In-Lieu Fee Program Instrument Review Workbook

November 2022



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Acknowledgements

This project was funded by the U.S. Environmental Protection Agency (EPA) through EPA IDIQ contract (EP-C-17-001) to Ecosystem Planning and Restoration (EPR). Erin Knauer, Environmental Scientist with EPR, and Steven Martin, subject matter expert, co-wrote and edited this document with oversight, guidance, and close review by staff from EPA's Office of Wetlands Oceans and Watersheds: Brian Topping, Palmer Hough, and Emily French (former Oak Ridge Institute of Science and Education Fellow). Brian, Palmer, and Emily also led the effort to assemble a steering committee (SC) to solicit input from regulators and industry experts across the nation. The review and individual input from the steering committee members were essential to making this document a more comprehensive and relevant guide for interagency reviewers, federal and state regulators, and industry professionals alike to reference in producing and/or reviewing mitigation instruments and associated documents. The steering committee included the following participants:

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Special thanks are due to other collaborators including: Jeanne Richardson, Norfolk District, U.S. Army Corps of Engineers Sara Johnson, Ecological Restoration Business Association Stephanie TomCoupe, National Fish and Wildlife Foundation Timothy Dicintio, National Fish and Wildlife Foundation

Citation:

Knauer, E., Martin, S., Topping, B., Hough, P., and French, E. 2022. In-Lieu Fee Instrument Review Workbook and Checklist. Document No. EPA-840-B-22002

Cover Image:

Erin Knauer – EPR designed Maryland wetland restoration site.

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Introduction

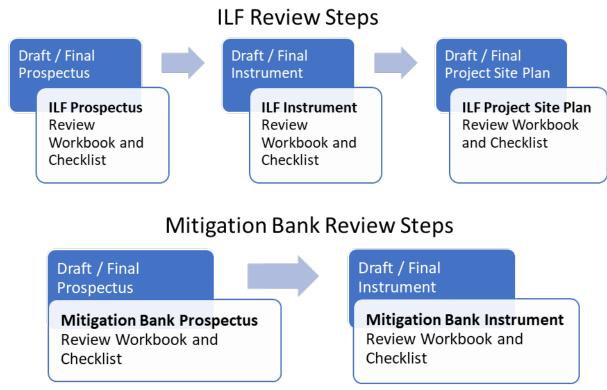
In 2007, the U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) began training federal, state, and tribal members of Interagency Review Teams (IRTs) on the review and approval process for mitigation banks and in-lieu fee (ILF) programs through national and regional courses. In 2008, the Corps and EPA issued joint regulations known as the Mitigation Rule, which standardized the review and approval process for mitigation banks and ILF programs. This review workbook and checklist reflect the lessons learned through more than a decade of teaching and learning from participants across the country. This workbook is one of a series of five review workbooks with one for each of the following: Mitigation Bank Prospectus, Mitigation Bank Instrument, ILF Prospectus, ILF Instrument, and ILF Project Site Plan. Each workbook is accompanied by a checklist that takes the mitigation review elements from each workbook and puts them in a fillable document to help track the IRT members' review progress and comments. Where the review elements are the same for mitigation banks and ILF programs, the corresponding workbooks are the same.

The workbooks provide many references and example practices discussed during the trainings and are organized according to the mitigation elements identified in the Mitigation Rule. Each mitigation element includes the relevant regulatory text, examples of how it is addressed from different District templates or instruments, and a series of questions to help IRT members adequately review all the relevant information needed to understand the proposal. The workbooks and checklists are technical resources to provide an organized structure for reviewing mitigation bank and ILF program proposals and ensuring that all aspects of the Mitigation Rule are considered. The checklist includes each review element question in a table for easily identifying what information has been reviewed and where any comments or questions remain after review. Bank and ILF proposals can often be hundreds of pages long and organized as a single or multiple documents. The checklists have been designed to help track where the information is and determine if more information or clarification is needed.

The complete set of five workbooks covers each of the major review steps for a mitigation bank and an ILF program development, as shown below (Figure 1). Bank review starts with the workbook and checklist for the mitigation bank prospectus. The bank prospectus workbook covers the eight review elements from the Mitigation Rule associated with a mitigation bank prospectus. Next is the mitigation bank instrument review workbook, which starts by asking if there are any unresolved questions from the bank prospectus review and then focuses on the 18 elements required for mitigation bank instruments. The ILF proposal review is a bit more complicated, with three workbooks and associated checklists. The ILF program prospectus covers the eight review elements from the Mitigation Rule associated with an ILF prospectus (six in common with the Mitigation Bank Prospectus Workbook). The ILF program instrument workbook differs from the bank instrument review workbook because it only covers 11 review elements needed for establishing the program, five in common with bank instruments, and six that only pertain to the ILF program instruments (Figure 1). Lastly, there is the ILF project site plan review workbook that covers 19 review elements, including all 18 elements required for a mitigation bank instrument and one additional element specific to establishing ILF sites.

¹ See: https://www.conservationfund.org/our-work/conservation-leadership-network/our-services/training-resourc-es-3rd-party-mitigation-interagency-review-team

Figure 1. Mitigation bank and ILF workbooks and checklists



This workbook and checklist are intended for use by members of the IRT to facilitate the review of an ILF program instrument and other documents associated with establishment and operation of the ILF program. ILF program instruments are typically large and complex documents, often with multiple supporting attachments or exhibits. The purpose of this ILF instrument review workbook is to assist the IRT reviewer in evaluating whether a proposed ILF program instrument is likely to result in an ecologically beneficial program that is capable of effectively compensating for lost aquatic resource functions and services. It is not intended to provide local guidelines and policies or replace any locally developed templates, tools, or guidelines used to prepare and review an ILF program instrument.

NOTE: This workbook (and supporting checklist) is ONLY for the IRT review of ILF programs. Each ILF program is intended to implement one or more individual ILF mitigation projects. When a project is added to an ILF program, it is considered a modification of the program instrument, and is subject to the prospectus and draft/final instrument process (including public notice) and full IRT review. An outline of the process and guide to reviewing the addition of a project to an ILF program is discussed in detail in a separate workbook, the "ILF Project Site Review Workbook". Addition of an ILF project follows the same regulatory standards and processes as adding an additional mitigation bank site under an umbrella bank instrument. Refer to the ILF Project Site Review Workbook for more on the 12 required elements for mitigation plans.

Before delving into review of the draft ILF program instrument, the reviewer should examine the separate ILF Prospectus Review Workbook and checklist questions for the proposed ILF program to evaluate how any concerns from the initial evaluation of the prospectus have been addressed. The prospectus workbook and checklist address the following eight elements of an ILF proposal:

Prospectus Workbook Elements

- 1. Objectives of the proposed ILF program
- 2. How the ILF program will be established and operated
- 3. Proposed service area(s)
- 4. General need and technical feasibility of the proposed ILF program
- 5. Proposed ownership arrangements and long-term management strategy for the ILF project sites
- 6. Qualifications of the Sponsor
- 7. Compensation Planning Framework (CPF)
- 8. Description of the ILF program account

(33 CFR 332.8(d)(2)/40 CFR 230.98(d)(2))

Workbook Organization

This workbook and associated checklist cover 11 separate review elements typically associated with ILF program instruments. Five of these elements are required for both banks and ILF programs, the other six are specific to ILF program instruments.

Together, these 11 elements are used to increase ILF program transparency and accountability and the likelihood for program success by ensuring the strategic selection of mitigation projects, the cost of project implementation is fully funded, and the accounting of program financial activities is clear.

ILF Program Instrument Review Elements

- 1. Compensation Planning Framework
- 2. Description of ILF Program Account
- 3. Advance Credits
- 4. Method for Determining Credits and Fees
- 5. Fee Schedule
- 6. Service Area(s)
- 7. How the ILF Program will be Established and Operated
- 8. Assumption of Mitigation Responsibilities
- 9. Accounting Provisions
- 10. Reporting Protocols
- 11. Default and Closure

All 11 elements are interrelated and will be referenced throughout this workbook. For example, the number and type of Advance Credits (Element 3) that are available in a Program Service Area (Element 6) will influence the price charged (Element 5: Fee Schedule) for those credits.

Background

For every permit issued by the Corps under the Clean Water Act (CWA) section 404, adverse impacts to wetlands, streams, estuaries, and other aquatic resources must be avoided and minimized to the extent practicable. For those unavoidable impacts, compensatory mitigation is often required to replace the loss of wetland, stream, tidal habitat, and other aquatic resource functions in the watershed.² The term "watershed" used throughout this workbook includes consideration of landscape and seascape perspectives. Compensatory mitigation refers to the restoration, establishment (creation), enhancement, or preservation of wetlands, streams, estuaries, or other aquatic resources in order to offset these unavoidable adverse impacts.

In 2008, the Corps and the EPA issued joint regulations known as the Mitigation Rule.³ These regulations established standards for all compensatory mitigation projects to offset permitted losses under CWA section 404. The Mitigation Rule recognizes three mechanisms for satisfying compensatory mitigation requirements: mitigation banks, ILF programs, and permittee-responsible mitigation (PRM). Equivalent standards are required for all compensatory mitigation projects regardless of the mechanism used to develop that project. This document focuses on reviewing and developing an ILF instrument.

Organization of the Mitigation Rule (Corps: 33 CFR 332/ EPA 40 CFR 230)

- The Mitigation Rule is divided into eight sections:
 - 1. Purpose and general considerations
 - 2. Definitions
 - 3. General compensatory mitigation requirements
 - 4. Planning and documentation
 - 5. Ecological performance standards
 - 6. Monitoring
 - 7. Management
 - 8. Mitigation banks and in-lieu fee (ILF) programs
- The first seven sections apply to all forms of compensatory mitigation
- The last section establishes standards that apply only to mitigation banks and ILF programs
- Mitigation Bank (bank): A mitigation bank is a project where aquatic resource conservation (restoration, establishment, enhancement, or preservation) has been initiated in advance of permitted losses of aquatic resource functions or services. Banks typically provide consolidated compensation for multiple permit actions. With the approval of regulatory agencies, permittees can acquire credits from a bank to meet their permit requirements for compensatory mitigation. The bank Sponsor (not the permittee) is responsible for the success of the bank project. Banks provide off-site compensation, meaning the compensation is at a location not typically on or immediately adjacent to the permitted impacts. Bank operation is governed by an instrument that the Sponsor drafts, often based on district or state provided templates, and is subject to review and approval by the Corps and its state and federal counterparts who compose the Interagency Review Team (IRT).

The appropriate citation from the Code of Federal Regulations associated with the Corps is 33 CFR Part 332 and EPA is 40 CFR Part 230, both are included throughout the workbooks.

² For some resource types, it may be preferable to site compensatory mitigation projects using geographic units other than watersheds. For example, for vernal pools, landscape units known as vernal pool regions may be preferable and for coral reefs, tidal wetlands, and other marine and estuarine resources, seascape units such as reef complex or littoral drift cell may be preferable. According to the RIBITS, projects using seascape or landscape units to site compensatory mitigation projects make up less than 5% of ILF projects.

• ILF Programs: ILF programs are established by a public agency or non-profit organization (the ILF Sponsor) and sell credits to permittees. The Sponsor commits to use those funds to perform mitigation activities. Typically, the Sponsor collects funds from multiple permittees in order to pool the financial resources necessary to build and maintain the mitigation site. The ILF Sponsor is responsible for the success of the mitigation. Like banking, ILF mitigation is also typically off-site; however, unlike banking, the mitigation typically occurs after the permitted impacts. Many districts/states require additional compensation to offset this temporal lag (see 33 CFR 332.3(f)(2)/40 CFR 230.93(f)(2). Like banks, ILF program operation is governed by an instrument drafted by the Sponsor, often based on district or state-provided templates, and is subject to review and approval by the Corps and the IRT.

Templates: Many districts have developed templates of ILF related documents (i.e., instruments, long-term management plans, site protection documents) to increase review efficacy. These templates are becoming more commonplace and encouraged by many District and state policies and practices. The IRT staff should be aware of language revision constraints and refrain from commenting on prior, approved language within the templates or providing comments that conflict with the approved template.

• **Permittee-Responsible Mitigation:** PRM is undertaken by a permittee to compensate for aquatic resource impacts resulting from a specific project. The permittee performs the mitigation after the permit is issued but prior to or concurrent with the initiation of permitted impacts. The permittee is responsible (liable) for the implementation, success and long-term protection and management of the mitigation project. The permit governs the PRM. There is no IRT involvement or instrument associated with PRM, and PRM may occur at the site of the permitted impacts or an off-site location within the same watershed.

Mitigation Preference Hierarchy: The Mitigation Rule established a preference hierarchy for mitigation credits ((33 CFR 332.3(b)(2) and (3)/40 CFR 230.93(b)(2) and (3)). Under this hierarchy if the appropriate type (wetland, stream, etc.) of released credits are available from a mitigation bank or released credits from an ILF project in a service area that includes the permitted impact, those credits are generally preferred over advance credits from ILF programs or PRM projects that have not been initiated.

Using released credits from banks and ILF projects is generally a preferred form of compensatory mitigation under the Mitigation Rule because they implement projects in advance of permitted losses thus reducing temporal losses of functions and uncertainty over project success. Additionally, ILF programs may consolidate compensatory mitigation projects where ecologically appropriate, in turn combining resources (including financial as well as agency resources), and scientific and technical expertise. (Note, this may be more of a challenge or even impractical for small PRM projects.) An ILF program prospectus may also include descriptions of how the mitigation project will provide offsets under other regulatory authorities such as state counterparts to CWA section 404, CWA section 402, or the Endangered Species Act.

ILF programs differ from mitigation banks in a number of ways:

- ILF programs can only be sponsored by government (usually state or local government) or non-profit conservation organizations.
- ILF programs are required to use a watershed approach for strategic site selection (forms part of the Compensation Planning Framework).
- ILF programs include two types of credit activities: advance credits that are associated with a program service area (NOT a project site); and released credits, generated by project sites that were funded with proceeds from advance credit sales and meet performance standards.
- ILF programs typically operate by selling advance credits as mitigation. These advance credits are associated with service areas, and the proceeds are then used to develop and implement mitigation projects on sites within the applicable service area. Credits generated from an ILF project site or mitigation bank (released credits) are generally preferred over these advance credits.
- The fee schedule for these advance credits is publicly available.
- When a program sells advance credits and has accrued sufficient proceeds from those credit sales, the ILF program can then identify project sites and develop and implement mitigation projects.
- Credits generated from an ILF project (released credits) are first used to fulfill a mitigation obligation generated by the sale of an advance credit. If there are any released credits left over after fulfillment, they can be sold and may be determined to be equivalent to a bank credit.
- ILF programs are required to identify financial accounting procedures to ensure that all collected funds are transparently and appropriately managed and dispensed.
- These programs often provide compensatory mitigation when there are few or no mitigation banks with available credits or where PRM is not practicable.
- Some ILF programs provide compensation for resources that are more difficult or less in demand, like the ecologically valuable fens, shellfish, seagrasses, mudflats, and subtidal sediment remediation projects, which generally have limited opportunities for return on investment.

ILF instrument development follows a four-step approval process (see Figure 2). The Sponsor is responsible for preparing and submitting all documentation associated with the ILF instrument to the IRT for review. The timelines depicted in Figure 2 are contingent upon the submittal of complete documents by the Sponsor at each step in the process.

Draft Draft **Final** Prospectus: Prospectus: Instrument: Instrument: 1 ١ 1 1 Up to **90**-day Up to a **90**-day Up to 45-Up to 30period for period to The IRT has 30 day day period process, incl. review and period for days to review required public for Corps comment by IRT to review and notice the IRT object to approval/

Figure 2. ILF program development

disapproval

the Corps

decision

Draft Prospectus submittal is considered an optional step in the Mitigation Rule, although many districts/ states require submittal. The purpose is to allow identification of any potential issues with the proposal early in the process so the Sponsor can address them prior to start of the formal process.

Prospectus submittal is required for all ILF program proposals. The prospectus provides a summary of the ILF program proposal at a sufficient level of detail to support informed review and comment by the IRT and the public (33 CFR 332.8(d)(2)/40 CFR 230.98(d)(2)). The Corps is required to issue a 30-day public notice for the complete prospectus. All comments received in response to the public notice are shared with the Sponsor and IRT within 15-days of the end of the public notice. The Corps will provide the Sponsor with an initial evaluation letter (IEL), stating the potential suitability of the proposal to provide compensatory mitigation. If the proposal is suitable, the Sponsor may be directed to prepare a draft instrument. If the proposal is deemed unsuitable, the Sponsor may revise the prospectus to address the deficiencies and resubmit. An approved prospectus does NOT guarantee approval of a proposed ILF program instrument. On a number of occasions, the districts have determined that a proposed ILF program is not potentially suitable for providing compensatory mitigation regardless of revision. In those cases, districts and/or Sponsors have withdrawn those proposals from further consideration.

Draft Instrument is submitted to the IRT by the Sponsor for review and comment. The draft instrument must be based on the prospectus and describe in detail the physical and legal characteristics of the mitigation bank or ILF program and how it will be established and operated. It must incorporate all draft instrument elements as mandated in the Mitigation Rule (33 CFR 332.8(d)(6)/40 CFR 230.98(d)(6)). The draft instrument should also incorporate or address any recommendations provided in the initial evaluation of the prospectus. The IRT Chair or co-chairs are responsible for providing all comments to the Sponsor to be addressed in the final instrument within 90 days of receipt of the complete draft ILF instrument.

Final Instrument is then submitted to the IRT by the Sponsor, along with documentation indicating how the Sponsor addressed previous comments on the draft instrument. The Corps must notify other members of the IRT within a 30-day period of its intent to approve/disapprove the Final Instrument. If a federal member of the IRT disagrees, he/she has up to 45days to object to the Corps decision and initiate a formal dispute resolution process. There is no automatic approval of an ILF program (or bank) instrument.

Delays in Instrument Review

Delays in the timelines specified in the Mitigation Rule can affect ILF program planning and feasibility. The Sponsor's ability to secure project sites and project implementation partners, acquire conservation easements, stay within project development and implementation budgets, secure financial assurances, and develop and implement ILF projects is more difficult when regulatory timelines are not followed.

Review can be delayed for a number of reasons including:

- Completion of Endangered Species consultation
- Completion of Cultural/Historic resources coordination (Section 106 NHRPA)
- Government to Government coordination (tribal coordination)
- Sponsor's failure to provide necessary information
- The necessary information cannot be secured within the specified timeframe
- IRT members failing to provide timely reviews

Terminology

Advance Credits: Credits of an approved ILF program that are available for sale prior to being fulfilled (implementation of a mitigation project) in accordance with an approved mitigation project plan. Advance credit sales require an approved ILF program instrument that meets all applicable requirements (33 CFR 332.2/40 CFR 230.92).

Assessment methodology: The mechanism or tool used to evaluate the loss of functions or services at the permitted impact site as well as the gain in functions or services provided at the compensation site. Assessment methods vary by aquatic resource type (i.e., wetlands, streams) and between districts/states.

Compensation Planning Framework: The watershed-based planning framework or tool used to select, secure, and implement aquatic resource restoration, establishment, enhancement, and/or preservation activities. All ILF projects used to provide compensation for Department of the Army (Corps) permits must be consistent with the approved compensation planning framework (33 CFR 332.8(c)(1)).

Compensatory mitigation methods: There are four compensatory mitigation methods, restoration, establishment, enhancement, and preservation:

- **Restoration** encompasses two types of actions, re-establishment of aquatic resources in a place where those resources formerly occurred (e.g., prior converted cropland) and rehabilitation of degraded aquatic resources. Much of the stream mitigation implemented involves the rehabilitation of degraded streams;
- Establishment (creation) is the development of an aquatic resource where one did not previously
 occur;
- **Enhancement** is the manipulation of one or more characteristics of an aquatic resource to improve or intensify one or more aquatic resource functions; and
- **Preservation** means removing any threat of destruction or adverse modification to an aquatic resource through appropriate physical and legal mechanisms.

Credits: A unit of measure (functional, areal, or other suitable metric) representing the accrual or attainment of aquatic functions or services at a mitigation site. This measure is based on restored, established, enhanced, or preserved aquatic resources. Credits are the currency that an ILF program utilizes for trading.

District: Refers to an Army Corps of Engineers (Corps) district office.

Fees: The costs of compensatory mitigation credits provided by an ILF program are determined by the ILF program Sponsor (33 CFR 332.8(o)(5)(i)/40 CFR 230.98(o)(5)(i)). The district engineer may evaluate fee schedules for ILF programs to determine whether those fees satisfy the criteria in 33 CFR 332.8(n)(5)(ii)/40 CFR230.98(n)(5)(ii) and are sufficient for providing the required compensatory mitigation (preamble to the Mitigation Rule, Federal Register / Vol. 73, No. 70 Thursday, April 10, 2008, pg. 19609).

Credit prices may vary based on mitigation resource type (e.g., wetland or stream). The cost per unit of credit must include the expected costs associated with the restoration, establishment, enhancement, and/ or preservation of aquatic resources in that service area. These costs must be based on full cost accounting,

and include, as appropriate, expenses such as land acquisition, project planning and design, construction, plant materials, labor, legal fees, monitoring, and remediation or adaptive management activities, long-term management, as well as administration of the ILF program (33 CFR 332.8(o)(5)(ii)/40 CFR 230.98(o) (5)(ii)).

Fulfillment of Sales of Advance Credits from an ILF Program: Application of credits released in accordance with a credit release schedule in an approved mitigation project plan to satisfy the mitigation requirements represented by the sale or debit of advance credits (33 CFR 332.2/40 CFR 230.92). Only after any advance credit sales within a service area have been fulfilled (through the application of released credits from an ILF project) may additional released credits from that project be sold or transferred to permittees (33 CFR 332.2/40 CFR 230.92).

Functions: Functions are the physical, chemical, and/or biological processes that occur in ecosystems (e.g., denitrification or carbon sequestration).

Hydrologic Unit Codes (HUCs): A nationwide hierarchical mechanism used to delineate watersheds based on surface hydrologic features. This system first developed by the USGS divides the country into 21 regions (2-digit), 222 subregions (4-digit), 370 basins (6-digit), 2,270 subbasins (8-digit), ~20,000 watersheds (10-digit), and ~100,000 sub-watersheds (12-digit). HUCs are often used in the definition of mitigation bank and ILF program service areas.

ILF Program: Mitigation that occurs when a permittee purchases credits from an ILF Sponsor (a public agency or non-profit organization). The Sponsor commits to utilizing those funds to perform mitigation activities. Typically, the Sponsor collects funds from multiple permittees in order to pool the financial resources necessary to build and maintain the mitigation site. The ILF Sponsor is responsible for the success of the mitigation. Like banking, ILF mitigation is also typically off-site; however, unlike mitigation banks, ILF mitigation typically occurs after the permitted impacts. Like banks, ILF program operation is governed by an instrument drafted by the Sponsor, often based on district or state provided templates, and is subject to review and approval by the Corps and the IRT.

ILF Project: A compensatory mitigation project developed by an ILF program to offset permitted losses of aquatic resource functions and services. ILF projects are required to follow the same standards, development, and approval process as mitigation bank sites. The 12 required elements for mitigation plans (33 CFR 332.4(C)(2)-(14)/40 CFR 230.94(C)(2)-(14)) apply to the bank, ILF, and PRM projects.

In-kind: A resource of a similar structural and functional type to the impacted resource.

Instrument: Refers to the ILF instrument and all associated exhibits/attachments. In some cases, the instrument is all-inclusive. In other cases the instrument is the framework, and the exhibits/attachments provide the detail on each element (monitoring, site selection, etc.).

IRT (Interagency Review Team): An interagency group of federal, tribal, state, and/or local regulatory and resource agency representatives that reviews documentation for and advises the co-chairs (Corps district and any other agency chairing the IRT) on the establishment and management of a mitigation bank or an ILF program (33 CFR 332.2/40 CFR 230.92). The reference to the IRT or IRT reviewer in this workbook is a reference to the IRT co-chairs (Corps and any other counterpart state, tribal, or federal agency with independent regulatory authority) as well as other IRT members (other federal, tribal, state, or local agency included on the IRT).

Multiple authority programs: Also called "Joint ILF programs." These are ILF programs that provide compensatory mitigation for resource impacts to resources under more than one regulatory authority. Examples include programs that provide compensation for resources regulated under CWA section 404 and the Endangered Species Act. Each regulatory agency has authority over credits providing compensation for impacts authorized under its jurisdiction.

Out-of-kind: A resource of a different structural and functional type than the impacted resource.

Released Credits: Those credits generated by an ILF project meeting performance milestones. The district engineer, in consultation with the IRT, may determine that those credits are available for sale or transfer once any debited advance credits have been fulfilled. A proportion of projected credits for a specific mitigation bank or ILF project may be released upon approval of the mitigation plan, with additional credits released as milestones specified in the credit release schedule are achieved (33 CFR 332.2/40 CFR 230.92).

Resource type: The type of aquatic resource considered. Examples include wetlands, streams, marine habitats, or subsets like vernal pools, pine savannas, tidal marsh, intermittent streams, lagoons, etc.

RIBITS: The national web-based application used by a number of federal agencies to track mitigation bank and ILF activities. Sponsors and regulators use RIBITS for the management of ledger and reporting activities. To access it, go to: https://ribits.ops.usace.army.mil/ords/f?p=107:2

Service area: The geographic area within which impacts can be mitigated at a specific ILF program, as specified in the ILF instrument (33 CFR 332.2/40 CFR 230.92.2).

Services: The benefits that human populations receive from the functions provided by ecosystems (e.g., flood flow attenuation or water quality improvement).

Sponsor: ILF program Sponsor; any government or non-profit conservation organization responsible for establishing and operating an ILF program. The ILF Sponsor is responsible for the success of the ILF program and all associated project sites.

Subordination agreement (in context of other interests in property): In compensatory mitigation, a subordination agreement makes any previously recorded easements, liens, or encumbrances take second place in the mitigation site protection instrument. For example, suppose a mitigation site protection instrument was recorded after a deed to secure a debt and the land was subsequently foreclosed upon to settle the debt. In that case, the site protection instrument could be terminated. Subordination makes the compensatory mitigation interest the primary property interest ("first in right") and allows greater assurance that the mitigation site will withstand adverse actions such as foreclosure.

Temporal Loss: The time lag between the loss of aquatic resource functions or services caused by the permitted impacts and the replacement of aquatic resource functions or services at the compensatory mitigation site.

Watershed approach: An analytical and strategic approach for selecting compensatory mitigation projects that consider the needs of a watershed and how the location and types of compensatory mitigation projects within the watershed address those needs. This same approach can be applied to other landscape/seascape units.

Commonly Used Acronyms

Bank Enabling Instrument (BEI)

Banking Instrument (BI)

Compensatory Planning Framework (CPF)

Environmental Protection Agency (EPA)

Geographic Information Systems (GIS)

Hydrologic Unit Codes (HUCs)

Initial Evaluation Letter (IEL)

In-lieu fee (ILF)

Interagency Review Team (IRT)

Letters of Intent (LOI)

Long-term management (LTM)

Mitigation Banking Instrument (MBI)

Permittee Responsible Mitigation (PRM)

Regulatory In-lieu Fee and Bank Information Tracking System (RIBITS)

United States Army Corps of Engineers (Corps or USACE)

1. Compensation Planning Framework (CPF)

The CPF is an ILF program tool used to identify project sites that meet aquatic resource needs in a watershed. The Mitigation Rule clearly lays out (1) what the framework is used for and (2) what should be included in the framework (33 CFR 332.8(c)(2)/40 CFR 230.98(c)(2)). Collectively, the framework

Compensation planning framework (CPF)

The CPF must support a watershed approach to compensatory mitigation (33 CFR 332.8(c)(1)/40 CFR 230.98(c)(1)).

elements (or criteria) constitute a watershed-based approach to site selection, focusing on projects that best address ecologic/environmental needs of the service area where the project is located.

To prepare for reviewing the contents of an ILF program's CPF, the IRT reviewer should refer to past instruments and current district/state policy to determine the level of detail necessary for the CPF narrative. The content and detail of an instrument CPF are ultimately decided by the Chair or co-chairs considering the characteristics of the service area(s) and the scope of the program (see Example 4). (The IRT review is a major factor in the Chair or co-chair's(?) decision on whether to approve the instrument (33 CFR 332.8(c)(3)/40 CFR 230.98(c)(3)).) Kihslinger et al. (2019) provide several case studies of ILF programs with rigorous CPFs.

1a. Does the instrument include a CPF?

The approved instrument for an ILF program must include a CPF that will be used to select, secure, and implement aquatic resource restoration establishment, enhancement, and/or preservation activities (33 CFR 332.8(c)(1)/40 CFR 230.98(c)(1)). ILF programs utilize information from a variety of sources and tools, including but not limited to local and regional assessments, plans, models, GIS and other datasets, and lists of impaired waters, to obtain the data/information for their watershed analysis/assessment. It is at the ILF program's discretion to decide the approach they will use for identifying ILF projects, as long as site selection complies with the CPF criteria laid out in the ILF program instrument and with regulatory requirements.

Sources ILF programs use in the development of the CPF may include:

- Wetland conservation plans assess, identify, and prioritize restoration and protection priority areas, e.g., wetland inventories, advanced identification of disposal areas, Special Area Management Plans (SAMPs), etc.
- *Water quality reports* such as a list of 303(d) waterways.
- *State wildlife action plans (SWAP)* identify species of greatest conservation need (SGCN) and assess the condition of their population(s) and habitat(s).
- Endangered Species Act (ESA) Habitat Conservation Plans are a required part of applications for permits issued under the Endangered Species Act (ESA) to parties undertaking projects that might result in the "take" (causing impacts to) of a threatened or endangered species.
- *Fish habitat partnerships* conduct analyses that identify priority restoration and preservation of catchment basins for high-ecological value fish and mussels.
- *Landscape development index (LDI)* shows relative level of human-induced impact.
- *Total Maximum Daily Load (TMDL) implementation plans* establish restoration targets designed to result in the attainment of water quality goals.
- *Flood management plans* illustrate the location/quantity of flooding impact and may be found in state and local flood management and hazard mitigation plans.
- *Comprehensive Conservation and Management Plans* are developed by partners for each estuary in the National Estuary Program administered by EPA.

ILF programs have implemented various approaches to site selection that range in complexity and specificity. Four approaches that span this range include:

Opportunistic identification: selecting sites that fulfill the regulatory requirements of the CPF as sites become available.

Strategic focus on credit demand and timing: selecting sites that meet the requirements of the CPF, credit demand, and timing of project implementation.

Scoring and weighting project proposals to select the most appropriate projects: selecting the most appropriate projects based on a scoring/weighting used by multiple ILF programs (e.g., Maine's NRCP, Oregon's DSL).

Project sites identified in the program instrument: identifying selected sites in the instrument, is a common approach for ILF programs that already have secured property/land.

These approaches are discussed in greater detail in Review Element 7: How ILF Will Be Established and Operated in this workbook.

1b. Are the elements of the CPF framework clearly identified?

An instrument must include the following ten framework elements (33 CFR 332.8(c)(2)/40 CFR 230.98(c) (2)):

- Geographic service area(s)
- Threats to aquatic resources in the service area(s)

- How threats are discussed (sometimes combined with the above)
- Analysis of historic aquatic resource loss and current conditions
- Aquatic resource goals and objectives for each service area
- Prioritization strategy for selecting/implementing projects
- Explanation of the use of preservation
- Description of stakeholder involvement and coordination with regulatory and resource agencies
- Long-term protection and management strategies
- Strategy for evaluation and reporting

1c. Does the CPF explain the development of program geographic service area(s)?

The service area(s) is the geographic area(s) in which an ILF program may provide compensatory mitigation for permitted impacts to aquatic resources (33 CFR 332.8(d)(6)(ii)(A)). These geographic areas vary in extent and scope and are specific to each ILF program. Service areas can be defined using a variety of geographic boundaries, including watershed, ecoregional, physiographic, and/or administrative boundaries. The CPF typically lays out the criteria and context for which its service area(s) was defined (see Example 1). The size of the service area(s) must be adequate to offset permitted impacts and maintain economic viability. The IRT reviewer should evaluate the service area(s) size/limits to determine if the area(s) is sufficiently sized to meet credit demand. In the past, ILF programs with multiple smaller service areas have had difficulties gathering sufficient funds within the three-year growing season timeframe in some service areas with limited demand for credits (see Review Element 3: Advance Credits in this workbook). As a result, some ILF programs have consolidated low-activity service areas into larger service areas that can better accommodate market demand (see ELI 2019 and ME DEP 2012).

1d. Does the CPF describe and discuss threats to aquatic resources in service area(s)?

While there is considerable variability in how threats are defined by ILF programs, the CPF should reference sources, such as development trends (population trends, transportation, and infrastructure planning, etc.) and geospatial data, in determining what activities/processes may have caused, are currently causing, and have the potential to cause destruction, degradation, and/or impairment to an ecosystem, natural resource, or community (ELI 2009, ME DEP 2011).

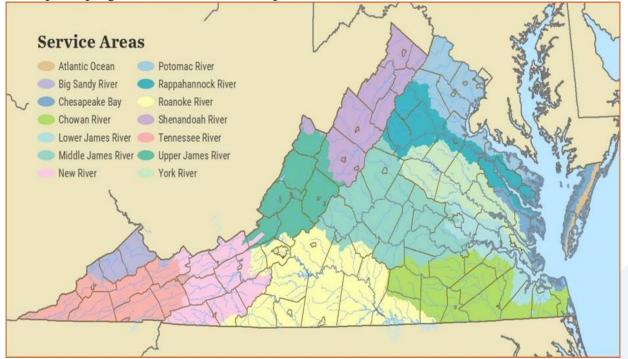
Examples of types of aquatic resource threats identified by an ILF program include (Maine DEP 2011):

- o Habitat loss and fragmentation (due to population increase and development)
- o Altered hydrologic regimes (water withdrawal, dams)
- o Alteration of the buffer zones around surface waters (lakes, ponds, rivers, streams, and wetlands)
- o Loss of landscape connectivity due to road impacts
 - fish and other wildlife passage blockages
 - loss of access to free movement and key habitat for wildlife
 - increased incidence of roadkill
- o Other impacts (from roadways, impoundments, agriculture, development, etc.)
 - increased frequency/extent of disturbances, like pollution and fire
 - changes in hydrology
 - increased salinity in adjacent waterbodies
 - increased opportunity for invasion by exotic and invasive species
 - increased recreation impacts (new roadways=new access)
 - forest conversion
 - changes in climatological patterns

Threats identified should be specific to the service area(s) and may be rated or ranked. For example, in the Maine ILF program instrument, based on available data and expert opinion, threats are qualitatively ranked based on their scope, severity, contribution, and irreversibility (ME DEP 2011).

Example 1: Developing Program Service Areas – Virginia Aquatic Resource Trust Fund (VARTF)

Aquatic ecologists at The Nature Conservancy (TNC) in Virginia stratified the state's ecoregions into ecological drainage units (EDUs). EDUs delineate areas within a freshwater ecoregion that correspond roughly with large watersheds, ranging from 3,000–10,000 square miles. EDUs are likely to have a distinct set of freshwater assemblages and habitats associated with them. TNC biologists and hydrologists developed EDUs by aggregating the watersheds of major tributaries (8-digit Hydrologic Unit Codes (HUCs)) that share a common zoogeographic history as well as local physiographic and climatic characteristics, taking into consideration USFS Fish Zoogeographic Subregions, USFS Ecoregions and Subsections, and major drainage divisions. They then crosswalked the EDUs with Virginia State law service area requirements to develop meaningful and compliant program service areas (see map below).



1e. Does the CPF provide an analysis of historic aquatic resource loss and current conditions?

The CPF should include an analysis of historic aquatic loss, which helps the ILF program to prioritize locations and aquatic resource types and justify the restoration need. A program may describe the ecological history of the state since colonial settlement (where that information is available) and provide a timeline of development and corresponding watershed and aquatic degradation that leads to the present. The history may present statistics/estimates comparing natural resource presence pre-settlement to current conditions and/or discuss the historical loss by service area, resource type, or anthropogenic activity (i.e., mining, dredging, agricultural conversion). Supporting sources for evaluating resource loss and current conditions may include historical documentation, peer-reviewed journal articles, state or district aquatic resource impact permit files, regional and state assessments/reports, metrics/rankings for the highest quality resource areas remaining, and GIS data layers that approximate historic loss and/or fragmentation. GIS layer(s) of historic resource areas may also serve as a tool for identifying possible restoration locations (ELI 2009, NH DES 2012, Maine DEP 2011, TNC 2014, and NFWF 2014).

1f. Does the CPF clearly state aquatic resource goals and objectives for each service area?

The CPF's aquatic resource goals and objectives should include a high-level discussion on the type(s) of aquatic resources the ILF program is focused on restoring for each service area. It should also include some indication of the general locations (statewide to project site) and amounts of aquatic resources the program will seek to provide (33 CFR 332.8(c)(2)(v)/40 CFR 230.98(c)(2)(v)).

The Sponsor may also include the overall goals of the ILF program (e.g., provide an alternative to permittee responsible mitigation, expand ILF mitigation to apply to larger scale projects/impacts, provide compensation for scarce or at-risk resources, contribute to environmental sustainability within the watershed, MA DFG 2014) or connect the program's goals to the agency's or organization's overall mission (e.g., "provide effective and responsible levels of protection and restoration of New Hampshire's aquatic resources through an efficient regulatory program..." NH DES 2012).

1g. Does the CPF clearly lay out a prioritization strategy for selecting/implementing projects? And does it explain the approach that will be used?

The CPF is used to strategically select and prioritize ILF compensatory mitigation sites. The CPF should include a description of the ILF program's prioritization strategy, including laying out the criteria used to select and implement projects. The site selection strategy in the CPF should show how the ILF program will incorporate consideration of the watershed or landscape context in strategic site selection. The CPF should show how the site selection strategy ties to the identified threats, historic and current conditions, and aquatic resource goals for each program service area. There is a range of approaches that ILF programs use—from identification of specific potential project sites (King County 2011, Riverside-Corona RCD 2012) to specification of the framework used for site identification and selection (NH DES 2012, TNC 2014, OR DSL 2009, etc.). Projects selected by the program must be consistent with the CPF prioritization strategy. See below for two examples of frameworks to prioritize ILF projects (Example 2 and 3).

Example 2: Ohio Nature Conservancy Compensation Planning Framework Approach

The Ohio Nature Conservancy ILF program identifies, designs, and implements its own projects. Their site selection approach prioritizes projects that:

- Address the specific needs of the watershed identified from the CPF, existing plans, reports, analyses, and stakeholder input.
- Capture multiple occurrences of each aquatic system within each service area to ensure representative conservation of biodiversity and habitat types by using all available options to meet mitigation requirements.
- Create a network of hydrologically connected aquatic systems to ensure representative and functional conservation areas within the service area and across the state.
- Maximize the potential for success and sustainability for each mitigation site by considering the surrounding land use patterns, local ecological processes, and environmental regimes that establish and maintain the aquatic system (e.g., hydrologic flow, seasonal hydroperiods, presence of invasive species, climate regimes).
- Include such factors as species having access to habitats/resources needed for life cycle completion, proximity to other protected ecological communities and systems, and the ability of aquatic species to adapt to environmental change through dispersal, migration, or re-colonization.
- Conservation Priorities include:
 - 1. Data on distribution and status of biodiversity
 - 2. Habitat condition
 - 3. Current/future threats
 - 4. Socio-political conditions that influence conservation

Example 3: Oregon Department of State Lands Compensation Planning Framework Project Prioritization Approach

Oregon relies heavily on existing conservation plans (i.e., SWAPs, water quality improvement plans, CWA section 303(d) lists, etc.) for conducting their watershed assessment and project site selection. Criteria considered include:

- Likelihood of success: Does the project have a reliable water source, have low or manageable levels of invasive species / threats, and result in a net gain of wetland acreage or function with limited maintenance. Restoration projects are prioritized because of higher functional lift and success rates.
- Addresses multiple objectives: Does the project addresses multiple functions such as fish and
 wildlife habitat, rare species, flood attenuation, and/or improved water quality. For example,
 the Lower Columbia bottomlands project provided winter and staging habitat for waterfowl,
 reconnected degraded tributary channels to their floodplains, and contributed to improved water
 quality and flood storage.
- Supports regional conservation objectives: Does the project have minimal to no conflicts with adjacent land uses, address limiting factors in the watershed, establish corridors, and augment nearby protected areas?
- Capacity/qualifications of the grant applicant and project team: Does the grant applicant and project team have the qualifications or capacity to manage projects, including planning, construction, monitoring, and remediation.
- *Project costs:* Looking at all expected costs, the greater functional gain-to-dollar ratio (bigger bang for the buck) is preferred.
- Long-term management (LTM) plan: Is there a comprehensive and realistic plan that accounts well for LTM costs.

1h. Does the CPF provide an explanation of use of preservation?

The use of preservation by ILF programs must comply with preservation criteria discussed in the Mitigation Rule (33 CFR 332.3(h)/40 CFR 230.93(h)), which states that preservation may be used to provide compensatory mitigation when it satisfies the following conditions:

- Provides important functions for the watershed;
- Contributes substantially to the ecological sustainability of the watershed;
- Is determined to be appropriate and practicable by the Corps;
- Is under threat of destruction or adverse modification⁴;
- Will be permanently protected; and
- To the extent appropriate and practicable, will be done in conjunction with restoration, establishment, and/or enhancement of aquatic the resources.

The instrument may list the above five conditions in the narrative on the use of preservation.

⁴ District or state specific guidelines may clarify what is meant locally by threat of destruction or adverse modification

1i. Does the CPF provide a description of stakeholder involvement and coordination with regulatory and resource agencies?

The CPF should contain a narrative describing at a broad level the types of stakeholders (i.e., public, private, conservation groups, non-profits, academia) and the state and resource agencies the Sponsor is coordinating with for the ILF program. Some programs will also include federal agencies and tribal representatives. Programs will vary in level and focus/scope of stakeholder involvement. For example, programs may request stakeholder involvement in:

- Developing the CPF and the resources used/tools developed by the program,
- Developing the program's conservation action planning efforts (identifying conservation targets, developing measurable conservation objectives, etc.),
- Obtaining resource information and finding mitigation opportunities within a service area as part of project site selection, and/or
- Developing, reviewing, and implementing mitigation projects (NH DES 2012, ME DEP 2011, TNC 2014, and NFWF 2014).

1j. Does the CPF describe long-term protection and management strategies?

The CPF needs to describe the long-term protection and management strategies or activities undertaken by the ILF program Sponsor (33 CFR 332.8(c)(2)(ix)/40 CFR 230.98(c)(2)(ix)). Regardless of the method of project implementation (e.g., design-build, request for proposals, bank credit purchase), the ILF program retains responsibility for ensuring that each project has suitable long-term protection (i.e., legal mechanism such as a conservation easement) and long-term management provisions. The specifics are detailed in each ILF project plan (refer to the ILF Project Site Review Workbook for more information).

1k. Does the CPF clearly lay out a strategy for evaluation and reporting?

Per the Mitigation Rule, the CPF must include a strategy for periodic evaluation and reporting on the progress of the ILF program in achieving its stated goals and objectives (see 1f). This evaluation should include a process for revising the CPF if necessary (33 CFR 332.8(c)(2)(x)/40 CFR 230.98(c)(2)(x)). The CPF should indicate what types of reports (monitoring, assessments, programmatic, progress) and the associated timeframe(x) (annual, biannual, etc.) for submittal to the IRT will be followed. Details on the contents of reports can be found in Review Elements 9: Accounting Procedures and 10: Reporting Protocols of this workbook. These reports should give the IRT reviewer a good indication of the program's status in progressing towards its stated goals and objectives and identify any changes that may affect or alter the program/CPF's strategy or goals.

Example 4: Interplay of CPF Elements - Oregon Department of State Lands

OR DSL (2012) characterizes each service area by size, land use, and population. It identifies the conservation significance of each service area based on state conservation strategies and identified resource priorities based on those strategies.

An example of of the approach is the Tualatin Basin (pictured), which is identified by the ILF program as a high-priority watershed (Geographic Service Area). Fifteen percent of the watershed is urban, 35% is agricultural, and 50% is forested (Analysis of Current Aquatic Resource Conditions). The Oregon Conservation Strategy recommended actions, including maintenance or restoration of riparian habitat and ecological functions, and the restoration of floodplain wetlands and riparian forests (Aquatic Resource Goals and Objectives).



Wetland acreage in the basin has been significantly reduced (<u>Analysis of Historic Aquatic Resource Loss</u>). One priority is to address habitat fragmentation including preservation, restoration, and enhancement of emergent, scrub shrub and prairie wetlands, and riparian forests (<u>Use of Preservation and Aquatic Resource Goals and Objectives</u>). Focal species include red-legged frogs, Pacific salamander, water howellia, and winter steelhead.

Limiting conditions include low summertime flows, increased peak flows and storm water management, channelization of streams and disconnected floodplains, reduced riparian vegetation, fragmented habitat, and water quality. The Tualatin Basin is water quality limited and has TMDLs for phosphorus, temperature, bacteria, DO, chlorophyll a, NH3 and pH (Analysis of Current Aquatic Resource Conditions and/or Description of Threats to Aquatic Resources).

The CPF indicates that mitigation projects should include as many of the functions as possible within these priority wetland types and riparian areas, concentrating on expanding and connecting core habitat areas (<u>Aquatic Resource Goals and Objectives and Prioritization Strategy</u>).

2. Description of ILF Program Account

The Mitigation Rule defines the foundations of an ILF program account, clearly outlining conditions on when an account must be established, how it must be established, and how funds are distributed. These explicit provisions in the regulations are in part the result of evaluations of ILF programs prior to the issuance of the Mitigation Rule, including the Government Accountability Office

ILF Program Account

The ILF program Sponsor must establish a program account after the instrument is approved by the district engineer, prior to accepting any fees from permittees... (33 CFR 332.8(i)(1)/40 CFR 230.98(i)(1)).

(GAO 2001) and the Environmental Law Institute (ELI 2006) that identified serious concerns regarding the lack of transparency and adequacy of accounting of ILF mitigation funds, and corresponding ineffective oversight of these ILF programs by the Corps and EPA. The Mitigation Rule established a regulatory standard for ILF programs to ensure that program account funds were used only for the ILF mitigation program and were appropriately tracked and distributed within the program account.

ILF Program Account Establishment

2a. Does the ILF instrument require establishment of a program account?

The Mitigation Rule (33 CFR 332.8(i)(1)/40 CFR 230.98(i)(1)) states that the ILF Program account:

- May only be used for the deposit of mitigation fees from permittees.
- May be established after the ILF instrument is approved by the Chair or co-chairs in consultation with the rest of the IRT but must be established before the ILF program may accept any funds.
- Must be established at a financial institution that is a member of the Federal Deposit Insurance Corporation (FDIC). This better ensures that funds are deposited in a reputable and accountable financial institution.

2b. Does the instrument describe an accounting mechanism for keeping permittee fees and funds from sources other than permittees separate?

Any funds from sources other than permittees (donations, grants, appropriations, adjoining non-mitigation projects, etc.) must be kept in separate accounts (33 CFR 332.8(i)(1)/40 CFR 230.98(i)(1)). This ensures there is no commingling of mitigation fees with non-mitigation fees. These two fee types must be kept separate to accurately account for advance credit debits and repayments. Additionally, any interest income and earnings from mitigation fees must remain in the ILF program account.

2c. Does the instrument describe what the program account may be used for?

The program account may only be used for the selection, design, acquisition, implementation, and management of ILF compensatory mitigation projects. This means that educational activities must be funded with non-mitigation fees (preamble to the Mitigation Rule, Federal Register / Vol. 73, No. 70 Thursday, April 10, 2008, pg. 19657).

A small percentage of the mitigation fees can be used to administer the ILF Program. That percentage is determined by the Sponsor to cover the expense of administering the program in accordance with the requirements of the Mitigation Rule and is subject to the approval of the Chair or co-chairs in consultation with the IRT and Sponsor. This is discussed further in Element 5: Fee Schedule.

Note: The regulations do not clearly identify what constitutes "a small percentage of mitigation fees" for administrative costs. The percentage is determined in discussions between the Chair or co-chairs, IRT, and Sponsor and has ranged from a low of five to as high as 25 percent, with a national average of 15 percent (from 2019 ILF presentation materials for National IRT Mitigation Bank and ILF Program Training Course ILF Presentation).

2d. Does the ILF instrument identify any sub-accounts or system of earmarks in the ILF program account?

ILF Programs may vary in the type and number of accounts/sub-accounts the Sponsor will establish and the scope and intended purpose of each account. For example, some common approaches to ILF program accounting are to separate funds by resource (e.g., non-tidal wetland, tidal wetland, stream, intertidal/subtidal system), program service area (typically defined in the CPF), and/or each phase of a mitigation project (i.e., program administration, mitigation project account, long-term management account), and/or establish programmatic, administrative, and site-specific funds. The IRT reviewers should refer to their district/state guidance and any templates, if available, for a better understanding of how the ILF program account should be organized.

More on approaches to establishing ILF Program Accounts

ILF programs often use sub-accounts within the ILF program account to breakdown tracking of:

- Administrative fees
- Program funds (may be further sub-divided or earmarked by resource or service area)
- General funds (e.g., Interests and/or earnings from released credits sales, contingency, or reserved funds)
- Statewide development funds (covering costs of initial site assessment and development of potential projects)
- Site funds (allocated to individual projects)
- Non 404/Section 10/401 fees (e.g., Proceeds from credits sale to offset impacts to isolated waters) These sub-accounts or earmarked funds allow for more complete reporting of ILF program activities.

The Chair or co-chairs, in consultation with the rest of the IRT, are responsible for approving the ILF mitigation projects. Note, in order to comply with federal fiscal law (specifically the Miscellaneous Receipts Statute – see Scodari et al. 2016), federal agencies cannot direct disbursement of funds from the ILF program account; they can only approve/disapprove projects that would require fund disbursement. Following project approval, funds may be disbursed from the ILF program account.

The Chair or co-chairs also have the authority to direct the Sponsor to identify alternative compensatory mitigation if the Sponsor does not provide compensatory mitigation in accordance with the required timeframes for mitigation implementation (33 CFR 332.8(i)(2)/40 CFR 230.98(i) (2)). This is discussed in more detail in Review Element 3: Advance Credits of this workbook. The IRT reviewer should refer to the ILF Project Site Plan Review workbook for more information on mitigation project approvals and alternative compensatory mitigation.

Some ILF program accounting approaches:

Simple:

- Separate sub-accounts are established for each service area
- Non-mitigation funds are deposited in separate accounts

Example: Maine Natural Resources Conservation Program (Maine NRCP 2020)

Moderate:

- Separate sub-accounts for each service area
- Administration sub-account
- Reserve sub-account funded with interest & earnings used to fund contingencies, long-term management, & permanent site protection

Example: Kentucky Department of Fish and Wildlife Resources (KY DFWR 2018)

Complex/Detailed:

• Mitigation fees are tracked by service area and resource type (non-tidal wetland, tidal wetland, and stream) and several additional sub-accounts are established for specific purposes

Example: Virginia Aquatic Resources Trust Fund (VARTF) has several other sets of funds, including Programmatic funds, Administration funds, and Site funds (TNC 2019a).

Programmatic funds are subset into:

- General fund funded with interest and earnings from sales of land and released credits
- Statewide Development Fund covers costs of initial site development; approved projects reimburse this fund for initial expenses
- Program Contingency Fund use for unanticipated program and site expenses

Administration Funds/Site Funds are subset into three sets of funds:

- Monitoring and management
- Site protection endowment
- Long-term management endowment

2e. Does the ILF instrument discuss program account reports and audits?

The Sponsor must provide annual reports to the Chair or co-chairs and IRT that include the following (33 CFR 332.8(i)(3)/40 CFR 230.98(i)(3):

- All income received, disbursements, and earnings by the program account
- A list of permits for which mitigation fees were accepted (refer to regulations for permit information to be included)
- A description of ILF program account expenditures
- The balance of advance and released credits at the end of the reporting period for each service area
- Any other information required by the Chair or co-chairs

Refer to Review Elements 9: Accounting Provisions and 10: Reporting Protocols for more information on ILF program account reporting requirements.

The Chair or co-chairs may audit ILF program records pertaining to the program account (33 CFR 332.8(i) (4)/40 CFR 230.98(i)(4). The regulations do not provide any further guidance as to what is covered by an audit, the frequency, or who/how audits are financed. It is up to the ILF program to determine:

- How often audits should occur
- Areas of operations covered by the audits (fiscal management, programmatic operations)
- How the audits will be funded
- How the results of the audits will be disseminated and utilized

It is recommended that the ILF program instrument clearly address each of these audit-related issues.

2f. Has the ILF instrument laid out the details of frequency, content, and funding source of audits?

ILF programs manage audits with a variety of approaches:

- Some ILF instruments simply restate the language from the Mitigation Rule that states the Corps may conduct audits of the ILF program account but does not specify how the audits are to be funded. In these cases, the district may take responsibility for funding and/or conducting the audit. This is not a preferred option for implementing program audits because district Regulatory program funds are typically limited, and resources are not usually available to fund ILF program audits. Although many districts have auditors, they are not associated with Regulatory program operations; they must be funded by the regulatory program in the district to conduct an audit. ILF program instruments may specify the allocation of funds for audits in administrative funds or factored into the cost of advance credits.
- State-sponsored ILF programs like those in KY and IN typically undergo a fiscal audit by independent state auditors on an annual or biennial basis.
- Some non-profit ILF programs routinely undergo independent audits paid for by the program. More commonly, ILF programs such as VARTF and the Cumberland River Compact (CRC) conduct independent fiscal and programmatic audits periodically (e.g., every five years). These audits are funded by the program under program operations. Credit prices should reflect the anticipated cost of audits.

2g. Does the ILF instrument specify what kind of audit(s) will be performed and who will conduct it?

Note, the Mitigation Rule only addresses conducting fiscal (financial) audits of the program account. In practice, some districts/states have also conducted programmatic audits.

A fiscal audit of ILF program financial management ensures that all funds are managed in accordance with appropriate financial standards and practices. A programmatic audit examines how the ILF program operates and whether the program and IRT oversight of program operations comply with the requirements of the Mitigation Rule. Any state or non-profit ILF program that conducts fiscal AND programmatic audits does so in accordance with the agreed-upon terms of the program instrument. An example of this approach is the 2016 programmatic and fiscal audits of the VARTF (ELI 2016, Hantzmon Weibel LLP 2016, Kihslinger et al. 2019). The programmatic audit helped the program Sponsor and IRT co-chairs

identify areas where program operations could be improved, including a more timely review of proposed mitigation projects by the IRT.

It is recommended that audits be conducted at regular intervals, including verification of cost accounting and achievement of projections, and evaluation of the adequacy of any reserve accounts. More insights related to audits can be found in Kihslinger et al. (2019).

3. Advance Credits

ILF programs typically have two types of credits: advance credits, associated with a program service area, and released credits, generated when ILF projects meet performance milestones for credit release.

Released credits may be determined to be equivalent to mitigation bank credits. The regulations lay out a mitigation

Advance Credits for ILF Programs

The ILF program instrument may make a limited number of advance credits available to permittees when the instrument is approved (33 CFR 332.8(n)(1)/40 CFR 230.98(n)(1)).

preference hierarchy such that if the appropriate type (wetland, stream, mudflat, etc.) of released credits are available in a service area, they are generally preferred over advance credits (mitigation preference hierarchy described in the Introduction to this workbook on pg. 5 and at 33 CFR 332.3(b)(2) and (3)/40 CFR 230.93(b)(2) and (3)).

Advance credits are available for sale once the ILF program instrument is approved by the IRT Chair or co-chairs (33 CFR 332.8(n)(1)/40 CFR 230.98(n)(1)). An ILF project site does not need to be secured and a mitigation plan does not need to be approved before advance credits can be sold. However, the land must be acquired, and physical and biological improvements must have been initiated (i.e., construction started) for an ILF project by the third full growing season (generally translates to within three years) from when the first advance credit is debited in a program service area. Additional time may be granted to the program if the district determines that it is needed to plan and implement a project. The process of accruing sufficient funds from advance credit sales and securing and implementing a project can take longer than the required three growing season period. If the district determines that it is in the public interest, time extensions may be granted to allow the program to implement the project. If the district determines that it would not be in the public interest to grant the Sponsor more time, then it must direct the Sponsor to pursue alternative mitigation such as purchase of mitigation bank credits to fulfill the obligations associated with the debit of advance credits (33 CFR 332.8(n)(4)/40 CFR 230.98(n)(4)). In many cases, there are delays between sales of advance credits and implementation of mitigation projects to offset permitted losses. This delay is often referred to as a temporal lag or loss of aquatic resource functions.

Accounting for Temporal Loss: Some assessment methodologies take into account temporal loss (lag) by requiring additional mitigation for projects that will be implemented concurrently or after the projects have taken place. Examples include the West Virginia stream and valuation metrics (Huntington District USACE 2017), Florida's uniform mitigation assessment method (UMAM; FL DEP 2013), and Washington state's credit and debit methodology (WA DOE 2012).

Each program service area has a finite number of advance credits, which the Corps determines in consultation with the IRT and Sponsor. The number and type of advance credits is specified in the ILF Program Instrument (33 CFR 332.8(n)(1) and (2)/40 CFR 230.98(n)(1) and (2)).

The number of advance credits available per service area is based upon:

- The analyses contained in the CPF
- The Sponsor's past performance in implementing aquatic resource projects (restoration, enhancement, establishment, or preservation)
- The projected financing needed to plan and implement ILF projects (33 CFR 332.8(n)(1)/40 CFR 230.98(n)(1))

3a. Does the instrument specify the approach used in determining the number of advance credits to be made available in each program service area? Does it reflect local district/state guidelines and practices?

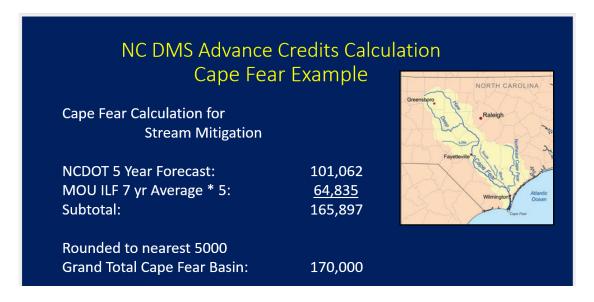
A number of approaches are used to determine the number of advance credits requested for a proposed ILF program service area, including:

- No advanced credits: This is an uncommon approach. It might be appropriate if an ILF program has already identified and secured one or more appropriate compensation sites in the service area and has the necessary resources to initiate the project without fees from the sale of advance credits. Three programs have used this approach: the Northwest Florida Water Management District (Northwest Florida Water Management District 2015), Coastal Mississippi Land Trust (Land Trust for Mississippi Coastal Plain 2010), and Everglades National Park ILF (US DOI 2015). In each of these cases, the Sponsors acquired the land(s) for mitigation projects, received approval of an instrument, a project plan, and a site protection mechanism, and released credits available without the use of/need for advance credits.
- Sufficient credits to offset a percentage of permitted impacts over a time period in a service area: Examples of this approach include the Maine and New Hampshire ILF program instruments. Each instrument allows for sufficient advance credits to offset the previous five years of permitted impacts in a service area. The ILF programs generally looked at state and/or district data on permitted impacts by resource type and service area over the previous five years. Programs then used these data to develop a credit quantity to request in the instrument. This may overestimate the demand for credits because many permitted impacts may not require compensatory mitigation (e.g., impacts associated with pipeline construction). Whether impact and mitigation data are available/used or not, the Sponsor should provide the basis or supporting data/calculations for the number of advance credits requested.
- Sufficient credits to offset a percentage of required mitigation over a time period in a service area: Examples of this approach include the Georgia-Alabama Land Trust (Georgia Land Trust, Inc. 2013) and North Carolina Division of Mitigation Services (NCEEP 2010). Both program instruments allowed sufficient advance credits to offset the previous five years of mitigation required in each service area (see Example 5). Similar to the previous estimation approach, the Sponsor should identify the mechanism(s) used to calculate the number of advance credits requested.

Example 5: North Carolina Advance Credit Approach

In North Carolina, there are two main groups using ILF wetland and stream credits: North Carolina Department of Transportation (NCDOT) and other consumers (developers, local government, individual landowners, etc.). To estimate the appropriate number of advance credits to request, the ILF program first looks at two components for each HUC 8 in the state:

- 1. The estimated mitigation need associated with the five-year NCDOT Transportation Improvement Plan for each resource type
- 2. An estimate of the five-year demand for mitigation by other consumers by resource type.



• Authorizing more advance credits to an experienced/reliable Sponsor in a service area: No examples were identified where the authorization of advance credits was based solely on experience.

In order to limit the risk of compensatory mitigation projects not being implemented on a timely basis, a number of districts and states have recommended limiting the number of credits available to new and incoming ILF programs (versus the already established programs). The IRT reviewers should consider the availability of bank and ILF credits for the same resource type in a program's service area. This factor might indicate that demand for a certain resource type is low or already being met. The IRT review may help the Sponsor determine for a given service area whether there is (1) sufficient demand for credits and (2) that each program will be able to secure sufficient funds to implement mitigation projects on a timely basis (following the three-year/growing season requirement).

3b. Does the instrument describe how the debit of advance credits will be fulfilled?

Once an advance credit is sold, it represents an obligation (promise of mitigation) that the ILF Sponsor must fulfill.

• A debited advance credit is fulfilled by securing a mitigation site and implementing a mitigation project.

The sale of advance credits is typically used to fund project implementation.

• As an ILF project meets its performance standards, it generates released credits in accordance with its approved credit release schedule (see the ILF Project Site Review workbook for more on the ILF project plan and credit release schedule). These released credits are used to fulfill the mitigation obligation associated with debited advance credits. Fulfilling previously debited advance credits releases those credits to be used for future debits (33 CFR 332.8(n)(3)/40 CFR 230.98(n)(3)).

The balance of advance credits may be thought of as analogous to a revolving charge or credit card balance. Like one's credit limit on a credit card, there are a limited number of advance credits available in a service area when the program instrument is approved. Similar to how the credit limit is approached as charges are accrued, the available balance declines as advance credits are debited. The only way to restore or pay back the balance of advance credits is by applying an equivalent number of released credits that have been generated by mitigation projects in the service area that have met their performance standards. Continuing the credit card analogy, this translates to paying off accumulated charges to result in a zero balance. The Kentucky state-wide program instrument describes this process well (KY DFWR 2018).

3c. Does the instrument discuss how surplus released credits will be treated by the program?

When the number of credits generated by projects meeting performance standards exceed the number of debited advance credits in that service area, those excess or surplus released credits are available for debit in addition to advance credits. These surplus credits may be determined to be equivalent to mitigation bank credits in the mitigation preference hierarchy (see 33 CFR 332.3(b)(2)/40 CFR 230.93(b)(2)). Having surplus released credits is a benefit for an ILF program, because the program may be in a better position to address the temporal lag that typically occurs between permitted impacts and implemented compensation. Programs with both advance and released credits available for debit in one or more program service areas include the North Carolina and Virginia state-wide programs and the Missouri Conservation Heritage Foundation Stream Stewardship Trust Fund.

4. Method for Determining Project-Specific Credits and Fees

Method for Determining Credits and Fees

The ILF instrument must identify a methodology for determining future project-specific credits and associated fees (332.8(d)(6)(iv)(C)/40 CFR 230.98(d)(6)(iv)(C)).

How does the ILF program expect to determine the number of credits generated by mitigation projects and the associated cost of purchasing those credits?

The Mitigation Rule does not specify how future projectspecific credits and associated fees are to be determined other than requiring the price of credits to be based on the full cost of providing compensation, including any contingencies (costs that take into account risk and uncertainty) (33 CFR 332.8(o)

(5)(ii)/40 CFR 230.98(o)(5)(ii)) - see Element 5: Fee schedule of this workbook. Accordingly, districts and states may apply their policies or practices in determining project specific credits and fees. The identified methodology for determining project-specific credits and fees is distinct from determing advance credits (Element 3 of this workbook) or the advance credit fee schedule (Element 5 of this workbook).

ILF program instruments typically consider one or more of the following components in determining project-specific credits and fees:

- Credit types
- Credit use
- Mitigation activities
- Assessment methods
- Number and type of credits
- Matching resources
- Differences between released and advance credit fees

Often, program instruments do not have a dedicated section on the method(s) for determining project-specific credits and fees. This information may be found in sections of the instrument devoted to crediting, project implementation, and/or credit fees.

4a. Does the instrument identify the potential credit types to be provided by ILF projects?

The ILF program instrument (or associated exhibits) should identify the type of mitigation credits that the Sponsor anticipates future mitigation projects will provide. Those credit types may be generically labeled as wetland, stream, or tidal credits or may be more specific, like tidal marsh, seagrass bed, floodplain forest, or vernal pools.

The credit types generated by projects should be consistent with the assessment methodology(ies) used by the district or state where the ILF program will operate.

Many ILF programs define advance credits as general credit types like wetland, stream, or tidal credits but

may prefer that ILF projects provide much more specific credit classifications such as freshwater forested wetlands, estuarine intertidal, estuarine subtidal, cool-water streams, intermittent stream, vernal pool, fresh meadow, shrub carr, reef, etc. Identifying the specific classification of the ILF projects helps the ILF ensure that their projects offset the specific classification of the permitted impacts associated with the debited advance credits. Maine's Natural Resource Conservation Program is an example of this approach, as can be seen in its annual Request for Letters of Intent (Maine NRCP 2020) which identifies priority mitigation types in each program service area based on permitted impacts.

4b. Does the instrument explain how credits generated by projects are treated?

The instrument should clearly indicate that credits generated by an ILF project that has met its performance standards must first be used to offset or fulfill the debited advance credits within the underlying program service area. Once the debited advance credits have been fulfilled for the program service area, any remaining or "surplus" released credits from the ILF project can be sold or transferred to permittees to offset permitted impacts (for more information on advance and released credits, see Element 3 of this workbook).

The anticipated number and type of credits generated by future mitigation projects should be specified in each ILF project plan (sometimes referred to as a site plan, site development plan, mitigation plan, etc.), which is approved by the IRT.

4c. Does the instrument identify the types of mitigation activities that may generate credits?

Mitigation activities that may generate credits include enhancement, establishment, re-establishment, and preservation of existing aquatic resources.

Note, policies and practices of many districts and/or states may limit the extent to which preservation can be used as compensatory mitigation for ILF projects. For instance, in Virginia, credits generated through preservation may only be debited in conjunction with credits generated by restoration or establishment to ensure that program operation does not result in a loss of aquatic resource area or function (TNC 2019a). Use of preservation as compensation is discussed in Element 1: Compensation Planning Framework of this workbook.

4d. Does the instrument identify the assessment method(s) used to determine the number and type of credits future projects would provide?

The assessment method should evaluate and describe the aquatic resource type(s) and, in most districts/ states, the number and type of credits to be provided by the ILF project (see 33 CFR 332.8(o)(1)-(2)/40 CFR 230.98(o)(1)-(2)). Assessment methods and credit determination (number and type of credits) are discussed in greater detail in the ILF Project Site Review Workbook.

Where available, some ILF programs may reference the relevant credit determination methodology in use in a given district/state. For example, the King County (WA) Mitigation Reserves Program Instrument (2011) states that the tool "Calculating Credits and Debits for Compensatory Mitigation in Western Washington – Operational Draft (Hruby, 2010)" will be used to determine credits generated by ILF projects. Any updated version of this tool would be used to determine credits generated from future projects.

Note, an ILF program instrument may be operational for ten or more years, while credit determination methods are periodically revised or replaced by districts/states. ILF program instruments should identify and apply the current credit determination method used in their state/district when the ILF project is approved and implemented. Most ILF program instruments will direct the application of the current district/state-approved credit determination method in calculating a proposed project's credit yield. Examples of this include ILF program instruments from Montana (MARS 2020), North Dakota (Ducks Unlimited 2013), Oregon (OR DSL 2012), and Virginia (TNC 2019a).

4e. Does the instrument discuss if matching resources (donations, grants, appropriations) may be considered for a future project(s)?

ILF programs are sponsored by a government or non-profit organizations, which often receive donations, grants, and appropriations to implement conservation projects. It is important that these non-mitigation funds are accounted for transparency so that they do not subsidize the ILF mitigation. These non-mitigation funds must not be commingled with mitigation fees and must not be used to fund the development or implementation of ILF mitigation projects. Matching resources may be available for ILF programs to implement larger and more ecologically valuable projects in conjunction with ILF funded projects. In these situations, it is critical that the program instrument or individual project development plan discuss how these matching resources will be treated to ensure that non-mitigation fees are not used to generate mitigation credits. A good example of this approach can be found in the Montana State-Wide ILF Program Instrument (MARS 2020).

This topic is also discussed in Element 7: How the ILF Program will be Established and Operated in this workbook.

4f. Does the instrument distinguish between fees for advance credits and those for released credits?

Most ILF programs do not distinguish between fees for purchase of advance credits (i.e., credits associated with a program service area) and released credits (i.e., credits generated from an ILF project site). The fee schedule applies to all credits.

However, some districts and Sponsors only apply the program fee schedule to advance credits. This practice is consistent with the Mitigation Rule at 33 CFR 332.8(d)(6)(iv)(B)/40 CFR 230.98(d)(6)(iv)(B). Consequently, some program instruments indicate that the Sponsor may negotiate marketable prices for the sale of released credits (e.g., VARTF).

5. Fee Schedule

The Sponsor is responsible for determining the cost (price charged) per credit (33 CFR 332.8(o)(5)(i)/40 CFR 230.98(o) (5)(i). The fee schedule is the price per credit the Sponsor charges.

Credit Pricing Approaches

The Mitigation Rule specifies that fees set by the Sponsor must encompass the full cost of project selection, design, implementation, and management (33 CFR 332.8(o)(5) (ii)/40 CFR 230.98(o)(5)(ii). This is referred to as full cost

Fee Schedule

[Paraphrased] A complete draft instrument must include identification of the amount of advance credits and the **fee schedule** of these credits by service area. And the instrument should include an explanation of the basis of the fee schedule (332.8(d)(6)(iv)(B)/40 CFR 230.98(d)(6)(iv)(B)).

accounting. So long as ILF programs incorporate this full cost accounting, they have the flexibility to develop their own approach to credit pricing. There are three main approaches that ILF programs have used for establishing fee schedules: fixed fee schedules, simple formulas (including ratios, calculators, and tables), and complex formulas. These approaches are discussed further in the questions below.

Full Cost Accounting

The Chair or co-chairs and IRT can evaluate the fee structure of an ILF program to determine whether the Sponsor is complying with the full cost accounting requirement. This requirement ensures that an ILF program generates sufficient funds to select and implement compensatory mitigation projects in a timely manner (preamble to the Mitigation Rule, Federal Register / Vol. 73, No. 70 Thursday, April 10, 2008, pg. 19660). By approving the Sponsor's proposed fee schedule, the Chair or co-chairs, in consultation with the IRT, have determined that the fees are sufficient to fund future compensation projects. As such, the Chair or co-chairs and the IRT have assumed some of the risk that the program may not have sufficient funds to deliver the compensation required by credit sales. One way to manage this risk is to confer with Corps project management or cost engineers, they may have better information on local costs. These data on local costs may help verify the proposed fee schedule.

For advance credits, the cost per credit is based on the full cost of providing compensation, including any contingencies (i.e., costs that take into account risk and uncertainty, such as changes in the price of fuel or materials like fencing or plants) and considering inflation (33 CFR 332.8(o)(5)(ii)/40 CFR 230.98(o) (5)(ii)). Once advance credits are available to the ILF program, it is the district/state's responsibility to determine whether the credits are appropriate compensation for any given permit.

Released credits may follow the same cost per credit calculation as advance credits but may also be priced differently by Sponsors. (See question 4f. in this workbook.)

5a. Do credit prices vary depending upon resource type and/or geographic location?

Credit fees may be based on (or vary by):

- The type of aquatic resource compensation provided (e.g., wetland, stream, tidal marsh, intertidal flat, forested wetlands)
- Location of the project (e.g., in service areas where land costs or construction expenses are high)
- Size of the impact and amount of compensation required

The response to 5b. below provides an example from North Carolina of variation in credit pricing based on resource type and location.

5b. Does the fee schedule allow a consumer (permit applicant) to calculate what the credit price is for a specific permit action?

The mechanism for determining credit purchase price should be clearly identified in the instrument. In some cases, because of efforts to ensure full cost accounting (See question 5c. below), the consumer (applicant) may need to contact the Sponsor to obtain a current credit purchase price.

Approaches to fee schedules

There are three main approaches that ILF programs have used for establishing fee schedules: fixed fee schedules, simple formulas (including ratios, calculators, and tables), and complex formulas.

Fixed fee schedules are the most common approach and are used by most ILF programs. Examples include: the Wisconsin Conservation Trust, The Nature Conservancy's Ohio Stream and Wetland ILF Program, the North Dakota Aquatic Resources ILF Program, and North Carolina's Division of Mitigation Services (NC DMS) ILF Program (see Example 6).

Example 6: North Carolina Fixed Fee Schedule Approach

At North Carolina's Division of Mitigation Services (DMS):

- Fees typically vary by aquatic resource type (riparian wetland, non-riparian wetland, coastal wetland, stream) and geographic area.
- DMS sets rates for mitigation credits using Actual Cost Methods. Pursuant to state law and regulations, the rate schedule for the DMS Statewide Stream and Wetland ILF Program is adjusted annually.
- NC DMS Rates are posted for standard rate areas as well as for premium rate areas where program costs are significantly higher.

NC DMS Fee Schedule						
Resource Category	Unit	Fee per Unit - Highest Fee HU	Fee per Unit - Lower Fee HU			
Riparian Buffer	Sq.ft	\$4.00	\$0.94			
Stream	Lin.ft	\$559	\$559			
Non-riparian & riparian wetland	Acre	\$117,000	\$61,264			
Coastal wetland	Acre	\$560,000	\$560,000			

Simple Formulas include ratio-based approaches (e.g., Maine's Natural Resource Conservation Program), simple calculators (e.g., New Hampshire's Aquatic Resource Mitigation fund), and tables that account for component price changes depending on the resource type and amount of credits purchased (e.g., NFWF's Sacramento District California ILF Program fee schedule (NFWF 2015)).

• Maine's Natural Resource Conservation Program's fee schedule is published in a fact sheet that is updated every two years (Maine DEP 2017). It consists of a Base Rate made up of regional construction costs + monitoring costs + land costs. A series of multipliers are then applied to the base rate to determine the actual credit price. Multipliers include 2:1 for more than ½ acre of wetlands or waters, 2:1 for special resources (e.g., peatland, coastal wetlands), and 4:1 for vernal pools and shorebird habitat.

Calculators are similar in function to simple formulas; however, the formulas are built-in, so it eliminates the potential for calculation error (it does the math). Calculators require the potential purchaser of credits to identify the aquatic resource type (e.g., forested wetland, emergent wetland, stream), the project location (in terms of county, latitude/longitude, or HUC 6 or 8), and the amount of the proposed impact (in square feet, acres, or linear feet). The calculator identifies the amount of compensation needed to offset the proposed impact and the cost of the credits. These calculators incorporate land costs as well as the program's historic experience in implementing mitigation projects into calculating the credit purchase price. Examples of calculators include New Hampshire's Aquatic Resource Mitigation Fund Calculator (NH DES 2020) and Oregon Department of State Lands' ILF Program Payment Calculator (OR DSL 2016).

Tables set prices based on different component costs, and each component's price may vary depending on the amount of credit purchased. The change in price often reflects an economy of scale (the more credits purchased, the lower the per credit price is).

• An example of the table approach to set a fee schedule is NFWF's Sacramento District California ILF Program fee schedule, which uses a sliding scale, is based on aquatic resource type (vernal pool or other aquatic resources) and uses the number of credits to be purchased and the unit credit price to calculate a base credit price. Contingency and administrative amounts are added to the base rate. The purchase price varies depending upon the resource type and the number of credits to be purchased (Figure 3).

		\$			
A	В	С	D	E	F
No. of	Unit Price	Base Price (\$)	Contingency	Administrative	Total Price (\$
Credits	Per Credit	(# Credits x B)	Amount (\$)	Fee Amount (\$)	(C + D + E)
Purchased					
0.01 - 0.25	\$265,000		(0.30 x C)	\$10,000	
0.26 - 0.50	\$265,000		(0.30 x C)	(0.15 x C)	
0.51 - 1.00	\$265,000		(0.30 x C)	(0.15 x C)	
1.01 - 3.00	\$265,000		(0.20 x C)	(0.15 x C)	
3.01 - 5.00	\$220,000*		(0.15 x C)	(0.16 x C)	
5.01+	\$175,000*		(0.10 x C)	(0.20 x C)	

Figure 3. Example of a formula fee schedule (NFWF California)

Complex formulas take into consideration the expected costs and anticipated credit yields for each proposed ILF project. In some cases (see Example 7; King County 2011), the ILF may have detailed estimates of expected costs of the initial or even subsequent projects. For other programs that have not yet identified a project, costs are estimated for various components (e.g., land acquisition, project design, implementation, contingencies) but may be subject to revision because of uncertainties. With these complex formulas, because the price changes with every project implemented, it is necessary for the permit applicant to contact the program Sponsor for the current credit price.

Example 7: King County ILF Program Complex Formula Approach:

- Costs are estimated for land acquisition, project selection and design, construction, monitoring
 and management, contingencies, long-term management, administration, and an adjustment for
 inflation.
- The cost per credit is the sum of these component costs divided by the anticipated project credit yield.
- As additional projects are implemented in a given service area, a weighted average cost per credit is calculated. This ensures that fees taken in are sufficient to offset permitted impacts.

5c. Does the fee schedule appear to account for the full cost of implementing a mitigation project?

The cost per unit credit must reflect the expected costs associated with mitigation projects, including:

- Land acquisition
- Project planning and design
- Construction, plant materials, labor
- Long-term management and long-term protection of the ILF project site
- Financial assurances to ensure successful completion of the project(s)
- Monitoring
- Remediation, adaptive management
- Legal fees

(see 33 CFR 332.8(o)(5)(ii)/40 CFR 230.98(o)(5)(ii))

Some fee schedules will explicitly identify the different factors that go into the development of the fee (land cost, site selection, design, implementation, monitoring, long-term management, etc.).

The cost per credit must also incorporate a contingency factor to address uncertainties and risks of securing sufficient funding to identify, design, and implement a mitigation project (see 33 CFR 332.8(o)(5)(ii)/40 CFR 230.98(o)(5)(ii)). Contingency fees generally range from 10-30%. The NFWF fee schedule (Figure 3) is an example of a schedule that incorporates contingency fees in the credit price.

5d. Does the instrument identify what portion of the credit purchase price is allocated to program administration?

ILF programs are allowed to retain a small percentage of the credit purchase price for program administration. That percentage is specified in the instrument and subject to review/approval by the

Corps in consultation with the IRT (33 CFR 332.8(i)(1)/40 CFR 230.98(i)(1)). The Mitigation Rule does not specify what is meant by a "small percentage," and as a result, administrative fees for ILF programs across the country range from 5-25%, with an average of 15%. Some programs like NFWF's ILF Program (NFWF 2015) use a sliding scale approach to calculate administrative fees (see Column E in Figure 3).

IRT reviewers should consider the Sponsor's past approved administrative fee history and/or the proposed uses of the administrative fees to gauge if the proposed ILF program fee percentage seems reasonable and defensible. For example, some ILF programs use administrative fees to cover the employment of 1-2 full-time program employees. The administrative fees for those programs tend to be at the higher end of the range.

5e. Does the program instrument address updates or revisions to fee schedules?

An ILF program selling advance mitigation credits must charge enough to ensure that it can fully offset the mitigation liability associated with the debit of advance credits. If credits are priced too low, the program will be unable to fully offset the mitigation liability that it has assumed, resulting in other parties having to subsidize ILF program mitigation.

For this reason, many ILF programs will regularly or periodically revise their fee schedule, spanning from every two years to reflect cost changes, to every six months, or even following implementation of each ILF project (see question 5b. above). These revisions are subject to Corps and IRT review and approval.

6. Service Area

A service area is a watershed and/or landscape unit (HUC 6, HUC, 8, littoral cell, ecoregion, physiographic province, or administrative area) within which the resource impact occurs and compensation would be provided (33 CFR 332.8(d)(6)(ii) (A)/40 CFR 230.98((d)(6)(ii)(A)).

An ILF program generally has more than one service area. ILF programs may also have different service areas for different

credit types, such as wetlands, streams, tidal flats, different types of wetlands, and/or other resource types, including listed species.

Service Area

The geographic service area is a defined area within which the ILF program is authorized to provide compensatory mitigation, as specified in the instrument (33 CFR 332.2/40 CFR 230.92).

The service area must be appropriately sized to ensure that the aquatic resource compensation provided by the ILF program will effectively offset permitted impacts and/or replace lost functions/services across the entire program service area (33 CFR 332.8(d)(6)(ii)(A)/40 CFR 230.98((d)(6)(ii)(A)).

The instrument should include the following for all program service areas:

- A map or other electronic representation (e.g., shapefile, kmz file) and written description identifying the extent of each program service area.
- Environmental factors (i.e., watershed, resource type, landform, at-risk species) used to determine the service areas. These factors are discussed further in Review Element 1: Comprehensive Planning Framework of this workbook.
- Any specific district, state, local, or tribal requirements (e.g., law, regulations, policy, management plans, etc.) used to determine the extent of service areas.
- Any economic considerations (e.g., expansion of a service area to increase credit availability) factored into determining a service area.
- The rationale for the location and extent of the service area (including economic considerations) is clearly documented in the CPF for the ILF program (33 CFR 332.8(c)(2)(i)/ 40 CFR 230.98(c) (2)(i)).

Where watershed boundaries do not exist (i.e., marine areas), an appropriate spatial scale should be used to replace functions/services within the same ecological system (reef complex, wave climate, embayment, drift cell, etc.) (33 CFR 332.3(c)(2)(v)/40 CFR 230.93(c)(2)(v)).

6a. Does the instrument clearly define the service area(s) for the program?

More information on service area(s) is generally found in Review Element 1: Comprehensive Planning Framework of this workbook. Service area boundaries on the ground may not be as precisely defined as depicted on maps. Some service areas are based on ecoregions or HUCs such as HUC 8 or HUC 6. HUCs are periodically revised, often changing extents in relatively flat areas like coastal plains. So, it is important that the instrument provide both a description of the service area(s) and associated map(s). Where possible, the boundaries of the service area should be clearly defined (i.e., use readily recognizable features for limits like an adjacent roadway, state line or county boundary, or geographic feature like a stream, drainage

divide, or mountain chain) to minimize future disputes between the Sponsor, the IRT members, and non-IRT member regulators over whether proposed permits are within a specific service area(s).

6b. Does the instrument or CPF identify the basis of the service area (i.e., watershed, coastal bay system, ecoregion, species distribution) and provide justification/rationale supporting its location and extent?

The size of the service area(s) may be related to the extent of the functions and services provided by the ILF program.

For example, the distribution of some aquatic types (e.g., vernal pools, coniferous bogs) is not based on watershed but landscape, elevation, climate, stratigraphy, geomorphology, or species distribution/use of an area by a distinct population, such as the Atlantic salmon in Maine. The service area(s) for the Maine Atlantic Salmon Restoration and Conservation ILF program (Figure 4; ME DMR 2018), which provides compensatory mitigation to offset the loss of stream area or function, is based on recovery (population segments) and includes consideration of the species

Figure 4. Atlantic salmon habitat recovery units (service areas). Source: Atlantic salmon restoration and conservation program (2018)



historic and current/potential range and/or any designated critical habitat.

6c. Did the instrument appropriately size each program service area to ensure that the proposed aquatic resources will effectively compensate for permitted impacts and replace lost functions/services?

The CPF for the program instrument must provide the justification or rationale for defining the limits and/or ecological appropriateness of each proposed service area. For those CPFs that identify specific project sites, an accompanying map showing the ILF project location(s) and position(s) within the service area may be appropriate (e.g., Everglades National Park ILF, Northwest Florida Water Management District ILF, or Riverside Corona Resource Conservation District). The ILF program service area should be defined such that the program can offset any impacts within its limits. The district and/or state ultimately make the determination, on a case-by-case basis, as to whether credits (advance or released) from the ILF program are appropriate to offset permitted losses.

6d. Does the service area comply with local, district, and/or state requirements (scale, size, or resource type)?

A number of districts/states have developed standardized ILF program service areas, for example, the Louisville District's pre-established service areas for the state of Kentucky. ILF and mitigation bank service areas in Kentucky are based on consideration of a number of factors, including hydrologic and topographic factors, soil characteristics, species at risk, land use, biodiversity, economic considerations, environmental justice, etc. (Louisville District 2020).

Refer to the local district/state for guidelines (or guidance documents), templates, and/or state/tribal regulations for more on the criteria for ILF program service areas.

7. How the ILF Program Will Be Established and Operated

The details of how an ILF program is established and operated are discussed at greater length in other review elements in this workbook (Advance Credits, ILF Program Account, Fee Schedule, etc.). The Mitigation Rule does not specify how ILF programs will be established and operated in one location. The section of the regulations associated with third-party

How the ILF program will be established

The draft instrument must be based on the prospectus and must describe in detail the physical and legal characteristics of the ILF program and how it will be established and operated (33 CFR 332.8(d)(6)(i)/40 CFR 230.98(d)(6)(i)).

compensatory mitigation provides some information on how ILF programs will be established and operated (33 CFR 332.8/40 CFR 230.98).

A number of program instruments have also addressed other operational elements including:

- (1) How the ILF program proposes to identify projects;
- (2) How the program plans to develop and implement mitigation projects; and
- (3) How the program plans to pursue project approval by the co-chairs.

Depending on the organization and operation of the ILF program, any number of additional features may be included in the instrument – see box below for some unique examples.

Other unique operational features found in ILF programs include:

- Create subaccounts within the ILF program account with slightly different practices governing those subaccounts.
 - For example, interest or earnings from sales of released credits might be earmarked so that the program can use those funds for due diligence (earnest money, Phase 1 Environmental Site Assessments, etc.) on potential mitigation projects without having to secure IRT approval for those minor expenditures. For more information, see this workbook Review Element 2: ILF Program Account.
- Contracting out day-to-day management of the program to a non-profit organization (Maine DEP and The Nature Conservancy).
- Establishing a review committee (state natural resource agencies and non-profit organizations) that screen project proposals before they are presented to the IRT for evaluation and approval.
 - The North Carolina DMS program has signed an agreement with their Corps district (Wilmington) to evaluate/screen proposals as well as review monitoring reports before they are reviewed by the district. This results in considerable time and resource savings by the regulatory agencies. As a reminder, ultimately, only the Chair of the IRT has the authority to approve projects.

7a. Does the instrument specify how the program will identify mitigation projects?

The Mitigation Rule does not specify how an ILF program is required to identify ILF projects, so long as site selection is consistent with the program's CPF. ILF programs have developed a number of approaches for identifying projects, including:

- **Opportunistic identification:** ILF programs identify potential project sites that are consistent with the CPF but do not explicitly prioritize the identification or implementation of projects. Many newly approved ILF programs will initially identify projects using this approach but then will graduate to a more strategic approach.
- Strategic focus on credit demand and timing: This is probably the most common approach ILF
 programs use to identify projects. Programs consider credit demand in a service area and the three
 growing season requirement for implementing projects to fulfill debited advance credits. Projects
 are selected that satisfy not only the CPF but also satisfy demand and implementation timeframe
 constraints.
- Scoring and weighting project proposals to select the most appropriate projects: This is especially applicable to programs that use Requests For Proposals (RFPs) from qualified mitigation providers to identify and implement projects (For more on RFP, see 7b. below.) RFP approaches may be the most effective at providing timely compensatory mitigation provided each program service area has sufficient funds to finance one or more mitigation projects. This approach uses explicit scoring and weighting of proposals to identify the most suitable mitigation projects and is used by several ILF programs, including in Maine (see Example 8), New Hampshire (NH DES 2012), North Carolina (NCEEP 2010), and Oregon (OR DSL 2012).
- Project sites identified in the program instrument: A number of ILF program instruments identify specific projects at the instrument level (either in the CPF or as exhibits to the instrument). This approach may be especially useful when the ILF program has already secured an interest in mitigation project sites or state or local government-sponsored programs. This approach has been adopted by a few programs, including King County Mitigation Reserves (WA; King County 2011), Riverside-Corona Resource Conservation District (CA; RCRCD 2012), and the Living River Restoration Trust (VA; Living River Restoration Trust 2018).

Example 8: Maine Natural Resource Conservation Program's (Maine program) Scoring and Weighting Components

The Maine program (ME DEP 2011) uses an RFP approach to project development and makes publicly available the project review criteria and weights that will be used in evaluating proposals. Maine DEP's 2020 projects are scored in terms of the following categories, and each has associated weights:

Program goals (30% of total weight) considers the project's likely sustainability. In this category the following factors are considered:

- Restoration and enhancement preferred
- The project's capability to offset functions lost through permitting
- The project's proximity to permitted losses
- For preservation projects, consideration is given to the threat of destruction/adverse modifications within 20 years
- Functional lift

Landscape context (20%) considers whether the project:

- Is within or adjacent to habitats of conservation significance
- Preserves or establishes habitat connectivity
- Involves important conservation resources

Project Readiness/Feasibility (20%) considers:

- Willingness of landowner & long-term manager to participate in the project
- Urgency of the project (is the site facing pending degradation?)
- Project has a sound technical approach
- Likelihood of meeting the project schedule & providing expected benefits
- Completeness and feasibility of proposed long-term management incl. funding

Sponsor's capacity (15%):

- Qualified, capable entity
- Support for the project from landowners, public, local government, and other conservation entities
- Demonstrated financial, technical, & administrative capacity
- Adequate long-term management provisions
- Sufficient financial & legal standing
- Proposal's quality & completenes

Cost effectiveness (10%)

- Clarity and detail of the budget
- Sufficient funds in the service area
- Matching funds

Other (5%)

7b. Does the instrument specify how the ILF program will develop and implement mitigation projects?

The Mitigation Rule does not specify an acceptable mechanism that an ILF program must use to develop mitigation projects. Consequently, a number of different mechanisms are used by different ILF programs for project development:

- **Design and build:** This mechanism is the most common in use. The Sponsor either designs and constructs the mitigation project or contracts out design and construction. This approach requires the ILF program to be able to design and implement projects in-house or contract project design and implementation. Examples of this approach include projects implemented by the Northwest Florida Water Management District ILF, Everglades National Park ILF, or the Virginia Aquatic Resources Trust Fund (Hantzmon Weibel LLP. 2016).
- **Design-Bid-Build:** Under this approach, the Sponsor designs the project and contracts out the construction or, more frequently, the Sponsor competitively solicits bids for design and construction, to separate entities or to one entity for both design and construction. This approach has been used extensively by North Carolina's Division of Mitigation Services.
- Requests for Proposals (RFP): The Sponsor issues a request for project proposals. The Sponsor identifies all necessary criteria, including need, geographic or program service areas, types of compensation, timing, and selection criteria (including ecological criteria), and following receipt of proposals, the Sponsor evaluates the proposals. An award/contract/agreement is made with parties associated with the selected project(s). The contract or agreement specifies the timing of project implementation, performance measures, and payment to the provider of the selected project.

Variations on the RFP Approach:

There are a couple of variations on this approach:

- 1. <u>Full Delivery Projects:</u> These are open to bidders meeting all contractor qualifications and standards established by the program Sponsor. The agreement typically spells out the expected deliverables over the life of the contract. Payment is phased and based on performance. North Carolina's Division of Mitigation Services has pioneered this approach for ILF projects and has used it to implement timely wetland and stream compensation across the state.
- 2. <u>Letter of Intent (LOI)</u>: Under this process, only local government and non-profits are eligible to submit LOIs (preliminary proposals). Parties that were favorably reviewed are encouraged to submit project proposals (similar to a prospectus). Project proposal, review, and approval typically occur on a regular annual basis. This approach has been used effectively to develop mitigation projects in Maine and New Hampshire.
- Purchase of Bank Credits: This is often used as a last resort by ILFs, for instance, when it has been more than three years since the first debit of an advance credit, and the ILF program has not implemented a mitigation project to fulfill that mitigation obligation (see Element 3: Advance Credits in this workbook). ILF programs have purchased bank credits in one or more service areas to fulfill obligations. Examples include the National Fish and Wildlife Foundation Sacramento District California ILF Program and the Virginia Aquatic Resources Trust Fund. Some programs, like the Georgia-Alabama Land Trust and North Carolina's Division of Mitigation Services, have regularly used bank credit purchases to provide

credits. Regardless of the frequency of bank credit purchases by ILF programs, bank sites selected for credit purchase must comply with the ILF program's CPF.

7c. Does the instrument indicate the process the program will use to obtain project approval?

ILF programs are required to submit mitigation plans for each ILF project proposal to the Chair or co-chairs and follow the instrument modification process (33 CFR 332.8(g)(1)/40 CFR 230.98(g)(1)) for project approval. As discussed in the Preamble to the Mitigation Rule (Preamble to the Mitigation Rule, Federal Register / Vol. 73, No. 70 Thursday, April 10, 2008, pg. 19656), the addition and approval of new ILF project sites "must be evaluated through the full instrument amendment process in 33 CFR 332.8(d)/40 CFR 230.98(d)." Project approval is further discussed in the regulations at 33 CFR 332.8(j)/40 CFR 230.98(j), which states that ILF project proposals must address the 12 fundamental requirements for mitigation plans (33 CFR 332.4(c)/40 CFR 230.94(c)) and include a credit release schedule consistent with the regulations at 33 CFR 332.8(o)(8)/40 CFR 230.98(o)(8). These elements are site-specific and should be clearly addressed in ILF project proposals to facilitate efficient and effective review by the IRT. ILF programs, in consultation with IRT Chair or co-chairs, have developed a few different approaches to comply with the review and approval requirements for ILF project sites. Approaches used include:

- **Opportunistic:** If a mechanism is not identified in the instrument, an ILF program will request project review and approval by the Chair or co-chairs as the need for projects or credits arise and/or projects are found or proposed. This approach gives the ILF program considerable flexibility in deciding when and where to pursue project approval and, as such, is the most common approach applied by programs. Examples of opportunistic use include the Missouri Conservation Heritage Foundation's ILF program, the New York Wetland Trust, and the Virginia Aquatic Resource Trust Fund.
- Regular schedule and process: Maine and New Hampshire follow an annual regular schedule and process for obtaining project approval. In Maine, LOIs submitted by mitigation providers are screened by the IRT. Full proposals are then evaluated by a multi-agency review committee (i.e., resource agencies, stakeholders). The review committee may recommend approvals of projects that meet or exceed their review criteria (see 7a. Maine program callout box). The Maine IRT (approval committee) then makes the final decision on project approval. Refer to the Maine ILF program's annual proposal and award timelines for more details (Maine DEP 2020).
- Permitting process: This mechanism applies to two states, Kentucky and Indiana, where the Corps districts have developed a streamlined permitting process known as a Letter Of Permission (LOP) for ILFs and umbrella banks to add project sites. This process combines the timeframes for the four-step site approval process spelled out in the Mitigation Rule and the permitting process that usually follows site approval so that programs do not need to obtain separate site approvals and permits for a project. Unlike many Department of the Army permits, the authorization covers the entire project site, including any upland or buffer areas. It ensures timely processing of project proposals by the Chair and IRT but also relies heavily on checklists and templates developed by the Chair for each step (concept plan checklist, early coordination, public notice, IRT coordination, Intent to Approve, etc.) in the permit process. More information on this Letter of Permission Process can be found in the Kentucky Department of Fish and Wildlife Resources ILF, the Northern Kentucky University ILF, and the Indiana Department of Natural Resources ILF program.

8. Assumption of Mitigation Responsibilities

The treatment of mitigation liability is one of the defining factors separating ILF programs from permittee responsible mitigation (PRM). When permittees conduct their own mitigation, they retain full responsibility/liability for the success of the project/mitigation. When permittees purchase credits⁵ from an ILF program, they pay to transfer their mitigation responsibility to the ILF Sponsor. (This is also true when credits are purchased from a mitigation bank.)

Assumption of Mitigation Responsibilities

A provision stating that legal responsibility for providing the compensatory mitigation lies with the Sponsor once a permittee secures credits from the Sponsor (33 CFR 332.8(d)(6) (ii)(C)/40 CFR 230.98(d)(6)(ii)(C)).

For a successful transfer of mitigation liability, the following regulatory requirements must be satisfied:

- The ILF program instrument must include a provision stating that the Sponsor assumes the permittee's mitigation liability,
- The permittee has secured a permit that approves the use of a certain amount and type of credits for satisfying their mitigation requirements, and
- The Sponsor has notified the Corps that the permittee has secured the appropriate amount and type of credits.

Note: The ILF program Sponsor is responsible for project implementation, any corrective actions or remediation, and long-term management, even though those activities may be conducted by other parties through requests for proposals or other contracting mechanisms (33 CFR 332.8(l)(3)/40 CFR 230.98(l)(3)).

8a. Does the instrument include a provision stating that the Sponsor assumes the permittee's mitigation liability?

Refer to the explanation above and the regulatory language on this requirement (33 CFR 332.8(d)(6)(ii) (C)/40 CFR 230.98(d)(6)(ii)(C).

8b. Does the instrument include a provision stating that the Sponsor will notify the district of each transaction?

As stated above, the instrument must specify that the Sponsor will notify the Corps for each approved credit transaction (33 CFR 332.8(p)(1)/40 CFR 230.98(p)(1)). This notification applies to any debit of credits from an ILF program, whether those credits are used as offsets for impacts under CWA section 404 or another regulatory authority (such as the Endangered Species Act, or independent state or local

⁵ An applicant has two options for utilizing ILF credits as compensation:

Credits may be secured/purchased once a permit has been issued

[•] Credits may be secured in advance of permit issuance
For both options, the applicant must obtain a permit before liability may be transferred to the ILF program Sponsor and associated credits may be applied for compensation.

authorizations). This helps ensure that the same credits are not sold twice for different projects, such as for a CWA section 404 permit and then for an unrelated impact under another program (see 33 CFR 332.3(j) (1)(ii)/40 CFR 230.93(j)(1)(ii) for more information).

8c. Does the instrument specify the timing at which the district is notified of a transaction?

As stated above, the permittee retains responsibility for the mitigation until the Corps receives documentation confirming the Sponsor has accepted responsibility. Copies of this documentation are retained in the permit and ILF program file (33 CFR 332.3(l)(3)/40 CFR 230.93(l)(3)). Failure to provide documentation would be considered non-compliance with the instrument.

9. Accounting Provisions

Accounting procedures are a mechanism for tracking debit and credit transactions. Credit transactions come in the form of:

- Making both advance credits (credits associated with a program service area only) and released credits (credits generated from ILF projects meeting performance standards) available to the Sponsor for sale
- Withdrawal/debit of advance and/or released credits to offset permitted losses

ILF program accounting is more complicated than bank accounting requirements, because it applies to advance credit transactions (at the program service area level) and released credit activities for each individual project site.

9a. Does the document have a credit accounting procedure outlined?

The instrument must include a provision requiring the Sponsor to establish and maintain an annual report ledger to account for all ILF program credit transactions as well as individual ledgers that track production and debit of released credits from each ILF project site (33 CFR 332.8(p)(2)/40 CFR 230.98(p)(2)).

Current practices vary between districts. Most use the Regulatory ILF and Banking Information Tracking System (RIBITS) for the ILF program and ILF project ledgers. Typically copies of the RIBITS ledger are acceptable, while some ILF instruments require the Sponsor to maintain a separate ledger. Additionally, many ILF instruments require submittal of annual credit ledger updates with the ILF program's annual

RIBITS credit classifications

Instrument credit types do not always correspond directly to credit classifications in RIBITS ledgers. District RIBITS administrators are responsible for translating credit types in ILF instruments to credit classifications in RIBITS. It may be helpful for the IRT and Sponsor to coordinate with the district RIBITS administrators to better understand how the credits in the ILF instrument translate to the RIBITS ledger. A recommended practice would be to include a table in the instrument that links credit types to RIBITS credit classifications.

report, as discussed in the following Review Element 10: Reporting Protocols.

9b. Does the document indicate when transaction notifications will be provided to the Corps?

Bank Sponsors are required to notify the Corps each time a transaction occurs (33 CFR 332.8(p)(1)/40 CFR 230.98(p)(1)). While technically, the regulations do not explicitly require the ILF Sponsor to do the same, in practice, all ILF program Sponsors typically notify their Corps representatives. This is a recommended practice to follow.

9c. Does it indicate what information will be provided in the notification?

Transaction documentation should include the date of transaction, permittee name, project, permit number, program service area, credit type(s) (advance, released, wetland, stream, etc.), and the amounts of credits.

10. Reporting Protocols

Reporting is a mechanism to monitor an ILF program's and an individual ILF project's progress and activity. The Sponsor is required to submit periodic/annual monitoring and ledger account reports (see 33 CFR 332.8(i)(3)/40 CFR 230.98(i)(3) and 33 CFR 332.8(q)(2)/40 CFR 230.98(q)(2)). These reports are then typically posted on RIBITS.

The Corps will also request reports on financial assurance and long-term management funding. The need for this reporting arose from previous experience with compensation projects where corrective action was necessary and resources (i.e., financial assurances) were not available to undertake that action. Past projects have been approved that did not have sufficient funds for long-term management once the site was closed. As a result, the annual/periodic funding report helps the IRT reviewer to ensure:

- Short-term financial assurances are still in place for ILF project completion, monitoring, and management in the operation phase, and
- Long-term management finances are funded as identified in the instrument and are sufficient for management after ILF project operations have ceased. Short-term financial assurances and long-term finances are discussed in more detail in the ILF Project Site Review workbook.

10a. Does the instrument (or associated documents) specify requirements for submittal to the Corps of:

• Project monitoring reports?

A Sponsor must submit project monitoring reports providing the results of monitoring each ILF project's development and potential attainment of performance standards to the IRT Chair or co-chairs. This report must adhere to the approved monitoring requirements for each site to determine the level of success and identify any problems requiring corrective actions (33 CFR 332.8(q)(2)/40 CFR 230.98(q)(2)). Refer to local district/state monitoring and reporting guidelines and policies, which may specify sampling/analysis methods for specific performance standards.

• Annual ledger account reports or RIBITS ledger updates?

Annual ledger account reports must include:

- A listing and summary of all credit and debit activity (both for advance credits and released credits)
 for the ILF program and its project sites for each resource type in each of the ILF program service
 areas. This provides transparency of credit transactions, by ensuring that all ledger activity is clearly
 documented.
- Beginning and ending balances of available credits and permitted losses (debits) based on resource (credit) type.
- All credit additions, subtractions, and other changes (releases, adjustments by the Corps, credit suspensions).
- Annual ledger account reports should differentiate data for separate ILF project sites.
 33 CFR 332.8(q)(1)/40 CFR 230.98(q)(1)

The annual ledger account report must be submitted to the Corps, which distributes it to the IRT, and must also be made available to the public on request.

• Annual financial assurance and long-term management funding reports?

These reports must include the following information identified by program service area (33 CFR 332.8(q) (3)/40 CFR 230.98(q)(3)):

- Beginning and ending balances of accounts providing funds for financial assurances and long-term management activities
- All deposits and withdrawals
- Total amounts of required assurances and long-term management funding
- Status of financial assurances, including expiration date
- Status of long-term management funding (how close to reaching the desired target; is it fully funded or partially funded?)

Additionally, annual financial assurance and long-term management funding reports should distinguish information for separate ILF sites.

Often ILF programs combine annual ledger account reports, annual financial assurance, and long-term management funding reports into a single annual ILF program report which summarizes these aspects of program operations as well as provides the status of project implementation. Some examples include annual reports from the state-wide ILF programs in Maine, Missouri, New Hampshire, and Virginia (see References).

11. Default and Closure

Default is when a Sponsor fails to comply with any aspects of the ILF program instrument or the mitigation plan for each ILF project. In general, the presumption is that any non-compliance with the instrument is considered a default on the instrument. The IRT will always attempt to resolve any noncompliance issues/situations that arise with the Sponsor and the program or project site(s) prior to the Corps undertaking more direct actions to correct a default.

Closure may take place at the ILF program level or for a specific ILF project. Closure indicates that an ILF program and/or an ILF project site has been successful in satisfying its responsibilities laid out in the ILF program instrument.

11a. Does the instrument specify what is meant by default?

An ILF program instrument must include default provisions (33 CFR 332.8(d)(6)(ii)(D)/40 CFR 230.98(d) (6)(ii)(D)). The IRT reviewers should refer to the relevant state/district guidelines, templates, or practices for information on the definition/interpretation of default in the context of the ILF program instrument.

11b. Does the instrument identify options available to address default by the ILF program or a specific ILF project site?

These are a range of actions, in order of easiest to most difficult to conduct, that may be implemented in response to default:

- 1. Delay the release or availability of credits to the Sponsor (either advance credits within one or more service areas or from an ILF project site);
- 2. Corrective Action–Plan for example, repair/replace the damaged structure that was not maintained;
- 3. Additional project monitoring perhaps no project monitoring has occurred, a monitoring period was missed, only part of a site was monitored, or portions of the project site failed to meet performance standards (33 CFR 332.6(b)/40 CFR 230.96(b));
- 4. Submittal of an additional or corrected ILF program annual report;.
- 5. Adaptive management implementation of an adaptive management plan for a project or program (33 CFR 332.8(l)(2)/40 CFR 230.98(l)(2)) (This might include programmatic matters, like modification of the fee schedule, or modification to the program instruments for handling and management of mitigation fees);
- Decrease available credits decreasing the number of credits (either advance credits within one or more service areas or released credits from an ILF project site) available to debit (33 CFR 332.8(l) (2)/40 CFR 230.98(l)(2));
- 7. Suspend part or all of operations suspension of credit availability (advance and/or released credits) to debit, notice provided via official letter from the district (33 CFR 332.8(o)(10)/40 CFR 230.98(o)(10));
- 8. Direct the Sponsor to provide alternative/replacement mitigation for example, use of a bank or another ILF program (33 CFR 332.8(l)(2)/40 CFR 230.98(l)(2));

- 9. Notice of non-compliance official notification of program or project non-compliance, which opens the door to administrative or legal action;
- 10. Making a claim on ILF project financial assurances only when the Sponsor is unable or unwilling to resolve issues; beneficiary/district makes the claim to attempt to resolve issues; and
- 11. Terminate the program instrument or ILF project site (most severe option) When all other actions fail. Chair/co-chair action. (33 CFR 332.8(o)(10)/40 CFR 230.98(o)(10))

11c. Does the instrument define ILF program closure? If so, does it identify those actions that must be completed for an individual project site to close?

An ILF program instrument must include closure provisions (33 CFR 332.8(d)(6)(ii)(D)/40 CFR 230.98(d) (6)(ii)(D)). The program instrument should lay out closure provisions and the process associated with closure. Refer to state/district templates, outlines, and/or guidance for more on closure requirements.

Project site closure is not defined in the 2008 Mitigation Rule but below are examples of criteria Districts use to define closure requirements for ILF programs and/or projects:

- Performance standards are met,
- All available credits are debited/relinquished by the Sponsor,
- Long-term management plan is implemented and revised if/when needed to reflect any changes in practice or availability of funding,
- Long-term steward/long-term manager is identified, and
- Long-term management plan is fully funded.

Note, IRT reviewers may find that site closure provisions are provided in the individual ILF project plans instead of in the ILF program instrument. If the program instrument provides detailed closure provisions and requirements, reviewers are advised to consult this element in the ILF Project Site Review workbook and checklist, where this information is more thoroughly discussed. District or state guidance may also specify conditions that must be met before an ILF project may close.

References

This includes literature referenced in the workbook as well as a sampling of prospectus outlines, templates, and instructions issued by districts and states across the United States that were reviewed and at times referenced in this review workbook. This list was current as of January 2022; however, program instruments, templates and tools will be revised over time.

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APPENDIX A: REVIEW CHECKLIST

In-Lieu-Fee Instrument Review Checklist

The ILF Instrument Review Checklist reflects the content of each element in the ILF Instrument Review Workbook. For each element, the checklist asks whether the question was addressed (yes/no), whether the narrative is complete (yes/no), and the page number(s) of the narrative. A comment section for reviewer input is also included.

Review Element Question	Addressed (Y/N)	Complete (Y/N)	Page #(s)	Reviewer Comments
Introduction				
Has the prospectus been reviewed?				
Are there any components unresolved or unaddressed from the prospectus?				
1. Compensation Planning Framework				
1a. Does the instrument include a CPF?				
1b. Are the elements of the CPF framework clearly identified?				
1c. Does the CPF explain the development of the program geographic service area(s)?				
1d. Does the CPF describe and discuss threats to aquatic resources in the service area(s)?				
1e.Doesthe CPF provide an analysis of historic aquatic resource loss and current conditions?				
1f. Does the CPF clearly state aquatic resource goals and objectives for each service area?				
1g. Does the CPF clearly lay out a prioritization strategy for selecting/implementing projects? And does it explain the approach that will be used?				
1h. Does the CPF provide an explanation of use of preservation?				

Review Element Question	Addressed (Y/N)	Complete (Y/N)	Page #(s)	Reviewer Comments
1i. Does the CPF provide a description of stakeholder involvement and coordination with regulatory and resource agencies?				
1j. Does the CPF describe long-term protection and management strategies?				
1k. Does the CPF clearly lay out a strategy for evaluation and reporting?				
2. Description of ILF Program Account				
2a. Does the ILF instrument require the establishment of a program account?				
2b. Does the instrument describe an accounting mechanism for keeping permittee fees and funds from sources other than permittees separate?				
2c. Does the instrument describe what the program account may be used for?				
2d. Does the ILF instrument identify any sub-accounts or system of earmarks in the ILF program account?				
2e. Does the ILF instrument discuss program account reports and audits?				
2f. Has the ILF instrument laid out the details of frequency, content, and funding source of audits?				
2g. Does the ILF instrument specify what kind of audit(s) will be performed and who will conduct it?				

Review Element Question	Addressed (Y/N)	Complete (Y/N)	Page #(s)	Reviewer Comments
3. Advance Credits				
3a. Does the instrument specify the approach used in determining the number of advance credits to be made available in each program service area? Does it reflect local district/state guidelines and practices?				
3b. Does the instrument describe how the debit of advance credits will be fulfilled?				
3c. Does the instrument discuss how surplus released credits will be treated by the program?				
4. Method for Determining Project-Specific Credits and Fees				
4a. Does the instrument identify the potential credit types to be provided by ILF projects?				
4b. Does the instrument explain how credits generated by projects are treated?				
4c. Does the instrument identify the types of mitigation activities that may generate credits?				
4d. Does the instrument identify the assessment method(s) used to determine the number and type of credits future projects would provide?				
4e. Does the instrument discuss if matching resources (donations, grants, appropriations) may be considered for a future project(s)?				
4f. Does the instrument distinguish between fees for advance credits and those for released credits?				

Review Element Question	Addressed (Y/N)	Complete (Y/N)	Page #(s)	Reviewer Comments
5. Fee Schedule				
5a. Do credit prices vary depending upon resource type and/or geographic location?				
5b. Does the fee schedule allow a consumer (permit applicant) to calculate what the credit price is for a specific permit action?				
5c. Does the fee schedule appear to account for the full cost of implementing a mitigation project?				
5d. Does the instrument identify what portion of the credit purchase price is allocated to program administration?				
5e. Does the program instrument address updates or revisions to fee schedules?				
6. Service Area				
6a. Does the instrument clearly define the service area(s) for the program?				
6b. Does the instrument or CPF identify the basis of the service area (i.e., watershed, coastal bay system, ecoregion, species distribution) and provide justification/rationale supporting its location and extent?				
6c. Did the instrument appropriately size each program service area to ensure that the proposed aquatic resources will effectively compensate for permitted impacts and replace lost functions/services?				
6d. Does the service area comply with local, district, and/or state requirements (scale, size, or resource type)?				

Review Element Question	Addressed (Y/N)	Complete (Y/N)	Page #(s)	Reviewer Comments
7. How ILF Will Be Established and Operated				
7a. Does the instrument specify how the program will identify mitigation projects?				
7b. Does the instrument specify how the ILF program will develop and implement mitigation projects?				
7c. Does the instrument indicate the process the program will use to obtain project approval?				
8. Assumption of Mitigation Responsibilities				
8a. Does the instrument include a provision stating that the Sponsor assumes the permittee's mitigation liability?				
8b. Does the instrument include a provision stating that the Sponsor will notify the district of each transaction?				
8c. Does the instrument specify the timing at which the district is notified of a transaction?				
9. Accounting Provisions				
9a. Does the document have a credit accounting procedure outlined?				
9b. Does the document indicate when transaction notifications will be provided to the Corps?				
9c. Does it indicate what information will be provided in the notification?				

Review Element Question	Addressed (Y/N)	Complete (Y/N)	Page #(s)	Reviewer Comments
10. Reporting Protocols				
 10a. Does the instrument (or associated documents) specify requirements for submittal to the Corps of: Project monitoring reports? Annual ledger account reports or RIBITS ledger updates? Annual financial assurance and long-term management funding reports? 				
11. Default and Closure				
11a. Does the instrument specify what is meant by default?				
11b. Does the instrument identify options available to address default by the ILF program or a specific ILF project site?				
11c. Does the instrument define ILF program closure? If so, does it identify those actions that must be completed for an individual project site to close?				