Montana Statewide In-Lieu Fee Mitigation Program Instrument

Sponsored by
Montana Aquatic Resources Services, Inc.

January 15, 2013

MARS
MONTANA AQUATIC RESOURCES SERVICES

P.O Box 1289, Bozeman, MT 59771-1289

This In-Lieu Fee Program Instrument (hereinafter, Instrument), regarding the establishment, use, operation, and maintenance of the federally-approved Montana Statewide In-Lieu Fee Program (hereinafter, ILF Program), is an agreement made and entered into by the U.S. Army Corps of Engineers, Omaha District (Corps) and the not-for-profit corporation, Montana Aquatic Resources Services, Inc. (MARS), the program Sponsor. The following agencies and organizations that constitute the Interagency Review Team (IRT) have indicated their acceptance: the U.S. Army Corps of Engineers, Omaha District; the U.S. Environmental Protection Agency; the Montana Department of Environmental Quality; the Montana Department of Fish, Wildlife and Parks; and, the U.S. Fish and Wildlife Service.

I. PREAMBLE

A. PURPOSE

The purpose of this Instrument is to establish guidelines, responsibilities, and standards for the establishment, use, operation, and management of the Montana Statewide In-Lieu Fee Mitigation Program (ILF). Montana Aquatic Resources Services, Inc. (MARS) will be the program Sponsor. The ILF Program will be used to provide compensatory mitigation for unavoidable impacts to waters of the United States that result from activities authorized under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Generally, this includes filling of wetlands that require mitigation, impacts to navigable waters of the U.S., and other activities that the Corps District Engineer may authorize. This Instrument addresses compensatory mitigation for impacts to jurisdictional waters, including wetlands, streams, and lakes. The ILF Program Instrument will not act as a framework for establishing mitigation banks. Rather, the Instrument outlines the circumstances and manner in which this statewide ILF program will provide a complementary compensatory mitigation option to permit applicants under the Corps regulatory program.

B. GOALS AND OBJECTIVES

The primary goal of the ILF Program is to provide effective compensatory mitigation for the authorized, unavoidable adverse impacts to the waters of the United States and waters of the State. The program is intended to uphold the goal of no net loss of wetlands through the preservation, enhancement, establishment, and restoration of ecological functions within a watershed context through the establishment and management of compensatory mitigation projects. It is the intent of the parties that this program be operated in a collaborative manner, including collaboration among the Interagency Review Team (IRT) members and other agencies and organizations with similar or consistent aquatic resource missions within the State of Montana.

The objectives of the ILF Program are as follows:

1. Provide an in-lieu fee alternative to mitigation banks and permittee-responsible compensatory mitigation through compensatory mitigation projects implemented using a watershed approach.
2. Use scale efficiencies by combining the required mitigation for impacts from individual smaller projects within a watershed into collective mitigation and restoration at larger sites with greater ecological value.
3. Provide compensatory mitigation in a timely and effective manner by streamlining the compensatory mitigation process that minimizes temporal loss of ecological functions and services.
4. Use a watershed approach as defined in 33 CFR 332 to identify the most appropriate off-site mitigation options available, thereby obtaining greater

ecological benefits than would otherwise be achieved through on-site mitigation options that are impracticable or of lower ecological value.

5. Operate in a financially self-sustaining manner: collect sufficient mitigation fees to complete compensatory mitigation projects and all associated protection, management, monitoring and maintenance.
6. Provide public benefit by applying mitigation resources toward improvement of ecologically impaired aquatic resources that have important ecological value to the watershed.

C. APPROVAL

This Instrument is considered fully executed upon the latter date of signature by the Chair of the Board of Directors of MARS and the District Engineer of the Corps.

II. REGULATORY AUTHORITIES

The establishment, use, operation, and maintenance of the ILF Program will be carried out in accordance with the following authorities:

A. FEDERAL AUTHORITIES

- Clean Water Act (33 USC §1251 et seq.)
- Rivers and Harbors Act of 1899 Section 9 and 10 (33 USC § 403)
- Regulatory Programs of the Corps of Engineers, Final Rule (33 CFR Parts
- 320-332)
- National Environmental Policy Act (42 USC § 4321 et seq.)
- Endangered Species Act (16 USC § 1531 et seq.)
- Fish and Wildlife Coordination Act (16 USC § 661 et seq.)
- National Historic Preservation Act, Section 106

B. STATE AUTHORITIES

- Natural Streambed and Land Preservation Act (310) Mont. Code Ann.§§ 75-7-101 et seq.
- Short Term Turbidity Exemption Mont. Code. Ann.§ 75-5-318
- Montana Water Quality Act. Title 75 Chapter 5
- Stream Protection Act. Montana Code Ann. Title 87 Chapter 5 Part 5

III. PROVISION OF LEGAL RESPONSIBILITY

MARS agrees to accept full legal responsibility for satisfying the mitigation requirements for Corps permits for which mitigation fees from a permittee have been accepted under the terms of this Instrument. This responsibility includes compliance with 33 CFR Part 332, 40 CFR Part 230 and any other applicable federal, state and local jurisdiction laws. In satisfaction of the compensatory mitigation requirements, the Sponsor will provide compensatory mitigation of the type and in the amount necessary to meet applicable regulation requirements. Any transfer of mitigation responsibility from the permittee to the Sponsor is contingent upon the prior approval by the Sponsor and the Corps.

1. Mitigation responsibility includes, but is not limited to: the identification and selection of compensatory mitigation project sites, property rights acquisition, mitigation project plan design and development, construction, monitoring, protection, and long-term management of the required mitigation.
2. The transfer of mitigation responsibility from the permittee to the Sponsor for each impact site will be effective upon (a) the permittee purchasing from the Sponsor the appropriate number and resource type of credits, and (b) the Corps' receipt of the Statement of Sale (Exhibit D), which expressly specifies that the Sponsor, and its successors and assigns, assume responsibility for accomplishment and maintenance of the transferee's compensatory mitigation requirements associated with the impacting project, as required by the permit conditions, upon completion of the credit sale.

IV. STATEWIDE ILF PROGRAM STRUCTURE

A. STATEWIDE INSTRUMENT

Under this Instrument, MARS establishes itself as a Montana statewide Sponsor of federally approved in-lieu fee mitigation. This Instrument is intentionally broad and sets the framework under which MARS-sponsored ILF projects will be identified, funded, operated, maintained and managed. The Instrument provides the authorization for the ILF Program to provide credits to be used as compensatory mitigation for activities permitted by the Corps. As compensatory mitigation projects are identified, MARS will submit compensatory mitigation project plans to the District Engineer for review and approval. Review and approval of compensatory mitigation project plans will follow the process outlined for Modifications to the Instrument, *Section IX*, of this Instrument and according to the procedures outlined in 33 CFR 332.8(g). At the District Engineer's discretion, review and approval of additional compensatory mitigation project plans may follow the streamlined modification process outlined in 33 CFR 332.8(g)(2).

B. INTERAGENCY REVIEW TEAM

The Corps' District Engineer has established an Interagency Review Team for the ILF Program. The District Engineer or designee is the official chair for the IRT and will be responsible for establishing the IRT and managing the IRT process. The District Engineer will make the final decision regarding the amount and type of compensatory mitigation to be required of federal permittees, and determine whether and how use of credits from the ILF Program is appropriate to compensate for unavoidable impacts.

The primary role of the IRT is to assist the Corps in its administration of the Instrument, evaluate mitigation project plans, recommend mitigation measures, review approval of credit release and certification, review monitoring reports, and advise the Corps regarding modifications to this instrument. The IRT's role and responsibilities are more fully set forth in Section 332.8 of the Federal Mitigation Rule (33 CFR Part 332). IRT participation does not, however, override or nullify the independent permitting authority of a Federal, State or local permitting entity to enforce their permit requirements at compensatory mitigation project sites.

The ILF Program IRT will consist of:

- U.S. Army Corps of Engineers, Omaha District (Chair)
- U.S. Environmental Protection Agency, Region 8
- Montana Department of Environmental Quality
- Montana Department of Fish, Wildlife and Parks
- U.S. Fish and Wildlife Service

The IRT will review and provide comments on the Instrument and subsequent modifications. IRT members will also review and provide written comments on

mitigation project plans, annual monitoring reports and field inspections, and credit release and certification requests. The IRT agencies may also be requested to provide expertise on other related matters, such as assessing the achievement of performance standards, reviewing long-term management plans, and recommending corrective actions or adaptive management. Written comments will be submitted within the time limits established by 33 CFR 332.8. Comments received after such deadlines will only be considered at the discretion of the District Engineer to the extent that doing so does not jeopardize the deadlines for actions required of the District Engineer.

The IRT for individual ILF projects may be augmented, at the discretion of the District Engineer in consultation with MARS, with additional representatives from Tribal, Federal, State, or local governments. Additional members of the IRT for individual ILF projects will be specified in each mitigation project plan. In general, these IRT members' roles will be limited to providing project-specific review and comments to the District Engineer.

The District Engineer serves as the Chair of the IRT and alone retains final authority for approval of the Instrument and subsequent modifications. The District Engineer will give full consideration to any timely comments and advice of the IRT.

Any of the IRT members may terminate their participation upon written notification to the Corps. Any such termination will not invalidate this Instrument. Participation of the IRT agency seeking termination will end thirty (30) days after written notification.

1. The IRT will work to reach consensus in its actions. This consensus-building process will include providing MARS the opportunity to provide additional information to IRT members during the IRT's decision making processes. The IRT will seek to reach such a consensus within a reasonable period of time and with minimal delays; and
2. The members of the IRT will review such documents and compensatory mitigation projects as each considers necessary to provide meaningful input to the IRT Chair, and express any recommendations, concerns, or potential improvements concerning the implementation of the ILF Program to the Sponsor.

C. ILF PROGRAM ACCOUNT

Upon approval of the ILF Program, MARS will create and maintain distinct and separate accounting – hereinafter referred to as the ILF Program Account – of revenue and expense financial transactions and asset management associated with the Montana Statewide ILF Program. Only credit fees and any interest earned from those fees will be assigned to the ILF Program Account. Those funds will be used only for the selection, design, acquisition, implementation, monitoring, management and protection of MARS ILF projects and allowable MARS administrative costs associated with administration of the ILF Program. Mitigation funds accepted from permittees will be kept in an entirely separate account from funds accepted by MARS from other entities and for other purposes.

Upon the sale of the first advance credits the sub-accounts following below will be

established under the ILF Program Account. The allocation of percentages for each sub-account provided below may be modified at any time by MARS as needed to maintain sufficient and appropriate balances among accounts. The Statewide Program Administration Account may not exceed 15% of fees collected and interest earned. MARS will allocate and deposit funds to appropriate accounts within 60 days of the receipt of mitigation funds from a permittee.

The Statewide ILF Mitigation Program Account will consist of: a Statewide Program Administration Account, a Mitigation Account, a Contingency Account and a Long-Term Management Account. Each of these will include sub-accounts for each Service Area and a Mitigation Project Account for each mitigation project. Collectively, the following accounts constitute the Statewide ILF Program Account, and include funds that will be available to support operation of all compensatory mitigation projects within the State:

1. Statewide Program Administration Account. MARS will maintain a Statewide Program Administration Account to administer the overall Statewide Instrument. The Statewide Program Administration Account will be funded initially by deposits of 15% of credit sales fees and 15% of any interest accumulated in all Program Accounts and will be used to pay for program administration duties not directly attributable to specific, approved mitigation projects, including but not limited to:
    a. Staff time and employment expenses, including relevant training
    b. Office expenses, rent, computer equipment, and office equipment and supplies related to program administration
    c. Phone, internet, and other communications expenses
    d. Site selection leading to project identification
    e. Fee and credit accounting for Program account and compensatory mitigation project accounts, including accounting services
    f. Legal services
    g. Data management
    h. Reporting regarding the statewide program
    i. Correspondence and meetings with IRT and other regulatory agencies, including negotiation of modifications to this Instrument
    j. Program development
    k. Other program administration duties as necessary
    l. Bank and other fees associated with operation of the program
2. Mitigation Account. A Mitigation Account will be established, with sub-accounts for each Service Area, to hold mitigation project establishment funds (fees) from initial credit sales and from which mitigation project expenses will be disbursed to approved mitigation projects. The Mitigation Account will be funded initially by deposits of 50 percent of credit fees collected. The percentage of credit fees allocated to the Mitigation Account may be adjusted by MARS as necessary to sustain the account and associated account purposes, and informed by ILF Program project history. Funds from the mitigation account will be available solely for the Establishment Phase of each compensatory mitigation project (see

Section V.B. for description of Operational Phases).

3. Contingency Account. A Contingency Account will be established, with sub-accounts for each Service Area, to cover contingencies related to project implementation or implementation of adaptive management plans for established compensatory mitigation projects. This is to include expenses incurred during the Establishment Phase of each approved compensatory mitigation projects. Funds from the Contingency Account may be used as Financial Assurances on a statewide basis. The Contingency Account will be funded initially by deposits of 20 percent of credit fees collected. The percentage of credit fees allocated to the Contingency Account may be adjusted by MARS as necessary to sustain the account and associated account purposes, and informed by ILF Program project history.
4. Long-Term Management Account. The Statewide ILF Program will maintain a Long-Term Management Account, with sub-accounts for each Service Area. The Long-Term Management Account will be held in reserve to fund long-term management, including adaptive management and remediation at compensatory mitigation project sites and enforcement of protections. Funds in the Long-Term Management Account will be available solely for use during the Long-Term Management phase and are not available for use on a project until the project enters the Long-Term Management phase (i.e. after all credit associated with a project is released). Funds from the Long-Term Management Account may be used as Financial Assurances on a statewide basis. The Long-Term Management Account will be funded initially by deposits of 15 percent of Credit Fees collected and may be adjusted by MARS as necessary. Long-term financing mechanisms may include non-wasting endowments, trusts, contractual arrangements with future responsible parties, and other appropriate financial instruments.

A separate Mitigation Project Account will be established for each approved compensatory mitigation project plan. Mitigation Project Accounts will be funded directly by transfer from the Mitigation Account once compensatory mitigation project plans have been approved. All funds within Mitigation Project Accounts will be restricted to implementation and operation of respective compensatory mitigation projects, but may be used for any expenses incurred by the project during the Establishment phase or Long-Term Management phase (see Section V.B. for description of Operational Phases).

Mitigation Project Accounts. Each approved compensatory mitigation project will have a Mitigation Project Account. These accounts will be funded from the Mitigation Account upon approval of the compensatory mitigation project plan and budget, with sufficient funds to cover all anticipated project-specific expenses. The fees in this account will be used for compensatory mitigation project administration, compensatory mitigation project plan development, land acquisition or protection, planning and design, project implementation, project management, monitoring and maintenance activities, and other activities and expenses directly attributable to a

specific compensatory mitigation project. Funds transferred from other accounts (e.g. to cover land acquisition or protection expenses, contingencies or long-term management) that are attributable to a specific compensatory mitigation project will be transferred from those accounts and included in the compensatory mitigation project account expense ledger.

Except as otherwise approved by the Corps, non-expended funds from credit sales will be held in federally-insured, interest-bearing financial instruments that may include, but are not limited to, checking accounts, money markets, and certificates of deposit at a financial institution(s) that is a member of the Federal Deposit Insurance Corporation (FDIC). All interest and earnings from the Program Account will remain in that account for the purpose of providing compensatory mitigation for impacts to Waters of the U.S. Interest earnings from the entire Program Account and Mitigation Project Accounts will be directed at the discretion of MARS to the Statewide Program Administration Account, Contingency Accounts, or Long-Term Management Account. A maximum of 15% of interest earned from all accounts may be transferred to the Statewide Program Administration Account.

MARS will review and balance funds among accounts annually, including Mitigation Project Account funds remaining after a project has entered the Long-Term Management phase, to ensure that Program Accounts in total do not exceed those amounts deemed necessary to implement current mitigation obligations, sustain long-term management and protection responsibilities for implemented compensatory mitigation projects, and provide financial assurances. MARS agrees to disburse funds considered to be in excess of those necessary for these purposes to additional or alternative mitigation or conservation measures.

The Corps in consultation with MARS has the authority to direct MARS to develop and implement alternative compensatory mitigation projects in cases where MARS does not provide compensatory mitigation as agreed to by the parties or in cases of default. MARS will fund these alternative projects from the Mitigation Account. The Corps will direct development and implementation of alternative mitigation projects through the issuance of a signed Corrective Action Directive Letter to MARS that specifies what responsive action MARS must take and the timeframe in which the action must be completed.

1. Fee Ledger

MARS will maintain two ledgers: one to track mitigation fees and expenditures, and a second to track debits and credits. Both ledgers will be organized by Service Area, and the two will be related to each other. The ledgers will be used to track the source of funding for compensatory mitigation projects as well as where and how fees collected from credit sales are spent. This section describes the Fee Ledger and *Section VI-F* describes the Credit Ledger.

The Fee Ledger will track all income (mitigation fees collected from advance or certified credit sales and any interest earned) and expenditures from the program. The fee

ledger will comprise separate sub-ledgers for each of the sixteen Service Areas. Each Service Area fee ledger will show the following:

Mitigation fees collected for each permitted impact project:

- Credit fee amount
- Impact project Permit Number

Deposits and expenditures from the Statewide Program Administration Account:

- Origin of deposits (Impact Permit Number(s))
- Program administration expenditures

Deposits and expenditures from the Mitigation Account:

- Origin of deposits (Impact Permit Number(s))
- Mitigation transfers and expenditures (Compensatory mitigation project name(s))

Deposits and expenditures from the Contingency Account:

- Origin of deposits (Impact Permit Number(s))
- Contingency expenditures (Compensatory mitigation project name(s))

Deposits and expenditures from the Long-Term Management Account:

- Origin of deposits (Impact Permit Number(s))
- Long-term management expenditures (Compensatory mitigation project name(s))

Deposits and expenditures from each Mitigation Project Account:

- List of expenditures by task categories covering all aspects of implementing mitigation receiving projects (e.g., administrative costs specific to the project, acquisition of property and protections, design and permitting, construction, monitoring, and long-term maintenance and management)

Fee Ledgers will be provided to the Corps in annual accounting reports by March 31 of the following year for approval by the Corps. Reports will include detailed summaries of Program Account deposits and disbursements for each ILF project made over the previous fiscal year (January 1 – December 31). The Corps may review Program Account records with 14 days written notice. When so requested, MARS will provide access to all books, accounts, reports, files, and other records relating to the Program Account.

2. Financial Assurances

Notwithstanding any other provision of this Instrument, MARS' financial obligation for the ILF Program will be limited to funds in the ILF Program Account. MARS intends to satisfy its obligations under this Instrument by obtaining sufficient funding from mitigation credit fees collected to carry out all design, development, implementation, monitoring, remediation, and site management responsibilities. Financial assurances are provided through thorough credit price estimation procedures and mitigation fees that are determined through full cost accounting. Mitigation project approval by the

Corps in consultation with the IRT is contingent upon demonstration by MARS that credit pricing is adequate to cover MARS' obligations under this Instrument.

MARS will maintain sufficient financial assurances to ensure a high level of confidence that approved compensatory mitigation projects will be successfully completed, in accordance with applicable performance standards. MARS will take the following actions to ensure funds are available to meet mitigation requirements for credits sold:

1) Funds outlined in approved compensatory mitigation projects will be earmarked for project-specific Mitigation Project Accounts, and used to pay project-specific expenses as work or other project-specific actions are accomplished.
2) A Contingency Account will be maintained within the ILF Program Account, and will be funded through the initial allocation of 20 percent of all fees collected from credit sales. Contingency Account funds may be used as financial assurances.
3) A Long-Term Management Account will be maintained within the ILF Program Account and held in reserve to fund long-term management, including monitoring and adaptive management and remediation at compensatory mitigation project sites and enforcement of MARS' site protections, after a project enters the Long-Term Management phase. The Long-Term Management Account will be funded through the initial allocation of 15 percent of all fees collected from credit sales. Long-Term Management Account funds may be used as financial assurances.
4) MARS will review all funds available to provide financial assurances on an annual basis to ensure that financial assurances are sufficient to conduct replacement mitigation, including costs for land acquisition or protection, planning and design, legal fees, mobilization, construction, and monitoring.
5) MARS would supplement existing funds as necessary with appropriate insurance policies to provide financial assurances.

Given these assurances incorporated into design of the program, the Corps does not require additional financial assurances at this time. However, each compensatory mitigation project plan will address financial assurances (such as those program elements listed above), and the Corps retains the right to reassess the need for financial assurances for each subsequent mitigation project plan.

D. SERVICE AREAS

To accomplish the goal of a watershed approach to mitigation, Service Areas are established as those watersheds delineated by the Montana Department of Transportation and Corps as 16 Watershed Districts (Table 1, Figure 1). These Watershed Districts have been adopted by the Corps and are used as the basis for other compensatory mitigation project plans including mitigation banks under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. MARS will provide compensatory mitigation for permitted impacts within the same geographic Service Area (Watershed District) in which the impact occurs unless the District Engineer, in consultation with the IRT, has agreed to an exception as defined in an approved mitigation project plan.

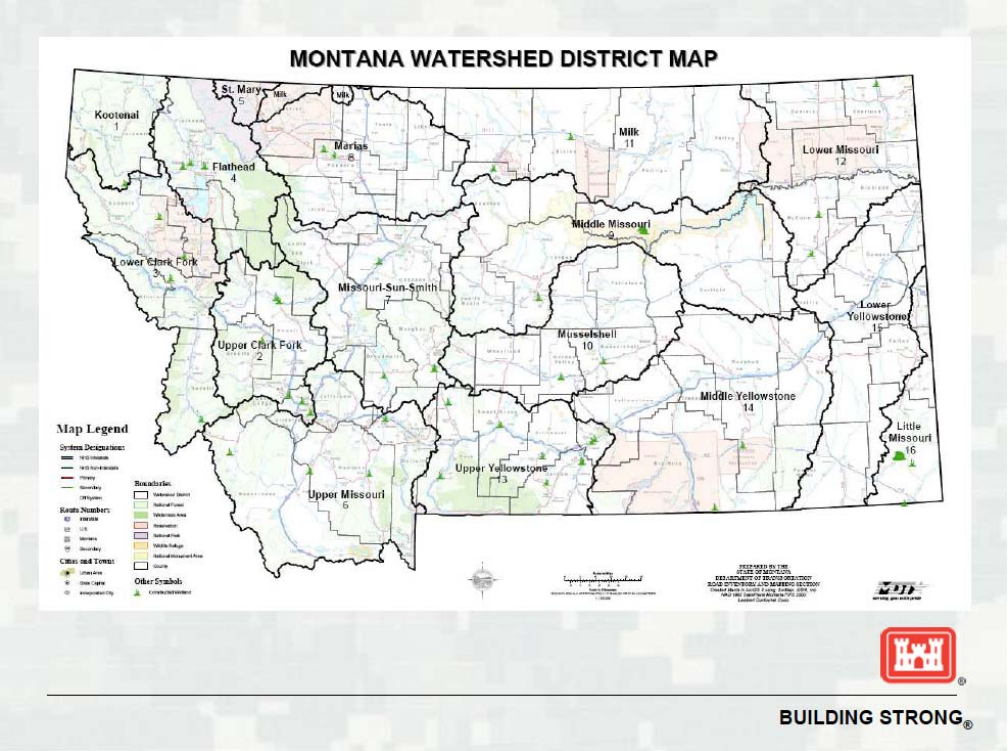
Table 1. Mitigation Service Areas (Watershed Districts).

Watershed District No.	Service Area Name
1	Kootenai
2	Upper Clark Fork
3	Lower Clark Fork
4	Flathead
5	St. Mary
6	Upper Missouri
7	Missouri-Sun-Smith
8	Marias
9	Middle Missouri
10	Musselshell
11	Milk
12	Lower Missouri
13	Upper Yellowstone
14	Middle Yellowstone
15	Lower Yellowstone
16	Little Missouri

Service Areas will serve as the basis for a watershed approach to site selection as well as for Accounting and Reporting procedures. The Corps and IRT will review and approve mitigation project plans for compensatory mitigation projects implemented to mitigate impacts of permitted actions within the same geographic Service Area. MARS intends to conduct mitigation for permitted actions by performing site selection within sub-watersheds within the Service Area to the extent possible and reasonable and with Corps and IRT review. However, the Montana Statewide ILF Program may be used to compensate for an impact that occurs outside of the Service Area if specifically approved by the Corps in consultation with the IRT.

Individual projects will be proposed for Service Areas in project-specific mitigation project plans. In the event that the Corps determines that a Service Area for a given compensatory mitigation project should differ from the established Service Area, the Corps in consultation with the IRT will make final Service Area determinations for approved mitigation project plans. Considerations will include the extent of ecologically similar areas, the expected amount and type of mitigation required in an area (demand) compared with the aquatic resources and amount of credits that are expected from an ILF project, the availability and appropriateness of commercial mitigation banks in the area, population and growth information, and ongoing watershed management programs.

Figure 1. Montana ILF Program Service Areas (Watershed Districts).



E. ILF PROGRAM CLOSURE

MARS or the Corps, acting independently or in concert, may terminate this Instrument within 60 days of written notification to the other party and to the IRT members. In the event that the Statewide ILF Program operated by MARS is terminated, MARS is responsible for providing to the IRT reports detailing credit and fee ledger balances, as well as status reports for all compensatory mitigation projects. MARS remains responsible for fulfilling any outstanding or pre-existing project obligations including the successful completion of ongoing compensatory mitigation projects, relevant maintenance and monitoring, reporting, and long-term management requirements. MARS will remain responsible for fulfilling these obligations or ensuring the transfer of long-term management and maintenance of all mitigation lands to a separate party approved by the Corps.

Funds remaining in the Statewide ILF Program account after the above obligations are satisfied must continue to be used for the restoration, enhancement, and/or preservation of aquatic resources and associated upland buffers. Any expenditure of these remaining funds requires Corps and IRT review and approval. If MARS has outstanding mitigation obligations at the time of closure which it is unable to fulfill, the Corps, in consultation with the IRT, will direct MARS to: 1) use these funds to provide further restoration, enhancement or preservation activities, 2) secure credits from

another source of third party mitigation, or 3) disburse funds to another entity such as a governmental or non-profit natural resource management entity willing to undertake further compensation activities. The Corps itself cannot accept directly, retain, or draw upon those funds in the event of a default.

F. ASSIGNMENT OF OBLIGATIONS

MARS may be permitted to assign its obligations, responsibilities, and entitlements associated with site protection, monitoring, and long-term management under this Instrument to a separate party provided that such assignment is consistent with the federal rule and approved by the Corps. The Corps following consultation with other members of the IRT must approve the identity of the assignee in order for any assignment to effectively relieve MARS of those obligations. Approval of the identity of the assignee will not be unreasonably withheld. MARS must amend this Instrument or associated compensatory mitigation project plans accordingly to reflect separate party assignments. In this case, applicable financial assurances must be approved by the Corps. The physical ownership of real property containing a compensatory mitigation project site, and the obligations, responsibilities, and entitlements under this Instrument are separate and distinct; thus, ownership of the MARS interest may be transferred independently with the approval of the Corps. Once assignment has been properly accomplished, MARS will be relieved of all its obligations and responsibilities under this Instrument associated with the compensatory mitigation project site(s) for which separate party assignments are made.

V. COMPENSATORY MITIGATION PROJECT ESTABLISHMENT AND OPERATION

MARS is established as the Sponsor of a qualified Statewide ILF Mitigation Program for Corps authorizations in Montana. An Interagency Review Team (IRT) will advise the Corps on the management of the MARS Montana Statewide ILF Mitigation Program. As Sponsor of the Program, MARS will sell mitigation credits to impact site permittees. The funds received from permittees may be consolidated and used to implement various compensatory mitigation projects.

The structure of the Statewide ILF Mitigation Program is outlined in this instrument. Mitigation project planning will be conducted within 16 Service Areas following guidelines established in the Compensation Planning Framework (See *Section V-A and Exhibit A*) that outlines an approach to prioritizing restoration and conservation needs, project selection criteria, and project site selection criteria. Each compensatory mitigation project will have a separate mitigation project plan reviewed by the Corps and IRT and signed by MARS and the Corps. Mitigation project plans will be developed and implemented in accordance with 33 CFR 332 and will be considered as a modification to the Instrument. Review and approval of subsequent compensatory mitigation project plans will follow the process outlined for Modifications to the Instrument, *Section IX*, of this Instrument and according to the procedures outlined in 33 CFR 332.8(g). At the District Engineer's discretion, review and approval of additional compensatory mitigation project plans may follow the Streamlined instrument modification process outlined in 33 CFR 332.8(g)(2). Mitigation project plans will include the following twelve elements:

1. Project objectives
2. Site selection factors
3. Site protection instrument
4. Baseline information
5. Determination of credits
6. Work plan
7. Maintenance plan
8. Performance standards
9. Monitoring requirements
10. Long-term management plan
11. Adaptive management plan
12. Estimate of project costs and Long-term funding mechanism

The mitigation project plan will also include a detailed credit release schedule (see *Section VI-C*). The scheduled release of credits will correspond to the timeframe established for plan approval, project implementation and monitoring of the compensatory mitigation project sites to ensure ecological performance standards are being met.

A. COMPENSATION PLANNING FRAMEWORK

All compensatory mitigation projects provided by MARS under the terms of this Instrument will comply with the Compensation Planning Framework described in Exhibit A of this Instrument. The Compensation Planning Framework in Exhibit A describes program elements designed to meet requirements of 33 CFR 332.8(c). The Compensation Planning Framework will be used to select, secure, and implement aquatic resource restoration, enhancement, and preservation activities.

A Compensation Planning Framework outlines a method for establishing priorities and identifying opportunities for resource restoration within designated Service Areas. Within the Compensation Planning Framework, MARS will use a watershed approach for establishing ILF compensatory mitigation projects in the state. This approach considers watershed needs, and how locations and types of compensatory mitigation projects address those needs. A landscape perspective is used to identify the types and locations of ILF compensatory mitigation projects that will benefit the watershed and offset losses of aquatic resource functions and services caused by activities authorized by Corps permits. This Compensatory Planning Framework considers landscape scale, historic and potential aquatic resource conditions, past and projected aquatic resource impacts in the watershed, and terrestrial connections between aquatic resources and key habitats.

The Compensation Planning Framework presented does not provide specific priorities and actions for all of Montana's 16 Service Areas. In this Statewide ILF Mitigation Program Instrument, the program Sponsor intentionally presents a framework for prioritization and planning based on general selection criteria in order to maximize flexibility of planning within each Service Area, and among Service Areas as appropriate, and to acknowledge the varied and dispersed nature of historic and anticipated mitigation requirements among Service Areas. A framework for ongoing prioritization and planning will allow MARS, in collaboration with the Corps and IRT, to address mitigation needs in the context of ever-evolving watershed conditions and restoration needs, as well as to integrate with other ongoing non-mitigation project planning and restoration activities.

Compensatory mitigation project planning under this ILF Instrument will be conducted according to the following general procedure, and further detailed in Exhibit A:

1. Upon sale of the first credits in a Service Area, MARS will complete Service Area mitigation planning consistent with the Compensation Planning Framework specific to the affected Service Area following the example presented in Exhibit A
2. Consider type, amount, and location of impacts to ecological functions relative to needs of sub-basin (4^{th} (8-digit) or 5^{th} (10-digit) level HUC) or Service Area identified in the Compensation Planning Framework.
3. Select compensatory mitigation project(s) that best meet needs of sub-basin and Service Area using a watershed approach, as defined in 33 CFR 332.2, and given existing and anticipated permitted impacts. Mitigation project plans will not be considered or approved by the Corps without prior submittal and review of the

Compensation Planning Framework for that Service Area.

Exhibit A also includes an example Compensation Planning Framework (CPF) for the Lower Yellowstone Service Area (Exhibit A, Part B). This CPF is provided as an example of the level of detail anticipated for all CPFs in other Service Areas according to the procedure outlined above.

B. MITIGATION PROJECT OPERATIONAL PHASES

Compensatory mitigation projects have two operational phases: the Establishment Phase in which the compensatory mitigation project is developed, constructed and actively managed until specific performance standards are met, and the Long-Term Management Phase in which the compensatory mitigation project is sufficiently mature to require only minimal active management after performance standards have been met.

1. Establishment Phase: The Establishment Phase of a particular compensatory mitigation project will commence upon MARS receiving Corps approval of the mitigation project plan and includes securing property and property protections, implementation of the physical and biological elements of the mitigation project, and meeting project performance standards. Prior to termination of the Establishment Phase of a compensatory mitigation project, the Corps may perform a final compliance inspection to certify that all performance standards associated with implementation have been achieved. Certification will occur upon MARS' receipt of a letter of "Project Closure Certification" issued by the Corps to MARS confirming that all advance credits associated with that project have been released, and confirming that MARS has fulfilled all compensatory mitigation project requirements for released credits. Termination of the Establishment Phase is conditioned upon Project Closure Certification.
2. Long-Term Management Phase: The Long-Term Management Phase of a particular compensatory mitigation project will commence upon the Corps determining, in consultation with the other members of the IRT and MARS, that:
    a. All applicable performance standards associated with implementation during the Establishment Phase for the project site prescribed in the approved mitigation project plan have been achieved;
    b. All advance credits for the Establishment Phase have been released;
    c. MARS has prepared a Long-Term Management Plan that has been approved by the Corps in consultation with the IRT;
    d. MARS has either: (1) assumed responsibilities for accomplishing the Long-Term Management Plan, in which case MARS will fulfill the role of long-term steward, or (2) has assigned those responsibilities to another long-term steward;
    e. The Long-Term Management Account has been funded as described in this Instrument;
    f. Appropriate moneys from the Long-Term Management Account have

been transferred to the Long-term steward, if applicable; and

g. MARS has complied with the terms of this Instrument.

C. MITIGATION CREDIT PRICING

Upon permit approval mitigation credit fees will be collected from permittees and deposited into the MARS ILF Program Account. Mitigation fees will fund the ILF Program Account and its constituent sub-accounts: Statewide Program Administration Account, Contingency Account, Long-Term Management Account, and Mitigation Account. Credit prices will reflect full-cost accounting to implement all aspects of planning, establishment and long-term management of compensatory mitigation projects undertaken by the Statewide ILF Mitigation Program. Mitigation fees will be apportioned to program accounts according to the following ratios:

Cost Category	**Percent of Fee**	**Elements of Credit Fee***
Mitigation Account	50%	All costs associated with implementation of mitigation projects, as described below in credit pricing formulas.
Contingency Account	20%	Unanticipated costs associated with planning or implementation of the mitigation project. Can be used as Financial Assurance.
Long-Term Management Account	15%	Adaptive management and remediation of mitigation site, including defense of protections and financial assurances. Can be used as Financial Assurance.
Program Administration Account	15%	Administration and management of the statewide ILF Program, including legal, accounting, and consulting fees.
Total Credit Price	**100%**	

* *Refer to Section IV.C – Program Account, for costs associated with each account*.

MARS will establish a price per unit of wetland mitigation credit and stream mitigation credit that will be sufficient to fund all accounts described in the Funding Provisions section of this document, including: Statewide Program Administration Account, Contingency Account, Long-Term Management Account, and Mitigation Account.

33 CFR 332.8(o)(5)(ii) (2008) states:

> For in-lieu fee programs, the cost per unit of credit must include the expected costs associated with the restoration, establishment, enhancement and/or preservation of aquatic resources in that Service Area. These costs must be

based on full cost accounting, and include, as appropriate, expenses such as land acquisition or protection, project planning and design, construction, plant materials, labor, legal fees, monitoring, and remediation or adaptive management activities, as well as administration of the in-lieu fee program.

The price of stream and wetland mitigation credits will be determined using one of the following formulas:

Formula 1 – for instances where a compensatory ***stream or wetland*** mitigation project plan has already been approved:

Credit Price = [M + (A + C + LT)] ÷ credits anticipated from project

Formula 2 – for instances where ***wetland*** mitigation credits are sold prior to an approved mitigation project plan within the Service Area:

Credit Price = [Rw+(A+C+LT)] ÷ *mm*

Formula 3 – for instances where ***stream*** mitigation credits are sold prior to an approved mitigation project plan:

Credit Price = [S(Rs)+(A+C+LT)] ÷ *mm*

Where:

- **M**= Mitigation project establishment cost (projected). This is the sum of all anticipated costs associated with establishment of the mitigation project, including but not necessarily limited to: project planning (identify project, project approval from Corps), land acquisition or other protection including all associated transaction costs and legal services, sufficient and appropriate water rights, design and permitting, preparation of bidding documents and contracting, project construction and implementation for all physical and biological improvement project elements (i.e., mobilization, materials, access and site remediation, labor and supervision), monitoring, and site maintenance. This cost represents 50% of the total credit price and corresponds to the portion of the credit fee transferred to the Mitigation Account (refer to *IV.C. ILF Program Account*).
- **(A+C+LT)** = Sum of mitigation expenses other than establishment costs (M). This cost represents 50% of the total credit price and is equal to establishment costs (M).
    - **A** = Statewide Program Administration Account cost (refer to *IV.C. ILF Program Account)*. This cost represents 15% of total credit price and is factored in the formula as 0.30 x Mitigation project establishment cost (M) or restoration cost (Rw or Rs).
    - **C** = Contingency Account cost (refer to *IV.C. ILF Program Account)*. This cost represents 20% of total credit price and is factored in the formula as 0.40 x Mitigation project establishment cost (M) or restoration cost (Rw or Rs).
    - **LT** = Long-Term Management cost (refer to *IV.C. ILF Program Account)*. This cost represents 15% of total credit price and is factored in the formula as 0.30 x Mitigation project establishment cost (M) or restoration cost (Rw or Rs).

- **Rw** = Wetland restoration cost/acre. Typical wetland restoration cost/acre in Montana, including planning, protection, design, and implementation and all other cost factors listed as Mitigation Account expenses. This cost is based on 2012 survey of 4 Montana restoration consulting firms with mitigation-related restoration expertise and representatives from Montana Fish, Wildlife and Parks Future Fisheries Improvement Program, Montana Department of Transportation, and U.S.D.A. Natural Resources Conservation Service (NRCS). Cost/acre may be scaled depending on number of credits sold (economies of scale), region in which a given project is proposed, anticipated additional credits sold (to pool for consolidated mitigation project), and specific type of mitigation that may be required.
- **Rs** = Stream restoration cost/foot. Typical stream restoration cost/foot in Montana, including planning, protection, design, and implementation and all other cost factors listed as Mitigation Account expenses. This cost is based on 2012 survey of 4 Montana consulting firms with mitigation-related restoration expertise and representatives from Montana Fish, Wildlife and Parks Future Fisheries Improvement Program, Montana Department of Transportation, and the NRCS. Costs will range depending on number of credits sold (economies of scale), anticipated additional credits sold (to pool for consolidated mitigation project), and specific type of mitigation that may be required.
- **S** = Stream order. Restoration and mitigation of larger streams is generally more expensive; stream order is used as a direct multiplier for mitigation requiring restoration of specific stream orders. Stream order multipliers will correspond to those defined in the Montana Stream Mitigation Procedure (2010). The maximum will be a multiplier of 4 for stream orders greater than 3. Stream order as a factor for estimating restoration costs has been evaluated through relation of restoration costs to stream order from a 2012 survey of 4 Montana consulting firms with mitigation-related restoration expertise and representatives from Montana Fish, Wildlife and Parks Future Fisheries Improvement Program, Montana Department of Transportation, and U.S.D.A. Natural Resources Conservation Service.
- ***mm*** = mitigation multiplier. The multiplier represents the number of credits typically generated per unit area of restoration conducted (acres of wetland or lineal foot of restored stream). The factor will typically be .67 for wetlands and 3 for streams. The multiplier for wetlands is the inverse of the 1.5:1 ratio for wetland restoration in the Montana Wetland Compensatory Ratios (2005). The multiplier for streams represents an assumed average ratio of credits generated per foot of stream restoration. This average value is based on results of running a number of restoration scenarios through the Montana Stream Mitigation Procedure calculators, which typically result in multiple credits per stream foot. This ‘mm’ factor is only necessary to estimate credits where an approved mitigation project has not yet been identified (Formulas 2 and 3). The multiplier can be adjusted to account for specific mitigation requirements or potential mitigation opportunities.

MARS will establish credit prices in the first years of operation based on best available information from other restoration, enhancement and preservation projects within each watershed conducted by other public, private and commercial ventures and using primarily Formulas 2 and 3, above. As specific mitigation opportunities are identified, MARS will review credit pricing annually to ensure fees are sufficient to cover all mitigation costs for each Service Area and to ensure the sustainability and

accountability of the Montana Statewide ILF Program. MARS may make credit pricing adjustments at the watershed, multi-watershed, or statewide level at MARS' discretion.

Credit prices may take into consideration economies of scale as a function of the number of credits sold to a given permittee, anticipated credit demand, and number of credits generated by a given mitigation project. Credit prices may also take into consideration opportunities for cost savings resulting from projects conducted at sites with minimal or no land acquisition or protection costs, such as on properties where protections already exist. In-kind permittee contributions to mitigation projects may include land or land protections or services that offset part of credit transaction costs. In-kind contributions may reduce credit transaction costs but will not reduce the price of credits. MARS will provide opportunity to the Corps to review changes in credit fees prices prior to credit transactions. The negotiation of credit prices with permittees is the sole province of MARS.

D. PERMITS

MARS will obtain all appropriate environmental documentation, permits and other authorizations needed to establish and maintain compensatory mitigation project sites. Compliance with this Instrument does not fulfill the requirement or substitute for such authorization.

E. MANAGEMENT OF ESTABLISHED MITIGATION PROJECTS

MARS will develop a Monitoring Plan and a Long-Term Management Plan, within each compensatory mitigation project plan, that specifies monitoring that will be conducted to evaluate performance standards and outlines adaptive management strategies and site maintenance and protection during and beyond the period of performance standards.

1. Monitoring

Monitoring will meet requirements outlined in the Final Rule. MARS is "responsible for monitoring the in-lieu fee project sites, in accordance with the approved monitoring requirements for each project, to determine the level of success and identify problems requiring remedial action or adaptive management measures. Monitoring must be conducted in accordance with the requirements in 33 CFR 332.6, and at time intervals appropriate for the particular project type. Additional monitoring requirements set forth in Appendix A of the Montana Stream Mitigation Procedures will be addressed. Monitoring will continue until such time that the District Engineer, in consultation with the IRT, has determined that the performance standards for the project have been attained." (33 CFR 332.8(q)(2)).

Performance monitoring will require qualitative and quantitative assessments of physical and biological characteristics of the project as appropriate, using appropriate analytical methods. The purpose of monitoring is to determine the level of compliance with established ecological performance standards specified in the approved mitigation project plan, which are intended to measure whether the requisite ecological lift is being created. The purpose of monitoring is also to identify problems requiring remedial action

or adaptive management measures. Where projects are conducted as partnerships or with additional non-mitigation funding, MARS will monitor the components of the project specifically developed to meet mitigation requirements and as specified in the mitigation project plan.

Monitored parameters will depend in large part on the type, scale and scope of a proposed project, but will generally include hydrologic conditions, vegetative cover, fish or wildlife usage, soil stability and presence/extent of noxious weeds and nuisance species in accordance with the ecological performance standards for a given site.

Monitoring requirements and specifications will vary among compensatory mitigation project sites and will be outlined in detail in the mitigation project plan for each compensatory mitigation project. The Corps, in consultation with the IRT, will have the opportunity to review and approve monitoring requirements during review of the mitigation project plans.

MARS will formulate a monitoring plan for each project that details the monitoring requirements for the compensatory mitigation project, including:

1. the parameters to be monitored,
2. the length of the monitoring period,
3. the party responsible for conducting the monitoring,
4. the frequency for submitting monitoring reports to the District Engineer, and
5. the party responsible for submitting those monitoring reports to the District Engineer. (33 CFR 332.6).

In general, MARS will provide annual monitoring reports for each project to the Corps and IRT in conjunction with annual credit reporting by March 31 of each year following the growing season (June 15 – August 31) until all performance standards have been achieved and associated credits released. Each report will be submitted in electronic format, and will contain the following:

1. Plans, maps, and/or photographs adequate to illustrate site conditions;
2. A narrative summarizing the condition of individual ILF projects;
3. Monitoring results with comparison to performance standards, and;
4. Recommendations for adaptive management at the site.

The monitoring duration may be extended beyond 5 years at the Corps' discretion in individual mitigation project plans or if performance standards have not been met within the specified monitoring time period. The District Engineer may also reduce or waive monitoring requirements upon determination that performance standards have been met.

MARS will provide for access to the project site to members of the IRT or their agents or designees at reasonable times as necessary to conduct inspections and compliance monitoring with respect to the requirements of this Instrument. Inspecting parties will not unreasonably disrupt or disturb activities on the property, and will provide written notice within reasonable time prior to the inspection.

2. Maintenance Provisions

ILF projects will be designed, to the maximum extent practicable, to be self-sustaining and to minimize maintenance needs once performance standards have been achieved. MARS will be responsible for maintaining ILF projects, consistent with the approved long-term management portion of the mitigation project plan, to ensure the project's long-term viability as functional aquatic resources. Maintenance may include weed control, replanting, fence maintenance and other such activities necessary to promote self-sustaining performance during initial years following implementation. Active maintenance practices will generally follow a minimum 5-year program, with maintenance actions triggered through adaptive management and as indicated by monitoring results. Projects requiring phased installation may specify maintenance and monitoring measures that promote the phased approach.

Due to the variability of projects at mitigation receiving sites, implementation and maintenance plans for each compensatory mitigation project will be developed on a case-by-case basis (and reviewed and approved by the IRT). Site maintenance beyond the project performance period will be performed by the property owner or the long-term steward, depending on the specific provisions for long-term stewardship. MARS will retain such responsibility unless and until the long-term project responsibility is formally transferred to a long-term steward approved by the Corps (see Ownership and Long-Term Management).

3. Adaptive Management and Contingencies Planning

Each mitigation project long-term management plan will include an adaptive management plan component. Adaptive management is defined in the federal rule as a "management strategy to address unforeseen changes in site conditions or other components of the compensatory mitigation project, including the party or parties responsible for implementing adaptive management measures. The adaptive management plan will guide decisions for revising compensatory mitigation project plans and implementing measures to address both foreseeable and unforeseen circumstances that adversely affect compensatory mitigation success." (33 CFR 332.4(c)(12)). Adaptive management plan components of long-term management plans will necessarily lack specific measures to address underperformance, since the type of underperformance will not be known at the time the mitigation project plan is developed. Specific corrective measures will be developed if and when underperformance details become clear. Any and all adaptive management measures will be appended to the mitigation project plan. The IRT will review and comment on any additions or amendments to mitigation project plans. Contingency funds, incorporated into the credit fees and held in reserve in a separate account (see *Section IV.C ILF Program Account*), will defray the cost of developing and implementing adaptive management actions.

Section 33 CFR §332.7(c) (2008) provides further guidance on adaptive management of compensatory mitigation projects:

> If monitoring or other information indicates that the compensatory

mitigation project is not progressing towards meeting its performance standards as anticipated, the responsible party must notify the District Engineer as soon as possible. The District Engineer will evaluate and pursue measures to address deficiencies in the compensatory mitigation project. The District Engineer will consider whether providing ecological benefits comparable to the original objectives of the compensatory mitigation project.

The District Engineer, in consultation with the responsible party (and other federal, tribal, state, and local agencies, as appropriate), will determine the appropriate measures. The measures may include site modifications, design changes, revisions to maintenance requirements, and revised monitoring requirements. The measures must be designed to ensure that the modified compensatory mitigation project provides aquatic resource functions comparable to those described in the mitigation project plan objectives.

Performance standards may be revised in accordance with adaptive management to account for measures taken to address deficiencies in the compensatory mitigation project. Performance standards may also be revised to reflect changes in management strategies and objectives if the new standards provide for ecological benefits that are comparable or superior to the approved compensatory mitigation project. No other revisions to performance standards will be allowed except in the case of natural disasters.

Once approved by the Corps and IRT, the revised project elements identified in the adaptive management plan will be implemented, and will be appended to the approved mitigation project plan. Ecological performance standards, monitoring requirements and schedule, and credit release schedule will be amended accordingly to incorporate the terms of the project as revised in the adaptive management plan.

If monitoring indicates the need for significant modification of a compensatory mitigation project as part of adaptive management, the responsible party must get approval from the Corps. A streamlined review process is available (see 33 CFR 332.8(g)(2)).

If the failure is substantial and would be difficult or impossible to correct on-site (e.g., landscape conditions change such that hydrology is insufficient to support a wetland), MARS will, in consultation with the Corps and IRT, evaluate whether the project should be abandoned altogether in favor of pursuing alternate contingency measures, such as a new project. A failure of a project (in whole or in part) is considered “default”, in which case default provisions in this instrument would apply.

4. Noncompliance and Default

Noncompliance includes performance failure and delinquency. Before a compensatory mitigation project is found to be in default, the Corps, in consultation with the IRT and Sponsor, will seek to address the causes of noncompliance. Corrective measures

available to the Corps should be commensurate with the scale at which noncompliance occurs. Such measures will ensure that mitigation fees collected from project applicants ultimately result in sufficient compensatory mitigation to offset the original impacts. Phases of compensatory mitigation project noncompliance include: (1) performance failure, (2) project delinquency (3) project default.

1. Performance failure. Performance failure may occur if, for any reason, a compensatory mitigation project fails to comply with terms of an approved mitigation project plan, including failure to meet performance standards after a project is completed. If monitoring reveals a performance failure, MARS, the Corps and the IRT will first attempt to address the failure through adaptive management. If adaptive management efforts are successful, no further responses to project performance failure will be necessary.
2. Project delinquency. Project delinquency occurs when adaptive management measures are not undertaken by MARS or if MARS fails to adequately implement adaptive management measures in response to performance failure. When site delinquency occurs, the Corps may notify MARS in writing identifying areas of delinquency and requesting MARS to propose, within 60 days from the date of receipt of that notice, corrective measures or a process for determining corrective measures. The IRT will advise the Corps on whether or not to authorize MARS to implement the proposed corrective measures. The Corps may provide a timeline for and authorize implementation of proposed corrective measures or request revisions. If corrective measures are implemented successfully, no further responses to site delinquency will be necessary.
3. Project Default. The Corps may determine a project default if corrective measures following a delinquency notice are unsuccessful or if MARS fails to comply with terms of the corrective actions specified in project delinquency notification. The Corps will notify MARS of project default by letter. Where the Corps determines that MARS is in default, the Corps may take appropriate action, including but not limited to: suspending sale of advance credits, requiring adaptive management measures, decreasing available advance credits, directing financial assurances or contingency funds to provide alternative mitigation, taking enforcement actions, or terminating the Instrument. Should MARS fail to correct the reasons for default according to and within the time period specified in the default notification, the Corps following consultation with the IRT may terminate the Instrument and any subsequent ILF Program operations.

5. Force Majeure

Any delay or failure of MARS to comply with the terms of this Instrument will not constitute a default if and to the extent that such delay or failure is primarily caused by any *Force Majeure* or other conditions beyond MARS' reasonable control that significantly, adversely affect its ability to perform its obligations hereunder. The Corps retains sole discretion over the final determination of whether an act or event constitutes *Force Majeure*, whether significant adverse impacts to a compensatory mitigation project have occurred, to what extent changes to a compensatory mitigation project will

be permitted, and corrective measures that may be employed. *Force Majeure* events include natural or human-caused catastrophic events or deliberate and unlawful acts by third parties.

1. Examples of a natural catastrophic event include, but are not limited to: flood, drought, lightning, earthquake, wildfire, landslide, disease or regional pest infestation, effects of climate change on habitat or hydrology.
2. Examples of a human-caused catastrophic event include, but are not limited to substantial damage resulting from: war, insurrection, riot or other civil disorders, spill of a hazardous or toxic substance, or fire.
3. Examples of a deliberate and unlawful act include, but are not limited to substantial damage resulting from the following: the dumping of a hazardous or toxic substance, the illegal diversion of water from a project area, or significant acts of vandalism or arson.

Other conditions beyond MARS' control will include: interference by third parties; condemnation or taking by any governmental body; change in applicable law, regulation, rule, ordinance, or permit condition, or the interpretation or enforcement thereof; any order, judgment, action or determination of any federal, state or local court, administrative agency or governmental body; and/or suspension or interruption of any permit, license, consent, authorization or approval. MARS will provide written notice to the District Engineer and IRT if the performance of any of the ILF projects are affected by any such event as soon as it is reasonably practical.

MARS will not be deemed to be in noncompliance or default due to unavoidable delays when delays to implementation or action are due to the IRT decision-making process including review and approval of mitigation actions, or to events categorized by the Corps in its sole discretion under the *Force Majeure* provision above.

6. ILF Mitigation Project Closure

Upon satisfaction of requirements and performance standards for any compensatory mitigation project under this Instrument, the Corps will certify, following consultation with MARS and the IRT, that the Establishment Phase and monitoring period component of the Long-Term Management Phase of a compensatory mitigation project has concluded, that credits associated with the establishment of the site have been released, and that the long-term management plan has been approved. Certification will occur upon MARS' receipt of a letter of "Project Closure Certification" issued by the Corps to MARS confirming that all advance credits have been released, and indicating that MARS has fulfilled all compensatory mitigation project requirements for released credits.

MARS may request that part of or an entire ILF project be closed early if it is determined that the performance standards are unattainable or it is otherwise in MARS' interest. The Corps will decide whether to grant such requests. In the event that credits were released prior to the early closure, MARS will remain responsible for fulfilling all obligations consistent with this Instrument and conditioned upon the number of advance

credits sold.

7. Ownership and Long-Term Management

Upon entering the Long-Term Management Phase of a compensatory mitigation project, MARS will be responsible for ensuring long-term protection of each ILF project in accordance with an approved Long-Term Management Plan. All real property on which compensatory mitigation projects are implemented will be either (1) subject to deed restrictions or a conservation easement granted to or purchased by MARS or other land trust or public entity by a landowner that restricts management to uses consistent with this Program. All restrictive covenants or conservation easements will be permanent in duration, must be approved by the IRT and provided to the Corps, and must be recorded with the deed in the county office of the appropriate county seat prior to the release of any credits; (2) owned in fee simple by MARS and subject to a restrictive covenant established by MARS and approved by the Corps/IRT limiting management to uses consistent with this Program or similarly restricted by a conservation easement granted by MARS to a separate party; or (3) in the case of publicly owned lands, subject to a long-term management plan or agreement between the Corps, MARS, and the administering agency and developed in cooperation with the administering agency. Properties with existing conservation easements or equivalent protections as well as lands held by state, federal, tribal, or other entities in the public trust present opportunities to optimize mitigation and conservation on a watershed.

Conservation easements will be held by entities such as federal, tribal, other state or local resource agencies, or non-profit conservation organizations, including MARS. The protection mechanism will assign long-term stewardship roles and responsibility for the project and will prohibit incompatible uses that might otherwise jeopardize the requirements of the ILF compensatory mitigation project. Copies of such recorded instruments will be sent to the Corps and become part of the official project record. Each protection instrument will contain a provision requiring notification to MARS and the District Engineer if any action is taken to void or modify it.

On publicly-owned property, long-term protection may be provided through facility management plans or integrated natural resource plans or conservation land use agreements. On privately held property, including property or easements held by conservation organizations or MARS, real estate instruments will be recorded. MARS will ensure that such protection mechanisms are in place prior to credit release, as stipulated in each mitigation project plan. Financial assurances for long-term management and protection will be provided by a combination of remaining Contingency Account funds and Long-Term Management Account funds. Copies of such recorded instruments on both publicly owned or privately owned property will be sent to the Corps and become part of the official project record.

MARS will remain responsible for complying with the provisions of this Instrument throughout the operational life of the Statewide ILF Program, regardless of the ownership status of the underlying real property where compensatory mitigation projects are located, unless those responsibilities have been assigned with IRT and Corps

approval. Although MARS is not required to do so, it may transfer ownership of all or a portion of a compensatory mitigation project site's real property interest to another party, provided the Corps, following consultation with the other members of the IRT, expressly approves the transfer in writing. MARS will provide no less than 60 days' written notice to the IRT of any transfer of fee title or any portion of MARS' real property interest to another party.

MARS may transfer its long-term management responsibility to a separate party assignee, which will then serve as long-term steward in place of MARS. The assignee may be a public agency, a land steward entity, or a non-governmental organization with such designated capacities. The identity of the assignee and the terms of the long-term management and maintenance agreement between MARS and the assignee must be approved by the Corps in consultation with the IRT, in advance of assignment. The Corps will retain the option of becoming a signatory to any contract or other arrangement assigning rights and delegating the responsibilities to the steward.

Upon execution of a long-term management assignment agreement and the transfer of the funds designated for the compensatory mitigation project in the Long-Term Management Account, and upon satisfaction of the remaining requirements for termination of the establishment phase of the compensatory mitigation project, MARS will be relieved of all further long-term management responsibilities under this Instrument which are associated with the site for which responsibilities have been transferred.

Regardless of the legal mechanism protecting the compensatory mitigation project site, MARS will be responsible for long-term management of the site unless or until responsibility is assigned to another party. The long-term management strategy will include the following components:

1. Specific needs for long-term success of the project including a general discussion of watershed benefits and site history will be considered. Generally, the long-term management strategy for a project will emphasize long-term and self-sustaining processes that produce and maintain aquatic resource benefits.

2. Each compensatory mitigation project will meet the Corps' long-term protection requirements. Agreements will require that project sites be protected from adverse future land uses with a permanent conservation easement, deed restriction, or other appropriate legal mechanism. For each project, MARS will submit a proposal for a specific permanent protection mechanism to the Corps and the IRT for review and approval prior to release of credits. Enactment of protection may serve as the basis for release of advance credits as identified in the credit release schedule.

3. Compensatory mitigation projects may be conducted by MARS on lands protected by easements held by a separate land trust entity. MARS may either continue to assume responsibility for long-term management or delegate monitoring and/or management responsibilities to that land owner or easement

holder entity. However, it may be most advantageous or necessary to transfer responsibility for long-term management to a separate party; e.g. where property owners request that a single entity hold the easement and provide long-term management. Where long-term management becomes the responsibility of a separate party, a Stewardship Management Agreement may be presented to the Corps' for approval that describes how the separate party will implement the strategy. In either case, the responsible party will maintain long-term management funds sufficient to ensure long-term protection of the site.

4. Monitoring of compensatory mitigation project sites in general will be required for a five-year period. The Corps' may, at its discretion, authorize shorter or require longer periods of monitoring to ensure performance standards are met.

5. The Mitigation Program account includes a contingency account and Long-Term Management Account. These accounts will be held by MARS except where responsibility for long-term management has been transferred to a separate party.

F. RESPONSIBILITIES OF THE CORPS AND IRT

In approving this Statewide ILF Program Instrument, the Corps and IRT agree to oversee and encourage MARS in administering the program in good faith and under the terms of the Final Rule. Specifically,

A. The Corps agrees to provide appropriate oversight in carrying out their responsibilities under the provisions of this Instrument.

B. The Corps agrees to review and provide comments on project plans, monitoring reports, contingency and remediation proposals, and similar submittals from the Sponsor in a timely manner. The Corps will coordinate its review with the members of the IRT.

C. The Corps agrees to review requests to modify the terms of this Instrument, to determine achievement of performance standards in order to evaluate the award of credits, and to approve compensatory mitigation project plans. The Corps will coordinate review with the members of the IRT so that a decision is rendered or comments detailing deficiencies are provided in a timely manner. The Corps agrees to not unreasonably withhold or delay action on such requests.

D. The Corps agrees to act in good faith when rendering decisions about acceptability of financial assurances, requiring corrective or remedial actions, requiring long-term management and maintenance actions, and releasing credits. The Corps will exercise good judgment in directing the development, approval, and implementation of plans that may necessitate accessing financial assurances, and only to the extent they reasonably and in good faith conclude that such remedial or corrective actions are an effective and efficient expenditure of resources. The Corps will act in good faith in determining the scope and nature of corrective actions to be undertaken, will act in good faith in conducting monitoring, developing reports, and assessing compliance with performance

standards; and will not unreasonably limit options available as corrective action activities or otherwise apply their discretion so as to unduly prejudice the Sponsor regarding the timing or number of credits released. Approval by the Corps of the identity of any assignee responsible for executing the Long-Term Management Plan, and approval of the terms of any long-term management assignment agreement, will not be unreasonably withheld.

E. The Corps will inspect the compensatory mitigation project sites as necessary to evaluate, in consultation with other members of the IRT, the achievement of performance standards, to assess the results of any corrective measures taken, to monitor implementation of Long-Term Management Plans, and, in general, to verify the Sponsor's compliance with the provisions of this Instrument.

F. Upon satisfaction of the requirements for any compensatory mitigation project phase under this Instrument, the Corps will determine the number of credits released and certified according to performance standards for the approved compensatory mitigation project and will certify that the establishment period of a compensatory mitigation project has concluded and that the site has entered the long-term management phase. Certification of the completion of the establishment phase will occur upon the Sponsor's receipt of a letter of "Project Closure Certification" issued by the Corps to the Sponsor confirming that all credits are released.

VI. CREDIT TRANSACTIONS

The standard unit of measure used in in-lieu fee mitigation programs and mitigation banking to quantify an impact is a 'debit'; restoration, enhancement and preservation at a compensatory mitigation project is measured in 'credits'. Generally, the determination of debits at a permit site and credits at a compensatory mitigation project in Montana are governed by existing Corps procedures specific to compensatory mitigation in the State of Montana. The Corps has established specific and separate procedures for the determination of debits and credits for wetlands and for streams. Determination of debits and credits for the purpose of providing compensatory mitigation under this Instrument will be conducted using the following specific procedures and provided in Exhibit C:

1. Wetland Mitigation: Wetland Compensatory Mitigation Ratios, 2005
2. Stream Mitigation: Montana Stream Mitigation Procedure, 2010.

Unless otherwise specified in a specific compensatory mitigation project plan and until updated procedures are published by the Corps, mitigation credits will be determined and counted using the previously listed procedures. While mitigation ratios are generally accounted for in establishing credits achieved, the Corps may, at their discretion and according to the relevant terms of the federal rule, require credit to debit mitigation ratios greater than one to one where necessary to account for the method of compensatory mitigation (e.g., restoration or preservation), the timing of mitigation relative to permitted actions, or other differences between impacts at the permit site and benefits or lift at the compensatory mitigation project.

A. GENERATION OF CREDITS

The number of credits resulting from an approved compensatory mitigation project will be specified in each compensatory mitigation project plan and will be determined using Wetland Mitigation and Stream Mitigation Procedures established by the Corps and referenced above or by other appropriate means as mutually agreed on by the Corps and MARS for specific compensatory mitigation projects. Generation of credits from approved mitigation projects will be based on federal regulations in accordance with 33 CFR Part 332, Compensatory Mitigation for Losses of Aquatic Resources. The District Engineer, in consultation with the IRT, will determine the number of credits generated by each compensatory mitigation project based upon the approved design and the resulting performance standards achieved, in accordance with the terms and conditions contained herein.

This instrument recognizes three types of credits described below.

> *Advance credits*: Advance credits are those issued to the ILF program and "available for sale prior to being fulfilled in accordance with an approved compensatory mitigation project plan" (33 CFR Part 332.2, Definitions).

Released credits: Released credits are those "*released* as milestones specified in the credit release schedule are achieved" and are available "for fulfillment of advance credit sales" (33 CFR Part 332.2, Definitions).

Certified credits: Certified credits are those achieved by ILF mitigation projects that exceed those necessary to satisfy established performance standards and to release all outstanding advance credits. Certified credits may be banked for future sale.

Advance credits identified in this instrument or certified credits from a certified mitigation project may be sold to any private or public sector individual, organization, agency, or entity seeking mitigation credits as authorized by the ILF Instrument within any Service Area. The number and type of credits and their application for activities authorized by Corps permits will be at the discretion of the Corps. Upon sale of advance credits, MARS becomes responsible for meeting the mitigation requirements identified in the approved mitigation project plan. When advance credits are fulfilled through credits generated from mitigation projects in the service area, "an equal number of new advance credits is restored to the program sponsor for sale or transfer to permit applicants" (33 CFR Part 332.2, Definitions).

Mitigation credits will not be available from restoration projects in existence prior to acceptance of this Instrument or otherwise conducted outside of the Statewide ILF Program. However, MARS anticipates that mitigation fees may be directed to supplement other programs and projects with consistent restoration, enhancement, or preservation objectives. The federal rule states: "However, compensatory mitigation credits may be generated by activities undertaken in conjunction with, but supplemental to, such programs in order to maximize the overall ecological benefits of the restoration or conservation project." 33 CFR §332.3(j)(2) (2008).

Where mitigation is conducted through collaborative projects, MARS may only claim mitigation credit proportional to the funding amount it provided to the 'complete project', including cash and in-kind contributions. A 'complete project' is defined as one that is ecologically self-sustaining with minimal maintenance, and may include the cost of restoring, enhancing, and/or preserving riparian and upland buffer areas if they contribute to the functionality of the site. If a compensatory mitigation project site requires additional means to ensure protection from adverse future land uses, MARS may include costs associated with acquisition of land, easements, or equivalent mechanisms as contributing to the cost of the project.

ILF projects that are eligible for collaborative funding from multiple sources are encouraged under the ILF Program. Credits will be based solely on aquatic resource functions provided as a result of the mitigation project plan, supplemental to and over and above those provided by collaborative funding from other programs. The Corps, in consultation with the IRT, will determine the amount of mitigation credit available to MARS for collaboratively funded projects, based primarily on the proportion of ILF Program Account disbursements relative to the complete project cost. Credit apportionment may be modified by the Corps and IRT if, after a collaboratively funded

project is completed, an audit indicates that MARS' actual financial contribution was substantially more or less than anticipated.

B. ADVANCE CREDITS

Advance credits will be issued to MARS and available for sale as mitigation credits in accordance with this Instrument and all applicable requirements for permits issued under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. The federal rule defines *advance credits* as "any credits that are available for sale prior to being fulfilled in accordance with an approved compensatory mitigation project plan." (33 CFR Part 332.2). MARS requests and the Corps agrees to grant advance credits for sale to permittees causing unavoidable impacts.

This instrument authorizes MARS to sell advance credits to permittees undertaking permitted actions to meet their compensatory mitigation requirements, provided these advance credits have been issued for the Service Area in which the permittee impact site is located. This Instrument establishes the number of advance wetland mitigation credits and stream mitigation credits available for sale (Table 2). In anticipation of variable credit demand among Service Areas, MARS proposes a two-tiered advance credit schedule among Service Areas:

- *Moderate credit demand* is anticipated in primarily rural, agricultural watersheds with potential for significant infrastructure maintenance and development impacts (utility crossings, highway development) and where jurisdictional water resources may be inherently limited. The number of advance credits proposed for moderate credit demand is 25,000 stream credits and 20 wetland credits per Service Area with moderate credit demand.
- *High credit demand* is anticipated in developing or urbanizing regions or where significant transportation infrastructure maintenance or development may occur and where jurisdictional water resources may be inherently more common. The number of advance credits proposed in high potential credit demand Service Areas is 50,000 stream credits and 40 wetland credits per Service Area.

The classification of certain Service Areas as having higher potential credit demand was determined by considering three primary factors related to impacts resulting from permitted actions: 1) *Development* – impacts resulting from development associated with population growth rates by county within Service Areas or with anticipated energy development and associated pipe and transmission lines; 2) *Transportation* - dominant transportation corridors including primarily state and federal highways and railroads, particularly those following major river courses; and 3) *Flood* – primarily the Musselshell watershed that experienced devastating and ubiquitous flood damages to agricultural and transportation infrastructure. Those watershed Service Areas that have experienced relatively rapid growth or which contain significant transportation infrastructure corridors are considered to present higher permit demand and associated mitigation requirements. For these, we used a factor of 2x relative to the base level

(moderate demand) number of advance credits. Table 2 indicates the primary impetus for designation of each high credit demand service area.

Table 2. Advance credits issued with the Instrument for each Service Area.

Watershed District No.	Service Area	Credit Demand Factors Present	Wetland Credits	Stream Credits
1	Kootenai		20	25,000
2	Upper Clark Fork	Development, Transportation	40	50,000
3	Lower Clark Fork	Transportation	40	50,000
4	Flathead	Development, Transportation	40	50,000
5	St. Mary		20	25,000
6	Upper Missouri	Development, Transportation	40	50,000
7	Missouri-Sun-Smith		20	25,000
8	Marias		20	25,000
9	Middle Missouri		20	25,000
10	Musselshell	Flood	40	50,000
11	Milk		20	25,000
12	Lower Missouri		20	25,000
13	Upper Yellowstone	Development, Transportation	40	50,000
14	Middle Yellowstone	Development, Transportation	40	50,000
15	Lower Yellowstone	Transportation	40	50,000
16	Little Missouri	Development (Energy)	40	25,000

To derive the number of advance credits for Service Areas presented in Table 2, MARS considered the average extent of impact (1,275 feet for streams and 6.8 acres for wetlands) from Corps Individual Permits, and the extent of impact from the largest single non-restoration project (17,500' for streams and 46.9 acres for wetlands) resulting from Corps Individual and Nationwide Permits over a 10-year period (Audubon 2004, and FOIA data request 2012). MARS estimated credits necessary to mitigate those impacts assuming an extent of impact to resulting debit ratio of 1:3 for streams and a ratio of 1:1.5 for wetlands. Using these ratios, an average permitted impact will require approximately 3,825 stream credits or 10 wetland acre credits of mitigation; the maximum permitted impact would require roughly 52,000 stream credits or 70 wetland credits for mitigation (Table 3). The proposed advance credit numbers are intermediate between the average and maximum permitted extent of impact for a single permit in a moderate credit demand Service Area. Records of requirements for compensatory mitigation of streams are not as robust as for wetlands and so present greater uncertainty in anticipating future credit demand. Additionally, MARS anticipates that effective stream restoration will require capitalization at the level represented by a theoretical example, provided below, as a minimum.

Table 3. Capital Cost Basis and Average and Max Permit Basis for estimating credit demand in moderate credit demand and high credit demand Service Areas.

Estimated and Proposed Credit Demand					
	Capital Cost Basis	**Average and Max Permit Basis**		**Advance Credits Proposed**	
		Average	Maximum	Moderate Credit Demand	High Credit Demand
Stream Credits	25,000	3,825	52,000	25,000	50,000
Wetland Credits	20	10	70	20	40

Capital Cost Basis refers to the number of credits generated from a mitigation project of sufficient size to create efficiency of scale in project development. "Average" and "Max Permit BasIs" refer to estimated credit requirements from a single permitted project in a Service Area.

In addition to considering the number of advance credits that may be necessary to meet credit demand for a single permit, MARS must also consider economies of scale and a minimum number of credit sales necessary to fund a typical mitigation project. The number of advance stream and wetland credits for each Service Area presented for moderate credit demand Service Areas (Table 2) is considered adequate to capitalize

stream and wetland mitigation/restoration projects in the appropriate watershed context. The number of advance credits requested for moderate credit demand is based primarily on the following examples of theoretical mitigation projects that are of sufficient scale to achieve efficiencies through economies of scale:

- Stream mitigation project example. 5,000 feet of stream restoration and bank revegetation with fenced and restored riparian buffers on both sides of the stream. The ratio of lineal feet of stream restoration to resultant stream credits is approximately 1:3 (15,000 credits), and for riparian mitigation is approximately 1:2 (~10,000 credits), for a total of ~25,000 credits (see Table 4, the Montana Stream Mitigation Procedure calculator worksheet using this project example).
- Wetland mitigation project example. 30 acres of wetland restoration. The ratio of acres of restored mitigation wetland to resultant wetland credits is 1.5:1, for a total of ~20 credits, as determined from the Montana Wetland Compensatory Mitigation Ratios (2005).

As advance credits are sold, the number of remaining advance credits available to MARS to sell diminishes until these sold advance credits are fulfilled and replenished by credits generated from projects in the watershed meeting performance measures or milestones. As projects implemented by MARS meet milestones or performance standards defined in the mitigation project plan, the Corps will release credits from the project sites according to the credit release schedule (next section). The Corps may then issue new advance credits to replenish the number allocated to MARS for sale to applicants according to this Instrument. The total number of advance credits available for sale or transfer will not exceed the number granted in this Instrument for each Service Area. However, MARS may request additional advance credits in excess of the number granted in this instrument. The Corps may approve additional advance credits as described in the Instrument modification procedures outlined in 33 CFR 332.8(g).

Table 4. Credit calculation for example typical stream mitigation project.

Project example from Draft Instrument:• 5,000 feet of stream restoration and bank revegetation with fenced and restored riparian buffers on both sides of the stream					
Stream Mitigation Table					
Factors	**Mitigation Reach 1**	**Mitigation Reach 2**	**Mitigation Reach 3**	**Mitigation Reach 4**	**Mitigation Reach 5**
Net Improvement	2.5	0	0	0	0
Stream Status	0.05	0	0	0	0
Type of Protection	0.15	0	0	0	0
Mitigation Timing	0	0	0	0	0
Comparative Stream Order	0.2	0	0	0	0
Location	0.1	0	0	0	0
Sum of Factors (SF_m)	3	0	0	0	0
Linear Feet (LF_m)	5000	0	0	0	0
SF_m x LF_m	15,000.0	0.0	0.0	0.0	0.0
Total Stream Credits = Σ (SF_m x LF_m) =					**15,000.0**
Riparian Mitigation Credit Table					
Factors		**Mitigation Reach 1**	**Mitigation Reach 2**	**Mitigation Reach 3**	**Mitigation Reach 4**
Net Improvement	Stream Side A	0.5	0	0	0
Net Improvement	Stream Side B	0.5	0	0	0
Type of Protection		0.15	0	0	0
Mitigation Timing		0	0	0	0
Comparative Stream Order		0.2	0	0	0
Location		0.1	0	0	0
Sum of Factors (SF_m)		1.45	0	0	0
Linear Feet (LF_m)		5000	0	0	0
Reach Multiplier (RM)		1.25	0	0	0
SF_m x LF_m X RM		9,062.5	0.0	0.0	0.0
Total Riparian Credits = Σ (SF_m x LF_m X RM) =					**9,062.5**
Assumptions:	substantial net improvement				
	tertiary waters (p. 18 in protocol)				
	3x buffer width				
	33-60% to be restored				
	left and right side equal				
	conservation easement protection				
	Schedule 5 timing				
	same order				
	off-site				

C. CREDIT RELEASE

Advance credits will be released from the project site once the debited advance credits in a given service area have been fulfilled in accordance with an approved mitigation project plan and credit release schedule. Credit release schedules and associated project milestones may vary by project and will vary among restoration, enhancement, and preservation projects. Credit release schedules will generally provide for release of a percentage of total credits anticipated from a mitigation project for achieving project milestones defined in the mitigation plan, including: approval of a mitigation plan, securing property, establishment of permanent protection of property, completion of physical and biological improvements, and achieving performance standards.

Approved mitigation plans emphasizing restoration will generally cap at 30% the release of credits for project milestones achieved prior to meeting performance standards, including mitigation plan approval, securing and protecting property, and completing physical and biological improvements. The remaining 70% of credits will be released as performance standards are met. An example of a typical credit release schedule might include:

- 20% of credits released upon approval of a mitigation project plan and establishment of permanent protections placed on real property at the compensatory mitigation project site.
- 10% of credits released upon completion of physical and biological improvements at the mitigation site.
- 60% of credits released incrementally as performance standards are achieved.
- 10% or credits released upon approval of the long-term management and protection plan and associated funding mechanisms.

MARS anticipates that there may be mitigation projects where mitigation project plans emphasize preservation as approved mitigation. In such cases, a typical release schedule might include:

- 75% of credits may be released at the signing of the site protection documents and completion of physical and biological improvements.
- Remaining 25% of credits may be released once associated performance standards (e.g. fencing or other physical improvements required in the mitigation plan to enforce preservation) have been achieved.

MARS will complete the establishment phase of a mitigation project within a given service area, including physical and biological elements of a mitigation project, by the end of the third full growing season (June 15 - August 31) after a sale of credits is completed within a given Service Area. The District Engineer may lengthen or shorten this timeframe at the time of the sale of advance credits if specific Service Area circumstances warrant the change. If MARS fails to meet the established timeline for project establishment, the District Engineer must either make a determination that more

time is needed to plan and implement an in-lieu fee project or direct MARS to disperse funds from the Program Account to provide alternative compensatory mitigation, including mitigation sites in other watersheds, to fulfill those compensation obligations.

The actual number of credits available for consideration to be released at any given point in the development of an ILF project will be determined through site monitoring and reporting. Because there is some degree of uncertainty about how many credits will ultimately be realized as performance standards are met, there is the potential for a given mitigation project to generate a greater number of credits than proposed in the mitigation project plan. Additional certified credits, that is those that exceed advance credits released, are contingent on exceeding performance standards and may be certified at the Corps' discretion. Where additional credits are achieved beyond those specified in the mitigation project plan, MARS may request that these credits be banked as certified credits for sale or transfer.

If mitigation activities cannot be implemented in accordance with an approved compensatory mitigation project plan, the Corps must consult with MARS and the IRT to consider modifications to the site mitigation project plan, including adaptive management, revisions to the credit release schedule, and alternatives for providing compensatory mitigation to satisfy any credits that have already been sold. Once implemented, if the ILF project does not then achieve its performance-based milestones, the Corps may modify the credit release schedule, including reducing the number of credits, according to procedures described in the federal rule (See 33 CFR 332.8(o)(8)(iii)).

D. SALE OF CREDITS

All activities regulated under Section 10 of the Rivers and Harbors Act, Section 404 of the Clean Water Act and other activities as the Corps may authorize consistent with this Instrument may be eligible to use the ILF Program as compensatory mitigation for unavoidable impacts. Credits purchased may only be used in conjunction with a Corps permit authorization, resolution of an unauthorized activity, or in conjunction with other actions as the Corps may authorize. The District Engineer will make decisions about the appropriate compensatory mitigation on a permit case-by-case basis, during evaluation of a Corps permit application. Authority for approving use of the ILF Program for compensatory mitigation lies with the District Engineer.

The responsibility to provide compensatory mitigation remains with the applicant/permittee unless and until credits are purchased from the ILF Program. Upon Corps approval of purchase of credits from the ILF Program, the permittee may contact MARS to secure the necessary amount and resource type of credits, as outlined in Corps permit conditions. Each Section 404 authorization that includes a special condition allowing purchase of credits from the ILF Program will include a requirement that MARS certify the transfer of responsibility via a Statement of Sale of Credit letter to the permittee and the Corps (Exhibit D). Certifications will outline the Corps permit number and state the number and resource type of credits that have been sold to the

permittee. A copy of each certificate will be retained in the administrative and accounting records for the ILF Program Instrument. Debits will be reflected in annual accounting reports as outlined in *Section VII*.

E. CREDIT ACCOUNTING

MARS seeks to achieve a net gain in ecological functions through mitigation actions within each Service Area through its Statewide ILF mitigation program. At a minimum the program must achieve no net loss of aquatic ecological function in a watershed context. Through its ILF program, MARS seeks to balance objectives of no net loss for each wetland and stream type through a watershed approach that may emphasize restoration or preservation of certain aquatic types or functions that differ from types or functions impacted by permitted actions. In order to track the balance of gains and impacts, MARS will establish credit accounting that records impacts from permitted actions and lift from compensatory mitigation projects according to wetland and stream type. MARS will use Corps' established Montana wetlands and stream mitigation procedures (Exhibit C) as the basis for maintaining a credit ledger of debits from permitted actions and credits generated from mitigation actions, unless other appropriate means for measuring credits are mutually agreed on by the Corps and MARS for specific compensatory mitigation projects.

MARS will be responsible for taking the following steps to ensure functional losses are mitigated through implementation of projects that achieve equivalent or greater functional gains within each Service Area:

1. When a mitigation credit is sold to offset an unavoidable impact in a given Service Area, MARS will record the debits of each wetland or stream impacted as a result of the permitted action, as determined by the Corps.
2. MARS will apply the Compensation Planning Framework and consider specific debits to be mitigated in the Service Area and strive to design and implement projects that fully compensate for functional losses using a watershed approach.
3. MARS will quantify and record the functional credit types "gained" through implementation of a compensatory mitigation project.

F. CREDIT LEDGER

For each Service Area MARS will maintain a Credit Ledger to account for all credit transactions including issuance of advance credits to MARS, the sale of advance or certified credits to permit applicants, the release of advance credits, and the certification of additional credits. The Credit Ledger template is shown in Exhibit E.

MARS will compile an annual Credit Ledger report for the District Engineer that will include the beginning and ending balance of advance, released, and certified credits, permitted impacts by resource type for which the ILF program will offset compensatory mitigation requirements, all additions and subtractions of credits and any other changes in credit availability. The ledger will contain basic information about each impact site for which the ILF Program is providing mitigation and about each compensatory mitigation

project, including the amount of compensation being provided by each mitigation method and aquatic resource type. Debits and credits will be associated with unique identifiers in the accounting system and ledger. For permitted impact debits, the unique identifier will be the Corps' permit number for the project. For compensatory mitigation project credits, the unique identifier will be a unique project name or number issued for each compensatory mitigation project.

VII. PROGRAM REPORTING

MARS has established a calendar-based fiscal year and reporting year (January 1 - December 31). MARS will submit an annual program report by March 31 of the following calendar year to the District Engineer and IRT that consists of: (1) a Statewide ILF Program Report that summarizes Program accounts and activities and (2) a compilation of Mitigation Project Reports that detail activities for all active compensatory mitigation projects and any adaptive management actions conducted on projects in the long-term management phase.

A. STATEWIDE ILF PROGRAM REPORT

MARS will submit an annual report that summarizes Statewide ILF program accounts and activities and includes the following components:

a. *Service Area Credit Transaction Report*: All credit transactions certified during the reporting year will be summarized in a report that, for each Service Area, including a Credit Ledger summary (Exhibit E, part A) and separate wetlands and stream mitigation credit transaction ledgers (Exhibit E, part C, and D). The ledgers provide: 1) accounting of all credit transactions and the balance of advance, released, and certified credits at the end of the report period for each Service Area; 2) a list of Corps permits issued for which mitigation fees from a permittee have been accepted under the terms of this Instrument; and 3) the Corps permit number and debits resulting from permitted impacts. The report will include copies of all Statement of Sale of Credit letters (Exhibit D) issued during the reporting year.

b. *Program Account Report*: The Program Account Report will provide a summary of the status and change in funds for component accounts within the Program Account during the fiscal year. The report will include a Program Account Summary for each Service Area (Exhibit E, part B) that provides a statement of all income received from credit sales, the distribution of those fees among respective accounts, and expenses related to mitigation projects. The Program Account Report will include beginning and ending balances, including deposits into and any withdrawals from, the accounts providing funds for financial assurances and long-term management activities.

B. MITIGATION PROJECT REPORTS

For each active compensatory mitigation project that MARS has not yet completed the required establishment phase requirements and monitoring requirements, the annual report will include a Mitigation Project Report with the following components:

a. *Project Credit Transactions*: The project report will include a summary of compensatory mitigation project credit transactions associated with the

specific compensatory mitigation project, including the total number of anticipated credits from the project, the number of credits released by the Corps according to the credit release schedule, and anticipated remaining credits to be generated from the project. The report will also include the Corps permit number and debits resulting from permitted impacts for which the released credits have met mitigation requirements.

b. *Annual Project Monitoring Report*: Monitoring is required of all compensatory mitigation projects to determine if the project is meeting performance standards. Compensatory mitigation project monitoring reports will comply with 33 CFR 332.6(c) and all elements specified in the Corps approved project-specific mitigation project plan.
c. *Project Management Summary*: The project report will summarize management actions implemented during the previous year or planned for the upcoming year for projects that have entered the long-term management phase. The summary will include descriptions of any remedial actions, explanations of why any compensatory mitigation projects are not meeting their performance standards, adaptive management strategies undertaken in the prior year, and long-term management or adaptive management actions required for projects and planned for the upcoming year.

VIII. OTHER PROVISIONS

A. Dispute Resolution: Resolution of disputes concerning the signatories' compliance with this Instrument will be in accordance with those stated in 33 CFR 332.8. Disputes related to satisfaction of performance standards may be referred to independent review from government agencies or academia that are not part of the IRT. The IRT will evaluate any such input and determine whether the performance standards have been met.

B. Validity of the Instrument: This Instrument will become valid on the latter date of the signature of the Chair of the MARS Board of Directors and the Corps District Engineer. This Instrument may only be amended or modified with the written approval of the Chair of the MARS Board of Directors and the District Engineer.

C. Notice: Any notice required or permitted hereunder will be deemed to have been given either (i) when delivered by hand, (ii) on the date postmarked by United States Postal Service registered or certified mail, or (iii) sent by express or next-day nationwide delivery system, addressed as follows (or addressed in such other manner as the party being notified will have requested by written notice to the other party):

Montana Program Manager

U.S. Army Corps of Engineers

Omaha District - Regulatory

10 West 15th Street, Suite 2200

Helena, Montana 59626

D. Invalid Provisions: In the event any one or more of the provisions contained in this Instrument are held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions hereof, and this Instrument will be construed as if such invalid, illegal or unenforceable provision had not been contained herein.

E. Headings and Captions: Any paragraph heading or captions contained in this Instrument will be for convenience of reference only and will not affect the construction or interpretation of any provisions of this Instrument.

F. Binding: This Instrument will be immediately, automatically, and irrevocably binding upon MARS and its successors, assigns and legal representatives upon signing by MARS and the Corps even though it may not, at that time or in the future, be executed by the other potential parties to this Instrument, such as the various IRT agencies.

G. Liability of Regulatory Agencies: The Corps and MARS administer their regulatory programs to best protect and serve the public's interest in its wetlands and waterways, and not to guarantee the availability of credits to

any entity, or ensure the financial success of mitigation banks, specific individuals, or entities. The public should not construe this Instrument as a guarantee in any way that Corps or MARS will ensure sale of credits from the ILF Program, or that the regulatory agencies will forgo other mitigation options that may also serve the public interest.

H. Right to Refuse Service: Corps approval of purchase of credits from the ILF Program does not signify MARS' acceptance or confirmation of MARS' offer to sell. MARS reserves the right to refuse to sell credits from the ILF Program for any reason.

I. Notification of Modification: If any action is taken to void or modify an ILF Project real estate instrument, management plan, or other long-term protection mechanism, MARS must notify the Corps in writing 60 days in advance.

IX. MODIFICATIONS

This Instrument may not be modified except by written agreement between MARS and the Corps, following consultation with the IRT and following the modification procedures outlined in 33 CFR 332.8(g).

The District Engineer and MARS may use a streamlined modification review process for changes reflecting specific mitigation project plans, including the addition or removal of compensatory mitigation projects and plans, adaptive management of the compensatory mitigation project, credit releases, changes in credit release schedules, and changes that the District Engineer determines are not significant. The streamlined review process will follow procedures outlined in 33 CFR 332.8(g)(2).

X. REFERENCES

33 CFR 332. Compensatory Mitigation for Losses of Aquatic Resources (FR V. 73 No. 70, April 10, 2008). Department of Defense, Department of the Army, Corps of Engineers. 33 CFR Parts 325 and 332.

XI. SIGNATURE PAGE

FOR THE ESTABLISHMENT AND OPERATION OF A MONTANA STATEWIDE IN-LIEU FEE PROGRAM WITHIN THE STATE OF MONTANA, OMAHA REGULATORY DISTRICT, U.S. ARMY CORP OF ENGINEERS.

This Agreement, entered into by Montana Aquatic Resources Services, Inc.; US Environmental Protection Agency; US Fish and Wildlife Service; Montana Department of Environmental Quality; Montana Department of Fish, Wildlife and Parks; and the US Army Corps of Engineers (COE), is for the purpose of establishing In-Lieu Fee (ILF) mitigation throughout the State of Montana. The ILF Program will be used to mitigate for unavoidable wetland and stream impacts approved through the COE, who is responsible for administering Section 404 of the Clean Water Act. The creation, operation, and use of the ILF program will be in accordance with this Instrument.

The objective of the ILF Program is to compensate for impacts to waters of the United States, and more specifically, special aquatic sites such as wetlands and streams throughout the State of Montana. The goal of the ILF Program is to create highly functional wetlands and streams.

The primary geographical service area for each mitigation project will be defined within one of the sixteen Major Basins of the Montana Service Area map, which are based on the United States Geological Survey Hydrologic Unit Code (USGS HUC) watershed boundaries. Those boundaries are the same as those established for the Montana Department of Transportation and the previous Montana Department of Fish, Wildlife and Parks In-Lieu Fee Program. At the discretion of the COE, credits may be approved outside of the primary geographic service area.

IN WITNESS WHEREOF, the parties hereto have executed this Montana Statewide In-Lieu Fee Program Instrument on the date herein below last written by the IRT Chair

Patrick Byorth, — January 15, 2013

Patrick Byorth, — Date

Chair of the Board of Directors
Montana Aquatic Resources Services, Inc.

Kathryn M. Schenk, — 1/29/13

Kathryn M. Schenk, — Date

Chief, Operations Division
US Army Corps of Engineers - Omaha District

INTERAGENCY REVIEW TEAM (IRT) SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Montana Statewide In-Lieu Fee Program Instrument on the date herein above last written by the IRT Chair.

Sign: _____ Date: 1/3/13

Print Name, Title: Mike Volesky, Acting Director

Organization: **Montana Department of Fish, Wildlife, and Parks**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **Montana Department of Environmental Quality**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **U.S. Fish and Wildlife Service**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **U.S. Environmental Protection Agency, Region 8**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

INTERAGENCY REVIEW TEAM (IRT) SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Montana Statewide In-Lieu Fee Program Instrument on the date herein above last written by the IRT Chair.

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **Montana Department of Fish, Wildlife, and Parks**

Sign: _____ Date: 11/19/12

Print Name, Title: Richard H. Opper, Director

Organization: **Montana Department of Environmental Quality**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **U.S. Fish and Wildlife Service**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **U.S. Environmental Protection Agency, Region 8**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

INTERAGENCY REVIEW TEAM (IRT) SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Montana Statewide In-Lieu Fee Program Instrument on the date herein above last written by the IRT Chair.

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **Montana Department of Fish, Wildlife, and Parks**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **Montana Department of Environmental Quality**

Sign: R. Mark Wilson Date: 12-17-2012

Print Name, Title: Mark Wilson

Organization: **U.S. Fish and Wildlife Service**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **U.S. Environmental Protection Agency, Region 8**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

INTERAGENCY REVIEW TEAM (IRT) SIGNATURE PAGE

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Sign: _____ Date: _____

Print Name, Title: _____

Organization: **Montana Department of Fish, Wildlife, and Parks**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **Montana Department of Environmental Quality**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **U.S. Fish and Wildlife Service**

Sign: _____ Date: 1/16/13

Print Name, Title: H. L. Garcia, TM

Organization: **U.S. Environmental Protection Agency, Region 8**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

XII. EXHIBIT A: COMPENSATION PLANNING FRAMEWORK

This Exhibit A contains two parts:

1. *Compensation Planning Framework (CPF) model*: The model presents the intentions and general model for CPFs that will be developed for each Service Area prior to conducting mitigation projects.
2. *Lower Yellowstone Service Area Compensation Planning Framework*. An example complete CPF for a Service Area anticipated to have early or immediate credit demand.

A. PART A – CPF MODEL

The Compensation Planning Framework (CPF) is used to select, secure, and implement aquatic resource restoration, enhancement, and preservation activities. Montana is divided into 16 Watershed Districts, which are used to delineate Service Areas in this Instrument. The Compensation Planning Framework presented does not provide specific priorities and actions for Montana's 16 Service Areas. In establishing this Instrument, the program Sponsor intentionally presents a framework for prioritizing and planning based on general criteria in order to maximize the flexibility of the planning within each Service Area and to accommodate the varied and dispersed nature of historic and anticipated mitigation requirements among Service Areas. A framework for ongoing prioritization and planning will allow MARS, in collaboration with the Corps and IRT, to address mitigation needs in the context of ever-evolving watershed conditions and restoration needs, as well as to integrate ILF projects with other non-mitigation project planning and restoration activities.

The mission of MARS is to restore and protect Montana's aquatic resources. Planning compensatory mitigation projects using a watershed approach will draw guidance from existing watershed plans, species restoration plans, expert opinions, and other sources necessary to identify and prioritize high-quality compensatory mitigation projects on an ongoing basis. The following sub-sections describe the proposed Compensation Planning Framework.

The following components of the Compensation Planning Framework are designed to meet requirements of 33 CFR 332.8(c).

1. Service Area (332.8 (c)(2)(i)

To accomplish the goal of a watershed approach to mitigation, Service Areas are established as those watersheds described by the Montana Department of Transportation and Corps as 16 Watershed Districts (Table 1, Figure 1). These Watershed Districts have been adopted for use by the Corps as the basis for compensatory mitigation plans and mitigation banks under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. MARS will provide compensatory mitigation for permitted impacts within the same geographic Service Area

in which the impact occurs unless the District Engineer, in consultation with the IRT, has agreed to an exception as defined in an approved mitigation project plan.

Table 1. Mitigation Service Areas (Watershed Districts).

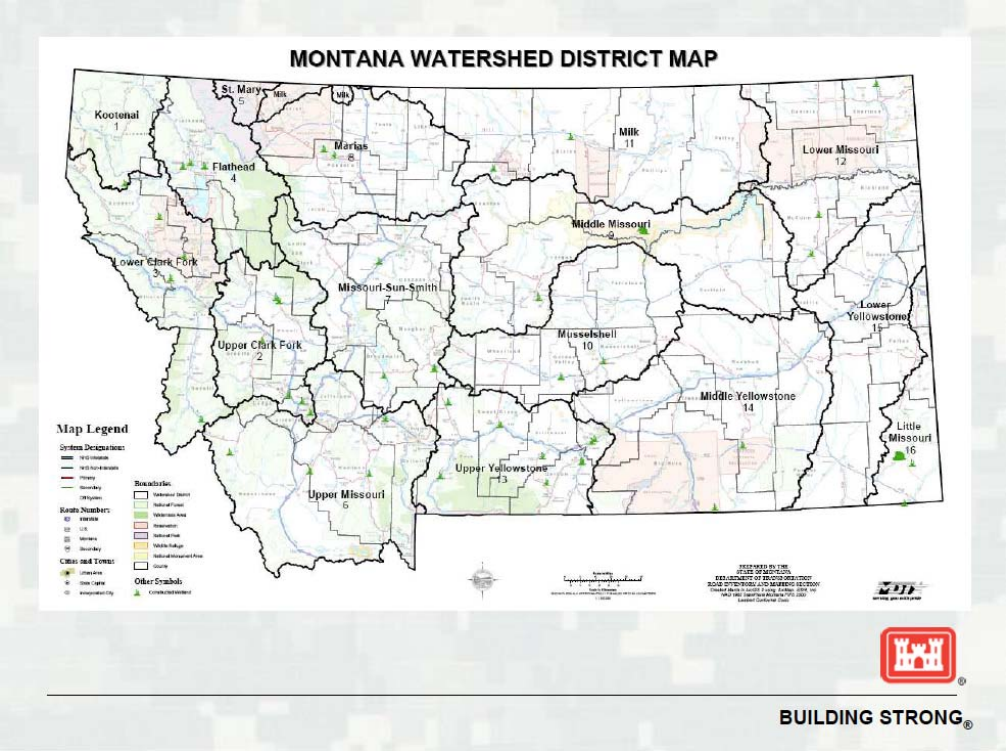
Watershed District No.	Service Area Name
1	Kootenai
2	Upper Clark Fork
3	Lower Clark Fork
4	Flathead
5	St. Mary
6	Upper Missouri
7	Missouri-Sun-Smith
8	Marias
9	Middle Missouri
10	Musselshell
11	Milk
12	Lower Missouri
13	Upper Yellowstone
14	Middle Yellowstone
15	Lower Yellowstone
16	Little Missouri

These Service Areas will serve as the basis for a watershed approach to site selection as well as for Accounting and Reporting purposes. The Corps and IRT will review and approve mitigation project plans for compensatory mitigation projects implemented to mitigate impacts of permitted actions within the same geographic Service Area. MARS intends to conduct mitigation for permitted actions by performing site selection within sub-watersheds within the Service Area to the extent possible and reasonable and with Corps and IRT review. However, the Montana Statewide ILF Program may be used to compensate for an impact that occurs outside of the Service Area if specifically approved by the Corps in consultation with the IRT.

Individual projects will be proposed for Service Areas in project-specific mitigation project plans. In the event that the Corps determines that a Service Area for a given compensatory mitigation project should differ from the established Service Area, the Corps in consultation with the IRT will make final Service Area determinations for approved mitigation project plans. Considerations will include the extent of ecologically similar areas, the expected amount and type of mitigation required in an area (demand) compared with the aquatic resources and amount of credits that are expected from an ILF project, the availability of credits already banked in the Service Area by the ILF or mitigation banks, population and growth information, and ongoing watershed

management programs.

Figure 1. Montana ILF Program Service Areas (Watershed Districts).



2. Threats (332.8 (c)(2)(ii)

Montana is a large state with widely varying terrain, climate, and levels of urban and natural resource development. Threats to aquatic resources, similarly, are diverse and vary substantially among the sixteen Service Areas. On a statewide basis, dominant threats to aquatic resources as identified by DEQ in its 2010 integrated report to the EPA[1] include:

- the physical alteration of the water bodies or related riparian communities from agriculture (both crop and grazing), development, transportation infrastructure, and energy or other resource development;
- sedimentation from altered land use and associated transportation networks;
- flow alteration, largely related to agricultural diversions;

[1] Montana Department of Environmental Quality. 2012. Montana Water Quality Assessment Report. http://cwaic.mt.gov/wq_reps.aspx?yr=2012qryId=92866

- water quality impairment, largely related to agricultural practices and land use, and increasingly associated with urban development;
- dams and associated impoundments;
- mining and related tailings;
- forestry and associated transportation networks;
- animal feed operations.

DEQ identified agricultural practices as the dominant source of impairments to aquatic resource quality in Montana. Hydromodification, resource extraction, forestry, and urban-related impacts present other common sources of impairments. Most agricultural impairments in Montana are not regulated by the Corps. And, while DEQ's report is a valuable tool for identifying aquatic resource impact areas, its findings are typically from a water quality impairment perspective. There are other significant threats to aquatic resources such as conversion of large, conservation-size properties through subdivision development that limits opportunities to utilize these areas for restoration, enhancement, and preservation as part of a watershed approach.

3. Historic Aquatic Resource Loss (332.8 (c)(2)(iii)

In general, Montana can be characterized as a semi-arid landscape with wetlands and riparian areas covering less than 4 percent of the state's land area. Aquatic resources play a major role in the state's economic and environmental well-being. Sixty percent of fish, amphibian, bird, reptile, and mammal species of greatest conservation need rely on the state's wetlands and riparian areas[2]. Furthermore, agriculture, tourism, and industry are largely reliant on water availability and water quality for their existence.

Wetlands provide critical biological and economic benefits such as plant and wildlife habitat, flood attenuation, and groundwater recharge. However, increasing pressures from human activities such as urbanization, agricultural development, and land conversion have debilitated some of the ecosystem services they provide[3]. Wetland conversion in Montana is typically associated with road construction, agriculture and residential development. From 1780 to 1980 it is estimated that Montana experienced 27% wetland loss[4]. Current estimates indicate 1/3 of the state's wetlands are gone or

[2] Montana Watercourse, *Water Facts for Montana*, http://www.mtwatercourse.org/waterfacts.htm (accessed June 13, 2011).

[3] EPA, *A Reference Wetland Network for Assessment and Monitoring Montana's Herbaceous Wetlands*, http://mtnhp.org/reports/MTRefNetwork.pdf (accessed June 13, 2011).

[4] Dahl, T.E. 1990. *Wetland Losses in the United States 1780's – 1990's*. U.S. Department of the Interior, Fish and Wildlife Service, Washington . D.C. 13pp.

their quality has been so compromised as to prohibit proper functioning.[5] The quality of wetlands has been reduced by fragmentation of habitat, increased development, and to a lesser extent, agriculture.

4. Current Aquatic Resource Conditions in Service Areas (332.8 (c)(2)(iv)

Current or existing aquatic resource conditions vary substantially across Montana and cannot be concisely characterized. Aquatic resource conditions within each Service Area will be evaluated as a critical element of early planning under mitigation project plan development to meet mitigation requirements within each Service Area. Existing conditions within each Service Area are a fundamental consideration in development of a plan and will be integrated into mitigation project planning for specific mitigation requirements and mitigation project plans. MARS will draw from available resource expertise, watershed assessments, Total Maximum Daily Load (TMDL) plans, species of concern management plans, watershed prioritization plans, and other resources to evaluate current conditions.

5. Aquatic Resource Goals By Service Area (332.8 (c)(2)(v)

Resource goals will be developed for Service Areas as mitigation demands are generated within the Service Area. Goals will reflect any existing conservation plans developed at watershed or state scales and will reflect best opportunities to implement mitigation at an effective scale. Goals will be developed based largely on existing assessments of historic aquatic resources losses, and will recognize the practical limitations, and opportunities, for using mitigation as an aquatic resource conservation strategy at the watershed scale. In the absence of meaningful or useful existing assessments that provide context for setting goals, resource goals for compensatory mitigation projects will be established following the prioritization strategy outlined in the next section.

Goals and objectives for the ILF program within a Service Area will be further refined as the scale of credit demand is determined and will be influenced by the scale of ILF funding in the Service Area.

6. Prioritization Strategy (332.8 (c)(2)(vi)

Montana's diverse landscapes and watersheds do not lend themselves to a single, statewide prioritization strategy. Rather, existing conditions, reports and specific resource goals from existing watershed plans within a Service Area will help to inform MARS regarding projects that can address ecologically limiting factors within a watershed. As mitigation needs arise, MARS will consider identified project opportunities in relation to the watershed's resource goals and identify appropriate

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[5] Telephone Interview with Lynda Saul, PWS Wetland Program Coord., Mont. Dept. of Envt'l Quality (June 15, 2011).

mitigation strategies including restoration of habitat and habitat-forming processes, habitat enhancement, habitat preservation, creation or establishment of stream or wetland resources, and connecting fragmented or isolated habitats. Each potential ILF project will be evaluated for its ability to provide appropriate compensatory mitigation for impacts to the waters of the U.S. based on the following criteria:

- **Likelihood of success:** Funded projects must demonstrate a high likelihood of success through a sound restoration, creation or establishment and/or enhancement concept and project planning. Projects are more likely to provide expected results where water sources are reliable and secure, where plans emphasize restoration or protections of processes that promote self-sustaining and dynamic aquatic systems, and where protection or restoration of functions that provide a higher "lift" in functions is emphasized. Projects are more likely to be successful if they are planned and designed to be resilient in the face of anticipated land-use change and climate change. Threats from invasive species or vandalism should be low or manageable. The project will be evaluated for its ability to result in successful and sustainable net gain of stream/wetland function, with limited maintenance. Restoration projects will receive priority over creation or enhancement projects due to the greater benefit to function that can be achieved, and the higher success rate of these types of projects.
- **Multiple aquatic objectives:** The project will be evaluated for its ability to address multiple functions and services and between both wetlands and streams. The project should emphasize native biodiversity and natural processes.
- **Species specific management or restoration plans:** Local, regional, or statewide efforts to restore or enhance critical habitats for federally threatened and endangered species or state species of concern will be considered where compensatory mitigation projects may complement species recovery or conservation efforts.
- **Supports regional conservation initiatives and is compatible with the surrounding landscape:** Projects should be located where they pose minimal conflicts with adjacent land uses and where they meet regional conservation priorities, address limiting factors identified in watershed assessments, provide habitat corridors, and/or add to the effectiveness of nearby protected natural areas.
- **Long-term management:** Suitable projects must have a high likelihood of successful and appropriate long-term management given planned stewardship, ownership and easement conditions.
- **Leverage available funds**. Collaborative funding from non-ILF sources will be considered where it is compatible and conducive to meeting mitigation requirements and expanding the value and beneficial outcomes of compensatory mitigation projects. In particular, partnerships offer potential for MARS as an ILF Sponsor to conduct mitigation in watersheds where mitigation fees alone may be insufficient to independently fund ecologically beneficial compensatory mitigation projects in a watershed context. Preference may be given to projects that provide

a higher functional gain as a consequence of collaborative funding. Similarly, projects that contribute to or enable larger scale restoration and protection efforts may be preferential to numerous isolated smaller scale projects. MARS will not use partnerships or non-mitigation funds for 'double dipping' to establish extra mitigation credits from partnership-funded projects. However, projects funded in part by partners have the potential to *complement* mitigation fees to leverage greater ecological benefit than can be realized from mitigation fees alone.

7. Preservation Strategy (332.8 (c)(2)(vii)

Preservation of compensatory mitigation project sites is generally required in conjunction with aquatic resource restoration or enhancement in order to sustain and protect the mitigation project investments and long-term functioning of the compensatory mitigation site. The mitigation project plan for each compensatory mitigation project will define how preservation will be used to meet mitigation objectives and how it meets criteria outlined in Section § 332.2 (h) (2) of the Final Rule. This section of the rule also provides for the application of preservation as a primary mitigation strategy when applied in a watershed context. Preservation of existing aquatic resources that are important for maintaining or improving ecological functions of a watershed may be part of the overall watershed approach of the ILF program. Preservation will be considered for sites that are under imminent threat to a valuable aquatic resource. These may include, but not be limited to: 1) sites that support aquatic threatened and endangered species or species of concern; 2) sites where a significant percentage of existing wetlands and riparian areas within a watershed can be preserved in relatively pristine condition; and, 3) where resources are considered unique, rare, or difficult to replace. Preservation strategies will target smaller and unique sites where a preservation strategy is less likely to be compromised by adjacent or nearby land management.

8. Public and Private Involvement (332.8 (c)(2)(viii)

MARS' Statewide ILF program is uniquely positioned to incorporate public and private involvement through partnerships and joint project funding. As the ILF Sponsor, MARS will consider opportunities to enhance compensatory mitigation project outcomes and increase the extent of mitigation benefits through collaboration with state, federal, tribal and other public aquatic resource protection programs or on public or tribal lands, except where those programs or lands impose costs, restrictions or other constraints that could limit the effectiveness of the ILF program. IRT members will serve in part to review documentation, conduct compensatory mitigation project evaluations, and to provide comments to the Corps relevant to their agencies' responsibilities and other considerations. MARS will also consider opportunities to partner with private or commercial entities and other conservation and restoration entities, including watershed groups, to promote collaboration in conservation of aquatic resources in Montana.

MARS anticipates engaging partners to collaborate and provide the following functions:

- Locate and identify suitable lands

- Hold easements (i.e., Land Trusts)
- Assist with development and implementation of monitoring programs
- Assist with expansion of contiguous habitat
- Provide long term management and protection
- Provide local knowledge and contacts

Following is a listing of probable mitigation program and project partners.

- Potential federal and state public partners include:
    - Western Area Power Administration (WAPA)
    - US Fish and Wildlife Service (USFWS)
    - US Bureau of Land Management
    - US Bureau of Reclamation
    - USDA Forest Service
    - US Environmental Protection Agency (EPA)
    - US Army Corps of Engineers (Corps)
    - USDA Natural Resources Conservation Service (NRCS)
    - USDA Farm Service Agency
    - Montana Dept. of Environmental Quality (DEQ)
    - Montana Dept. of Fish Wildlife and Parks (FWP)
    - Montana Dept. of Natural Resources and Conservation (DNRC)
    - Montana Department of Transportation (MDT)
    - Bonneville Power Administration (BPA)
    - U.S. Federal Highway Administration

- Potential NGO partners include:

    - American Prairie Foundation
    - American Bird Conservancy
    - Avian Science Center – University of Montana
    - Ducks Unlimited, Inc.
    - Montana Fish, Wildlife and Parks Foundation
    - Montana Land Reliance
    - Pheasants Forever, Inc.
    - Rocky Mountain Elk Foundation
    - The Conservation Fund
    - The Trust for Public Land
    - The Nature Conservancy
    - Trout Unlimited
    - Yellowstone River Conservation Districts Council
    - Individual County Conservation Districts
    - Montana Association of Conservation Districts
    - Greater Yellowstone Coalition
    - Yellowstone Valley Audubon Society

- Montana Watershed Coordination Council

9. Long-Term Protection and Management Strategies by Sponsor (332.8 (c)(2)(ix)

MARS will be responsible for developing and implementing a long-term protection and management plan for each ILF mitigation project. On publicly owned property, long-term protection and management may be provided through facility management plans or integrated natural resource plans. On privately owned property, including property held by MARS or other conservation organizations, real estate instruments will be recorded with the appropriate County Clerk and Recorder's Office(s) to guarantee protection and provide notice. MARS will ensure that protection mechanisms are in place prior to release of credits. Draft conservation easements or equivalent protection mechanisms will be submitted to the IRT and Corps as part of each project mitigation plan for review and Corps approval.

MARS ILF Program projects will be designed, to the maximum extent practicable, to minimize long-term management once performance standards have been achieved. MARS will be responsible for maintaining ILF Program projects consistent with the mitigation plan to ensure long-term viability as functional aquatic resource sites. MARS will retain responsibility unless and until the long-term management responsibility is formally transferred to a long-term manager with Corps approval. The long-term management plan developed for each ILF project will include a description of anticipated management needs with estimated annual costs and an identified funding mechanism (such as non-wasting endowments, trusts, contractual arrangements with future responsible parties, or other appropriate financial instruments).

10. Periodic Evaluation and Reporting (332.8 (c)(2)(x)

See previous *Section V* for a description of evaluation and monitoring of compensatory mitigation projects. See previous *Section VII* for a description of reporting for the Statewide ILF Program and for specific compensatory mitigation projects.

MARS will monitor completed ILF mitigation projects using a mitigation monitoring protocol developed by MARS that is consistent with Corps of Engineers guidance at the time each ILF project is initiated. This protocol will provide consistent methods and measurements among sites allowing for additional evaluation of the ILF Program as a whole, thus helping to ensure that performance standards are met. The frequency and duration of monitoring and specific monitoring requirements will be defined in each individual mitigation plan. In general, monitoring reports will include: 1) plans, maps, and photographs to illustrate site conditions; 2) a narrative summarizing condition of the site as well as monitoring results as compared to performance standards; and 3) recommendations for contingency or adaptive management as needed. The Corps may extend the monitoring duration designated in the mitigation plan if performance standards have not been met. The Corps may also reduce or waive monitoring requirements upon determination that performance standards have been achieved.

Monitoring and contingency reports will address adaptive management strategies that

provide management guidelines and recommendations for future site restoration and monitoring. The responsibility of each participating party will be clearly defined and address procedures to improve or alleviate foreseen or unforeseen threats to restored aquatic sites and functions. The monitoring and contingency plan will track progress towards measurable goals and their associated objectives.

B. PART B – LOWER YELLOWSTONE SERVICE AREA CPF

Compensation Planning Framework for the Lower Yellowstone Service Area

Abstract: This Compensation Planning Framework will be used to select, secure, and implement aquatic resource restoration, enhancement, and preservation activities within a Service Area. The U.S. Army Corps (Corps) has established 16 Watershed Districts in Montana, which are used to describe Service Areas in this Instrument. This CPF describes the Lower Yellowstone Service Area. This CPF provides preliminary information that will guide the prioritization and selection of mitigation projects within the Service Area and is consistent with MARS' mission to restore and protect Montana's aquatic resources. It presents a framework for prioritization and planning in order to maximize the flexibility of the planning and to accommodate the varied and dispersed nature of mitigation opportunities and requirements within the Service Area. This framework will allow MARS, in collaboration with the Corps and IRT, to address mitigation needs in the context of ever-evolving watershed conditions and restoration needs, as well as to integrate its ILF projects with other ongoing non-mitigation project planning and restoration activities. This CPF draws from existing watershed plans, species restoration plans, expert opinions, and other sources necessary to identify and prioritize high-quality compensatory mitigation projects on an ongoing basis.

The Lower Yellowstone Service Area contains the lower extent of the Yellowstone River within Montana from the confluence of the Powder River to the North Dakota border, the Powder River basin within Montana, and the O'Fallon Creek sub-watershed. This Service Area is primarily a plains and grassland ecosystem where agriculture is the principal land use. Coal mining and coal bed natural gas production are two of the major extractive industries. Threats within the Service Area include water quality impairments as a result of crop production, grazing, and coal and natural gas extraction, forest and range management, flow alterations, physical alteration of wetlands, streams, and riparian areas, barriers to fish passage. The largest tributary to the Lower Yellowstone is the Powder River, which is particularly at risk of long-term impacts as a result of the expansion of coal bed natural gas extraction. Endangered species that are most likely to be impacted by the landscapes-scale changes to aquatic habitats in the Service Area include the pallid sturgeon.

1. Service Area

The described Lower Yellowstone Service Area is an established Watershed District used by Corps to provide a geographic context for wetland and stream mitigation projects. There is an inherent advantage in adopting the previously established Watershed Districts as primary Service Areas in that the Corps is actively using these areas for mitigation planning and accounting by mitigation project sponsors, including

mitigation banks and permittee-responsible mitigation projects. Additionally, the Service Area map represents a scale that is appropriate to provide mitigation opportunities within connected and related sub-basins where permitted impacts are anticipated. MARS will provide compensatory mitigation through individual mitigation projects within the Service Area in which the permitted impact occurred, unless the District Engineer authorizes an exemption.

This Service Area is based on United States Geological Survey Hydrologic Unit Code (USGS) watershed boundaries, and includes the following 4th level (eight-digit) HUC Watersheds:

- 10100004 Lower Yellowstone
- 10100005 O'Fallon
- 10090209 Lower Powder
- 10090210 Mizpah
- 10090207 Middle Powder (within MT)
- 10090208 Little Powder (within MT)

This Service Area includes the following geographic features:

- Counties: Carter, Custer, Dawson, Fallon, Powder River, Prairie, Richland, and Wibaux, Counties.
- Mountain Ranges: Big Sheep Mountains
- Major Tributaries: Powder River

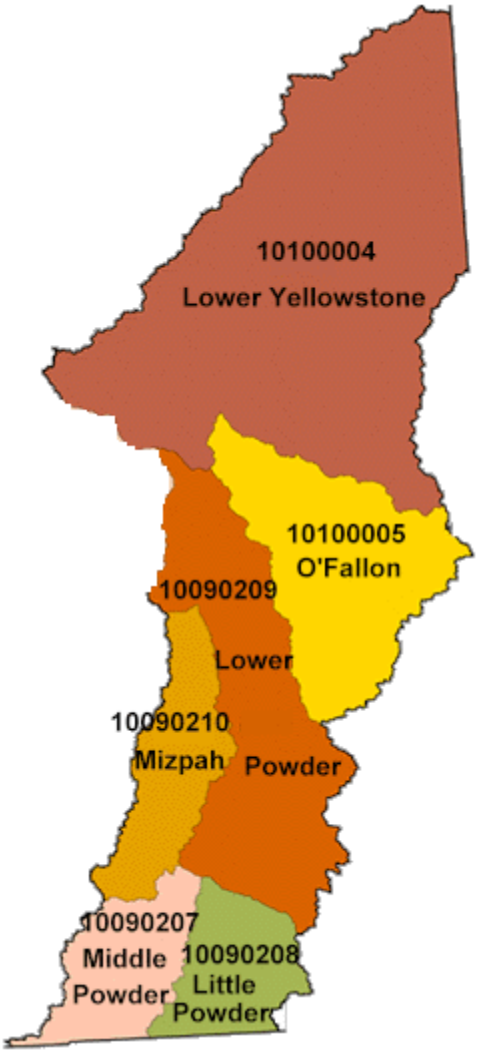

Figure 1: Sub-basins of the Lower Yellowstone Service Area (NRIS, 2012)

2. Threats

Active and potential threats to the Lower Yellowstone Service Area include physical alterations of streams, flow alteration, water quality impairment, dams, mining, forestry, and invasive species. Additionally, recent developments in energy-related industries (primarily coal mining and coal bed natural gas extraction) pose significant threats to water quality and physical availability of water. The ILF program will emphasize mitigation project selection that maximizes opportunities to directly address these threats and their resultant impacts. Because many threats represent landscape-scale changes in land use, the ILF program will emphasize projects that can address threats at this scale within the stream corridors and wetland complexes of this Service Area. Threat abatement strategies will include primarily remediation of physical alterations and revegetation, with significant emphasis on protection of restored and intact areas aquatic resource sites.

Specific active and potential threats within this Service Area include the following:

- *Physical Alteration:* Physical alteration refers to direct physical alterations of streams, wetlands, riparian areas and other aquatic resources. Physical alterations, both permitted and not, are extensive and typically poorly documented. Land use activities associated with agricultural practices, irrigation diversions, and transportation and other infrastructure have directly impacted the physical habitat and processes supporting streams and wetlands throughout the Service Area
    - Rip-rap and other streambank stabilization structures are listed as conservation concerns in the Powder River Ecotype (FWP, 2005), as well as along the Yellowstone River associated with railways.
        - Jaeger (2008) found that stream bank armoring was likely degrading the quality of pallid sturgeon habitat (Jaeger *et al,* 2008)
        - BNSF Railway Company routinely impacts the Yellowstone River and its tributaries through physical impacts to the streams and rivers, primarily through installation of riprap and replacement of ballast to protect and maintain rail infrastructure.
- Modifications and degradation of stream channels as a result of construction or land management are listed as conservation concerns in the Powder River Ecotype (FWP, 2005).
- *Flow alteration:* Flow alterations that cause dewatering or unnatural fluctuations that decrease the quantity or quality of essential habitats are listed as conservation concerns in the Powder River Ecotype (FWP, 2005).
    - Chronic dewatering occurs on the mainstem of the Powder River from the mouth to mile 220.3 (MFISH, 2012).
    - 6 creeks in the Lower Yellowstone sub-basin are impaired for flow regime alterations, [see Appendix A (CWAIC, 2012)].
- *Water Quality Impairment:*
    - Range and forest management and associated alterations of riparian vegetation are listed as conservation concerns in the Powder River Basin-Breaks-Scoria Hills Ecotype and the Powder River Ecotype (FWP, 2005)
    - Water chemistry problems due to irrigation return water and discharge from coal bed methane operations are listed as conservation concerns in the Powder River Ecotype (FWP, 2005).
        - Elevated bicarbonate or conductivity levels were found to be characteristic in streams receiving CBM wastewater discharge (Davis, 2008).

    - The leading cause for water quality impairments in the Lower Yellowstone and O'Fallon 4th level HUC's is irrigated crop production, followed by grazing and the transfer of water from outside watersheds. Detailed data on water quality impairments can be found in Appendix A (CWAIC, 2012).
- *Dams*: The Yellowstone River is the largest free-flowing river in the lower 48 states, yet the Yellowstone and especially its tributaries are impacted throughout the area by culverts, low-head mainstem dams, irrigation impoundments, and diversions.
    - Culverts, dams, irrigation diversions and other barriers that partially impede fish movement and reduce connectivity of habitat and may cause fish entrainment are listed as conservation concerns in the Powder River Ecotype (FWP, 2005).
    - The Intake Diversion and the Cartersville irrigation dam act as a fish passage barriers to paddlefish, shovelnose sturgeon, pallid sturgeon, and other migratory fish. When U.S. Army Corps of Engineers plans to rebuild the Intake Diversion are completed, the Cartersville irrigation dam will be the primary fish passage barrier on the Lower Yellowstone River (Dowl HKM et al, 2010).
    - Pallid sturgeon larva drift downstream long distances following hatching and prior to recruitment. It is suspected that larval pallid sturgeon drift into the Sakakawea Reservoir associated with the Intake Diversion and die (Jaeger *et al,* 2008).
- *Mining:* Mining within this Service Area is limited primarily to small sand and gravel operations. DEQ Abandoned Mine Inventory Sites in the Lower Yellowstone Service Area listed by sub-basin include (NRIS, 2012):
    - 299 in the Lower Yellowstone; 11 in O'Fallon Creek; 17 in the Lower Powder River; 33 in the Middle Powder River; and 28 in Mizpah Creek
- *Forestry:*
    - Forest Management is listed as a conservation concern in both the Powder River Basin-Breaks-Scoria Hills Ecotype and the Powder River Ecotype (FWP, 2005)
    - Disruption of natural disturbance processes, especially fire, is listed as a conservation concern in the Powder River Basin-Breaks-Scoria Hills Ecotype (FWP, 2005)
- *Invasive Species:* Noxious weeds are a threat in riparian areas, and can be particularly challenging to manage in wetlands restoration (Jones, 2001).

- Invasive fish and other invasive or exotic species are listed as conservation concerns in the Powder River Ecotype and Powder River Basin-Breaks-Scoria Hills (FWP, 2005).
- Russian Olive and Salt Cedar have been identified in all of the watersheds in Eastern Montana. Russian olive is a threat to native plant communities in both riparian areas and grasslands (Combs, 2010).

- *Energy development (oil and gas)*
  - Davis (2008) found that while coal bed methane (CBM) wastewater discharges into streams in the Powder River Basin did not have an immediate effect on fish assemblages, the elevated bicarbonate or conductivity levels characteristic in streams receiving CBM wastewater discharge were likely to impact fish assemblages in the long-term.

3. Historic Aquatic Resource Loss

Aquatic resource loss within this Service Area is primarily characterized by loss of wetland and riparian areas due to physical alteration as well as effects of upland land use on aquatic resource areas. Railway and other transportation features have been a dominant source of impact particularly along the Yellowstone River. The following characterizes resource loss within the Service Area:

- 25% of Montana's wetlands were lost between 1780 and 1990 (Jones, 2001). While these data are not sufficiently detailed to account for loss within this Service Area, it is indicative of the extent of impact statewide.
- The Yellowstone River is an alluvial river system that occupies a much larger corridor than just the primary channel and is continuously eroding banks and simultaneously building point bars within the Chanel Migration Zone (Thatcher et al, 2009). Channel simplification has occurred where restrictive features have limited natural river migration and development of associated aquatic and riparian successional habitats along portions of the Lower Yellowstone River. Restrictive features include:
  - Irrigation infrastructure including dikes, levees, ditches and pump protection armor, impact just over 5% of the primary channel bankline and have increased 7% since 1950 in Dawson County (Thatcher and Boyd, 2008).
  - Stream stabilization features, which include features that protect the bankline and limit lateral channel migration, impact 1% of the high flow bankline and have increased close to 800% in Dawson County from 1950 to 2005 (Thatcher and Boyd, 2008).
  - Transportation feature encroachment, which includes roads, railroads, and bridges, impacts 22% of the primary channel bankline and have increased

close to 17% in Dawson County from 1950 to 2005 (Thatcher and Boyd, 2008).
    - The total length of dike and levee features impacts 14% of the primary channel bankline (Thatcher and Boyd, 2008).
    - Total bank armor features, including rock rip-rap, concrete rip-rap, flow detectors, and steel retaining walls, impact just over 1% of the primary channel bankline (Thatcher and Boyd, 2008).
    - Alterations of the natural geomorphic conditions and flood disturbance can greatly impact the diversity of bird species by limiting succession and side channel riparian habitat (Jones and Hansen, 2009)
- Historic loss in biodiversity is represented by Endangered, Threatened, Proposed, and Candidate Species and Species of Concern
    - Endangered, Threatened, Proposed, and Candidate Species: Black-footed Ferret (LE), Greater Sage-Grouse (C), Sprague's Pipit (C), Pallid Sturgeon (LE), Interior Least Tern (C), Whooping Crane (LE), Piping Plover (LT, CH)
    - Animal Species of Concern: 40 species in Carter County, 43 species in Custer County, 36 species in Dawson County, 21 species in Fallon County, 34 species in Prairie County, 38 species in Richland County, 45 species in Powder River County, and 27 species of concern in Wibaux County (MTNHP, 2012)
    - Plant Species of Concern: 20 species in Carter County, 9 species in Custer County, 4 species in Dawson County, 5 species in Fallon County, 2 species in Prairie County, 6 species in Richland County, 11 species in Powder River County, and no species of concern in Wibaux County (MTNHP, 2012)
    - The population of wild adult pallid sturgeon has declined by about 76% since 1988 in Recovery Priority Management Area (RPMA) 2, which includes the Yellowstone River and Powder River within this Service Area. Moreover, the population is skewed towards male fish at a ratio of 2:1, leaving the population especially threatened due to the fact that females only spawn every two to three years (Jaeger et al, 2008). Population declines are believed to be primarily result of barriers to migration for both adults and drifting juveniles as well as to loss of habitat diversity within the channel.

4. Current Aquatic Resource Conditions in Service Area

Current aquatic resource conditions reflect impacts primarily to plains and grass/shrub uplands, prairie rivers and streams, and wetlands. The following provides details of aquatic resources of concern and interest within the service area.

- Ecotypes in the Lower Yellowstone Service Area that are considered important to conservation in Montana include (FWP, 2005):

    - The Powder River focus area is a Plains and Grassland ecotype located in the Lower Yellowstone Service Area. It is a warmwater fishery with 38 aquatic species. Tier I conservation species include:
        - Fish: Sturgeon Chub, Burbot, Sauger
    - The Powder River Basin-Breaks-Scoria Hills focus area is Shrub Grassland ecotype. Wetland and Riparian areas in this ecotype are considered Tier I habitat and cover about 6% of the focus area. There are 299 terrestrial species in this ecotype. Tier I species include:
        - Amphibian: Northern Leopard Frog
        - Reptile: Snapping Turtle, Spiny Softshell, Western Hog-nosed Snake, Milksnake
        - Bird: Trumpeter Swan, Common Loon, Bald Eagle, Greater Sage-Grouse, Whooping Crane, Long-billed Curlew, Black Tern, Burrowing Owl
        - Mammal: Spotted Bat, Townsend's Big-eared Bat, Black-tailed Prairie Dog, Meadow Jumping Mouse, Black-footed Ferret, American Bison
- Riparian and Wetlands Restoration Program (RWRP) and Department of Environmental Quality (DEQ) Priority Wetland Sites in the Lower Yellowstone Service Area listed by sub-basin include (NRIS, 2012):
    - 186 RWRP Sites and 2 DEQ priority wetland sites, the Burns Creek Wetland and Fox Lake, in the Lower Yellowstone sub-basin.
    - 20 RWRP sites in O' Fallon Creek sub-basin.
    - 56 RWRP sites in the Lower Powder River sub-basin.
    - 64 RWRP sites in the Middle Powder River sub-basin.
- There are no TMDL documents completed within the Lower Yellowstone Service Area. The Powder River TMDL planning area is considered a priority area, but is not scheduled for completion of a TMDL until after 2014.
    - Salinity is the only identified cause of impairment in the Lower Powder River, Middle Powder River, Little Powder River, and Mizpah 4th level HUC's. The probable cause is recorded as natural sources (CWAIC, 2012)
    - Copper, Iron, Lead, Total Nitrogen, Nitrate/Nitrite, Phosphorus, solids, Total Dissolved Solids, Chlorophyll-a, and Selenium impairments exist throughout the O'Fallon and Lower Yellowstone sub-basins and are primarily attributed to irrigated crop production, grazing, and transfer of water from outside watersheds.

5. Aquatic Resource Goals by Service Area

Goals for aquatic resources are typically specific to the plans or programs under which they are developed, and are often specific to defined geographic areas of those programs or organizations' interests. MARS, in applying the watershed context, draws from available plans and priorities from partner and related organizations. This CPF does not explicitly state or endorse any specific aquatic resource goals, but rather seeks and identifies mitigation opportunities that are consistent with the varied goals of its partners and related concerns. Generally, aquatic resource goals for compensatory mitigation projects will be established following the prioritization strategy outlined in the next section. Aquatic resource goals reflect existing conservation plans developed at watershed or state scales and reflect best opportunities to implement mitigation on an effective scale. Goals reflect existing assessments of historic aquatic resources losses and recognize the practical limitations and opportunities for using mitigation as an aquatic resource conservation strategy at a watershed scale.

In consideration of available plans and our understanding of threats and conditions, MARS' ILF program will emphasize the following general goals in the Lower Yellowstone Service Area:

- Restore and protect functioning floodplains and riparian forests and restore floodwater access to floodplains. Maintain active channel processes which will provide for bank scouring, deposition of islands, gravel, and sandbars, create mainstream islands of mature cottonwood, willow, and other communities through channel avulsions, and other natural stream/wetland floodplain features.
- Restore and protect tributary and headwaters streams to improve water quality, water temperature, and to restore habitat quality degraded through land use and irrigation practices that are not sustainable.
- Maintain spring/early summer flows in the mainstem Yellowstone and tributaries sufficient to allow spawning fish to move to spawning areas and for fry to exit these areas before flows drop to the point that eggs/fry are lost.
- Protect, enhance and restore ecologically significant wetlands.
- Control aquatic and terrestrial invasive species.
- Focus efforts as feasible to benefit rare, threatened, and endangered species or species and habitats of special concern.
- Emphasize recolonization of beaver as a component of restoration and protection in tributary streams and in side channels of the Yellowstone.

Of particular concern within the Lower Yellowstone Service Area is the recovery of listed endangered pallid sturgeon. Specific priority recovery recommendations are provided in Skidmore (2009) as:

1. protect channel migration zones (CMZs) through easements,
2. screen intakes for adult and larval pallid sturgeon, and

3. restore normative flows, sediment and temperature regimes.

6. Prioritization Strategy

The mission of MARS is to restore and protect Montana's aquatic resources. Many partners have lists of priority lands targeted for restoration or protection that will provide a suite of opportunities for consideration and prioritization using a watershed approach. As mitigation needs arise, MARS will consider identified project opportunities in relation to the watershed's resource goals and identify appropriate mitigation strategies including restoration of habitat and habitat-forming processes, habitat enhancement, habitat preservation, creation or establishment of stream or wetland resources, and, connecting fragmented or isolated habitats. Each potential ILF project will be evaluated for its ability to provide appropriate compensatory mitigation for impacts to the waters of the U.S. based on the following criteria:

- **Likelihood of success:** MARS' ILF projects must demonstrate a high likelihood of success through a sound restoration, creation or establishment and/or enhancement concept and project planning. Projects are more likely to provide expected results where water sources are reliable and secure, where plans emphasize restoration or protections of processes that promote self-sustaining and dynamic aquatic systems, and where protection or restoration of functions that provide a higher ecological "lift" is emphasized. Projects are more likely to be successful if they are planned and designed to be resilient in the face of anticipated land-use change and climate change. Threats from invasive species or vandalism should be low or manageable. Projects will be evaluated for their ability to result in successful and sustainable net gain of stream and wetland functions with limited maintenance.
- **Multiple aquatic objectives:** MARS' ILF project wills be evaluated for their ability to address multiple functions and services and between both wetlands and streams. The project should target native biodiversity and natural processes.
- **Species specific management or restoration plans:** Local, regional, or statewide efforts to restore or enhance critical habitats for federally threatened and endangered species or state species of concern will be considered where compensatory mitigation projects may complement species recovery or conservation efforts.
- **Supports regional conservation initiatives and is compatible with the surrounding landscape:** Projects should be located where they pose minimal conflicts with adjacent land uses and where they meet regional conservation priorities, address limiting factors identified in watershed assessments, provide habitat corridors, and/or add to the effectiveness of nearby protected natural areas.
- **Long-term management:** Suitable projects must have a high likelihood of successful and appropriate long-term management given planned stewardship, ownership and easement conditions.
- **Leverage available funds**. Collaborative funding from non-ILF sources will be

considered where it is compatible and conducive to meeting mitigation requirements and expanding the value and benefits of compensatory mitigation projects. In particular, partnerships offer potential for MARS as ILF Sponsor to conduct mitigation in watersheds where mitigation fees alone may be insufficient to independently fund ecologically beneficial compensatory mitigation projects in a watershed context. Preference may be given to projects that provide a higher functional gain as a consequence of collaborative funding. Similarly, projects that contribute to or enable larger scale restoration and protection efforts may be preferential to numerous isolated smaller scale projects. MARS will not use partnerships or non-mitigation funds for 'double dipping' to establish extra mitigation credits from partnership-funded projects. However, projects funded in part by partners have the potential to *complement* mitigation fees to leverage greater ecological benefit than can be realized from mitigation fees alone.

Additionally, within the Lower Yellowstone Service Area, the following criteria and opportunities will be considered in prioritizing specific mitigation projects:

- *Species specific management or restoration plans:* Prioritize projects that benefit Tier I aquatic species listed in the ecotype focus areas and the "Species of Greatest Conservation Need" that are present in the Lower Yellowstone Service Area and identified in the Montana Comprehensive Fish and Wildlife Conservation Strategy (MFWP, 2005).
    - Species listed as "Species of Greatest Conservation Need" that are found in the Lower Yellowstone Service Area include :
        - Pallid Sturgeon (Scaphirhynchus albus)
        - Blue Sucker (Cycleptus elongates)
        - Burbot (Lota lota)
        - Northern Leopard Frog (Rana pipiens)
        - Spiny Softshell (Apalone spinifera)
        - Trumpeter Swan (Cygnus buccinators)
        - Greater Sage-grouse (Centrocercus urophasianus)
        - Mountain Plover (Charadrius montanus)
        - Burrowing Owl (Athene cunicularia)
        - Black-tailed Prairie Dog (Cynomys ludovicianus)

- *Supports Regional Conservation Initiatives*: Partner with local Conservation Districts and state and federal agencies.
    - There are no watershed groups in the service area
    - Montana Department of Fish, Wildlife, and Parks, Montana Department of Environmental Quality, and Montana Department of Natural Resources and Conservation; U.S.D.A. Natural Resources Conservation Service,

Farm Service Agency, and U.S. Forest Service; and the U.S.D.I. Fish and Wildlife Service, and U.S. Bureau of Land Management are state and federal agencies active within the Lower Yellowstone Service Area. Agency personnel will be important partners in identifying suitable projects.

- *Long Term Management:* Partner with agency personnel, land trusts, and landowners to ensure the long-term success of projects.
    - Montana Land Reliance is the primary active land trust in the Lower Yellowstone Service Area and holds easements on about 2281 acres (MTNHP, 2012).

7. Preservation Strategy

Preservation of compensatory mitigation project sites is generally required in conjunction with aquatic resource restoration or enhancement in order to sustain and protect the mitigation project investments and long-term functioning of the compensatory mitigation site. Furthermore, preservation of riparian corridors for streams and rivers, as well as adjacent and contributing lands for wetlands, is emerging as one of the single most important strategies for stream and wetland restoration and protection. Preservation of riparian and upland areas will be used conjunction with restoration to protect mitigation sites, as well as to establish habitat corridors and enhance the functioning of existing natural areas.

The mitigation project plan for each compensatory mitigation project will define how preservation will be used to meet mitigation objectives and how it meets criteria outlined in Section § 332.2 (h) (2) of the Final Rule. This section of the rule also provides for the application of preservation as a primary mitigation strategy when applied in a watershed context. Preservation of existing aquatic resources that are important for maintaining or improving ecological functions of a watershed may be part of the overall watershed approach of the ILF program. Preservation will be considered for sites that are under imminent threat to a valuable aquatic resource. These may include, but not be limited to: 1) sites that support aquatic threatened and endangered species or species of concern; 2) sites where a significant percentage of existing and riparian areas within a watershed can be preserved in relatively pristine condition; and, 3) where resources are considered unique, rare, or difficult to replace. Preservation strategies will target smaller and unique sites where a preservation strategy is less likely to be compromised by adjacent or nearby land management.

Preservation as a means to provide effective mitigation in the Lower Yellowstone Service Area represents a significant opportunity to maximize the benefits of MARS' ILF program. The anticipated use of Channel Migration Zone (CMZ) easements to offset the financial impact to landowners for allowing natural stream processes to occur and affect their lands may be far more effective than streambank protection, revegetation, and more traditional stream restoration techniques. CMZ easements are perceived by many resource managers in the area as a core program for protecting and restoring the

Yellowstone River and its tributaries in the long term.

8. Public and Private Involvement

The MARS Statewide ILF program is uniquely positioned to incorporate public and private involvement through partnerships and joint project funding. As the ILF Sponsor, MARS will consider opportunities to enhance compensatory mitigation project outcomes and increase the extent of mitigation benefits through collaboration with state, federal, tribal and other public aquatic resource protection programs or on public or tribal lands. MARS will generally pursue all such collaboration except where other programs or use of public or tribal lands impose costs, restrictions or other constraints on MARS that could compromise the effectiveness of the ILF program. IRT members will serve in part to review documentation, conduct compensatory mitigation project evaluations, and to provide comments to the Corps relevant to their agencies' responsibilities and other considerations. MARS will also consider opportunities to partner with private or commercial entities and other conservation and restoration entities, including watershed groups, to promote collaboration in conservation of aquatic resources in Montana.

MARS anticipates engaging partners to collaborate and provide the following functions:

- Locate and identify suitable lands
- Hold easements (i.e., Land Trusts)
- Assist with development and implementation of monitoring programs
- Assist with expansion of contiguous habitat
- Provide long term management and protection
- Provide local knowledge and contacts

Following is a listing of probable mitigation program and project partners.

- The Yellowstone River Conservation Districts Council promotes collaboration between the Conservation Districts of the basin with public and private agencies, and also supports ongoing research. Reports and information are available at http://www.yellowstonerivercouncil.org/index.php.
    - YRCDC was formed out of an initiative by the Governor's Upper Yellowstone River Task Force, which worked from 1997 until 2003 to assess the cumulative effects on the River. Reports and information are available at http://nris.mt.gov/yellowstone/govtaskforce/default.htm
    - The 2006 Yellowstone River Cultural Inventory: Part I provides information about local stakeholder's perceptions on aquatic resource management in the service area (Gilberts *et al.* 2006).
- Potential federal and state public partners include:
    - Western Area Power Administration (WAPA)
    - US Fish and Wildlife Service (USFWS)

- US Bureau of Land Management
- US Bureau of Reclamation
- USDA Forest Service
- US Environmental Protection Agency (EPA)
- US Army Corps of Engineers (Corps)
- USDA Natural Resources Conservation Service (NRCS)
- USDA Farm Service Agency
- Montana Dept. of Environmental Quality (DEQ)
- Montana Dept. of Fish Wildlife and Parks (FWP)
- Montana Dept. of Natural Resources and Conservation (DNRC)
- Montana Department of Transportation (MDT)
- Bonneville Power Administration (BPA)
- U.S. Federal Highway Administration

- Potential NGO partners include:

  - American Prairie Foundation
  - American Bird Conservancy
  - Avian Science Center – University of Montana
  - Ducks Unlimited, Inc.
  - Montana Fish, Wildlife and Parks Foundation
  - Montana Land Reliance
  - Pheasants Forever, Inc.
  - Rocky Mountain Elk Foundation
  - The Conservation Fund
  - The Trust for Public Land
  - The Nature Conservancy
  - Trout Unlimited
  - Yellowstone River Conservation Districts Council
  - Individual County Conservation Districts
  - Montana Association of Conservation Districts
  - Greater Yellowstone Coalition
  - Yellowstone Valley Audubon Society

9. Long-Term Protection and Management Strategies

MARS will be responsible for developing and implementing a long-term protection and management plan for each ILF project. On publicly owned land, long-term protection and management may be provided through facility management plans or integrated natural resource plans. On privately owned property, including property held by MARS or other conservation organizations, real estate instruments shall be recorded with the appropriate County Clerk and Recorder's Office(s) to guarantee protection and notice. MARS will ensure that protection mechanisms are in place prior to release of credits. Draft conservation easements or equivalent protection mechanisms will be submitted to the IRT and Corps as part of each project mitigation plan for review and Corps approval.

MARS' ILF Program projects will be designed, to the maximum extent practicable to require little or no long-term management once performance standards have been achieved. MARS will be responsible for maintaining its ILF projects consistent with the mitigation plan to ensure long-term viability as functional aquatic resources. MARS will retain responsibility unless and until the long-term management responsibility is formally transferred to a long-term manager with Corps approval. The long-term management plan developed for each MARS ILF project will include a description of anticipated management needs with annual cost estimates and an identified funding mechanism (such as non-wasting endowments, trusts, contractual arrangements with future responsible parties, or other appropriate financial instruments).

10. Periodic Evaluation and Reporting

MARS will monitor completed ILF mitigation projects using a mitigation monitoring protocol developed by MARS that is consistent with Corps of Engineers guidance at the time each ILF project is initiated. This protocol will provide consistent methods and measurements among sites allowing for additional evaluation of the ILF Program as a whole, thus helping to ensure that performance standards are met. The frequency and duration of monitoring and specific monitoring requirements will be defined in each individual mitigation plan. In general, monitoring reports will include: 1) plans, maps, and photographs to illustrate site conditions; 2) a narrative summarizing condition of the site as well as monitoring results as compared to performance standards; and, 3) recommendations for contingency or adaptive management as needed. The Corps may extend the monitoring duration designated in the mitigation plan if performance standards have not been met. The Corps may also reduce or waive monitoring requirements upon determination that performance standards have been achieved.

Monitoring and contingency reports will address adaptive management strategies that provide management guidelines and recommendations for future site restoration and monitoring. The responsibility of each participating party will be clearly defined and address procedures to improve or alleviate foreseen or unforeseen threats to restored aquatic sites and functions. The monitoring and contingency plan will track progress towards measurable goals and their associated objectives.

11. Additional Information

In 2011 during spring flooding, BNSF Railway Company stabilized approximately 23,391 feet of stream bank at multiple sites, many within Lower Yellowstone Service Area #15, impacting the Yellowstone River and tributaries.

The US Army Corps of Engineers issued a Public Notice (NOW-2011-01103-MTB) on July 5, 2012 regarding after-the-fact approval for projects conducted by the BNSF Railway Company on the Yellowstone River and its tributaries between Huntley, MT and Wibaux, MT. Impacts associated with this permit notice total approximately 82,000 stream debits requiring mitigation. Approximately one third of these impacts occurred within the Lower Yellowstone Service Area. BNSF indicates its intentions within the Public Notice of providing in-lieu fees to MARS for floodplain protection through CMZ acquisition along the Yellowstone River. MARS anticipates that this crediting opportunity

and associated funding would assist MARS in establishing an effective and comprehensive conservation easement program for the Yellowstone River corridor that over time will provide a foundation for aquatic resource restoration projects whether mitigation-driven or otherwise.

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APPENDIX A:

Table 1: Montana Department of Environmental Quality's Clean Water Act Information Center (CWAIC) data on water quality impairments in the mainstem of the Yellowstone River. Water Quality Category Abbreviations: 4C - TMDLs are not required; no pollutant-related use impairment identified, and 5 - One or more uses are impaired and a TMDL is required (CWAIC, 2012).

Location	Waterbody ID	Size	Water Quality Category	Beneficial Use	Probable Cause	Probable Sources
Lower Yellowstone Diversion Dam to North Dakota border	MT42M001_011	53.7	5	Partially Supporting Aquatic Life	Alteration in Stream-side or littoral vegetative covers	Irrigated Crop Production, Rangeland Grazing, Streambank Modifications/destabilization
					Chromium (total)	Source Unknown
					Copper	Natural Sources, Source Unknown
					Fish-Passage Barrier	Impacts from Hydrostructure Flow Regulation/modification
					Lead	Source Unknown
					Nitrogen (Total)	Irrigated Crop Production, Rangeland Grazing, Streambank Modifications/destabilization
					pH	Natural Sources, Source Unknown
					Phosphorus (Total)	Irrigated Crop Production, Rangeland Grazing, Streambank Modifications/destabilization
					Sedimentation/Siltation	Impacts from Hydrostructure Flow Regulation/modification, Irrigated Crop Production, Rangeland Grazing, Streambank Modifications/destabilization, Source Unknown
					Total Dissolved Solids	Natural Sources, Source Unknown
Powder River to Lower Yellowstone Diversion Dam	MT42M001_012	76.7	4C	Partially Supporting Aquatic Life	Fish-Passage Barrier	Dam Construction (Other than Upstream Flood Control Projects)

Table 2: Montana Department of Environmental Quality's Clean Water Act Information Center (CWAIC) data on water quality impairments found in the Lower Yellowstone Sub-basin. Water Quality Category 5 signifies that one or more uses are impaired and a TMDL is required (CWAIC, 2012).

Stream Name	Waterbody ID	Size (Miles)	Category	Beneficial Use	Probable Causes	Probable Souces
Burns Creek	MT42M002_110	53.7	5	Partially Supporting Aquatic Life and Primary Contact Recreation	Chlorophyll-a	Crop Production
					Fish-Passage Barrier	Hydrostructure Impacts on Fish Passage, Irrigated Crop Production
					Iron	Natural Sources
					Nitrogen (Total)	Crop Production
					Other flow regime alterations	Irrigated crop production
					Phosphorus (Total)	Crop Production
Cabin Creek	MT42M002_150	102.5	5	Not supporting Aquatic Life, Fully Supporting Primary Contact Recreations	Nitrogen (Total)	Rangeland Grazing
					Oxygen, Dissolved	Dam or Impoundment, Natural Sources, Rangeland Grazing
					Sedimentation/Siltation	Dam or Impoundment, Natural Sources, Rangeland Grazing
Cedar Creek	MT42M002_141	27.5	5	Partially Supporting Aquatic Life	Alteration in stream-side or littoral vegetative covers	Grazing in Riparian or Shoreline Zones, Natural Sources
					Arsenic	Natural Sources, Spills from Trucks or Trains
					Copper	Natural Sources, Spills from Trucks or Trains
					Iron	Natural Sources, Spills from Trucks or Trains
					Lead	Natural Sources, Spills from Trucks or Trains
Cottonwood Creek	MT42M002_100	22	5	Not supporting Aquatic Life, Fully Supporting Primary Contact Recreations	Cadmium	Natural Sources, Unknown
					Fish-Passage Barrier	Hydrostructure Impacts on Fish Passage
					Iron	Natural Sources

					Physical substrate habitat alterations	Channelization, Flow Alterations from Water Diversions
Crane Creek	MT42M002_070	24.2	5	Partially Supporting Aquatic Life, Fully Supporting Primary Contact Recreation	Alteration in stream-side or littoral vegetative covers	Channelization
					Other flow regime alterations	Irrigated crop production
					Sedimentation/Siltation	Channelization, Irrigated Crop Production
First Hay Creek	MT42M002_030	33.4	5	Partially Supporting Aquatic Life and Primary Contact Recreation	Copper	Irrigated crop production, Transfer of Water from an Outside Watershed
					Fish-Passage Barrier	Hydrostructure Impacts on Fish Passage
					Iron	Irrigated crop production, Transfer of Water from an Outside Watershed
					L	Irrigated crop production, Transfer of Water from an Outside Watershed
					Nitrate/Nitrite	Irrigated crop production, Transfer of Water from an Outside Watershed
					Nitrogen (Total)	Irrigated crop production, Transfer of Water from an Outside Watershed
					Other flow regime alterations	Irrigated crop production, Transfer of Water from an Outside Watershed
					Phosphorus (Total)	Irrigated crop production, Transfer of Water from an Outside Watershed
					Solids (Suspended/Bedload)	Irrigated crop production, Transfer of Water from an Outside Watershed
					Total Dissolved Solids	Source Unknown
Fourmile Creek	MT42M002_020	29.7	5	Partially Supporting Aquatic Life, Not Supporting Primary Contact Recreation	Chlorophyll-a	Source Unknown
					Nitrate/Nitrite	Source Unknown
					Nitrogen (Total)	Source Unknown
					Other flow regime alterations	Dam or Impoundment
					Total Dissolved Solids	Source Unknown
Fox Creek	MT42M002_051	49.8	5	Partially Supporting Agriculture, Aquatic Life, and Primary	Arsenic	Source Unknown

				Contact Recreation, Not supporting Drinking Water		
					Excess Algal Growth	Source Unknown
					Iron	Natural Sources, Source Unknown
					Lead	Natural Sources, Source Unknown
					Low flow alterations	Irrigated Crop Production
					Mercury	Source Unknown
					Nitrogen (Total)	Source Unknown
					Phosphorus (Total)	Source Unknown
					Physical substrate habitat alterations	Channelization
					Solids (Suspended/Bedload)	Irrigated Crop Production
					Sulfates	Source Unknown
					Total Dissolved Solids	Source Unknown
Glendive Creek	MT42M002_130	55.9	5	Not supporting Aquatic Life, Fully Supporting Primary Contact Recreations	Alteration in stream-side or littoral vegetative covers	Grazing in Riparian or Shoreline Zones
					Cadmium	Natural Sources, Source Unknown
					Chromium (total)	Natural Sources, Source Unknown
					Copper	Natural Sources, Source Unknown
					Iron	Natural Sources, Source Unknown
					Lead	Natural Sources, Source Unknown
					Nickel	Natural Sources, Source Unknown
					Selenium	Natural Sources, Source Unknown
					Solids (Suspended/Bedload)	Grazing in Riparian or Shoreline Zones
					Zinc	Natural Sources, Source Unknown
Lone Tree Creek	MT42M002_040	17.3	5	Partially Supporting Aquatic Life and Primary Contact Recreation	Alteration in stream-side or littoral vegetative covers	Channelization, Habitat Modification - other than Hydromodification
					Chlorophyll-a	Irrigated Crop Production
					Iron	Irrigated Crop Production
					Nitrate/Nitrite	Irrigated Crop Production
					Other flow regime alterations	Irrigated Crop Production
					Solids (Suspended/Bedload)	Irrigated Crop Production

North Fork Fox Creek	MT42M002_052	20.3	5	Not supporting Drinking Water, Partially Supporting Aquatic Life, Agriculture, and Primary Contact Recreations	Arsenic	Source Unknown
					Excess Algal Growth	Source Unknown
					Iron	Natural Sources, Source Unknown
					L	Natural Sources, Source Unknown
					Low flow alterations	Irrigated Crop Production
					Mercury	Source Unknown
					Nitrogen (Total)	Source Unknown
					Phosphorus (Total)	Source Unknown
					Physical substrate habitat alterations	Channelization
					Solids (Suspended/Bedload)	Irrigated Crop Production
					Sulfates	Source Unknown
					Total Dissolved Solids	Source Unknown
O'Brien Creek	MT42M002_060	15.5	5	Not Supporting Aquatic Life, Partially Supporting Primary Contact Recreations	Excess Algal Growth	Animal Feeding Operations (NPS)
					Nitrate/Nitrite	Animal Feeding Operations (NPS)
					Selenium	Irrigated Crop Production
Sears Creek	MT42M002_180	15.2	5	Not Supporting Aquatic Life and Primary Contact Recreation	Alteration in stream-side or littoral vegetative covers	Channelization, Rangeland Grazing
					Copper	Irrigated Crop Production
					Excess Algal Growth	Source Unknown
					Fish-Passage Barrier	Hydrostructure Impacts on Fish Passage
					High Flow Regime	Irrigated crop production, Transfer of Water from an Outside Watershed
					Iron	Irrigated Crop Production
					Lead	Irrigated Crop Production
					Solids (Suspended/Bedload)	Irrigated crop production, Transfer of Water from an Outside Watershed

Table 3: Montana Department of Environmental Quality's Clean Water Act Information Center (CWAIC) data on water quality impairments found in the O'Fallon Creek Sub-basin. Water Quality Category 5 signifies that one or more uses are impaired and a TMDL is required (CWAIC, 2012).

Stream Name	Waterbody ID	Size (Miles)	Category	Beneficial Use	Probable Causes	Probable Souces
Pennel Creek	MT42L001_010	66	5	Partially Supporting Aquatic Life, Fully Supporting Primary Contact Recreation	Total Dissolved Solids	Source Unknown
Sandstone Creek	MT42L001_020	72.8	5	Partially Supporting Aquatic Life, Fully Supporting Primary Contact Recreation	Nitrate/Nitrite	Agriculture, Municipal Point Source Discharges

XIII. EXHIBIT B - DEFINITIONS

This instrument adopts all definitions as defined in the Final Rule. However, in cases where MARS has a differing term or definition, or where an additional term has been applied, clarification has been provided in the definitions listed.

MITIGATION PROJECT PLAN – The document that formally establishes a compensatory mitigation project and stipulates the terms and conditions of its construction, operation, and long-term management. Each mitigation plan will be bound by the terms and conditions of this Instrument by reference.

PROTECTION — Protection refers to legal instruments and mechanisms established at a mitigation project site to provide permanent protection from land use or management practices that may limit natural aquatic functions at the site as established through the mitigation project. Examples of protections include conservation easements, deed restrictions, and other legal encumbrances as approved in a mitigation project plan.

CERTIFIED CREDIT - Certified credits are those achieved by ILF mitigation projects that exceed those necessary to satisfy established performance standards and to release all outstanding advance credits. Certified credits may be banked for future sale.

XIV. EXHIBIT C: MITIGATION PROCEDURES FOR WETLANDS AND STREAMS IN MONTANA

This Exhibit references, but does not include herein, the following Army Corps of Engineers documents:

A. MONTANA COMPENSATORY RATIOS, MONTANA REGULATORY PROGRAM, APRIL 2005

B. MONTANA STREAM MITIGATION PROCEDURE (MTSMP), MAY 2010.

XV. EXHIBIT D: STATEMENT OF SALE OF CREDIT

Omaha District Engineer
U.S. Army Corps of Engineers
1616 Capitol Ave., Ste. 9000
Omaha, NE 68128

Subject: Statement of Sale for *[Number of Credits]* Wetland Mitigation Credits and *[Number of Credits]* Stream Mitigation Credits from the Montana Statewide In-Lieu Fee Mitigation Program to *[Permittee name]*

[Date]

This letter confirms the sale of *[Number of Credits]* of *[Resource Type A]* and *[Number of Credits]* of *[Resource type B].* These credits are being used as compensatory mitigation for (number of feet/acres) of impact to [*Resource Type A]* and *[number of feet/acres]* of impact *[Resource Type B]* in the *[Service Area name, number]* Service Area as authorized by Department of the Army permit(s) *[DA permit number(s)]*.

By selling credits to the above permittee, the Montana Aquatic Resources Service, Inc. (MARS) is the party responsible for fulfilling the compensatory mitigation requirements of the permit(s) listed above.

SPONSOR

_____

MARS Executive Director or Chair, MARS Board of Directors

[address]

XVI. EXHIBIT E: CREDIT LEDGER AND PROGRAM ACCOUNT LEDGER TEMPLATES

A. Credit Ledger Summary – example of an annual credit ledger for a single Service Area. Values are for illustration only.

Missouri-Sun-Smith Service Area

Credit Ledger Summary - 2011

	Credit Type	Debits permitted	Advance Credits Issued	Advance Credits Sold	Advance Credits Available	Advance Credits Released	Total Credits Released + Certified	Credit Balance (net)
Wetlands	**Beginning**	0	0	0	0	0	0	
	Ending	25	38	25	13	25	29	4
Streams	**Beginning**	0	0	0	0	0	0	
	Ending	2,000	27,000	2,000	25,000	2,000	3,400	1,400

B. Program Account Summary – example of an annual program account summary for a single Service Area. Annual reporting will also include a summary in this format for the statewide program that will roll up all Service Area accounts. Values are for illustration only.

Missouri-Sun-Smith Service Area

Program Account Summary -2011

	Fees from Credit Sales	Program Admin Account	Contingency Account	Long-Term Account	Mitigation Account	Mitigation Expense Total
Beginning	0	0	0	0	0	0
Ending	350,000.00	16,752.48	50,000.00	41,500.00	15,000.00	175,000.00
Year	350,000.00	16,752.48	50,000.00	41,500.00	15,000.00	175,000.00

C. Wetlands Mitigation, Detailed Credit Report – example of a detailed credit report for wetlands mitigation in a single Service Area. Values are for illustration only.

Missouri-Sun-Smith Service Area **Detailed Credit Report – 2011 – WETLAND MITIGATION**									
Permit Debits			ILF Mitigation Credits						
Transaction Date	Permit Number	Debits permitted	Advance Credits Issued	Advance Credits Sold	Advance Credits Available	Advance Credits Released	Total Credits Released + Certified	Credit/ Project ID	Credit Balance (net)
Beginning Balance		0	0	0	0	0	0		
4/1/11			20		20				
4/25/11	1275	10		10	10				
5/17/11	1343	5		5	5				
5/17/11	1344	5		5	0				
6/30/11					0	8	8	2011-1	
9/1/11					0	10	10	2011-1	
9/15/11			18		18				
10/11/11	1488	5		5	13				
11/1/11					13	2	2	2011-1	
11/15/11					13	2	2	2011-1	
12/31/11					13	3	7	2011-1	
Wetland Totals		**25**	**38**	**25**	**13**	**25**	**29**		**4**

D. Stream Mitigation, Detailed Credit Report – example of a detailed credit report for stream mitigation in a single Service Area. Values are for illustration only.

Missouri-Sun-Smith Service Area **Detailed Credit Report - 2011**									
Permit Debits			ILF Mitigation Credits						
Transaction Date	Permit Number	Debits permitted	Advance Credits Issued	Advance Credits Sold	Advance Credits Available	Advance Credits Released	Total Credits Released + Certified	Credit/ Project ID	Credit Balance (net)
Beginning Balance		**0**	**0**	**0**	**0**	**0**	**0**		
4/1/11			25000		25000				
4/25/11	1275	1000		1000	24000				
5/17/11	1343	500		500	23500				
5/17/11	1344	500		500	23000				
6/30/11					23000	800	800	2011-2	
6/30/11					23000	1000	1000	2011-2	
9/1/11			1800		24800				
9/15/11					24800				
10/11/11					24800	200	200	2011-2	
11/1/11			200		25000				
11/15/11					25000		1400	2011-2	
Stream Totals		**2,000**	**27,000**	**2,000**	**25,000**	**2,000**	**3,400**		**1,400**

XI. SIGNATURE PAGE

FOR THE ESTABLISHMENT AND OPERATION OF A MONTANA STATEWIDE IN-LIEU FEE PROGRAM WITHIN THE STATE OF MONTANA, OMAHA REGULATORY DISTRICT, U.S. ARMY CORP OF ENGINEERS.

This Agreement, entered into by Montana Aquatic Resources Services, Inc.; US Environmental Protection Agency; US Fish and Wildlife Service; Montana Department of Environmental Quality; Montana Department of Fish, Wildlife and Parks; and the US Army Corps of Engineers (COE), is for the purpose of establishing In-Lieu Fee (ILF) mitigation throughout the State of Montana. The ILF Program will be used to mitigate for unavoidable wetland and stream impacts approved through the COE, who is responsible for administering Section 404 of the Clean Water Act. The creation, operation, and use of the ILF program will be in accordance with this Instrument.

The objective of the ILF Program is to compensate for impacts to waters of the United States, and more specifically, special aquatic sites such as wetlands and streams throughout the State of Montana. The goal of the ILF Program is to create highly functional wetlands and streams.

The primary geographical service area for each mitigation project will be defined within one of the sixteen Major Basins of the Montana Service Area map, which are based on the United States Geological Survey Hydrologic Unit Code (USGS HUC) watershed boundaries. Those boundaries are the same as those established for the Montana Department of Transportation and the previous Montana Department of Fish, Wildlife and Parks In-Lieu Fee Program. At the discretion of the COE, credits may be approved outside of the primary geographic service area.

IN WITNESS WHEREOF, the parties hereto have executed this Montana Statewide In-Lieu Fee Program Instrument on the date herein below last written by the IRT Chair

Patrick Byorth, — January 15, 2013

Patrick Byorth, — Date

Chair of the Board of Directors
Montana Aquatic Resources Services, Inc.

Kathryn M. Schenk, — 1/29/13

Kathryn M. Schenk, — Date

Chief, Operations Division
US Army Corps of Engineers - Omaha District

INTERAGENCY REVIEW TEAM (IRT) SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Montana Statewide In-Lieu Fee Program Instrument on the date herein above last written by the IRT Chair.

Sign: _____ Date: 1/3/13

Print Name, Title: Mike Volesky, Acting Director

Organization: **Montana Department of Fish, Wildlife, and Parks**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **Montana Department of Environmental Quality**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **U.S. Fish and Wildlife Service**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **U.S. Environmental Protection Agency, Region 8**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

INTERAGENCY REVIEW TEAM (IRT) SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Montana Statewide In-Lieu Fee Program Instrument on the date herein above last written by the IRT Chair.

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **Montana Department of Fish, Wildlife, and Parks**

Sign: _____ Date: 11/19/12

Print Name, Title: Richard H. Opper, Director

Organization: **Montana Department of Environmental Quality**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **U.S. Fish and Wildlife Service**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **U.S. Environmental Protection Agency, Region 8**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

INTERAGENCY REVIEW TEAM (IRT) SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Montana Statewide In-Lieu Fee Program Instrument on the date herein above last written by the IRT Chair.

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **Montana Department of Fish, Wildlife, and Parks**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **Montana Department of Environmental Quality**

Sign: R. Mark Wilson Date: 12-17-2012

Print Name, Title: Mark Wilson

Organization: **U.S. Fish and Wildlife Service**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **U.S. Environmental Protection Agency, Region 8**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

INTERAGENCY REVIEW TEAM (IRT) SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Montana Statewide In-Lieu Fee Program Instrument on the date herein above last written by the IRT Chair.

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **Montana Department of Fish, Wildlife, and Parks**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **Montana Department of Environmental Quality**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: **U.S. Fish and Wildlife Service**

Sign: _____ Date: 1/16/13

Print Name, Title: H. L. Garcia, TM

Organization: **U.S. Environmental Protection Agency, Region 8**

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____

Sign: _____ Date: _____

Print Name, Title: _____

Organization: _____