## Mitigation Banking Instrument Outline For Proposed Mitigation Banks Within the State of Missouri

(February 2015)

The U.S. Army Corps of Engineers (Corps) and U.S. Environmental Protection Agency joint regulation for *Compensatory Mitigation for Losses of Aquatic Resources*, (33 CFR, Part 332 and 40 CFR 230) herein referred to as the Mitigation Rule, improves planning, implementation, and management of permittee-responsible and third party compensatory mitigation projects. The purpose of this document is to explain how the Corps Districts whose regulatory boundaries fall within the State of Missouri and the Interagency Review Team (IRT) members interpret the required content for mitigation banking documentation.

As outlined in the Mitigation Rule, the approval process for the mitigation banking instrument occurs in four phases. The <u>Compensatory Mitigation Rule Timeline for Bank or ILF Instrument Approval</u>, is included in Appendix D of this document. Prospective bank sponsors shall submit the information contained in the following outline to the Corps and to the IRT members in order to initiate the review process;

Phase I of the review process is recommended, however, it is not required. This phase is the preliminary review of the proposed mitigation site and is intended to allow the Corps and the IRT an opportunity to identify potential issues early in the review process so that the sponsor may attempt to address those issues, or locate an alternative site if recommended, prior to the start of the formal review process. A draft prospectus is recommended at this stage in order to assist with the review of the site. Following the preliminary review and the acceptance by the Corps and the IRT that the site is conducive to aquatic resource improvements, the draft prospectus shall be revised in order to incorporate the comments of the IRT that result from the preliminary review. The submittal of the complete prospectus, to the Corps, initiates phase II of the review process.

Phase II involves the submittal of the complete prospectus that must describe the items included in Section I (A - H) below. The complete prospectus will be placed on Public Notice (PN) for a 30-day public comment period. After the bank sponsor considers the comments from the Corps, the IRT, and the public, and if the sponsor chooses to proceed with the establishment of the mitigation bank, the sponsor shall incorporate all substantive comments into a draft banking instrument and submit the draft instrument to the Corps to initiate phase III of the approval process.

Phase III involves the submittal of the draft banking instrument that describes, in detail, the physical and the legal characteristics of the mitigation bank including how it will be established, operated, and managed. It is from the draft instrument that a final instrument (Phase IV) is prepared. The final instrument is the document by which the Corps determines whether to approve or deny the establishment of the proposed mitigation bank.

Phase IV of the approval process begins after the bank sponsor submits the final instrument to the Corps and to the members of the IRT. The final instrument must incorporate all comments provided by the Corps and the IRT in phase III and include supporting documentation that explains how the final instrument addresses the comments provided by the Corps and the IRT. After review of the final instrument the Corps will notify the IRT of intent to approve/not approve the final instrument. If the banking instrument is approved by the Corps District(s), signatures of the IRT agencies will be requested. If the Corps denies the final instrument the bank sponsor will be notified and the final instrument may be modified until an agreement is reached. A graphic depiction of the review process is included as Appendix D of this document.

Two outlines are provided below and are intended to assist the prospective bank sponsor in preparing and providing the phased approach documentation required by the Corps and IRT. The first outline lists the requirements for a complete prospectus as outlined in the Mitigation Rule. However, the primary emphasis of this document is placed on the draft banking instrument outline. The outline consolidates four sections of the Mitigation Rule into the arrangement and content to be addressed in the draft banking instrument and provides prospective bank sponsors with a predictable and transparent rationale for submitting the required documentation.

## I. Requirements for a Complete Prospectus

- A. The objectives of the proposed mitigation bank.
- B. How the mitigation bank will be established and operated.

  The following provision must be included in this section of the Prospectus and must also be included in the Draft and Final Instrument. The bold font must be maintained in the Instrument.

The U.S. Army Corps of Engineers (USACE) approval of this Instrument constitutes the regulatory approval required for the [INSERT NAME OF THE MITIGATION BANK] to be used to provide compensatory mitigation for Department of the Army permits pursuant to 33 C.F.R. 332.8(a)(1). This Instrument is not a contract between the Sponsor or the Property Owner and the USACE or any other agency of the federal government. Any dispute arising under the Instrument will not give rise to any claim by the Sponsor or the Property Owner for monetary damages. This provision is controlling notwithstanding any other provision or statement in the Instrument to the contrary.

- C. The proposed service area (See Section II (3) below).
- D. The general need for and technical feasibility of the proposed mitigation bank.
- E. The proposed ownership arrangements and long-term management strategy

- F. The qualifications of the sponsor to successfully complete the type(s) of mitigation project(s) proposed, including information describing any past such activities by the sponsor.
- G. The ecological suitability of the site to achieve the objectives of the proposed mitigation bank, including the physical, chemical, and biological characteristics of the bank site and how that site will support the planned types of aquatic resources and functions; In addition, include a description of all real estate encumbrances on the proposed property; and
- H. Assurance of a sufficient water source to support the long-term sustainability of the mitigation bank and disclose any split estate mineral rights or other existing real estate encumbrances on the proposed property.

## II. Requirements for the Draft/Final Banking Instrument

#### 1) Introduction of the Mitigation Bank Site

- A. Describe the location, including map(s), of the proposed bank site.
  - 1. Provide a shape file with metadata for the project site boundary, Section, Township and Range and the Latitude and Longitude (decimal degrees) of the center point of the bank site
- B. Describe how the bank will be established and operated.
- C. Describe the current and the long-term ownership arrangements including the long-term management strategy for the bank.
- D. Describe the qualifications of the sponsor to successfully complete the construction of the mitigation bank site. Provide information on past experience regarding the construction of wetland restoration/creation projects and/or stream restoration projects.
- E. Provision stating that legal responsibility for providing the compensatory mitigation is with the sponsor once a permittee secures credits from the sponsor.

#### 2) Watershed Approach to Mitigation Bank

- A. Define your watershed boundary and incorporate the watershed approach (items 1 through 5 below) to address how the mitigation proposal will benefit wetland habitats, water quality, hydrologic conditions, and species needs within the identified watershed boundary.
  - 1. Identify and briefly discuss historic losses and current trends of losses of wetland and wildlife habitats within the watershed based on current and historic land use.
  - 2. Identify and briefly discuss water quality issues present within the watershed.
  - 3. Describe the immediate and the long-term needs of the watershed to improve both the wildlife habitats and the water quality and describe the suitability (technical feasibility) of the site to meet the needs of the watershed.
  - 4. Describe the historic and the current state of the bank site and the adjacent lands. In addition, describe the ecological suitability (physical, chemical and biological

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5. Identify and discuss the short-term and the long-term off-site threats (including water rights) within the watershed that may affect the wetland and the water quality services constructed at the bank site. Discuss how these threats are addressed in order to assure longevity of services at the site.

#### 3) Service Area for the Mitigation Bank Site

- A. The service area for a bank should be defined as an appropriately sized watershed or part of a watershed where aquatic resource functions and services can be mitigated. Smaller watersheds are more appropriate when the aquatic functions and services are needed at a lesser scale or where these are found to vary at a larger scale when applying the watershed approach.
  - 1. Large service areas will have to be justified by the watershed approach and the overall suitability of the proposed bank site to provide flood attenuation, water quality benefits, habitat for wildlife, and resource type replacement for wetlands and streams that are most likely to be impacted or are in need of restoration or establishment in the proposed service area.
  - 2. The Corps Districts and the IRT have agreed that the Ecological Drainage Unit (EDU) is the largest service area unit that will be considered for mitigation banks (see Appendix A).
  - 3. The following are examples when the EDU concept for geographic service area may not be practicable: an EDU containing a river with an expansive geomorphic floodplain (i.e. Mississippi River), or a densely populated area exists within an EDU that also contains large non-urbanized areas.
- B. Provide a map outlining the proposed service area along with a shape file of the service area boundary. The Shapefile for the service area must in the:
  - Geographic Coordinate System
  - North American Datum 1983 with units in degrees
  - The Shapefile should only contain the Service Area for the particular bank

#### 4) Mitigation Plan Requirements for the Bank Site

#### A. Objectives

- 1. Specific objectives must identify:
  - a. The resources to be provided (e.g., forested or emergent wetlands with species composition matching reference aquatic resources of similar type and landscape position in the service area, stream type, order, classification such as Rosgen, and channel-floodplain connectivity)
  - b. The final goal to be provided by the resource for: amount (e.g., acres, linear feet); function (e.g., channel stability, shading of riverine system, vegetative structure, reconnect stream to floodplain); and/or services (e.g., filtering nutrients from agricultural runoff, provide quality habitat for a specific species of concern, provide flood water capacity, improve aquatic species passage),
  - c. The method of compensation (i.e., restoration, enhancement, establishment, preservation), and

2. Briefly describe how the resources provided will address the needs of the watershed and the proposed service area.

#### B. Site Selection

- 1. Compensatory mitigation projects shall use a watershed approach in order to be appropriately sited and designed to ensure that natural hydrology and landscape position will support long-term sustainability and function as a self-sustaining system. Discuss how the bank site is ecologically suitable for providing the desired aquatic resource functions by describing:
  - a. The hydrological conditions, soil properties, native seed source, and other physical and chemical characteristics.
  - b. The watershed-scale features such as aquatic habitat diversity, habitat connectivity, the existence of threatened or endangered species related to prior habitat loss, and other landscape scale functions.
  - c. The size and the location of the bank site relative to hydrologic sources (including the availability of water rights) and other ecological features.
  - d. The compatibility with adjacent land uses and any existing watershed management plans.
  - e. The reasonably foreseeable effects the compensatory mitigation project will have on ecologically important aquatic or terrestrial resources, cultural resources, or habitat for federally or state listed threatened and endangered species.
  - f. Other information as available including potential chemical contamination, impacts from land use changes including residential and/or commercial development within the watershed, and the proximity to the location of other mitigation banks, in-lieu fee mitigation project sites, or protected conservation areas within the watershed.

#### C. Site Protection Instrument

- 1. Describe the ownership, legal arrangements and instrument that will be used to ensure the long-term protection of the proposed mitigation bank site. Include the draft real estate instrument as an appendix to the draft banking instrument.
  - a. For long-term protection of non-government property other than transfer of title, the use of conservation easements and/or deed restrictions are deemed sufficient site protection measures. A conservation easement, deed restriction, or restrictive covenant should, where practicable, establish an appropriate third party (e.g., governmental or non-profit resource management agency) the right to enforce site protections and provide the third party the resources necessary to monitor and enforce the site protections.
  - b. The long-term protection mechanism must contain a provision requiring 60-day advance notification to the district engineer before any action is taken to void or modify the instrument, management plan, or long-term protection mechanism, including transfer of title to, or establishment of any other legal claims over, the compensatory mitigation bank site.
  - c. For government property, long-term protection may be provided through federal facility management plans or integrated natural resources management plans as

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#### D. Baseline Information

- 1. Describe the ecological characteristics of the proposed bank site.
- 2. Describe the historic and the existing plant communities, historic and existing hydrology, and existing soil conditions.
- 3. Include map(s) identifying the boundary of the proposed bank site with coordinates (Latitude and Longitude in decimal degrees). Include a shape file with metadata of the delineated boundary.
- 4. Conduct a wetland delineation using appropriate Regional Supplement or if a supplement is not implemented in a geographic area of the State use the routine delineation methods as described in the Corps of Engineers 1987 Wetland Delineation Manual.
- 5. Describe the existing hydro-system connectivity between wetlands and other waters including tributaries connection to receiving waters.

#### E. Determination of Credits

- 1. Describe the number of and the type of proposed credits to be provided at the bank including a brief explanation of the rationale for this determination.
  - a. Wetland credit types shall be identified to the Cowardin class (e.g., PFOs, PSS, PEM). In the absence of a condition or functional assessment method, wetland credits will be determined based on a combination of land area and the method of compensation (restoration, enhancement, establishment, and/or preservation), with a maximum credit value given not to exceed 1 credit for each 1 acre gain in wetland area. Upon implementation of a functional or condition assessment method in the State of Missouri the approved methodology will be used to assess wetland credits.
  - b. Upland buffers next to wetlands that provide habitat connectivity and other ecological functions may also generate compensatory mitigation credits because of their contribution to the ecological functions of the overall mitigation bank. The Corps in consultation with the IRT will determine on a case-by-case basis when buffers are essential to maintaining the ecological viability of adjoining aquatic resources, and thus eligible to produce compensatory mitigation credits. Credits will be determined on a percentage of land area, habitat connectivity, and ecological functions to be included as buffer until a condition or functional assessment methodology is approved for the State.
  - c. The amount of stream mitigation credit, created at the site, is determined by stream type (ephemeral, intermittent, perennial), the location, the condition, instream improvements and linear feet of stream included in the bank. These factors are determined using the State of Missouri Stream Mitigation Method which derives a value expressed in credit.
  - d. Riparian areas are critical components of stream ecosystems that provide important ecological functions, and directly influence the functions of streams, especially in terms of habitat quality and water quality. Therefore, it is important for mitigation banks containing streams and other open waters to include riparian areas as part of the overall compensatory mitigation project. In such cases,

#### F. Mitigation Work Plan

- 1. Describe in detail the specifications and work descriptions of the compensatory mitigation project, including, but not limited to the geographic boundaries of the project; construction methods; timing; and sequence.
- 2. Describe the sources of water, including connections to existing waters and uplands, and anticipated seasonal water depths in the wetland (water budget).
- 3. Describe the methods for establishing the desired plant community and plans to control undesirable plant species, including species composition and type of plantings (i.e. seeding, propagules, seedlings, saplings, etc.) and height of saplings. If trees are being planted, include a plan for how to control for wildlife damage.
- 4. Include any grading plan identifying the location and the elevation of the constructed features proposed.
- 5. For stream projects include existing channel cross-sections, proposed alterations to the stream channel and/or stream banks, a description of in-stream structures including materials used for improvements, dimensions and elevations, and riparian plantings.

#### G. Operation and Maintenance Plan

1. A description and a schedule of maintenance required to maintain the viability of the bank site once the initial construction is completed [e.g. mowing timing and frequency, herbicide (application method, timing, type, and frequency), invasive species management plan, irrigation plan, passive water control structures, supplemental irrigation source, in-stream structures].

#### H. Ecological Performance Standards

- 1. Describe the ecological, administrative, and adaptive management standards that will be used to determine whether the compensatory mitigation project is achieving its objectives. The standards must be based on attributes that are objective and verifiable. They must be based on the best available science that can be measured or assessed in a practicable manner. The standards should take into account the expected stages of the aquatic resource development process in order to allow early detection of potential problems and appropriate adaptive management. The use of reference aquatic resources (least disturbed and exhibiting the highest levels of functions in the service area) is encouraged to establish performance standards. This approach can help ensure that the performance standards are reasonably achievable, by reflecting the range of variability exhibited by the regional class of aquatic resources as a result of natural processes and anthropogenic disturbances.
- 2. The performance standards should relate to the objectives of the mitigation bank site, so that the project can be quantitatively and/or qualitatively evaluated to determine if it is developing into the desired resource type, providing the expected functions and/or services, and attaining any other applicable metrics. Examples include:

#### a. Structural Measures:

- Description-size, classification (HGM, Cowardin, Rosgen) of aquatic resource(s).
- Hydrology-duration, periodicity,
- Soils-hydric indicators, redoximorphic features,

- Stream—status of structures and structural integrity, sinuosity, cross-section, bank full width, particle size (e.g. no significant change in D50 size particle silt, sand, gravel, cobble), longitudinal profile.
- b. Indicators of attainment or condition: snag density, foliage height, diversity, basal area, degree of shading, channel profile,
- c. Composite measures-FQI, HSIs, IBI, FCI/FCU, etc.

#### I. Monitoring Requirements

- 1. Monitoring reports (see Appendix E) must be submitted by the bank sponsor or their authorized agent in order to determine if the compensatory mitigation project is on track to meet performance standards and used as a measure to determine if adaptive management is needed.
- 2. The bank site must be monitored for a period not less than five years after final construction and planting. Extending the monitoring period beyond the five year minimum may be required depending on:
  - a. Resource type (e.g., forested wetlands, riparian corridors, bottomland hardwood forests, wet prairie).
  - b. Adaptive management measures occurring after initial site work (e.g., planting of additional trees, adjustments/re-building of in-stream structures to address stream stability).
- 3. The instrument must include: the parameters to be monitored, monitoring methods and procedures, a schedule for monitoring; the party responsible for conducting the monitoring and, if separate, the party responsible for submitting the monitoring report; and permission for the IRT members to participate in the monitoring process if requested.
- 4. Upon a determination by the Corps and IRT that performance standards have not been met or the compensatory mitigation project is not on track to meet them, the monitoring period may be extended. The IRT may also revise monitoring requirements when remediation and/or when an adaptive management plan is required.

#### J. Long-term Management Plan

- 1. Describe how the bank will be managed after performance standards have been achieved to ensure the long-term sustainability of the resources, including a description of long-term management needs, annual cost estimates for these needs, identify the funding mechanism that will be used to meet those needs and the party responsible for carrying out the long-term management activities.
- 2. The sponsor is encouraged to transfer the long-term management responsibilities for the bank to a land stewardship entity, such as a public agency, non-governmental organization, or private land manager, as long as the entity is approved by the IRT. If the entity is identified in the instrument they shall be signatory to the instrument.
- 3. In cases where the long-term management entity is a public authority or government agency, that entity shall provide a plan or give an indication how long-term financing will be established, and include a written stewardship commitment specifying commitment to long-term management and maintenance and a plan for financing.

4. Non-governmental organizations shall demonstrate that long-term financing mechanisms will be implemented. In cases where long-term financing for long-term

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- management of compensatory mitigation projects is necessary, district commanders should consider the need to make inflationary adjustments and certain financial assumptions such as total return assumptions and capitalization rates (e.g. endowments, or Consumer Price Index adjustments in the case of annual payments).
- 5. The Corps and IRT prefer that the land stewardship entity be identified in the instrument however the Mitigation Rule provides the prospective sponsor flexibility to identify the entity at a later time. In this instance, the sponsor will be responsible for long-term management until the sponsor identifies a long-term stewardship entity and that entity is approved by the Corps and IRT.

#### K. Adaptive Management Plan

- 1. Describe the strategy to address unforeseen changes in site conditions or other components that adversely affect the bank's success, including the party or parties responsible for the development and the implementation of the adaptive management measures and the timeline for the development and the implementation of the plan.
- 2. Circumstances that may qualify for adaptive management include an inability to construct the bank in accordance with the approved mitigation work plans, monitoring or other information reveals the bank is not progressing towards meeting its performance standards, possible remedial measures that result in site modifications, design changes, revisions to maintenance requirements, revised monitoring requirements.

#### L. Financial Assurances

- 1. Describe the financial assurances that will be provided and how they are sufficient to ensure a high level of confidence that the compensatory mitigation bank will be successfully completed in accordance with the proposed performance standards.
- 2. The amount of financial assurances, approved by the district engineer, will be determined by the size and the complexity of the bank site, the degree of completion of the project at the time of bank approval, the likelihood of success, the past performance of the bank sponsor, and any other factors the Corps deems appropriate.
  - a. The rationale for determining the amount of the required financial assurances must be documented in the instrument and may include; costs for land acquisition, planning and engineering, legal fees, mobilization, construction, monitoring, and maintenance. An alternative to providing an itemized cost analysis, would be to provide the cost of replacement mitigation through the purchase of credits from an approved mitigation bank or in-lieu-fee arrangement whose service area boundaries overlap with the proposed mitigation bank.
- 3. The financial assurances may be in the form of performance bonds, escrow accounts, casualty insurance, letters of credit, or other appropriate instruments approved by the district engineer. The financial assurances must be in the form that ensures the district engineer will receive notification at least 120 days in advance of any termination or revocation.
- 4. For performance bonds or letters of credit a standby trust account must be established. All amounts paid by the financial assurance provider must be paid directly to the

- 5. Financial assurances may be phased out once the bank has been determined by the Corps to be successful in accordance with its performance standards. Otherwise, the assurance shall remain in place until the Corps in consultation with the IRT determines performance standards have been achieved.
- 6. The instrument must clearly specify the conditions under which the financial assurances are to be released to the sponsor, and/or other financial assurance provider.

#### 5) Credit Release Schedule for the Mitigation Bank Site

- A. All credit releases must be approved by the Corps, in consultation with the IRT, based on a determination that required milestones have been achieved.
- B. Release of credits must be tied to performance based milestones (i.e. construction, planting, establishment of specified plant communities, bank full events, etc.).
- C. Up to 20 percent of the total credits projected may be debited from the bank upon instrument approval, appropriate financial assurances have been established and funded, and any other requirements determined to be necessary by the IRT have been fulfilled.
- D. The credit release schedule should reserve no less than 20 percent of the total credits for release only after full achievement of ecological performance standards.
- E. In order for credits to be released, the sponsor must submit documentation (i.e. via monitoring report) to the Corps demonstrating that the appropriate milestones for credit release have been achieved and requesting the release. The Corps will provide copies of this documentation to the IRT members for review. IRT members must provide any comments to the Corps within 15 days of receiving this documentation. However, if the Corps determines that a site visit is necessary, IRT members must provide any comments to the Corps within 15 days of the site visit. The Corps must schedule the site visit so that it occurs as soon as it is practicable, but the site visit may be delayed by seasonal considerations that affect the ability of the Corps and the IRT to assess whether the applicable credit release milestones have been achieved. After full consideration of any comments received, the Corps will determine whether the milestones have been achieved and the credits can be released. The Corps shall make a decision within 30 days of the end of that comment period, and notify the sponsor and the IRT.
- F. The Corps, in consultation with the IRT, may modify the credit release schedule, reduce the number of available credits or suspend credit sales or transfers altogether, when deficiencies in the performance standards have been observed or specific requirements of the instrument have not been met.

#### 6) Accounting Procedures for the Mitigation Bank Site

#### A. Use of Credits

- 1. At the discretion of the Corps, all activities authorized by Department of the Army permits are eligible, to use the mitigation bank to fulfill compensatory mitigation requirements for DA permits, including compensatory mitigation associated with unauthorized activities or non-compliance actions.
- 2. The Corps will determine the number and type(s) of credits required to compensate for the authorized impacts.

#### B. Ledger

1. The instrument must contain a provision requiring the sponsor to establish and maintain a ledger to account for all credit transactions. The sponsor must notify the

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Corps each time a credit transaction occurs and the sponsor must provide an updated ledger.

#### 7) Reporting for the Mitigation Bank Site

#### A. Monitoring Reports

- 1. Monitoring reports must be submitted (a minimum of one annually) to the Interagency Review Team (IRT) for a period not less than five years after final construction and planting.
- 2. The monitoring report must be provided in the format cited in Regulatory Guidance Letter 08-03 and be of sufficient content for the district engineer, in consultation with the IRT, to determine that the bank site is progressing towards meeting the performance standards as outlined in the instrument.
- 3. The monitoring report must include as-built drawings, maps, and ground photography illustrating the site conditions and interpretation of the current site conditions. If available, approved wetland and/or stream assessment methods that provide qualitative measures of the functions of the resource can be submitted.

## B. Ledger Accounting Reports.

- 1. The sponsor must compile an annual ledger report showing the beginning and ending balance of available credits and permitted impacts for each resource type, including types of credits debited, all additions and subtractions of credits, and any other changes in credit availability (e.g., additional credits released, credit sales suspended).
- 2. The ledger report must be submitted to the Corps and IRT on an annual basis. The ledger report will serve as part of the administrative record for the mitigation bank.

#### C. Financial Assurances Reports

- 1. The sponsor must provide an annual report showing beginning and ending balances, including deposits into and any withdrawals from, the accounts providing funds for financial assurances.
- 2. The report shall include information on the amount of required financial assurances and the status of those assurances, including their potential expiration.

#### 8) Default and Closure Provisions

#### A. Default Provisions

1. If the Corps determines that the mitigation bank is not meeting performance standards or complying with the terms of the instrument, appropriate action will be taken. Such actions may include, but are not limited to, suspending credit sales, adaptive management, decreasing available credits, utilizing financial assurances, and/or terminating the instrument.

#### B. Closure Provisions

1. Bank closure will occur when the terms and conditions of an instrument have been determined by the Corps, in consultation with the IRT, to be fully satisfied or until all credits have been debited, whichever is later. Subsequent to bank closure, management will remain the responsibility of the sponsor unless a Long-Term

2. If adaptive management strategies are unsuccessful and performance standards are unattainable, the sponsor may request early closure of a bank and forfeiture of remaining anticipated credits if it is determined that the performance standards are unattainable.

## 9) Approval of the Final Instrument and the Incorporation of the IRT's Comments

A. The bank sponsor must submit, for approval, a final bank instrument to the Corps that adequately addresses the main topics and subtopics contained within this bank instrument guidance document. The final instrument must also include supporting documentation outlining how the final instrument addresses the comments provided by the IRT. Mitigation credit cannot be sold at the bank prior to the approval of the final bank instrument by the Corps in consultation with the IRT.

## **Appendices**

Appendix A – Ecological Drainage Unit (EDU) Map

Appendix B – District Specific Site Protection Example(s)

(e.g. Conservation Easement, Deed Restriction, etc.)

Appendix C – District Specific Financial Assurance Example(s)

(e.g. performance bond, letter of credit, etc.)

Appendix D – Compensatory Mitigation Rule Timeline for Bank or ILF Approval

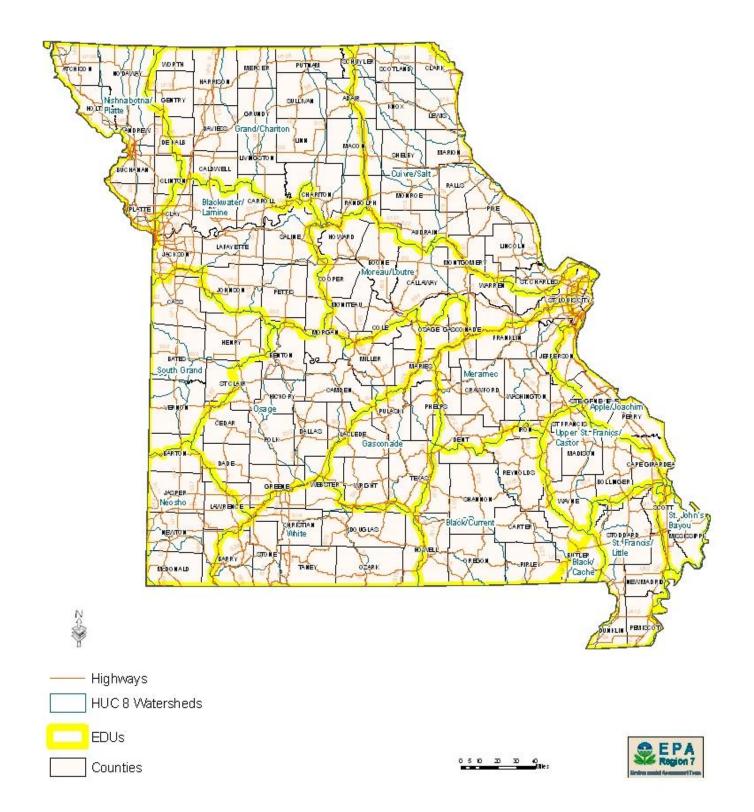
Appendix E – Regulatory Guidance Letter 08-03

# Appendix A

# Ecological Drainage Unit (EDU) Map (See Map on Following Page)

Additional Map Available at: http://www.atlas.moherp.org/missouri/edu/

# Missouri's Ecological Drainage Units and Subwatersheds (HUC 8s)



# Appendix B

District Specific Site Protection Example(s)
(See Conservation Easement and Deed Restriction Templates for Kansas and Missouri on the Following Pages)

## CONSERVATION EASEMENT

THIS DEED OF CONSERVAT	ION EASEMENT is given	this day of
, 20, by	("Grantor") to	, naving an address of
having an address of	( Grantor ) to	("Grantee") As used herein.
the term "Grantor" shall include as subsequent owners of the Property any successor or assignee of Grant	y (as hereinafter defined), an	, having an address of, having an address of, or assigns of the Grantor, and all ad the term "Grantee" shall include
	WITNESSETH:	
· · · · · · · · · · · · · · · · · · ·	nore particularly described i	itle of certain lands situated in n Exhibit A, attached hereto and
WHEREAS Department	Permit No.	of the U.S. Army Corps of
Engineers ("Corps") (hereinafter reaffect waters of the United States;	referred to as the "Permit") a	
WHEREAS, the Permit re wetlands or uplands located on the	•	e, enhance, restore, or mitigate
WHEREAS, Grantor, in coperate the permitted activity, and grant a perpetual Conservation East	as an inducement to the iss	
NOW THEREFORE, in a conditions, and restrictions contain consideration, the adequacy and revoluntarily grants and conveys a pupon the property, which shall run remain in full force and effect force	eceipt of which is hereby acl perpetual Conservation Ease In with the land and be binding	ner good and valuable knowledged, Grantor hereby ment for and in favor of Grantee
The scope, nature, and cha	racter of this Conservation I	Easement shall be as follows:
or water areas on the Property in the condition and to retain such areas or upland areas that are to be resto	heir natural, vegetative, hyd as suitable habitat for fish, p ored, enhanced, created, or p tored, enhanced, created, or	plants, or wildlife. Those wetland reserved on the Property shall be preserved condition as described in
2. <b>Rights of Grantee:</b> The Corps by this easement:	ne following rights are conve	eyed to the Grantee and to the
a. The right to take	e action to preserve and prot	ect the environmental value of the

Property; and

- b. The right to prevent any activity on or use of the Property that is inconsistent with the purpose of this Conservation Easement, and to require the restoration of areas or features of the Property that may be damaged by any inconsistent activity or use;
- c. The right to enter upon and inspect the Property in a reasonable manner and at reasonable times to determine if Grantor is complying with the covenants and prohibitions contained in this Conservation Easement; and
- d. The right to proceed at law or in equity to enforce the provisions of this Conservation Easement, and to prevent the occurrence of any of the prohibited activities hereinafter set forth.
- 3. **Prohibited Uses:** Except for restoration, creation, enhancement, preservation, maintenance, and monitoring activities, or surface water management improvements, required by the Permit, or required by the compensatory mitigation plan, or are otherwise approved by the Corps, the following activities are prohibited on the Property:
- a. Construction of any structure or object (i.e., buildings, roads, above or below ground utilities, signs, billboards etc.) without written approval from the Corps of Engineers prior to construction;
- b. Dumping or placing of soil or other substance or material as landfill, or dumping or placing of trash, waste, or unsightly or offensive materials;
- c. Removal or destruction of trees, shrubs, or other vegetation, except for the removal of nuisance, exotic, or non-native vegetation in accordance with a maintenance plan approved by Corps;
- d. Planting of nuisance, exotic, or non-native plants as listed by the State of Missouri;
- e. Exploration for, or extraction of, oil or gas in such a manner as to affect the surface, or excavation, dredging, or removal of coal, loam, peat, gravel, soil, rock, or other material substance;
- f. Use of motorized and non-motorized vehicles, the keeping or riding of horses, grazing, livestock confinement, or other surface use that may affect the natural condition of the Property, except for vehicle use for purposes of maintenance and upkeep;
- g. Tilling, plowing, planting of crops, digging, mining, or other activities that are or may be detrimental to drainage, flood control, water conservation, water quality, erosion control, soil conservation, or fish and wildlife habitat preservation, including but not limited to ditching, diking, and fencing;

- h. The extraction of water from the Property or the impoundment of water on the Property so as to affect the hydrology of the Property;
- i. Acts or uses detrimental to the aforementioned retention and maintenance of land or water areas;
- j. Acts or uses detrimental to the preservation of the structural integrity or physical appearance of sites or properties of historical, architectural, archaeological, or cultural significance.
- 4. **Reserved Rights:** Grantor reserves all rights as owner of the Property, including the right to engage in uses of the Property that are not prohibited herein, and that are not inconsistent with the intent and purposes of this Conservation Easement.
- 5. **Taxes:** Grantor shall pay any and all applicable real property taxes and assessments levied by competent taxing authority on the Property.
- 6. **Maintenance:** Grantor shall, at Grantor's sole expense, operate, maintain and keep up the Property consistent with the purpose of this Conservation Easement. Grantor shall remove from the Property any nuisance, exotic, or non-native plants as listed by the State of Missouri and shall maintain the hydrology of the Property as it currently exists or as otherwise required by the Permit or as required by the compensatory mitigation plan or as required by the Corps approved final mitigation banking instrument.
- 7. **Hazardous Waste:** Grantor covenants that if any hazardous substances or toxic waste exist or has been generated, treated, stored, used, disposed of, or deposited in or on the Property, or there are or have been any underground storage tanks on the Property, Grantor shall be responsible for any and all necessary costs of remediation.
- 8. **Public Access:** No right of access by the general public to any portion of the Property is conveyed by this Conservation Easement.
- 9. **Liability:** Grantor shall continue to retain all liability for any injury or damage to the person or property of third parties that may occur on the Property arising from ownership of the Property. Neither Grantor, nor any person claiming by or through Grantor, shall hold Grantee liable for any damage or injury that may occur on the Property.
- 10. **Recording Requirements:** Grantor must record this Conservation Easement in the official records of \_\_\_\_\_\_ County, Missouri, and shall re-record it at any time Grantee or the Corps may require to preserve their rights. Grantor shall pay all recording costs, fees and taxes necessary at any time to record this Conservation Easement in the public records. Grantor shall thereafter insert the terms and restrictions of this Conservation Easement in any subsequent deed or other legal instrument by which Grantor divests himself/herself/itself of any interest in the Property, and shall provide a photocopy of the recorded Conservation Easement to the new owner(s).

- 11. **Enforcement:** The terms and conditions of this Conservation Easement may be enforced in an action at law or equity by the Grantee or the Corps against the Grantor violating or attempting to violate these Restrictions. Venue for any such action shall be in \_\_\_\_\_\_ County, Missouri. Enforcement of this Conservation Easement shall be at the reasonable discretion of the Grantee or the Corps, and any forbearance on behalf of Grantee or the Corps to exercise its or their rights hereunder in the event of any breach by Grantor shall not be deemed or construed to be a waiver of rights. Any costs incurred in enforcing, judicially or otherwise, the terms, provisions, and restrictions of this Conservation Easement, including without limitation, the costs of suit, and attorney's fees, shall be borne by and recoverable against the non-prevailing party in such proceedings, except that such costs shall not be recoverable against the Corps. In addition, if the Grantee or the Corps shall prevail in an enforcement action, such party shall also be entitled to recover that party's cost of restoring the land to the natural vegetative and hydrologic condition existing at the time of execution of these Restrictions or to the vegetative and hydrologic condition required by the Permit and/or as required by the associated compensatory mitigation plan.
- 12. **Assignment of Rights:** Grantee shall hold this Conservation Easement exclusively for conservation purposes. Grantee will not assign its rights and obligations under this Conservation Easement, except to another legal entity qualified to hold such interests under applicable state and federal laws and committed to holding this Conservation Easement exclusively for the purposes stated herein. Grantee shall notify the Corps in writing of any intention to reassign this Conservation Easement to a new grantee at least sixty (60) days in advance thereof, and the Corps must accept the assignment in writing. The new grantee shall then deliver a written acceptance to the Corps. The assignment instrument must then be recorded and indexed in the same manner as any other instrument affecting title to real property and a copy of the assignment instrument shall be furnished to the Corps. Failure to comply with the assignment procedure herein stated shall result in invalidity of the assignment. In the event of dissolution of the Grantee or any successor, or failure for 60 days or more to execute the obligations of this Conservation Easement, the Grantee shall transfer this Conservation Easement to a qualified and willing grantee. Upon failure of the Grantee or any successor to so transfer the Conservation Easement, the Corps shall have the right to sue to force such an assignment to a grantee to be identified by the Court.
- 13. **Successors:** The covenants, terms, conditions, and restrictions of this Conservation Easement shall be binding upon, and inure to the benefit of the parties hereto and their respective personal representatives, heirs, successors, and assigns, and shall continue as a servitude running in perpetuity with the Property.
- 14. **Notices:** All notices, consents, approvals, or other communications hereunder shall be in writing and shall be deemed properly given if sent by United States certified mail, return receipt requested, addressed to the appropriate party or successor-in-interest.

thereof to any person or cir	If any provision of this Conservation Easement or the application reumstances is found to be invalid, the remainder of the provisions of it shall not be affected thereby, as long as the purpose of the preserved.
be amended, altered, release parties hereto or their heirs records of	Revocation: This Conservation Easement, granted in perpetuity, may sed, canceled, or revoked only by written agreement between the s, assigns, or successors in interest, which shall be filed in the publicCounty, Missouri. No action shall be taken, however, without hereof by the Corps. Corps approval shall be by letter attached as an nending, altering, canceling, or revoking the Conservation Easement, ormal and shall not require notarization. It is understood and agreed es a minimum of sixty (60) days written notice, and that the Corps dditional mitigation, a separate conservation easement or alternate requirements as a condition of approval. Any amendment, alteration, vocation together with written Corps approval thereof shall then be of County, Missouri, within 30 days thereafter.
9	<b>aw:</b> The interpretation and performance of this Conservation d by the laws of the State of Missouri.
in fee simple; that the Prop the terms of this Conservat has good right and lawful a	<b>THER COVENANTS</b> that Grantor is lawfully seised of said Property berty is free and clear of all encumbrances that are inconsistent with tion Easement and that no mortgages or other liens exist; that Grantor authority to convey this Conservation Easement, and that it hereby the title to the Conservation Easement hereby conveyed against the s whomsoever.
good title to the easement against all claims and dem enumerated in this docume to refrain from any activity this easement deed. The co	TO HOLD, the Grantor covenants that he, she, or they are vested with area and will warrant and defend the same on behalf of the Grantee ands. The Grantor covenants to comply with the terms and conditions ent for the use of the easement area and adjacent lands for access, and not specifically allowed or that is inconsistent with the purposes of ovenants, terms, conditions, restrictions, and purpose imposed with at shall be binding upon Grantor, and shall continue as a servitude the Property.
Dated this_	day of, 20
Grantor(s):	Print Name
	Signature
	Print Name
	Signature

## **ACKNOWLEDGEMENT**

STATE OF	
COUNTY OF	
Notary Public in and for said State personally	, 20, before me, the undersigned, a papeared, know or
proved to me to be the person(s) described in acknowledged that executed the same	and who executed the foregoing instrument, and e as free act and deed.
IN TESTIMONY WHEREOF, I have year first above written.	hereunto set my hand and official seal the day and
	ry Public for the State of
	ling at
My C	Commission Expires
ACCEPTAN	CE BY GRANTEE:
I (print )	name), (title), being
the duly authorized representative of the Gran Deed with respect to the rights and duties of t	ntee, do hereby accept this Conservation Easement
Dated this day of	, 20
	Signature
	Title

#### **DECLARATION OF RESTRICTIVE COVENANTS**

The Declarant,
1. <b>Purpose:</b> The purpose of these Restrictions is to retain and maintain land or water areas on the Property in their natural, vegetative, hydrologic, scenic, open, agricultural, or wooded condition, and to retain such areas as suitable habitat for fish, plants, or wildlife. Those wetland or upland areas that are to be restored, enhanced, or created pursuant to the Permit shall be retained and maintained in the restored, enhanced, or created condition required by the Permit.
2. <b>Rights of Corps and Owners in the Development:</b> The following rights are conveyed to the Corps and any Owner of any parcel of real estate in the Development (the "Owner" or "Owners"):
a. The right to take action to preserve and protect the environmental value of the Property; and
b. The right to prevent any activity on or use of the Property that is inconsistent with the purpose of these Restrictions, and to require the restoration of areas or features of the Property that may be damaged by any inconsistent activity or use;
c. The right to enter upon and inspect the Property in a reasonable manner and at reasonable times to determine if the Declarant is complying with the covenants and prohibitions contained in these Restrictions; and
d. The right to proceed at law or in equity to enforce the provisions of these Restrictions, and to prevent the occurrence of any of the prohibited activities hereinafter set forth.

a. Construction of any structure or object (i.e., buildings, roads, above or below ground utilities, signs, billboards etc.) without written approval from the Corps of Engineers prior to construction;

monitoring activities, or surface water management improvements, which are permitted or

required by the Permit, the following activities are prohibited on the Property:

3. Prohibited Uses: Except for restoration, creation, enhancement, maintenance, and

- b. Dumping or placing of soil or other substance or material as landfill, or dumping or placing of trash, waste, or unsightly or offensive materials;
- c. Removal or destruction of trees, shrubs, or other vegetation, except as may be permitted by the Permit, and except for the removal of nuisance, exotic, or non-native vegetation in accordance with a maintenance plan approved by the Corps;
- d. Planting of nuisance, exotic, or non-native plants as listed by the State of Missouri;
- e. Exploration for, or extraction of, oil or gas in such a manner as to affect the surface, or excavation, dredging, or removal of coal, loam, peat, gravel, soil, rock, or other material substance, except as may be permitted or required by the Permit;
- f. Use of motorized and non-motorized vehicles, the keeping or riding of horses, grazing, livestock confinement, or other surface use that may affect the natural condition of the Property, except for vehicle use for purposes of maintenance and upkeep, or as otherwise may be permitted or required by the Permit;
- g. Tilling, plowing, planting of crops, digging, mining, or other activities that are or may be detrimental to drainage, flood control, water conservation, water quality, erosion control, soil conservation, or fish and wildlife habitat preservation, including but not limited to ditching, diking, and fencing, except as permitted or required by the Permit;
- h. The extraction of water from the Property or adjacent properties owned by Grantor, or the impoundment of water on the Property or on adjacent properties owned by Grantor, so as to affect the hydrology of the Property;
- i. Acts or uses detrimental to the aforementioned retention and maintenance of land or water areas;
- j. Acts or uses detrimental to the preservation of the structural integrity or physical appearance of sites or properties of historical, architectural, archaeological, or cultural significance.
- 4. **Reserved Rights:** Declarant reserves all rights as owner of the Property, including the right to engage in uses of the Property that are not prohibited herein and that are not inconsistent with any Corps rule, criteria, permit, or the intent and purposes of these Restrictions.
- 5. **Taxes:** Declarant shall pay any and all applicable real property taxes and assessments levied by competent taxing authority on the Property.
- 6. **Maintenance:** [See highlighted text in Para. 6 of Conservation Easement] Declarant shall, at Declarant's sole expense, operate, maintain and keep up the Property consistent with the purpose of these Restrictions. Declarant shall remove from the Property any nuisance, exotic, or non-native plants as listed by the State of Missouri and shall maintain the hydrology of the Property as it currently exists or as otherwise required by the Permit.

- 7. **Hazardous Waste:** Declarant covenants that if any hazardous substances or toxic waste exist or has been generated, treated, stored, used, disposed of, or deposited in or on the Property, or there are or have been any underground storage tanks on the Property, Declarant shall be responsible for any and all necessary costs of remediation.
- 8. **Public Access:** No right of access by the general public to any portion of the Property is conveyed by these Restrictions, and Declarant further covenants not to hold any portion of the Property open to general use by the public except with the written permission of the Corps. As used herein, "the public" shall include the Owners, except for the limited purpose of compliance inspection pursuant to Paragraph 2, above.
- 9. **Liability:** Declarant shall continue to retain all liability for any injury or damage to the person or property of third parties that may occur on the Property arising from solely by reason of ownership of the Property. Neither Declarant, nor any person claiming by or through Declarant, shall hold the Corps or any Owner liable for any damage or injury that may occur on the Property.
- 10. **Recording Requirements:** Declarant shall record these Restrictions in the official records of \_\_\_\_\_\_ County, Missouri, and shall re-record these Restrictions at any time the Corps may require to preserve its rights. Declarant shall pay all recording costs and taxes necessary at any time to record these Restrictions in the public records. Declarant shall thereafter insert the terms and restrictions of these Restrictions in any deed or other legal instrument by which Declarant divests himself/herself/itself of any interest in the Development, and shall provide a copy of these Restrictions to the new owner(s).
- 11. **Enforcement:** The terms and conditions of these Restrictions may be enforced in an action at law or equity by the Corps or any Owner against the Declarant or any other party violating or attempting to violate these Restrictions. Venue for any such action shall be in \_\_\_\_\_\_\_ County, Missouri. Enforcement of these Restrictions shall be at the reasonable discretion of the Corps or Owner, and any forbearance on behalf of the Corps or Owner to exercise any right hereunder in the event of any breach by Declarant shall not be deemed or construed to be a waiver of rights. Any costs incurred in enforcing, judicially or otherwise, the terms, provisions, and restrictions of these Restrictions, including without limitation, the costs of suit, and attorney's fees, shall be borne by and recoverable against the non-prevailing party in such proceedings, except that such costs shall not be recoverable against the Corps. In addition, if the Corps or any Owner shall prevail in an enforcement action, such party shall also be entitled to recover that party's cost of restoring the land to the natural vegetative and hydrologic condition existing at the time of execution of these Restrictions or to the vegetative and hydrologic condition required by the Permits.
- 12. **Effect of Restrictions:** These Restrictions shall take effect immediately upon declaration and shall run with the land in perpetuity. These Restrictions shall be deemed to survive unity of title. Declarant shall take no action to rescind, revoke, or otherwise nullify these Restrictions.
- 13. **Successors:** The covenants, terms, conditions, and restrictions of these Restrictions shall be binding upon, and inure to the benefit of the parties hereto and their respective personal

representatives, heirs, successors, and assigns, and shall continue as a servitude running in perpetuity with the Property.

14. **Notices:** All notices, consents, approvals, or other communications hereunder shall be in writing and shall be deemed properly given if sent by United States certified mail, return receipt requested, addressed to the appropriate party or successor-in-interest. Any and all notices to the Declarant may be addressed to:

#### [address and point of contact]

- 15. **Severability:** If any provision of these Restrictions or the application thereof to any person or circumstances is found to be invalid, the remainder of the Restrictions shall not be affected thereby, as long as the purpose of these Restrictions is preserved.
- 16. **Alteration or Revocation:** These Restrictions may be amended, altered, released, canceled, or revoked only by written agreement between all then-current owners of all parcels of land located in the Development as shown the by the public records of \_\_\_\_\_\_ County, Missouri. No action shall be taken, however, without advance written approval by the Corps. Corps approval shall be by letter attached as an exhibit to the document amending, altering, canceling, or revoking the Restrictions, and said letter shall be informal and shall not require notarization. It is understood and agreed that Corps approval requires a minimum of sixty (60) days written notice to the Corps, and that the Corps may require substitute or additional mitigation, a separate conservation easement or alternate deed restrictions, or other requirements as a condition of approval. Any amendment, alteration, release, cancellation, or revocation together with written Corps approval thereof shall then be filed in the public records of County, Missouri within 30 days thereafter. 17. **Controlling Law:** The interpretation and performance of these Restrictions shall be governed by the laws of the State of Missouri. IN WITNESS WHEREOF, the Declarant has executed this Declaration of Covenants and Signed in the presence of: DECLARANT: Print Witness Name: By: \_\_\_\_\_ Print: \_\_\_\_\_ Title: \_\_\_\_\_

Print Witness Name: \_\_\_\_\_

STATE OF MISSOURI COUNTY OF	
6 6	of Restrictive Covenants was acknowledged before me this, by as
of	_ who is personally known to me or has produced as identification.
My Commission Expires:	
	NOTARY PUBLIC

## Appendix C

# District Specific Financial Assurance Example(s) (Letter of Credit, Performance Bond, etc.) Currently Under Development

#### **EXAMPLE**

The Letter of Credit must be on the financial institute's letterhead

(DATE)

(NAME AND MAILING ADDRESS OF THE STANDBY ACCOUNT HOLDER)

Salutation:

We hereby open our irrevocable credit in favor of the (Name of the standby account holder) for the sum or sums not to exceed a total of (credit limit (\$)) to be made available on the request of the United State Army Corps of the Engineers (USACE) for payment upon the presentation of a draft accompanied by the following statement:

The undersigned certifies that a claim is presented against the (Mitigation Bank Name) as it has been determined by the USACE and the Interagency Review Team (IRT) that (Bank Sponsor) has defaulted on some or all of the obligations, covenants, terms, and conditions of the (Bank Name Instrument) and the amount of the drawing will be used to implement corrective measures at the mitigation bank site or other alternative. Under (Letter of Credit Identification) we are providing this documentation instructing the (financial institution(s)) to pay proceeds in the amount of (dollar amount) as determined by the USACE to be sufficient to bring the mitigation bank into compliance with the approved mitigation banking instrument to the (standby trust account holder) to direct the activities requested by the USACE. Please wire said proceeds to the (standby trust account holder).

This Letter of Credit is valid until (the Bank Sponsor) receives a letter from the USACE stating that all activities necessary to restore compliance with the banking instrument have been satisfactorily completed and the success criteria for which compensatory mitigation credits have been sold are met.

Financial Institution

Authorized Signatory Title

# Appendix D

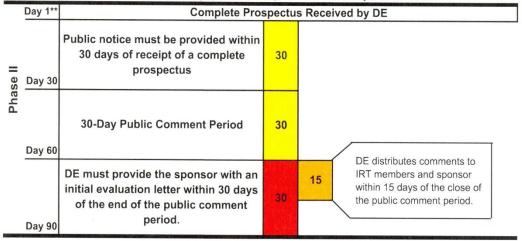
# Compensatory Mitigation Rule Timeline for Bank or ILF Approval (See Following Page)

# Compensatory Mitigation Rule Timeline for Bank or ILF Instrument Approval\*

	Event	# of Da	ys**
Phase I	Optional Preliminary Review of Draft Prospectus	30	DE provides copies of draft prospectus to IRT and will provide comments back to the sponsor within 30 days.

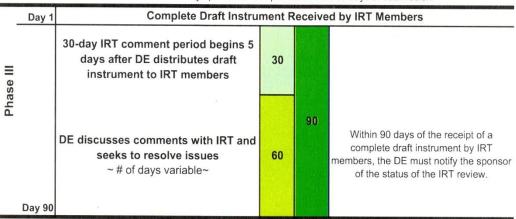
#### Sponsor Prepares and Submits Prospectus

~DE must notify sponsor of completeness w/in 30 days of submission~



#### Sponsor Considers Comments, Prepares and Submits Draft Instrument

~DE must notify sponsor of completeness w/in 30 days of submission~



#### **Sponsor Prepares Final Instrument**

~Sponsor provides copies to DE and all IRT members~

10.000	Day 1	Final Instrument Received by DE & IRT			
Phase IV	Day 30	DE must notify IRT members of intent to approve/not approve instrument within 30 days of receipt.	30	IRT members have 45 days fr submission of final instrument to o approval of the instrument and init	IRT members have 45 days from submission of final instrument to object to approval of the instrument and initiate the
		Remainder of time for initiation of dispute resolution process by IRT members	15		dispute resolution process.
	Day 45	INSTRUMENT APPROVED/NOT APPROVED, or DISPUTE RESOLUTION PROCESS INITIATED			

EPA/Corps draft 4/02/08

Total Required Federal Review (Phases II-IV): ≤225 Days

<sup>\*</sup>Timeline also applies to amendments

<sup>\*\*</sup>The timeline in this column uses the maximum number of days allowed for each phase.