## In-Lieu Fee Mitigation Program Instrument

For

## The Lower Black Warrior River Watershed

## Sponsored by:

Alabama Department of Conservation and Natural Resources, State Lands Division

SAM-2011-0366-MBM



64 N. Union Street, Suite 464 Montgomery, AL 36130

Submitted to:
U.S. Army Corps of Engineers,
Mobile District,
Regulatory Program

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#### 1.0 INTRODUCTION

The following In-Lieu Fee Program Instrument (ILF Instrument) outlines the circumstances and manner in which the Alabama Department of Conservation and Natural Resources' (ADCNR) State Lands Division (SLD) proposes to sponsor a stream and wetland In-Lieu Fee Program (ILF Program) for portions of Hale, Bibb, Greene, Perry, Marengo, and Tuscaloosa county in Alabama that fall within the Lower Black Warrior River Watershed (ILF Service Area). The overall objective of the ILF Program is to provide a viable compensatory mitigation option for applicants seeking authorization to conduct work pursuant to the regulatory program administered by the U.S. Army Corps of Engineers-Mobile District.

Permits are required by the Corps through the Clean Water Act Section 404 (Section 404) for discharge of dredge or fill materials within "waters of the U.S." and through the Rivers and Harbors Act Section 10 (Section 10) for structures or work in or affecting navigable water of the U.S. These permitting programs require that losses to aquatic resource functions and services be avoided, minimized or offset through compensatory mitigation.

The rules, requirements, parameters, and options for compensatory mitigation are set forth in the Corps' regulations at 33 C.F.R. Part 332. To date, mitigation banks and permittee-responsible mitigation are the only options available in Alabama. However, federal regulations recognize that ILF programs may be an environmentally preferable mitigation option based on several factors. Notably, ILF programs consistently include thorough scientific analysis, planning, implementation, and monitoring for each project. Furthermore, the structure of an ILF program facilitates up-front site selection, mitigation plan development, and provides scientific expertise and financial assurances that translate to a reduction in temporal loss of aquatic resource function and reduction in project success uncertainty.



#### 2.0 ILF PROGRAM

#### 2.1 Goals and Objectives

The goals and objectives of the ADCNR-SLD -sponsored ILF Program are as follows:

- a) Provide an alternative to permittee-responsible and mitigation bank compensatory mitigation that will effectively replace functions and services lost through permitted impacts.
- b) Minimize the temporal loss of wetland functions and services by gaining approval of mitigation sites in advance of mitigation needs as funds allow.
- c) Create a program that has a level of accountability commensurate with mitigation banks as specified in 33 C.F.R. Part 332.
- d) Provide projects to meet current and expected demand for credits; and
- e) Achieve ecological success on a watershed basis by providing stream and wetland types and functions that are appropriate to the service area, and by integrating ILF projects with other conservation activities whenever possible.

#### 2.2 Qualifications of Sponsor

The ADCNR is the state agency responsible for the conservation and management of Alabama's natural resources. The ADCNR-SLD manages state-owned trust lands that are specific to their identity as well as to the income beneficiary. The ADCNR-SLD also manages ~220,000 acres under the Forever Wild Public Land Acquisition Program, ~60,000 acres of other state trust lands, as well as maintaining Alabama's official natural heritage database. The ADCNR-SLD also manages submerged lands (both inland and coastal) totaling some 600,000 acres, and are often impacted by Section 10 and Section 404 permitted activities.

The ADCNR-SLD is comprised of a professional staff with all necessary training and certifications for the implementation of wetland restoration activities. The ADCNR-SLD staff



has extensive experience in the disciplines of community ecology, wetland ecology/mitigation/restoration of long-leaf pine savanna, habitat ecology, forest ecology, wildlife management, burn ecology, environmental sciences, water quality monitoring/management, habitat management, permit review, exotic/invasive species control, and threatened and endangered species habitat restoration/mitigation.

The ADCNR-SLD's strategy for implementing stream mitigation projects will be to employ an environmental engineering firm that has the necessary training, certificates, and experience for the implementation of stream mitigation activities. These activities will include, but are not limited to, stream assessment, planning, design, construction, and monitoring.

#### 2.2.1 Legal Authority

The ADCNR derives its authority for operating an in-lieu fee program from the Alabama statutes and constitutional amendments below. These provisions authorize ADCNR-SLD to follow and comply with the federal mitigation regulations under 33 C.F.R 332 that govern in-lieu fee mitigation.

#### • Alabama Code § 9-2-2 Powers and Duties

"The general function and duties of the department of conservation and natural resources shall be as follows:

- 1) To protect, conserve and increase the wildlife of the state and to administer all laws relating to wildlife and the protection, conservation and increase thereof; ...
  - \* \* \* \* \* \* \* \* \* \*
- 4) To maintain, supervise, operate and control all state lands other than those specifically committed to the use or control of some other department, board, bureau, commission, agency, office or institution of the state;
- 5) To cooperate with and enter into cooperative agreements and stipulations with the secretary of agriculture of the United States or any other federal officer or



department, board, bureau, commission, agency, or office thereunto authorized with respect to wildlife restoration projects;..."

# Alabama Code § 9-2-6 Commissioner of Conservation and Natural Resources; powers and duties generally

"All functions and duties of the department of conservation and natural resources shall be exercised by the commissioner of conservation and natural resources acting by himself or by and through such administrative divisions or such offices or employees as he may designate."

#### Alabama Code § 9-2-122 State Lands Fund

"All funds and fees accruing from the management of lands by the Lands Division of the Department of Conservation and Natural Resources which are received or retained pursuant to Sections 9-15-15, 9-15-16, 9-15-39, 9-15-40, 9-15-52, 91-15-123, shall be deposited into the State Lands Fund, and shall be used only for the preservation, management, protection, and improvement of the lands."

Monies received pursuant to this in-lieu fee program will be placed in a separate interest bearing account and all interest earnings will be re-invested into this account and only expended for project purposes as further explained in section 3.1 of this document.

#### Alabama Code § 9-15-15 Revenues; disposition

"Any revenues that shall accrue from the lands so managed by the Department of Conservation and Natural Resources subject to costs of administration shall be the property of the department or institution to which the lands belong or in which the department or institution shall own the beneficial interest..."

#### • Alabama Code § 9-15-18 Sale of natural resources

"The commissioner of conservation and natural resources is hereby empowered to sell or cause to be sold timber or minerals or other natural resources from all lands managed or



controlled under the authority of this article when in his opinion he deems such timber or minerals or other natural resources to be merchantable quantity or quality. All lands or any interest therein over which the department of conservation and natural resources shall exercise management and control by virtue of this article may be leased, exchanged or sold by the commissioner of conservation and natural resources with the approval of the managing head of the department or institution to which said lands belong and the approval of the governor of Alabama."

All State-Owned properties enlisted into the ILF Program will be managed to achieve goals of the Section 404 Program. Any actions dealing with the transfer of the mitigation properties will require approval by the IRT and District Engineer. Property protection instruments (i.e. conservation easements) shall be transferred with the property.

#### 2.3 Establishment and Operation

This ILF Instrument establishes the ADCNR-SLD as a qualified ILF sponsor for providing compensatory mitigation, within the ILF Service Area, pursuant to Section 404 and Section 10 permit authorizations where the Corps has determined the use of an ILF is the preferred mitigation alternative. As a governmental natural resources management entity, the ADCNR-SLD will work with the Corps, in those areas of Alabama which fall within the ILF Service Area, to assure that federal requirements for compensation of stream and wetland resource impacts are adequately being met.

The structure of the ILF Program is outlined in this ILF Instrument and includes a compensation planning frame work detailing program elements, such as geographic service area, description of threats to aquatic resources in the service area, an analysis of historic aquatic resource loss in the service area, an analysis of current aquatic resource conditions in the service area, aquatic resource goals and objectives, a prioritization strategy for selecting and implementing compensatory mitigation activities, an explanation of how any preservation would be used, a description of any public and private stakeholder involvement in plan development and implementation, a description of the long term protection and management strategies for activities conducted by the in-lieu fee program sponsor, and a strategy for periodic evaluation



and reporting on the progress of the program in achieving the goals and objectives. In total, the ILF Instrument will serve as the "umbrella" beneath which mitigation projects in the ILF Service Area will be proposed and implemented.

Each mitigation project will have a separate mitigation plan which will require approval by the Inter-agency Review Team. Once approved, each mitigation plan will be appended to the relevant ILF Instrument. Such mitigation plans will be developed and implemented in accordance with 33 C.F.R. § 332.4(c) and relevant Mobile District Corps guidelines. Mitigation plans will include the following 14 elements:

- a) Project objectives;
- b) Site selection factors;
- c) Description of the site protection legal arrangements/instrument;
- d) Baseline information for the proposed compensatory mitigation project site;
- e) Determination of credits (advanced and released);
- f) Mitigation work plan;
- g) Maintenance plan;
- h) Ecologically-based performance standards;
- i) Monitoring parameters and requirements;
- j) Long-term management plan;
- k) Adaptive management plan; and
- 1) Financial assurances.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Pursuant to 33 C.F.R. § 332.3(n)(1), it is recognized that a formal, documented commitment from ADCNR may suffice to provide the requisite financial assurance.



- m) Accounting information for each project will be determined on a project-byproject basis and included in the project management plan.
- n) Any additional information as needed by the Corps and/or the IRT for adequate review.

Stream and wetland functional assessments will be completed using Mobile District Corpsapproved techniques before and after project implementation to help guide mitigation plan development and evaluate success. The ADCNR-SLD will remain responsible for the implementation of mitigation plans under the ILF Program. The ADCNR-SLD will act as program manager and report to the Inter-Agency Review Team on the work conducted programmatically.

The ADCNR-SLD assumes all legal responsibility for satisfying the mitigation requirements of the Corps/State permit for which fees have been accepted (i.e., implementation, performance and long-term management of the compensatory mitigation projects(s) approved under this agreement and subsequent mitigation plans). The transfer of liability is established by: (1) approval of this ILF Instrument; (2) receipt by the district engineer of a credit sale form/letter/certificate that is signed by the ADCNR-SLD and the permittee and dated; and (3) the transfer of fees from the permittee to the ADCNR-SLD.

#### 2.4 Inter-agency Review Team

An Inter-agency Review Team (IRT) will advise the Corps on the establishment and management of the ILF Program. The Corps will chair the IRT and may include, but is not limited to, representatives of the following entities:

- U.S. Army Corps of Engineers Mobile District, Regulatory Division
- U.S. Environmental Protection Agency Region IV, Water Management Division
- U.S. Fish and Wildlife Service



- Alabama Department of Environmental Management
- Mississippi Department of Environmental Quality
- Mississippi Department of Marine Resources
- Mississippi Department of Wildlife, Fisheries, and Parks

The Corps may designate different representatives of the agencies listed above, and may invite additional members to serve on the IRT for individual mitigation projects. The IRT will meet at least annually to review planned and implemented mitigation projects, more often if compliance inspections are requested for proposed credit releases. In accordance with the relevant provisions of 33 C.F.R. Part 332, the IRT will review project proposals and provide recommendations to the respective district engineer. In reviewing and recommending project proposals, the IRT should use a watershed approach to the extent possible. Additionally, all selected project mitigation management plans must be reviewed and approved by the IRT. IRT recommendations will ensure a careful consideration of the ecological suitability of compensatory mitigation sites and the long-term protection and maintenance of restoration sites funded under the ILF Agreement.

#### 2.5 Compensation Planning Framework

#### 2.5.1 ILF Program Service Area

As part of the ILF Program, the ADCNR-SLD intends to have mitigation projects in the Lower Black Warrior River Watershed (LBWRW) (HUC 03160113) that fall within the jurisdiction of the Corps that will provide appropriate compensatory mitigation for impacts to the waters of the U.S. and state waters.

The ADCNR-SLD's ILF Program is eligible to provide compensatory mitigation for permitted impacts within the ILF's Service Area in instances where the District Engineer has determined the use of the ILF Program is the appropriate and preferred mitigation alternative in accordance with 33 C.F.R 332.3. In rare instances the ADCNR-SLD can also provide mitigation for permits



outside the ILF Service Area when deemed appropriate and approved by the District Engineer. In such cases the proximity factor method will be used.

#### 2.5.2 Description of Threats

The Alabama Department of Environmental Management and the Black Warrior River Watershed Management Plan identify a number of threats impacting the habitat and water quality of the LBWRW. These threats include impacts from Agriculture Operations, Aquaculture Operations, Forestry Operations, and Urban/Rural Development.

Agriculture Operations produce excess nutrients and bacteria from animal wastes, runoff of pesticides, fertilizers, and other chemicals from croplands and pastures. Critical wetland habitats have been drained to create open farmland areas. Streams have been straight-lined or channelized to increase crop production areas. The effects of channelization include the acceleration of bank erosion which leads to increased sediment load, head-cutting, the loss of habitat diversity, substrate instability, and loss of riparian areas that are necessary for filtering out sediment and other pollutants from reaching streams.

Aquaculture Operations require dams that have resulted in changes to natural stream flow patterns and levels. Dams have drastic effects on water temperature and oxygen levels in streams. Aquatic habitat fragmentation has occurred from these activities impacting species that depend on free-flowing streams. This fragmentation has resulted in the elimination of many riverine species from extensive portions of their former range. Most of the watershed's imperiled species now live in small and isolated populations. Impounding from dams has also resulted in the loss of important riverine and bottomland hardwood wetlands along the stream corridor.

Improper logging practices from silviculture operations has resulted in increased erosion of soils which make their way into stream and wetland habitats resulting in siltation of sensitive areas. The most significant impact from forestry operations is the removal of critical headwater habitat. These headwater areas are crucial for reducing overland water flow and filtering nutrients and sediment from runoff reducing the likelihood of these pollutants reaching streams and rivers.



Silviculture operations have also turned pristine riverine and bottomland hardwood wetlands in to monocultural pine plantations.

Urban/Rural Development has increased the amount of impervious surfaces within the watershed which in turn reduces infiltration of water into soil inhibiting much needed groundwater recharge. Other threats from urban/rural development include untreated runoff from paved areas and lawns entering storm drains that flow directly to streams with no filtering from riparian areas that once existed in those areas. (BWRWMP)

The ILF Program will seek projects that help offset impacts that could potentially be caused by these threats. Project site selection is outlined in Section 2.5.6 Prioritization Strategy for Selecting and Implementing Compensatory Mitigation. These projects may include, but are not limited to returning wetlands that have been converted to croplands back to their original state, returning habitat diversity along with pattern, profile, and dimension to channelized streams, reforesting headwater areas that have been cleared by forestry practices, or removing dams created by aquaculture operations to restore natural flowing stream habitat.

#### 2.5.3 Analysis of Historic Resource Loss

Due to a paucity of accurate and consistent historical analytical data for the LBWRW, it is impossible to provide an accurate account of impacts that have occurred to the aquatic resources by the threats described in Section. 2.5.2 beyond 20 years. However, it can be ascertained from written and verbal historical accounts of activities in the watershed that the aquatic resources that this ILF program seeks to restore and protect have been inevitably impacted by human activities throughout the last century.

It is known that the LBWRW has experienced numerous aquatic resource losses due to human impacts resulting from agricultural activities, pond and reservoir dam construction, livestock farming, silviculture impacts, and urbanization (ADEM).

The LBWRW has a history rich in agriculture. As early as the 1800s, erosion problems have been severe as settlers have stripped the watershed of its forest and as primitive agricultural practices have allowed precious topsoil to be eroded into streams. Agricultural practices were



geared toward the production of cotton, corn, soybeans, and livestock with little regard as to the impacts it would have on the water quality of the watershed. Natural, free flowing streams were channelized and the riparian buffers were removed to increase the area of crop lands available. Wetlands have been clear cut for their timber value and drained only to be replaced with croplands or monoculture pine plantations (HALE).

Around the 1960s, farmers began shifting their focus from agriculture to aquaculture. The catfish production industry lead farmers to begin creating series of dams and levees along free flowing stream and across valleys that contained ephemeral streams. These dams were created for water retention in the form of ponds for the purpose of raising catfish. (GOLD) These practices have led to over 11,000 acres of catfish ponds being established in Hale County alone (HALE).

#### 2.5.4 Analysis of Current Resource Conditions

An analysis of the current resource conditions of the LBWRW is based on review of region-wide or local publications and online information sources (including Environmental Protection Agency, Alabama Soil and Water Conservation Committee, Alabama Department of Environmental Management, Black Warrior Clean Water Partnership, US Geological Survey National Land Cover Data, US Geological Survey National Hydrography Dataset, and Alabama Gap Analysis Project). Assessment of current resource conditions were derived from a summarization of data found in the references listed above.

The LBWRW contains 19 sub-watersheds located within an approximately 1,458 mi<sup>2</sup> area in southwest Alabama. The Alabama Department of Environmental Management has deemed 7 of the 19 sub-watersheds as being impaired. (ADEM 2002) Sources of impairment include crop runoff, pasture grazing, aquaculture, forestry, and sedimentation. Nine of the 19 sub-watershed have been identified as having a moderate to high non-point source impairment potential from crop runoff. Seven of the 19 sub-watershed have been identified as having a moderate to high non-point source impairment potential from pasture grazing. Six of the 19 sub-watersheds have been identified as having a moderate to high non-point source impairment potential from aquaculture. Four of the 19 sub-watersheds have been identified as having a moderate non-point



source impairment potential from forestry. Three of the 19 sub-watersheds have been identified as having a moderate non-point source impairment potential from sedimentation (BWRWMP).

Vegetation and land cover statistics for the LBWRW were developed using the 2006 National Land Cover Data (NLCD) and are shown in Table 1. In summary, forest covers just over half of the LBWRW (56%), non-forested upland (non-wetland) vegetation about one-fifth (20%), wetlands about 15%, developed urban areas about 6%, and the remaining 3% is open water which includes lakes, rivers, reservoirs, and aquaculture ponds. (2006 NLCD) A comparison between 2001 and 2006 NLCD reveals a 3.5% decrease of woody wetlands and emergent herbaceous wetlands. Available data shows that the wetlands (both woody and herbaceous) that provide important ecological functions are not abundant in the LBWRW and are worthy of protection and mitigation. This decrease could possibly be the result of impacts associated with the 13.5% increase seen in Urban Development.

**Table 1.** Vegetation and Land Cover Classes for Lower Black Warrior River Watershed across all Land Ownerships. (2006 NLCD)

Land Cover	Acres	Percent	
Forest			
Deciduous Forest	219,630	23.6	
Evergreen Forest	117,669	12.7	
Mixed Forest	107,029	11.5	
Shrub Scrub Forest	74,603	8.0	
Non-Forest Uplands			
Grassland/Herbaceous (Grazing)	10,860	1.2	
Pastures/Hay	142,444	15.3	
Cultivated Crops	29,901	3.2	
Wetlands			
Woody Wetlands	138,223	14.9	
Emergent Herbaceous Wetlands	2,591	0.3	
Unvegetated			
Urban	56,034	6.0	
Open Water			
Streams, Lakes, Ponds, Reservoirs	31,000	3.3	
Total	929,984	100	



The LBWRW contains approximately 3,800 miles of rivers and streams. An analysis of the US Geological Survey National Hydrologic Data reveals that nearly 1,256 miles of streams have been impacted by dams associated with navigation, aquaculture, livestock ponds, recreational ponds, and beaver activity. In 1998, the Alabama Soil and Water Conservation committee estimated open water to cover approximately 1% of the watershed. Since 1998, there has been a 2.3% increase in open water according to an analysis of the 2006 NLCD.

These resources are being subjected to unavoidable impacts when the Corps issues permits for projects that clear, drain, and fill wetlands and streams as communities grow or redevelop and transportation or resource development occurs in the LBWRW.

#### 2.5.5 Mitigation Goals

The goals of the ADCNR-SLD -sponsored ILF Program are as follows:

- a) Protect and preserve valuable stream and wetland habitats that provide important functions and support the ecological health and sustainability of the watershed, through restoration, enhancement, or creation of valuable wetland and stream habitat.
- b) Achieve ecological success on a watershed basis by providing stream and wetland types and functions that are appropriate to off-setting the historic/current threats to the service area as described in section 2.5.2 and by integrating ILF projects with other conservation initiatives, such as ADCNR's Conserving Alabama's Wildlife: A Comprehensive Strategy Plan 2005, whenever possible.
- c) Restore habitat diversity, pattern, profile, and dimension to streams that have been channelized or dammed by agriculture and aquaculture operations
- d) Reduce sediment load into streams by restoring or enhancing riparian buffer areas and reforesting clear-cut headwater areas.



- e) Restore hydrology, habitat diversity, and function to wetlands that have been drained by agricultural operations.
- f) ADCNR-SLD will seek to restore properties that have multiple conservation objectives.

#### 2.5.6 Prioritization Strategy for Selecting and Implementing Compensatory Mitigation

The ADCNR-SLD will begin by assessing properties currently owned by the State of Alabama within the watershed. Land cover maps, aerial photography, historical accounts of the property use, GIS data, on-site visits, etc. will be used to perform an initial determination of the current conditions of the aquatic resources found on these properties. The ADCNR-SLD will rely on best available information, professional judgment of resource managers, and the IRT's knowledge of the watershed when assessing sites for mitigation potential. Properties found to have significant aquatic resource impacts that will allow the ADCNR-SLD to meet the goals set forth in Section 2.5.5 will be considered as potential ILF mitigation sites. Use of State-owned lands as potential sites for compensatory mitigation projects may diminish the need for, and consequently reduce the number of advanced credits available to the ILF Program (see Section 3.3).

If properties currently owned by the State of Alabama are not suitable for aquatic restoration activities, the ADCNR-SLD will begin assessing properties found under real-estate listings. The ADCNR-SLD may also respond to inquiries from willing landowners interested in protecting their resources or approach landowners of high-value aquatic habitat to gauge their interest in selling. Properties found adjacent to currently owned state properties will be given priority in an attempt to increase the ecological importance of the area by creating a large continuous ecological corridor. Use of areas not currently owned by the State as potential sites for compensatory mitigation will require IRT review of the need for, and number of advanced credits available to the ILF Program.

Projects that predict a high likelihood of success through sound stream and/or wetland restoration, creation, and/or enhancement design will be given priority. These projects will



include documented presence of hydrology, soils, and vegetation for wetlands or presence of appropriate stream metrics such as pattern, profile, and dimension for streams. 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 aquatic resource area and/or function.

Projects will first be evaluated on their ability to provide stream and wetland functional replacement, and secondly, based on their potential to address multiple goals outlined in Section 2.5.5 or the ability to address multiple functions and services which may include improvement of fish and wildlife habitat, support for rare species, flood attenuation, water quality improvement, and recreation or education values. Projects that support the ADCNR's regional conservation initiative *Conserving Alabama's Wildlife A Comprehensive Strategy 2005*, which emphasizes the protection and restoration of stream and wetland habitat to provide necessary habitat for endangered/protected species, will be given priority.

Projects will be located where they complement adjacent land uses, meet regional conservation priorities, address limiting factors in watersheds, increase habitat diversity, support state wildlife action plans, reduce fragmentation, establish corridors, and enhance the function of existing natural areas.

The ADCNR-SLD will also take into consideration stakeholder concerns and interest when selecting mitigation sites.

#### 2.5.7 Use of Preservation

Preservation will be the last preferred strategy proposed for credit generation. All efforts to present projects that generate credits through restoration, enhancement, and creation will be presented first. If preservation is proposed in a mitigation plan, it will include a detailed explanation of how it fulfills the requirements of 33 C.F.R § 332.3(h).

#### 2.5.8 Stakeholder Involvement

As the ILF Program sponsor, the ADCNR-SLD will optimize compensatory mitigation efforts under the ILF Program by working closely with interested agencies, community partners or



organizations, and private landowners to identify stream and wetland mitigation opportunities and develop mitigation plans and methods for inclusion in the ILF Instrument following IRT project review and Corps approval. Methods for assessing aquatic resource functions pre- and post-project implementation will be coordinated using approved Mobile District guidance. This will allow ILF Program efforts to dovetail with ongoing inventory and monitoring efforts.

#### 2.5.9 Long Term Protection and Management Strategies

The ADCNR-SLD will monitor ILF projects for the duration of the project using an IRT-approved standard mitigation monitoring protocol to provide consistency and predictability in methods and measurements among habitat types. The frequency and duration of monitoring and specific monitoring requirements will be defined in each individual mitigation plan. In general, monitoring reports will include plans, maps, and photographs to illustrate site conditions, a narrative summarizing the condition, monitoring results as compared to IRT-approved performance standards, and recommendations for contingency or adaptive management if needed. The monitoring duration designated in the mitigation plan may be extended, and/or the monitoring protocol modified, by the IRT if performance standards have not been met. The IRT may also reduce or waive monitoring requirements upon determination that performance standards have been achieved. Once final performance standards have been achieved, the Long-Term Steward will begin monitoring in perpetuity and provide biennial reports to the IRT with the monitoring requirements and responsibilities required in each individual mitigation plan.

ILF projects will be designed to the maximum extent practicable, to require minimal long-term management efforts once performance standards have been achieved. The ADCNR-SLD shall be responsible for maintaining ILF projects consistent with the mitigation plan to ensure long-term viability of functional aquatic resources. The ADCNR-SLD shall retain responsibility until the long-term management responsibility is formally transferred to a long-term manager with IRT approval. The long-term management plan developed for each ILF project will include a description of anticipated management needs with annual cost estimates and an identified funding mechanism (such as endowments, trusts, contractual arrangements with future responsible parties or other appropriate financial instruments).



For long-term protection, mitigation sites will have appropriate preservation mechanisms (i.e. Conservation Easement) in perpetuity, approved by the District Engineer, placed upon them.

#### 2.5.10 Reporting

Each year, the ADCNR-SLD will submit a summary report to the IRT that includes an account of all income, disbursements, and interest earned by the ILF Program account and the balance of funds, and will also address the status of the:

- a) ILF Program Account Summary
- b) Project-specific monitoring
- c) Credit Transactions/Availability
- d) Financial Assurances and Long-Term Management Funding

The report will describe the conditions of the Program Account and relate those conditions to the success criteria for each project. The annual report will also contain the following items:

- a) A ledger report that includes the Corps permit number, the amount of authorized impacts, the service area, the amount of required compensatory mitigation, the amount paid to the ILF Program and the date the funds were received from the permittee;
- b) An accounting of ILF Program expenditures/disbursements from the Program Account;
- c) The balance of advance credits and released credits at the end of the report period for each resource type, and any changes in credit availability (including additional credits released);
- d) The permitted impacts for each resource type;



- A comparison of the functions lost through authorized wetlands impacts in the service area with the functions accrued, or expected to accrue, at the mitigation project site;
- f) The annual monitoring report for each mitigation project;
- g) A description of any remedial action items implemented during the prior year at any of the mitigation projects; and
- h) An explanation of why any mitigation projects are not meeting their performance standards and any adaptive management strategies undertaken in the last year, or planned for the upcoming year;
- Beginning and ending balances, including a listing of deposits and withdrawals, of individual project accounts providing funds for financial assurance or longterm management; and
- j) Status of required financial assurances; however, the ADCNR-SLD will give the Corps 120 days advance notice if financial assurances will be terminated or revoked.

#### 3.0 ACCOUNTING PROCEDURES

#### 3.1 ILF Program Account

Upon Corps approval of the ILF Instrument, the ADCNR-SLD will create an escrow account to serve as the ADCNR-SLD ILF Program Account (also referenced in other documents as the ADCNR Stream Restoration Trust Fund). The Program Account will be an interest-bearing account maintained separately from the ADCNR-SLD's general operating budget. The Account will collect deposits from the sale of credits and will be used only for the selection, design, acquisition, implementation, monitoring, management and protection of ILF projects, and administrative costs for the ADCNR-SLD. Allowable expenditures may include fees associated with securing a permit for conducting mitigation activities, resource assessment, activities related to the restoration, enhancement, and creation of wetlands or streams, maintenance and



monitoring of mitigation sites, the purchase of credits from mitigation banks, or the hiring of private contractors or consultants directly related to accomplishing ILF program work. Administrative costs may include bank charges associated with the ILF Program Account, staff time and expenses for day to day management, bookkeeping, mailing, printing, copying, office supplies, computer hardware and/or software, travel, and oversight of private contractors or consultants directly related to accomplishing ILF program work. Administrative costs will not exceed the IRT approved 22% of each mitigation project. In accordance with 33 C.F.R. § 332.8(i)(1) all interest and earnings from the Program Account will remain in that account for the purpose of providing compensatory mitigation. ILF Program funds are explicitly prohibited from uses such as upland preservation (other than for buffers), research, education and outreach, implementation of best management practices (except for those used as a component of restoration or enhancement activities) or any activities not directly associated with accomplishing the purposes and goals of the ILF program.

Complete budgets for ILF projects will be approved as part of each mitigation plan. In addition, the ADCNR-SLD shall submit ledgers to the Corps on January 15, May 15 and September 15 showing all transactions for the previous reporting period and a cumulative tabulation of all transactions to date. At a minimum, each ledger must include the following information: permittee, permit number, type of permit, locality, type of impacted system, amount of impacts, balance of advance credits and released credits, amount of credits debited from the ILF program, number of remaining credits not yet allocated, USGS HUC Catalog Unit, and Date of Transaction.

On the income side of the transaction ledger, the following items must be tracked:

- a) Fees and all other income received, source of income (i.e., permitted impact, penalty fee, etc.) and any interest earned by the ILF Program Account
- b) List of permits for which ILF Program funds were accepted including the permit number, service area, amount of authorized impacts, resource type, amount paid to the ILF Program for each authorized impact, and the date the funds were received.



Disbursements/expenditures will also be tracked as well as the nature of the disbursement (i.e., costs of land acquisition, planning, construction, monitoring, maintenance, contingencies, adaptive management, and administration).

Ledgers and transaction reports shall be submitted to the IRT as long as credits remain in the ILF fund. The Corps may review Program Account records with written notice and when so requested, the ADCNR-SLD shall provide all books, accounts, reports, files and other records relating to the Program Account.

#### 3.2 Generation of Credits

The ADCNR-SLD's ILF Program will generate compensatory stream and wetland mitigation credits via creation, restoration, and enhancement or a combination of such. Generation of stream credits will be based on the Mobile District approved Compensatory Stream Mitigation Standard Operation Procedures and Guidelines that are most current at the time of initiation of each new mitigation project. Generation of wetland credits will be based on the Mobile District approved Ratio Method or the Wetland Rapid Assessment Procedure as appropriate.

In accordance with 33 C.F.R. § 332.8(o)(5), the cost per unit of credit will include the cost associated with the restoration, establishment, enhancement and/or preservation of streams and wetlands in that service area including, but not limited to, expenses for land acquisition, project planning and design, construction, plant materials, labor, legal fees, monitoring and remediation, or adaptive management strategies, as well as administration of the ILF Program which will not exceed the IRT approved 22% of each mitigation project. The cost per unit credit will also take into account contingency costs appropriate to the stage of project planning, including uncertainties in construction and real estate expenses as well as the resources necessary for the long-term management and protection of the proposed project. Finally, the cost per unit credit will include financial assurances that are necessary to ensure successful completion of proposed projects. The minimum cost of a credit will be equal to the replacement cost of purchasing credits at a Corps approved mitigation bank.



#### 3.3 Advanced Credits

In accordance with 33 C.F.R Section 332.8(n) the use of "advanced credits" can be made available to permittees when this ILF Instrument is signed. Advanced credits are defined as "any credits of an approved in-lieu fee program that are available for sale prior to being fulfilled in accordance with an approved mitigation project plan. Advance credit sales require an approved in-lieu fee program instrument that meets all applicable requirements including specific allocation of advance credits, by service area where applicable. The instrument must also contain a schedule for fulfillment of advance credit sales." For this ADCNR-SLD ILF Instrument, advanced credits will be determined on a project-by-project basis depending on the needs of the submitted mitigation plan. Given the ILF Program's prioritization strategy for sites, potential compensatory mitigation projects targeted for State-owned lands may require fewer, if any, advanced credits. For potential compensatory mitigation sites targeted for privately owned sites, advanced credit availability may be deemed appropriate and the number of advanced credits will be determined by the District Engineer, in consultation with the IRT, and will be specified in the Mitigation Plan for each ILF project.

The number of advanced credits will be based on:

- a) The compensation planning framework
- b) ADCNR's past performance in implementing aquatic resource restoration, establishment, enhancement, and/or preservation
- c) The projected financing necessary to begin planning and implementing the project
- d) If required by the District Engineer, the ADCNR-SLD will provide any additional information to support project specific requests for advanced credits.

The ADCNR-SLD will replace any advanced credits granted and sold with released credits from the project as soon as they are produced. Because of the project-specific nature of advanced credit assignation, when released credits are produced by an individual compensatory mitigation project they replace the advanced credits granted for that project. However, under this



agreement, the advanced credits are not re-allocated. Under this ILF agreement, allocation of advanced credits is done on a project-by-project basis at the discretion of the DE in consultation with the IRT.

In the initial phase of project development, mitigation plans will be established using funds from the advance credit sales. The number of advance credits allowed will be determined based on the projected financing necessary to begin planning and implementing the project but will not exceed 20% of the total number of credits that could be derived from the project.

#### 3.4 Released Credits

In order for the ILF Program to be available as an option for meeting Corps mitigation requirements for permit authorizations within a given service area, a mitigation project must be identified and described in a mitigation plan that has been approved by the IRT. The number of credits available at any given time will be determined by the standard IRT credit release schedule outlined in each approved mitigation plan. The credit release schedule for stream projects will be incremental and based on the release schedule found in the Compensatory Stream Mitigation Standard Operation Procedures and Guidelines that are most current at the time of initiation of each new mitigation project. Wetland credits will be released incrementally based on meeting habitat success criteria milestones as laid out by approved IRT habitat success criteria. Percentages available at each increment will be determined by the IRT's standard credit release schedule based on meeting success criteria for specific habitat types.

All land acquisition and initial physical and biological improvements must be implemented by the third full growing season after the sale of advance credits for that project. If ADCNR-SLD fails to complete land acquisition and initial improvements by the third full growing season, the Corps must direct the funds to be disbursed from the ILF Program Account to provide alternative compensatory mitigation to fulfill those compensation obligations. Credits generated through ILF mitigation projects may be sold to any private or public sector individual, organization, agency, or entity that is seeking mitigation credits as authorized by a Section 404 permit within the ILF Service Area. Use of, as well as the number and type of credits required as



compensatory mitigation for activities authorized by Corps permits will be determined by the Corps.

Upon sale of credits, the ADCNR-SLD becomes responsible for the relevant mitigation requirements of the permit. These terms require the ADCNR-SLD to submit a credit form/letter/certificate to the Corps. The document must be signed by the ADCNR-SLD and the permittee and dated. It must include the permit number(s) for which the ADCNR-SLD is accepting fees, the number of credits being purchased, and resource type(s) of credits being purchased. The ADCNR-SLD must submit the signed and dated credit transaction form/letter/certification to the IRT within 10 days of receiving fees from the permittee. A copy of each credit transaction/form/letter/certificate will be retained in both the Corps' and the ADCNR-SLD's administrative and accounting records for the ILF Program. The minimum cost of a credit will be equal to the replacement cost of purchasing credits at a Corps approved mitigation bank.

The Corps will make decisions about the most appropriate compensatory mitigation on a case-by-case basis during evaluation of a permit application. Authority for approving use of the ILF Program for compensatory mitigation lies with the Corps. Responsibility to provide compensatory mitigation remains with the permittee unless and until credits are purchased from the ILF Program. Upon Corps approval of purchase of credits, the permittee may contact the ADCNR-SLD to secure the necessary amount and resource type of credits, as outlined in the permit conditions. Each Section 404 authorization that includes a special condition requiring purchase of credits from the ILF Program will include a requirement that the ADCNR-SLD certify the transfer of responsibility via written communication to the permittee and the Corps. 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. Credit debits will be reflected in annual accounting reports.



#### 4.0 ADAPTIVE MANAGEMENT

The IRT accepts that all ecological restoration projects are site specific, that multiple endpoints are possible owing to the stochastic nature of ecological processes, and that human activities offsite and beyond the control of the ILF Program may influence the course of restoration. For these reasons, the IRT and ADCNR-SLD may review the restoration strategy, objectives, and the performance standards and monitoring protocols at any time prior to full project release. Proposed changes to the ILF Instrument must be made in writing and must qualify as adaptive management in response to site-specific conditions and must be approved by the IRT. If approved, the conditions of the ILF Instrument may only be amended or modified in accordance with 33 C.F.R. § 332.8(g)(2) and the written approval of all signatory parties. The ILF Program must demonstrate good-faith efforts to comply with restoration requirements.

#### 5.0 FORCE MAJEURE

Nothing herein shall be construed to authorize proceedings against ADCNR-SLD for any damages to the mitigation properties caused by acts of God such as earthquakes, fire, flood, storm, war, civil disturbance, strike, or similar causes. In the event of a force majeure event, ADCNR-SLD will notify the members of the IRT and work with the IRT to resolve the damages, if any, caused by the event. However, if the force majeure events do not preclude ADCNR-SLD from resuming operations without unreasonable expense, then it shall not be relieved of its obligations under this document. Any impact to future credit releases or number of credits available for sale shall be discussed and determined by the IRT at the time.

#### 6.0 DISPUTE RESOLUTION

Resolution of disputes about application of this ILF Instrument shall be in accordance with those stated in the Federal Guidance for the Compensatory Mitigation for Aquatic Resources; Final Rule (33 C.F.R. § 332.8(e), dated April 10, 2008). Disputes related to satisfaction of Success Criteria may be subject to independent review from government agencies or academia that are not part of the IRT. The IRT will evaluate this input and determine whether the success criteria are met.



#### 7.0 DEFAULT

The Corps may determine that ADCNR-SLD has failed to provide the required compensatory mitigation in a timely manner if ADCNR-SLD has not complied with the terms of this ILF Instrument or an approved mitigation plan. If the Corps determines that ADCNR-SLD failed to timely provide the required compensatory mitigation for any of the reasons outlined above, ADCNR-SLD must take appropriate action to achieve compliance with the terms of the ILF Instrument and all approved mitigation plans. Appropriate action may include, but is not limited to, suspending credit sales, decreasing available credits, requiring adaptive management measures, or requiring the use of financial assurances or contingency funds to provide alternative compensation.

#### 8.0 VALIDITY, MODIFICATION AND TERMINATION

This ILF Instrument will become valid on the latter date of either the Sponsor's signature or the signature of the representative of the Corps. This ILF Instrument may only be amended or modified in accordance with 33 C.F.R. § 332.8(g)(2) and with the written approval of all signatory parties.

Additionally, any party to the agreement (i.e Corps and ADCNR-SLD) may terminate the agreement within 60 days of written notification to the other party. If the ILF Instrument and ILF Program operated by the ADCNR-SLD are terminated, the ADCNR-SLD is responsible for fulfilling any remaining project obligations, and shall remain responsible until the long-term financial obligations have been met and the long-term ownership of all mitigations lands has been transferred to the party responsible for ownership and long-term management of the project(s). Funds remaining in the ILF Program accounts after these obligations are satisfied must continue to be used for the restoration, establishment, enhancement, and/or preservation of aquatic resources. The ADCNR-SLD may direct the ILF Program funds to secure credits from another source of third-party mitigation. The funds should be used, to the maximum extent practicable, to provide compensation for the amount and type of aquatic resources for which fees were collected. The Corps itself cannot accept directly, retain, or draw upon these funds in the event of a default.



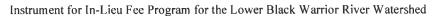
Any of the IRT members may terminate their participation upon written notification to all signatory parties without invalidating this ILF Instrument. Participation of the IRT member seeking termination will end 30 days after written notification.



#### 9.0 SIGNATURE PAGE

## **SIGNATURE PAGE**

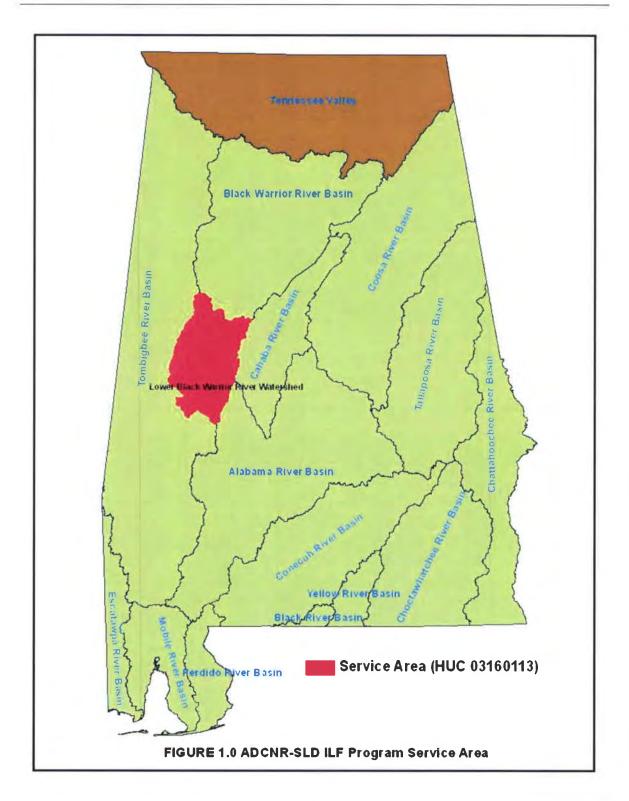
## **SIGNATORS** U.S. Army Corps of Engineers, **Mobile District** Craig J. Litteken, Chief Date Regulatory Division, Mobile District U.S. Army Corps of Engineers **U.S. Environmental Protection Agency** Jennifer Derby, Section Chief Date Wetlands and Marine Regulatory Section U.S. Fish and Wildlife Service William J. Pearson, Field Supervisor Date Alabama Ecological Services Field Office Alabama Department of Environmental Management Steven O. Jenkins, Chief Date Field Operations Division





Sponsor:		
Alahama Danartmant of Conserv	ation and Natural Resources, State Lands Divi	sion
Alabama Department of Conserv	tion and Natural Resources, State Lands Divi	SIUII
Patricia J. Powell	Date	SIUII







#### References

- (ADEM). 2002. Surface Water Quality Screening Assessment of the Cahaba and Black Warrior River Basin-2002. Alabama Department of Environmental Management. Montgomery, AL.
- (BWRWMP). 2002. Black Warrior River Watershed Management Plan. Black Warrior Clean Water Partnership. Birmingham, AL
- (GOLD). 2006. Fishing for Gold, The Story of Alabama's Catfish Industry. Karni R. Perez. Tuscaloosa, AL.
- (HALE). 2006. Soil Survey of Hale County, Alabama. U.S. Forest Service, U.S. Department of Agriculture, Natural Resource Conservation Service.
- (2006 NLCD) Multi-Resolution Characteristics Consortium (MRLC) http://www.mrlc.gov/nlcd2006.php



## 9.0 SIGNATURE PAGE

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#### **SIGNATORS**

U.S. Fish and Wildlife Service

William J. Pearson, Field Supervisor

Alabama Ecological Services Field Office

SEP 2 1 2012



1400 Coliseum Blvd. 36110-2400 • Post Office Box 301463 Montgomery, Alabama 36130-1463 (334) 271-7700 FAX (334) 271-7950

October 24, 2012

Mr. Mike Moxey, IRT Chair U.S. Army Corps of Engineers - Mobile District Regulatory Division - Inland Branch P. O. Box 2288 Mobile, Alabama 36628-0001

RE:

ADCNR-SLD In-Lieu Fee Mitigation Program Instrument for Alabama

ADEM Tracking ID: 2011-175-MBI

Dear Mr. Moxey:

Enclosed is the original signed and dated ADEM signatory page for the Alabama Department of Conservation and Natural Resources - State Lands Division In-Lieu Fee Mitigation Program Instrument for Alabama.

Please contact the ADEM's Coastal Program Satellite Office in Mobile: 251-432-6533 if we may be of further assistance.

Sincerely,

Steven O. Jenkins, Chief Field Operations Division

SOJ/jsb

ecopy: Doug Deaton, ADCNR-SLD

(251) 432-6598 (FAX)



## 9.0 SIGNATURE PAGE

## **SIGNATURE PAGE**

### **SIGNATORS**

Alabama Department of Environmental Management

Steven O. Jenkins, Chief Field Operations Division



## **Sponsor:**

Alabama Department of Conservation and Natural Resources, State Lands Division

Patricia 9. Powell

Date

Director



### 9.0 SIGNATURE PAGE

## SIGNATURE PAGE

#### **SIGNATORS**

U.S. Army Corps of Engineers,

**Mobile District** 

Craig J. Litteken, Chief

Regulatory Division, Mobile District

U.S. Army Corps of Engineers

Date