MODOT STATEWIDE UMBRELLA
WETLAND AND STREAM MITIGATION BANKING INSTRUMENT

By agreement between

THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

Acting for its subordinate

THE MISSOURI DEPARTMENT OF TRANSPORTATION

And

THE U.S. ARMY CORPS OF ENGINEERS, KANSAS CITY DISTRICT
THE U.S. ARMY CORPS OF ENGINEERS, ST. LOUIS DISTRICT
THE U.S. ARMY CORPS OF ENGINEERS, MEMPHIS DISTRICT
THE U.S. ARMY CORPS OF ENGINEERS, LITTLE ROCK DISTRICT
THE U.S. ARMY CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
U.S. ENVIRONMENTAL PROTECTION AGENCY REGION VII
U.S. FISH AND WILDLIFE SERVICE
NATURAL RESOURCE CONSERVATION SERVICE
FEDERAL HIGHWAYS ADMINISTRATION
MISSOURI DEPARTMENT OF CONSERVATION
MISSOURI DEPARTMENT OF NATURAL RESOURCES

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This umbrella Banking Instrument, regarding the establishment, use, operation, and maintenance of The Missouri Department of Transportation Mitigation Banks (hereinafter, Banks), is made and entered into by and among The Missouri Highways and Transportation Commission, acting for its subordinate, The Missouri Department of Transportation (MoDOT), The U.S. Army Corps of Engineers (USACE), The U.S. Environmental Protection Agency (USEPA), the U.S. Fish and Wildlife Service (USFWS), The Federal Highway Administration (FHWA), The Natural Resources Conservation Service (NRCS), The Missouri Department of Natural Resources (MDNR), and The Missouri Department of Conservation (MDC), with reference to the following:

I. PREAMBLE

A. PURPOSE

The purpose of this umbrella Banking Instrument is to provide guidelines and assign responsibilities for the establishment, use, operation, and maintenance of MoDOT Banks established in Missouri within the USACE Kansas City, St. Louis, Memphis, Little Rock, and Rock Island Districts. Banks will be used for compensatory mitigation for unavoidable impacts to waters of the United States, including wetlands, streams, and other aquatic resources. Such impacts are expected to result from MoDOT activities authorized under Section 404 of the Clean Water Act (CWA), and FHWA rulemaking on Mitigation of Impacts to Wetlands. Use of a Bank must meet all applicable requirements and be authorized by the appropriate authorities. Although this Banking Instrument establishes the method to develop a Bank, it does not authorize any specific Bank.

In addition to compliance with the regulatory authorities listed above, this Banking Instrument is intended to be the primary method by which MoDOT meets the net-gain goals expressed in the FHWA rulemaking on Mitigation of Impacts of Wetlands, the President's Wetland Plan of 1998, and the Missouri Executive Order 96-03. MoDOT will comply with CWA Section 404(b)(1) Guidelines by applying the following mitigation sequence for MoDOT project impacts and in general Bank establishment:

1. Avoid wetland and aquatic (streams and natural lakes) impacts through the use of practicable alternatives;

2. Minimize wetland and aquatic impacts using all reasonable actions to reduce impacts; and

3. Compensate for unavoidable wetland and aquatic impacts and loss of aquatic function.

This Bank Instrument does not guarantee that the USACE will accept the use of a Bank for a specific project. On-site mitigation opportunities must be evaluated on a project-by-project basis prior to use of a Bank. However, as stated in the federal mitigation banking guidance, use of a Bank to compensate for small impacts associated with linear projects and authorized by nationwide permit is preferred to on-site mitigation.

The Kansas City District will act as the Lead USACE District for this Banking Instrument. Subsequent Bank projects will be established through a Bank Development Plan (BDP). The USACE District having jurisdiction over the location of the Bank will be the Chair USACE District of the MBRT in the review and development of that BDP.

B. MITIGATION BANK GOALS AND OBJECTIVES

MoDOT will establish and maintain projects in wetland and/or other aquatic habitat in accordance with the provisions of this umbrella Banking Instrument and a BDP. An individual Bank will replace essential functions for both wetland and aquatic habitat and functions anticipated to be lost during transportation development projects and maintenance activities authorized by the USACE within a specified service area.

Although each Bank site should be selected and managed to use the natural water storage functions of wetlands, flood control shall not be the primary purpose. Specifically, Banks shall not be used to primarily satisfy local or regional storm-water detention requirements.

C. ESTABLISHMENT AND USE OF CREDITS

In accordance with the provisions of this Banking Instrument and upon satisfaction of the success criteria contained herein and as supplemented by a BDP, credits will be available to use as compensatory mitigation in accordance with all applicable requirements. The anticipated number of credits may be based on the total area and degree of environmental gain (see Section III.B.5) of wetland or aquatic habitat that is created, restored, enhanced, buffered, or in some exceptional circumstances preserved, as defined in the USACE RGL No. 02-2, to the standards of the success criteria defined in Section IV.F.

The credits generated by all Banks shall be used as compensatory mitigation for unavoidable and adverse environmental impacts to wetland and aquatic resources of the United States and where legal requirements apply to other natural resources, as these impacts result from public transportation projects constructed by MoDOT.

D. MITIGATION BANKING REVIEW TEAM (MBRT)

The MBRT members shall consist of the appropriate representatives from:

- U.S. Army Corps of Engineers, Kansas City District (Lead District for umbrella Banking Instrument)
- U.S. Army Corps of Engineers, St. Louis District
- U.S. Army Corps of Engineers, Little Rock District
- U.S. Army Corps of Engineers, Memphis District
- U.S. Army Corps of Engineers, Rock Island District
- U.S. Environmental Protection Agency, Region VII, Kansas City
- Natural Resources Conservation Service, Columbia State Office
- U.S. Fish and Wildlife Service, Columbia Field Office
- Federal Highway Administration, Jefferson City Office
- Missouri Department of Conservation, Jefferson City
- Missouri Department of Natural Resources, Jefferson City

E. DISCLAIMER

This Banking Instrument does not in any manner affect statutory authorities and responsibilities of the signatory parties. Furthermore, endorsement by the signatory parties of these policies and procedures does not authorize specific BDPs.

II. AUTHORITIES

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

A. FEDERAL AUTHORITIES

- Clean Water Act (33 USC 1251 *et seq.*)
- Rivers and Harbors Act of 1899 Section 10 (33 USC 403 *et seq.*)
- Fish and Wildlife Coordination Act (16 USC 661 *et seq.*)
- Transportation Equity Act for the 21st Century (TEA-21)
- Department of the Army, Section 404 Permit Regulations (33 CFR Parts 320-330) - Policies for Evaluating Permit Applications to Discharge Dredged or Fill Material
- Environmental Protection Agency, Section 404(b)(1) Guidelines (40 CFR Part 230) - Guidelines for Specification of Disposal Sites for Dredged or Fill Material
- Memorandum of Agreement between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act, Section 404 (b)(1) Guidelines (February 6, 1990)
- Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (FR, Vol. 60, No. 228, Pages 58605-58614, 1995) (60 FR 58605)
- National Historic Preservation Act, Section 106 (16 USC 470)
- National Environmental Policy Act (42 USC 4321 *et seq.*), including the Council on Environmental Quality's implementing regulations (40 CFR Parts 1500-1508)
- Federal Highway Administration Guidance on Mitigation of Impacts to Wetlands (23 CFR Part 777) Revised March 30, 2001
- Clean Water Act, Section 404 (33 USC 1344)
- Federal Guidance on the Use of the TEA-21 Preference for Mitigation Banking to fulfill Mitigation Requirements under Section 404 of the Clean Water Act.
- Army Corps of Engineers Regulatory Guidance Letter (RGL) 02-2, Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899
- Federal Agricultural Improvement and Reform Act of 1996, Public Law 104-494. 16 USC 3801 *et seq.*
- Fish and Wildlife Service Mitigation Policy (46 FR pages 7644-7663, 1981)

B. STATE AUTHORITIES

- 10 CSR 20-6.060 Missouri State Water Quality Certification
- 10 CSR 20-7.031 Missouri State Water Quality Standards

- Chapter 644 Missouri Revised Statutes, Missouri Clean Water Law

III. ESTABLISHMENT OF A BANK

MoDOT will submit notification in the form of a Bank prospectus to the Chair USACE District of the service area indicating the intent to use a site for mitigation banking purposes. The notification should be made prior to the initiation of physical work to create a Bank. The Chair District will convene the MBRT, which will develop the BDP with MoDOT.

A. SPONSOR AGREEMENTS

MoDOT agrees to coordinate their planning, establishment, monitoring, bookkeeping, and reporting activities through MoDOT's Environmental Unit. MoDOT agrees to perform all necessary work to establish wetland and aquatic habitat in accordance with the provisions of this Banking Instrument. MoDOT agrees to perform this work until it is demonstrated to the satisfaction of the Chair USACE District for each individual bank, in coordination with the MBRT, that the project complies with all conditions contained herein and within the associated BDP. As agreed by USACE and FHWA, the financial assurance for MoDOT Bank proposals shall be the assurance that FHWA "will take appropriate administrative action, within the legal authority of the agency, to ensure that wetland mitigation commitments established to compensate for wetland impacts due to Federal-aid highway projects are completed or achieved" (see APPENDIX A).

Prior to MoDOT's signature on an individual BDP, MoDOT's financial resources shall be committed to the purchase of real estate as MoDOT land or as interest in the form of a conservation easement, deed restriction, or covenant. A MoDOT commitment to purchase shall be a formal Missouri Highways & Transportation Commission (MHTC) approval of fee simple purchase for a project. When the site is not acquired through MHTC purchase of private land, MoDOT shall record a conservation easement, deed restriction, or covenant on Bank land prior to debiting the Bank.

B. BANK PROSPECTUS

MoDOT is encouraged to discuss potential bank sites with the MBRT prior to submitting a formal prospectus (a proposal describing a site and a plan of development as mitigation site). For each individual Bank, MoDOT will prepare a prospectus following the guidelines outlined in RGL No. 02-2 and the Model Compensatory Mitigation Plan Checklist and Supplement for Aquatic Resource Impacts under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. The prospectus should address:

1. Bank goals and objectives including the impacts to aquatic resources listed by Cowardin Class (see **Figure 1**) and approximate acreage from MoDOT transportation projects anticipated to be mitigated in the proposed Bank and the EDU it will primarily serve;

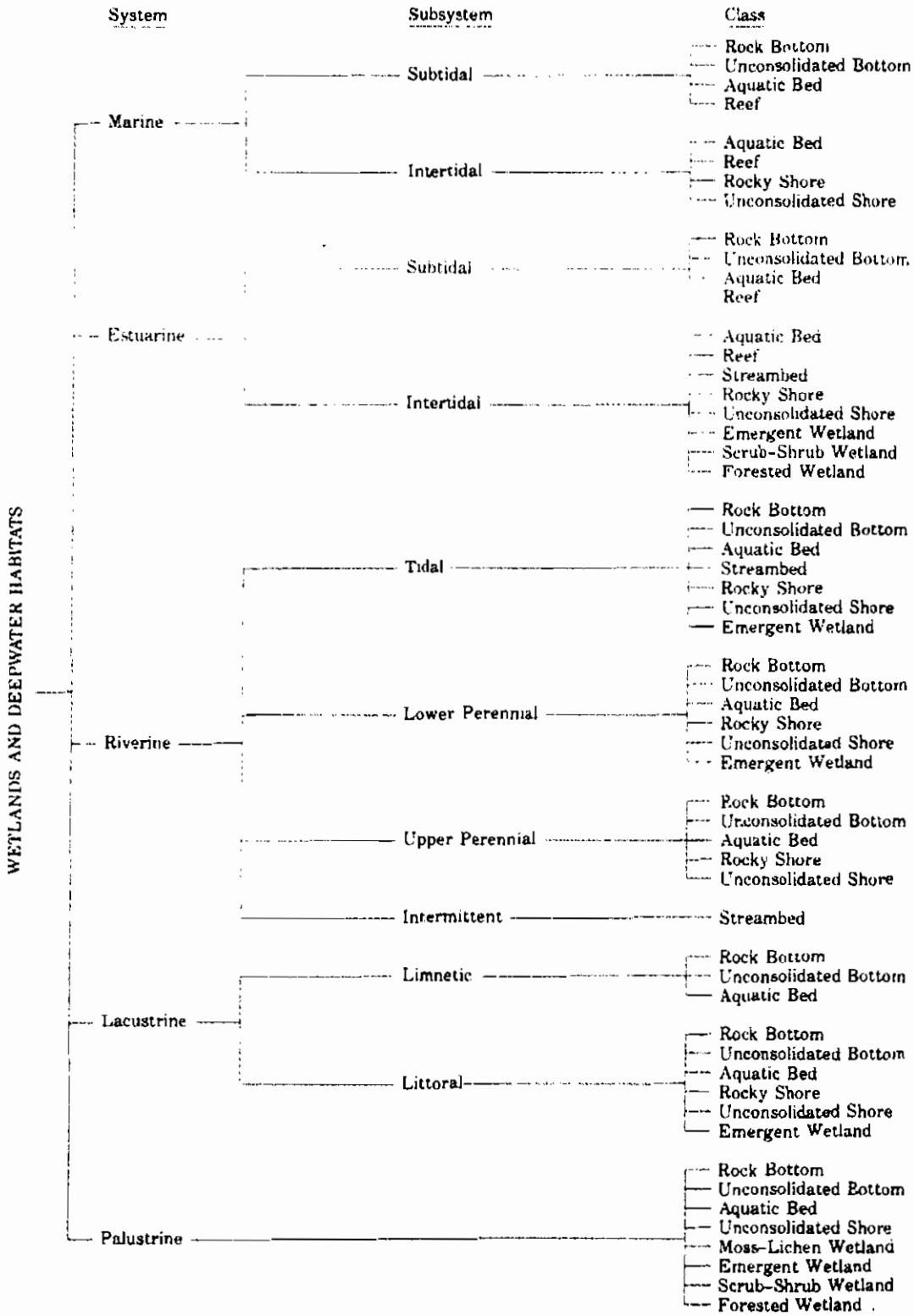

Figure 1. Classification hierarchy of wetlands and deepwater habitats, showing Systems, Subsystems, and Classes. From *Classification of Wetlands and Deepwater Habitats of the United States*, Cowardin, et al., 1979.

2. Ownership and real estate protection provisions of Bank land. MoDOT will describe in its prospectus if it already owns the proposed Bank site or a conservation easement, or provide a letter from the landowner indicating he/she has discussed the sale of his/her land to MoDOT, has given MoDOT and the MBRT permission to access the site, and is willing to sell the property if MoDOT is able to secure approval of the prospectus. MoDOT will also describe the type of legal protection to be used such as conservation easement, deed restriction, or covenant;

3. Description and functional assessment of baseline conditions at the Bank site. MoDOT will use a functional assessment method preferred or accepted by the Chair Corps District;

4. Bank size, Cowardin Class, and functional assessment of wetland and/or other aquatic habitat proposed for construction or preservation in the Bank, including a site plan and specifications;

5. Proposed mitigation credits from the Bank based on the size and the degree of environmental gain resulting from the whole mitigation project. Environmental gain will be the difference between the restored condition and the baseline condition of the aquatic resource using best professional judgment or a functional assessment method preferred or accepted by the Chair USACE District. Based on this assessment, the Chair USACE District in consultation with the MBRT will determine the actual number of potential credits. A wetland credit in any Bank will be equivalent to restoration or creation of an acre of fully functioning wetland habitat from a condition providing few or no wetland functions. A stream credit in any Bank will be equivalent to restoration or creation of an acre of fully functioning stream and riparian habitat from a condition providing few or no stream or riparian functions;

6. Bank specific performance standards;

7. Contingency plans;

8. Provisions for long-term management and maintenance.

MoDOT will submit an electronic copy (PDF file) of a Bank prospectus on CD ROM to the Chair USACE District for review. MoDOT may also provide paper copies to the other members of the MBRT. If the activities described in the BDP will require a Section 10/404 permit, MoDOT will also submit a complete permit application for the project. MoDOT will obtain any other appropriate environmental documentation, permits, or other authorizations needed to establish and maintain a Bank. Neither this Banking Instrument nor a BDP fulfills or substitutes for such authorization.

C. BANK DEVELOPMENT PLAN

Once a complete individual Bank prospectus is accepted, the public will be notified of the opportunity to comment on the proposal. For Banks that require authorization under an individual Section 10/404 permit, this condition will be satisfied through the standard individual permit procedures. For other proposals, the Chair USACE District will provide notification of

the availability of the prospectus for a minimum 21-day public comment period. Once the public notice period has closed, copies of all public comments received will be distributed to the other members of the MBRT and MoDOT for full consideration in reviewing the prospectus. The MBRT and MoDOT may meet to address comments, revise the prospectus if needed, and produce a formal BDP. The MBRT will work to reach consensus on the BDP, but the Chair USACE District has the responsibility of making the final decision on the BDP within 120 days from the date the public notice is published. If the final decision is to approve the BDP, the Chair USACE District shall issue a Section 10/404 permit (if applicable) and signed writing on USACE letterhead, approving the BDP and informing MoDOT and its related governmental agencies that they may proceed to establish and operate the individual Bank as described in the BDP.

D. SPONSOR PERFORMANCE AND MODIFICATIONS

Credits shall become available in accordance with the schedule specified in Section IV.G of this Banking Instrument. In the event MoDOT determines that modifications must be made in a BDP to ensure successful establishment of habitat within a Bank, MoDOT shall submit a written request for approval of such modification to the MBRT, through the Chair USACE District for the individual Bank. Documentation of implemented modifications shall be made consistent with Section III.F.

E. REAL ESTATE PROVISIONS

Prior to requesting release of any credits MoDOT will record the most appropriate real estate instrument (conservation easement, deed restriction, or covenant) to achieve protection of the Bank property. The real estate instrument shall preserve a Bank as wetlands and/or aquatic habitat in perpetuity and shall preserve the perpetual right of access for MoDOT and the MBRT. A deed restriction will be adequate for Bank property MoDOT owns and intends to retain. If the Bank property belongs to or ownership will be transferred to someone else, MoDOT will acquire and record a conservation easement or deed restriction. In cases where a Federal, State, local government or nongovernmental natural resource conservation organization owns the property before the Bank is established, or will receive ownership from MoDOT after construction, neither a deed restriction nor conservation easement will be required, if the third party demonstrates to the Chair USACE District that they are capable of managing the site and agrees in writing to the terms of this Banking Instrument and of the applicable BDP.

F. AS-BUILT REPORT

MoDOT agrees to submit an as-built report within 90 days following completion of construction or approved modification of a Bank. The as-built report for the original construction will describe in detail any deviation from that described in a BDP and include drawings showing finish grades and completed planting scheme.

IV. OPERATION OF A BANK

A. SERVICE AREA

Each MoDOT Bank may provide appropriate compensatory mitigation for impacts to the waters

of the United States authorized by the USACE within that Bank's primary service area. Federal Guidance for the Establishment, Use and Operation Mitigation Banks (60 F.R. 58605 *et seq.*, November 28, 1995) recommends that hydrologic map units or larger watershed regions and eco-regions should determine the geographic extent of the service areas, as much as possible. However, the guidance specifies that "a more inclusive area may be appropriate for mitigation banks whose primary purpose is to compensate for linear projects that typically involve numerous small impacts in several watersheds." The guidance also supports integrating bank service areas with other regional, state, or federally recognized resource management plans. The Missouri Resource Assessment Partnership (MoRAP) recently completed an aquatic resource classification and GAP analysis project recognized and adopted by the Missouri Department of Conservation as part of their Comprehensive Wildlife Strategy. The Aquatic Subregions within Missouri (Central Plains, Ozarks, and Mississippi Alluvial Plains) and the Ecological Drainage Units (EDU) described by MoRAP will be the basis for MoDOT Bank service areas.

The EDU is based on combining watersheds containing aquatic assemblages that are relatively similar and are distinct within the context of the surrounding watersheds. There are nineteen EDUs within Missouri, and the boundaries of these would serve as the primary service area boundaries for the individual Banks with two exceptions. The Plains/Des Moines EDU in the northeast corner of the state and the Plains/Kansas EDU, which comprises only a small area around the Kansas River in Missouri, are combined with the Plains/ Mississippi Tributaries between the Des Moines and Missouri Rivers and the Plains/Missouri River tributaries between the Blue and Lamine Drainages, respectively. Thus, there are seventeen functional service areas as listed in Table 1 and shown in Figure 2.

Service Area	*Corps District*	*EDU Service Area Location Description*
1	Kansas City	Plains/Missouri Tributaries between Nishnbotna and Platte Drainages
2	Kansas City	Plains/Grand/Chariton
3	St. Louis	Plains/ Mississippi Tributaries between the Des Moines and Missouri Rivers
	Rock Island	Plains/Des Moines
4	Kansas City	Plains/Missouri Tributaries between Blue and Lamine Drainages
		Plains/Kansas
5	Kansas City	Ozark/Moreau/Loutre
	St. Louis	
6	Kansas City	Plains/Osage
7	Kansas City	Ozark/Osage
8	Kansas City	Ozark/Gasconade
9	St. Louis	Ozark/Meramec
10	St. Louis	Ozark/Mississippi Tributaries between Missouri and Ohio Rivers
11	Little Rock	Ozark/Elk/Spring
12	Little Rock	Ozark/White
13	Little Rock	Ozark/Current/Black
14	St. Louis	Ozark/Upper St. Francis/Castor
15	Little Rock	Mississippi Alluvial Plain/White/Black
16	Memphis	Mississippi Alluvial Plain/St. Francis
17	Memphis	Mississippi Alluvial Lower Mississippi/St. John's Bayou

Table 1. The Geographic Extent of MoDOT Bank Service Areas within Missouri.

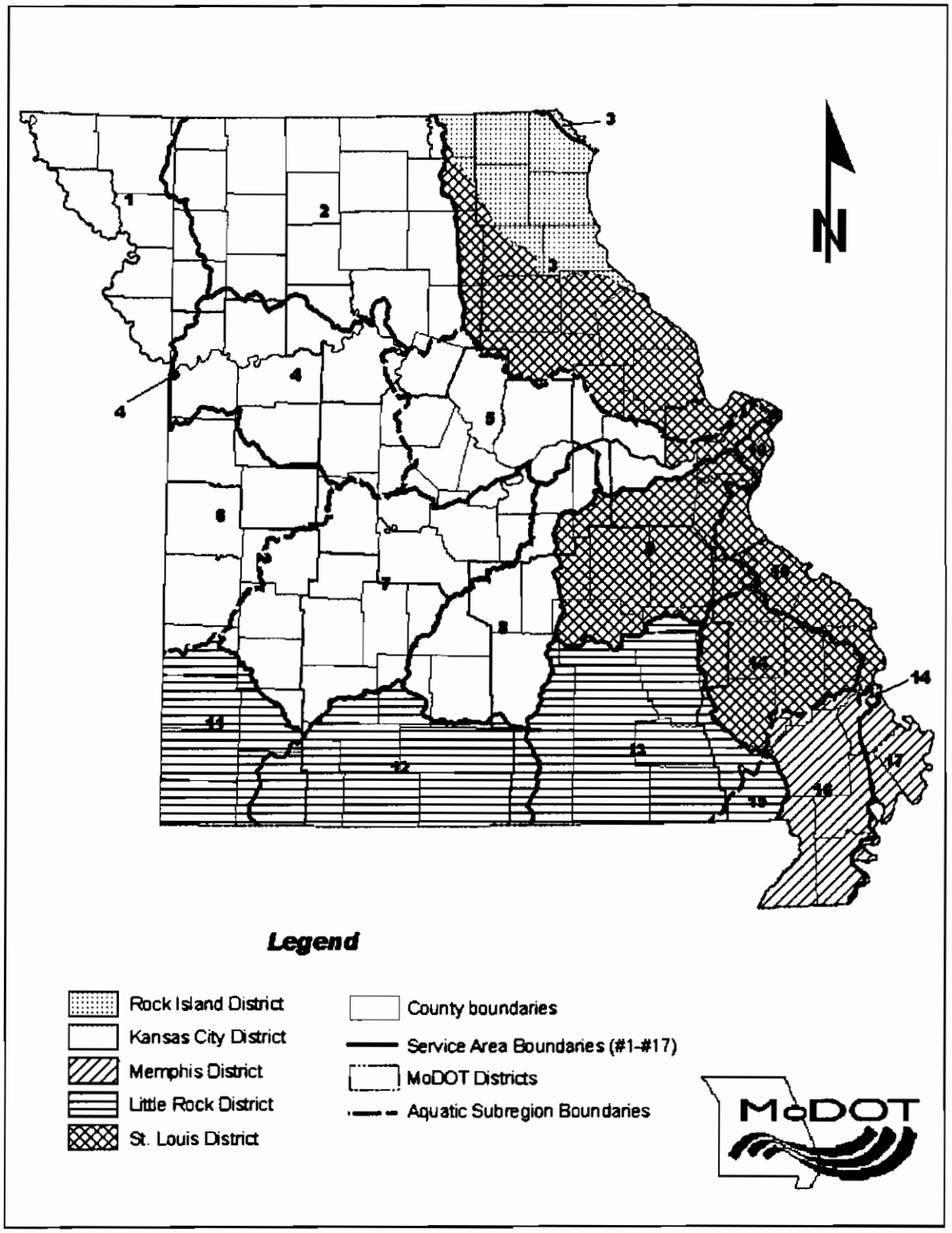

Figure 2. MoDOT Mitigation Bank Primary Service Areas.

Bank credits will generally be authorized for use within the EDUs of the associated aquatic impact areas, but maybe authorized in the same larger Aquatic Subregion on a case-by-case basis. Mitigation ratios may increase when impacts located in one EDU are mitigated at a Bank located in another EDU or other Aquatic Subregion. The USACE District with jurisdiction over the area of impact will be responsible for authorizing the use of credits from an individual Bank and determining the appropriate mitigation ratio in accordance with applicable requirements. The establishment of a primary service area for individual Banks does not preclude any subsequent public interest review processes of Section 10/404 permit applications for specific transportation projects.

MoDOT's Bootheel Region Bank service area, established prior to this Banking Instrument, will remain as it was established. Future MoDOT Banks established within the Bootheel Region Bank service area will follow the EDU service areas outlined in this document.

B. BANK SIZE

Federal guidance indicates that 40-acre wetland bank sites are desirable. However, the size of MoDOT Banks will be determined during the BDP approval process and will be dependent upon MoDOT need for mitigation in the service area and site availability. Stream mitigation Bank size will be treated on a case-by-case basis.

C. LANDOWNER RESPONSIBILITIES

If a Landowner other than MoDOT owns a Bank, they will allow or otherwise provide for, access to the site by MoDOT and other MBRT members for the purpose of inspection and compliance monitoring consistent with the terms and conditions of this Banking Instrument, BDP, and the conservation easement. Inspecting parties shall provide reasonable notice to MoDOT and the Landowner, if applicable, of not less than 24 hours prior to inspection of a Bank.

D. PROJECT ELIGIBILITY

The intended use of a Bank under this agreement is for compensatory mitigation of wetland and aquatic impacts for federally or state-funded transportation projects. For projects with minor aquatic resource impacts that are authorized by nationwide Section 10/404 permits, use of a Bank generally is "preferable to on-site mitigation" (60 F.R. 58605 *et seq.*, November 28, 1995). Larger aquatic resource impacts may be appropriately mitigated in a Bank if the essential biological and/or physical functions of the impacted site can be adequately replaced.

In general, it is agreed that a Bank may be used to provide full or partial compensatory mitigation for unavoidable impacts to wetlands or other aquatic resources from transportation projects within its service area that receive a Section 10/404 regional or nationwide general permit. For projects requiring individual Section 10/404 permit authorization, the Chair USACE District, considering MBRT member responses to the individual permit public notice, will determine projects that are eligible to use a Bank.

Use of a Bank to compensate for impacts outside its primary service area may be authorized when such use of a Bank is determined to be environmentally desirable and practicable, as

determined on a case-by-case basis by the USACE Districts and the MBRT. More mitigation credits may be required in such cases where the impacts are outside the primary service area of the Bank that is used. Credits may also be used to compensate for environmental impacts authorized under other environmental laws for federal, state, or local wetland, watershed, stream, or endangered species programs.

E. PROJECT INELIGIBILITY

The permitting USACE District will make decisions about the appropriate compensatory mitigation for impacts of a specific project on a case-by-case basis, during evaluation of any permit application. The permitting USACE District may determine during the public interest review or through coordination with the MBRT that compensatory mitigation through use of credits from a Bank may be inappropriate for some projects. Likewise, signatories recognize that the USACE District can review any proposed project and determine that another form of compensatory mitigation is ecologically preferable because of case-specific circumstances.

F. SUCCESS CRITERIA

The following general criteria and those specified in subsequent BDPs will be used to assess basic project success:

1. Financial Success

MoDOT must demonstrate that it has purchased a conservation easement or property with a deed restriction or covenant, contracted for restoration services, and that MHTC has approved funds for bank construction.

2. Hydrologic Success

At least the portion of a Bank planned to be wetlands must meet the hydrologic criteria for wetlands as outlined in the 1987 Wetland Delineation Manual and consistent with the BDP. However, in the early phases of Bank site establishment, special water level drawdown may be necessary and is allowed to establish desirable woody species. Such drawdown measures should not necessarily impede a final determination of hydrologic success.

3. Vegetative Success

The long-term vegetative success criteria will be determined for Individual Banks through agreement in a BDP. In general, the portion of a Bank planned to be wetlands must meet the vegetative criteria for wetlands as outlined in the 1987 Wetland Delineation Manual and at least 80% of the vegetative cover should be desirable plants suitable for the Bank's water regime and site potential. Desirable species are those native to the eco-region of the Bank. Undesirable species shall be kept to a minimum within a Bank. A list of undesirable species, including noxious and invasive species, and allowable percentages of these species shall be developed and included with each BDP.

4. Soil Success

At least the portion of the site planned to become wetlands must meet the hydric soil requirements according to the 1987 Wetland Delineation Manual. Inundation or saturation to within 12 inches of the surface can be used as an indicator that this criterion is being met before other indicators of hydric soil are achieved.

G. SCHEDULE OF CREDIT AVAILABILITY

Upon submittal of all appropriate documentation by MoDOT and subsequent approval by the Chair USACE District, in consultation with the other members of the MBRT, it is agreed that credits will become available for use by MoDOT in accordance with the following schedule:

1. Initially, 10 percent of total anticipated credits shall be available for debiting immediately after the MBRT's approval of a BDP and MoDOT has achieved financial success, as described in Section IV.F.

2. An additional 15 percent of total anticipated credits shall be available for debiting immediately after submittal and approval of the as-built report.

3. Up to an additional 25 percent of total anticipated credits shall be available for debiting following demonstration of meeting hydrological success, as described in Section IV.F of this instrument and the applicable BDP. The number of credits released will be based on the proportion of proposed wetlands meeting the hydrology success criteria.

4. The remaining 50 percent of total anticipated credits shall be made available by the Chair USACE District for withdrawal when the vegetative and soils success criteria as described in Section IV.F and the applicable BDP are satisfied. If a portion of the individual Bank does not meet the hydrologic, vegetative, or soil success criteria, the equivalent credit for the area that does not meet the criteria will not be available for debiting until the criteria are achieved.

H. CREDIT UTILIZATION

Credits will be utilized in conformity with the following general criteria:

1. In no case may the same credits be used to compensate for more than one USACE authorized wetland or aquatic resource impact. Once credits have been used to mitigate the impacts occurring on one property or project, those credits cannot be used again. However, credits from mitigation banks may also be used to compensate for environmental impacts authorized under other programs, such as state or local wetland programs. For example, if mitigation for a specific project is required by USACE (Section 404), MDNR (Section 401) and USFWS (Endangered Species Act) for impacts to the same wetland and/or aquatic resource, the same credits can count toward mitigation under all programs.

2. The construction of the Bank, including final grading, planting, and restoration of wetland hydrology, must be initiated and completed within one full growing season following the use of the first credit for that Bank, unless other plans are agreed upon by the Chair USACE District in consultation with the MBRT.

3. MoDOT may request full credit release at any time after a minimum of three (3) years of data collection for emergent wetlands and stream systems and four (4) years of data collection for forested and scrub/shrub wetland and stream systems. After the MBRT reviews the monitoring reports and conducts a site visit if needed, credits will be released by the Chair USACE District if the Bank has met the success criteria in Section IV.F and any additional criteria in the BDP.

4. The actual exchange ratio of credits for unavoidable impacts authorized by nationwide or regional general Section 10/404 permit will be determined on a project-by-project basis by the permitting USACE District. When an individual Section 10/404 permit is required, the permitting USACE District will determine the mitigation credit requirement in consultation with the other members of the MBRT during the permit process evaluation. The credit requirement for streams and wetlands will be determined by a functional assessment method or best professional judgment. For wetland mitigation, all attempts will be made to provide "no net loss of wetland functions".

I. SITE USE PROVISIONS

Hunting, fishing, and trapping may be compatible uses when conducted in accordance with state and federal regulations and approved by the Chair USACE District in consultation with the MBRT. This includes the leasing of such rights to others. However, compatibility of temporary blinds or stands for hunting purposes will be reviewed and may be approved by the Chair USACE District in consultation with MBRT. MoDOT, Landowner, or Lessee will make all reasonable and practicable efforts to prevent unauthorized and incompatible uses of Bank sites.

Unless outlined in the BDP or approved in writing by the Chair USACE District, in consultation with the MBRT, MoDOT, the Landowner, or the Lessee shall NOT:

1. Grant additional easements, right of way, or any other property interest in or to the project areas for pipelines, utility lines, transportation projects, etc., without the written consent of the Chair USACE District, in consultation with the MBRT;

2. Construct trails or roads except for maintenance and educational purposes, which are contingent upon Chair USACE District review and approval in consultation with the MBRT;

3. Use or allow the use of permanent hunting blinds, motorcycles, off-road vehicles, swamp buggies, motor boats, or other motorized vehicles unless for maintenance activities approved by the Chair USACE District in consultation with the MBRT;

4. Cut, harvest, or otherwise alter the successional growth of timber unless outlined in the BDP or approved by the Chair USACE District in consultation with the MBRT;

5. Burn, hay, graze, cultivate, or plant crops unless outlined in the BDP as a management tool or approved by the Chair USACE District in consultation with the MBRT; or

6. Use or authorize the use of areas within a Bank for any purpose that interferes with the individual Bank's goals and objectives. This includes modifying the hydrology or vegetation to create a different type of wetland.

J. BANK CLOSURE

Individual Bank closure will occur when the terms and conditions of a BDP have been determined by the Chair USACE District, in consultation with the MBRT, to be fully satisfied or until all credits have been debited, whichever is later. MoDOT may request early closure of an individual Bank and forfeiture of remaining anticipated credits if they determine that the success criteria are unattainable. At the termination of the operational phase of the Bank, a Bank closure report will be required. The report will include an aquatic resource delineation and Cowardin Classification, pre-construction and current aerial or satellite photography, detailed diagrams/drawings of the site, expected land use and management of site, finalized ledger, and finalized long-term management and ownership records. Subsequent to Bank closure, management will remain the responsibility of MoDOT, the Landowner, or Lessee. Management decisions after Bank closure shall always be made with the primary goals of maintaining healthy wetland and/or aquatic habitat functions for which the site was originally designed.

V. MAINTENANCE AND MONITORING OF A BANK

A. ACCOUNTING PROCEDURES

MoDOT shall make a request in writing to the Chair USACE District that additional credits should be approved and released. The Chair USACE District will review the request in consultation with the MBRT and approve or deny the release of additional credits in writing within 60 days of receiving the request. MoDOT will maintain a ledger for bank credits and debits for each individual Bank. The ledger will record the date and number of credits released when the credit availability criteria are met. For planning purposes, wetland and aquatic impacts mitigated in the individual Bank will be listed by Cowardin Class (see Figure 1). Projects with impacts to multiple wetland Classes will list the acreage of each Class and the total mitigation credits required for compensation. The debits and credits balance will be recorded and balanced for general wetland credits or stream credits (see Section VIII for a sample ledger). MoDOT shall submit an annual ledger showing all transactions for each Bank to the Chair USACE District for distribution to the MBRT members.

B. MAINTENANCE PROVISIONS

MoDOT agrees to ensure that all necessary work is performed to maintain a Bank consistent with the maintenance criteria established in a BDP. MoDOT, the Landowner, or Lessee shall continue with such maintenance activities until closure of a Bank. Upon closure of a Bank, MoDOT shall implement the long-term management requirements established in Section V.F. Deviation from the approved BDP maintenance plan is subject to review and written approval by the Chair USACE District in consultation with the MBRT.

C. MONITORING PROVISIONS

MoDOT agrees to perform all necessary work to monitor each Bank and demonstrate compliance with the success criteria established in this Banking Instrument. Work will include:

1. Vegetative species monitoring locations will be based on the methods in the 1987 Wetland Delineation Manual (or other methodology subsequently approved by the USACE). Woody stem density and herbaceous plant cover will be characterized by species. This will be scheduled annually from early to late growing season from year one through year five following initial establishment. If the vegetative success criteria are not met, the Chair USACE District, in consultation with the MBRT, will determine if additional monitoring will be required after review of the five-year report.

2. An annual fish, shellfish, and wildlife species listing for the site will be compiled from casual observations.

3. Hydrologic monitoring will document water distribution throughout the year for the first three years in accordance with the methods in the 1987 Wetland Delineation Manual. This will serve to document water retention capability and success of water manipulation in facilitating vegetation establishment. The frequency of hydrologic monitoring may be reduced to annual or biannual monitoring after three years if approved by the Chair USACE District in consultation with the MBRT. MoDOT, Landowner, or Lessee will collect this data using monitoring wells, piezometers, gauges, local rainfall reports, or other approved methods.

4. Soils will be sampled in accordance with the 1987 Wetland Delineation Manual to determine if the soils have indicators of hydric conditions. Soils will be sampled concurrently with the vegetation sampling annually for five years following initial establishment. If the soils success criteria are not met, the Chair USACE District, in consultation with the MBRT, will determine if additional monitoring will be required after review of the five-year report.

5. If any of the performance criteria have not been met after the five-year report is submitted, the Chair USACE District, in consultation with the MBRT, may require direct project modification or further monitoring.

D. REPORTING

MoDOT shall annually submit to the Chair USACE District a report in digital format describing the conditions of each individual Bank comparing those conditions to the success criteria until the terms and conditions of a BDP have been determined to be fully satisfied or until all credits have been debited, whichever is later. Reports will be submitted each calendar year by December 31 for each individual Bank, and will contain the following:

1. A US Geological Survey map showing the location of the individual Bank. A digital point location will also be included;

2. A narrative summarizing the condition of the individual Bank and all regular maintenance activities;

3. Appropriate topographic maps (e.g., 1-2-foot contour intervals) showing location of sampling plots, permanent photo points, and location of transects;

4. Results of hydrology survey including the extent of inundation and depth of pools after site construction;

5. Results of vegetation survey, including:

a) Visual estimates of percent cover by species for each vegetation layer; relative percent cover of nonnative invasive species in each vegetation layer; total percent cover of obligate, facultative wetland, facultative, and facultative upland plants in each vegetation layer; and a list of dominant species in plant communities within a Bank site;

b) Survival rate of planted trees and shrubs based on sampling transects and description of planted vegetation vigor; and

c) Description of species and cover estimates of natural woody species colonization;

6. Results of qualitative fish, shellfish, and wildlife observations;

7. Soil sample descriptions with soil profile and hydric condition indicators;

8. Acreage and descriptions of aquatic habitats in the individual Bank described to Cowardin Class (see Figure 1) and any further level specified by the Chair USACE District of that individual Bank in consultation with the MBRT;

9. Ledger showing wetland and stream impacts debited in the individual Bank and the individual Bank's stream and wetland credit balances (see Sections V.A and VIII). The impacts should be debited as simply wetland or stream impacts. However, impacts should be described by Cowardin Class and any further level specified by the Chair USACE District of that individual Bank in consultation with the MBRT;

10. List of deficiencies identified for the individual Bank; and

11. Recommendations for remedial vegetation plantings, hydrologic modifications, modification of vegetative sampling scheme, and modifications of hydrologic monitoring scheme.

E. CONTINGENCY PLANS/REMEDIAL ACTIONS

Should the Chair USACE District, in consultation with the MBRT, determine that remedial action is necessary because a Bank has failed to achieve the success criteria specified in Section IV.F, MoDOT shall develop and implement remedial action plans in coordination with the Chair USACE District and the MBRT. In the event MoDOT fails to implement necessary remedial

actions at a Bank site within 90 calendar days or other time period determined by the Chair USACE District in consultation with the MBRT, the Chair USACE District will notify MoDOT that debiting from the bank is suspended.

If the Chair USACE District determines that a Bank is operating at a deficit, MoDOT will be notified that debiting of credits from that Bank should immediately cease. The Chair USACE District, in consultation with the MBRT and MoDOT, will determine what remedial actions are necessary to correct the situation.

F. LONG-TERM MANAGEMENT

MoDOT or cooperating Landowner or Lessee, after reimbursement for this service as part of an easement purchase and site construction agreement, is the responsible entity for long-term management, and assumes this responsibility for the site. When all credits of a Bank have been debited, MoDOT or the Landowner shall be responsible to manage a Bank in perpetuity in accordance with the terms of this agreement and the real-estate provisions and the long-term management plans outlined in the BDP.

VI. RESPONSIBILITIES OF THE MBRT

A. AGENCY OVERSIGHT

The agencies represented on the MBRT agree to provide appropriate oversight in carrying out provisions of this Banking Instrument. The MBRT will strive to obtain consensus on its actions. The Chair USACE District for each individual Bank will have the responsibility for making final decisions within 120 days of the date the public notice was published where consensus cannot otherwise be reached.

B. AGENCY REVIEW

The USACE Districts agree to distribute electronic copies of all Bank prospectuses and applications, annual reports, credit release requests, remedial action plans, and Bank closure reports to the MBRT members within 15 days. The agencies represented on the MBRT agree to review and provide written comments on all Bank prospectuses and applications, annual reports, credit release requests, remedial action plans, and Bank closure reports within 45 calendar days. If a MBRT agency chooses not to participate in a particular portion of the review process, they may notify the USACE District. If the USACE does not receive written comments within 45 calendar days, the District shall assume report approval and proceed to the next stage of the review process. This does not guarantee that mitigation proposals or permit applications will be approved within 45 days. Written comments may be submitted using e-mail correspondence.

C. CREDIT RELEASE

The Chair USACE District agrees to review in consultation with the MBRT, reports evaluating the success of the Bank and release approved credits within 60 days.

D. COMPLIANCE INSPECTIONS

The agencies represented on the MBRT shall conduct compliance inspections, as determined necessary by the Chair USACE District in consultation with the MBRT, to verify whether all success criteria have been met and whether credits may be released in a Bank. The Chair USACE District shall report their findings to MoDOT in writing and recommend corrective measures, if any, until the terms and conditions of a BDP have been determined to be fully satisfied or until all credits have been debited, whichever is later.

VII. OTHER PROVISIONS

A. FORCE MAJEURE

MoDOT will not be responsible for Bank failure that is attributed to natural catastrophes such as flood, drought, disease, regional pest infestation, etc., that the Chair USACE District, in consultation with the MBRT, determines is beyond the control of MoDOT to prevent or mitigate.

B. DISPUTE RESOLUTION

Resolution of disputes about application of this Banking Instrument shall be in accordance with those stated in the Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (60 F.R. 58605 *et seq.*, November 28, 1995). The Lead USACE District has the responsibility of making final decisions for this umbrella Banking Instrument and the Chair USACE District has the responsibility of making final decisions regarding an individual Bank when consensus cannot be reached between the MBRT members and/or MoDOT.

C. VALIDITY, MODIFICATION, AND TERMINATION OF THE BANKING INSTRUMENT

This Banking Instrument will become valid on the date of the last participant's signature. This Banking Instrument may be amended or modified with the written approval of all signatory parties. The Lead USACE District can reconvene the MBRT for amendments to this agreement and the Chair USACE District can reconvene the MBRT for an amendment to the BDP for an individual Bank. However, unless an individual Bank is in substantial noncompliance with its BDP, amendments to this agreement or its BDP cannot include changes that postpone the use of approved credits or render the Bank unavailable for mitigation.

Any of the MBRT members may terminate their participation in this agreement upon written notification of termination to all signatory parties. Participation of the MBRT members will terminate 90 calendar days after written notification. Either the Lead USACE District or MoDOT may terminate this agreement by giving a 90-day written notice to the other party and the MBRT. MoDOT or the Chair USACE District for an individual Bank may terminate that BDP by giving a 90-day written notice to the other party and the MBRT.

D. INDIVIDUAL BANK SITES

When MoDOT submits an individual Bank prospectus to the MBRT for a service area, the Chair USACE District will be the District with jurisdiction over the location of the Bank site and will

publish the prospectus in a public notice and convene the MBRT for review of the prospectus and development of the BDP. The other USACE Districts with jurisdiction in the service area should participate in the MBRT. Other USACE Districts may, but are not required to, participate on the MBRT for that Bank.

E. CONTROLLING LANGUAGE

To the extent that specific language in this document changes, modifies, or deletes terms and conditions contained in those documents that are incorporated into the BDP by reference, and that are not legally binding, the specific language within this Banking Instrument shall be controlling. This Banking Instrument shall be controlling for all items it covers in detail. The BDP shall be controlling for those items within it that this Banking Instrument states will be outlined in detail or may be modified in the BDP. Any proposed bank that would contradict the controlling language of this Banking Instrument could be developed and approved independently in accordance with the Federal Guidance for the Establishment, Use and Operation of Mitigation Banks. Definitions for types of Banking that may occur are taken from RGL No. (02-2).

VIII. SAMPLE LEDGER

MoDOT Mitigation Banking Ledger														
Individual Bank Name			Blue Springs											
Service Area			#4 Plains, Missouri River Tributaries between Blue and Lamine Drainages								Anticipated Wetland Credits			40
Chair Corps District			Kansas City District								Anticipated Stream Credits			10
Mitigated Impact Information								Wetland Mitigation			Stream Mitigation			
Date	Permitting Corps District	CE Permit Number	Project or Action Description (Route and MoDOT project number for projects, Success criteria for credit release)	EDU	Aquatic Resource Type	Impact Size	Credits Needed	Credits Deposited	Credits Debited	Credits Remaining	Credits Deposited	Credits Debited	Credits Remaining
1-Jan-06	Kansas City		BDP was approved					4.0		4.0	1.0		1.0
2-Jan-06	Kansas City	200601001	US 71	4	PEM	0.5	1.0		1.0	3.0			1.0
					PSS	0.4	1.0		1.0	2.0			1.0
					R4SB	0.3	1.0			2.0		1.0	0.0
8-Aug-06	Kansas City		As-built report approved					6.0		8.0	1.5		1.5
10-Oct-06	Kansas City	200700010	MO 52	4	PEM	0.5	1.0		1.0	7.0			1.5
					PSS	0.5	1.0		1.0	6.0			1.5
					R4SB	0.2	1.0			6.0		1.0	0.5

One wetland credit is equivalent to restoration or creation of an acre of fully functioning wetland habitat from a condition providing no wetland functions.
One stream credit is equivalent to restoration or creation of an acre of fully functioning stream and riparian habitat from a condition providing little or no stream or riparian functions.

IX. APPENDIX A

U.S. Department of Transportation
Federal Highway Administration

Subject: **ACTION:** Financial Assurances for Wetland Mitigation Banks

Date: April 30, 1997

From: Executive Director

Reply to Attn. of: HEP-40

To: Regional Administrators
Federal Lands Highway Program Administrator

Under the provisions of the Intermodal Surface Transportation Efficiency Act (Sections 1006 and 1007), the FHWA can participate in the establishment of wetland mitigation banks developed by State highway agencies to compensate for wetland impacts associated with future Federal-aid highway projects. Additionally, current White House policy on wetlands has placed increased emphasis on mitigation banking. The issuance on November 28, 1995, of the Federal Guidance for the Establishment, Use and Operation of Mitigation Banks (the Guidelines), developed as an interagency effort by Federal natural resource agencies, provided an administrative framework for interagency cooperation to successfully implement mitigation banks.

With the initiation of banking agreements under the Guidelines, questions have arisen regarding some of its provisions. One such inquiry relates to the raquirement for State highway agencies or the FHWA to provide financial assurances, as described in Section E.5 of the Guidelines, to cover contingency actions in the event of bank default or failure. This issue has been discussed with the United States Army Corps of Engineers (USACE) Headquarters Regulatory Branch staff and agreement has been reached that such assurances ara not required for wetland banks established with Federal-aid participation by State highway departments primarily for Federal-aid highway projects. To reach this agreement, we assured the USACE that the FHWA will fulfill its responsibilities as signatories of wetland banking agreements, as we do with any mitigation commitment on our projects.

Where Federal-aid highway funds are used to develop and establish wetland mitigation banks, the FHWA field offices will take appropriate administrative action, within the legal authority of the agency, to ensure that wetland mitigation commitments established to compensate for wetlands impacts due to Federal-aid highway projects are completed or achieved. These include meeting agreed-upon performance objectives, as specified in banking instruments or mitigation agreements, carrying out monitoring programs, and performing necessary modifications or remediation on mitigation projects required to establish wetlands' functions and environmental benefits. Federal-aid participation in such activities has been previously addressed in the Headquarters memorandum titled Funding for the Establishment of Wetland Mitigation Banks, dated October 24, 1994.

This policy applies to the following: 1) wetland mitigation banks established by State highway agencies or on their behalf by other State or Federal Agencies to mitigate wetland impacts of Federal-aid highway projects; 2) privately-owned wetland mitigation banks only for wetland mitigation credits acquired by State highway agencies with Federal-aid highway funds for wetland impacts caused by Federal-aid highway projects; 3) wetland mitigation banks independently developed and operated by other State or Federal Agencies only for credits acquired by State highway agencies as mitigation for impacts to wetlands on Federal-aid highway projects.

This memorandum does not supersede any part of the Guidelines. It is intended to clarify the Guidelines' recommendations regarding the need for financial assurances from State highway agencies which are establishing wetland mitigation banks with Federal-aid participation solely for wetlands impacts attributed to Federal-aid highway projects.

For further information regarding this matter, please contact Fred Bank, (202) 366-5004, or Paul Garrett, (202) 366-2067, of the Office of Environment and Planning, Natural and Cultural Resources Team.

Anthony R. Kane

X. SIGNATURES

BANKING INSTRUMENT LEAD USACE DISTRICT

Michael A. Rossi
Colonel, U.S. Army Corps of Engineers
District Engineer
Kansas City District

5 Apr 06
Date

MBRT CONCURRENCE

For LTC, EN

Lewis F. Setliff III
Colonel, U.S. Army Corps of Engineers
District Engineer
St. Louis District

24 Feb 06
Date

MBRT CONCURRENCE

Wally Z. Walters
Colonel, Corps of Engineers
District Engineer
Little Rock District

14 MARCH 2006
Date

MBRT CONCURRENCE

Duane Gapinski
Colonel, Corps of Engineers
District Engineer
Rock Island District

3/3/06
Date

MBRT CONCURRENCE

Charles O. Smithers
Colonel, Corps of Engineers
District Engineer
Memphis District

3 Mar 06
Date

MBRT CONCURRENCE

Leo J. Alderman
Director
Water, Wetlands, and Pesticides Division
U.S. Environmental Protection Agency, Region VII

1/10/06
Date

MBRT CONCURRENCE

Charles M. Scott

Charles Scott
Field Supervisor
U.S. Fish & Wildlife Service

1/23/06
Date

MBRT CONCURRENCE

1-24-06

Allen Masuda
Division Administrator, Missouri Division
Federal Highway Administration

Date

MBRT CONCURRENCE

Roger Hansen
State Conservationist
Natural Resource Conservation Service

1/17/06
Date

MBRT CONCURRENCE

Doyle Childers

Doyle Childers
Director, Missouri Department of Natural Resources

1-13-06
Date

MBRT CONCURRENCE

John D. Hoskins

John D. Hoskins
Director, Missouri Department of Conservation

1-24-06
Date

FOR MISSOURI DEPARTMENT OF TRANSPORTATION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

By _____

Title Chief Engineer

ATTEST:

_____
Secretary to the Commission

Approved as to Form:

_____
Commission Counsel