsors must also:

- Maintain an annual report ledger that accounts for all credit transactions, beginning and ending credit balances, permitted impacts for which fees are collected by resource type, and any changes in credit availability[85]
- Maintain individual ledgers that track the production of released credits for each individual in-lieu fee project[86]
- Provide an annual program report summarizing activity from the program account, which must include:
    - Financial information:
        - Income received, disbursements, and interest earned[87]
        - 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[88]
    - Credit accounting:
        - A list of all permits for which funds were accepted, including the permit number,

79 §§ 332.4(c)(10), 332.6 et seq.
80 § 332.8(d)(6)(ii)(E).
81 §§ 332.6 et seq., 332.8(q)(2).
82 § 332.8(q)(3).
83 § 332.8(p)(1).
84 *Id.*
85 § 332.8(p)(2).
86 *Id.*
87 § 332.8(i)(3)(i).
88 § 332.8(i)(3)(iii).

service area in which the impacts occurred, 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[89]

- The balance of advance credits and released credits at the end of the report period for each service area[90]

These reports and ledgers should also be made available to the entity that is assuming long-term stewardship of the site, as appropriate.

2.4.1.10 Element 10: Long-Term Management Plan

The long-term management plan for mitigation sites is one component of the required mitigation plan. (Yes, the plan is part of the plan!) All permittee-responsible compensation sites, mitigation bank sites, and in-lieu fee sites approved since 2008 are required to have a long-term management plan in place that describes "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."[91] *For more information on long-term management plans, see Section 7, "Long-Term Management Plans: Technical Guide," on page 105. For more information on long-term financing, see Section 8, "Long–Term Financing Mechanisms: Technical Guide," on page 117.*

The vocabulary used in this area relative to § 404 compensatory mitigation is very similar to the language used by land trusts; however, in many cases, it has different meanings. See Chart 2 on page 8 for how these long-term stewardship definitions are used in this handbook.

The long-term management plan must identify:

- The party responsible for long-term management and maintenance activities
- A description of the long-term management and maintenance needs (affirmative obligations)
- The party responsible for long-term ownership (presumably, fee title)
- A description of the annual cost estimates for those needs
- The funding/financing mechanisms that will be used to meet those needs, which may include provisions for:
    - Addressing inflationary adjustments and other contingencies as appropriate
    - Non-wasting endowments
    - Trusts
    - Contractual arrangements with future responsible parties
    - Other appropriate financial instruments

[89] § 332.8(i)(3)(ii).
[90] § 332.8(i)(3)(iv).
[91] § 332.4(c)(11).

The 2008 regulations also state that "the permit conditions or instrument *may*" include provisions allowing the permittee or sponsor to transfer the long-term management responsibilities of the compensatory mitigation project to another entity. Those responsibilities may be transferred to a land stewardship entity, such as a public agency, non-governmental organization, or private land manager. In addition, the "land stewardship entity to whom responsibilities will be transferred need *not*" be identified in the original permit or instrument in advance, as long as the future transfer of long-term management responsibility is reviewed and approved by the Corps.[92] Note that the rule does not require that the long-term management plan specify which entity will hold the long-term financing mechanism.

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 stewardship entity is a public authority or government agency, that entity must provide a plan for the long-term financing of the site.[93]

For permittee-responsible mitigation, any long-term financing mechanisms must be identified in the permit[94] and approved before the activity causing the authorized impacts begins.[95] For mitigation banks, long-term financing information would be outlined in the mitigation plan, which is approved at the same time as the instrument. For in-lieu fee programs, the general description of long-term financing is spelled out in the Compensation Planning Framework, which is part of the instrument, but the specifics will be detailed in the mitigation plan for each individual project.

2.4.1.11 Element 11: Adaptive Management Plan

An adaptive management plan that outlines a strategy to address unforeseen changes in site conditions or other components of the project is also required. This plan should specify:

- The party or parties responsible for implementing adaptive management measures
- A description of how the compensatory mitigation plan may be revised to address adaptive management procedures
- A commitment to notify the Corps if a "significant modification" of the project is to occur
- A commitment to notify the Corps if monitoring or other information indicates that the project is not progressing toward meeting its performance standards[96]

2.4.1.12 Element 12: Financial Assurances

Financial assurances are those funds or other resources that the mitigation provider must provide to ensure that if a compensation project fails to meet its performance standards or if the mitigation provider ceases to exist, funds are available to ensure that the project will be successfully completed. These funds differ from those set aside to support long-term stewardship activities.

This section of the mitigation plan must include a description of:

[92] § 332.7(d)(1) (emphasis added).
[93] § 332.7(d)(3).
[94] § 332.7(d)(1).
[95] § 332.7(d)(4).
[96] §§ 332.4(c)(12), 332.7(c).

- The type financial assurances that will be provided, which 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…"[97]
- How these financial assurances were calculated
- A justification that the financial assurances are sufficient to ensure a high level of confidence that the project will be successfully completed in accordance with its performance standards[98]

The amount of financial assurances that are required, and therefore the justification, "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 other factors that the Corps determines to be significant, such as "the cost of providing replacement mitigation, including costs for land acquisition, planning and engineering, legal fees, mobilization, construction, and monitoring."[99] Although information about how the mitigation provider has determined the amount of financial assurances must be in the mitigation plan, the rule also requires that this information be documented either in the permit itself or in the instrument.[100] So, in some cases this information may be duplicated in more than one place, or additional information may be found in other locations.

Because the likelihood of a site failing diminishes as it meets its performance standards, the Corps and EPA allow mitigation providers to phase out the financial assurances as specific milestones are met (i.e., as performance standards are met, adaptive management tasks are carried out, or the provider complies with other special conditions).[101] Information on the phase-out of financial assurances should be spelled out in the permit (for permittee-responsible mitigation) or in the instrument (for banks and in-lieu fee projects) and the 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…"[102] This information may also be found in the mitigation plan.

2.4.2 The Watershed Approach

When a mitigation provider – whether an applicant suggesting a permittee-responsible project, a banker proposing a site for a bank, or an in-lieu fee provider exploring a site for a project – presents a proposed site to the Corps (and the IRT in the case of banks and in-lieu fee projects), how do the agencies evaluate the appropriateness of the project? Understanding the factors that the Corps considers can help improve the likelihood that the project will be approved in a timely manner. It can also be helpful to land trusts that are hoping to direct the location and character of compensatory mitigation sites.

Mitigation sites are evaluated at two levels: the watershed level and the site level. *For a discussion of site-level considerations, see Section 2.4.1.2, "Element 2: Site Selection," on page 26.*

At the watershed level, the Corps is required to use a watershed approach to "establish compensatory mitigation requirements in [Department of the Army] permits to the extent practicable and appropriate."[103]

97 § 332.3(n)(2).
98 § 332.4(c)(13).
99 *Id.*
100 § 332.3(n)(2).
101 § 332.3(n)(4).
102 *Id.*
103 § 332.3(c).

The watershed approach was first outlined in the 2008 Compensatory Mitigation Rule in response to science-based recommendations to adopt such a method.[104] The approach is defined as an "analytical process" for making compensatory mitigation decisions that involves consideration of watershed needs and relies upon a landscape perspective.[105]

Here's how the watershed approach works: if an existing, "appropriate" watershed plan is available, the watershed approach should be based on that plan. A **watershed plan** is:

> [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.[106]

Watershed plans that meet this definition exist in very few parts of the country. Where no such plan exists, the Corps is directed to apply a watershed *approach* based on information from existing sources.[107]

The rule outlines the "considerations" that must be a part of the watershed approach, such as 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.[108] The rule also describes the *type of information* that should be utilized in watershed-based decision-making. It suggests that this information may be contained in existing plans or in information from other sources, including local ecological reports or studies, etc.[109]

If your land trust has developed a watershed plan that meets some, but not all, of the components required for an appropriate watershed plan – for example, if it identifies protection (preservation) priorities only and not restoration priorities – all is not lost. Your plan could be incorporated into the watershed approach as one existing plan for the Corps to consider.

As of mid-2012, the Corps and EPA have not issued further guidance on the watershed approach. Seven pilot projects were underway across the country to apply the watershed approach in specific locations. These pilot projects are sponsored by the Corps, EPA, and The Nature Conservancy/Environmental Law Institute. By the end of 2012, it is likely that some of these approaches will yield lessons that will help guide the future application of the watershed approach.

To sum up, when evaluating a proposed compensatory mitigation project, the Corps first must determine how well the project meets the needs of the watershed within which it is located, what functions it seeks to provide, and what wetland/stream types it will include. This analysis can rely on an existing watershed plan that meets the rule's definition or can rely upon information available from other sources. The Corps will then move on to evaluating the project at the site level.

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[104] In 2001, the National Research Council issued a report recommending that the federal wetland mitigation program make site selection decisions that "follow from an analytically based assessment of the wetland needs in the watershed" rather than through an automatic preference for on-site and in-kind compensation. NATIONAL RESEARCH COUNCIL, COMPENSATING FOR WETLAND LOSSES UNDER THE CLEAN WATER ACT 4 (National Academy Press 2001), available at http://www.nap.edu/openbook.php?isbn=0309074320.

[105] 33 C.F.R. § 332.2.

[106] *Id.* (emphasis added).

[107] § 332.8(c)(1).

[108] § 332.3(c)(2).

[109] § 332.3(c)(3)(ii).

2.4.3 Banks and In-Lieu Fee Programs: Default and Closure Plans

Since 2008, mitigation banks and in-lieu fee programs have been required to include in their bank and in-lieu fee instruments a section on default and closure provisions.[110] The terms "default" and "closure" are not defined in the rule and no additional information is provided on what this plan should look like.

Presumably, default refers to instances in which a bank, specific in-lieu fee project, or an overall in-lieu fee program sponsor fails to meet its performance standards, to submit reports in a timely manner, to follow adequate accounting procedures, or to otherwise comply with the terms of its program instrument and/or mitigation project plan. In such cases, the Corps has several different options for addressing the default, such as mobilization of financial assurances, delay of credit release, suspension of credit sales, or suspension of the bank or in-lieu fee program operations. One of the most severe options is termination of the bank or in-lieu fee instrument. In such an extreme case the resulting dissolution would be governed by the default section of the plan.[111]

Banks and in-lieu fee programs may also wish to cease operation or close. A program may seek closure, for example, when all of the applicable success criteria have been achieved at all of its sites, all of the program's released credits have been debited, or the sponsor chooses to cease operation. In any of these cases, the Corps and IRT require that the procedures for dissolving the project or program are spelled out in the agreement.

Some of the elements that may be included in the default and closure plan are:

- The circumstances under which the program may be deemed in default
- The circumstances under which the program will not be deemed in default if the program fails to meet its obligations (i.e., an "act of God" or "force majeure"[112] provision)
- Process for program closure
    - Notification by letter
    - Number of days from written notification to termination
- Allocation of unused funds
    - Entity to whom the funds will be allocated
    - Discussion of how unused funds will be used (i.e., location and type of activity)
- Remaining mitigation obligations assumed by the bank or in-lieu fee program (legal liability/responsibility to satisfy mitigation obligations)
- Obligations for long-term management

[110] § 332.8(d)(6)(ii)(D).
[111] § 332.8(o)(10).
[112] While today "force majeure" is interpreted to represent sudden, catastrophic events like fires, earthquakes or hurricanes (which might damage natural habitat or man-made restoration work like berms), many believe "force majeure" may or should be construed in future to include irreparable harm due to climate change.

2.4.4 Party Responsible for Project Implementation, Performance, and Long-Term Management

All mitigation projects must clearly specify the party or parties that are responsible for project implementation, performance, and long-term management of the project site. If your organization plans to play any role in a compensatory mitigation project, knowing which entity is designated as the responsible party *for each component of the project* is a crucial part of your due diligence.

For permittee-responsible mitigation projects, the responsible party must be specified in the Special Conditions section of the permittee's § 404 permit.[113] In the case of mitigation banks and in-lieu fee programs, the instrument or mitigation project plan must indicate the party or parties responsible for implementation, performance, and long-term management. This instrument or project plan must also state that once a permittee has secured credits from a bank or made a payment to an in-lieu fee program, all responsibility for the permittee's compensatory mitigation requirements transfers to the bank or in-lieu fee program sponsor.[114]

2.5 Corps District Mitigation Policies and the Role of States

As discussed in Section 2.1, "Purpose and Goals of the Section 404 and Section 10 Programs," on page 13, the Corps is responsible for the day-to-day permitting activities related to § 404 and provides oversight of compensatory mitigation. These activities are carried out in the agency's 38 district offices. Although the Corps is an agency within the Department of the Army, it is decentralized. Rules and guidance set at the headquarters level generally allow for substantial flexibility at the district level. This is evident, for example, in the discussion about the appropriateness of preservation. Although preservation may only be used if all of the criteria outlined in Section 2.3.1 are met, two of those criteria are decided by the district engineer (i.e., the district engineer determines if the preservation project contributes "significantly to the ecological sustainability of the watershed"[115] and is "appropriate and practicable"[116]). Likewise, waving the limitation on preservation-only projects is up to the discretion of the district engineer.[117] As a result, each district posts region-specific guidelines and other resources – such as checklists, compensation ratios, credit ratios, district-supported functional assessment tools, mitigation bank guidelines, and model mitigation easements – on its website or on RIBITS (Regulatory In lieu fee and Bank Information Tracking System), the Corps' centralized, on-line resource for information on mitigation banks and in-lieu fee mitigation (*see Box 2: RIBITS – An On-Line Resource for District and Bank Information*). This regional specificity allows each Corps district to tailor its policies to specific locational conditions.

Corps districts are drawn largely on watershed lines. As a consequence, a single state may fall within several districts. For example, the western third of Tennessee falls within the Memphis District, while the eastern two-thirds of the state are within the Nashville District. Other states, while they fall within the boundaries of more than one district, delegate all of the regulatory/permitting activities to one of those districts. For example, the state of Oregon falls within three districts: Portland, San Francisco, and Walla Walla. However, the Portland District handles regulatory responsibilities for the entire state. Generally, the district will have a map posted on its website that designates its boundaries, and the permitting or regulatory section of the site will have links to mitigation-related documents specific to that area.

[113] 33 C.F.R. § 332.3(l)(1).
[114] § 332.3(l)(2).
[115] § 332.3(h)(1)(ii).
[116] § 332.3(h)(1)(iii).
[117] § 332.3(h)(2).

In addition, states may play a significant role in the regulation of impacts to wetlands and streams. There is no easy way to characterize the range of ways in which states regulate wetlands and streams. But here are some examples.

Under § 401 of the Clean Water Act, states may review any activity that requires a federal permit or license – for example a § 404 permit, a dam license – to determine its effect on the state's water quality standards.[118] Section 401 give states the authority to approve, condition, or deny the federal permit or license based on their review. For many states, particularly in the central part of the country, § 401 certification requirements provide the primary or the sole regulatory mechanism by which states regulate wetlands and streams. However, there is a significant range in the staff and resources that states devote to § 401 review.

In addition, many of the coastal states (including the Gulf and Great Lakes states) have adopted laws and regulations that give them the explicit authority to issue permits for dredge and fill activities in wetlands and streams. Some of these states regulate impacts to all coastal and tidal resources, as well as freshwater wetlands (all of New England, most of the mid-Atlantic, Florida, and Oregon). Others only regulate activities in coastal and/or tidal wetlands (southeastern coastal states, Louisiana and Mississippi, California, and Washington). Finally, several states (Indiana, North Carolina, Ohio, Tennessee, Washington, and Wisconsin) have adopted regulations that extend that state's jurisdiction to "geographically isolated" wetlands that are not covered by § 404.[119]

Box 2: RIBITS: An On-Line Resource for District and Bank Information

In 2007, the Army Corps launched RIBITS (Regulatory In lieu fee and Bank Information Tracking System), a nationwide on-line resource repository for information about mitigation banking and in-lieu fee mitigation. RIBITS includes a Google Earth plug-in that allows the user to see where banks are located and includes information on individual banks, such as the types and numbers of credits available. Increasingly, RIBITS is also serving as a repository for federal and district-specific mitigation policies and tools.[1]

[1]Martin, Steven and Robert Brumbaugh. 2011. "Entering a New Era: What Will RIBITS Tell Us About Mitigation Banking?" *National Wetlands Newsletter.* Vol. 33, No. 3.

For example, in Virginia, the Department of Environmental Quality (DEQ) administers the Virginia Water Protection (VWP) Permit Program. DEQ requires permits for surface water withdrawal and impacts to open water, streams, and wetlands.[120] The Corps, DEQ, and the Virginia Marine Resources Commission (VMRC) have, however, developed a "Standard Joint Permit Application," so permit applicants can satisfy both § 404 and VWP requirements and permits in a coordinated manner. In another example, New York State administers the Freshwater Wetlands Act,[121] which regulates activities in wetlands that are great than 12.4 acres. The act also regulates the 100-foot buffer around these wetlands. In New York, a proposed development that would impact a wetland larger than 12.4 acres would need a state permit and a § 404 permit, while impacts to wetlands below that threshold would require only a § 404 permit.

Finally, the Clean Water Act gives states the authority to seek "assumption" of the § 404 program. States can essentially take the lead in administering the § 404 program within their boundaries. To do so, the state must develop a wetlands permit program similar to the federal program and then apply to EPA.[122] To date, only two states – Michigan and New Jersey – have assumed the § 404 program.

[118] U.S. ENVIRONMENTAL PROTECTION AGENCY, NATIONAL GUIDANCE: WATER QUALITY STANDARDS FOR WETLANDS (1990), available at http://www.epa.gov/owow/wetlands/regs/quality.html.

[119] ENVIRONMENTAL LAW INSTITUTE, STATE WETLAND PROTECTION: STATUS, TRENDS & MODEL APPROACHES (Environmental Law Institute 2008), available at http://www.elistore.org/reports_detail.asp?ID=11279&topic=Wetlands.

[120] VA. CODE ANN. §§ 62.1-44.15, 62.1-44.15:20 (2012), available at http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+TOC62010000003000010000000.

[121] Environmental Conservation Law, N.Y. LAW §§ 24-0101-07 (1997), available at http://www.dec.ny.gov/docs/wildlife_pdf/wetart24a.pdf.

[122] EPA State or Tribal Assumption, supra note 5.

States can also play multiple roles in wetland and stream regulatory programs. They can be, among other things, a permit applicant, a co-regulator, or a partner in developing policies related to the regulation of wetlands and streams. These factors will dictate how active a role your state may play in both permitting impacts to wetlands and streams and in guiding or regulating compensatory mitigation requirements.

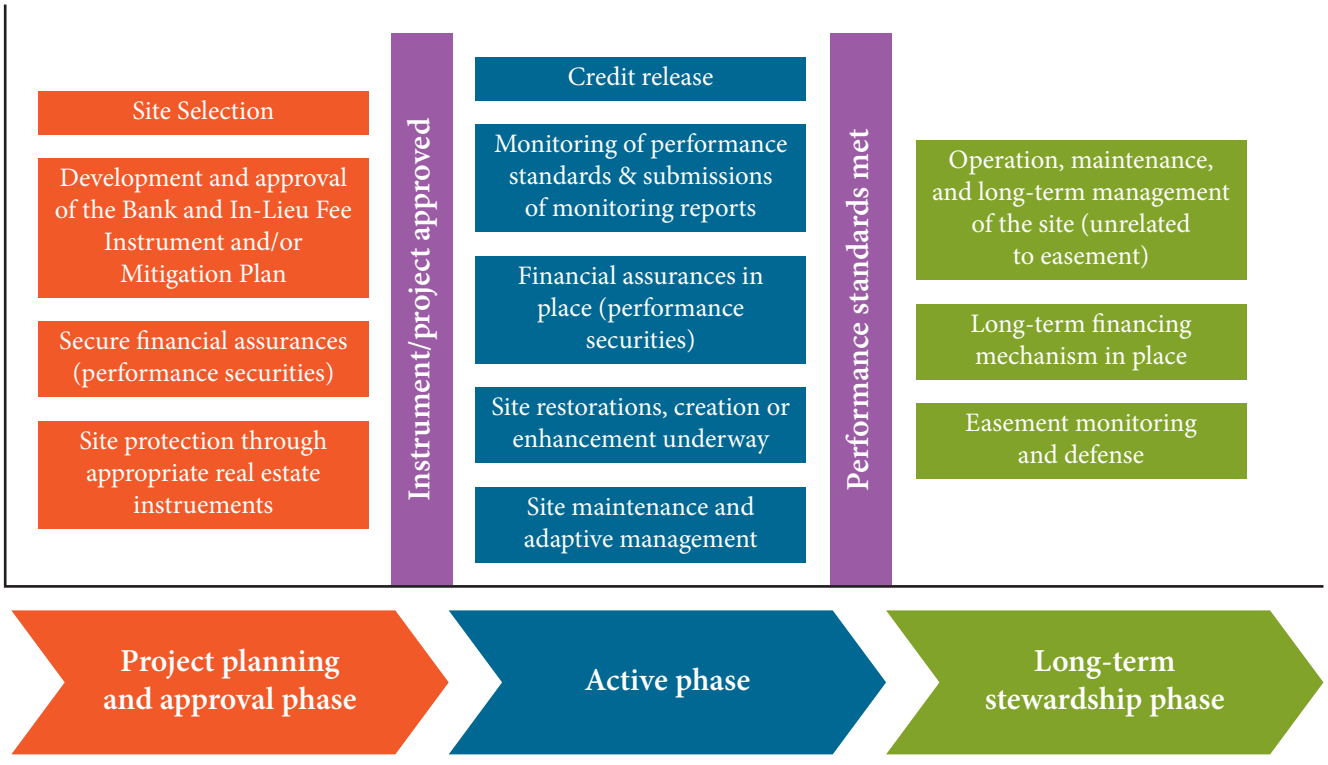
Compensatory Mitigation Project Phases

For the sake of simplicity, let's envision three compensatory mitigation projects along a timeline. For a permittee-responsible project, at one end of the timeline is the point at which the Corps issues its permit specifying how much compensation the permittee must secure to offset the permitted impacts. At the other end, is the point at which the mitigation project is complete, has met its performance standards, the permittee has met its monitoring obligations, and a qualified land trust has accepted a conservation easement on the site.

For a mitigation bank, the starting point would be the time at which the mitigation banker decides he or she would like to initiate a bank and, at the other end, the time at which all of the bank credits have been sold, performance standards have been met, the banker has completed all of its monitoring and reporting obligations, and the banker has transferred long-term financing to a qualified entity. Similarly, with an in-lieu fee site, a project is proposed and then on the back end, the project is deemed complete and in the long-term stewardship phase.

Between these two points are a lot of moving parts. There are many different roles and a variety of players can assume these roles. The amount of liability each entity exposes itself to is, in part, dependent not only on *which* roles each party agrees to take on (the subject of Section 4, "Roles That Land Trusts Can Play in Compensatory Mitigation"), but *at what point* along that timeline it accepts responsibility. Knowing where your organization is entering into the process along this timeline can help you assess the amount of liability to which you may be exposed. That knowledge can also help you limit your liability by putting in place appropriately protective language.

Chart 6: Compensatory Mitigation Project Phases



3.1 Phase I: The Project Planning and Approval Phase

In this first stage – the project planning and approval phase – the mitigation project is born. What does the birth of a mitigation project look like? In the case of a mitigation bank, a mitigation banker is interested in investing in Watershed X because they know that there is a lot of development pressure in the area and there will likely be demand for mitigation credits in the watershed in the coming years. With an in-lieu fee program, a non-profit organization or government agencies identifies the need for a third-party compensation mechanism in a particular state, watershed, or series of watersheds. With permittee-responsible mitigation, an applicant has been informed that it may be required to compensate for its permitted impacts in Watershed X, and the developer may have hired a consulting firm to identify possible sites. This is the starting point for most compensatory mitigation projects.

Even during this very early stage, the applicant (for permittee-responsible mitigation), the banker, or the in-lieu fee sponsor is encouraged to meet with the Corps to discuss the appropriateness of the project or program and other details. Before moving on to the next mitigation phase – the active phase – there are several pieces that must be in place.

For a permittee-responsible mitigation project, the mitigation site must be selected and be provided long-term protection, and the project must be approved by the Corps in advance of or at the same time that the permitted impacts are taking place.[123] For mitigation banks, the bank cannot begin selling credits until three conditions are satisfied: the mitigation plan and the banking instrument must be approved, the site must be selected and secured with an appropriate real estate protection mechanism, and financial assurances must be in place.[124] In the case of in-lieu fee programs, the in-lieu fee program instrument must be approved, which must include the Compensation Planning Framework – a prioritization *strategy* that outlines how sites will be selected.[125] But in most cases, in-lieu fee programs do not identify sites, protect sites, or secure financial assurances until after the program begins to collect fees. Before an in-lieu fee *project* may move forward, the mitigation plan must be approved, sites identified, financial assurances must be in place, and long-term stewardship arrangements must be determined.

The project planning and approval phase (Phase I) of a mitigation project is generally characterized by several components: site selection, site protection, long-term stewardship arrangements, establishment of financial assurances, and program and/or project approval. *See Chart 6 for a depiction of this phase.*

3.1.1 Site Selection

The process of site selection differs for the different compensatory mitigation mechanisms. Sites are selected and protected for banks and permittee-responsible projects during this project planning and approval phase (Phase I). In-lieu fee program sites, however, are not generally selected until after the instrument is approved. Once an in-lieu fee program has sold its first advance credit, the clock starts ticking, and the program sponsor must acquire the project site and begin physical and biological improvements by the third full growing season.[126]

[123] 33 C.F.R. § 332.7(a)(5).
[124] § 332.8(m).
[125] § 332.8(c)(2)(vi).
[126] § 332.8(n)(4).

3.1.2 Site Protection

Permittee-responsible mitigation providers are required to obtain approval from the Corps of the real estate protection mechanism used to protect a site prior to initiation of the permitted impact.[127] Bank sponsors as well must protect the bank site before any credits can be released.[128] *For more information on site protection requirements, see Section 2.4.1.3, "Element 3: Site Protection Instrument," on page 26 and Section 6, "Site Protection Instruments: Technical Guide," on page 85.*

3.1.3 Long-Term Stewardship Arrangements

When the mitigation project is approved, the project sponsor is required to identify the party or parties responsible for the long-term stewardship of the project. As shown in Chart 2, several different parties may engage in long-term stewardship activities, including the entity that holds the fee title to the property, the party that carries out long-term management activities, the entity that holds an easement on the site, and the party that holds the long-term financing mechanism. Some of these responsibilities are worked out during this early phase. For example, many of the land trusts interviewed for this handbook accepted easements on mitigation lands during Phase I. Others may accept these responsibilities in Phases II or III. As noted elsewhere, these arrangements need not be worked out during the planning and approval stage, but rather, the mitigation provider may simply indicate that future transfer of the long-term management responsibility will happen at a later date and must be approved by the Corps.[129] Until transfer of these responsibilities, however, the project sponsor assumes long-term management responsibilities by default.[130]

3.1.4 Establishment of Financial Assurances

For permittee-responsible mitigation projects, financial assurances must be in place before the permitted activities begin. The requirements for financial assurances are included as a special condition of the permit.[131] Banks cannot begin selling credits until the three conditions discussed in Section 3.1 (page 41) are satisfied, including the establishment of financial assurances.[132] For in-lieu fee programs, the program instrument may describe the mechanism that will be used to support financial assurances, although in most cases, financial assurances will not be set aside until the sponsor seeks approval of individual projects.

3.1.5 Mitigation Program and/or Project Approval

The process for seeking approval for a mitigation bank, permittee-responsible mitigation project, in-lieu fee program, or in-lieu fee project, is complicated. If your organization is involved in the program or project at this early stage, you can contribute significantly to protecting your interests by carefully reviewing the documentation associated with program/project approval with your legal counsel. *Appendix A contains guidelines on reviewing these complicated documents.*

In the case of a mitigation bank, the sponsor must first **sel**ect a site. After selecting a site, the sponsor may submit

[127] § 332.7(a)(5),(d)(1).
[128] § 332.8(m).
[129] § 332.7(d)(1).
[130] This is not the case in California, however, where the default long-term manager is the fee simple owner rather than the project sponsor. CALIFORNIA MULTI-AGENCY PRODUCT DELIVERY TEAM, MITIGATION BANK ENABLING INSTRUMENT TEMPLATE 17-18 (2008), available at http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=3955.
[131] 33 C.F.R. §§ 332.3(k)(iv), (n)(4).
[132] § 332.8(m).

a draft prospectus to the Corps and Interagency Review Team (see Chart 7). The draft prospectus step is optional but recommended by the agencies to allow potential issues to be identified early on in the process. The sponsor then submits a prospectus to the Corps. Once the Corps determines that the prospectus is complete (as defined by the rule), the agency must issue a public notice about the project and provide the sponsor with comments. At this point, the Corps determines whether the project is potentially suitable for providing compensatory mitigation and, if it is, then the sponsor develops a draft instrument (see Chart 8), which includes a detailed mitigation plan (see Section 2.4.1, "The Mitigation Plan," on page 25). Once the Corps determines that the draft instrument is complete (as defined by the rule), the IRT reviews the draft instrument and submits comments to the sponsor. Finally, the sponsor submits a final instrument (see Chart 8) and awaits final review and signature on the banking instrument. See Chart 9 for an overview of the bank approval process.

Chart 7: Required Components of Bank and In-Lieu Fee Program Prospectus.
Source: 33 C.F.R. §§ 332.8(d)(2).

Bank/ILF Prospectus
6 Common Elements • Objectives • How the bank/ILF program will be established and operated • Proposed service area • Need and technical feasibility • Ownership arrangements • Qualifications
Bank: 2 Additional Elements • Ecological suitability • Assurance of sufficient water rights
ILF: 2 Additional Elements • Compensation planning framework • Description of program account

With an in-lieu fee program, the sponsor must follow the same steps required for a bank to secure *program* approval. After the program is approved and fees paid, the sponsor must secure new IRT approval for each individual *project* that is proposed (see Chart 10). With in-lieu fee mitigation, there are different roles that a land trust or other conservation partner can play in both the program and project approval stages. *For more on roles, see Section 4, "Roles The Land Trusts Can Play in Compensatory Mitigation," on page 52.*

Chart 8: Required Components of Bank and In-Lieu Fee Instrument. *Source: 33 C.F.R. §§ 332.8(d)(6).*
Draft/Final Banking and In-Lieu Fee Instrument Components
5 Elements • Service area • Accounting procedures • Provision stating legal liability • Default and closure provisions • Reporting protocols
Bank: 2 Additional Elements • Mitigation plan (with 12 key elements) • Credit release schedule
ILF: 4 Additional Elements • Compensation planning framework • Specification of initial allocation of advanced credits • Methodology for determining project specific credits and fees • Description of ILF program account

Finally, with permittee-responsible mitigation, the Corps determines the amount and type of compensatory mitigation that is required, which is included in the Special Conditions of the permit.[133] *This process is described more fully in Section 2.2, "The Impact Side," on page 14.*

Even if your land trust expects to play no role at the site until all performance standards, monitoring, and reporting obligations are met by the mitigation provider (Phase III: Long-Term Stewardship), there are still important components of the project that are determined during this early stage that warrant your attention. And if you will be accepting an easement or other responsibility during this early stage, you will want to take full advantage of the opportunity to review key documentation related to the establishment and operation of the program or project. Many of the administrative and ecological components of these programs and projects are decided early on, and your participation can help influence your eventual role, the ecological and financial outcomes of the project, and your exposure to liability.

The Wetlands Conservancy (TWC) in Oregon sees benefits in early engagement in mitigation projects. For TWC, the ideal situation is when the organization can be involved during the planning and approval phase, when the mitigation provider is still identifying a site and working with the regulatory agencies to develop performance standards. "If we are going to be the long-term easement holder and steward of the wetland, we want to be involved in the ecological design and understand the long-term stewardship requirements before we sign on to a project partnership,"[134] says Esther Lev, Executive Director.

Wendy Reed, President of the Antelope Valley Conservancy in California makes a compelling case for early involvement. "Who selects the site is such an important question," she notes. "The idea that a land trust would *start* analyzing a site when they are approached by someone proposing mitigation does not make sense. It may be a good site, but land trusts have to ask bigger questions: is it contiguous with other sites, is it part of a larger plan, is it defensible, do you want to preserve lands around it? And is the decision based on science? The role of conservancy organizations like ours is to advocate for critical areas and get mitigation

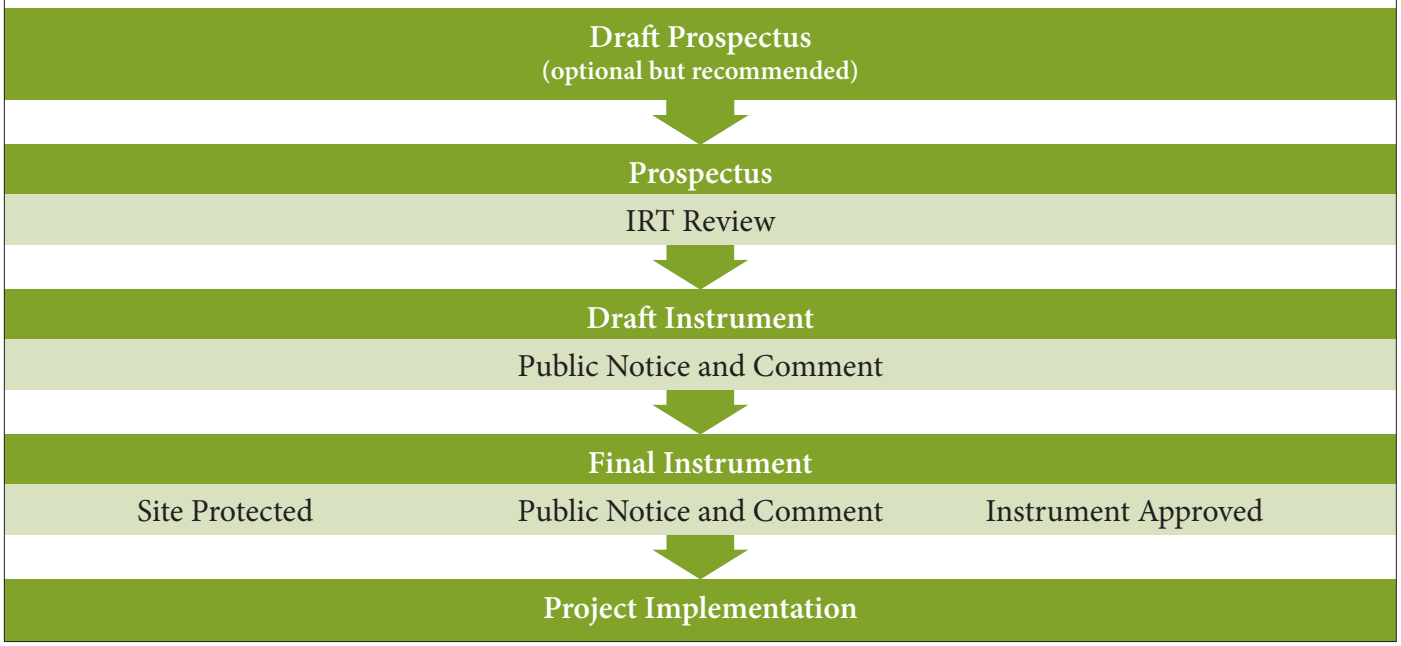
[133] § 332.3(k)(1)-(2).
[134] Interview with Esther Lev, Executive Director, The Wetlands Conservancy (Jan. 9, 2012).

dollars to those areas. That is why our land trust has already gone through extensive regional analysis to plan where we feel important and sustainable preservation sites are located. And, out of those sites, we have prioritized which ones we wish to work on."[135]

Mark Steinbach of the Texas Land Conservancy notes that although his group does not have a policy for when they get involved with a compensation project, "we try our best to be involved at the onset."[136]

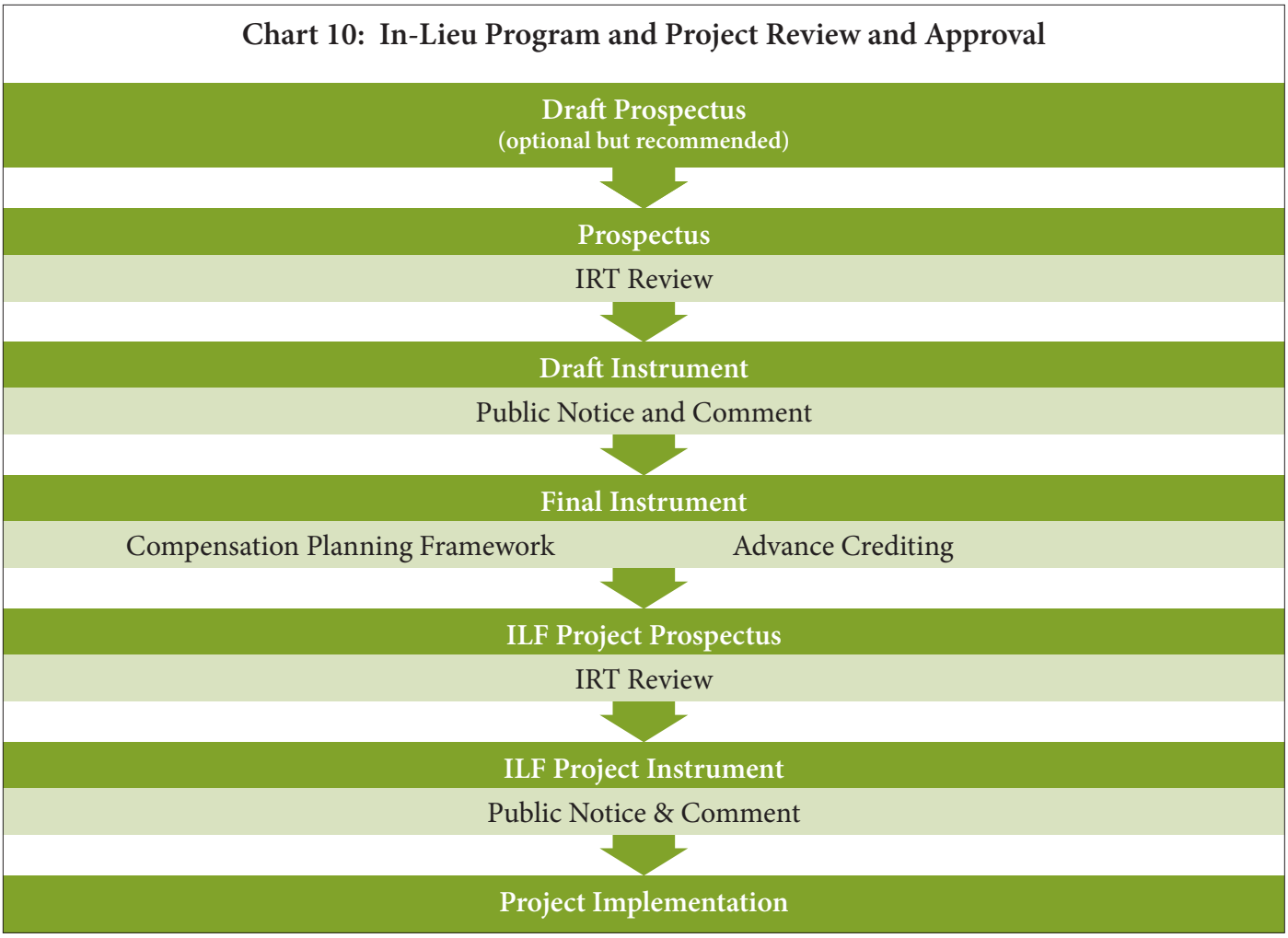
Mitigation providers also recommend this level of early involvement. Greg DeYoung, Vice President for Westervelt Ecological Services, which operates mitigation banks in Alabama, California, Florida, and Mississippi, states, "Any mitigation preserve must be established and maintained with a long-term vision. The mitigation provider that involves the easement holder early streamlines mitigation project approval. In an ideal scenario, the provider confers with the land trust during reconnaissance to factor in the organization's acquisition goals. This type of partnership approach cultivates community buy-in and a more enduring conservation legacy."[137]

Chart 9: Mitigation Bank Review and Approval



On the other hand, the California-based Wildlife Heritage Foundation (WHF) believes that it is not appropriate to get involved with discussions between the mitigation provider and the Corps about the appropriateness of sites. The organization does, however, normally play a significant role in helping shape the mitigation plan, conservation easement language, and long-term management plan – but only after the site has been selected. "We make clear early on in the process that we reserve the right to make comment on all of these documents before they are approved by the appropriate regulatory agency," says Patrick Shea, Executive Director of WHF. He adds, "we also reserve the right to review and comment upon the endowment calculation. If we feel the endowment is inadequate and the project sponsor or the agency will not allow a change, WHF will not take the conservation easement."[138]

[135] Interview with Wendy Reed, President, Antelope Valley Conservancy (Feb. 9, 2012).
[136] Interview with Mark Steinbach, Executive Director, Texas Land Conservancy (Feb. 9, 2012).
[137] Personal correspondence with Greg DeYoung, Vice President, Westervelt Ecological Services (August 14, 2012).
[138] Personal correspondence with Patrick Shea, Executive Director, Wildlife Heritage Foundation (Jan. 24, 2012, August 17, 2012).



3.2 Phase II: The Active Phase

The most significant pitfalls lurk in the active phase of a compensation project. During this phase, the mitigation provider's potential liability is at its peak. Knowing which, if any, of the areas of liability your land trust has taken on during this phase is critical.

This phase may include active restoration or enhancement work. It also involves the generation of credits, sale of credits or acceptance of fees, monitoring and reporting, adaptive management or remedial action, and, in limited cases, the use of financial assurances to cover deficiencies or default. *See Chart 6 for a depiction of this phase.*

3.2.1 Mitigation Bank and In-Lieu Fee Program Credit Release

In the case of banks and in-lieu fee programs, the Corps must approve the release of any credits before they can be sold (in the case of a bank) or used to pay off credit debt incurred through the advance sale of credits (in the case of an in-lieu fee program). *For more information on credits, see Section 2.3, "The Compensation Side," on page 18.*

This is another opportunity for parties potentially taking on long-term stewardship responsibilities to monitor how projects are progressing. The banker or in-lieu fee provider must submit documentation to the Corps with a request for release of credits, along with supporting documentation, demonstrating that milestones have been met. The Corps must circulate the documentation to the IRT. The Corps and IRT may use this opportunity to conduct a site visit. Finally, the Corps will inform the mitigation provider whether the credits will be released.[139] In addition, banks are required to inform the Corps every time a credit transaction occurs.[140]

If your land trust has committed to or is considering taking on any long-term stewardship responsibilities for a compensation site, your organization should monitor the progression of credit releases. Ask the Corps to automatically inform you of any credit release requests submitted by the mitigation provider. Alternatively, you could request that the project documentation (bank or in-lieu fee instrument or mitigation plan) be amended to require that the documentation be sent to your organization, as well as to the Corps. This would allow you to track the pace at which credits are being generated and what, if any, problems have arisen at the site that may be limiting credit release.

3.2.2 Monitoring and Reporting

As discussed in Section 2.4.1.9, Element 9: Monitoring (and Reporting) Requirements," on page 30, banks and in-lieu fee programs have a variety of different reporting requirements. These include the submission of reports on ecological monitoring, crediting, financial assurances, and long-term management funding.

3.2.2.1 Ecological Monitoring

At intervals outlined in the mitigation plan, the mitigation provider – the permittee, mitigation banker, or in-lieu fee provider – must monitor the site and submit monitoring reports to the Corps.[141] The site attributes that must be monitored are worked out in advance and are included in the "monitoring requirements" section of the mitigation plan (see Section 2.4.1.9, "Element 9: Monitoring (and Reporting) Requirements," on page 30). The Corps is required to provide copies of the monitoring reports to the public upon request.[142]

As with the credit releases, if your land trust anticipates playing a role in the long-term stewardship of a compensatory mitigation site, ask the Corps or mitigation provider to automatically send you the monitoring reports when they are received by the agency. Alternatively, you could request that the project documentation (bank or in-lieu fee instrument or mitigation plan) be amended to require that the monitoring reports be submitted to your organization, as well.

During this active phase, the Corps may conduct site inspections to evaluate how effectively the site is performing. Your land trust may request to be included on any site visits and/or request that you are sent any written documentation that results from site inspections. This information can help you evaluate how well a compensation site is meeting its ecological performance standards and can give your land trust an early warning if problems are developing. If, when reviewing these documents, you find that a site is struggling to meet its performance-based milestones, you may wish to meet with the mitigation provider and possibly the Corps to learn what, if any, corrective measures may be taken.

139 33 C.F.R. § 332.8(o)(9).
140 § 332.8(p)(1).
141 §§ 332.4(c)(10), 332.6 et seq.
142 § 332.6(c)(3).

3.2.2.2 Accounting

In addition to submitting ecological monitoring reports, banks and in-lieu fee programs must follow the accounting procedures spelled out in the "Reporting Protocols" section of their instrument (see Section 3.1.5, "Mitigation Program and/or Project Approval," on page 42 and Chart 8).[143] Banks and in-lieu fee programs must maintain ledgers for all credit transactions. In-lieu fee programs must maintain an annual report ledger and individual ledgers that describe the production of released credits for each individual in-lieu fee project.[144] Both banks and in-lieu fee programs must then submit to the Corps an annual program report summarizing activity from the program account – both financial and credit accounting.[145]

The Corps is required to make the ledger report available to the public upon request.[146] Although not as critical as tracking the ecological progress or the financing of the project, your land trust may wish to review the annual program reports to determine whether the sponsor is including all that was required in its instruments.

3.2.2.3 Reporting on Financial Assurances and Long-Term Management Funding

Both bank and in-lieu fee sponsors *may* be required to submit to the Corps an annual report on financial assurances and long-term management funding.[147] The required components of these reports are spelled out in the "Reporting Protocols" section of the bank or in-lieu fee program instrument (see Section 3.1.5, "Mitigation Program and/or Project Approval," on page 42).[148] If you were not involved in the planning stage of the project and the bank or in-lieu fee instrument does not require the sponsor to prepare and submit this report, you should condition your involvement on the submission of these reports to the Corps and to your organization. As discussed in Section 8.3, "Accepting Funds from the Mitigation Provider," on page 134, the long-term management fund can be financed in a number of different ways. In most cases, deposits will be made to this fund at regular intervals, often as credits are sold. Your organization should make sure that the financing of the fund is following the prescribed process, that no unauthorized withdrawals have been made, and that there have been no changes in the status of the financial assurance mechanism.

3.2.3 Cases of Corrective Action and Default

There are many ways a compensatory mitigation project can go wrong. Many of these scenarios play out during the active phase of the project.

Permittee-responsible, bank, or in-lieu fee projects, and in-lieu fee programs may be deemed in default. The term "default" is not specifically defined in the 2008 rule, but it presumably refers to instances when the sponsor fails to "provide the required compensatory mitigation."[149] For example, the project sponsor could fail to meet the performance standards outlined in the mitigation plan[150] or could fail to submit monitoring reports in a timely manner.[151] Banks and in-lieu fee programs could default by failing to establish and

143 § 332.8(d)(6)(ii)(E).
144 § 332.8(p)(1)-(2).
145 § 332.8(i)(3), 332.8(q)(1).
146 § 332.8(q)(1).
147 § 332.8(q)(3).
148 § 332.8(d)(6)(ii)(E).
149 Compensatory Mitigation Rule, 73 Fed. Reg. at 19638 (Preamble).
150 33 C.F.R. § 332.8(o)(10).
151 § 332.6(c)(2).

maintain a credit ledger,[152] banks could fail to report approved credit transactions,[153] or banks and in-lieu fee programs could fail to submit an annual ledger report[154] or an annual financial assurances and long-term management funding report.[155] An in-lieu fee program could fail to complete land acquisition and initial physical and biological improvements by the third full growing season after the first advance credit in that service area is secured by a permittee.[156] Banks and in-lieu fee programs can fail to be in compliance with their program instrument and/or mitigation project plan.[157]

When a compensatory mitigation project or program is in default, the Corps may take action, but it has discretion as to what type and degree of action it may take.[158] Examples of such actions include requiring the provider to call upon its financial assurances or directing the project sponsors to pursue adaptive management measures. Adaptive management may entail "site modifications, design changes, revisions to maintenance requirements, and revised monitoring requirements."[159] The Corps may also decrease the number of available credits or suspend a bank or in-lieu fee program's credit sales.[160] If an in-lieu fee program has failed to meet its obligations, the Corps may direct the sponsor to use the fees collected to provide alternative compensatory mitigation – for example, buying credits from an existing mitigation bank.[161] In extreme cases, the Corps may terminate the bank or in-lieu fee agreement or refer the case to the U.S. Department of Justice (though it is uncertain whether the Department would pursue legal action in a such a circumstance).[162]

If the Corps determines that performance standards have not been met or the project is not on track to meet the standards, the agency may extend the monitoring period beyond that which was outlined in the mitigation plan.[163] If your organization has agreed to participate in the long-term management and maintenance of the site and the monitoring period is extended, your liability may be affected. This could occur, for example, if the long-term management plan did not clearly specify that your organization's obligation were triggered only upon satisfaction of the performance standards. If, instead, the plan suggested that long-term management and maintenance was to begin in a given year or after a given period of years (and did not account for the possibility of an extended monitoring period) your land trust could find itself legally responsible for "maintaining" a level of ecological functionality that the site had yet to reach. As a result, in the event the monitoring period is extended, you should ask the Corps to fully describe any changes it believes have occurred in liability created for your organization. You will want to ensure, by negotiation if necessary, that the mitigation provider retains all liability for project success until all of the performance standards have been met.

When significant components of a mitigation program or project need to be updated to reflect noncompliance – for example, an extension of the monitoring period or a change in the monitoring parameters – the mitigation plan or mitigation instrument may be modified. *For more information on plan and instrument amendments or modifications, see Section 3.4, "Plan and Instrument Amendments or Modifications," on page 50.*

[152] § 332.6(p)(1)-(2).
[153] § 332.6(p)(1).
[154] § 332.8(q)(1).
[155] § 332.6(q)(3).
[156] § 332.8(n)(4).
[157] § 332.8(o)(10).
[158] Compensatory Mitigation Rule, 73 Fed. Reg. at 19638 (Preamble).
[159] 33 C.F.R. § 332.7(c)(3).
[160] Compensatory Mitigation Rule, 73 Fed. Reg. at 19638 (Preamble); 33 C.F.R. § 332.8(o)(10).
[161] Compensatory Mitigation Rule, 73 Fed. Reg. at 19638 (Preamble); 33 C.F.R. § 332.8(i)(2).
[162] Compensatory Mitigation Rule, 73 Fed. Reg. at 19638 (Preamble); 33 C.F.R. § 332.8(o)(10).
[163] 33 C.F.R. §§ 332.6(b), 332.7(c)(3).

3.3 Phase III: The Long-Term Stewardship Phase

The long-term stewardship phase of a mitigation project is generally considered the phase that begins once a project's performance standards have been met. *See Chart 6 for a depiction of this phase.* There may be management or maintenance obligations associated with the site during this stage, as well as monitoring and reporting requirements and traditional easement duties. Some of the management and maintenance obligations may be similar to the maintenance activities that were required during the active phase of the project (see Section 2.4.1.7, "Element 7: Maintenance Plan," on page 29). However, they are dictated by a separate section of the mitigation plan: the long-term management plan.[164]

The long-term management plan is developed by the project sponsor and approved by the Corps and IRT during the project planning and approval phase. If your organization was involved in the early stages of project development, you may have played a role in drafting or commenting on this section. In either case, if you will be playing a role during the long-term stewardship phase of the project, it is essential that you have a thorough understanding of which aspects of the long-term management plan you have an obligation to uphold. Even if you plan to hold the easement only and not accept any of the affirmative obligations, it is still essential to have an understanding of how the site will be managed and by whom, to ensure that you are accepting involvement in a site that will be ecologically successful.

Esther Lev of The Wetlands Conservancy in Oregon suggests, "even if your land trust isn't involved until the active phase of the project, you should still review and pay very close attention to the performance standards and wetland management plan that the mitigation provider and regulatory agencies have signed." The first mitigation easement the Conservancy accepted "was on land that we knew well," said Lev. "We had the benefit of seeing the results of 10 years of a similar restoration technique on an adjacent portion of the property." In this case, TWC accepted the easement during the planning and approval phase. In another case, however, TWC "had questions on the ability of the site to meet its performance standards and what, in turn, the long-term maintenance and stewardship responsibilities would be." In this second example, stated Lev, "we asked the bankers to come back and show us the results of three years of monitoring and then we would evaluate if it was a good fit for the Conservancy." Lev added, "if the project's ecological success is less predictable, it is best to not accept an easement until later on in the process."[165] *For more on the opportunities and challenges of mitigation easements, see Section 5.4, "How Will Involvement in Long-Term Stewardship Affect Your Organization's Exposure to Risk?," on page 74.*

For more information on the long-term management plan, see Section 2.4.1.10, "Element 10: Long-Term Management Plan," on page 32 and Section 7, "Long-Term Management Plans: Technical Guide," on page 105.

3.4 Plan and Instrument Amendments or Modifications

It is not uncommon for a compensatory mitigation project's authorizing or guiding documentation to be amended or modified. Bank or in-lieu fee instruments,[166] mitigation plans (for all three forms of compensatory mitigation),[167] in-lieu fee Compensation Planning Frameworks, and permit conditions can be all be amended or modified.[168] In addition, a mitigation bank's or in-lieu fee program's credit release schedule

[164] §§ 332.4(c)(11), 332.7(d).
[165] Lev, supra note 134.
[166] 33 C.F.R. § 332.8(g).
[167] §§ 332.6(b), 332.7(d)(4).
[168] § 332.8(c)(1).

(a component of a bank or in-lieu fee program instrument, see Chart 8) may be modified, the performance standards for any compensatory mitigation project may be altered, and the length of the active monitoring period may be extended.[169]

Under what circumstances are these important documents amended or modified? In some cases, bank and in-lieu fee program instruments may be modified when a bank adds an additional umbrella bank site, an in-lieu fee program seeks approval for a project, or a previously approved bank or in-lieu fee project seeks to add acreage.[170] In other cases, these documents may need to be amended to reflect a transfer of sponsorship or land ownership or other changes in site condition. The Corps may also require a modification to a mitigation project or program as a consequence of compliance or enforcement action.[171]

For land trusts playing a role in the long-term stewardship of compensatory mitigation sites, there are two relevant aspects of project or program modification.

First, as discussed in Section 3.1.5, "Mitigation Program and/or Project Approval," on page 42, if your organization plans to play a role – any role – in a compensatory mitigation project, you are at a clear advantage if you participate in the review and design of the project or program during the planning and approval phase (Phase I). If your involvement begins after the program's instrument or project's mitigation plan has already been approved, you may request that these documents be modified to address your interests. For example, if the long-term management plan does not clearly or adequately define your role in long-term stewardship, it is in your best interest to seek clarification and have it documented.

Second, if you have agreed to play a role in the long-term stewardship of a site, you should know if and when a project sponsor is considering any modifications to a plan or instrument. For example, the Corps may determine that the monitoring period must be extended into the long-term stewardship phase or may make changes to the long-term management obligations, or the sponsor may opt to change the financing for the long-term management of the site. These changes may have a profound effect on your role or implied liability. Project sponsors are required to notify the Corps at least 60 days in advance if they plan to make any modifications to the long-term protection mechanism, including the transfer of title to the site or establishment of any other "legal claims" over the site.[172] You should ask that the Corps or project sponsor inform you of any and all potential project or program modifications or amendments at least 60 days in advance of the change, as well. Having advance notice will give you an opportunity to review the proposed changes and determine if they will affect your liability, responsibilities, or interest in continuing to participate in the long-term stewardship of the project.

The process for formally modifying or amending an approved bank or in-lieu fee instrument is described in the 2008 rule.[173] More frequently, however amendments are handled through a letter documenting the modification, which is then attached to the original documentation.[174]

[169] § 332.8(d)(6)(iii)(B), (o)(8)(iii).
[170] § 332.8(g)(1).
[171] § 332.8(l)(2).
[172] § 332.7(a)(3).
[173] § 332.8(d).
[174] Interview with Steven Martin, Environmental Planner, U.S. Army Corps of Engineers (Aug. 21, 2012).

Land trusts can play a variety of roles in the federal wetland and stream compensatory mitigation program. They may sponsor a mitigation bank or in-lieu fee program. They may agree to accept an easement on or title to a property on which a compensatory mitigation project has been conducted. They can act as the long-term steward of a compensation site. Land trusts can also partner with a mitigation provider to help guide site selection, conduct monitoring and reporting, or undertake restoration activities. Or, land trusts may enter into some creative combination of the above. In any of these cases, the land trust should enter into such an arrangement only with full knowledge and understanding of its responsibilities and liabilities. As with any of the roles described in this section, there are tradeoffs – unanticipated expenses, board or staff burnout, or even public relations problems if the project fails. Engagement in mitigation should only take place after an assessment of how doing so relates to the organization's mission, the comfort level of the group's board of directors and staff, and the land trust's technical expertise and capacity. Before taking on any of the roles discussed in this section, your land trust must have a process for fully evaluating and addressing the potential risks. *For more information on assessing your land trust's participation in compensatory mitigation – the risks and opportunities, see Section 5, "Assessing Your Land Trust's Participation in Compensatory Mitigation: Opportunities and Challenges," on page 66.*

4.1 Mitigation Provider

In some cases, land trusts have opted to become mitigation providers, either by sponsoring a mitigation bank or an in-lieu fee program. Under such arrangements, the land trust works with the relevant state and federal agencies to obtain approval for the bank or in-lieu fee program, secures the site, secures financial assurances, carries out the mitigation activities, and assumes full liability for meeting the ecological performance standards at the site.

4.1.1 Nonprofit Conservation Organizations as In-Lieu Fee Sponsors

As of mid-2012, seven of the existing sixteen in-lieu fee programs that have been approved under the terms of the 2008 rule are run by private, nonprofit conservation organizations, such as land trusts.[175] Land trusts sponsoring an in-lieu fee program may use the fees collected to acquire and restore aquatic resources in areas that are a geographic priority for the trust or under significant threat of development.

For example, in 1995, The Nature Conservancy's (TNC) Virginia Chapter established the Virginia Aquatic Resources Trust Fund, an in-lieu fee program. An updated agreement that meets the requirements of the 2008 Compensatory Mitigation Rule was signed in 2011. By the end of 2011, TNC reported having accepted more than $56.9 million in fees, of which it had used $41.9 million to pursue 116 mitigation projects. Through the program, TNC accepts fees related to many small development projects – most less than one acre. The fees are pooled, and when sufficient funds have been collected, TNC uses the funds to undertake large-scale projects that yield large conservation outcomes. In addition, the mitigation fees have generated more than $4.8 million in interest, which has been returned to the fund to support additional conservation.[176]

In all, the Virginia Aquatic Resources Trust Fund has accepted fees from projects that have impacted 251

[175] These figures are accurate as of July 2012. The seven nonprofit-sponsored in-lieu fee programs are: Coastal Mississippi In-Lieu Fee Program (Land Trust for the Mississippi Coastal Plain), Mississippi Delta (Ducks Unlimited), Southeast Alaska Land Trust In-Lieu Fee Program (Southeast Alaska Land Trust), Tennessee Wildlife Federation Statewide Wetland In-Lieu Fee Program (Tennessee Wildlife Federation), Vermont In-Lieu Fee Program (Ducks Unlimited), Virginia Aquatic Resources Trust (TNC), and Virginia Living Resources Trust (Living River Restoration Trust).

[176] THE NATURE CONSERVANCY, VIRGINIA CHAPTER, VIRGINIA AQUATIC RESOURCES TRUST FUND ANNUAL REPORT – 2011 (2012), available at http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/virginia/vartf-2010-report-final.pdf.

acres of wetlands (tidal and non-tidal) and 36 miles of stream. With these dollars, TNC has restored more than 475 acres of wetlands – a replacement ratio of almost 1:2 (acres impacted compared to acres restored). The program has also restored and protected 140 miles of stream – a replacement ratio of almost 1:4. Add to that the more than 20,500 acres of wetlands and uplands protected as part of these projects, and one can see the conservation opportunities presented by this program.[177] Because of its nonprofit status and reputation among landowners, TNC can leverage these mitigation funds to secure significant additional conservation acreage through donated easements, donated lands, and bargain sales of land and easements.

The Nature Conservancy generates financial assurances for the projects through the collected mitigation fees themselves. Twenty percent of the construction budget is set aside (tracked within the project budget) to provide these performance securities. If these funds are unused, they are first used to fund long-term stewardship of the project site, with any remaining funds returned to the general balance and used on other projects. In the past, TNC has drawn from these funds to remedy problems identified through regular monitoring. Such corrective actions have included replanting trees, eradicating invasive plant species, and making minor structural adjustments.[178]

As with any land protection project, each project for which TNC has used its in-lieu fee funds has had its own unique structure. In one example, TNC partnered with a private landowner on a project – the Brooks-Ober Tract – that led to protection of the site and restoration of 12.5 acres of non-tidal forested wetlands. The landowners donated a conservation easement on the property, which is located on the Chesapeake Bay in Mathews County, Virginia, to the Middle Peninsula Land Trust and donated fee title to TNC. The Conservancy used funds from the in-lieu fee program to restore the property and support long-term stewardship of the site. It also provided the Middle Peninsula Land Trust with an easement stewardship endowment to cover expenses related to easement monitoring and defense. The Conservancy, on the other hand, is responsible for the long-term management and monitoring of the restoration project.

In-lieu fee programs can generate significant funds that can be used to support a land trust's conservation objectives when those objectives coincide with the purpose of compensatory mitigation. However, a land trust should not seek approval for an in-lieu fee program with the expectation that the collected fees can be used to preserve existing, high quality wetlands and streams. Although there is variation in the Corps' attitude toward preservation from district to district, the agency has a strong preference for compensation dollars to be used for restoration of wetlands, rather than the preservation of existing, high quality wetlands. Land trusts with an interest in sponsoring in-lieu fee programs should have a very solid understanding of the agency's position on preservation as a compensation method. *For more information on the Corps and EPA mitigation policy related to preservation, see Section 2.3.1, "Mitigation Methods," on page 18.*

4.1.2 Nonprofit Conservation Organizations as Mitigation Bankers

Few land trusts or conservation organizations have the capacity and resources to establish a mitigation bank. However, in November 1996, The Nature Conservancy's Mississippi Chapter acquired more than 1,700 acres of converted loblolly pine commercial forest to establish the Old Fort Bayou Mitigation Bank. The restored site now features several habitat types, including wet pine savanna, bottomland hardwood, and emergent marsh. In addition to the Old Fort Bayou bank, TNC also manages the Red Creek Consolidated Mitigation Project. Together, TNC's wetland and stream mitigation banking efforts have helped preserve and maintain important aquatic resources of South Mississippi.

[177] *Id.*

[178] Interview with Karen Johnson, The Nature Conservancy, Virginia Field Office (Jan. 9, 2012, Feb. 22, 2012).

4.2 The Watershed Approach, Site Selection, and Project Design

In Sections 2.4.1.2, "Element 2: Site Selection," on page 26 and 2.4.2, "The Watershed Approach," on page 34, we describe in greater detail the process of site selection, the watershed approach to compensatory mitigation, and the criteria used by the Corps to evaluate the appropriateness of selected sites for meeting compensatory mitigation obligations. Section 3.1.1, "Site Selection," notes that mitigation project sites are selected for banks and permittee-responsible projects during the first phase of mitigation project development. In-lieu fee programs, on the other hand, generally select project sites after their programs are approved and after they have started selling advance credits.

Regardless of when it occurs, many land trusts feel that there are clear and compelling reasons to get involved in mitigation site selection.

Land trusts can *partner with* public, private, or nonprofit mitigation providers to guide the watershed approach, site selection, and/or project design without sponsoring any mitigation projects. If your land trust already undertakes watershed planning, strategic site selection, identifies opportunities for aquatic resource restoration, or has science-based expertise on effective restoration methods, applying these skills and resources to compensatory mitigation can allow you to guide the location and character of compensatory mitigation projects. You can influence compensatory mitigation decisions and meet your conservation objectives without incurring significant expenses or liability.

Your land trust can *take the lead in coordinating* with federal, state, and nongovernmental partners to develop watershed plans (or adapt existing plans) that meet the parameters for watershed plans set forth in the rule. In so doing, you may help to guide where compensation projects are carried out and what restoration goals they seek to achieve. By helping to determine the actual siting of projects, you can advance conservation objectives, such as providing connections between existing protected areas.

You may find, however, that mitigation providers resist land trust involvement in site selection. Particularly with private mitigation banking, the mitigation provider may not want information about a potential land acquisition deal to become public knowledge.

Land trusts may also engage in project design, thereby helping to improve the likelihood that the compensation projects will be sustainable. As discussed in Section 3.1, "Phase 1: The Project Planning and Approval Phase," on page 41, helping to shape the design of the project, long-term management plan, and long-term financing for the site can best ensure that the property meets your conservation objectives. If you plan to accept some of the long-term management and maintenance responsibilities for the site, there are obvious advantages to engagement on site selection. It is in your best interest to guide the selection of sites and design of projects to those that will minimize the need for active engineering features (e.g., pumps) and maximize the likelihood that the site will be self-sustaining.[179]

In Oregon, The Wetlands Conservancy has played a significant role in helping to guide the selection of compensation project sites. The mission of the organization is the protection and conservation of Oregon's "Greatest Wetlands" – those deemed the most biologically rich and diverse. In addition to traditional land protection through acquisitions and conservation easements, TWC also promotes community and private partnerships that support better regulatory decision-making. For example, in response to developers' complaints about a lack of access to wetland information, TWC partnered with The Institute for Natural

[179] 33 C.F.R. § 332.7(b).

Resources and the Oregon State University Libraries to create the Oregon Wetlands Explorer,[180] a computer portal that: provides a clearinghouse for existing information on the geography, ecology, and locations of Oregon's wetlands; identifies opportunities for wetland restoration, enhancement, and conservation; and streamlines the wetland permitting process with the goal of promoting more successful mitigation and restoration projects.[181] The Oregon Wetlands Explorer can be used to identify and prioritize compensation sites, with the knowledge that the sites reflect the conservation priorities of an array of state conservation experts.

Janice Allen, Deputy Director of the North Carolina Coastal Land Trust (NCCLT) also notes the value of being involved at that early stage. While NCCLT has always been brought on after site selection at its mitigation sites, "If possible, we would prefer to work with the company up front on site selection. Otherwise, you are in a situation where the project proponent just asks 'do you want it or not,' and in those situations, we often say no because the site does not meet our conservation criteria. In our opinion, if the Corps is going to require that there be a long-term holder of a conservation easement over a mitigation bank, it should encourage potential bankers to work up front with a potential easement holder, for example, the local land trust." Allen adds that the more seasoned mitigation providers are more likely to work with land trusts early on in the site selection process "because they understand our process." She notes that working with mitigation lands over the years has helped them refine and improve their land conservation criteria. In addition, NCCLT has had success undertaking multiple projects with the same mitigation provider: "We are more confident about recent sites because we have worked with the company before and have a good relationship. We know what we want to get out of it."[182]

Mark Steinbach of the Texas Land Conservancy in Austin offers similar sentiments about working repeatedly with the same mitigation banker: "At the Texas Land Conservancy, we deal with only a few banking groups because they're the only people we really trust and so we've done multiple deals with them. These days, bankers get us involved at the site selection phase, as soon as they've started looking into taking on a site. They make sure early on that the site is a viable selection for us."[183]

Finally, in Maine, the Brunswick-Topsham Land Trust focuses its land protection efforts in a three-town region that borders Casco Bay. The land trust has undertaken a strategic planning effort, guided by Land Trust Alliance's "Strategic Conservation Planning" Standards and Practices Curriculum.[184] Through this landscape analysis process, Brunswick-Topsham identified 34 "ecological focus areas," or high priorities for wetland and stream restoration, enhancement, and protection. These areas were selected as priorities because of the presence of at-risk plants, animals, and natural communities, as well as the presence of intact stream reaches capable of supporting coldwater fisheries and intact forest habitat. The land trust then mapped the sites and conducted site visits to identify opportunities for restoration and enhancement through such activities as the removal of culvert restrictions, removal of low head dams, revegetation or removal of small roads created through timber operations, redirection of stormwater flows, and revegetation at the site of existing borrow pits. When funds became available through the state's in-lieu fee program, Brunswick-Topsham was well positioned to direct the funds to high priority sites.[185]

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[180] Institute for Natural Resources, The Wetlands Conservancy, Oregon State University Libraries, and Northwest Alliance for Computational Science & Engineering, http://oregonexplorer.info/wetlands/about (last visited July 18, 2012).
[181] Lev, supra note 134.
[182] Interview with Janice Allen, Deputy Director, North Carolina Coastal Land Trust (Feb. 10, 2012).
[183] Steinbach, supra note 136.
[184] Ole M. Amundsen, Strategic Conservation Planning, in STANDARDS AND PRACTICES CURRICULUM (Sylvia Bates ed., Land Trust Alliance 2007).
[185] Interview with Steve Walker, Vice President, Brunswick-Topsham Land Trust (Apr. 24, 2012).

4.3 Long-Term Stewardship Responsibilities

The 2008 Compensatory Mitigation Rule identifies different tasks that must be undertaken in the long-term stewardship phase. Although the way the rule is written sometimes suggests that there is one long-term "land steward," in reality there are multiple duties that may be the responsibly of different entities, including a land trust, the mitigation provider, or other parties – public or private. The four roles of long-term stewardship include:

1. Fee title holder
2. Easement holder
3. Long-term stewardship fund holder
4. Long-term manager

4.3.1 Fee Title Holder

When a mitigation site is located on private land, the site is generally purchased in fee (by the project sponsor or by another party using the sponsor's funds) during the project planning and approval phase (Phase I). After all of the performance standards have been met for a project (Phase III), the project sponsor may seek to transfer fee title ownership of the property to another entity.

Generally speaking, land trusts may hold fee title to mitigation lands under two sets of circumstances. In the first, land trusts may undertake compensatory mitigation on proprieties they already hold in fee and then continue to hold the property in fee during the long-term stewardship phase (Phase III). *For more information on performing compensatory work on fee title lands, see Section 4.4, "Funding for Restoration," on page 61.* In other cases, land trusts may be willing to accept fee title to properties on which compensatory mitigation projects are being or have been carried out. The transfer of the fee title, in these cases, can occur at any stage in the project's life. However, the land trust does not automatically assume long-term liabilities when accepting fee-title ownership. Any obligations the land trust has as the fee title holder – such as long-term management and maintenance, holding the long-term stewardship fund, etc. – would be determined as part of the process of negotiating the transfer of title.

In the case of the Solano Land Trust in California, the organization has opted not to accept fee title to mitigation lands where another party has performed the compensation work. The group's primary concerns relate to the possibility of common law or regulatory liability for mitigation measures. "Given the risk of being on the hook for shoddy mitigation work," says Executive Director Nicole Byrd. "We prefer to do the restoration work ourselves. That way we have full control over operations at the site and we can ensure that they are performed satisfactorily."[186] *For more information on fee title ownership generally, see Section 6.1.3, " Fee Simple Title," on page 92.* As noted above, however, a land trust could wait to take fee title until after mitigation measures had been completed and the agencies had approved the work. This would provide the land trusts will ample opportunity to assess the work before committing to ownership and possibly stewardship of the land.

The Center for Natural Lands Management, which operates in California, frequently holds fee title to mitigation lands. *For more on the unique roles played by CNLM and WHF, see Boxes 3 and 4, respectively.*

[186] Interview with Nicole Byrd, Executive Director, Solano Land Trust (Feb. 27, 2012).

4.3.2 Easement Holder

Federal regulations require that mitigation sites be provided with long-term protection. The Corps may consider many different site protection mechanisms or arrangements. However, conservation easements are the most common way in which land trusts have engaged with compensatory mitigation to date. Some Corps districts have also expressed a preference for conservation easements.[187] Furthermore, under the mitigation rule, mitigation easements are likely to provide back-up enforcement rights to the Corps and/or other federal or state agencies, making them twice as strong.[188] As the easement holder, the land trust should seek to meet the standards and practices associated with good easement stewardship detailed in *Land Trust Standards and Practices. For more information on site protection mechanisms see Section 6.1, "Types of Instruments," on page 85.*

For example, the Solano Land Trust in California holds easements on two mitigation bank properties. In both cases, the for-profit mitigation banker continues to hold the property in fee. Solano is provided with a lump sum payment to support easement monitoring and enforcement, while any affirmative long-term management and maintenance obligations during the long-term management phase – apart from the standard easement monitoring and defense – are the responsibility of the mitigation provider.[189]

Also in California, the Wildlife Heritage Foundation holds easements on mitigation lands. Prior to accepting an easement on any such property, WHF sends its experts into the field to evaluate the site. WHF has a checklist it uses to evaluate whether the site meets the organization's standards. For example, WHF gathers information on the current and historical use of the land, legal restrictions that might restrict property uses and management, and a variety of biological information, such as the habitat types present and the presence of special-status or undesirable species on the site. If, based on this information, WHF determines that the site does not meet its mission or the organization does not have a high degree of confidence that the site will be sustainable over time, WHF will not accept the easement.[190]

The Great Land Trust in Alaska also holds mitigation easements and evaluates potential projects much as it would traditional conservation projects. David Mitchell, the organization's conservation director states, "When we are deciding whether to be involved in holding a conservation easement on a mitigation bank site, we'll go through the same process we use for easement selection in general. If it is a high quality property that meets our organization's criteria, we will become involved."[191]

Finally, the Georgia Land Trust has been taking easements on mitigation properties since 1999, though most have been granted since 2008. The group currently holds easements on 10 mitigation properties. In each case, the organization receives a stewardship contribution to cover expenses related to easement monitoring and defense. The land trust has not taken on any long-term management and maintenance obligations associated with these projects. Justin Park, Staff Attorney, for the Georgia Land Trust states that in the organization's experience, banks that were approved prior to the 2008 Compensatory Mitigation Rule rarely have any long-term management requirements outlined in their approved banking instruments. But banks approved since adoption of the 2008 rule do have long-term management requirements. In these cases, the landowner has continued to be the responsible party for the site's management. "It is most of all a matter of who has day-to-day control and would it be worth our cost to do the maintenance," says Park. He adds, "The landowner is the one in the best position to carry out affirmative management requirements because they usually own and manage the surrounding land already and may be living there. We work with the bankers to be

[187] Personal correspondence with Steven Martin, Environmental Planner, U.S. Army Corps of Engineers (Aug. 7, 2012).
[188] 33 C.F.R. § 332.7(a)(1).
[189] Byrd, supra note 186.
[190] Shea, supra note 138.
[191] Interview with Dave Mitchell, Conservation Director, Great Land Trust (Mar. 2, 2012).

Box 3: Long-Term Stewardship - The Whole Package

Land trusts often play more than one of the long-term stewardship roles in mitigation projects. Few organizations, however, have played as many roles or done as much to professionalize the long-term stewardship of compensatory mitigation sites in the country as the Center for Natural Lands Management (CNLM). CNLM was founded in 1990 with the mission of protecting sensitive biological resources through professional, science-based stewardship of mitigation and conservation lands in perpetuity. Sherry Teresa, the founder and former executive director of CNLM, notes, "Compensatory mitigation – both for Section 404 and endangered species – is big business in California. As the number of compensation sites began to proliferate, particularly in areas of Southern California where open space is scarce, concerns were raised about how these lands were going to be managed and maintained in perpetuity."[1]

The Center was founded to help serve that need, accepting fee title and conservation easements to professionalize long-term stewardship of compensation properties. The organization holds fee title to 31 properties (most of them mitigation-related) and has stewardship or conservation easement (or both) responsibility on another 61 properties in California. Among these properties are 21 conservation or mitigation banks, with CNLM playing various roles, including management and/or holding a conservation easement and/or holding endowments. As of February 2012, CNLM manages endowment funds totaling more $60 million. In addition to assuming land ownership and stewardship responsibilities on mitigation and other conservation lands, CNLM also has significantly influenced the way organizations and agencies think about planning, budgeting, and investing to ensure that sufficient financial resources are in place to sustain necessary stewardship activities. The organization has been resolute in its conviction that both financial and natural resources must be appropriately acquired and maintained to achieve conservation objectives. As discussed in Section in Box 11, "Preparing for Perpetuity," on page 128, CNLM developed a software program – the Property Analysis Record (PAR) – to estimate long-term management costs.

[1] Interview with Sherry Teresa, EcoLogical Solutions Consulting (April 11, 2012).
[2] Interview with Deborah Rogers, Director of Conservation Science, Center for Natural Lands Management (April 13, 2012).

sure that the terms of the banking instruments and the conservation easement don't bind us to do something we haven't been compensated for. When you read banking instruments, terms like 'maintenance,' 'monitoring,' and 'stewardship' are sometimes used interchangeably. Those terms matter to us as a land trust, because monitoring a conservation easement is what we want to know we're doing."[192] *For more information on how these terms are used in this handbook, see Chart 2 on page 8.*

In all these cases, land trusts hold easements on compensatory mitigation sites and have received long-term funding to support easement monitoring and defense. These groups carefully evaluate whether such an easement is consistent with the organization's conservation mission. With the exception of the Wildlife Heritage Foundation, each the organizations discussed above have chosen not to accept any long-term management and maintenance obligations. Many land trusts report that in addition to holding an easement on a mitigation property, they have been asked by the mitigation provider to take on long-term management responsibilities for the site as well. We discuss the role of long-term site manager further below. *For more information on how to determine the amount of long-term funding needed, see Section 8.1, "How to Determine How Much Money Your Organization Will Need," on page 117.*

[192] Interview with Justin Park, Staff Attorney, Georgia Land Trust (Apr. 24, 2012).

4.3.3 Long-Term Stewardship Fund Holder

In addition to providing financial assurances to ensure that funds are available to address any problems that may arise during the active phase of a mitigation project, mitigation providers are also required to establish a funding mechanism that will provide funds to carry out long-term stewardship obligations.[193] These obligations may include funding for management and maintenance, as well as funding for easement monitoring and defense. The parameters of the long-term stewardship obligations, an annual cost estimate for carrying out those obligations, and the actual funding mechanism that will be used must be outlined in the long-term management plan (part of the mitigation plan).[194] *For a full discussion of long-term funding mechanisms and how they are calculated, see Section 8, "Long-Term Financing Mechanisms: Technical Guide," on page 117. Additional information about the long-term management plan section of the mitigation plan can be found in Section 2.4.1, "The Mitigation Plan," on page 25.*

The long-term financing for compensatory mitigation projects is often presented as a single fund that covers all of the possible long-term stewardship responsibilities. However, long-term funding can be structured – and often is structured – to provide different and separate streams of revenue for different aspects of the long-term stewardship obligations (i.e., different streams of funding for long-term management and maintenance obligations and for easement monitoring and defense). In addition, these separate long-term stewardship funding streams can be held – and often are held – by different entities. Which of the entities involved in the project holds these long-term funds differs from project to project.

For example, The Wetlands Conservancy in Oregon holds an easement on a wetland mitigation bank – the Mud Slough, a 180-acre mitigation bank west of Salem.[195] Although the mitigation banker retained fee title to the property and is responsible for all long-term management and maintenance requirements outlined in the long-term management plan, TWC holds the long-term endowment and took on this responsibility during the active phase of the project (Phase II). Once the project meets its performance standards and enters into the long-term stewardship phase (Phase III), the long-term endowment will support the banker's long-term management and maintenance of the site, the Conservancy's easement monitoring and other administrative costs, and will support contributions to TWC's easement legal defense fund.[196]

California's Solano Land Trust, which undertakes mitigation activities on lands it holds in fee, retains the long-term management and maintenance obligations on these properties, as well as the funding for these obligations.[197] In Alabama, with both of the mitigation properties on which the Freshwater Land Trust holds easements, the organization also holds the endowments for long-term management and easement monitoring and defense.[198]

Several land trusts believe that an organization that is going to hold the fund for the long-term stewardship of a mitigation project should have some interest in the real property as well – they should have "some skin in the game," as David Brunner of the Center for Natural Lands Management likes to say. In other words, Brunner adds, "the logic is that the challenges with endowment management and conservation property management tend to inversely correlate and, consequently, if they are tied together, you are more likely to have better and more sustainable long-term outcomes. When managed together, the land trust is much more likely to expend the needed cash and fix problems that arise because it represents a liability to the organization."[199]

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193 33 C.F.R. § 332.7(d)(2).
194 Id.
195 The Wetlands Conservancy, Mud Slough Conservation Easement, http://oregonwetlands.net/index.php?option=com_content&view=article&id=49&Itemid=53 (last visited Aug. 20, 2012).
196 Lev, supra note 134.
197 Byrd, supra note 186.
198 Interview with Brian Rushing, Executive Director, Freshwater Land Trust (Mar. 4, 2012).
199 Interview with David Brunner, Executive Director, Center for Natural Lands Management (May 25, 2012).

There are many different models for how long-term stewardship funds are held, and if the funds are separated into different streams of funding, different parties can hold the different streams. Some fee title holders maintain responsibility for all of the funds associated with long-term stewardship and disperse funding to the easement holder for easement monitoring and defense. Some land trusts hold easements on mitigation lands and hold all of the long-term stewardship funds, but allocate funding to the entity carrying out the long-term management and maintenance activities (often the fee title holder). Finally, others hold easements on mitigation properties, as well as the fund for easement monitoring and defense, but the long-term management and maintenance funding is held by the fee title owner that is also the party responsible for these activities.

4.3.4 Long-Term Manager

One of the central goals of the compensatory mitigation program is to design sites that – as much as possible – are "self-sustaining once performance standards have been achieved."[200] Nonetheless, the rule anticipates that there will be some long-term management and maintenance needs for mitigation sites during the long-term stewardship phase (Phase III). The type of long-term management and maintenance contemplated here is *unique* to the § 404 program and its goal of replacing lost aquatic resource functions. These include management, maintenance, and, possibly, monitoring and reporting obligations aimed at maintaining those resource functions. Because most mitigation sites have been restored or enhanced to some degree, they are likely to require more intense long-term management and maintenance (such as fire management or invasive species control) to ensure the viability and sustainability of the resource. As such, the responsibilities associated with the management of compensatory mitigation sites extend well beyond the conventional "stewardship" responsibilities that land trusts generally take on when they hold an easement on a traditional conservation property.

Most land trusts are reluctant to take on the long-term management and maintenance obligations of compensatory mitigation sites. For example, the North Carolina Coastal Land Trust is often asked by mitigation providers to assume easements on mitigation lands, as well as the long-term management and maintenance obligations associated with those sites. Janice Allen, the organization's deputy director says, "we are a regional land trust with a high profile, so mitigation providers assume that we are the logical candidate to provide long-term stewardship of these sites." Allen adds, however, "although we have agreed to hold easements on mitigation lands when the properties have been in our conservation interest, we have consistently said no to taking on any long-term management and maintenance obligations."[201]

Mike Rolband, President of Wetland Studies and Solutions, Inc., a natural resources consulting firm based in northern Virginia, has a lot of experience with wetland and stream mitigation banking. His firm sponsors six mitigation banks, all of which are located in Virginia. Rolband understands that land trusts might not want to take on the long-term management (non-easement related responsibilities) of a mitigation bank. If land trusts do accept this responsibility, however, Rolband notes that the "key is to be very clear about your organization's liability. Land trusts must be very cognizant of the long-term management responsibilities outlined in the long-term management plan."

Your land trust may have an interest in holding and monitoring an easement but may lack the expertise needed to manage a site or may not want the liability associated with long-term management. Your organization is under no obligation to accept the long-term management responsibilities for a site on which you hold the easement. In the majority of cases, when a land trust agrees to hold an easement but

[200] 33 C.F.R. § 332.7(b).
[201] Allen, supra note 182.

not serve and the long-term site manager, that role is retained by the mitigation provider who either carries it out themselves or contracts with another organization to do so. In limited places around the country – predominantly California – there are private non-profit organizations that routinely play the role of long-term mitigation site manager. *Two land trusts that have assumed this role are highlighted in the Boxes 3 and 4 on pages 58 and 62, respectively.*

In Alaska, the Great Land Trust has tackled some of the long-term management responsibilities on mitigation projects in addition to easement monitoring and defense. Conservation Director David Mitchell cites the Campbell Creek Estuary project as one where "we are taking some land management responsibilities, as well as the easement monitoring responsibilities." Another project where the land trust will have management obligations beyond the conservation easement is on a 4,800-acre Native Corporation site. "At that site, we will also be responsible for calculating and setting aside funds for land management," states Mitchell.[202]

Taking on long-term management and maintenance obligations entails far more responsibility and liability than does traditional easement monitoring and defense. As such, it is critical that land trusts engaging with mitigation in this capacity do so with a full understanding of their responsibilities and liabilities. The importance of securing adequate financing to cover these obligations, as well as any potential unforeseen problems, cannot be overemphasized. In the words of Sherry Teresa, former Executive Director of the Center for Natural Land Management, "If it can go wrong, it will go wrong."[203] To paraphrase a well-worn phrase, plan for the worst and hope for the best.

4.3.5 Conclusion: Long-Term Stewardship Roles

Accepting an easement on mitigation lands can provide land trusts with unique opportunities for adding to the portfolio of land in its target conservation area. In addition, because long-term management funds are often part of the agreement for taking on any long-term stewardship responsibilities for a mitigation project, playing one of the long-term stewardship roles may also serve to increase the financial and professional capacity of the organization. However, becoming a long-term steward of a mitigation site can lead to unforeseen management expenses, public relations problems, permitting and legal hassles, and even staff burnout and mission drift—all potential problems that must be considered before taking on the project. *Section 5, "Assessing Your Land Trust's Participation in Compensatory Mitigation," on page 66 covers several of these potential issues and provides a framework for land trusts to help them evaluate the efficacy of playing a role in the long-term stewardship of compensation sites.*

4.4 Funding for Restoration: Carrying out Compensatory Mitigation Projects on Your Fee Title Lands

In limited instances, land trusts may undertake compensatory mitigation on proprieties they already hold in fee. In such cases, the land trust functions as the contractor for the permittee-responsible mitigation, allowing the land trust to bring compensation dollars to sites it already owns that are in need of restoration. Two such examples – one each in California and Alabama – follow.

The Solano Land Trust in California undertakes active site restoration for mitigation purposes on its fee title lands. Nicole Byrd, the organization's Executive Director, states, "We develop management plans for all of our

[202] Mitchell, supra note 191.
[203] Interview with Sherry Teresa, EcoLogical Solutions Consulting (Apr. 11, 2012).

fee properties and identify priority restoration projects." She adds, "This practice allows us to be prepared when permittees approach us with mitigation needs. We do the work in advance and can provide the project proponents with a range of options of sites and habitat types in need of restoration or enhancement." Byrd recommended against land trusts seeking out mitigation projects in reaction to inquiries from permittees. Doing so can, in her words, "pull your organization in a direction that does not match your mission or your priorities."[204] But when the land trust is prepared, in advance, with projects that meet its mission and need funding, compensation funds present a valuable opportunity to achieve a land trust's conservation goals.

In these instances, Solano not only provides site protection—through fee title ownership, as well as deed restrictions layered on top of that ownership[205]—but undertakes mitigation work during the active phase and assumes long-term management responsibilities in the long-term stewardship phase. Solano enters into a separate contractual agreement with the permittee, which precisely defines Solano's obligations, timeframe for carrying out these obligations, and liability. It does so in part by defining the circumstances in which Solano is no longer responsible for compensation outcomes—for example, if there are disruptions caused by market failures or acts of God (i.e., "force majeure").[206]

Box 4: One Land Trust - Two Models of Long-Term Stewardship

The Wildlife Heritage Foundation in California holds easements on several mitigation sites. The organization's involvement in projects during the long-term management phase generally takes one of two forms. In the first model – the "oversight and compliance" model – WHF holds the easement and long-term endowment, but the mitigation provider retains all responsibility for managing and maintaining the site in perpetuity. The Foundation conducts annual site visits to determine whether the mitigation provider is meeting its obligations under the long-term management plan and pays the fee title holder for its management/maintenance out of the long-term financing mechanism. In one such example, WHF holds a conservation easement on the Gilsizer Slough Giant Garter Snake Preserve (a conservation bank approved under the federal Endangered Species Act), which is owned by the mitigation provider, Wildlands, Inc. The Foundation is obligated to conduct at least one oversight/compliance site visit per year and pays out funds from the long-term endowment to the bank sponsor to conduct the necessary management, maintenance and monitoring activities called for in the approved long-term management plan.

Under the "management endowment" model, WHF holds the easement and endowment and assumes the long-term management and maintenance obligations. In one example, WHF holds an easement on the Pilarcitos Quarry Preserve. Along with the easement, West Coast Aggregates, Inc. provided WHF with a $329,000 endowment to carry out routine easement monitoring and defense, as well as monitoring of special status species, management of invasive species, and maintenance of water control structures.[1]

[1] Interview with Patrick Shea, Executive Director, Wildlife Heritage Foundation (Jan. 24, 2012).

[204] Byrd, supra note 186.

[205] As discussed in Section 2.4.1.3, "Element 3: Site Protection Instrument," on page 26, the Corps requires that compensatory mitigation project lands be provided long-term protection. Under the mitigation rule, fee title ownership by a nonprofit conservation organization is considered sufficient site protection. 33 C.F.R. § 332.7(a)(1). However, when possible, the Corps seeks to layer site protection mechanisms. As a result, the Corps often asks for deed restrictions or a conservation easement on top of sites owned by conservation organizations. In some cases, Solano's fee title lands are also subject to deed restrictions. Solano is then responsible for adhering to the conditions of the deed restriction. Byrd, supra note 186.

[206] Byrd, supra note 186.

Each project has an associated mitigation plan, approved by regulatory agencies, that outlines the restoration plan for the site, the required management and maintenance activities, the monitoring and reporting requirements, and the responsibilities of the agencies, project proponent, and land trust. The mitigation plan also lays out the budget, including the long-term funding mechanism, and any monitoring and adaptive management obligations. The approved plan is referenced in Solano's contract. Solano does, however, remain liable for meeting the ecological performance standards set out in the mitigation plan.

Like the Solano Land Trust, the Freshwater Land Trust in Alabama also has undertaken mitigation work on the properties it holds in fee. The land trust is currently finalizing an effort to inventory and map the restoration needs of its fee title properties. The inventory describes the problems that exist at its sites, for example, stream banks in need of restoration, the presence of invasive species, or wetland areas that were historically drained and can be restored. Once the inventory is finalized, Freshwater plans to submit the list to the Corps, as well as to the Alabama Department of Environmental Management.

When a permit applicant is in need of site-specific mitigation credits, the Corps or the applicant can then contact Freshwater to see if any of the trust's properties are appropriate to offset the permitted impacts. If the match is a good one, Freshwater may enter into an agreement with the mitigation provider for the restoration or enhancement to be carried out on the land trust's property. Unlike Solano, Freshwater Land Trust does not assume responsibility for the mitigation work itself. Instead, the land trust simply facilitates site selection and holds fee title ownership. As a result, all of the negotiations over the number of credits that the project will generate are worked out between the Corps and the permittee.

Freshwater has applied this model in an agreement on a project that involves the restoration of 1,500 feet of stream channel downstream from an urban area. The stream was restored to its original course, stream banks were restored, and vegetation was anchored. In addition, invasive privet was removed on 40 acres of streambank. A portion of the funds from this project were put into a long-term fund to be used to control invasive species. The site is held in fee by Freshwater, which signed an agreement with a private consultant to carry out the restoration work. The liability for the restoration work was transferred to the consultant. To ensure that the Freshwater Land Trust's land management standards are maintained, the organization requires that, for example, invasive species be removed by mechanical means, if possible, and if not, that any herbicides used in the project be properly handled. "When it comes to stream restoration," says Brian Rushing, the land trust's Executive Director, "we always make sure that whatever work is done on our lands meets our standards for soft engineering and protection of water quality, with environmental sensitivity being the primary focus."[207]

If your organization is considering mitigation projects on its fee ownerships, consider proactively conducting an inventory of your properties' restoration and enhancement needs. As discussed in Section 5.2, "How Will Involvement in The Project of Program Affect Your Organization's Reputation," on page 68, doing so may help your organization communicate to the public how mitigation funds are supporting your conservation mission.

4.5 Beneficiary of a Standby Trust

The Corps requires mitigation providers to provide financial assurances (performance securities) that can fund any remedial activities that may be required during the active phase of a project (Phase II). In addition to establishing these financial assurances, the mitigation sponsor must identify a beneficiary or establish a standby trust agreement. If the Corps determines that the mitigation plan cannot be implemented, then remedial funds would be paid to the beneficiary or into the standby trust to carry out a project approved by

[207] Rushing, supra note 198.

the Corps.[208] It is entirely possible that mitigation providers may seek out land trusts or other conservation organizations to hold the standby trust.

The Georgia Land Trust has negotiated with the Corps and two mitigation providers to act as the beneficiary of letters of credit that provide financial assurance for one wetland and one stream restoration project. One of these projects has been approved, and the land trust holds the easement on the land. The other is in the final stages of Corps approval. Justin Park, staff attorney for the organization, states, "Since adoption of the 2008 Compensatory Mitigation Rule, the Army Corps' Savannah District has been requiring more significant financial assurances for compensation projects, including the designation of back-up parties to administer the mitigation site to completion." Park added that for the two projects they have considered, the land trust is the beneficiary of financial assurances for the construction and performance monitoring of the bank - in other words, "the bankers are now being required to post a bond or letter of credit during the construction and performance—credit generating—phases of the banks. If, in the Corps' discretion, it is determined that the banker is in default and does not cure the deficiency, then the Corps can authorize a draw from the financial assurances and call upon the Georgia Land Trust to administer the funds and carry out the compensatory mitigation project."[209]

4.6 Participant in Restoration

Some land trusts have used mitigation funds to carry out compensation activities – restoration, establishment, enhancement, or preservation – to support the compensatory mitigation obligations of a separate mitigation provider. This roles differs from that described in Section 4.4, "Funding for Restoration," on page 61 because these funds are used to secure protection for lands that are not already protected by a conservation easement or through outright ownership.

Several state in-lieu fee programs, for example, carry out their required compensation by issuing grants to perform compensation work to local governments and local conservation organizations through a "request for proposal" process. In Maine, the state's Department of Environment Protection (MDEP) has sponsored an in-lieu fee program since 2007. The program, which has since been approved under the terms of the 2008 rule, is called the Maine Natural Resource Conservation Program (MNRCP). Although sponsored by the state, the program is administered by The Nature Conservancy. Since its inception, the program has collected more than $5.5 million in fees. The MNRCP also established a Compensation Project Review Committee, which is comprised of several state and federal agencies, as well as non-governmental organizations. On a more or less annual basis, the state, Corps, and The Nature Conservancy "post a notice requesting that compensation project applicants submit a Letter of Intent to apply for grant funding."[210] Applicants must provide detailed information about their proposed projects, which are then evaluated by the Review Committee based on criteria outlined in the program's Compensation Planning Framework. In January 2011, the program issued its third round of grants, totaling $2.4 million, which will support the restoration and protection of wetlands and streams at 17 project sites.[211] Eleven of the 17 projects awarded (60 percent of the funds) went to local and regional land trusts.[212]

One funding recipient was the Sebasticook Regional Land Trust in central Maine. Between 2010 and 2011, the organization received $345,000 from the MNRCP to preserve and enhance more than 830 acres. In 2011,

[208] 33 C.F.R. § 332.3(n)(6).
[209] Park, supra note 192.
[210] MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, STATE OF MAINE – IN LIEU FEE PROGRAM INSTRUMENT (2011), available at http://www.nae.usace.army.mil/Regulatory/Mitigation/In-Lieu/ILFP_ME.pdf.
[211] Press Release, Maine Department of Environmental Protection, Maine DEP, The Nature Conservancy & Army Corps Announces $2.4 Million Awarded to Conserve Natural Resources in Maine, (Jan. 9, 2012), http://www.maine.gov/dep/news/news.html?id=336549.
[212] Press Release, Maine Department of Environmental Protection, Maine DEP, The Nature Conservancy & Army Corps Announces $2.4 Million Awarded to Conserve Natural Resources in Maine, (Jan. 9, 2012), http://www.maine.gov/dep/news/news.html?id=336549.

the land trust received $309,000 to preserve and enhance two parcels. Moulton's Mill is a 440-acre parcel of forested wetland with two miles of undeveloped frontage on Twenty-Five Mile Stream. The land trust's regional conservation plan identified the site as a top priority acquisition, and The Nature Conservancy recognized the site as a statewide conservation priority. Funds from MNRCP provided 100 percent of the dollars needed to purchase the property in fee. In addition to owning the property outright, the land trust entered into a "project agreement" with the Maine Department of Environmental Protection. The project agreement, recorded in the registry of deeds, limits future development on the property; essentially, it functions as a deed restriction.[213]

The 2011 funds also supported the preservation of the 200-acre Sousa Project, located at the junction of the Twenty-Five Mile Stream and the Sebasticook River. The site is a mixture of farmland and woodlot with more than one mile of undeveloped shorefront. The MNRCP funds will be combined with additional state and private monies to purchase the property and remove threats to the wetland resource from agricultural and timber harvesting activities by increasing the size of the buffers around the wetland areas.

Finally, in 2010, the land trust received $36,000 from the program to preserve the Kanokolus Bog North. The landowner donated the parcel to the Sebasticook Regional Land Trust and the funds were used for the boundary survey and to establish a long-term endowment for the property that will cover monitoring the site and any future stewardship projects.

Jennifer Irving, Executive Director of the Sebasticook Regional Land Trust, has found participation in the program very beneficial. "This pool of money has allowed us to preserve some very high value properties we would not have been able to pursue otherwise. In the case of one of the projects, we had already exhausted all other avenues of support," noted Irving. "The Maine Natural Resource Conservation Program was particularly helpful with the mixed-use Sousa Project, allowing us to think outside the box and assemble the funding necessary to bring the project to fruition."[214]

When land trusts are the recipients of funds from an in-lieu fee program, as in the preceding examples, liability for the success of the project remains with the in-lieu fee sponsor. The 2008 rule explicitly states that even if the in-lieu fee sponsor implements its compensation through a request for proposal process or other contracting mechanism, the sponsors itself remains "responsible for the implementation, long-term management, and any required remediation of the restoration, establishment, enhancement, and/or preservation activities…."[215] In the case of the Maine in-lieu fee program, the responsibility for the success of the projects carried out by groups like the Sebasticook Regional Land Trust remains with the sponsor, the Maine Department of Environmental Protection. For this reason, whenever MNRCP awards funds for a conservation easement acquisition, the program requires that the easement provide third-party enforcement rights to the Department and the right of entry for monitoring and oversight to both the Department and the Corps. Likewise, all required management plans for fee acquisitions must be reviewed and approved by the Department of Environmental Protection and the Corps, and the Department is liable in the event any enforcement action is required. Finally, for restoration and enhancement projects, the Corps generally takes the lead role on all annual monitoring visits and follow-up reports.[216]

If your land trust operates in a state with an existing in-lieu fee program (particularly one sponsored by a state agency), you may want to considering inquiring about opportunities to carry out compensation projects with available funds.

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213 Interview with Alexander Mas, The Nature Conservancy, Maine (Apr. 13, 2012).
214 Interview with Jennifer Irving, Executive Director, Sebasticook Regional Land Trust (Apr. 11, 2012).
215 33 C.F.R. § 332.8(l)(3).
216 Mas, supra note 213.

If your land trust is thinking about participating in a compensatory mitigation program or project, such a decision should not be taken lightly. There is a steep learning curve and many factors will need to be weighed. Rightly, your board and staff will have many questions about the opportunities and risks involved. This section will help you evaluate whether to engage in a compensatory mitigation project. In addition, it can help you prepare for the questions you are likely to encounter along the way.

5.1 Is the Project or Program Consistent with Your Organization's Mission and Conservation Goals?

Involvement in compensatory mitigation projects may clearly support your organization's conservation mission. Alternatively, it may divert your time, attention, and resources and fail to advance your organization's overall mission. Land trusts evaluating whether to engage in a mitigation program or project should consider (before initiating or at regular intervals) whether doing so supports their mission. Without such a routine evaluation, your organization may run the risk of getting off track, making ineffective use of your resources, or saying one thing and doing another.

Undertaking such an evaluation is perhaps the most essential step your group can take when faced with this decision. A land trust should refer to its project selection criteria to ensure that a proposed mitigation project advances its mission. For example, Nicole Byrd of the Solano Land Trust encourages conservation organizations to ensure that mitigation projects have "a clear public benefit, other than helping a developer meet its mitigation requirements."[217] Reviewing your project selection criteria will help you articulate more clearly to the public your group's decision and will help you guard against negative public perception. For more on public perception, see Section 5.2, "How Will Involvement in the Project or Program Affect Your Organization's Reputation?," on page 68.

While how a mitigation project could conflict with your land trust's mission may not seem self-evident, consider the following example. In many Corps districts, the Corps' model conservation easement for compensatory mitigations sites states: "There shall be no construction of roads, trails or walkways" on the site unless the Corps and the easement holder give their written approval.[218] This prohibition means that your land trust may not be able to develop trail systems on the property for use by the public. If a large part of your land trust's mission is to facilitate public enjoyment of conservation lands, participating in compensatory mitigation projects may not align as well with your mission.

Standard 1 (Mission) of *Land Trust Standards and Practices* states that land trusts should have a clear mission that serves a public interest, and all programs should support that mission.[219] Practice 1B (Planning and Evaluation) asks land trusts to routinely evaluate programs, goals, and activities to be sure they are consistent with the mission,[220] and Practice 8B (Project Selection and Criteria) requires land trusts to have a defined process for selecting land and easement projects. Ideally, your land trust will have the necessary tools in place to evaluate whether a compensatory mitigation project or program supports your organizational mission and meets your selection criteria.

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[217] Byrd, supra note 186.

[218] See, e.g., NEW YORK DISTRICT, U.S. ARMY CORPS OF ENGINEERS, CONSERVATION EASEMENT (2012), http://www.nan.usace.army.mil/business/buslinks/regulat/pnotices/NYMCEas.pdf; WILMINGTON DISTRICT, U.S. ARMY CORPS OF ENGINEERS, MODEL CONSERVATION EASEMENT (2003), http://www.saw.usace.army.mil/wetlands/mitigation/conservation_easement_r8-03.pdf; MOBILE DISTRICT, U.S. ARMY CORPS OF ENGINEERS, MODEL CONSERVATION EASEMENT AND ACCEPTANCE (FOR USE WITH INDIVIDUAL PERMITS) (2012), http://www.sam.usace.army.mil/RD/reg/mitigation.htm; CHARLESTON DISTRICT, U.S. ARMY CORPS OF ENGINEERS, CONSERVATION EASEMENT MODEL OF SEPTEMBER 2010 (2010), http://www.sac.usace.army.mil/assets/pdf/regulatory/mitigation/Model Conservation Easement 092210.pdf; CALIFORNIA MULTI-AGENCY PRODUCT DELIVERY TEAM, CONSERVATION EASEMENT DEED FOR MITIGATION AND CONSERVATION BANKS IN CALIFORNIA (2010), http://www.dfg.ca.gov/habcon/conplan/mitbank/ [hereinafter CALIFORNIA MULTI-AGENCY PRODUCT DELIVERY TEAM – CONSERVATION EASEMENT DEED].

[219] LAND TRUST ALLIANCE, LAND TRUST STANDARDS AND PRACTICES 1 (2004) [hereinafter LAND TRUST STANDARDS AND PRACTICES].

[220] LAND TRUST STANDARDS AND PRACTICES, Practice 1B. Planning and Evaluation.

As part of this evaluation, you should articulate how the project or program supports existing conservation goals and relates to any conservation or recreational plans developed by you or your partner organizations. You may also want to evaluate whether the size of the parcel is sufficient to contribute significantly to your ecological or social goals and whether it contributes to landscape connectivity (e.g., habitat or trail connectivity). Lastly, consider how your involvement might help to ensure that compensatory mitigation projects are adequately protected and managed by stewardship professionals.

For more information on development of a mission, see Practice 1A. For more on establishing strategic goals for implementing your mission and routinely evaluating programs, goals, and activities to be sure they are consistent with the mission, see Practice 1B and the Standards and Practices Curriculum Course, "Mission, Planning and Capacity." For more information on project selection and criteria, see Practice 8B and the Standards and Practices Curriculum course, "Evaluating and Selecting Conservation Projects."

5.1.1 Examples from the Field

Many land trusts across the country have found that they can advance their conservation goals through engagement in compensatory mitigation. In so doing, land trusts have considered both what sites are appropriate to meet their goals and also what roles they might play at a given site.

As described in Section 4.1, "Mitigation Provider," on page 52, The Nature Conservancy in Virginia has been very successful at leveraging mitigation funds—generated through the sponsorship of a statewide in-lieu fee program—for conservation. Other land trusts, such as The Wetlands Conservancy in Oregon, have advanced their conservation goals through participation in the watershed approach and site selection. *For more information on the watershed approach, site selection, and TWC's role, see Section 4.2, "The Watershed Approach, Site Selection, and Project Design," on page 54.*

Most significantly, land trusts across the country have successfully advanced their conservation goals through involvement in long-term stewardship of compensatory mitigation projects. *For more information on the long-term stewardship role, see Section 4.3, "Long-Term Stewardship Responsibilities," on page 56.* The most common role land trusts play in supporting the long-term stewardship of compensation sites is holding easements on mitigation lands. The Wetlands Conservancy, for example, currently holds easements on several phases of a wetland mitigation bank that includes wetlands identified as among Oregon's Greatest Wetlands.[221] The acquisition of wetlands identified by the Oregon's Greatest Wetlands program is central to TWC's strategic plan, so these sites clearly advance that organization's conservation goals.[222] *For more information on the role of easement holder see Section 4.3.2, "Easement Holder," on page 57.*

Several additional land trusts have supported long-term stewardship of compensation projects by accepting long-term management and maintenance responsibilities. In Alabama, the Freshwater Land Trust has advanced its conservation mission by securing funds from permittees, which have been used to restore aquatic resources on lands the group holds in fee. *For more information on conducting compensatory mitigation projects on your fee title lands see Section 4.4, "Funding for Restoration," on page 61.* And in Maine, the Brunswick-Topsham Land Trust has been successful at advancing its conservation mission as a participant in mitigation. Steve Walker, the group's vice president, states that mitigation

[221] Lev, supra note 134.
[222] The Wetlands Conservancy, Strategic Plan, http://oregonwetlands.net/index.php?option=com_content&view=article&id=8&Itemid=16 (last visited May 9, 2012).

"should be seen as an opportunity to protect and restore high priority projects." In Maine, he adds, "mitigation has proven to be a good way to direct funds to priority projects."[223]

5.1.2 Professionalization of Long-Term Stewardship

The number of compensatory mitigation projects conducted nationwide continues to grow (see Chart 1). These sites all need to be protected in perpetuity. The Corps processed 84,000 permits in 2010,[224] and around 45,000 acres of compensatory mitigation are approved every year.[225] The impacts approved by the Corps are, in most cases, permanent. Ideally, the compensation that is provided in response to those impacts is permanent as well. However, most mitigation providers are not long-term stewardship professionals. Many are developers, consultants, or state infrastructure agencies. By bringing your stewardship/conservation expertise to the mitigation table, your individual land trust can increase the likelihood that these sites are protected in perpetuity and that the sites' conservation values are maintained. Further, if the land trust is a member of the Land Trust Alliance and has adopted their Standards and Practices, the land trust brings even greater credibility and value to the mitigation process and project.

For example, The Conservation Foundation in Illinois began accepting easements on mitigation lands due to concerns that mitigation providers – in many cases, commercial developers – were not providing adequate protection of the sites. The organization now holds two easements on mitigation lands that encompass 127 acres in northeastern Illinois. Brook McDonald, President and CEO of the Foundation, found that, "when developers are in charge, you see a lot of corners cut." However, land trusts, particularly those that follow *Land Trust Standards and Practices,* can help ensure that those shortcuts are not taken. McDonald adds, "When responsibility for long-term easement monitoring is handed over to a group like us, the result is more professional."[226]

5.2 How Will Involvement in the Project or Program Affect Your Organization's Reputation and What are the Potential Conflicts of Interest?

The § 404 program is complicated and the rules filled with jargon. Most members of the public poorly understand the hurdles a developer must overcome to secure a permit from the Corps to fill a wetland or stream. As a result, it is not surprising that laypeople view a land trust's engagement in mitigation as facilitating development. People often believe that permittees get approval for permits *because* mitigation options exist. But this is not the case. The project will proceed with or without a land trust's involvement. The questions that remain are: who will carry out that compensation, where will it be located, will the project contribute to a larger conservation vision, and who will provide professional, long-term stewardship of the site in perpetuity. Given this gap in public perception, it is important that your land trust both understand the permitting process and be able to clearly articulate that process and your role in it. At the same time, sensitivity to public perception may impact how you assess the projects you engage in and may lead your land trust to favor some over others. *For more on the permitting process see Section 2.2, "The Impact Site: How the Corps Evaluates a Proposed Permit," on page 14.*

Involvement in mitigation projects can also raise the potential for conflicts of interest. Your organization may have long-term relationships with private mitigation providers and private entities that may one day be a permittee. These for-profit groups may propose projects that have garnered public opposition. Many of these reputational and conflict of interest issues may be resolved through the development and execution of a sound policy guiding your evaluation of mitigation projects.

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[223] Walker, supra 185.

[224] U.S. ARMY CORPS OF ENGINEERS, ANNUAL REPORT OF THE SECRETARY: FY 2010 (2010), http://cdm15141.contentdm.oclc.org/utils/getfile/collection/p16021coll6/id/32/filename/33.pdf.

[225] Based on a review of the U.S. Army Corps of Engineers' Annual Reports of the Secretary from FY 2006-2010 and data provided by the Corps in 2003.

[226] Interview with Brook McDonald, President and CEO, The Conservation Foundation (Apr. 26, 2012).

One way the Solano Land Trust in California has addressed the public perception that its land trust is indirectly supporting development impacts is by developing an objective mitigation policy that allows the organization to evaluate the merits of engaging in a project without participating in the discussions about permit issuance. Solano's policy includes four steps to avoid misperceptions about its involvement in mitigation:

1. Proactively describe the decision to accept a mitigation property, and describe the value of the conservation lands, the natural resources that will be protected through the project, and how the project will advance the organization's mission
2. Carefully limit the organization's role in mitigation to avoid any actual involvement in facilitating projects (i.e., avoid involvement prior to the permitting agency's determination of the mitigation requirements)
3. Adopt a clear statement that the organization reserves the right to deny involvement in individual projects that do not meet the assessment criteria (e.g., the permit will lead to the destruction of irreplaceable resources or the project has garnered significant public opposition)
4. Ensure, through appropriate financial and accounting procedures, that the organization captures all of the project costs so that it does not subsidize the cost of a permittee's compensatory mitigation requirement[227]

Together, these four steps help Solano avoid the perception that it is facilitating development. Recently, for example, Walmart inquired whether Solano had any preserves in need of restoration that could help mitigate the impacts of a proposed store in Suisun City. Subsequent discussions between Walmart and Solano about potential opportunities at the land trust's Lynch Canyon property drew attention from the local press. Having an objective mitigation policy in place, however, has allowed the organization's Executive Director, Nicole Byrd, to confirm that the organization remains entirely removed from the permitting process and the land trust's involvement does not indicate either support for or opposition to permit approval. In addition, the policy clarifies that Solano will not engage in any projects unless the organization has determined that doing so will advance its conservation mission.

Solano's experience, as well as the information in the preceding sections, provides the foundation for land trusts to develop and apply practices that prepare you to communicate with the public why you are involved in a mitigation project. The development of a clear mitigation policy dovetails well with written selection criteria that can be used to determine whether a project is eligible for your organization's consideration and is consistent with your mission.[228] If you have already developed these criteria for your typical conservation projects, development of similar criteria for mitigation sites will be far easier.

5.3 Will Involvement in the Project or Program Require New Skills and the Commitment of More Time for Your Organization?

As your land trust decides whether to engage in a compensatory mitigation program or project, the issue of appropriate skills and capacity should be a key consideration. The development and administration of § 404 projects or programs poses unique challenges and requires unique, often technical, expertise. To participate in compensatory mitigation your land trust must have, or must be able to develop, the necessary tools.

[227] SOLANO LAND TRUST, MITIGATION PROGRAM OF THE SOLANO LAND TRUST (2004).
[228] LAND TRUST STANDARDS AND PRACTICES, Practice 8B. Project Selection and Criteria.

5.3.1 Evaluation of the Areas of Expertise Needed

Land Trust Standards and Practices supports such an evaluation. Standard 7 (Volunteers, Staff and Consultants) states that land trusts should have in place volunteers, staff and/or consultants with appropriate skills and in sufficient numbers to carry out their programs.[229] All land trusts must engage outside expert help in the event they do not have sufficient expertise in-house and must be sure to select projects that are consistent with their capacity. The areas of expertise needed will, in part, depend on the role or roles you choose to play. They may, however, include people with appropriate regulatory, legal, financial, ecological, and management (both program management and preserve/land management) expertise.

After you've made an initial determination of how mitigation will impact staffing needs, it is important to routinely reassess; these needs may change over the course of a mitigation project or as you take on different mitigation projects. Practice 7A (Capacity) asks land trusts to regularly evaluate their programs, activities, and long-term responsibilities to ensure that their organizations have sufficient volunteers, staff, and/or consultants to carry out their work.[230] Some or all of this evaluation may be a part of the annual budgeting and work planning processes (Practice 6A) or a part of the trust's strategic planning process (Practice 1B).
Once you have identified areas of necessary expertise, it will still take time to get up to speed. Long-term success requires an investment in on-going staff training and a commitment to maintaining this expertise on staff or through other means into the future. The following areas of expertise are essential to aid your evaluation.

5.3.1.1 Regulatory Expertise

To participate in compensatory mitigation programs professionally and effectively, you will need staff with a solid understanding of this rather obscure area of environmental policy. As Nicole Byrd, Executive Director of the Solano Land Trust, states, "Without someone on staff who is well-versed in the regulatory 'business model,' working with the regulators can be an enormous amount of work."[231]

5.3.1.2 Legal Expertise: Site Protection and Long-Term Stewardship

Assuming long-term stewardship obligations on a mitigation site also poses distinct legal challenges, whether your organization is taking on responsibilities for easement monitoring and defense, long-term management and maintenance, administration of long-term stewardship funds, or all of these functions. In all cases, your land trust will be dealing with a site that has been restored or enhanced and may not be self-sustaining. These unique characteristics can change the nature of site stewardship in ways that may be unfamiliar to your land trust. The less familiar you are with the potential implications, the greater the chance that you will end up assuming more liability than you expect, so having legal experts available or on staff is very important.

Legal expertise is essential to negotiating, managing, and enforcing a mitigation easement, negotiating the terms of a deed restriction, structuring appropriate long-term financing mechanisms, or assessing the risks of fee title ownership of mitigation lands. These activities bear many similarities to those for traditional easements, deed restrictions, or fee title acquisitions, but there are also a number of significant differences. Likewise, retaining experienced legal counsel is essential to ensuring that the terms of a long-term management plan do not create unreasonable risks of liability, such as the inclusion of terms that would make the land trust liable in the event the mitigation work fails and the site cannot continue to meet its performance standards. *For more information*

[229] LAND TRUST STANDARDS AND PRACTICES, supra note 219, at 7.
[230] LAND TRUST STANDARDS AND PRACTICES, Practice 7A. Capacity.
[231] Byrd, supra note 186.

on the challenges of crafting appropriate site protection instruments, see Section 6, "Site Protection Instruments: Technical Guide," on page 85. For more information on the challenges of engagement on long-term management, see Section 5.4, "How Will Involvement in Long-Term Stewardship Affect Your Organization's Exposure to Risk," on page 74. See also Practice 9A (Legal Review and Technical Expertise).

5.3.1.3 Program Management, Financial Management, and Accounting Expertise

The § 404 program has very specific requirements for financial management, financial accounting, and credit accounting. If you are considering serving in one of the many roles that are affected by these requirements, having this type of expertise at the ready will be crucial. The amount of staff, volunteer, or consultant time that will need to be devoted to this area will depend entirely on the role or roles you assume. For example, the financial management and accounting requirements for mitigation bankers and in-lieu fee mitigation providers are extensive (see Section 2.4.1.9, "Element 9: Monitoring (and Reporting) Requirements," on page 30 and Section 2.4.1.12, "Element 12: Financial Assurances," on page 33).

In addition, if your organization is anticipating launching a mitigation program (i.e., sponsoring an in-lieu fee program or taking on mitigation easements and/or long-term management obligations on a regular basis), rather than simply taking on a single project, you may need to designate or consider hiring a knowledgeable program manager who can oversee all aspects of the program and serve as the lead in communicating about individual projects to the board and public.

5.3.1.4 Restoration Ecology and Conservation Planning Expertise

Depending on which roles you take on, having ecological expertise at your disposal can be advantageous—and is sometimes necessary. If, for example, your organization is planning to act as a mitigation provider or otherwise to participate in restoration, you will need to have the capacity to design mitigation projects. In either case, you will need to carry out the on-the-ground restoration, establishment, or enhancement activities called for in the mitigation plan (and, in the case of mitigation providers, develop the detailed mitigation work plan). Many land trusts that play these roles contract out planning and implementation activities. But even if these services are outsourced, it remains essential that you maintain significant oversight of the project planning and implementation to ensure that you minimize your liability.

If you choose to participate in the watershed approach or site selection, you will need staff, volunteers, or consultants with expertise in conservation planning. If you accept long-term management and maintenance responsibilities on a site, you will need ecological expertise to support your participation in the design of management goals and tasks that will guarantee the ecological health of the site in perpetuity. Long-term stewardship fund holders will need their own experts to review these management plans.

Even if you only plan to hold fee title to a mitigation site or hold an easement, you must evaluate the mitigation plan, maintenance plan, ecological performance standards, and other design aspects of the project to determine how likely it is that the project will meet its performance standards, be ecologically successful, and be self-sustaining. How much due diligence you commit to this review will depend on the role you play. The greater your concerns about the success of the project, the greater the need to enlist legal counsel who can put in place appropriate limits on your liability for ecological and financial risk. *For more information on legal expertise,see Section 5.4, "How Will Involvement in Long-Term Stewardship Affect Your Organization's Exposure to Risk?," on page 74.*

In any of these cases, your organization will need to retain the services of those with expertise in restoration ecology. For land trusts that hope to carry out this due diligence in-house, some of the considerations to take into account can be found in *Appendix A*.

5.3.1.5 Preserve Managers and/or Land Management

Finally, if your organization is taking on the long-term management and maintenance of one or more mitigation sites, you may need to designate a preserve manager and/or land manager. The personnel requirements will depend on the size and complexity of the site and its associated management requirements, as well as the number of sites for which you have assumed responsibility.

5.3.2 Evaluation of the Number of Staff and Amount of Time Needed

To evaluate your organization's staffing, volunteer, and contractor needs, you need to consider the amount of time that you need to devote to these programs and projects over and above your other conservation activities. Some issues to consider include:

5.3.2.1 Building and Maintaining Relationships with Regulatory Agencies and Mitigation Providers

Effective participation in mitigation entails a significant investment of time in building relationships with the relevant regulatory agencies and, in some cases, mitigation providers. The time your land trust will need to devote depends on your existing familiarity and comfort with these parties, as well as the type of project with which you will be involved. Developing a good relationship with the Corps can be especially challenging because, even in one state, you may be dealing with more than one Corps district and Corps policies can vary from district to district. *For more information on state and regional policy differences, see Section 2.5, " Corps District Mitigation Policies and the Role of States," on page 37.*

Janice Allen of the North Carolina Coastal Land Trust enforces this point by noting, "Relationships are very important." Allen adds that devoting time to building relationships with the regulatory agencies upfront can help smooth the way to a positive, productive relationship.[232] The alternative, describes Nicole Byrd, Executive Director of the Solano Land Trust, is "time, expense, frustration, and an inability to get things done. Without a relationship with the agency, familiarity with the process, or someone on staff who is well-versed in the regulatory 'business model,' working with the regulators can be an enormous amount of work."[233] But when you reach the point where "the Corps sees your land trust as critical to accomplishing its goals," says Dave Mitchell, Conservation Director of the Great Land Trust, "the relationship is mutually beneficial."[234]

In addition, for land trusts that are interested in establishing a mitigation program to carry out mitigation projects on their fee title lands, hold multiple mitigation easements, or hold multiple long-term stewardship funds, it is key to establish and maintain ongoing relationships with mitigation providers, as well as the relevant regulatory agencies. If the mitigation providers and regulatory agencies are familiar with your organization and know that you have the interest and capacity to play a role in mitigation, you are far more likely to have project opportunities come your way.

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[232] Allen, supra note 182.
[233] Byrd, supra note 186.
[234] Mitchell, supra note 191.

5.3.2.2 Negotiation, Cooperation, and Review

One frequent challenge is the timeframe within which decisions regarding compensatory mitigation projects take place. The timeframe for coordinating the design of a compensation project, securing approval of projects, coming to agreement on the terms of an easement on a compensation property, and other matters can vary among Corps districts. Land trusts that have a pre-existing relationship with the regulatory agencies find that the process goes more quickly and smoothly. Even so, the time it takes to prepare and execute mitigation projects is substantially greater than that for traditional conservation projects.

For example, if your organization is participating in a restoration or enhancement project – even if you have significant expertise in wetland or stream restoration or enhancement – you will need to work with the Corps and IRT to develop a mitigation work plan, appropriate ecological performance standards, an adaptive management plan, and a method for determining credits. All of these components of a mitigation project are likely to be over and above what you might develop for a less complex restoration or enhancement project on a conservation site.

David Urban, Director of Operations at Ecosystem Investment Partners, has worked on many mitigation projects and has lots of experience working with the Corps. "There's a huge cost factor," notes Urban, "in terms of time, money, and negotiations, to get a compensatory mitigation project approved by the Corps."[235] Consequently, land trusts—especially those engaging with mitigation sites and the regulatory agencies for the first time—should be prepared to devote more staff time to meetings and conversations with the Corps and other parties, and must expect that the preparation of permits, easements, agreements, and other management details at the site, from start to finish, will have a notably longer timeframe than that of a traditional conservation project.

Mark Steinbach, Executive Director, Texas Land Conservancy notes, "In terms of timelines, general involvement with federal agencies will increase your timeframe by two- or three-fold."[236]

5.3.2.3 Easement Drafting, Monitoring, and Defense

As noted, drafting a mitigation easement can have significant time and staffing implications for your land trust. The Corps may require that your organization conform to a model mitigation easement developed by the Corps or IRT *(see Section 6.2, "Mitigation Easement Language," on page 94)* and, at a minimum, will require Corps or IRT review and approval of any easement drafted by your land trust. Both situations will necessitate expert review of the new template or new terms required by the Corps and lengthier three-party negotiations with the Corps and the landowner (and possibly other parties).

Monitoring and enforcing mitigation easements can also impose new costs. Mitigation easements may have more extensive reporting obligations than traditional easements, for example, requiring more detailed annual monitoring reports or requiring the inclusion of the Corps on all communications with the landowner. Mitigation easements also require Corps approval before the land trust can amend the easement—which may include what your land trust might consider minor technical changes, like updating easement terms to comport with changes to state or local law or correcting scrivener's errors. Requesting and awaiting Corps approval in these instances means more time and more resources to complete easement stewardship responsibilities.

[235] Interview with David Urban, Director of Operations, Ecosystem Investment Partners (Feb. 9, 2012).
[236] Steinbach, supra note 136.

Finally, the Corps' right to enforce the terms of the mitigation easement independently could increase the time and staff needed for easement enforcement. While in nearly all circumstances the Corps' position as an extra enforcer is beneficial to land trusts, coordinating with the Corps in the event of a possible or actual violation makes easement defense more complicated. Most complicated – and resource intensive – would be a situation in which the Corps decides to get involved in easement enforcement in a way that is contrary to the land trust's enforcement policies, or where the Corps uses its independent enforcement power to enforce the easement's terms *against* the land trust (though land trusts report that they have never heard of this occurring in actuality). These are low probability events, but because they are also of high consequence, land trusts should consider how they might impact staff time for a mitigation project.

5.3.2.4 Long-Term Management and Maintenance

As with many other components of compensatory mitigation, even if your land trust is already experienced in managing and maintaining conservation properties, carrying out these tasks on a compensatory mitigation site may mean an additional time burden. The Corps may require detailed ecological monitoring and reporting, in addition to more direct activities like ongoing vegetation and species management. If the long-term management financing is held by another entity – such as the mitigation provider or another party – you will likely be limited with respect to the amount of funds you may draw from this account on an annual basis to the amount specified in the long-term management plan (absent the specific consent of the Corps for any "overdraw"). The long-term stewardship fund holder may also require that you submit an annual management plan to justify your expenditures.

5.3.2.5 Public Relations and Outreach

As discussed below in Section 5.4, your organization may decide that before you become involved in compensatory mitigation programs or projects, you need to adopt and implement new policies and procedures that will allow you to communicate effectively to the public about your participation in these efforts. Developing and applying these policies and procedures will also consume additional time. So too will the job of proactively communicating the reasons for your involvement in compensatory mitigation programs and projects.

5.4 How Will Involvement in Long-Term Stewardship Affect Your Organization's Exposure to Risk?

Your organization may have expertise in negotiating deals, crafting conservation easements and deed restrictions, managing stewardship funds, and monitoring and enforcing easements. But assuming responsibilities at a conservation site that is part of the federal compensatory mitigation program does not come without risk. Much of this risk can be minimized by conducting due diligence and adopting sound financial practices – both with respect to how you manage funds and ensuring you have sufficient funding to meet your mitigation-related obligations. As with any land and easement transaction, land trusts should adhere to the appropriate due diligence review, including environment due diligence for hazardous materials. *For more information on environmental due diligence, see Practice 9C.*[237]

[237] LAND TRUST STANDARDS AND PRACTICES, Practice 9C. Environmental Due Diligence for Hazardous Materials.

5.4.1 Mitigation Easements and Increased Rates of Violation

Existing research indicates that mitigation easements may be prone to increased rates of violation compared to traditional easements. Unlike landowners who donate or sell easements voluntarily, mitigation easements are the product of a regulatory system that exacts these easements as a permit condition.[238] As a result, the fee title owner of mitigation easements may not share the conservation values or desires to preserve the landscape that motivate traditional donors. Janice Allen of the North Carolina Coastal Land Trust notes, "Owners of traditional easement sites often have emotional reasons for engaging with us—for example, the land has been in the family for a long time or they are very conservation-minded. With mitigation banks, however, land protection is done to meet regulatory requirements, and bankers are primarily motivated by profit."[239]

In this respect, bankers and other fee title owners of mitigation property may be more similar to second- or third-generation owners of donated property, who may have bought or inherited the land without sharing the original donor's ideals. Surveys of easement violations on donated lands confirm that most violations take place under second- or third-generation owners.[240] Future owners are also more likely to challenge the easement in court.[241] Your organization should take into serious consideration the fact that mitigation easements will likely be violated and challenged more frequently than donated easements.

Ultimately, whether any particular mitigation easement will be prone to violations will depend in large part on the identity of the landowner and that landowner's commitment to the stewardship of conservation values in perpetuity.

5.4.2 The Transfer of Fee Title to a New Party

At mitigation bank properties, easement violation concerns are amplified by the fact that the mitigation provider may desire to transfer fee title ownership of the property once all of the credits have been sold. At that point, the land has little value to the banker, and bankers generally do not see themselves as long-term property managers. Mark Steinbach of the Texas Land Conservancy emphasizes that given the heavy restrictions on these properties, land trusts should consider at the outset "what the succession plan for the site will be and whether the mitigation banker has an exit strategy. A lot of banks," adds Steinbach, "just assume they'll give the land trust fee title, but we, for one, won't accept it."[242] Without an acceptable buyer lined up, bankers may turn to less acceptable buyers.

5.4.3 The Size of the Enforcement Guns

The private mitigation bankers or permittee-responsible parties that hold mitigation lands in fee may have more resources at their disposal to challenge easements or fight enforcement actions against them. Traditional easements are more likely to come from individual landowners or other nonprofit conservation organizations, while those seeking conservation easements for compensatory mitigation may be large entities—perhaps even multinational corporations with more resources to oppose the land

[238] See Jessica Owley Lippmann, Exacted Conservation Easements: The Hard Case of Endangered Species Protection, 19 J. ENVTL. L. & LITIG. 293 (2004), available at http://www.law.uoregon.edu/org/jell/docs/192/Owley.pdf.

[239] Allen, supra note 182.

[240] Lippmann, supra note 238, at 333-34; Melissa Danskin, Land Trust Alliance, Conservation Easement Violations: Results from a Study of Land Trusts, EXCHANGE 157, Winter 2000, available at http://tlc.lta.org/documents/3692/file; Jason B. van Doren, Land Trust Alliance, Summary of the 2004 Conservation Easement Violations & Amendments Study, EXCHANGE, 162 Summer 2005, available at http://tlc.lta.org/documents/4755/file; Brenda Biondo, Land Trust Alliance, Dealing with Conservation Easement Violations, EXCHANGE 5, Winter 1997, available at http://tlc.lta.org/documents/3990/file.

[241] Lippmann, supra note 238, at 333-34; Danskin, supra note 240; Biondo, supra note 240.

[242] Steinbach, supra note 136.

trust. As Nicole Byrd of the Solano Land Trust put it, when enforcing a mitigation easement, "someone on the other side may have a lot bigger guns."[243]

On the other hand, since the Corps retains oversight and enforcement responsibilities on mitigation properties, land trusts have some big guns of their own. If sites continue to be held in fee by mitigation providers, these parties may be less likely to violate easements if they perceive that the Corps is actively monitoring their compliance under its § 404 and easement authority (though land trusts suggest that such active monitoring by the Corps is unlikely to occur as easements age). The Corps can be a useful and powerful source of leverage to ensure that violations are addressed before formal enforcement actions need to be taken.

5.4.4 Requirements to Layer Site Protection Mechanisms

Compensatory mitigation rules note that fee title ownership by a conservation organization is considered sufficient for site protection.[244] However, without another layer of protection, the Corps does not have any recourse if the conservation organization fails to live up to its stated purpose. As a result, the Corps often requires that additional layers of site protection be placed on a site held in fee to ensure conservation in perpetuity.

If the regulatory agency seeks deed restrictions, your land trust will need to negotiate those restrictions. If your land trust already owns the site or will acquire it from a donor, you will need to ensure that the regulatory restrictions are compatible with the land donor or funder's original intent for the property—recreational purposes, for example.[245] To do so, you may need to include the donor or funder in this negotiation and you may need to memorialize your understanding with the Corps in a separate agreement.

Alternatively, if the Corps requires your organization to donate a conservation easement to another organization on the property you hold in fee, your land trust will need to assess the added burdens created by having another entity involved as an enforcer. In such a case, it is especially important that your vision for the property matches the vision of the third-party organization and the terms of the easement. Finally, if the Corps seeks a reversionary clause in the deed of the land, your land trust should carefully review the terms so that it is very clear what types of activity could trigger a reversion of the property to its previous owner.

5.4.5 Implied Responsibility for Providing Aquatic Resource Functions

Land trusts that hold title to mitigation properties – even if you have not accepted long-term management responsibilities – should be particularly vigilant to ensure that you have not taken on any liability related to the success of the mitigation at the site. It is essential that the long-term management plan specify the long-term responsibilities and which entity has accepted liability for these activities. Transformations at the site as a result of climate change—for example, new invasive species or a loss of restored wetland functions—could create similar headaches if liability for unforeseen impacts at the site is not clear.

[243] Byrd, supra note 186
[244] 33 C.F.R. § 332.7(a)(1).
[245] Byrd, supra note 186.

5.4.6 Potential Impacts from Site Failure on Adjacent Properties

Another possibility is tort liability under the traditional common law of trespass or nuisance if, for example, some of the mitigation measures on the site fail and result in intrusions onto neighboring lands or inconveniences for neighboring landowners. Patrick Shea, Executive Director of the Wildlife Heritage Foundation, notes, "If you take on mitigation that has some kind of restoration component, there is always the risk of a berm collapsing or a levee breaking."[246]

5.4.7 Enforcement of Deed Restrictions

A land trust will only be subject to deed restrictions if it is accepting fee title ownership of a mitigation property. Deed restrictions can create additional legal and management obstacles on top of the traditional concerns of fee title ownership. First, accepting a property with deed restrictions means that any enforcement action would be taken *against the land trust*. While a well-managed land trust is unlikely to act in a way that would trigger an enforcement action, it is important to note this role reversal in comparison to conservation easements and to deed restrictions your land trust may hold on non-mitigation properties.

5.4.8 Deed Restrictions in States with Marketable Title Acts

Deed restrictions can create headaches in states with marketable title acts or other statutes that affect limitations placed in deeds. Marketable title acts erase limitations on the deed after long periods of time. To prevent this, the Corps may require the land trust or other fee title owner to periodically rerecord the deed (and so reset the clock for the extinguishment of the deed restrictions). A marketable title act would not come into play where the land trust owns fee title unless and until the land trust transfers landownership to another entity, which your land trust may not expect to do. But if the land trust is the long-term steward on land owned by a private party, a marketable title act could allow a landowner to claim, in time, that their use of the land is no longer limited by the terms of the deed restriction. In either case, the land trust will need to devote time and resources to tracking the status of the deed restriction and ensuring that it remains viable.

5.4.9 Level of Specificity in Long-Term Management Plans

If you will be acting as the long-term manager of a compensatory mitigation site, another important consideration is how to design a long-term management plan that clearly defines your management and maintenance obligations while also preserving your land trust's flexibility to adapt your management strategies to meet the evolving needs of the site. There is risk inherent in the level of vagueness or specificity of the long-term management plan. On one hand, vague language and ill-defined management tasks may increase the likelihood that the regulatory agency will expect the long-term manager to carry out tasks not anticipated at the time that the long-term management plan was crafted. Vague tasks also increase the possibility that the land trust could become subject to liability for perceived failures to effectively implement the plan. For example, vague statements such as those requiring the long-term manager to "control invasive species," fail to identify the specific species that must be controlled, the degree of invasion that is permissible (i.e., percent basal coverage), and how to address invasion by species currently off the radar screen, or invasion by species that are effectively uncontrollable because, for example, they are firmly established on surrounding lands. Vague language can also make it very difficult for a land trust to estimate long-term management costs, and could thus vastly increase the risk that the land trust will not have enough money to meet long-term management goals.

[246] Shea, supra note 138.

On the other hand, long-term management is carried out over the long term and it is difficult to anticipate the management needs of a site into the future. Highly specific language may make it more difficult for you to address changing site conditions – such as the introduction of a new invasive species – that were not on the horizon when the long-term management plan was written. The regulatory agencies may execute their authority to provide strict oversight of the use of long-term management funds and any deviation from the use of those funds from the tasks outlined in the long-term management plan may necessitate the modification or amendment of the plan.

Consequently, land trusts must carefully weigh the level of specificity that should be reflected in the long-term management plans. Finding the right balance may require a significant investment of time and resources, as well as the input of expert advice. If you will be serving as the long-term manager of a mitigation site, your land trust should consider including language in this section that limits your liability to perform long-term management only to the extent funds are made available to the land steward from the long-term financing mechanism to cover such management activities.

For more information on crafting long-term management plans see Section 7, "Long-Term Management Plans: Technical Guide," on page 105.

5.4.10 Consistency Between Required Long-Term Management Actions and Other Site Restrictions

Land trusts should ensure that long-term management plans are compatible with the other documents associated with the mitigation site, particularly the easement or other means of site protection. Without careful coordination, the tasks envisioned in the management plan could be barred by the terms of the easement. Similarly, the easement may provide for or permit the continuation of some compatible uses on the property—for example, hunting. The long-term management plan must contemplate and account for the proposed uses of the site allowed for in the easement and ensure that long-term management actions will complement – not conflict – with allowable uses. This consistency would also be necessary if the site were under an alternative means of site protection, but in the mitigation context, regulatory agencies will also be parties to the review of the long-term management plan and its implementation. Coordination should also extend to the terms of the permit or instrument and any other documents or agreements associated with the site.

5.4.11 Compliance of Long-Term Management Actions with Other Regulatory Provisions

In preparing the long-term management plan, your land trust also needs to ensure that the plan's terms are compatible with current local, state, and federal law. For example, particular kinds of actions on the site might require a permit—like controlled burning for fire-dependent species. Management actions envisioned at the site might also require that your land trust secure water rights to be successful.[247] Given the breadth of possible concerns and the variability of sites, there is no easy checklist for all the considerations that should inform your long-term management plan. As a result, it is all the more important that your land trust consult with appropriate scientific, legal, and land management experts in crafting your plan.

[247] Where that is the case, the plan should also address the circumstance where the manager is unable to secure water rights or loses water rights, and cannot secure replacement water.

5.4.12 Possible Legal Liability for Ecological Failure

Another challenge in evaluating your engagement as a long-term manager is the potential for legal liability arising from your obligations under the management plan. Land trusts should carefully review the management plan with their legal counsel to ensure that they understand the relationship of the obligations it creates and the liability for failure to perform one or more obligations. A site that has met performance standards—and so entered the long-term management phase—might still experience a setback that would prevent it from functioning as intended. This could be the result of poorly planned or implemented mitigation work during the site's active phase or of the subsequent failure of a mitigation feature (e.g., a levee that breaks). Alternatively, a malfunction could occur due to the consequences of environmental disruptions—sudden, like a hurricane, or gradual, like climate change. These types of disruptions are often referred to as "acts of God" or "*force majeure*."

Your land trust should have the appropriate experts review the management plan with a mind to what would happen in the event of an engineering or similar failure. Generally, the plan is written to give the long-term manager responsibility for the success of the site and likely provides for your land trust to conduct routine maintenance and repair. Are those provisions written in such a way as to include responsibility for more substantial failures on the site? Would it fall to your land trust to make (potentially costly) repairs to the basic mitigation or geo-engineering features on the site? If so, have you anticipated those costs in the long-term stewardship fund? If your land trust does not consider such questions in advance, you could find yourself saddled with a legal obligation to perform work that you cannot afford to undertake.

5.4.13 The Adequacy of Your Financial Management and Accounting Systems

Compensatory mitigation brings very specific and somewhat challenging financial management and accounting requirements. *For more information on reporting requirements and financial assurances, see Section 2.4.1.9, "Element 9: Monitoring (and Reporting) Requirements," on page 30 and 2.4.1.12, "Element 12: Financial Assurances," on page 33.* As such, your organization will need to ensure that you have adequate financial management and accounting systems to satisfy the requirements of the § 404 program.

Standard 6 (Financial and Asset Management) of *Land Trust Standards and Practices* outlines practices to help land trusts manage their finances and assets in a responsible and accountable way.[248] For example, Practice 6B (Financial Records) directs land trusts to maintain accurate financial records in a form appropriate to the scale of their operations and in accordance with Generally Accepted Accounting Principles.[249] Practice 6E (Internal System for Handling Money) relates to the system an organization adopts to handle money.[250] And Practice 6F (Investment and Management of Financial Assets and Dedicated Funds) requires land trusts to develop a system for the responsible and prudent investment and management of the organization's financial assets, as well as policies on allowable uses of dedicated funds and investment of funds.[251]

You will need to examine your existing financial policies to ensure that they are consistent with the financial management and accounting requirements that apply to your role in compensatory mitigation. If the policies are in conflict with one another, you will need to amend them to ensure internal consistency. You might also want to consider adopting parallel financial and accounting policies that specifically apply to mitigation projects.

248 LAND TRUST STANDARDS AND PRACTICES, supra note 219, at 6.
249 LAND TRUST STANDARDS AND PRACTICES, Practice 6B. Financial Records.
250 LAND TRUST STANDARDS AND PRACTICES, Practice 6E. Internal System for Handling Money.
251 LAND TRUST STANDARDS AND PRACTICES, Practice 6F. Investment and Management of Financial Assets and Dedicated Funds.

For more information on developing financial policies, see the Standards and Practices Curriculum course, "Financial Management of Land Trusts."

5.4.14 Calculating Sufficient Long-Term Financial Needs

Many compensatory mitigation roles entitle your organization to be the recipient of funding to support long-term stewardship – both long-term management and maintenance responsibilities and the monitoring and enforcement of mitigation easements. One significant challenge is ensuring that sufficient resources are set aside to cover long-term stewardship tasks over time. Calculating long-term stewardship funds depends not only on making careful assumptions about economic variables, but also on thoughtful analysis of the costs to your land trust of different management activities. Even small mistakes in the estimations of costs could compound over time and lead to a shortfall in available funding. *For more information on calculating mitigation funds, see Section 8.1, " How to Determine How Much Money Your Organization Will Need," on page 117.*

5.4.15 Underperforming Long-Term Financial Mechanisms

In addition to underestimates of stewardship costs, a long-term stewardship fund might also underperform as a result of other failed modeling assumptions or unforeseen, external market shocks. One hurdle of long-term management planning is preparing for the possibility of such a funding shortfall. Appropriate preparation must occur on a few fronts. First, the long-term management and maintenance plan should specify that the land trust is not obligated to perform long-term management and maintenance tasks that it cannot pay for out of the allocated funds. Second, the plan should make it clear, if possible, which tasks are contingent on the availability of adequate funding. The management tasks may be prioritized based on many variables, including which tasks are the outgrowth of statutory or regulatory obligations, which management goals are most significant at the site, which tasks are most central to achieving priority goals, and which tasks achieve the most significant benefit relative to their value. However, permitting agencies and land managers often want an ongoing "say" in this prioritization; if that is the case, the plan should make clear what procedures will be used to make such determinations in the future. Efficient task prioritization can have a large impact on the fate of sites – and your liability – in the event that funding becomes scarce. *For more information on avoiding liability for unperformed obligations in the event of funding disruptions, see Section 7.2.2, "Contents of a Management Plan," on page 107.*

5.4.16 Coordinating Long-Term Stewardship Funding Needs with the Long-Term Stewardship Fund Holder

Land trusts often hold or are the recipients of funds for different aspects of the long-term stewardship of compensatory mitigation projects. *For a full discussion of the role of land trusts as the holder of long-term financing, see Section 4.3.3, "Long-Term Stewardship Fund Holder," on page 59.*

For example, your land trust may hold the easement on a mitigation property, but not the long-term stewardship fund that supports the expenses related to monitoring and defending that easement. Under these circumstances you will need to make sure that the terms for how these funds are disbursed are clear and support your needs. Alternatively, your organization may be responsible for long-term management and maintenance obligations while another entity holds the long-term financing for these activities. In either case, your main concern is that the process for disbursement is clear and that your organization is adequately protected from liability in the instance that the long-term stewardship fund holder challenges your expenditure of funds or, perhaps more likely, that the permitting agency directs curtailment of funding due to economic or other reasons.

Finally, your organization may be responsible for holding and managing the long-term financing and dispersing funds to the party or parties that retain responsibility for long-term management and maintenance or easement monitoring and defense. In Oregon, for example, The Wetlands Conservancy holds the easement on a mitigation bank and is responsible for holding and managing the long-term endowment. However, the mitigation banker retains fee title ownership and the long-term management and maintenance obligations. TWC must disburse funds to the mitigation banker to carry out its obligations. TWC meets with the mitigation provider on an annual basis to review monitoring results and set goals for the coming year.[252] In such a situation, it would be in your organization's best interest to require that the managing party submit to your organization an annual management plan with the proposed management activities and estimated costs for your review and approval before funds are disbursed. This level of oversight and review does not come without costs – in time and staff expertise. As such, your organization should negotiate at the outset to secure an administrative fee for providing these services.

In any of these cases, you should determine with the other parties in advance how decisions will be made about the disbursement of funds. This language can be included in the long-term management plan or can be part of a stand-alone stewardship agreement. The disbursement procedures should be clearly stated so that those unfamiliar with the arrangement in the future can understand and follow the terms. A dispute mechanism might be included, along with recitals to guide the interpretation of the agreement.

5.5 Is the Project Likely to Be Ecologically Successful and Sustainable?

Your organization's confidence in the ecological success and sustainability of a compensatory mitigation project may be the most significant determinant of whether you choose to take on any responsibility for a project. As discussed in Section 5.3, "Will Involvement in the Project or Program Require New Skills and the Commitment of More Time for you Organization?," on page 69, in order to evaluate projects, you may need to engage experts within and outside of your organization to undertake this analysis. How much time and resources you commit to doing so will depend on the role you play and your expected exposure to liability.

For example, if you plan to hold an easement on a property, but have made certain that all liability for the ecological success of the project rests with other parties, your investment in this analysis may be limited. If, however, you plan to assume all responsibility for long-term management and maintenance, you should ensure that you have a high degree of confidence in the success of the project and that you have limited your liability for the success of any specific aspects of the project in which you have less confidence. For example, if your organization is acting as the long-term management entity on a site that is bordered by privately held properties, your ability to control invasive species in the future is far more questionable than if the site were surrounded by lands your organization already manages.

Appendix A provides some guidelines (by no means comprehensive) on how to evaluate the ecological effectiveness of projects and what you should consider as part of a full evaluation.

5.6 How Might Future Policy Changes Affect Long-Term Stewardship of the Site?

Participation in the long-term stewardship of compensatory mitigation sites differs from traditional conservation land management in several key regards; most significant is the fact that many of the decisions you make will be subject to review and approval of regulatory agencies and/or mitigation providers—possibly

[252] Lev, supra note 134.

in perpetuity. Land trusts and other organizations that become involved in the management of mitigation easements, real property, or funding simply will not have the type of full control over these assets that they enjoy with respect to their philanthropically derived assets.

In the case of long-term stewardship roles, because mitigation sites must be managed in perpetuity, land trusts will encounter many generations of agency personnel. As with second- and third-generation landowners, working with a new set of parties can create management challenges. The most dramatic example might be new regulatory agency personnel who, perhaps under the direction of new state or federal policies, interpret the terms of a written agreement—a banking instrument, an easement, a management plan, and so on—differently than their predecessors.

Ducks Unlimited is a national organization that sponsors many mitigation banks and in-lieu fee programs. Darin Blunck, Director of Conservation Programs, notes: "We enter into banks with regulators today, but we really don't know what the compliance interpretation will be from future regulators. Obligations to maintain functioning banks last a long, long time and that creates legal uncertainty. We try to reduce risk in our instruments and ensure financial reserves. Without question, we expect to continually learn from our experiences."[253]

Janice Allen, Deputy Director of the North Carolina Coastal Land Trust, makes a similar point about easements. "The major legal risk of mitigation easements is making sure your paper trail doesn't show that you're the responsible party for restoration work," added Allen. "Interpretations by personnel in the regulatory bureaucracy change, so you need to be prepared to show your paper trail."[254] For mitigation sites, the legal uncertainty created by unknown future stakeholders includes not only future landowners, but future agency regulators as well. While the magnitude of risk is difficult to quantify, it should prompt land trusts to be especially diligent in ensuring that all contract terms are clearly spelled out and that documentation is created and maintained to show the nature of interpretations and agreements between the regulatory agencies and the land trust.

5.7 Should Your Organization Adopt New Policies to Guide Mitigation Decision-Making?

Even if your organization operates in accordance with *Land Trust Standards and Practices,* a programmatic commitment to participation in compensatory mitigation may require you to consider developing and adopting additional policies to guide your decision-making in this context.[255] As discussed in Section 5.2, "How Will Involvement in the Project or Program Affect Your Organization's Reputation," on page 68, having such policies in place can, among other things, support your ability to communicate your involvement in mitigation projects to the public. It can also help ensure that you are acting in a fiscally responsible manner, selecting appropriate sites, and choosing projects that support your conservation mission. Some policies or guidelines that you might consider include:

- Guidelines for reviewing whether to get involved in a mitigation project (for example, whether you will accept mitigation properties in fee and/or conservation easements for mitigation sites, and in what circumstances you will do so)[256]
- Guidelines for evaluating and accepting mitigation easements[257]

[253] Interview with Darin Blunck, Director of Conservation Programs, Ducks Unlimited, Inc. (Feb. 21, 2012).
[254] Allen, supra note 182.
[255] Land Trust Alliance, Accreditation, http://www.landtrustalliance.org/training/accreditation (last visited Aug. 28, 2012).
[256] See SOLANO LAND TRUST, supra note 227.
[257] LAND TRUST STANDARDS AND PRACTICES, supra note 219, at 8.

- Guidelines for the categories of information that must be gathered to screen projects for potential involvement and for preparing of a project portfolio[258]
- A policy outlining the methodology that will be used to calculate long-term financial needs[259]
- A policy dictating how long-term management funds will be managed and disbursed
- Guidelines for crafting and evaluating mitigation easements (i.e., a mitigation easement template, taking note of any applicable agency templates)[260]
- Guidelines for developing and evaluating long-term management plans (i.e., a long-term management plan template, taking note of any applicable agency templates)

Alternatively, you may choose to adopt a single mitigation policy that guides the full range of mitigation-related decision-making. One example of such a policy is Solano Land Trust's "Mitigation Program of the Solano Land Trust."[261]

Other land trusts have established standing or ad hoc mitigation committees to oversee the land trust's mitigation program, development of mitigation policies, decision-making over management and disbursement of long-term stewardship funds, and/or decision-making on a specific project. For example, the Freshwater Land Trust in Alabama holds easements on two mitigation bank properties. In both cases, the mitigation provider holds the land in fee and is responsible for long-term management and maintenance. The banking instrument that established the banks also creates a long-term, independent stewardship board. The board is comprised of five individuals, including the mitigation provider and state and federal regulatory agencies. A representative of the Freshwater Land Trust is occasionally asked to sit on this board, as well. The stewardship board makes decisions about management activities on the property.

Which policies or guidelines you choose to develop and adopt will depend upon the role or roles you are considering playing, whether you are considering participating in one project exclusively or are considering developing a larger mitigation program, and the size and complexity of the program or projects under evaluation.

5.8 Can Participation in a Mitigation Project or Program Strengthen Your Organization?

Despite the risks and concerns, participating in compensatory mitigation projects can help your organization advance its conservation missions.

In particular, many land trusts indicate that when they hold easements on mitigation lands, the involvement of the Corps has been a net positive. While acknowledging the frustrations of working within a broader regulatory program, land trusts stress the value of being able to call upon the Corps as co-enforcer of the easement, to benefit from Corps expertise, and to use Corps authority to ease negotiations with the landowner. Dave Mitchell of the Great Land Trust in Anchorage, Alaska, calls his organization's relationship

[258] See SOLANO LAND TRUST, supra note 227.
[259] Doscher, Paul, Brenda Lind, Ellen Sturgis and Chris West. 2007. "Determining Stewardship Costs and Raising and Managing Dedicated Funds." Standards and Practices Curriculum. Ed. Sylvia Bates. Land Trust Alliance.
[260] LAND TRUST STANDARDS AND PRACTICES, Practice 6F. Investment and Management of Financial Assets and Dedicated Funds and Practice 6G. Funds for Stewardship and Enforcement.
[261] SOLANO LAND TRUST, supra note 227.

with the Corps "very positive."[262] Mark Steinbach of the Texas Land Conservancy notes that his organization has always viewed the government entities it has worked with as an "asset or ally."[263]

In addition, engagement in mitigation may help your organization expand its staff and expertise, build its network of conservation lands, and generate new streams of income for land restoration and protection. The Solano Land Trust in California reports that the funding it receives for long-term management of mitigation sites provides a reliable source of funding for the management needs of its mitigation sites, something that is not always readily available for non-mitigation sites. Engaging in mitigation "helps us build endowment funds to adequately steward fee-title lands," reports Nicole Byrd, Solano's Executive Director. Byrd adds, "Mitigation provides funding in perpetuity for our stewardship efforts."[264] *For more information on the role of long-term manager see Section 4.3.4, "Long-Term Manager," on page 60.*

[262] Mitchell, supra note 191.
[263] Steinbach, supra note 136.
[264] Byrd, supra note 186.

The § 404 program requires that mitigation sites must be provided long-term protection. The goal of the 2008 regulations is "to ensure permanent protection of all compensatory mitigation project sites."[265] The impacts that occur to wetlands and streams through the § 404 program are generally permanent and, in turn, the agencies require that the compensation should itself be permanent and sustainable.

The Corps and EPA have established requirements that go as far as possible to guarantee that mitigation sites are protected in perpetuity. The rule requires that sites be provided long-term protection "through real estate instruments or other available mechanisms." In addition, to ensure adequate oversight of these sites, "where practicable," an extra party, such as a government agency or nonprofit natural resource management organization, should be given the ability to provide independent enforcement.[266] The agencies also instruct that these extra parties be provided with the financial resources necessary to monitor and enforce the site protection. *For more information on long-term financial assurances see Section 2.4.1.12, "Element 12: Financial Assurances," on page 33 and Section 8, "Long-Term Financing Mechanisms: Technical Guide," on page 117.*

6.1 Types of Instruments

The types of real estate mechanisms contemplated by the Corps and EPA include:

1. "conservation easements held by entities such as federal, tribal, state, or local resource agencies, nonprofit conservation organizations, or private land managers"
2. "the transfer of title to such entities"
3. "restrictive covenants."

For government property, projects are protected through the inclusion of appropriate specifications in "federal facility management plans or integrated natural resources management plans."[267]

The form of site protection selected for a site will depend on the availability of necessary third parties (such as a land trust willing to hold an easement), state laws governing real estate instruments, and the long-term management and stewardship needs of the site. *For more information on state law relative to real estate instruments see Box 5.* In some cases, the Corps or other regulatory agency will take a primary role in selecting the appropriate site protection mechanism. In other cases, the banker or in-lieu fee provider may choose how to structure real estate protections at the site. In all cases, the Corps may require or provide incentives for one protection mechanism over another (for example, a title transfer and deed restrictions) as a condition of approval.

Regardless of the mechanism used, the protection mechanism selected must prohibit incompatible uses on the site, such as clear-cutting, mineral extraction, or other activities that would jeopardize the mitigation project. In addition, if any changes are made to the protection mechanism, the Corps must be given 60 days advance notice. Such changes include "any action [that] is taken to void or modify" the mechanism, including title transfer or other changes to the arrangement of legal claims at the site.[268]

Although some Corps districts may express an explicit preference for conservation easements over other

[265] Compensatory Mitigation Rule, 73 Fed. Reg. at 19646 (Preamble).
[266] 33 C.F.R. § 332.7(a)(1).
[267] *Id.*
[268] § 332.7(a)(3).

mechanisms,[269] your land trust should consider which of the following mechanisms is most compatible with the mission and abilities of your organization and the needs of the sites.

6.1.1 Conservation Easements

If you choose to take on site protection responsibilities at a mitigation site, your land trust is most likely to use a conservation easement as the mechanism. Like a traditional conservation easement, a mitigation conservation easement is a legal agreement between a landowner and a land trust in which the landowner agrees to certain restrictions on the use of the property in order to uphold a set of conservation values in perpetuity. The land trust is given the power to enforce those restrictions by monitoring the site for violations and taking legal action, if necessary, to correct them. Mitigation easements function just like traditional easements with respect to these fundamental functions.

Mitigation conservation easements do differ from traditional easements in some important ways. First, the landowner agreeing to the restrictions is doing so primarily to satisfy the requirements of the § 404 program and not necessarily because they have a non-compulsory interest in protecting the conservation values of the land. Second, the land covered by the easement may require remediation or other mitigation work before it meets the conservation values identified in the easement. Finally, the easement may be a three-party agreement: in addition to the landowner and land trust, the Corps, or other government agency will be closely involved in the drafting of the easement and can remain involved in the management and enforcement of its terms. These primary differences between mitigation and traditional easements will affect some aspects of how your land trust drafts and monitors the easement, as well as some of the legal risks and benefits of accepting the easement. *For more information on the differences between standard conservation easements and mitigation easements, see Section 6.2, "Mitigation Easement Language," on page 94. For more information on the legal risks associated with mitigation easements, see Section 5.4, "How Will Involvement in Long-Term Stewardship Affect Your Organization's Exposure to Risk," on page 74.*

On permittee-responsible mitigation sites, the easement is an agreement between the land trust, the Corps, and the permittee (or the landowner, if the permittee was performing its permittee-responsible mitigation on someone else's land). For mitigation banks and in-lieu fee sites, the parties to the easement are the Corps, the land trust, and the banker or in-lieu fee sponsor[270]—or, alternatively, the landowner who owns title to the bank or in-lieu fee land. The § 404 permittee receiving credits from the bank or in-lieu fee project is not involved with the easement at all. In each of these scenarios, your land trust will be obligated to monitor and enforce the easement, just as you would for a standard conservation easement.

[269] The California districts, Washington State, and others require conservation easements for banks and some, such as the Norfolk and Savannah Districts, give additional credits for banks with approved conservation easements as site protection mechanisms. Personal correspondence with Steven Martin, Environmental Planner, U.S. Army Corps of Engineers (Aug. 7, 2012).

[270] As land trusts can themselves serve as mitigation bankers or in-lieu fee providers, it is possible for a land trust to hold a conservation easement on bank or in-lieu fee land that is owned by another land trust. The Corps refers to this situation as layering site protection mechanisms. *For more information on layering, see Section 6.2, "Mitigation Easement Language," on page 94.*

Chart 11 – Traditional Conservation Easements vs. Mitigation Conservation Easements		
Traditional Conservation Easement		**Mitigation Conservation Easement**
• State conservation easement statute	*Legal foundation*	• State conservation easement statute
• Protection of any kind of land • May require minor remediation, but typically just preservation	*Site characteristics*	• Wetlands or streams, selected according to ecosystem functions lost as part of permitted project • May be preservation, but often require restoration, establishment or enhancement
• Variable according to desire of parties, but typically perpetual to qualify for tax benefits	*Duration*	• Perpetual, required by Corps or other agency
• Usually two (land trust and land owner/donor)	*Number of parties*	• At least three (land trust, landowner, Corps or other agency—may also be additional agencies or third parties)
• Landowner, motivated by conservation interest and/or tax benefits • May be donated or purchased • Easement creation is voluntary	*Easement grantor*	• Landowner, may also be permittee, banker or ILF sponsor • Permittee/banker/ILF sponsor more likely motivated by profit or need to comply with regulatory requirement • Easement exacted as a permit condition
• Typically drafted by the land trust, usually from land trust's easement template • Terms require negotiation with landowner	*Drafting*	• Variable according to Corps district • Corps districts may have a template; use may be mandatory or voluntary • If no Corps template, drafted by land trust, but reviewed by Corps/IRT • Terms will require negotiation with Corps, as well as landowner; multi-party negotiation may be lengthy

• Traditional terms identifying parties and site, describing conservation values, reserving rights, restricting uses; also terms outlining liability and notice, effects of eminent domain or extinguishment, subordination of other legal interests	*Included terms*	• Traditional terms identifying parties and site, describing conservation values, reserving rights, restricting uses; also terms outlining liability and notice, effects of eminent domain or extinguishment, subordination of other legal interests • Unique terms noting/ incorporating Section 404 permit or bank/ILF instrument, allowing mitigation activities, providing for long-term site management (if applicable), protecting site in future mitigated state, giving Corps/others third-party rights and including Corps in communications and amendment/ termination/transfer decisions
• Variable, depending on those necessary to protect the conservation values and desire of parties; may have more allowable uses • Must, at a minimum, impose limitations to retain or protect natural, scenic or open space values; often assure availability for agricultural, forestry, recreational or open space use; protect natural resources; maintain or enhance air or water quality; or preserve historical, architectural, archaeological or cultural features • May allow agriculture, grazing and/or hunting • May allow extensive trail systems and public access • May allow new roads or structures	*Restricted uses*	• Variable, but within narrow range of allowable uses; likely to have heavy restrictions • 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" • May not allow new roads or structures • May not allow any industrial, commercial, residential or agricultural activities • May not allow recreational activities other than personal, noncommercial use • May not allow public access • May allow fishing or grazing rights

• According to easement terms and state law • May only require consent of easement grantor (landowner) and easement grantee (land trust)	*Amendment*	• Mitigation Rule requires 60-day notice to Corps before action to void/modify/transfer easement • Requires consent of easement grantor, easement grantee and the Corps or other agency; Corps/agency approval necessary even for minor easement amendments
• By land trust; occasionally by third parties if allowed by state law or included in the easement • Against landowner	*Enforcement*	• By land trust; also by Corps/agency (always allowed), other listed third parties (if applicable) • Against landowner; depending on drafting, Corps/agency/other third party may be able to enforce obligations against land trust
• Easement is voluntary, likely motivated at least in part by conservation interest • Limited third-party support for enforcement • Landowner may have fewer resources to challenge easement or fight enforcement, because more likely to be small entity (like private landowner) • Landowner may have more daily interaction with site, may live on site • More flexible use restrictions make land more attractive for transfer • Standard risk of problematic new owner	*Violation considerations*	• Easement is exacted, not motivated by conservation interest • Corps oversight may deter violations; Corps resources support enforcement • Landowner may have more resources to challenge easement or fight enforcement, because more likely to be large entity (like permittee/banker/ILF sponsor) • Landowner may have little daily interaction with site • More stringent use restrictions make site harder to transfer • Standard risk of problematic new owner

6.1.2 Deed Restrictions

Deed restrictions, or restrictive covenants, are simpler mechanisms that require less documentation than conservation easements, but achieve a similar goal. They restrict the activities the landowner can undertake on his or her land and give another party the power to enforce those restrictions. Unlike conservation easements, however, deed restrictions on mitigation property are a two-party arrangement involving only the Corps and the fee simple owner of the mitigation project site. As a result, if a mitigation site is protected by a deed restriction, it will be the Corps, not a third party such as a land trust that will enforce the restrictions against the landowner.

As a result, land trusts are not usually involved with deed restrictions on mitigation sites. In the case of a permittee-responsible mitigation site, deed restrictions are between the Corps and the § 404 permittee who

owns the land. With mitigation banks or in-lieu fee projects, the deed restrictions are between the Corps and the bank sponsor, in-lieu fee sponsor, or private landowner who owns the underlying land. Your land trust will only be involved with deed restrictions if you have agreed to take fee title ownership of the mitigation project site temporarily or permanently or if compensatory mitigation activities are carried out on land already held in fee. Even then, the Corps may not impose any deed restrictions because the agency considers fee title ownership by a land trust to be an independent, sufficient form of site protection (see Section 6.1.3, "Fee title ownership", on page 92).[271] However, the Corps may ask for certain restrictions on your fee title deed as a way of layering site protection mechanisms. This situation is more likely to occur in those districts that incentivize layering. For example, in the Corps' Savannah District, the agency has adopted guidelines assigning additional credit to mitigation projects that grant a conservation easement to a "qualified" third party or take other protective measures on sites that already have an initial form of site protection in place.[272]

If this is the case, it is important to remember that unlike conservation easements, where your land trust is the party *enforcing* the restrictions, with deed restrictions, your land trust is the owner of the land and so the restrictions would be *enforced against you* by the Corps. If your land trust later sold the land, the deed restrictions would travel with it. The Corps would then enforce those restrictions against the subsequent owner.

6.1.2.1 Conservation Easements versus Deed Restrictions

In general, the Corps prefers conservation easements to deed restrictions because easements are more protective. Deed restrictions and restrictive covenants don't protect mitigation sites as well as conservation easements because they are more vulnerable to lawsuits and statutes that can erase them from the books. In particular, state marketable title laws can eliminate a deed restriction if the mitigation property is sold too many years after the original restrictions were put in place.[273] Given its many responsibilities, the Corps would also rather see the long-term enforcement responsibilities handled by a reliable third party, like a land trust holding a conservation easement, than rely on deed restrictions, which it or another agency would have to enforce itself. With all this in mind, the Corps or mitigation provider will usually work to find a land trust willing to hold a conservation easement on the mitigation site, rather than using deed restrictions.

Box 5: Marketable Title

Marketable title is the legal term used to describe the title to a piece of land when that title is free from encumbrances, litigation risks, and other "defects," so that the owner is able to sell freely. A property title would not be considered marketable if, for example, there was a lien on the property or if it was not clear that the person selling it had the best claim of ownership to the land. A deed restriction—which inhibits some uses on the land—is considered an encumbrance. Because encumbrances make land less valuable and thus harder to sell, many states have adopted marketable title acts as a way to promote the property market. These acts function to erase limitations on land after a certain amount of time in order to assure that very old restrictions do not hinder the sale of a piece of land today. The length of time before a restriction is subject to these acts and the steps necessary to keep a restriction in place vary from state to state.

[271] 33 C.F.R. § 332.7(a)(1).
[272] SAVANNAH DISTRICT, U.S. ARMY CORPS OF ENGINEERS, STANDARD OPERATING PROCEDURE: COMPENSATORY MITIGATION 4 (2004), available at http://www.sas.usace.army.mil/regulatory/documents/SOP.04.pdf.
[273] See, e.g., Bill Silberstein & Bridget McNeil, Land Trust Alliance, Protecting Conservation Easements from Marketable Record Title Act Extinguishment, EXCHANGE, Winter 2002, available at http://learningcenter.lta.org/attached-files/0/20/2040/exchange_21_01_08.pdf.

Chart 12 – Site Protection: Conservation Easements vs. Deed Restrictions		
Conservation Easement		**Deed Restrictions**
• Land trust holds a conservation easement on property owned by landowner	*Property right*	• Land trust owns the property, but the deed to the property limits allowable uses or development on the property
• Land trust will enforce the easement against the landowner in the event of a violation; Army Corps or another agency may be a third-party enforcer	*Enforcement*	• Agency or other enforcer will enforce the deed restriction against the land trust in the event of a violation
• Perpetual, though state law may require that this be explicit in the easement	*Duration*	• Subject to termination, i.e. through state marketable title laws; may be maintained in perpetuity with proper re-recordation
• Protection more challenging, because landowner, not land trust, is owner and primary user of property; land trust may need to go to court to ensure protection	*Protection of conservation values*	• Protection may be easier, because land trust is owner and primary user of property
• Expense of monitoring and defending easement (including preparation of annual monitoring reports); expense of negotiating easement	*Primary costs*	• Potential expense of purchasing the land; expense of liability insurance; expense of monitoring for trespass and other unauthorized use; expense of periodic re-recordation of deed restriction
• Poorly written easement could create responsibility for mitigation success or failure; insufficient enforcement could threaten land trust's easement ownership or tax-exempt status; insufficient funding for easement defense could hinder conservation goals	*Legal and financial risks*	• Land ownership creates traditional tort liabilities associated with duties of care, nuisance and trespass (which could even be triggered by the failure of a restoration/ enhancement feature); violation of the deed restriction by the land trust could prompt suit against it
• May limit who may hold a conservation easement; may dictate how duration must be specified in easement terms	*Impacts of state law*	• May require re-recordation of deed restrictions to prevent termination; may create tax consequences for owners of large land areas

• Negotiation between (at least) three parties (land trust, agency, landowner); may require use of an agency easement template; more complex instrument may mean more complex negotiations	*Negotiation challenges*	• Negotiation between (at least) two parties (land trust, agency); must ensure compatibility with original donor/funder intent (if applicable); may require use of an agency deed restriction template; simpler instrument may mean simpler negotiations
• Less likely; once an easement is placed on the land, agency is unlikely to require additional site protection	*Layered site protection*	• More likely; a deed restriction on property owned by a land trust is already a second layer of protection (ownership by the land trust is sufficient site protection on its own); land under deed restriction may also have a conservation easement placed on it
Both: • Must prohibit incompatible uses, like clear cutting or mineral extraction • May recognize compatible uses, like fishing or grazing • Must give the Corps 60-day advance notice of changes to the instrument (including amendments and transfers) • Should, where practicable, establish third-party enforcement rights		

6.1.3 Fee Simple Title

Mitigation sites may be protected by "the transfer of title" to a government agency or nonprofit conservation organization, such a land trust. Compensatory mitigation regulations make clear that taking fee title from a private or for-profit owner and putting it into the hands of a government or nonprofit owner, with no further strings attached, is sufficient to ensure that sites are well-protected and preserved in accordance with conservation goals. In this way, "protection by title transfer" is distinct from "protection by deed restriction"; it is assumed that deed restrictions would only be necessary on sites with *for-profit* owners, while sites with *nonprofit* owners would be fully protected by the organization's commitment to conservation.

But in a few cases, even government and nonprofit site owners have used mitigation sites in ways that are not fully in line with the aims of the compensatory mitigation program. Without a deed restriction or a conservation easement on the property, however, there is nothing the Corps can do to remedy these divergences. As a result, the Corps has become more likely to layer additional protections on sites owned by nonprofits – even though this is not required by the rule – by placing a conservation easement on the land, negotiating a deed restriction, or insisting on a reversionary clause.[274] As discussed previously in Section 6.1.2, "Deed Restrictions," on page 89, some Corps districts may even provide incentives for layering protection mechanisms. As a result, you may hold

[274] Reversionary clauses are the latest tool used to address this issue. In some districts the Corps is starting to put these clauses in the deeds that transfer ownership of mitigation lands to land trusts or government agencies for protection. U.S. ENVIRONMENTAL PROTECTION AGENCY, MITIGATION RULE FAMILIARIZATION WORKSHOP – SESSION 6 (2008), available at http://www.epa.gov/owow/wetlands/wetlandsmitigation/session6/6-Site-Protection.html. A reversionary clause is a special form of restriction placed on a deed. Unlike traditional deed restrictions (i.e. restrictive covenants), which allow the enforcer to prevent a landowner from using land in certain ways, reversionary clauses cannot stop a landowner from taking certain actions. Instead, reversionary clauses specify that, if the new landowner does not use (or protect) the property as intended, the landowner will lose all ownership of the land and ownership will revert back to the original owner. The possibility of losing ownership thus creates a disincentive to misusing the land.

fee title to a mitigation site that is also subject to deed restrictions or to a conservation easement held by a separate, third-party land trust.

Regardless of whether the Corps imposes additional layers of site protection, accepting fee simple title gives your land trust ownership of the land on which the compensatory mitigation is being carried out. As with traditional conservation lands, the choice to accept fee title ownership, rather than a conservation easement, depends on your land trust's acquisition policies and what kind of liabilities you are willing to accept. The same process your land trust uses to determine whether fee simple ownership is appropriate for traditional conservation lands should inform the question of whether to acquire these mitigation lands. *For more information on the decision to accept fee title, see Section 5.4, "How Will Involvement in Long-Term Stewardship Affect Your Organization's Exposure to Risk." on page 74.*

Chart 13: Site Protection Arrangements – Examples from the Field

Land Trust	Project	Fee Simple Owner	Easement Holder
North Carolina Coastal Land Trust	Greens Thoroughfare: 221.1 acres, North Carolina	For-Profit Bank	Land Trust
Greens Thoroughfare is a 221.1-acre wetland parcel in Lenoir County, North Carolina. The property is an island surrounded by the Neuse River. It contains mostly coastal plain bottomland hardwood, with some cypress gum-swamp. A for-profit banker, Restoration Systems, LLC, owns fee title to the site. The North Carolina Land Trust accepted a conservation easement on the property in 2002.			
Great Land Trust	Knik Islands Conservation Project: 4,800 acres, Alaska	Private Landowner	Land Trust
The Knik Islands Conservation Project protects about 4,800 acres of land at the mouth of the Knik and Matanuska Rivers. The property includes habitat for wild salmon and other species and is adjacent to the Palmer Hay Flats Game State Game Refuge and the Chugach State Park. The Great Land Trust accepted the easement in 2011. Eklutna, Inc., an Alaska Native Corporation and the largest private landowner in Anchorage, holds fee title to the property and will continue traditional uses on the land, such as hunting and fishing. The easement was purchased with funds set aside to offset habitat losses associated with the expansion of the Port of Anchorage.			
Solano Land Trust	Lynch Canyon: 1,040 acres, California	Land Trust	None
Between November 1993 and December 1995, the Solano Land Trust purchased four parcels that now make up the 1,040-acre Lynch Canyon project. Together, the parcels include agricultural grassland and water resources, riparian ecosystem providing riparian vegetation and wildlife habitat, grassland ecosystem providing forage and habitat for birds, as well as cultural resources, including historic and pre-historic sites. The property is also home to special status species, including the endangered California red-legged frog. Solano holds fee title to the land. Though not currently under a conservation easement or subject to deed restrictions, Solano is considering placing deed restrictions on particular parcels or on the whole property.			
Great Land Trust	Campbell Creek Estuary Project: 60 acres, Alaska	Land Trust, then Municipality	Land Trust
The Great Land Trust purchased 60 acres of estuarine wetlands and upland forest buffer in 2010. The land trust negotiated the purchase of the property before transferring title to the Municipality of Anchorage. The land trust retained a conservation easement on the site. The bulk of the acquisition and conservation easement costs were covered with compensatory mitigation funds from the Great Land Trust's ILF account, as well as from the Port of Anchorage Mitigation Fund.			
Texas Land Conservancy	Pineywoods Mitigation Bank: 19,079 acres, east Texas	Nonprofit Organization, then For-Profit Partnership	Land Trust

Pineywoods Mitigation Bank is a bank containing more than 19,000 acres of forested bottomland along the Neches River. It is the largest mitigation bank in Texas and the second largest in the nation, connecting the Davey Crocket and Angelina National Forests. The Texas Land Conservancy took the easement on the property in 2008. At the time, the Neches River Corridor, LP, a partnership between The Conservation Fund, a nonprofit organization, and a private timberland investment group, held fee title to the property. In 2010, the Pineywoods East Texas Investment Partners, LLC purchased the property.			
Solano Land Trust	East Wilcox Ranch: 1,497 acres, California	Land Trust	Third-Party Conservation Organization
Solano acquired fee title to the East Wilcox Ranch in 2005. The Nature Conservancy donated the land and kept a conservation easement on the property. At 1,497 acres, the property is home to vernal pools and swales that provide habitat to the threatened delta green ground beetle, the endangered vernal pool tadpole shrimp and the endangered vernal pool fairy shrimp. An endowment created with mitigation funds from a power plant built by Creed Energy Center, LLC, supports long-term management on the site. In the future, Wilcox Ranch will also be used for grazing, scientific and educational purposes.			
North Carolina Coastal Land Trust	Pories Tract – Tar River: 37.5 acres, North Carolina	Private Landowner	Government; monitoring contracted to land trust before being returned to government
The Pories Tract of the Tar River is a 37.5-acre riparian site in Pitt County, North Carolina. A private landowner holds fee title to the land, but in 2006, the North Carolina Ecosystem Enhancement Program (NCEEP) purchased a conservation easement on the property. NCEEP holds the easement, and NCEEP funds were used to purchase the easement and to fund the easement endowment. Monitoring responsibilities, however, were initially contracted to the North Carolina Coastal Land Trust, which had helped negotiate the easement. When it became clear that the monitoring endowment would be insufficient to cover its responsibilities, the North Carolina Coastal Land Trust terminated the monitoring contract. The land trust is no longer involved at the site, and monitoring responsibility has reverted to the State, which holds the easement.			

Box 6: Government Ownership and Government Lands

Federal agencies do not have the authority to place land use restrictions, like easements or deed restrictions, on government-owned property. As a result, when a mitigation site is on state or federally owned lands, the rule instructs that the site be protected by designating it for "conservation uses" in a Federal Facility Management Plan or Integrated Natural Resources Management Plan. These are intra-governmental documents, so land trusts are generally not involved in site protection on government-owned lands. Land trusts may, however, be involved in site protection on state or local lands, where traditional land use restrictions may be allowed through state law.

6.2 Mitigation Easement Language

The language of a compensatory mitigation easement is, on the whole, very similar to that of a traditional conservation easement. However, the extent of the similarities and the amount of work involved in drafting the mitigation easement may depend on the state or Corps district within which your land trust is located.

Many Corps districts have developed model mitigation easement templates, which they provide on their websites and/or make available to mitigation providers and the third parties taking on long-term stewardship obligations. These models are found in at least a third of Corps districts,[275] and your land trust

[275] There is no general requirement that Corps districts develop a model mitigation easement. However, a number of districts—particularly those with active

may be expected to use the model when developing an easement for a mitigation site. While not all districts mandate use of their model easements, some do. In districts that have not developed model mitigation easement language, land trusts generally prepare the first draft of the mitigation easement, which the Corps then reviews and comments on before determining whether it will approve the easement. Some Corps districts, like those in California,[276] mandate the use of the model easement for mitigation banks but not for other types of mitigation sites. Corps offices with voluntary models may encourage their use as a means of expediting review and approval of the easement.[277]

Even so, most land trusts involved in mitigation prefer to prepare the first draft of the easement. While this draft will still require IRT or Corps approval, drafting the mitigation easement allows a land trust to capitalize on its experience with easement design and oversight, craft terms that are consistent with its goals and capabilities, and incorporate language from its traditional easements that has been fine-tuned and whose consequences are well-understood. It also allows land trusts to ensure greater uniformity amongst its many easements, as land trusts with many easements often find that significant variation between them impedes monitoring and enforcement efforts and creates other inconveniences in normal operation. More generally, the power to draft the mitigation easement ensures that your organization is familiar with every term in the easement.

By contrast, if a Corps-approved easement template is imposed or your organization or your group chooses to start from a Corps template, you will likely need to expend additional time and effort to ensure that the easement comports with your land trust's standards and expectations, as well as with *Land Trust Standards and Practices.* Wendy Reed, President of the Antelope Valley Conservancy, counsels, "It is very important that land trusts have legal counsel competent in easement law, as well as experienced biologists, to prudently evaluate conservation easement language. In our state, the California Department of Fish and Game, U.S. Fish and Wildlife Service, and U.S. Army Corps of Engineers have adopted standardized conservation easement language for mitigation under their jurisdiction."[278] Corps personnel in districts such as Reed's are willing to engage with a land trust to adjust the terms of their models, but depending on the district, such negotiations can be lengthy.

6.2.1 What to Expect When Drafting a Mitigation Easement

Overall, mitigation easements are very similar to traditional conservation easements. They include traditional terms identifying the parties and the land, reserving rights, restricting uses, and outlining liability, notice, and other general provisions. Those provisions include identifying the conservation values to be protected, outlining the effects of eminent domain or the extinguishment of the easement, and providing for the subordination of other legal interests in the land. *For more information on the basic components of a conservation easement, see the Land Trust Alliance's The Conservation Easement Handbook (2005).*

In addition to these standard components of a conservation easement, however, a mitigation easement must include terms accounting for the role of federal or state agencies on the property and addressing any mitigation or maintenance work that may take place during the active and long-term management phases of the project.

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mitigation bank programs—have developed models. Personal correspondence with Steven Martin, Environmental Planner, U.S. Army Corps of Engineers (Jan. 18, 2012). Districts with model conservation easements and/or model restrictive covenants include: Baltimore, Charleston, Chicago, Galveston, Kansas City, Los Angeles, Mobile, New York (which has two, one for New York and one for New Jersey), Norfolk, Omaha, Pittsburgh, Rock Island, Sacramento, San Francisco, Savannah, and Wilmington. See Section 11, "Additional Resources/Bibliography" for links to these documents.

276 The California districts of the U.S. Army Corps of Engineers, in concert with the U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, and the California Department of Fish and Game (known collectively as the multi-agency Product Delivery Team) have developed a single model conservation easement for mitigation and conservation banks in the state of California. It is available at: http://www.dfg.ca.gov/habcon/conplan/mitbank/.

277 Martin, supra note 275.

278 Reed, supra note 135

Model easements developed by the Corps districts illustrate the sort of provisions that you might encounter when negotiating an easement on a mitigation site. There are seven provisions unique to mitigation easements that are found in these Corps models. While these unique provisions are generally straightforward, their effect on legal risks associated with these easements may be less so. Careful review of these potential terms with legal counsel is important to ensure that your land trust understands the Corps' expectations and your resulting liability. Doing so will help you determine whether holding an easement on the compensatory mitigation site is a good fit for your land trust. *To learn more about the legal risks of mitigation easements, see Section 5.4, "How Will Involvement in Long-Term Stewardship Affect Your Organization's Exposure to Risk," on page 74."*

6.2.1.1 Seven Provisions Common to Corps Mitigation Easements

6.2.1.1.1 Reference to the Section 404 program

As you might expect, conservation easements for compensatory mitigation typically include a reference to the § 404 program. For mitigation banks and in-lieu fee projects, this will include a reference to the banking instrument. For permittee-responsible mitigation, this will include a reference to the permit under which the permittee is required to perform the mitigation. Usually, the permit or instrument is mentioned in the section of the easement that describes the property. Sometimes, it is identified in a separate section of the easement. The permit or instrument is usually just referenced by name or number but some Corps districts may require that the document be attached to the easement as an exhibit. In addition, most easements will state explicitly that the restoration, creation, enhancement, or preservation of the property in question is a condition of that permit or of the § 404 program generally.

Example: "WHEREAS, the Protected Property has been approved by the Mobile District of the United States Army Corps of Engineers ("Third-Party" or "Corps," to include any successor agencies), for use as a compensatory mitigation for unavoidable impacts to waters of the United States for work or activities permitted in Department of the Army Permit No. _____, ("Permit"), said permit being Attachment 2 hereto which is incorporated and made a part hereof as if fully set forth herein." – Model Conservation Easement and Acceptance (For Use with Individual Permits), U.S. Army Corps of Engineers, Mobile District[279]

6.2.1.1.2 Right to do Mitigation Work

Like traditional easements, mitigation easements have at their core a list of restrictions on the uses of and activities that can be carried out on the land. If a land trust accepts a mitigation easement during the planning or active phases of the project (Phases I or II), the easement must also specify the right to perform the restoration, creation, or enhancement work that is required in the mitigation plan. These activities often include excavating, earth moving, planting new seedlings, cutting or burning nonnative plants, diking, pumping, and transporting construction materials to and from the site. If your organization is accepting an easement during the long-term stewardship phase (Phase III), the easement should allow for any substantive maintenance activities that are outlined in the long-term management plan. In either case, the easement may restrict the locations for particular activities to protect existing habitat or features of the land. *For more information on management plans, see Section 2.4.1.10, "Element 10: "Long-Term Management Plan," on page 32 and Section 7, "Long-Term Management Plans: Technical Guide," on page 105.*
Different Corps model easements address this issue in different ways. Some list the right to conduct

[279] MOBILE DISTRICT, supra note 218.

mitigation work as a reserved right of the landowner. Others include a separate section immediately following the list of restrictions on use that states, notwithstanding all of those prohibitions, that mitigation work can be performed in accordance with the mitigation plan.

As a corollary to the right to conduct mitigation work, mitigation easements will specify that the protection outlined in the easement is intended to protect the property in its "mitigated" state. To do so, a mitigation easement may define and protect the baseline conditions of the property and then require that the baseline be updated once the mitigation activities are complete. A mitigation easement might also achieve this aim by stating that the property is to be preserved in its "natural condition" and then specify that the "natural condition" of the property includes the improvements made as part of the mitigation work. *For more information on baselines, see Section 7.2.2, "Contents of a Management Plan," on page 107.*

Example: "Compensatory mitigation. Grantor reserves the right to perform any restoration, enhancement, and other wetlands mitigation activities required by Section 404 permits and/or Mitigation Banking Instruments, including the use of all equipment necessary to successfully complete any mitigation requirements contained therein." – Conservation Easement Model of September 2010, U.S. Army Corps of Engineers, Charleston District[280]

6.2.1.1.3 Additional reporting requirements

The Corps' model mitigation easements may require that the Corps be included on or given notice of communications between the easement grantor (the landowner) and the easement grantee (the land trust). This may include communication between the land trust and owner about notices of violation, amendments, and other requests. In many Corps districts, the land trust must only include the Corps on the correspondence that is *required* under the easement (such as notices of violation). Some Corps district model easements require the land trust to include the Corps on *all* communications with the landowner—including informal communication, like updates on activities at the site, emails between the land trust and landowner, or other routine interchanges.

In contrast to some traditional easements, Corps model easements for mitigation properties also require that certain communications between the land trust and the landowner or the Corps take place on a standardized timeline. For example, there are often timelines for proposals to amend the easement's terms, and landowners commonly have exactly 30 days to cure a breach before the land trust, or Corps, can begin legal action on a violation.

Finally, some districts may expect easement monitoring reports, which must be submitted annually or on some other regular schedule.

Example: "In the event of a breach of the Conservation Easement by the Grantor, Grantee, or another party, or any party working for or under the direction of the Grantor or Grantee, the USACE must be notified immediately. If the USACE becomes aware of a breach of the restrictions, the USACE will notify the Grantor and Grantee of the breach. The parties shall have thirty (30) days after receipt of such notice to undertake actions that are reasonably calculated to swiftly correct the conditions constituting the breach. If the conditions constituting the breach are corrected in a timely and reasonable manner, no further action is warranted or authorized. If the Grantor or Grantee fail to initiate such corrective action within thirty (30) days or fail to complete the necessary corrective action, the USACE may undertake such actions, including legal proceedings, as are necessary to effect such

[280] CHARLESTON DISTRICT, supra note 218.

corrective action." – Conservation Easement, U.S. Army Corps of Engineers, Galveston District[281]

6.2.1.1.4 Corps Approval for Easement Modifications

In addition to the requirement that land trusts include the Corps on their communications with the landowner, many of the agency's model mitigation easements also require that the land trust, or landowner, secure approval from the Corps before making certain adjustments to the easement or property. Some of the models give the Corps the authority to approve or disapprove of any amendments or modifications to the terms of the easement. Even where the landowner and land trust are in agreement, the Corps may retain the authority to veto a proposed amendment. Some Corps districts extend this veto power to assignment of the easement as well. If your Corps district requires this language, you should take it under consideration when evaluating its effect on your liability and your interest in holding the easement.

Example: "WHEREAS, the Grantor acknowledges that these land use restrictions and other terms of this conservation easement ("Easement") may not be changed, modified, amended or revoked without express written approval for the change, modification, amendment or revocation of this Easement from the U.S. Army Corps of Engineers that is witnessed, authenticated, and recorded pursuant to the law of the State of Illinois with such amendment, modification, or revocation instrument…." – Grant of Conservation Easement, U.S. Army Corps of Engineers, Chicago District[282]

Example: "Grantee shall notify the Corps in writing of any intention to reassign this Conservation Easement to a new grantee at least sixty (60) days in advance thereof, and the Corps must accept the assignment in writing." – Conservation Easement, U.S. Army Corps of Engineers, Kansas City District[283]

6.2.1.1.5 Grantee Failure

Many traditional easements require a proceeding before a judge if the land trust can no longer hold the easement and the easement must be transferred to another qualified conservation organization or land trust. This is sometimes called "grantee failure" and it occurs when a land trust closes its doors or becomes ineligible to hold the conservation easement. Unlike traditional easements, however, many Corps model mitigation easements also define "grantee failure" as the "inability or failure to enforce the easement." This means a land trust—even one still in operation and eligible to hold easements—could be removed from ownership of a conservation easement if the Corps believes the land trust is not properly enforcing the easement. The decision about who should replace the land trust as easement holder would, presumably, fall to the courts. It is important to find out if your Corps district requires this language in the easement, because it would affect your legal and reputational risk.

Example: "If at any time Grantee is unable or fails to enforce this Conservation Easement, or if Grantee ceases to be a qualified grantee, and if within a reasonable time after the occurrence of one of these events Grantee fails to make an assignment pursuant to this Conservation Easement, then the Grantee's interest shall become vested in another qualified grantee in accordance with an appropriate proceeding in a court of competent jurisdiction." – Model Conservation Easement, U.S. Army Corps of Engineers, Wilmington District[284]

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[281] GALVESTON DISTRICT, U.S. ARMY CORPS OF ENGINEERS, CONSERVATION EASEMENT (2012), available at http://www.swg.usace.army.mil/Portals/26/docs/regulatory/e-library/Conservation_Easement.pdf.

[282] CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS, GRANT OF CONSERVATION EASEMENT (2012), available at http://155.79.114.199/co-r/conservease.htm.

[283] KANSAS CITY DISTRICT, U.S. ARMY CORPS OF ENGINEERS, CONSERVATION EASEMENT (2010), available at http://www.nwk.usace.army.mil/Missions/RegulatoryBranch/MitigationToolsandGuidance.aspx.

[284] WILMINGTON DISTRICT, supra note 218.

6.2.1.1.6 Independent Enforcement Rights

All of the model mitigation easements reviewed for this handbook give the Corps, and any successor agencies, an independent right to enforce the terms of the easement (referred to in the easements as "third-party rights"). This enforcement right is in addition to any rights the Corps may have to enforce the § 404 permit, mitigation banking instrument, or in-lieu fee program instrument itself. Along with this right, most model mitigation easements also give the Corps the right to enter the property. Many districts also give independent enforcement rights to the state or a specific state agency. Where state enforcement rights are included in the easement, it is typically because the state conservation mitigation easement regulations require it, as is the case in New Hampshire.[285]

Land trusts should be particularly alert to easements that would extend independent enforcement rights even further, either by broadening the kinds of rights afforded to these parties or by expanding the list of independent, enforcing parties. For example, the Galveston model easement provides for enforcement "[i] n the event of a breach of the Conservation Easement by the…Grantee," noting that if the Grantee fails to correct the breach, the Corps "may undertake such actions, including legal proceedings, as are necessary to effect such corrective action."[286] This language would allow the Corps to enforce the easement *against the land trust (*the easement's "Grantee"). Even where such a right is not explicit, a broadly drafted independent rights provision (typically called a "third-party rights" provision) that does not specify the limits of independent enforcement could subject the land trust to legal action. Such expansive independent enforcement rights could create management and enforcement headaches for the land trust and should not be agreed to lightly.

Similarly problematic, though far less likely, would be an easement that provided independent enforcement rights to people or groups other than the Corps (or other lead agency) and the state. Though no models currently in use appear to do so, the California model (since updated) did include a term giving enforcement rights to "any entity organized for conservation purposes."[287] An easement granting such broad enforcement rights could pose significant challenges for the land trust holding the easement. One would hope that the absence of such terms in current Corps models will be a continuing trend, but your land trust should remain alert for any such language.

Example: "WHEREAS, Grantor agrees, in accordance with ECL Section 49-0305.5, that rights of enforcement of the terms of this Conservation Easement shall be held by the Holder, and that third-party rights of enforcement shall also be held by the Corps of Engineers or other appropriate enforcement agencies of the United States and that these rights are in addition to, and do not limit, the rights of enforcement under the Permit." – Conservation Easement, U.S. Army Corps of Engineers, New York District[288]

[285] New Hampshire's mitigation conservation easement regulation includes the following requirement: "(a) Each conservation interest instrument shall: . . . (4) Convey an interest to the State of New Hampshire that allows the state to enforce the conditions and restrictions of the easement and to recover the costs of such enforcement from the easement holder or property owner, or both." N.H. CODE ADMIN. R. ANN. ENV-WT 807.13(a)(4) (2012), available at http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wt100-900.pdf.

[286] GALVESTON DISTRICT, supra note 281.

[287] This language comes from the model easement currently posted on the Sacramento Corps district's website. However, as the California Project Delivery Team recently released an updated Conservation Easement Template for use in the whole state, this Sacramento easement is presumably out of date. SACRAMENTO DISTRICT, U.S. ARMY CORPS OF ENGINEERS, PERPETUAL CONSERVATION EASEMENT GRANT (2004), available at http://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/Conservation_Easement_Template.pdf.

[288] NEW YORK DISTRICT, supra note 218.

6.2.1.1.7 Broad Restrictions on Uses

The list of prohibited uses in Corps model easements is extensive and may be more restrictive than some land trusts are used to. The compensatory mitigation regulations specify that the site protection instrument "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"—though compatible uses like "fishing or grazing rights" will be allowed where appropriate.[289] The precise restrictions that the Corps requires or suggests will vary based on the Corps district and the site in question, but land trusts involved in mitigation should note that, in practice, mitigation easements generally leave few permissible uses of the protected land compared to traditional easements. According to Jennifer Lorenz, Executive Director of the Bayou Land Conservancy, "You have to be more conscientious about what type of activities you engage in on mitigation lands. Activities that might be allowed on other easements will not be allowed here."[290] For example, Lorenz states that managed grazing and/or hunting leases are often allowed on many of their private easements, as are significant trail systems. But the land trust has found that their federal and state agency partners have not been supportive of these activities on wetland mitigation sites.[291]

The majority of Corps model easements, for instance, bar the construction of new trails on mitigation sites, except with the prior written approval of both the Corps and the easement holder. In addition, mitigation easement models typically do not allow new buildings or roads on mitigation sites and prohibit all, or nearly all, industrial, commercial, residential, and agricultural activities. Typically, these easements also bar all motorized vehicle use except on pre-existing roads and all recreational activities other than personal (noncommercial) use. In rare cases, they go so far as to bar public access to the site without the Corps' and easement holder's permission. This might come as a surprise to land trusts that are used to allowing public enjoyment of their conservation lands. On the whole, land trusts accustomed to crafting more permissible easements with donor landowners should familiarize themselves with the list of prohibited uses in Corps models and consider the extent to which these additional restrictions will alter their enforcement expectations or interest in a site. Some terms may be negotiable, but your land trust should be prepared for the probability that many of these use restrictions will appear in the final easement.

Example: "Prohibited Uses. Any activity on or use of the Bank Property that is inconsistent with the purposes of this Conservation Easement is prohibited. Without limiting the generality of the foregoing, the following uses and activities by Grantor, Grantor's agents, and third parties are expressly prohibited: …(d) Recreational activities, including, but not limited to, horseback riding, biking, hunting or fishing except for personal, non-commercial, recreational activities of the Grantor, so long as such activities are consistent with the purposes of this Conservation Easement and specifically provided for in the Management Plan. (e) Commercial, industrial, residential, or institutional uses… (g) Construction, reconstruction, erecting or placement of any building, billboard or sign, or any other structure or improvement of any kind... (k) Altering the surface or general topography of the Bank Property, including but not limited to…building roads or trails..." – Conservation Easement Deed for Mitigation and Conservation Banks in California, standardized template produced by the California Project Delivery Team, in use by the U.S. Army Corps of Engineers, California Districts[292]

289 33 C.F.R. § 332.7(a)(2).
290 Interview with Jennifer Lorenz, Executive Director, Bayou Land Conservancy (Feb. 10, 2012).
291 *Id.*
292 CALIFORNIA MULTI-AGENCY PRODUCT DELIVERY TEAM – CONSERVATION EASEMENT DEED, supra note 218.

Example: "Public Access: No right of access by the general public to any portion of the Property is conveyed by this Conservation Easement, and Grantor further covenants not to hold any portion of the Property open to general use by the public except with the written permission of the Corps [and Grantee]." – Conservation Easement, U.S. Army Corps of Engineers, Kansas City District[293]

6.2.1.2 Reviewing the Easement for Unanticipated Liability

While the seven broad categories of terms outlined above are the principal variations between traditional conservation easements and Corps model mitigation easements, land trusts should carefully review the model or other proposed mitigation easement for other novel terms that could affect your organization's liability. Though land trusts regularly review easements in this manner, the flexible nature of the division of duties between easement holders, mitigation providers, and long-term managers makes this step especially important at a mitigation site. If your land trust accepts an easement on a bank or an in-lieu fee property before the site has met all of its performance standards, be certain about your liability for the mitigation provider failing to meet performance standards or otherwise defaulting on the mitigation plan. Liability may also exist even if your organization accepts an easement after performance standards have been met (during Phase III).

As this sort of risk is unlikely to appear in a single easement provision, land trusts should be sure to review the easement as a whole for provisions, or omissions, that could lead to consequences if the mitigation work on the property fails.

To ensure that they are well-protected, some land trusts take additional measures to ensure that they are not liable for meeting ecological performance standards during the active and/or long-term stewardship phases of compensatory mitigation projects (Phases II and III). The North Carolina Coastal Land Trust routinely enters into a secondary agreement with mitigation providers—either in the form of a contract or as part of the purchase and sales agreement—outlining liability at the site and clarifying that the land trust, as the easement holder, will not be liable for any obligations at the site other than easement monitoring and defense. "Where the easement is on a mitigation bank, we prefer not to be a listed party in the Mitigation Banking Instrument," adds Janice Allen, Deputy Director of the North Carolina Coastal Land Trust.[294]

[293] KANSAS CITY DISTRICT, supra note 283.
[294] Allen, supra note 182.

Box 7: Documentation for Mitigation Easements

As with a traditional easement, the mitigation easement document will be accompanied by a number of exhibits, which could include (in full or in summary):

- Clean Water Act Section 404 and/or Section 10 permit
- Mitigation banking or in-lieu fee instrument (if applicable)
- Survey or legal description of the property
- Identification of other rights or interests in the property, which may include documentation showing the subordination of these interests to the mitigation easement
- Baseline description of conservation functions, services and resources on the site, including species, habitat, vegetation and contribution to the watershed
- Mitigation plan and/or long-term management plan

With regard to mitigation and long-term management plans, many Corps easement models suggest that a landowner and land trust enter into a separate long-term management and maintenance agreement (see Section 7.1, "Where to Find the Long-Term Management Plan," on page 105), which only needs to be referenced in or attached as an exhibit to the easement. Even if your land trust plans to enter into such an agreement, the parties should ensure that the easement reserves for each the rights necessary to achieve the goals of the separate agreement (for example, reserving the right to remove or destroy invasive species). But most land trusts holding mitigation easements agree that more detailed management and maintenance agreements are best dealt with apart from the easement document itself.

Box 8: Complying with State Law

To be enforceable, all conservation easements, including mitigation easements, must comply with state law. Unlike run-of-the-mill property easements, conservation easements are not part of the common law. This means that they cannot be enforced in court unless they are authorized under a state (or federal) statute. At present, every state except North Dakota has a state conservation easement statute allowing these property rights, but each creates its own set of requirements for how an easement must be drafted and what terms it must include.

Land trusts using mitigation easement models drafted by the Corps must review their terms in consultation with legal counsel to ensure that they are satisfactory under the state's conservation easement law. While the Corps also has an interest in making sure easements are enforceable under state law (as arguments for their enforceability on federal grounds are highly uncertain and purely speculative), land trusts should do their own due diligence because statutes may change and because the land trust's interpretation of requirements may differ from that put forth by the Corps. In particular, land trusts and their legal counsel should review the compliance of provisions on the following:

- *Easement duration:* In practice, the Corps requires that mitigation conservation easements specify that they are perpetual.[1] Some state conservation easement statutes put default limits on easement duration, but, at present, all allow parties to contract around that default and select a term of their choosing.[2] As a result, all 50 states presently allow conservations easements to last in perpetuity.[3] However, in light of the presence of default duration limits in some states, land trusts should review the proposed easement to ensure it clearly provides for perpetual duration. They should also review state statutes before each proposed easement to ensure that there have been no amendments to the state's easement duration provisions, and to familiarize themselves with any actions necessary to maintain the perpetual nature of the easement over time (see below on Marketable title acts). Most land trusts already take these steps with regard to traditional easements; mitigation easements are no different despite their association with a federal program.
- *Independent enforcement:* Conservation easement statutes may restrict or mandate who may be granted independent enforcement rights under an easement. For example, state statutes may grant independent rights to particular units of government or even to members of the public, as is the case in Illinois,[4] or may restrict independent enforcement rights to exclude particular categories of enforcers, as is the case in New Mexico.[5] These provisions may specify what rights the independent enforcer has—for example, whether they may collect enforcement costs from the primary easement holder (the land trust).[6]
- *Marketable title acts:* Marketable title statutes, which exist in about half the states,[7] operate to wipe out property restrictions like deeds and easements that were placed on a property in the past, often 30 years or more prior to the present. Some marketable title statutes exempt conservation easements,[8] but land trusts should verify that an exemption exists or, if it does not, should ensure that the easement provides for protective measures like periodic re-recordation of the easement deed.
- *Voluntariness:* A handful of conservation easement statutes contain language requiring that the easement be voluntary.[9] As mitigation easements are exacted as a condition of the Section 404 permit, a court could interpret them to be involuntary.[10] This language is rare,

and could be avoided by purchasing fee title from a voluntary seller, but where it is found, land trusts should review the provision carefully and speak with knowledgeable parties about how courts have applied that language and whether the issue has come up with regard to easements related to the Section 404 program.

While many of the above provisions will be familiar to land trusts from their work with traditional easements, the dynamics of a mitigation easement make compliance with state easement law particularly important.

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[1] The Section 404 rules only require "long-term" not perpetual protection. This language recognizes that it may not always be possible to find a third-party easement holder. In that case, the Corps would need to use methods that cannot guarantee perpetuity (like deed restrictions in states with marketable title statutes). However, where a land trust is willing to take on a conservation easement, the Corps will insist that it be an easement in perpetuity.

[2] *See, e.g.,* Ala. Code § 35-18-2(c) (2012) ("Except as provided in subsection (b) of Section 35-18-3 [affirming the power of the court to modify or terminate an easement as appropriate], the term of a conservation easement shall be the term stated in the instrument creating the easement or, if no term is stated, the lesser of 30 years or the life of the grantor, or upon the sale of the property by the grantor.").

[3] Only North Dakota does not have a conservation easement statute, but conservation easements can be achieved functionally through the purchase of adjacent land and the creation of an "easement appurtenant." (An easement appurtenant is a type of easement that is allowed only if the easement holder owns a piece of land that actually abuts the property on which the easement is place.)

[4] 765 Ill. Comp. Stat. 120/4 (2012) ("A conservation right created pursuant to this [Real Property Conservation Rights] Act may be enforced...by any of the following: (a) the United States or any agency of the federal government, the State of Illinois, or any unit of local government; … (c) the owner of any real property abutting or within 500 feet of the real property subject to the conservation right…").

[5] N.M. Stat. Ann. § 47-12-2(c) (2012) (defining independent ("third-party") enforcement rights to exclude government agencies: "'[T]hird-party enforcement right' means a right expressly provided by the parties to a land use easement empowering a specifically identified nonprofit corporation, nonprofit association or nonprofit trust that, although eligible to be a holder, is not a holder, to enforce any term of the easement…").

[6] This is the case in New Hampshire, where the state mitigation conservation easement regulations not only give the state independent enforcement rights, but also give the state the right to recover its enforcement costs from the land trust. Although the statute is written more broadly, the New Hampshire's regulations state: "(a) Each conservation interest instrument shall: …(4) Convey an interest to the State of New Hampshire that allows the state to enforce the conditions and restrictions of the easement and to recover the costs of such enforcement from the easement holder or property owner, or both." (emphasis added) N.H. Code Admin. R. Env-Wt 807.13(a)(4) (2012), available at: http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wt100-900.pdf.

[7] Environmental Protection Agency, Mitigation Rule Familiarization Workshop – Session 6 (2008), available at: http://www.epa.gov/owow/wetlands/wetlandsmitigation/session6/6-Site-Protection.html.

[8] *See, e.g.,* N.C. Gen. Stat. § 47B-3(8) (2012) ("Such marketable record title shall not affect or extinguish the following rights: … (8) Rights of any person who has an easement or interest in the nature of an easement…when such easement or interest in the nature of an easement is for any one of the following purposes: … (c) Conserving land or water areas pursuant to a conservation agreement…").

[9] *See, e.g.,* Mont. Code Ann. § 76-6-104(2) (2011) ("'Conservation easement' means an easement or restriction, running with the land and assignable, whereby an owner of land voluntarily relinquishes to the holder of such easement or restriction any or all rights to construct improvements upon the land or to substantially alter the natural character of the land or to permit the construction of improvements upon the land or the substantial alteration of the natural character of the land, except as this right is expressly reserved in the instruments evidencing the easement or restriction.")(emphasis added), available at: http://data.opi.mt.gov/bills/mca/76/6/76-6-104.htm; Cal. Civ. Code § 815.2(a) (2012) ("A conservation easement is an interest in real property voluntarily created and freely transferable in whole or in part for the purposes stated in Section 815.1 by any lawful method for the transfer of interests in real property in this state.")(emphasis added), available at: http://www.leginfo.ca.gov/cgi-bin/displaycode?section=civ&group=00001-01000&file=815-816.

[10] *See* Jessica Owley Lippmann, The Emergence of Exacted Conservation Easements, 84 Neb. L. Rev. 1043, 1103-1006 (2006), available at: http://digitalcommons.pace.edu/lawfaculty/588/.

All compensatory mitigation projects are required to have mitigation plans approved by the Corps and, in the case of mitigation banks and in-lieu fee projects, the IRT as well. The mitigation plan must itself include a long-term management plan. *For more on the mitigation plan, see Section 2.4.1 "The Mitigation Plan," on page 25.* If your organization plans to take on any duties during the long-term stewardship phase of a compensatory mitigation project (Phase III), the long-term management plan is the most critical component of the mitigation plan to review. Ideally, you will have the opportunity to help craft the plan to ensure that your land trust's legal and financial liabilities are minimized.

Practice 12C (Land Management) of *Land Trust Standards and Practices* requires land trusts to develop a management plan for all properties they own in fee. In the mitigation context, long-term management plans are particularly important because they are the mechanism for ensuring that restoration or other efforts uniquely associated with mitigation projects continue to provide desired functions in perpetuity. The rule requires five basic components to be included in the plan, including the identities of involved parties, the management responsibilities, and the means of funding (*see below*).

The long-term management plan is not, however, comprehensive of all of the dimensions of long-term stewardship. For example, it is required to generally describe funding needs and the funding mechanism, but it is not required to stipulate which entity holds the long-term financing or how these funds are disbursed. As a result, if your land trust will play any role in the long-term stewardship phase (Phase III), you should consider participating in the development of a long-term stewardship agreement in addition to the long-term management plan. These stand-alone contractual agreements cover the full range of stewardship responsibilities assigned to responsible parties after a site has met its performance standards. *For more on long-term stewardship agreements, see Section 7.3, "Stewardship Agreements," on page 114.*

There are two important and often confusing issues worth noting. First, long-term management is easily confused with "easement stewardship," because land trusts doing either kind of work may refer to that work as "stewardship" or to themselves as "stewards." Second, there may be management, maintenance, and monitoring obligations associated with both the active phase of the project (Phase II) and the long-term stewardship phase of the project (Phase III). However, during the active phase, any management, maintenance, and monitoring requirements are the obligation of the mitigation provider, and the mitigation provider is liable for these actions. Active phase obligations may also differ in substance from those of the long-term stewardship phase (e.g., requiring different kinds or frequencies of activities).

7.1 Where to Find the Long-Term Management Plan

The Compensatory Mitigation Rule requires that the long-term management obligations for sites be identified in two places. First, basic information on long-term management is required for all forms of compensatory mitigation in their primary project instrument. For permittee-responsible mitigation projects, the permit itself must "indicate the party or parties responsible for the…long-term management of the compensatory mitigation project."[295] Likewise, for a mitigation bank or in-lieu fee program, "the instrument must clearly indicate the party or parties responsible for the…long-term management of the compensatory mitigation project(s)."[296]

Second, the overarching mitigation plan must include plans for long-term management.[297] While all of the details of long term management may appear in the mitigation plan's long-term management plan

[295] 33 C.F.R. § 332.3(l)(1).
[296] § 332.3(l)(2).
[297] § 332.4(c)(11).

section, more commonly that section of the mitigation plan simply states that long-term management will take place pursuant to a separate document that is included as an appendix. Putting requirements in this separate document—typically (and helpfully) called the long-term management plan—and incorporating it in the mitigation plan by reference is useful first and foremost as an organizational tool. That way, the long-term management plan—with all of its details and appendices—can be viewed in one place and as a stand-alone plan. It also allows the parties to the plan to structure it as a contract, including sections on items like amendment and notice that might be awkward in the middle of the mitigation plan.

7.2 What Is in a Long-Term Management Plan?

Under the mitigation rule, there are five required components of the long-term management plan:

1. The parties responsible for long-term management and maintenance
2. The long-term management and maintenance requirements
3. The party responsible for long-term ownership
4. A description of the annual costs for carrying out long-term management activities
5. The funding mechanism that will be used to meet those costs

Some additional information is required for banks and in-lieu fee sites. For these compensatory mitigation mechanisms, the rule states that the long-term management plan must also document "the legal mechanisms and the party responsible for the long-term management and protection" of the site.[298] Specifically, the "responsible party should make adequate provisions for the operation, maintenance, and long-term management of the compensatory mitigation project site." The plan must also "address the financial arrangements and timing of any necessary transfer of long-term management funds to the steward."[299] This material must appear in the instrument (for a bank) or in the approved mitigation plans (for an umbrella banking instrument or in-lieu fee program).

7.2.1 Turning Regulatory Requirements into a Comprehensive Plan

Beyond the five requirements outlined above, the mitigation rule provides no more guidance on the specific components of a long-term management plan. This leaves a lot of discretion in the hands of the parties to turn these broad requirements into specific obligations.

Like easements or program instruments, your Corps district may have a template long-term management plan or provide some other guidance. Several Corps districts in California have developed such templates[300] and others, such as the Chicago District,[301] provide written specifications as to what should be in the plan.

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[298] § 332.8(u)(1).

[299] § 332.8(u)(3).

[300] CALIFORNIA MULTI-AGENCY PRODUCT DELIVERY TEAM, LONG-TERM MANAGEMENT PLAN FOR THE MITIGATION BANK (2008), available at http://www.dfg.ca.gov/habcon/conplan/mitbank/ [hereinafter CALIFORNIA MULTI-AGENCY PRODUCT DELIVERY TEAM – LONG-TERM MANAGEMENT PLAN]; SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS, BANK MANAGEMENT PLAN TEMPLATE (2005), available at http://www.spn.usace.army.mil/regulatory/mitigation/SFMgtPlan.pdf; SACRAMENTO DISTRICT, U.S. ARMY CORPS OF ENGINEERS, OPEN SPACE PRESERVE OPERATION AND MAINTENANCE TEMPLATE (2003), available at http://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/Open_Space_Preserve_Template.pdf.

[301] CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS, CHICAGO DISTRICT PERMITTEE RESPONSIBLE MITIGATION REQUIREMENTS (2009), available at http://www.lrc.usace.army.mil/Missions/Regulatory/MitigationRequirements.aspx hereinafter CHICAGO DISTRICT - MITIGATION

Some portions of the plan will be straightforward, for example, identifying who will own the site and who will be the long-term site manager. But most of the plan will require thorough analysis and thoughtful design. Crafting a list of management tasks, for example, will first require an understanding of the goals of the site going forward. After the goals are outlined, a set of comprehensive but achievable tasks capable of meeting those goals must be developed. Estimating costs and designing a sufficient funding mechanism is also complex. *For more information on calculating long-term financing, see Section 8, "Long-Term Financing Mechanisms: Technical Guide," on page 117.*

Once tasks and funding are established, the long-term management plan must also address tough questions about liability for these tasks and how to prioritize tasks if not all of them can be performed. For a land trust taking on the role of long-term manager, this will first require negotiating liability for the plan's management obligations, typically by ensuring that the land trust will not be liable for tasks that cannot be covered by the long-term funding mechanisms in the event of underperformance or other curtailment of the fund's availability by the permitting agency. Second, the land trust should consider what obligations the plan creates, or waives, if the restoration project fails or other forces—acts of God, climate change—interfere with the ecological success of the project. This requires the land trust to grapple with such questions as the appropriate role of adaptive management at the site and how land trust duties should be prioritized in the event of the unexpected.

Land trusts assuming other stewardship roles should consider how the long-term manager's liability or responsibility will affect their own. For example, if the long-term management plan allows the manager to stop work when funding is low, this action may affect the easement holder by diminishing the land's conservation value.

7.2.2 Contents of a Management Plan

Although long-term management plans can take different forms and must be tailored to the site, the rule requires certain elements and others are suggested by existing guidance from the Corps districts. Typically, long-term management plans have nine main elements:

1. Introduction to and purpose of the plan
2. Party responsible for long-term management
3. Party responsible for site ownership
4. Property description
5. Description of the habitat and species on the site
6. Management and monitoring requirements (covering both goals and tasks arising from those goals)
7. Administrative matters, such as transfer, replacement, amendment, and notice

REQUIREMENTS]. In Chicago, for example, the Corps instructs the plan's drafter to include: (1) a description of long-term management needs, annual cost estimates for those needs, and the funding mechanism that will be utilized to meet the needs, (2) the entity responsible for ownership and long-term management of the site with supporting documentation showing the owner's and manager's willingness to assume this role ("e.g., agreement or letter of intent"), the District prefers "that the proposed long term manager or organization have expertise in executing adaptive management procedures" and that the applicant "establish agreements for long-term management with public or private conservation organizations with final approval of the Chicago District"; and (3) an associated financial assurance plan. The District also requires that the applicant "submit a financial plan that demonstrates that the mitigation can be maintained in perpetuity" including the "establishment of a fully funded endowment for long term site management activities."

8. Funding and task prioritization
9. Other sections

Of these areas, the descriptive sections (4 and 5), the management and monitoring section (6) and the funding section (8) will be the most technical and time-consuming.[302]

7.2.2.1 Introduction and Purpose

The introduction to the management plan lays out the basic framework of the plan, describes the compensatory mitigation requirements, and outlines the specific project giving rise to the management plan. This section may provide a brief introduction to the contents of the plan and may mention any other general obligations that fall on the land manager (like the requirement to seek IRT approval for changes).

Often the party or parties responsible for long-term management and site ownership are noted in the introduction. This section may include legal language indicating that the site must be managed in perpetuity by the land manager and any subsequent managers in accordance with the plan. The introductory section will state that the plan is "a binding and enforceable instrument." The introduction will also note whether or not the plan is enforceable through the conservation easement.

7.2.2.2 Party Responsible for Long-Term Management

One of the central objectives of the long-term term management plan is to clearly identify "the party or parties" that are responsible for long-term management obligations.[303] Although the rule states that the permit or instrument must name the party responsible for ownership and all long-term management of the mitigation project, the Corps and EPA also acknowledge that the mitigation provider may not have determined the long-term manager at the time a mitigation project is approved. To account for this uncertainty, the permit or instrument may include "provisions allowing the permittee or sponsor to transfer the long-term management responsibilities" to a "land stewardship entity, such as a public agency, non-governmental organization, or private land manager." [304] However, if the mitigation provider transfers long-term management responsibilities at a later date, the Corps must first approve the arrangement.[305]

These requirements give the project sponsor or permittee two options. First, the sponsor/permittee could seek out a land trust or other land stewardship entity at the time the bank or project is being approved. If the sponsor/permittee secures a land trust's consent to serve as long-term manager, that land trust will be identified in the permit or instrument, satisfying the regulatory requirement. The sponsor/permittee and the land trust may choose to enter into a separate agreement memorializing their understanding, but the permit or instrument itself will identify the land trust's obligation to manage the site for the required period.

Second, the project sponsor or permittee could list itself in the permit or instrument as the party responsible for long-term management. Alongside this obligation, the sponsor/permittee would add a provision stating that these responsibilities may be transferred to a qualifying land steward upon Corps approval. Then, at

[302] For an additional example, see CENTER FOR NATURAL LANDS MANAGEMENT, ANNOTATED OUTLINE OF STANDARD FORMAT MANAGEMENT PLAN FOR RESOURCE AND HABITAT CONSERVATION AREAS: FIVE-YEAR MANAGEMENT PLAN (2007), available at http://learningcenter.lta.org/attached-files/0/80/8085/appendix_12_C_03.pdf.
[303] 33 C.F.R. § 332.7(d)(1).
[304] *Id.*
[305] *Id.*

some later date—perhaps once the instrument has been approved—the sponsor/permittee could identify a land trust willing to assume long-term management responsibilities, secure the agency's approval, and then transfer those responsibilities to the land trust. In this second instance, the land trust would not be identified in the permit, banking instrument, or in-lieu fee instrument (unless upon amendment). Instead, the long-term management arrangement would be established through some other contractual document between the sponsor/permittee and the land trust, which would affect the transfer of responsibilities.

Which of these two options is better from a land trust's perspective will depend largely on the role under consideration. If you are contemplating becoming a long-term manager at a site, accepting these responsibilities later down the line—maybe even after the site has met its performance standards—gives you a chance to make sure that the site restoration has gone according to plan and that the site will be successful before you take on any liability. As a mitigation provider, however, identifying the long-term manager early on limits the amount of time that you are responsible for these obligations. As a potential easement holder, knowing in advance who the long-term manager will be could affect your consideration of whether to accept the easement. As a result, when reviewing a long-term management plan, the role you are assuming—and your knowledge of the other parties involved—should be foremost among your concerns.

7.2.2.3 Party Responsible for Site Ownership

The long-term management plan must also clearly indicate the party responsible for long-term ownership of the site. The fee title property owner may be someone other than the mitigation sponsor, permittee, or long-term manager. Details related to fee title ownership will also appear in the site protection instrument section of the long-term management plan.[306] If your land trust plans to hold an easement on a mitigation site, it is prudent for you to ensure that either this section of the long-term management plan or a separate stewardship agreement require the fee title owner to notify your organization if and when fee title to the property is transferred to a different entity.

7.2.2.4 Property Description and the Baseline

Although not required, the long-term management plan often includes a detailed property description (both a legal description and a qualitative description).[307] If included, this section of the plan would likely describe the property's location, including references to maps included as attachments to the plan and legal identifiers like the parcel number. The section may also describe the history of the site, including past and present land use on the site and in the area, and the history of the site's ownership. The land uses on adjacent parcels may be noted here or in a separate section; identifying adjacent land uses helps determine potential management concerns. This element may provide information on any property encumbrances, like easements over the land (such as power lines running through the site or neighbors with rights-of-way across the property), which could affect its management.

This section may also address considerations like property taxes, mineral rights, local water management controls, title maintenance (including re-recordation of deeds), and other notable types of non-natural features, like buildings and roads, or more unusual features, like sites of archaeological interest. Finally, the property description typically includes a detailed account of the site's physical characteristics: hydrology, topography, and soil composition.[308]

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[306] § 332.7(a)(3).

[307] See, e.g., CENTER FOR NATURAL LANDS MANAGEMENT, supra note 302; CALIFORNIA MULTI-AGENCY PRODUCT DELIVERY TEAM – LONG-TERM MANAGEMENT PLAN, supra note 300.

[308] Where the instrument already includes a survey of these features (for example, the Cultural Resources Survey required of mitigation banks in some states), the

At the time the long-term management plan is approved, the restoration, enhancement and/or creation activities have not yet taken place. If you accept an easement during the planning phase of the project (Phase I), the conditions at the site are likely to be vastly different by the time the site has met its performance standards and is in the long-term stewardship phase. So what to do about baseline documentation?

Practice 11B of *Land Trust Standards and Practices* requires a baseline documentation report for every easement, prepared prior to closing and signed by the landowner at closing. For mitigation easements, an initial baseline that meets Practice 11B should still be prepared and should reflect the site conditions at the time. It should also outline the mitigation activities that will be taking place on the site. The mitigation provider must identify the work that will be carried out at the site, and those tasks appear in the "mitigation work plan" section of the mitigation plan. The initial baseline documentation should also reflect the maintenance activities that are spelled out in the mitigation plan. *For more information on the components of the mitigation plan, see Section 2.4.1, "The Mitigation Plan" on page 25.* Once the Corps determines that the project has met its performance standards (and is in the long-term stewardship phase), the baseline documentation report can be updated and finalized and the land trust should continue its annual easement monitoring based on the new site conditions. Land trusts may also consider seeking an amendment to the long-term management plan to reflect the conditions of the site at the point when performance standards have been met.

7.2.2.5 Habitat and Species Description

The Compensatory Mitigation Rule does not require a description of habitat and species at the site. However, like the property description, this section appears on Corps and land trust templates and can help inform decisions about specific management tasks.[309] In fact, this information may already be available in other surveys of the site (for example, California requires that mitigation banks provide a biological resources survey of the site as part of the banking instrument). A thorough analysis would include: ecosystem types, geographic features, vegetation, native species, invasive or exotic species, and habitat requirements of the identified species. It might also include a more detailed inventory of species known to be or likely to be on the property, as well as identification of endangered or threatened species that might require more careful management. Where possible, maps should be used to illustrate the species and habitat descriptions. Particularly important would be identification of any on-site elements added or enhanced as part of the mitigation project, like enhanced waters or plantings, and their location.

7.2.2.6 Management and Monitoring Requirements

The management and monitoring section is at the heart of the long-term management plan. The rule requires that the plan include "a description of long- term management needs."[310] This section should detail not only the goals of long-term management, but also the specific tasks that the long-term manager will undertake to ensure the site's continued ecological functioning over time. The goals, and thus the tasks, will depend on the needs of the site. This section of the plan may also outline any required monitoring.

Biological goals will address the natural and created features at the site, as well as the habitat and native, invasive, and threatened or endangered species identified in the plan's ecological description.

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plan could reference that survey.

[309] See, e.g., CENTER FOR NATURAL LANDS MANAGEMENT, supra note 302; CALIFORNIA MULTI-AGENCY PRODUCT DELIVERY TEAM, LONG-TERM MANAGEMENT PLAN, supra note 300.

[310] 33 C.F.R. § 332.7(d)(2).

Infrastructure goals will concern the maintenance of structures to control activities at the site. Administrative goals address reporting, adaptive management, and staffing concerns.

For each goal, the plan should outline tasks. Tasks linked to the biological goals may include population assessment surveys, species mapping, vegetation management (like mowing), ongoing restoration work (like planting, reintroduction of species, etc.), and fire management. Tasks that relate to the infrastructure goals may include the maintenance of fencing at site boundaries, trash collection, and damage repair. Tasks associated with the administrative goals may include site visits, qualitative and reference photo monitoring, and the submission of annual (or other frequency) reports on the status of the site and any success criteria.

The following goal/task example comes from the California template long-term management agreement for mitigation banks:[311]

Element A.4 Threatened/Endangered Plant Species Monitoring
…

Objective: Monitor population status and trends.

(i) Objective: Manage to maintain habitat for _____.

Task: Monitor status every year by conducting population assessment surveys. The annual survey dates will be selected during the appropriate blooming period and will generally occur from late March through April depending on the timing of the blooming period each year. Occupied habitat will be mapped and numbered to allow repeatable data collection over subsequent survey years. Abundance will be assessed semi-quantitatively using broad abundance categories, i.e., 0, 1-100, 101-500, 501-1,000, and >1,000 plants.

Task: Visually observe for changes to occupied habitat, such as changed hydrology or vegetation composition. Record any observed changes.

Task: Implement other tasks that enhance or monitor habitat characteristics for _____.

When crafting language about management tasks, it is important to strike a balance between tasks that are very directive and those that are more general or tied to meeting specific performance standards or services provided by the site. *For more information on the risks associated with overly prescriptive verses overly vague management task wording, see Section 5.4.9, "Level of Specificity in Long-Term Management Plans," on page 77.* The development of a solid long-term financing plan will be far easier the more clear the management tasks are. The tasks laid out in this section will dictate how the long-term management funds may be allocated. In general, the long-term manager of the site will not be able to undertake management work that is "over and beyond" what is required in the plan without a plan modification. Such modifications must be coordinated with the regulatory agencies and the other parties engaged in long-term site stewardship. *For more on modification and amendments of mitigation documentation, see Section 3.4, "Plan and Instrument Modifications," on page 50.*

If your land trust holds an easement on a mitigation site and a different entity is responsible for the long-term management and maintenance obligations, a thorough review of this section is essential. You will want

[311] CALIFORNIA MULTI-AGENCY PRODUCT DELIVERY TEAM – LONG-TERM MANAGEMENT PLAN, supra note 300.

to ensure that you are clear on how routine site obligations are divided between your land trust and the long-term manager, and, in some cases, the fee title holder. In comparison to non-mitigation easements, you may find that you are responsible for *less* than you are used to. For example, administrative tasks may be the job of the fee title holder or the easement holder on a non-mitigation site; on mitigation sites, those tasks are likely to be those of the long-term manager. Second, because conservation easements are written to protect specific conservation values, it is important to review this section of the plan to ensure that—in your view—the management tasks will be adequate to maintain those values. Accepting an easement on a site that has little chance of being sustainable in the long-term could divert your land trust's valuable resources, undermine your conservation goals, and potentially reflect poorly on your land trust in the eyes of the public.

7.2.2.7 Administrative Matters

The long-term management plan may also discuss a range of administrative matters. There are four areas of administration that may be included:

1. Transfer of long-term management responsibilities. Transfer of long-term management occurs when the land trust or other manager voluntarily arranges to transfer its responsibilities to another land trust or land steward. The plan may require that this transfer be approved by the agency or IRT, or be formalized through an amendment to the plan itself.

2. Replacement of the land manager. This subsection will outline procedures that the agency or IRT may follow to remove the current long-term manager and designate a new one, though it may first provide the manager with an opportunity to cure any deficiencies in its management.

3. Amendment to the plan. The amendment subsection outlines procedures for making changes to the long-term management plan.

4. Notices. The notice subsection lists the parties to whom notices under the plan must be sent. This list will include all agencies that are signatories to the permit or instrument.

7.2.2.8 Funding and Task Prioritization

Another of the required and essential components of the long-term management plan is a section that outlines "annual cost estimates for [long-term management] needs," and identifies "the funding mechanism that will be used to meet those needs."[312] In addition to describing the expected costs of long-term management, which are often presented in a table identifying tasks and their frequency, this section should outline any underlying assumptions, like inflation or capitalization rates. Although the funding mechanism must be described, the rule does not require that this section of the plan identify who will hold the long-term funds and how they will be distributed or transferred to the land manager. If your land trust is holding a mitigation easement or is responsible for long-term site management, it is important that these issues are outlined either in this section or in a separate stewardship agreement. *For more information on long-term financial assurances see Section 8, "Long-Term Financing Mechanisms: Technical Guide," on page 117. For a discussion on fund disbursement, see Section 5.4.16, "Coordinating Long-Term Stewardship Funding Needs With the Long-Term Stewardship Fund Holder," on page 80 and Section 8.4, "Managing Long-Term Funds," on page 134. For more information on stewardship agreements, see Section 7.3, "Stewardship Agreements," on page 114.*

[312] *Id.*

As discussed above, the long-term management plan should include a section that lays out the goals for the site and the tasks associated with meeting those goals. This section, however, should not only link the expected costs with those management tasks, but should establish appropriate procedures to guide decision making if funding proves insufficient to fully implement the plan. In particular, the plan should indicate how management tasks will be prioritized in the event the long-term manager does not have the funds to fulfill its full range of obligations. For example, the California long-term management plan template specifies that tasks will be prioritized as follows:

1. Tasks "required by a local, state, or federal agency"
2. Tasks that are "necessary to maintain or remediate habitat quality"
3. Tasks that "monitor resources, particularly if past monitoring has not shown downward trends."[313]

Some Corps districts will want considerable oversight over how decisions are made about prioritizing management tasks in years with insufficient funding. The California template suggests that, at least in that state, the Corps and IRT will play a significant role in the selection and prioritization of management tasks under such circumstances. In fact, the final determination of task priorities in these circumstances must be approved by the project's IRT. Other Corps districts will be far more hands-off in guiding task prioritization in lean years. But the permitting agencies may have the authority to play this role in perpetuity, regardless of whether or not they execute it.

When crafting or reviewing this section, there may be two approaches to consider. First, the long-term site manager may be given the authority to make decisions about which management tasks will be curtailed when funds are limited. This approach may, however, expose the party to potential liability for those decisions. Under such an arrangement, the long-term manager should consider including a provision in the long-term management plan that clearly indicates that it is not liable for the consequences of *good faith* or *reasonably prudent* decisions made along these lines.

On the other hand, if the regulatory agencies have the primary authority for making these decisions, the long-term site manager would be required to adhere to the decisions and would be absolved of liability for them.

For more information on the challenges associated with funding long-term stewardship, see Section 5.4, "How Will Involvement in Long-Term Stewardship Affect Your Organization's Exposure to Risk," on page 74 and Section 8, "Long-Term Financing Mechanisms: Technical Guide," on page 117.

7.2.2.9 Other Sections

Additional sections may be included in the long-term management plan to address the needs of the site and the nature of the project. For example, your plan may include additional information on the adjacent and local area—population dynamics, land use trends, zoning, and so on. This sort of information might be more important at a site in an urban or suburban area where the presence of nearby communities could increase the likelihood of management complications.

[313] CALIFORNIA MULTI-AGENCY PRODUCT DELIVERY TEAM – LONG-TERM MANAGEMENT PLAN, supra note 300.

The plan may also include:

- More detailed information about the land trust assuming management responsibilities (like its history and mission)
- An explanation of broader biological principles that will inform management goals and tasks
- Local, state, or federal laws that may impact management (for example, the need for permits for some activities)
- Natural hazards that may affect the site, like floods or hurricanes
- Equipment or supplies necessary to perform management tasks
- Information on the possibility of expanding the preserved area—perhaps identifying adjoining lands that could, in the future, be added to the site to enhance its ecological functions
- "Programmatic" objectives, like public education, recreation, or research programs that might be appropriate on the site, and any partnerships (with groups or volunteers) to effectuate these programs
- The impact or relationship of compatible uses permitted on the site, like hunting[314]

This list by no means exhausts the considerations for a long-term management plan, but it conveys the broad range of appropriate topics and the need for careful tailoring of the plan to the site in question. Whether you will be the easement holder or the long-term manager, thoughtful review of the adequacy of the management plan is central to ensuring that your stewardship role will be successful and without incident.

For more information on creating land management plans, see the Standards and Practices Curriculum, "Caring for Land Trust Properties."

7.3 Stewardship Agreements

Long-term stewardship of mitigation sites very often includes more than one party. In fact, having several parties involved in the long-term stewardship of a site has become the norm. For example, the mitigation provider may retain fee title ownership of the site, carry out long-term management and maintenance obligations, and hold and manage the long-term financing, while a land trust may hold the easement and only conduct easement monitoring and defense. It would not be unusual, though, for duties to be spread across even more parties—including, perhaps, a private owner of the fee title or a separate entity responsible for holding the long-term funding mechanism, not to mention that the Corps or other lead agency will always remain involved.

Managing a site with the involvement of multiple entities may require complex contractual arrangements between the parties. The long-term management plan may not, however, include all the essential details about these arrangements, many of which may affect your organization's financial and legal liability. For example, the long-term management plan is not required to stipulate which entity holds the long-term financing or how these funds are disbursed. It also may not address transfer of fee title to the property

[314] See also CENTER FOR NATURAL LANDS MANAGEMENT, supra note 302.

or details about the easement, if there is one. If the specific responsibilities of each party are not clearly articulated in the long-term management plan and your organization will be playing a role in the long-term stewardship phase (Phase III), a **long-term stewardship agreement** should be considered. These stand-alone contractual agreements may cover the full range of stewardship responsibilities assigned to responsible parties *after* a site has met its performance standards.

Stewardship agreements, like long-term management plans, will be multi-party contracts involving the project proponent or permittee, the agency or agencies, the land trust serving in one or multiple roles, and any landowners, contractors, subcontractors, or other third parties involved at the site. The involvement of multiple parties can mean lengthier negotiations about the design of contractual agreements and may necessitate more complex contractual provisions that outline how responsibilities and liabilities are allocated among the different players. But the value of a stewardship agreement is that, unlike a long-term management plan, it allows you the flexibility to cover ***all*** of the various stewardship roles and their responsibilities in one place. A single overarching document helps guarantee that there are no gaps or gray areas left in the allocation of responsibility and liability.

Stewardship agreements can also be used to hash out details of a single role when arrangements surrounding that role are particularly complex. For example, under North Carolina's Ecosystem Enhancement Program (EEP), the state government is required to maintain a property interest in any mitigation completed under the EEP in-lieu fee program. As a result, owners of mitigation sites cannot grant conservation easements directly to land trusts. Instead, the state can serve as the easement holder listed in the easement alongside the Corps and the landowner. At the same time, the state can assign its easement responsibilities to a land trust, which thus becomes responsible for monitoring and enforcement without being party to the original easement.[315] This type of arrangement should be memorialized in a stewardship agreement accompanying the easement itself.

7.4 Conclusions on Long-Term Management Plans

The broad and open-ended nature of some of the questions surrounding long-term management is one reason your land trust should consider getting involved in the site sooner rather than later. While the rules allow the sponsor/permittee to identify long-term manager after the long-term management plan has been approved, such an arrangement would mean your land trust misses the first opportunity to shape the content of that plan and would put your land trust in the position of having to accept or reject a fully formulated management plan. You can seek amendments to an approved plan, and some land trusts report this is the norm. *For more information on amending mitigation plans, see Section 3.4, "Plan and Instrument Amendments or Modifications," on page 50.* Other land trusts suggest that being at the table during formulation is critical; some Corps districts state a preference for this early involvement.[316] Early involvement allows the land trust to contribute its expertise to the challenges of outlining long-term goals for the site, of determining specific management tasks necessary to meet those goals, of estimating the costs of carrying out the required tasks, and of designing funding mechanisms adequate to cover the costs. Early involvement ensures that the management plan will be optimally aligned with the capacity of the particular land trust and its needs in managing the site in perpetuity.

[315] Interview with Suzanne Klimek, Senior Program Consultant, North Carolina Ecosystems Enhancement Program (May 19, 2011, June 2, 2011).

[316] This may also be the preference of the Corps district. The Chicago District provides, for example: "The applicant shall also identify the entity responsible (and provide supporting documentation, e.g. agreement or letter of intent) for the ownership and long-term management of the site. Identifying the responsible entity prior to permit issuance will aid in the processing of the instrument." CHICAGO DISTRICT - MITIGATION REQUIREMENTS, supra note 301.

Box 9: Documentation for Long-Term Management Plans

To support its substantive goals and tasks, the long-term management plan will be accompanied by a range of appendices, which could include:

Tables:
- Anticipated cost table with object/strategy/costs/schedule/seasonal distribution/frequency/success criteria, etc.
- Table of management goals and tasks with seasonal/yearly scheduling

Maps:
- Map of the general vicinity
- Map of the specific property
- Property deed or plat map (showing easements or rights-of-way, as well as legal boundaries)
- Topographic map
- Vegetation map
- Map identifying waters of the United States
- Map indicating the habitat and location of species known or likely to occur, endangered species and rare/special species (possibly indicated on separate maps where management tasks are geared to one of those subsets of species)

Surveys and Inventories:
- Biological resources survey
- Inventory of species (known or likely to occur on the property, endangered, rare or special)
- Cultural resources survey

Other:
- Prioritization of tasks (may also be produced separately on an annual basis)
- First-year or first-period work plan (if the long-term management plan provides for more narrowly tailored annual or multiyear work plans)

The specific set of documents required will depend on the site and its needs. Some of these documents, however, may be incorporated into other parts of the mitigation plan or instrument. As a result, they may only need to be referenced in the long-term management plan. Where one of the above documents would aid the long-term manager but does not currently exist, the plan might also provide for its creation (for example, detailed endangered species maps).

Under the § 404 compensatory mitigation regulations, mitigation providers are required to provide sufficient funding to meet the long-term management needs of the site. The long-term management plan for the site must describe "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."[317] In addition, any "provisions necessary for long-term financing must be addressed in the original permit or instrument."[318]

As discussed in Section 4.3, "Long-Term Stewardship Responsibilities," on page 56 there are four separate roles that can be played during the long-term stewardship phase. Compensatory mitigation regulations provide that the mitigation provider provide funds for the entities that are responsible for two of those roles:

1. Long-term management and maintenance
2. Easement stewardship and defense

The responsibilities for carrying out these activities can similarly be divided between different agencies and organizations. As you might expect, the funding for these two different sets of responsibilities can also be separated. Consistent with Practices 11A (Funding Easement Stewardship) and 12A (Funding Land Stewardship) of *Land Trust Standards and Practices,* whatever role a land trust plays in a mitigation project, it must ensure that it receives sufficient funds to meet its obligations. This is crucial not only to ensure that your land trust can meet its conservation and financial goals, but also to ensure that the legal and regulatory obligations associated with the property are met. As with traditional conservation easements, careful financial and investment management is necessary to reduce the financial risk for the land trust over the long-term.

8.1 How to Determine How Much Money Your Organization Will Need

Once you have determined that your organization is comfortable with and has the capacity to engage in the long-term stewardship of a mitigation site and have identified the role(s) you will play in the project, you need to answer the all-important question: how much money will be needed to ensure the protection and management of the site over the long-term? There are a number of steps a land trust must take to answer this question, including:

1. Identify the range of duties, activities, and other responsibilities that need to be considered when calculating annual stewardship costs
2. Calculate the annual stewardship costs
3. Calculate the enforcement costs
4. Calculate the principal amount of the long-term financing mechanism

The more clear the management tasks in the long-term management plan, the easier it will be to develop a solid long-term financing plan. However, as conditions may change over the long-term the land trust may consider including some flexibility in the long-term management plan. *For more information on the risks associated with overly prescriptive verses overly vague management task wording,*

[317] 33 C.F.R. §332.4(c)(13).
[318] § 332.7(d)(3).

see see Section 5.4.9, "Level of Specificity in Long-Term Management Plan," on page 77. In addition, the long-term manager should structure the long-term management plan and stewardship agreement to clearly indicate that it is not liable for completing management tasks if the long-term financing falls short. The amount of Corps oversight of how decisions are made about prioritizing management tasks in years with insufficient funding will vary by district. *For more information on task prioritization see Section 7.2.2, "Contents of a Management Plan," on page 107.*

8.1.1 Identify the Range of Duties, Activities, and Other Responsibilities that Need to Be Considered When Calculating Annual Stewardship Costs

The range of duties, activities, and other responsibilities taken on by the land trust will vary with each mitigation project (e.g., with the specifics of the site, the mitigation plan, and the roles of other organizations in the project) and will depend on the role the land trust plays in the long-term stewardship of the site – easement holder, fee title holder, or long-term manager. *For more information on the roles a land trust can play in compensatory mitigation, see Section 4, "Roles That Land trusts Can Play in Compensatory Mitigation," on page 52.*

Stewardship costs for traditional conservation easements can be broken down into four major categories (see Box 10: *Four Main Easement Stewardship Activities*):

1. Baseline documentation (some land trusts include this item as an acquisition cost)
2. Annual monitoring and stewardship responsibilities
3. Ongoing landowner relationships
4. Enforcement to address violations

For traditional conservation properties held in fee, a land trust must plan for additional stewardship costs in the following categories:

1. Start-up costs
2. Annual costs
3. Capital
4. Capital replacement costs

For the purposes of this handbook, we define long-term stewardship of mitigation sites as the full range of activities that take place on a compensatory mitigation site after that site has met its performance standards, including long-term management and maintenance, easement stewardship and defense, and management of the long-term funding mechanism.[319] The stewardship activities outlined in Box 10 supply a comprehensive starting point for identifying the range of activities that should be considered when calculating long-term stewardship costs for mitigation sites. However, there will likely be additional considerations for mitigation sites given that these sites are associated with a regulatory program and many of these sites have been recently restored and are still ecologically young. For example, mitigation sites will require long-term management and maintenance conducted in accordance with a long-term management plan, which may include more intensive activities (e.g., invasive species control, controlled burning, etc.).

[319] For a clarification on the terms used in this handbook, see *Chart 2 on page 8*.

8.1.1.1 Key Considerations for Easement Stewardship and Defense

Many of the easement stewardship and defense activities required for traditional easements will be applicable to mitigation sites. However, mitigation easements may entail additional activities such as more involved monitoring and reporting obligations and the possibility of higher easement defense legal costs.

Your land trust should thoroughly evaluate the long-term management plan to fully understand how these tasks may affect the easement stewardship and defense activities for the site. *For more on long-term management plans, see Section 7, "Long-Term Management Plans: Technical Guide," on page 105.*

In general, a land trust should consider the following when determining easement stewardship and defense costs:[320]

- Labor costs for easement monitoring
- Labor costs for establishing and maintaining landowner relationships
- Consultants
- Office overhead
- Travel and mileage
- Supplies and equipment (e.g., cameras, image processing, GPS units, fireproof file cabinets, copying and mailing, etc.)
- Storage and records management (e.g., direct costs, labor costs, administrative support)
- Legal costs (i.e., ready access to an attorney when questions arise about easement interpretation, compliance issues, process, and other points of law)
- Enforcement costs
- Insurance costs

The costs associated with these items will vary with the site characteristics, staff capacity, easement complexity, and likelihood of violations. *For more information on the challenges and opportunities of holding an easement on a mitigation site, see Section 5.4, "How Will Involvement in Long-Term Stewardship Affect Your Organization's Exposure to Risk," on page 74.*

[320] Doscher, supra note 259.

Box 10: Four Main Easement Stewardship Activities

When a land trust acquires a new easement, it must estimate stewardship costs for that easement. From these estimated costs, the land trust can calculate what amount of funding is needed to support the easement permanently over time. When calculating long-term funds for mitigation sites, a land trust will need to address these considerations, as well as any that may apply only in the regulatory context.

In general, a land trust's four major easement stewardship responsibilities are:

- Baseline documentation: The land trust must visit and evaluate the site in order to record baseline conditions. (Many land trusts include this item as an acquisition cost.)
- Annual monitoring and stewardship responsibilities: Easements may include both restrictions on activities and affirmative obligations. The land trust's annual monitoring and stewardship responsibilities will vary based on these restrictions and obligations.
    - Restrictions on a property will vary depending on the purposes of the easement. Any outside approval needed for easement activities will increase the land trust's time and expense burdens. Specific responsibilities may include:
        - Annual (or more frequent) monitoring
        - Responding to landowner questions and concerns
        - Following up on easement issues as they occur
        - Communicating with new landowners as the property changes hands
        - Communicating with the land trust board, staff and committees
        - Maintaining documentation and supporting materials, such as long-term management plans, legal documents, monitoring reports, photos, notice of approvals and landowner correspondence in accordance with the land trust's recordkeeping policy
        - Maintaining communication with the Corps and other regulatory agencies as needed (for mitigation easements)
    - Affirmative obligations may be imposed on the land trust or the landowner. Given the larger affirmative management burdens for mitigation sites, these duties are often separated out as long-term management and maintenance activities and are specified in the long-term management plan. Depending on the role the land trust plays, these duties may be the responsibility of a different entity. The land trust should be sure to budget for the time and expense necessary to ensure these obligations are met (either for completing the work or ensuring the landowner or other organization performs any affirmative obligations). Specific activities could include:
        - Managing habitat
        - Obtaining and following forest or agricultural management plans

- Monitoring for a specific species
- Managing public access for recreation
- Conducting specific agricultural or historic activities on a property

- Maintaining ongoing landowner relationships: The land trust should be in consistent contact with the landowner as part of ongoing stewardship. Specific activities may include:
  - Communicating with the landowner on a regular basis
  - Resolving problems as they occur
  - Documenting activities with landowner contacts
  - Communicating with interested external parties, the land trust board, committees and staff
- Enforcement to correct violations: The land trust is responsible for responding to violations to the easement or other legal challenges to the site. Due to their size (often small) and location (often urban/suburban), mitigation sites may be more vulnerable to violations. Specific costs may include:
  - Land trust staff and volunteer time (e.g., discussions with the landowner, site visits, consultation with board and staff members, communication with legal counsel, documentation and managing public relations)
  - Legal fees
  - Coordination with the regulatory agencies (for mitigation easements)
  - Expert advice

For additional information, see: Doscher, Paul, Brenda Lind, Ellen Sturgis and Chris West. 2007. "Determining Stewardship Costs & Raising and Managing Dedicated Funds." Standards and Practices Curriculum. Ed. Sylvia Bates. Land Trust Alliance.

8.1.1.2 Key Considerations for Properties Held in Fee

As discussed in Section 4.3.1, "Fee Title Holder," on page 56, land trusts may hold mitigation sites in fee under different sets of circumstances. For example, the land trust may hold the mitigation property in fee, while another organization takes on the long-term management and maintenance of the site. Even if the land trust does not assume on the long-term management responsibilities, there may be additional tasks required for properties held in fee that go above and beyond the basic easement monitoring activities. Basic funding obligations for mitigation properties held in fee may include:

- Marking and maintaining boundaries
- Monitoring the site regularly

- Paying taxes
- Carrying insurance
- Overseeing leases and other arrangements
- Protecting the important conservation attributes of the property

Other costs for properties held in fee can include:[321]

- Start-up costs (e.g., holding a dedication ceremony, contacting neighbors, paying back taxes, preparing leases, surveying and posting boundaries and hazards, cleaning up garbage, conducting natural and cultural resources inventories, locating rare species, fencing, installing gates at trailheads or to block roads, constructing or repairing trail and parking areas, removing buildings or known hazards, erecting entrance signs, purchasing or preparing maps and aerial photographs, preparing a management plan, and preparing a property brochure)
- Annual costs (e.g., monitoring, maintenance, equipment, resource maintenance or restoration, administration, property taxes, recreation, public relations, insurance and review of leases)
- Capital expenses and replacement costs (e.g., replacement, repair, or maintenance of brochures, trailhead or road barriers, equipment purchase and maintenance, signs and registration boxes, boundary signs/brushing out boundaries, bridges and walkways, and buildings and other structures)
- Resource inventories and management plans – The long-term management plan for the mitigation site will detail the long-term management activities for the site. If another entity has been assigned these responsibilities, the land trust should be sure to review what will be required on the site to ensure that the long-term management and maintenance requirements are compatible with your long-term conservation goals for the site
- Contingency – The land trust should set aside funds to account for unforeseen costs that result from property ownership

As with mitigation easement stewardship, mitigation properties may require additional staff time and capacity for monitoring. Mitigation sites are often small and located in urban areas and thus may have an increased risk of violations. Therefore, the land trust may need to estimate higher than normal enforcement costs for mitigation sites held in fee. *For more information on the challenges and opportunities of holding a mitigation site in fee, see Section 5.4, "How Will Involvement in Long-Term Stewardship Affect Your Organization's Exposure to Risk?," on 74 and Section 6.1.3, "Fee Simple Title," on page 92.*

8.1.1.3 Key Considerations for Long-Term Management and Maintenance

Because most mitigation sites have been recently restored, intensive management (such as fire management or invasive species control) may be necessary. The management duties will be dictated by the terms of the long-term management plan, which "should include a description of long-term management needs, annual cost estimates for these needs, and identify the funding mechanisms that will be used to meet those needs."[322]

[321] *Id.*
[322] 33 C.F.R. § 332.7(d)(2).

If the land trust is taking on the long-term management responsibilities, you should thoroughly evaluate the long-term management plan to identify the management activities that will be required. These management activities may include:

- Habitat management (e.g., species monitoring and inventories)
- Fire management (e.g., prescribed burns)
- Invasive species control (e.g., weed control)
- Hydrology (e.g., management of any structural water control mechanisms on site)
- Educational activities
- Public recreation or access
- Volunteer training
- Demonstration areas

The cost estimates for management activities should be carefully tied to the exact tasks identified in the long-term management plan. If the land trust does not have experience or expertise with all of the management tasks required for the site, you should seek advice to estimate the costs for these activities. You may also consider including funds for consultants and contractors or for hiring new staff to be responsible for specific management activities. *For more information on the challenges and opportunities for the long-term manager of a mitigation site, seeSection 4.3.4, "Long Term Manger," on page 60 and Section 5, "Assessing Your Land Trust's Participation in Compensatory Mitigation," on page 66.*

8.1.2 Calculate Annual Stewardship Costs

Once all duties and responsibilities have been identified, the land trust will need to carefully estimate how much it will cost to carry out these duties and responsibilities annually. Depending on the role your land trust plays – easement holder, fee title holder, or long-term manager – it may be appropriate to calculate the annual costs for easement stewardship separately from the annual costs for long-term management and maintenance. The land trust may then choose to secure two separate funds – one for easement stewardship and defense and another for long-term management and maintenance activities, if applicable. You may find that maintaining two separate funds can help to ensure accurate accounting.

When calculating the annual costs for either easement stewardship and defense or long-term management, you must account for all potential costs, including administrative, day-to-day, annual, and periodic costs (as listed above in Box 10). You can calculate the annual costs of periodic maintenance by first determining the cost of the maintenance activity and then amortizing the amount over the time period between activities. Similarly, capital replacement costs should be extrapolated to an annual cost (or included as a "lump sum" in the year in which they are expected to be needed). Care should be taken about the manner in which these non-annualized costs are discounted to net present value or otherwise monetized into the up-front principal amount of the long-term funding mechanism. The annual costs should also allow for uncertainty and change – to account for both unforeseen development on the site, as well as for changes in land trust administration of the site.

Whichever method you choose to calculate stewardship costs for a mitigation site, you should fully

document how you have determined the annual stewardship and long-term funding amounts. Be prepared to justify the calculation methodology when negotiating with the mitigation provider and the regulatory agencies. A detailed and transparent explanation of how you calculated the long-term funding amount (including an explanation of all of the inputs) will help ensure that you receive the full principal amount needed for proper stewardship of the site.

There are a number of methods that land trusts have developed to calculate the costs of easement stewardship and long-term management, several of which are outlined below.

8.1.2.1 Stewardship Cost Calculators

Many land trusts calculate costs using either spreadsheet calculators or computerized database methodologies, such as the Property Analysis Record (PAR) developed by the Center for Natural Lands Management (see Box 3 on page 58 for more information on this tool). These funding formulas and cost calculators can be modified to calculate the principal amount of the long-term funding mechanism necessary for perpetual stewardship or management of mitigation sites.

8.1.2.1.1 Case-by-Case Calculation of Projected Annual Costs

Stewardship costs for mitigation sites can be calculated using a worksheet that includes line items for one-time costs (such as baseline documentation and easement preparation), easement defense, and ongoing stewardship or management costs. The latter may include estimates to cover staff salary and benefits, travel time, on-the-ground monitoring, landowner relations, meetings with town officials and community groups, direct costs for maps and supplies, overhead and office expenses, help from experts such as foresters or wetland ecologists, capital purchases, and additional insurance.

For example, the Freshwater Land Trust in Alabama developed a worksheet to calculate stewardship costs (see Chart 14). Brian Rushing, Executive Director, explains:

> To develop our worksheet, we borrowed various components from existing examples and added additional components to capture what we feel, based on our experience, are the important considerations for calculating stewardship and easement defense funds. Mitigation easements may be more time intensive in monitoring, so the worksheet is able to factor in the additional time needed on site.[323]

[323] Rushing, supra note 198.

Chart 14: Freshwater Land Trust Cost Calculator

Assumptions	
Hourly Staff Rate	$35.00
Travel Reimbursement per Mile	$0.585
Annual Monitoring Supplies Expense	$25.00
Annual Endowment Return	5%

Annual Stewardship Expense							
1. Monitoring Activities							**Total**
Monitoring Property	$35.00 x	x					
	staff rate	# hours	# staff				
Travel	[($35.00 x	x	) +	($0.585 x	)] x		
	staff rate	# hours	# staff	rate/mile	# miles	# trips	
Reporting	$35.00 x	x					
	staff rate	# hours	# staff				
Supplies							
						Total Monitoring	**$**
2. Maintenance							
Monitoring Property	$35.00 x	x					
	staff rate	# hours	# staff				
Travel	[($35.00 x	x	) +	($0.585 x	)] x		
	staff rate	# hours	# staff	rate/mile	# miles	# trips	
Supplies							
						Total Maintenance	**$**
						Total Annual Stewardship Expense	***$***

Endowment Required to Fund Annual Stewardship Needs	
Total Annual Stewardship Expense	
÷ Annual Endowment Return	5%
Stewardship Endowment Required	***$***

One-time Expenses	
Gates	
Fencing	
Boundary Marker	
Other	
Total One-time Expenses	***$***

Total Stewardship Funds Required	
Stewardship Endowment Required	
Total One-time Expenses	
Total Stewardship Funds Required	***$***

8.1.2.1.2 Base Rate Modified for Acreage and Complexity

As an alternative to using a line-by-line stewardship cost calculator, many land trusts determine stewardship expenses using a base rate based on average easement stewardship costs. The base rate can be determined using a line-by-line calculation for an *average* conservation easement or by dividing annual stewardship expenses by the number of easements held.

The base rate also can be adjusted based on acreage of the property and/or the complexity of the easement.[324] Additional considerations for mitigation sites might include:

- Property size
- Detailed management requirements
- Detailed monitoring requirements
- Reporting requirements
- Public (versus private) landowner
- Public trails and/or access
- Presence of threatened and endangered species, or other critical or unique natural features
- Surface water buffer zones
- Whether there is a co-holder of the easement
- Distance from the land trust office[325]

Land trusts should be cautious when using this approach to calculate the long-term stewardship fund for mitigation sites, given their unique characteristics. A mitigation site is likely to require more monitoring, maintenance, and reporting than a traditional conservation property. The Congaree Land Trust in South Carolina, for example, holds two mitigation properties in fee. The land trust uses a formula based on acreage to calculate stewardship the amount of long-term funding for stewardship of traditional conservation sites. However, Bill Cate from Congaree says:

> We have a minimum threshold for stewardship. For traditional easements, sites up to 200 acres require a $5,000 endowment. For mitigation sites we would require additional funds. For example, a site within a development, say 30 acres, would require a lot more than the $5,000 required of a traditional easement. Our current mitigation sites are more urban sites, which can come with challenges not usually associated with the large rural sites in which we generally specialize. For example, it is difficult to police encroachments in neighborhoods and to deal with stormwater runoff and kids playing on the site. We would require more money for the endowment if we were to take these sites today.[326]

Further, this method will not work well for calculating long-term management costs. The management activities for each site will be closely tied to the specific long-term management plan and thus will vary significantly between

[324] Brenda Lind, Conservation Stewardship Costs and Funding, PowerPoint presentation delivered at LTA Rally, Madison, Wisconsin (October 16, 2005).
[325] *Id.*; Leslie Ratley-Beach, Vermont Land Trust Reevaluates the costs of Easement Stewardship and How to Cover Them, EXCHANGE Fall 2002, at 14-17.
[326] Interview with Bill Cate, Executive Director, Congaree Land Trust (Feb. 27, 2012).

sites. A base rate based on an average conservation site, even if modified by property size, may vastly underestimate the costs needed to manage that site. As indicated by the example above, this approach to calculating long-term stewardship costs is extremely risky, and should not be used to calculate costs for mitigation properties.

8.1.2.1.3 Amount Based on Percentage of Value

Long-term stewardship funds are sometimes determined based on the value of the easement or overall property. The amount is usually set at a portion of the value of the property. Land trusts should be cautious when using this percentage of value approach. In most cases, these models do not lead land trusts to estimate stewardship fund levels that accurately reflect their ongoing financial responsibilities for the property. Mitigation sites may require monitoring, maintenance, and reporting, as well as long-term management activities that are specific to the site's long-term management plan and not applicable to traditional sites. Thus, the stewardship costs for a mitigation site may not track well with property value. Using a percentage of the property value is an arbitrary and risky way to estimate stewardship costs and land trusts should not use these method to calculate costs for mitigation properties.

8.1.2.1.4 Stewardship Cost Calculators

The Center for Natural Lands Management has developed a stewardship cost calculator called the Property Analysis Record (PAR).[327] The PAR is a computerized database methodology that is effective in helping land managers calculate the costs of land management for a specific project. The PAR helps analyze the characteristics and needs of the property from which management requirements and costs are derived. It helps pinpoint management tasks, estimate the costs associated with these tasks, and determine administrative costs. The PAR generates a report on the full cost estimate for managing a property, which can provide your land trust with a well-substantiated basis for justifying your long-term funding needs.

8.1.3 Calculate the Enforcement Costs

Mitigation easements are likely to have more violations than traditional conservation easements, so a land trust should carefully estimate enforcement costs. Bill Cate from the Congaree Land Trust notes, "For mitigation sites, there are more likely to be violations, just given the generally more urban locations and the smaller size of the sites."[328] *For more information on easement violations on mitigation sites, see Section 5.4.1, "Mitigation Easements an Increased Rates of Violation," on page 75.*

The cost of an enforcement action may be determined based on a reasonable estimate for the hourly rate of legal representation and staff multiplied by the estimated number of hours that would be required for the action. Alternatively, many land trusts set aside a fixed amount per easement for easement defense. The typical amount set aside varies, but can be as high as $5,000 or much more.[329] For traditional conservation easements, the Alliance recommends that land trusts should have *at least* $50,000 in a legal defense fund and collect an additional $1,500 to $3,000 for each subsequent transaction.[330] Recent research estimates that defending a conservation easement in a routine challenge could cost a minimum of $35,000 if the case were decided on summary judgment, $50,000 if it went to trial, and $50,000 for an appeal in either case.[331]

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[327] Center for Natural Lands Management, Property Analysis Record, http://cnlm.org/cms/index.php?option=com_content&task=view&id=21&Itemid=155 (last visited May 7, 2012).
[328] Cate, supra note 326.
[329] Doscher, supra note 259.
[330] *Id.*
[331] VERMONT LAW SCHOOL LAND USE INSTITUTE & LAND TRUST ALLIANCE, PRACTICAL POINTERS FOR LAND TRUSTS WHEN FACING A

In 2011, the Land Trust Alliance formed the Terrafirma Risk Retention Group LLC to help land trusts defend their conservation easements from legal challenge. Terrafirma is owned by its members to insure the costs of upholding conservation easements and fee lands held for conservation purposes when they have been violated or are under legal attack and to provide information to those land trusts on risk management.[332] When it is operational, the annual premium for participating land trusts will be $60 per conservation easement or fee-held property before any discounts, with a deductible of $5,000. The maximum claim is $500,000. As of July 2012, the Alliance has commitments from 467 land trusts from 47 states and the District of Columbia for 18,544 conservation easements and fee properties to the proposed conservation defense insurance program. For participating land trusts, this insurance program can simplify the process of estimating easement defense costs while ensuring that the land trust has sufficient funds to address easement violations and other legal challenges.

Box 11: Preparing for Perpetuity - Decision-Support for Calculating the Perpetual Costs of Stewardship

The Center for Natural Lands Management (CNLM) has developed a due diligence process and software that provide a structure for detailed and objective determination of perpetual stewardship costs. Called the "PAR©" (for Property Analysis Record), the software asks for detailed information on the acquisition transaction, conservation values and stewardship tasks, and financial parameters. Together, with the due diligence process, the PAR software provides an estimate of stewardship costs that are also parlayed into an appropriate long-term stewardship amount. The product then provides a detailed and transparent justification for the long-term stewardship fund figure, allowing discussion and revision or negotiation, as appropriate, among the interested parties.

The PAR process and software reflect four fundamental features of rigorous cost determination for perpetual stewardship:

1. Conduct research: As with all software, the resulting analysis is only as robust as the input data. Examples of documents that must be thoroughly reviewed prior to the cost analysis include a preliminary title report, tax document, habitat management plan, biological assessments and surveys, hydrological information (if appropriate), and documentation of the history and status of the property's and region's land use. It is important to investigate and consider not just the property itself, but surrounding areas; adjacent and regional land use will be the source of many, perhaps most, of the management challenges.

2. Be comprehensive in cost inclusion: The PAR process continues from the due diligence stage to parsing every stewardship need or responsibility into tasks and materials and inputting an appropriate, present-day cost for each. Tasks are assigned a frequency that could range from several times per year to once every 30 years. The software totals the costs to determine an average annual cost for stewardship. It is critical to ensure that all preserve-related costs are covered and either included in the cost calculation or clearly defined as being the responsibility of another entity. Expenses that should be considered include those associated with taxes, road or trail maintenance, fence maintenance and replacement, maintenance of any structures (such as buildings or constructed water conveyance features),

LAWSUIT OR OTHER LEGAL CHALLENGE OF ANY SIZE (forthcoming 2012).

[332] Land Trust Alliance, Conservation Defense Insurance, http://www.landtrustalliance.org/conservation/conservation-defense/conservation-defense-insurance/conservation-defense-insurance (last visited Aug. 28, 2012).

and biological monitoring. Costs should also consider, if relevant, easement monitoring, defense, and enforcement, as well as appropriate types and levels of insurance. If specialized skills are needed (e.g., pesticide application, listed species monitoring, input from professionals with certifications), costs should be included for contracting those services. When volunteer effort is assumed as a critical part of preserve management, ensure that costs associated with recruiting, training, and managing volunteer staff are included. Also ensure that perpetual costs of transportation are included, noting that the IRS tax rate does not necessarily cover all transportation costs.

3. Allow for uncertainty, risk, and change: The PAR software provides the opportunity to include a contingency cost to any specific materials or tasks that are considered reasonable by the manager. But in addition to the uncertainty or volatility of cost estimates, consider costs associated with change (e.g., staff turnover, technological advances, adaptive management). Depending on the organization's structure, some or all of those costs may be included in the administrative cost, but that should be specified, not simply assumed.

4. Carefully consider the financial parameters: Because the goal of the analysis is to calculate costs for perpetual management, the PAR software incorporates two tools: (1) a means of parlaying the average annual costs into an long term stewardship fund amount; and (2) a provision for allowing the long term stewardship fund to mature for some time prior to the need to draw management funds from long term stewardship fund earnings. Both of these calculations are based on parameters provided by the manager: there is no "standard." For long-term stewardship fund calculations, a critical decision is the drawdown (sometimes called the "recapitalization") rate. That rate reflects the expected average annual amount that would be available from long-term stewardship fund earnings for stewardship expenses. The PAR software allows the input only of this one parameter for long-term stewardship fund calculation; it is intended to reflect—as a combined value—the long-term average inflation, earnings from investment, and long term stewardship fund management costs. The determination of the appropriate drawdown rate for the managing entity is critical. The second parameter is simply the number of years where management tasks are expected before earnings can be drawn from the long term stewardship fund. Because this is factored into the PAR software as separate annual budgets for each of those years, the manager can also include any initial costs (such as contracting for a survey, documenting baseline conditions for a conservation easement or constructing a fence around the property).

Finally, as with any software—and as emphasized here by partnering the PAR software with the PAR process—the due diligence, decisions and input data are more important than the software. It is the integrity and thoroughness of those thought processes that will largely determine whether the financial estimate for stewardship is adequate and durable and hence whether the preserve resources are appropriately protected.[1]

By Deborah L Rogers, Director of Conservation Science, Center for Natural Lands Management

[1] The "PAR" is copyright-protected software developed and sold by the Center for Natural Lands Management.

8.1.4 Calculate the Principal Amount of the Long-Term Funding Mechanism

Once the annual easement stewardship and defense and/or long-term management costs have been determined, a principal amount is estimated that will ensure that there are sufficient funds to pay for the required stewardship activities in perpetuity. Most financial and investment models used for this purpose will attempt to create a high statistical likelihood that earnings on and appreciation of the principal amount over time will be sufficient to cover the annual stewardship costs without drawing down principal below critical levels.[333]

To determine the principal amount of the long-term funding mechanism, the land trust will need to make and apply assumptions about the projected average annual rate of return from its stewardship fund, the assumed inflation rate, and the annual costs of stewardship. For example, assuming a 5 percent "nominal" expected return rate and an assumed inflation rate of 3 percent, the land trust could expect to withdraw 2 percent of the fund on an annual basis. The spend rate assumed by the land trust should be ***net*** of inflation, that is, the land trust should establish a model where it will plan to spend earnings and appreciation above and beyond the rate of inflation over time. Because inflation is a measure of the loss of buying power, reinvestment helps maintain the buying power of the fund.

To calculate the principal amount of the long-term funding mechanism, the land trust would divide the annual stewardship cost estimate by the projected rate of return minus the inflation rate minus the rate of any administrative costs (e.g., financial management costs, etc.). This net value – projected rate of return minus projected rate of inflation minus rate of administrative costs – is known as the "capitalization rate." For example, if the land trust has estimated the annual stewardship costs to be $20,000, the expected investment earnings to be 6.5 percent, the expected inflation rate to be 4 percent, and expected administrative costs to be 1 percent, then the land trust would need a fund of $1,333,333 (i.e., 20,000/(6.5% - 4%-1%) = $1,333,333). As the capitalization rate will significantly influence the size of the fund, the mitigation provider and/or regulatory agencies may ask your organization to detail the assumptions you used in choosing the capitalization rate. *For more information on the relationship between the capitalization rate and investment strategy, see Box 12.*

When determining the long-term stewardship fund amount, the land trust should also consider securing startup costs from the mitigation provider as part of the transaction costs for each property. Startup costs allow the land trust to fund annual stewardship for a specific number of years while allowing the long-term stewardship fund to mature for that period of time before the land trust needs to draw funds from the long-term stewardship fund itself. For more information on calculating start up costs see Box 11 on PAR on page 128. These costs are paid for separately from the long-term stewardship fund that covers annual stewardship expenses in perpetuity.

8.2 Long-term Financing Mechanisms and Their Relative Risks and Benefits

Once the long-term stewardship fund amount has been determined, there are a number of financial instruments for holding mitigation funds that may be appropriate. The 2008 Compensation Rule requires:

> 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

[333] However, some endowments may be established such that they are temporarily restricted, allowing the land trust to draw on principal for specific purposes, such as easement defense. For an academic treatment of the development of endowment law, see Susan Gary, Charities, Endowments, and Donor Intent: The Uniform Prudent Management of Institutional Funds Act, 41 GA. L. REV. 1277 (2007).

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.[334]

There are a number of possible financing mechanisms, including:

- **Annuities:** An annuity is a financial product sold by a financial institution that is designed to accept and grow a single payment or series of payments and that is, upon annuitization, paid out in a series of payments at regular intervals over time.[335] An annuity is used primarily to provide a steady flow of cash for a given period of time. Annuities generally have a defined period of time during which payments are guaranteed to continue (generally for the life span of the annuitant or a fixed period of time). In the mitigation context, for example, the mitigation provider would pay the annuity holder a lump sum. The premium would then be paid back to the long-term manager over time.

The downside is that the purchaser of an annuity is entirely exposed to the credit risk of the issuer. The annuitant is reliant on the continuing existence and financial solvency of the issuer, and the annuity may not be redeemable or transferable.[336] Furthermore, in times of low interest rates, annuities may not keep up with inflation; returns from the annuity may be worth less and less over time.

- **District fees:** District fees are collected through special purpose districts – limited purpose local government entities that provide a specified function or limited amount of functions that may not be otherwise provided by a city or county. Special purpose districts may be authorized to tax, issue municipal bonds, or set fees. They may also obtain funds from federal, state, or local appropriations; special assessments; sale of property; interest earnings; or utility revenues. Generally, the districts perform a single function or a limited number of functions (e.g., electricity, fire protection, flood control, health, housing, irrigation, parks and recreation, library, water/sewer service, street lighting, public transportation, stadiums, conventional centers, and entertainment facilities). Special purpose districts can also include conservation districts, health districts, transportation authorities and districts, television reception improvement districts, shellfish protection districts, and emergency service communication districts.[337]

Special purpose districts could be set up to fund and manage mitigation sites. However, district funds can be vulnerable because city/county governments may in some cases repurpose district funds for other uses. Special purpose districts for mitigation would need to be carefully crafted to ensure the fund or source of funding remains intact over the long term.

- **Homeowner association fees:** Homeowner associations make and enforce rules for the properties in their jurisdiction.[338] Homeowners often pay a share of common expenses (usually on a per unit or per square foot basis) to the association for things such as walls and roofs in condo buildings and private roads, streetlights, services, utilities, amenities,

[334] 33 C.F.R § 332.7(d)(3).
[335] Investopedia, Definition of Annuity, http://www.investopedia.com/terms/a/annuity.asp (last visited Aug. 28, 2012).
[336] Contrast this to a diversified portfolio of stocks, bonds, and other freely-tradable assets, in which case the dissolution or bankruptcy of any one entity would likely not jeopardize the overall portfolio.
[337] MUNICIPAL RESEARCH AND SERVICES CENTER OF WASHINGTON, SPECIAL PURPOSE DISTRICTS IN WASHINGTON STATE, (2003), available at http://www.mrsc.org/publications/spd.pdf.
[338] Investopedia, Definition of Homeowner's Association, http://www.investopedia.com/terms/h/hoa.asp#axzz1p24HkjON (last visited Aug. 28, 2012).

commonly owned buildings, and pools in subdivisions. Homeowner associations can be responsible for managing common areas, open space, or wetland mitigation areas. However, associations may lack the expertise for managing these areas in a sustainable manner. Like special purpose districts, it may be difficult to bulletproof these fees to ensure that they are not raided for other purposes over the long-term.

- **Trusts:** A trust is a financial relationship where one party (the trustor/grantor) gives another party (the trustee) the right to hold assets on behalf of a third party (the beneficiary). For a mitigation property, the mitigation provider (trustor) would provide the land trust or other financial holder (trustee) with the stewardship fund (asset) to fund performance of the permit/regulatory enforced long-term stewardship activities on behalf of the public.

- **Endowments:** An endowment is a charitable or trust fund held by an organization, typically established to support a specific purpose, defined by the characteristic that the principal amount of the fund is not wholly expendable by the organization on a current basis.[339] At the outset, land trusts should note that many "endowments" established for purposes of funding long-term stewardship work on mitigation properties are actually not "endowments" in the legal sense but rather are restricted trust or escrow accounts. With respect to those funds that are legal endowments, under modern law applicable to endowments there are restrictions on both investing endowment funds and withdrawing from the endowment's principal. (See section on calculating endowments above.) Most land trusts will have stewardship endowment policies in place for managing endowments for conservation easements (See section on managing endowments below). However, mitigation endowment funds may not be able to be considered charitable gifts, donations, or contributions. Land trusts should work closely with their legal, tax, and accounting advisors to understand the exact legal status of funds they may hold for long-term stewardship.[340] Land trusts should also be wary if the mitigation provider or other payor of the mitigation endowment requests the land trust to sign an IRS Donee Acknowledgment or other document suggesting that the endowment funds are tax deductible as a "donation."[341]

Box 12: Long-Term Stewardship Funds - Calculating the Initial Principal

The initial principal set aside to pay for perpetual management of a particular parcel of mitigation land is typically referred to as the long-term stewardship fund ("LTSF") for that land.

As an initial matter, it is important to note that the calculation of the LTSF's appropriate initial value is entirely dependent for its accuracy on the quality of the underlying inputs. Therefore, the first step in the process should always be to review and confirm (1) the year-by-year work items required for management of the parcel in perpetuity; and (2) the fully-loaded[1] costs to perform each of those items, including appropriate contingencies to reflect the variability in tasks and costs that may occur over long periods of time. Note that for mitigation properties, these work items will be outlined in the long-term management plan for the site. After the accuracy of tasks, costs and contingencies has been reviewed and confirmed, the next step is to convert that stream of annual cash needs into a lump sum, present value amount.[2] This conversion is typically

[339] Unif. Prudent Mgmt. of Institutional Funds Act (1972), available at http://uniformlaws.org/Act.aspx?title=Prudent%20Management%20of%20Institutional%20Funds%20Act (adopted by the District of Columbia and all states, except Pennsylvania).
[340] See Lippmann, supra note 238.
[341] Lucinda Calvo, Mitigation and Tax Deductions: Where Angels Fear To Tread, CONSERVATION FRONTIERS, Feb. 28, 2012.

accomplished through the application of a capitalization rate (sometimes called the "cap rate"). The cap rate is essentially the percentage of the fund assumed to be drawn each year to meet the annual cash need. As a formula, the initial principal of the LTSF equals the annual cash need divided by the cap rate.[3]

Some software programs that analyze land stewardship needs and costs embed a placeholder for the cap rate. For most land managers and the regulatory agencies whose permits require the mitigation lands and associated long-term work, the question becomes how to determine the appropriate cap rate to insert in this placeholder.

In addressing this question, a key concept is that the cap rate reflects the *net* amount of gain that the LTSF investment portfolio must achieve each year, on average, over long periods of time. "Net" in this sense is not only net of costs, such as investment manager and other administrative fees, but also net of inflation. Thus, for example, assuming administrative costs at 1 percent annually and inflation at 3 percent annually, a cap rate of 3.5 percent would require average gross annual returns of at least 7.5 percent over time; a cap rate of 1 percent would require 5 percent.

Because the cap rate is derived from assumptions about future expected investment returns, it is critical that any cap rate be aligned with the investment strategy that is employed for the LTSF portfolio. For example, a cap rate of 3.5 percent, requiring average gross annual returns of 7.5 percent, would in turn require the execution of an investment strategy reflecting a fully diversified asset allocation,[4] such as those employed by many contemporary university endowments and pension plans.[5] In contrast, a cap rate of 1 percent would require average gross annual returns of 5 percent, which could potentially be achieved through an investment portfolio with a different, more conservative (i.e., less risky) asset allocation.

The relationship between cap rate and investment strategy highlights two primary competing factors. On the one hand, applying a lower cap rate increases the statistical likelihood of successful funding in perpetuity (and potentially allows for less risky investment portfolios) because it demands less investment return from the portfolio over time. On the other hand, applying a higher cap rate decreases the principal amount that must be paid upfront (because it assumes higher investment returns over time) and thus is often advocated by the permittee or payor of the funds. These competing factors reflect the risk/reward calculus inherent in determining the appropriate initial amount of the LTSF.

In sum, all stakeholders involved in planning for the long-term stewardship of mitigation lands should understand the relationship between the cap rate and investment strategy and ultimately make decisions regarding the initial principal amount and ongoing management of LTSFs with a full appreciation of the implicit assumptions regarding spending (work costs, contingency costs, administrative costs and inflation) and earning (return targets, asset allocations, portfolio execution) in their analyses.

By Timothy J. DiCintio, Vice President, Impact-Directed Environmental Accounts National Fish and Wildlife Foundation.

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[1] "Fully-loaded" in this sense means not just the cost of the work items themselves, but also the cost of any administration, oversight and other ancillary work necessary to ensure full performance of those work items.

[2] This process is akin to determining "terminal value" in the "discounted cash flow" method of valuation used widely in corporate financial management.

[3] This assumes that the required land management work, and therefore the annual cash need, is the same every year. Cash needs for non-annual items, e.g., replacement of a fence every 15 years, should be reduced to net present value individually and included in the baseline principal amount. This calculation is typically accomplished automatically in land management and LTSF costing.

[4] "Fully diversified" in this sense means invested across a wide range of asset classes, including fixed income (bonds), equities (stocks) and alternative investments, such as commodities, real estate, hedge funds and private equity.

[5] *See, e.g.,* Corkery, Michael, "Calpers May Cut Target Return," Wall Street Journal, March 13, 2012 (noting that while the median state pension plan assumes an annual rate of return of approximately 8 percent, the California Public Employees' Retirement System is currently set to reduce its return target from 7.75 percent to 7.50 percent). See also annual data published as part of the NACUBO-Commonfund Study of Endowments®.

8.3 Accepting Funds from the Mitigation Provider

For traditional conservation projects, the long-term stewardship fund is generally paid at the time the easement is signed. However, mitigation providers may take different approaches to funding the long-term fund – from a lump sum payment to a schedule of payments or a percentage of credit sales. The mitigation provider may have a preference for one of these approaches; however, the land trust should assess the risks involved before agreeing to a specific payment approach.

- **Lump sum:** Many mitigation providers will pay the long-term stewardship fund in one lump sum at the time the easement is signed based on the amount agreed upon by the Corps, the mitigation provider, and the land trust. The provider's determination to pay the land trust in one lump sum may be based on the status and wishes of the investors and the cash in hand. A lump sum payment can eliminate the risk that the land trust would not be paid the full stewardship amount if the provider goes bankrupt or is otherwise unable to pay.
- **Schedule:** The land trust may agree to be paid based on a schedule of payments from the mitigation provider. If paying in installments, the mitigation provider should be asked to increase the long-term stewardship fund (by 10 percent, for example) to compensate the land trust for any loss of interest income not earned due to a delay in full payment of the long-term stewardship fund. If agreeing to scheduled payments, however, the land trust faces greater risks of not receiving the full long-term stewardship fund if the mitigation provider is unable to complete the scheduled payments on time or at all (e.g., if the economy falters and a mitigation banker cannot sell credits on schedule). To lessen this risk, your land trust should establish a solid contractual agreement – including financial assurances – with the mitigation provider to ensure receipt of the full long-term stewardship fund amount over time.
- **Percentage of credit sales:** A mitigation bank provider may wish to build the long-term stewardship fund as credits are sold – for example, a percentage of the funds from each credit sale would be deposited into the fund. This approach may make business sense for the mitigation banker, but it is a less secure source of funds for the land trust. The anticipated amount the long-term stewardship fund may not be fully funded if the banker goes bankrupt or if demand for credits is lacking.

  For example, Dave Mitchell at the Great Land Trust in Alaska warns, "Some banks are supplying the management funds from the proceeds of selling credits, but the bank has not sold any credits yet." Mitchell adds, "The banker says it will pay out of pocket until then, but if the banker disappears there is nothing there to take care of the site. As a result, we try to only hold the easement where we know there is enough money to manage the land pursuant to the terms of the easement."

  If a land trust does agree to accept payment as a percentage of credit sales, the land trust should sign an agreement with the provider to ensure that all long-term funds are paid, regardless of the bank's success. This agreement should be supported by financial assurances.

8.4 Managing Long-Term Funds

Consistent with Practices 11A (Funding Easement Stewardship) and 12A (Funding Land Stewardship) of *Land Trust Standards and Practices,* land trusts should have written stewardship fund policies. If a land trust intends to take on the stewardship of mitigation sites, the stewardship fund policies should include language specific to mitigation properties. These policies should be reviewed on a periodic and ongoing basis. Stewardship fund policies

should include: the methods the land trust uses to calculate stewardship costs; a requirement to secure funds for each transaction at the time of acquisition or a policy for how the land trust will ensure the stewardship fund is paid in full; specific plans for how the land trust will fullfill its management duties if the long-term stewardship fund underperforms or there is another interruption in funding; and a management and an investment strategy.

8.4.1 Accepting Long Term Stewardship Funds

Because there are a number of roles a land trust can play in a mitigation project, land trusts should be careful to calculate the long-term stewardship fund necessary to fulfill all the obligations it has agreed to perform. A land trust taking on the easement stewardship and defense of a mitigation site must calculate, accept, and manage a long-term stewardship fund. Land trusts accepting long-term management responsibilities separately or in addition to easement stewardship, will need to secure a corresponding management fund. Even when not responsible for long-term management, the land trust may hold a management fund to fund another entity that has agreed to perform management work on a mitigation site. If your land trust is playing the role of the long-term stewardship fund holder, you should make sure to include funds for staff or contractor time to administer the management fund and distribute the funds to the long-term manager. Additional funds will also be needed for annual accounting and audits.

8.4.2 Managing Long Term Stewardship Funds

For all long-term stewardship funds, land trusts must determine how to invest the funds. Practice 6F (Investment and Management of Financial Assets and Dedicated Funds) of *Land Trust Standards and Practices* requires that land trusts have a system for the responsible and prudent investment and management of their financial assets, and have established policies on allowable uses of dedicated funds and investment of funds.[342]

The land trust's investment strategy will influence the calculation of the stewardship or management fund (*see Box 11, Preparing for Perpetuity on page 128*). The investment policy should be spelled out in the stewardship fund policy. The investment policy may include bounds on what can be invested in stocks, bonds, cash, etc. Establishing an investment committee or seeking outside financial management help may be essential, especially for managing large mitigation endowments.[343] For example, the Solano Land Trust relies on the advice of an investment group that manages the endowment, as well as an investment committee to keep watch on the endowment performance and to provide oversight to the land trust's board related to decisions on endowment management.[344] Multiple funds may be pooled for investment purposes, but pooling will impose accounting requirements to ensure that each fund is maintained.

If your land trust is managing the long-term stewardship fund as a legal endowment, that is, as its own "institutional fund," it should develop a thorough understanding of the Uniform Prudent Management of Institutional Funds Act (UPMIFA), which is the legal authority governing endowments in 49 of the 50 States as of June 2012 (Pennsylvania is the exception).[345] If the land trust is managing the long-term stewardship fund pursuant to the terms of a trust instrument or other agreement with the permitting agency or mitigation provider, the land trust should carefully review and understand the provisions of the controlling document to ensure it can comply with its obligations regarding the management, investment, and disbursement of the funds.

[342] LAND TRUST STANDARDS AND PRACTICES, Practice 6F. Investment and Management of Financial Assets and Dedicated Funds.
[343] Doscher, supra note 259.
[344] Byrd, supra note 186.
[345] See www.upmifa.org for more information.

For more information on managing endowment funds see the Standards and Practices Curriculum course, "Determining Stewardship Costs and Raising and Managing Dedicated Funds."[346]

Box 13: What are Financial Assurances?

The 2008 compensatory mitigation regulations require that the mitigation plan include "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."[1]

Financial assurances are primarily required of the mitigation provider to ensure that the compensation project successfully meets its performance standards. The financial assurance is a "mechanism that ensures that a sufficient amount of money will be available for use to complete or replace a mitigation provider's obligations to implement a required mitigation project and meet specified ecological performance standards in the event that the mitigation provider proves unable or unwilling to meet those obligations."[2]

The purpose of a financial assurance is to "indemnify the public"[3] against losses that may occur if the mitigation provider is unable to perform its obligations. Financial assurances are generally held by third-party institutions (e.g., surety companies, insurance companies, banks or other financial institutions). The third-party institutions agree to hold themselves financially liable for the failure of the provider to successfully fulfill its obligations.

Mitigation assurances are generally released when the mitigation project has met all monitoring and maintenance requirements in accordance with established performance standards. After this point, long-term monitoring and management is still required to ensure the long-term ecological success of the site, so mitigation providers are required to ensure that funds are available for legal protection – or easement defense – and long-term management of mitigation project sites. However, these are separate from the financial assurances required to ensure that the mitigation project meets its performance standards.

As a result, most financial assurance mechanisms will be short-term, lasting until performance standards are met, while management funding mechanisms should be designed to last over the long-term to ensure that funding is available for monitoring and maintenance of the site in perpetuity.

Bonds and letters of credit are two types of financial assurance mechanisms that may be used for mitigation sites.

[1] C.F.R. §332.4(c)(13) (2008).
[2] U.S. Army Corps of Engineers, Institute for Water Resources. June 2011. "IWR White Paper: Implementing Financial Assurance for Mitigation Project Success."
[3] U.S. Army Corps of Engineers, Institute for Water Resources. June 2011. "IWR White Paper: Implementing Financial Assurance for Mitigation Project Success."

8.4.3 Distributing Funds from the Management and Maintenance Fund

Some land trusts will hold the long-term management and maintenance fund, but will not be responsible for management activities. In these cases, the land trust will pay another entity to do the work. The land trust should develop in advance a plan for how decisions about long-term management and distribution of funds will be made. This plan may be included within the long-term management plan or in a separate long-term stewardship agreement. Further, if your land trust is taking on the role of the fund manager,

[346] Doscher, Paul, Brenda Lind, Ellen Sturgis and Chris West. 2007. "Determining Stewardship Costs and Raising and Managing Dedicated Funds." Standards and Practices Curriculum. Ed. Sylvia Bates. Land Trust Alliance.

you should make sure to include the costs of managing the fund and the costs of distributing the funds to the long-term manager when calculating the fund amount. *For more information on the roles a land trust plays in a mitigation project, see Section 4.3.3, "Long-Term Stewardship Fund Holder," on page 59. For more information on including fund management in the long-term management plan, see Section 7.2.2, "Contents of a Management Plan," on page 107.*

For example, the Connemara Conservancy in Texas is currently negotiating an agreement with the Corps and a mitigation provider to take on the management fund for a mitigation bank on which the land trust already holds an easement and easement stewardship fund. The Conservancy will hold the management fund, as well, but the landowner will be responsible for the management work. The land trust and the landowner will agree on the work to be done based on the long-term management plan for the site, and the land trust will pay the landowner for the work from the management fund.

8.4.4 Accounting, Auditing, and the Stewardship Fund Policy

Most land trusts will have an established system to track and manage stewardship funds, large restricted gifts, and other funding sources. In fact, Practice 6B (Financial and Asset Management) of *Land Trust Standards and Practices* requires that the land trust keeps accurate financial records, in a form appropriate to its scale of operations and in accordance with Generally Accepted Accounting Principles (GAAP) or alternative reporting method acceptable to a qualified financial advisor.[347] Given that mitigation properties are part of a regulatory program, detailed accounting and auditing systems should be even more critical for these properties.

For easement stewardship funds, some land trusts will pool the money for all projects in one account, while others will maintain separate accounts for each project (this approach may be more common for properties held in fee than for easements). Separate accounts may be more difficult to manage and do not allow the land trust to pool funds for investment purposes; however, they make tracking of stewardship funds for individual properties easier. Your organization may wish to hold mitigation easement funds in a separate fund from that for other donated easements and for properties held in fee. You may also consider holding the long-term management and maintenance fees in a separate account. It may also be best to hold stewardship funds in separate accounts from defense funds.

Regardless of the method for holding the funds, the land trust should track the funds for each individual project separately. It is especially important to keep accounting and auditing for these properties separate from the land trust's other conservation properties. Indeed, the mitigation or stewardship plan may require that the land trust account for the mitigation funds separately. It is also important to account for the long-term management and maintenance activities separately from the easement stewardship activities.

For example, Dave Mitchell of the Great Land Trust in Alaska says, "For our in-lieu fee projects, as the easement holder we hold the easement stewardship fund while the fee–simple owner (in our case this is often the municipality) holds the long-term management endowment." In the two cases involving long-term management, the land trust holds both the long-term management fund and the easement stewardship fund. Mitchell notes, "The funds are kept in separate pools. The easement stewardship fund contribution is deposited in one fund with all of our other conservation easement stewardship fund contributions from all of our projects. Right now, we only have two projects where we hold the long-term management fund as well – one with a municipality and one with the Eklutna Native Corporation. We are holding the management

[347] LAND TRUST STANDARDS AND PRACTICES, Practice 6B. Financial Records.

funds in separate accounts specific to those projects," said Mitchell. "With the municipality, the funds have an individual bank account, so that if the city wants to draw from it they need to go through us."[348]

8.5 Risk

For mitigation easements, land trusts may take on additional legal and regulatory obligations that go above and beyond those encountered with traditional properties. In these cases, it is critical to comprehensively estimate stewardship costs and consider all contingencies. Not only do land trusts need to be able to justify the long-term stewardship fund amount to the mitigation provider and regulatory agencies, but they also need to be confident that the long-term stewardship fund is sufficient to fund the land trust's role in the long-term stewardship of the site in perpetuity. Using operating reserves or general stewardship funds to subsidize mitigation properties if the long-term stewardship fund is not sufficient is not the best option. Indeed, use of donated funds for mitigation properties presents difficult issues of private benefit that are beyond the scope of this work.

8.5.1 Financial Risk if the Long Term Stewardship Fund Is Not Paid

Depending on the responsibilities taken on by your land trust, the financial risk of not receiving enough funds for your stewardship responsibilities will vary. Land trusts taking on easement stewardship at the mitigation site will be responsible for annual monitoring and easement defense duties, among other possible responsibilities. Given the often small size and urban location of many mitigation sites, easement defense costs could be much higher for these sites than for traditional conservation easements. Expenses related to easement monitoring and defense could put the land trust at significant risk, especially if the entire long-term stewardship fund is not paid in full at or before the completion of the transaction. If the land trust also takes on management responsibilities, the financial risk for the land trust could increase if it does not receive funds sufficient to cover the costs of the management pursuant to the long-term management plan. The mitigation and long-term management plans may specify ongoing – and potentially expensive – maintenance and management of the site that will be required of the land trust in perpetuity.

The best approach is to secure long-term stewardship and enforcement expenses at or before the completion of the transaction.[349] However, because – for mitigation easements – the easement signing may occur many years before the land trust takes on stewardship responsibilities for the site, the mitigation provider may wish to pay the long-term stewardship fund in installments. As discussed in Section 8.3, "Accepting Funds from the Mitigation Provider," on page 134, the land trust should seek an increase in the long-term stewardship fund amount to cover any lost interest income from the mitigation provider if the provider is paying in installments.

8.5.2 How to Avoid Going Broke in the Process

It is important to carefully calculate stewardship costs before accepting a mitigation property. But what if something unforeseen occurs or you just do not have enough money to cover the property's affirmative obligations? A land trust could attempt to raise extra money (e.g., through capital campaigns, soliciting donations, or other fundraising efforts), but many donors may not wish to donate to a mitigation project, unless the project provides other public benefits. Land trust also do not want to subsidize the cost of development by expending money above and beyond those obtained form the permittee/mitigation provider.

[348] Mitchell, supra note 191.
[349] LAND TRUST STANDARDS AND PRACTICES, supra note 219, at 11.

And, as mentioned above, private benefit doctrine may come into play if a nonprofit wants to use donated funds to pay for permit-required management activities. Land trusts should be careful to consult with legal counsel before raising philanthropic funds or using their own internal funds to pay for required mitigation activities. Subsidizing the cost of legally required mitigation with charitable donations could raise a number of serious legal, tax, and accounting issues. Instead, there are a number of more proactive steps a land trust can take to ensure you do not go broke by taking on a mitigation property.

First, the land trust must thoroughly review the mitigation plan, long-term management plan, and project site to identify all potential responsibilities and avoid any surprises. Second, the land trust should draft and sign a contractual stewardship agreement with the mitigation provider, the Corps, and any other parties (e.g., the landowner) that specifies the land trust's responsibilities, any roles to be played by the other parties (e.g., long-term manager, etc.), and the funding that will be provided to accomplish these activities. Finally, your land trust should structure the contractual stewardship agreement to include enough flexibility to address any unforeseen events (e.g., environmental disruptions, market disruptions, or other changes in the site) and to specify that the land trust will not be responsible for fulfilling its management duties if the long-term stewardship fund underperforms or there is another interruption in funding. The plan should also make it clear, if possible, which tasks are contingent on the availability of adequate funding or include a process for task prioritization. *For more information on avoiding liability for unperformed obligations in the event of funding disruptions, see Section 5.4.15, "Underperforming Long-Term Financial Mechanisms," on page 80 and Section 7, "Long-Term Management Plans: Technical Guide," on page 105.*

For example, the Solano Land Trust in California has structured its mitigation agreements such that "if the market underperforms, then we are only obligated to complete the long-term tasks that can be funded by the endowment," says Nicole Byrd, Executive Director of the land trust. "We are not obligated to perform these tasks if the endowment isn't generating enough funds to pay for it."[350] Byrd notes that there is some room for negotiation in these agreements and suggests that land trusts be very careful not to promise to perform tasks above what the long-term stewardship fund income can provide.

Land trusts will reduce their financial risk if they carefully calculate the annual stewardship and management costs based on the management responsibilities outlined in the long-term management plan, ensure they are paid in full at or before the completion of the transaction, and professionally manage and track mitigation long-term stewardship funds.

[350] **Byrd, *supra* note 186.**

Conclusions

Engagement in mitigation can be a net positive for a land trust. It can help your organization build its network of conservation lands, expand its staff and expertise, and provide new streams of income for land restoration and protection, as well as easement monitoring and defense. However, your engagement in mitigation should only take place after a thorough assessment of how doing so relates to your land trust's mission, the comfort level of your board of directors and staff, your technical expertise and capacity, and the risks and liabilities associated with mitigation projects. Sensitivity to public perception may also be an important part of your evaluation.

Keep in mind that compensatory mitigation will happen with or without the involvement of your land trust. The questions then are: who will carry out that compensation, where will it be located, and who will care for the compensation site in perpetuity? As the nation's stewardship experts, land trusts may be best positioned to take on some or all of these responsibilities.

Here are a few important tips as you consider your involvement:

- **Get up to speed:** This handbook is a great place to start. You should also check your local Corps district office website for more information, program guidance, and/or model documents (e.g., easements, long-term stewardship agreements) that may be specific to your state or region. You can also find more information on the § 404 program on the EPA website at http://water.epa.gov/lawsregs/guidance/wetlands/wetlandsmitigation_index.cfm.
- **Ask questions:** The handbook identifies many of the questions that your land trust will need to ask before getting involved in a mitigation project. As you ponder these questions, you may find it useful to reach out to the experts, including people with appropriate regulatory, legal, financial, ecological, and management (program and financial management, as well as preserve/land management) expertise. Call on the regulatory agencies and mitigation providers for answers to your questions throughout the entire process, no matter how minor they may seem at the time. The more information you have upfront, the less likely you are to encounter surprises down the road.
- **Be thorough in your due diligence:** Thoroughly review all authorizing documentation, including the mitigation plan, long-term management plan, easement or other real estate instrument, stewardship agreement and all other documents and contracts that are associated with the mitigation project. Diligently identify all potential responsibilities that will accompany your land trust's role in the project. Make sure that your roles and responsibilities are as clear as possible and consistently expressed across all of the relevant documentation. The more specific you are in laying out your role, responsibilities, and liabilities, the lower the risk that you will be asked to fulfill duties you did not anticipate or that you will run out of money to carry out your responsibilities. If your staff or board do not have the appropriate regulatory, legal, financial, ecological, and management expertise, enlist the professional services of these experts for the due diligence review.
- **Get involved early:** Land trusts that get involved early in the mitigation process are better positioned to shape the design of the project, the reporting requirements, the long-term goals for the compensation site, the management tasks necessary to meet those goals, and the funding for carrying out those tasks. Early involvement can help to ensure the easement, management plan, and stewardship agreement will be optimally aligned with the capacity of your land trust and its needs and help you to minimize your risks over the long-term.

- **If you come to the table late in the game, seek amendments to ensure that your interests are represented:** If you were not at the table when the mitigation plan, instrument, long-term management plan, or stewardship agreement were crafted, be particularly vigilant to ensure that your interests are represented. If your roles and responsibilities are ill-defined or inconsistently expressed in the different documents, if your organization is not set up to receive monitoring reports and other notices about changes to the project, or if you are exposed to more risk that you are comfortable with, you should seek a formal amendment to the authorizing documentation. Alternatively, you can secure a letter documenting all modifications signed by all participating parties and attached to the original documentation.

- **Remember that mitigation projects are not like traditional conservation projects:** There are many differences between mitigation projects and traditional conservation projects. Most importantly, mitigation easements are the product of a regulatory system that exacts these easements as a permit condition. This permitting program comes with regulatory requirements. Mitigation projects must be provided with long-term protection. Long-term funding must be provided to cover all long-term stewardship needs, including, if applicable, easement monitoring and defense, as well as maintenance requirements. Easements are not donated out of sheer good will on the part of the landowner. The Corps is likely strongly encouraging the mitigation provider to find a conservation entity to hold the easement. Remember, you are entitled to full funding for easement monitoring and enforcement. Anything less, in essence, subsidizes the cost of that mitigation project.

- **View agencies as partners:** Agency staff can be an invaluable source of information on the compensatory mitigation program and the mitigation process. Corps district staff can also help to connect land trusts to mitigation project opportunities and introduce qualified conservation organizations to mitigation providers looking for organizations to assume the long-term stewardship of their sites. The agencies can also play a critical third-party enforcement role, doubling the strength of easements and covenants, and can play a role in task prioritization in years where long-term funding levels fall short of what is needed to fulfill the tasks outlined in the long-term management plan. The closer the partnership between the land trust and the regulatory agency, the better the chance that the land trust's priorities and expertise are considered in the development of the long-term management plan, stewardship agreement, and other documents, and the more smoothly the long-term management phase will proceed, especially if something goes wrong.

- **If you have an interest in holding a mitigation easement you do not have an obligation to accept long-term management responsibilities.** Your land trust may have an interest in holding a mitigation easement but may lack the expertise needed to carry out complicated site management. Or you may simply not want the liability associated with long-term site management. Your organization is under no obligation to accept the long-term management responsibilities for a site on which you hold the easement. Although land trusts across the country are increasingly saying yes to holding mitigation easements, few have taken on the added responsibilities of long-term site management.

- **Just say no:** If the burden is too great on your staff, if your board isn't comfortable with the associated liability, if the mitigation provider is insisting that you serve as the long-term manager along with holding the easement, if the long-term financing is insufficient

to cover your needs, if for any reason you have significant reservations about engaging in a mitigation project or program – say no, thank you! Do express your reasons – they may help the regulatory agencies and mitigation provider better understand your concerns and shape future projects that may be more appealing.

Land trusts are the nation's stewardship professionals, and you have a tremendous amount of experience to bring to the table. More than 45,000 acres of compensation mitigation are provided annually. You have an opportunity to professionalize the long-term stewardship of these sites. But you should only dive in with full knowledge of the tradeoffs.

Adaptive management, adaptive management plan, adaptive management measures: A management strategy to address unforeseen changes in site conditions or other components of the compensatory mitigation project. The plan will guide decisions for revising compensatory mitigation plans and implementing measures to address both foreseeable and unforeseen circumstances. The adaptive management plan is one component of the mitigation plan.

Advance credits: Credits available through an approved in-lieu fee program that are available for sale prior to compensation activities taking place on-the ground. The amount of advance credits that are available through an in-lieu fee program are specified in the in-lieu fee instrument. (§§ 332.2, 332.8(n).)

Compensatory mitigation: The restoration (reestablishment or rehabilitation), establishment (creation), and/or, in certain circumstances, preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts that remain after all appropriate and practicable avoidance and minimization have been achieved.

Credit: 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.

Debit: 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.

Federal facility management plan or integrated natural resource management plan *(in sections on site protection, may be short-handed to "management plan"):* Site protection instruments for mitigation on public lands. Federal and state lands cannot be put under traditional real estate instruments (like conservation easements or deed restrictions) so long-term protection of a mitigation site is achieved by integrating conservation requirements into a government federal facility management plan or integrated natural resource management plan. Mitigation site protection may be added to a plan that already exists and that addresses other government activities on the site. Such a plan is ***not*** a part of the mitigation plan.

Interagency Review Team (IRT): An interagency group of representatives who review all of the documentation required for establishment of a bank or in-lieu fee program.

Land stewardship entity: General reference to a land trust or other nonprofit conservation organization or private land manager that might be responsible for easement stewardship *or* long-term management *or both.*

Long-term management: Activities that guide management of a compensatory mitigation site after performance standards have been met and in perpetuity. The specific management tasks are outlined in the long-term management plan. Also referred to as *long-term management responsibilities or long-term management and maintenance.*

Long-term management entity: Specific reference to the land trust, nonprofit conservation organization, or private land manager responsible for *long-term management.*

Long-term management and maintenance: In this case, the 2008 compensatory mitigation rule refers to the broad universe of *long-term management* tasks. Some Corps districts have attempted to distinguish

between what constitutes "management" and what constitutes "maintenance" within long-term management arrangements, but this distinction is not articulated in the rule.

Long-term management needs: The specific management requirements at a site, which are identified and described in the long-term management plan, such as "invasive species control."

Long-term management plan: The plan that outlines how the compensatory mitigation project will be managed after performance standards are met to ensure the long-term sustainability of the resource. The plan includes information on the long-term financing mechanism and the party responsible for long-term management. The long-term management plan is one component of the mitigation plan. Some long-term management responsibilities may also be outlined in the permit conditions, or in the bank or in-lieu fee instrument. Also referred to as the *long-term management strategy.*

Long-term management provisions: Given the location of this phrase, it appears to refer not to general long-term management arrangements but, rather specifically, to any *financing mechanisms* associated with long-term management. "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" (§ 332.3(k)(iv)).

Long-term protection and management strategies: A combined reference to ***both*** site protection ***and*** long-term management. "A description of the long-term protection and management strategies for activities conducted by the in-lieu fee program sponsor…" (§ 332.8(c)(2)(ix)).

Maintenance: "Maintenance" primarily refers to the period between the end of the mitigation work and the satisfaction of performance criteria. The mitigation plan or instrument must include a "maintenance plan" describing how the site will be looked after during in this period.

Maintenance plan: The plan for the maintenance of the mitigated resource once initial construction is completed and until performance standards are met. The plan covers the same period of time as the monitoring requirements. The maintenance plan is one component of the mitigation plan.

Management: "Management" primarily refers to either "adaptive management" or "long-term management."

Mitigation plan, mitigation project plan: The plan outlining the full scope of the project and incorporated into the permit or instrument. Includes, as components, the mitigation work plan, maintenance plan, monitoring requirements, long-term management plan, and adaptive management plan. Also lays out objectives, site selection background, baseline information, determination of credits, performance standards, and financial assurances.

Mitigation work plan: Specifications and work descriptions for the mitigation work itself, including construction methods and timing, source(s) of water and plans for planting, invasive species control, grading, soil management, and erosion control. The mitigation work plan is one component of the mitigation plan.

Monitoring: Tracking a set of parameters onsite to determine if the mitigation project is on track to meet performance standards and to identify when those standards have been met. The monitoring period is typically five years after the completion of mitigation work but can be shortened or extended

as appropriate. Monitoring requirements are identified in the "monitoring" section of the mitigation plan or instrument.

Monitoring requirements: The plan for tracking a set of parameters onsite to determine if the mitigation project is on track to meet performance standards and to identify when those standards have been met. Also used to determine if adaptive management is necessary. Covers the same period of time as the maintenance plan. The monitoring requirements are one component of the mitigation plan.

Nonprofit conservation organization, non-governmental organization, or private land manager: Like "land stewardship entity," three descriptors for the type of entity that may take on long-term management ***or*** easement stewardship tasks.

Ownership, site ownership: Refers to fee title ownership of the mitigation site. Where site protection is through an easement, site ownership will be held by a different entity; that owner—and not the easement holder—is referenced here by the term "ownership." "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))" (§ 332.4(c)(4)). "The permit conditions or instrument must identify the party responsible for ownership and all long-term management of the compensatory mitigation project" (§ 332.7(d)(1)).

Ownership arrangements: Appears to refer not merely to the fee title owner of the property, but to the set of property arrangements (including, for example, a conservation easement) in place at the project site. "The proposed ownership arrangements and long-term management strategy for the mitigation bank or in-lieu fee project sites" (§ 332.7(d)(1)).

Site protection, site protection instrument, site protection mechanism: The legal arrangement for ensuring that the site remains a conservation site in perpetuity: conservation easements, deed restrictions, fee title ownership by a qualifying entity, or a federal facility management or integrated natural resources management plan. Also referred to as *long-term protection, long-term protection mechanism, ownership arrangements.*

Steward: *Outside the mitigation rule,* the term is a general reference to a land trust or other nonprofit conservation organization or private land manager responsible for easement stewardship ***or*** long-term management *or both,* like the term "land stewardship entity." *In the mitigation rule* the term appears only once outside of the phrase "land stewardship entity." In that single case, refers to long-term management (rather than easement stewardship). (§ 332.8(u)(3).)

Umbrella bank: A mitigation bank that has multiple sites but is guided by one umbrella banking instrument. (§ 332.8(h).)

Umbrella mitigation banking instrument: A single mitigation banking instrument that provides for future authorization of additional mitigation bank sites. As additional sites are selected, they are included in the mitigation banking instrument as modifications. (§ 332.8(h).)

11.1 Land Trust Standards and Practices

The Learning Center, the Land Trust Alliance's digital library for members and partners contains a large number of documents specifically written to help with implementation. http://learningcenter.lta.org/.

Amundsen III, Ole M. 2001. "Strategic Conservation Planning." *Standards and Practices Curriculum.* Ed. Sylvia Bates. Land Trust Alliance.

Bates, Sylvia K. and Tammara Van Ryn Eds. 2006. "Land Trust Standards and Practices Guidebook: An Operating Manual for Land Trusts, Volume 1 and Volume 2, Revised." Land Trust Alliance.

Bouplon, Renee J. 2008. "Conservation Easement Stewardship." *Standards and Practices Curriculum.* Ed. Sylvia Bates. Land Trust Alliance.

Brown, Hugh and Andrew Pitz. 2009. "Caring for Land Trust Properties." *Standards and Practices Curriculum.* Ed. Sylvia Bates. Land Trust Alliance.

Doscher, Paul, Brenda Lind, Ellen Sturgis and Chris West. 2007. "Determining Stewardship Costs and Raising and Managing Dedicated Funds." *Standards and Practices Curriculum.* Ed. Sylvia Bates. Land Trust Alliance.

Hamilton, Jane Ellen and Jonathan Moore. 2007. "Evaluating and Selecting Conservation Projects." *Standards and Practices Curriculum.* Ed. Sylvia Bates. Land Trust Alliance.

Hamilton, Jane Ellen. 2008. "Conservation Easement Drafting and Documentation." *Standards and Practices Curriculum.* Ed. Sylvia Bates. Land Trust Alliance.

Hocker, Jean. 2008. "Mission, Planning and Capacity." *Standards and Practices Curriculum.* Ed. Sylvia Bates. Land Trust Alliance.

O'Donnell, MaryKay and Monica Henderson. 2009. "Acquiring Land and Conservation Easements." *Standards and Practices Curriculum.* Ed. Sylvia Bates. Land Trust Alliance.

Ratley-Beach, Leslie. 2009. "Managing Conservation Easements in Perpetuity." *Standards and Practices Curriculum.* Ed. Sylvia Bates. Land Trust Alliance.

Sohl, Kay and Eric Rowley. 2009. "Financial Management of Land Trusts." *Standards and Practices Curriculum.* Ed. Sylvia Bates. Land Trust Alliance.

11.2 Resources on Wetland and Stream Compensatory Mitigation

Department of Defense and Environmental Protection Agency. April 10, 2008. *Compensatory Mitigation for Losses of Aquatic Resources.* Final rule. Federal Register. Vol. 73, No. 70: pp. 19594-19705. http://water.epa.gov/lawsregs/guidance/wetlands/wetlandsmitigation_index.cfm#regs.

Hough, Palmer and Morgan Robertson. 2009. "Mitigation under Section 404 of the Clean Water Act: where it comes from, what it means." Vol. 17, No. 1: 15-33.

National Mitigation Banking Association. http://www.mitigationbanking.org/index.html.

U.S. Army Corps of Engineers, Institute for Water Resources. June 2011. "IWR White Paper: Implementing Financial Assurance for Mitigation Project Success." http://www.iwr.usace.army.mil/docs/iwrreports/Financial_Assurance.pdf.

U.S. Environmental Protection Agency and U.S. Department of the Army. February 6, 1990. Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines. http://water.epa.gov/lawsregs/guidance/wetlands/mitigate.cfm.

11.3 U.S. Army Corps of Engineers Model Site Protection Instruments and Long-Term Management Plans

Baltimore District, U.S. Army Corps of Engineers (2012), available at: http://www.nab.usace.army.mil/WetlandsPermits/mitigation.htm.

- Example Joint Corps-Maryland Department of the Environment Mitigation Banking Site Declaration of Restrictive Covenant
- Example Joint Corps- Maryland Department of the Environment Permittee-Responsible Mitigation Site Declaration of Restrictive Covenant

California districts (Los Angeles, Sacramento, San Francisco), U.S. Army Corps of Engineers, (2012), available at: http://www.dfg.ca.gov/habcon/conplan/mitbank/.

- Conservation Easement (for Banks)
- Long-term Management Plan

Charleston District, U.S. Army Corps of Engineers (2012), available at: http://www.sac.usace.army.mil/?action=mitigation.home.

- Model Restrictive Covenants
- Model Conservation Easement

Chicago District, U.S. Army Corps of Engineers (2012), available at: http://155.79.114.199/co-r/conservease.htm.

- Grant of Conservation Easement

Galveston District, U.S. Army Corps of Engineers, (2012), available at: http://www.swg.usace.army.mil/Portals/26/docs/regulatory/e-library/Conservation_Easement.pdf.

- Conservation Easement

Kansas City District, U.S. Army Corps of Engineers, (2012), available at:
http://www.nwk.usace.army.mil/Missions/RegulatoryBranch/MitigationToolsandGuidance.aspx.

- Conservation Easement Checklist
- Conservation Easement Form
- Deed Restriction Form

Mobile District, U.S. Army Corps of Engineers, (2012), available at:
http://www.sam.usace.army.mil/RD/reg/mitigation.htm.

- Restrictive Covenant / Conservation Easement Instructions
- Restrictive Covenant Permits With Mitigation Plan
- Restrictive Covenant Permits Without Mitigation Plan
- Model Conservation Easement for Mitigation Banks
- Model Conservation Easement for Individual Permits

New York District, U.S. Army Corps of Engineers, (2012), available at:
http://www.nan.usace.army.mil/business/buslinks/regulat/index.php?conservation.

- New York Model Conservation Easement
- New Jersey Model Conservation Easement

Norfolk District, U.S. Army Corps of Engineers, (2012), available at:
http://www.nao.usace.army.mil/Missions/Regulatory/CommonlyUsedForms.aspx.

- Deed Restriction Template

Omaha District, U.S. Army Corps of Engineers, (2012), available at:
http://www.nwo.usace.army.mil/html/od-r/mitbnk.htm.

- Conservation Easement for Mitigation Bank – template
- Deed Restriction - template

Pittsburgh District, U.S. Army Corps of Engineers (2012), available at:
http://www.lrp.usace.army.mil/or/or-f/permits.htm.

- Model Conservation Easement
- Model Deed Restriction

Rock Island District, U.S. Army Corps of Engineers (2012), available at: http://www2.mvr.usace.army.mil/Regulatory/.

- Grant of Conservation Easement and Covenants
- Creation and Grant of Covenants

Savannah District, U.S. Army Corps of Engineers (2012), available at: http://www.sas.usace.army.mil/regulatory/Policy_Procedures.html - SASMitigationInfo.

- Savannah District Model Declaration of Restrictions and Covenants
- Savannah District Amendments to Declaration of Restrictions and Covenants
- Savannah District Standards for Conservation Easements

Wilmington District, U.S. Army Corps of Engineers, (2012), available at: http://www.saw.usace.army.mil/WETLANDS/Mitigation/index.html.

- Model Conservation Easement
- Restrictive Covenants Guidance
- Declaration of Restrictions

Many of the sections below refer to components of the mitigation plan. A full discussion of the mitigation plan can be found in Section 2.4.1, "The Mitigation Plan," on page 25.

12.1 The bank or in-lieu fee prospectus

- Objectives: How feasible do you think it is that the project is likely to achieve its objectives, particularly ecological objective?
- Project operation and establishment: Do you think the bank or in-lieu fee program is structured in a way that will lead to likely success?
- Qualifications: Is the bank or program sponsor, in your view, qualified?
- Mitigation bank considerations:
    - Ecological suitability: Do you think the site has a high likelihood of being ecologically sustainable over time?
- In-lieu fee program considerations:
    - Compensation Planning Framework:
        - Framework overall: Do you think that the analysis undertaken to identify watershed needs is robust and accurate?
        - Prioritization strategy: Do you think the prioritization strategy will yield sites that have a high likelihood of being ecologically sustainable over time?
        - Long-term management: How, at this early stage in program approval, has the sponsor anticipated ensuring the long-term protection and management of the sites? Has the program sponsor identified your organization in this section? Is your role accurately described? Does this section suggest or commit you to any liability for project or program compliance?
        - Strategy for periodic evaluation and reporting: Does the program discuss which entity – the sponsor or the long-term steward – will be liable for monitoring, reporting, and meeting performance standards if these obligations are extended past the anticipated period?

12.2 The bank or in-lieu fee instrument (draft and final)

- Provision stating legal liability: Are you satisfied that the language here is clear and that, if you are not the sponsor, the section does not suggest or commit you to any liability for project or program compliance?
- Default and closure provisions: Are you satisfied that the components of this section are all addressed adequately? Does the section make it clear which entity – the project sponsor or the long-term steward – is liable in the case of default? To whom will remaining funds be allocated and if your organization is named here? And if your organization is named for this role, does accepting these funds come with any substantive obligations? Does any of the

language here suggest or commit you to liability for default?

- Reporting protocols: If your organization is playing a role in long-term stewardship of the site, does this section indicate that your organization will be a recipient of ecological monitoring repots, credit transaction reports, the program account report, and reports on financial assurances and long-term management funding? In particular, this portion of the instrument should require, rather than suggest, that the sponsor provide an annual report on deposits to and withdrawals from the long-term management fund to your organization.
- In-lie fee program considerations:
    - Compensation Planning Framework: A preliminary draft of this component of the instrument was included in the prospectus (see above). Here is an opportunity to see if your questions or concerns were addressed.
    - Advance credits: Are you satisfied that the components of this section are all addressed adequately?

12.3 The mitigation plan

For mitigation banks, the mitigation plan is a part of the draft and final banking instrument. For an in-lieu fee program, the mitigation plan is developed and reviewed as part of the project approval process. For permittee-responsible mitigation, the mitigation plan is developed by the permittee and then reviewed and approved by the Corps during the permitting process. Permittee-responsible mitigation plans are either incorporated into the individual permit by reference or the Corps may address individual components of the mitigation plan as permit conditions.

Specific considerations when reviewing the mitigation plan:

- **Objectives:** Are you satisfied that the objectives are clear and will address the needs of the watershed?
- **Site selection:** Do you have confidence that factors that were considered in selecting the site were adequate? Do you think they have a high likelihood of yielding ecologically self-sustaining projects? Is the site, as envisioned, in a location and of a type that meets with your organization's conservation objective?
- **Site protection instrument:** Is the party responsible for site ownership clearly indicated? Are you satisfied with the legal arrangements and type of site protection instrument outlined?
    - For easements:
        - Are you familiar with all of the terms, including any new terms encouraged or required by the Corps or other agency?
        - Does the easement comply with state law on conservation easements?
        - Does the easement allow for the necessary mitigation work? Does it allow for the tasks required by the long-term management plan?
        - Must the Corps approve changes to the easement? Would this include

routine easement maintenance or only major changes? If you wish to transfer the easement must the Corps approve the new holder?

- Does the easement require the creation of monitoring reports or impose other communication duties?
- Are the land use restrictions more stringent than on a traditional easement? Is public access allowed? Are trail systems allowed?
- Who, if anyone, is given an independent right to enforce the easement? Can they enforce the easement's terms against the easement holder, or just the landowner? Can an independent enforcer collect enforcement costs from the easement holder?

- For deed restrictions:
  - Does the deed restriction specify that it is in perpetuity?
  - Does the deed restriction require that the Corps or other agency be notified in the event the property is sold or transferred?
  - If the deed restriction is being placed on trust-owned land, is the new restriction consistent with the original donor or funder's intentions for the land?
  - Are the terms of the deed restriction consistent with the obligations of the mitigation provider and the long-term manager?
  - Does your state have a "marketable title" act? If so, does the deed restriction, or a separate agreement, provide for periodic re-recordation?
  - Who, if anyone, is given an independent right to enforce the deed restriction?

- **Baseline information:** Do you have confidence that the baseline conditions are likely to encourage the development of a sustainable site?
- **Mitigation work plan:** Do you feel that the activities outlined are likely to yield the intended ecological outcomes?
- **Maintenance plan:** Are you satisfied with the maintenance activities and how will they affect the site during the stewardship phase?
- **Performance standards:** Are the performance standards adequately ecologically based? Do you feel that, if met, they are likely to result in a site that meets is overall objectives, as well as your conservation objectives? Are they objective and verifiable? Are they based on best available science? Do they address different states of project development?
- **Monitoring requirements:** Are you satisfied that the parameters to be monitored will yield information adequate to evaluate whether or not the project is on track to meet its performance standards? Is the length of the monitoring period sufficient, given the characteristics of the project? Is the schedule for monitoring and reporting clear? Does the section specify the party that will be responsible for conducting the monitoring? As discussed above, is your organization listed as a party to whom monitoring reports will be submitted?

- **Long-term management plan:**
    - Does the plan clearly outline the party that is responsible for the affirmative obligations during the long-term stewardship phase or does the plan outline provisions for the permittee or sponsor to transfer the long-term management responsibilities? If the latter, consider requiring (if you are involved early on, or through a plan/instrument amendment) or requesting that your organization receive notification of any transfer of these responsibilities?
    - Does the plan clearly indicate the party that is responsible for long-term ownership (both fee title and easement holder, if any) or does the plan state that the long-term ownership may be identified at a later date at the approval of the Corps? If the latter, consider requiring (if you are involved early on, or through a plan/instrument amendment) or requesting that your organization receive notification of any transfer of fee title or easement?
    - Does the plan clearly describe the affirmative obligations (unrelated to easement monitoring and defense) that are required to manage the site after performance standards have been met?
        - Are these obligations formulated as specific management tasks that will be both achievable and effective at meeting management goals on the property?
        - Do they avoid vague or broad language that could make them difficult to measure or subject to multiple interpretations?
        - Do the required activities comport with local, state, and federal law? Does the plan provide for securing relevant permits or licenses, if necessary?
        - Are management obligations consistent with other project documents? In particular, are they allowed under the terms of the easement or other site protection instrument?
- Does the plan clearly describe the long-term financing mechanism(s) to be used, as well as an estimate for these needs?
    - Does the mechanism include provisions for addressing inflationary adjustments or contingencies? Is there a non-wasting endowment or trust? Are there any contractual arrangements with future responsible parties?
    - Are the identified management tasks achievable under the provided-for funding?
    - Does the plan allow the land manager to perform only those tasks for which there are sufficient funds? Does the plan address how tasks should be prioritized in the event funding is insufficient?
- Does the plan set up appropriate procedures for amending or transferring responsibilities?
- Does the plan specify the party responsible for all aspects of long-term management? Specifically, does the section outline who will:
    - Hold the endowment

- Undertake any affirmative obligations, such as invasive species removal
- Undertake any monitoring and/or submit any required monitoring reports to the regulatory agencies
- Hold the easement
- Monitor the easement

It is perfectly reasonable that the long-term management plan does not outline who will be responsible for each of these long-term management responsibilities. The critical consideration for your organization is that if these issues aren't resolved in the mitigation plan itself, that they are clearly articulated before you take on any long-term obligations.

- **Adaptive management plan:**
  - Does the plan clearly indicate the party or parties that will be responsible for implementing any adaptive management measures, should they arise?
  - Does the plan indicate how or if the mitigation plan will be revised if adaptive management is needed?
  - Does the plan clearly indicate that the permittee or sponsor will notify the Corps if there are any significant modifications to the project or if the project is not progressing towards meeting its performance standards?
  - If your organization will play a role in long-term stewardship, consider requiring (if you are involved early on, or through a plan/instrument amendment) or requesting that your organization receive notification of any significant modifications to the plan or notifications that the project is not progressing towards meeting its performance standards.
- **Financial assurances:** Does this section clearly indicate:
  - The types of financial assurances that will be provided?
  - Do you feel that the financial assurances are enough to successfully complete the project if any problems arise? Do they reflect the likelihood of project success, the size or the program, complexity of the project, etc.?
  - If financial assurances are going to be phased as performance standards are met, does the instrument clearly specify the conditions under which the assurances are released?
  - Is the financial assurance in a form that ensures that the Corps will receive notification at least 120 days in advance of any termination or revocation?
  - Does the mitigation plan make it clear that financial assurances will be payable at the direction of the Corps to a designee or into a standby trust? Is it clear who the trustee is and what the trustee's obligations are?

12.4 The §404 Permit

If your land trust is considering any involvement in a permittee-responsible mitigation project, the section of the permit termed "special conditions" is a critical piece of documentation to review. The special conditions of the permit are required to indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation project.

- Is your organization, or any of its officers, listed as a responsible party for any aspect of project?
- If so, make sure you are clear about what you are liable for and ensure that there are adequate protections in place for you and your organization.
- Are the financial assurances included as a special condition in the permit?
- If financial assurances are going to be phased as performance standards are met, does the permit clearly specify the conditions under which the assurances are released?

12.5 Credit Release

- Some considerations to take into account when reviewing the credit release documentation and communicating to the Corps about the project:
- Is the mitigation provider following the credit release schedule outlined in the project instrument/mitigation plan?
- Does the documentation requesting the credit release indicate that milestones for credit release are being achieved?
- Did the Corps and/or IRT opt to carry out a site visit? If so, is there written documentation about their findings?
- Did the Corps approve the credit release? If not, why not?
- If the requested credits are not being released, is the Corps planning to take any corrective actions?

12.6 Reviewing Monitoring Reports

Things to consider when reviewing the monitoring report and communicating with the Corps about the project:

- Has the mitigation provider monitored all of the parameters outlined in the "monitoring requirements" section of the mitigation plan?
- Was the monitoring report submitted on time? The schedule for monitoring and reporting can also be found in the "monitoring requirements" section of the mitigation plan.
- Does the Corps believe that the project is in compliance with its performance standards? And if not, what corrective action does the agency intend to take?