3. Geographic Limits of Applicability

The service area of a mitigation bank is the designated area (e.g., watershed, county) wherein a bank can reasonably be expected to provide appropriate compensation for impacts to wetlands and/or other aquatic resources. Designation of the service area should be based on consideration of hydrologic, edaphic and biotic criteria, and be stipulated in the banking instrument.

The geographic extent of a service area should be guided by the cataloging unit of the "Hydrologic Unit Map of the United States" (USGS, 1980) and ecoregion of the "Ecoregions of the United States" (James M. Omernik, EPA, 1986) or section of the "Descriptions of the Ecoregions of the United States' (Robert G. Bailey, USDA, 1980). It may be appropriate to use other hydrologic and biotic classification and mapping systems developed at the state or regional level for the purpose of specifying bank service areas, when such systems compare favorably in their objectives and level of detail. In the interest of integrating banks with other resource management objectives, bank service areas may encompass larger watershed areas if the designation of such areas is supported by local or regional management plans (e.g. Special Area Management Plans, Advance Identification), State Wetland Conservation Plans or other Federally sponsored or recognized watershed management plans.

4. Use of a Mitigation Bank vs. On-Site Mitigation

As indicated in 1990 Memorandum of Agreement on mitigation between the EPA and DA, compensatory mitigation should be undertaken in areas adjacent or contiguous to the site of the aquatic resource impacts when practicable and environmentally preferable. This preference for on-site mitigation is established because on-site mitigation often has greater potential for compensating for particular aquatic functions. For example, on-site mitigation may be the most appropriate option for compensating for local flood control functions, habitat for a species or population with a very limited geographic range or narrow environmental requirements, or where local water quality concerns dominate.

The preference for on-site mitigation, however, should not preclude the use of a mitigation bank when there is no practicable opportunity for on-site compensation, or when use of a bank is environmentally preferable to on-site compensation. In making the latter determination, careful consideration

must be given to wetland functions, landscape position, affected species populations at the impact and mitigation bank sites, and potential onsite compensation areas. In general, it may be desirable to provide compensation for minor aquatic resource impacts through consolidation in a well-managed bank. There may also be circumstances warranting a combination of on-site and off-site (i.e., bank) mitigation to compensate for losses.

With respect to larger aquatic resource impacts, use of a bank may be appropriate if it is capable of replacing essential physical and/or biological functions of the aquatic resources which are expected to be lost or degraded and is environmentally preferable to on-site compensatory mitigation. Moreover, for projects that might otherwise cause or contribute to significant degradation (40 CFR part 230.10(c)), a bank may only be used when it is demonstrated that use of the bank will prevent or replace the lost functions that give rise to the significant degradation finding, and where a reasonable assurance of success is provided.

5. In-Kind vs. Out-Of-Kind Mitigation Determinations

In the interest of achieving functional replacement, in-kind compensation of aquatic resource impacts should generally be required. Out-of-kind compensation may be acceptable if it is determined to be practicable and environmentally preferable to in-kind compensation (e.g., of greater ecological value to a particular region). However, non-tidal wetlands should typically not be used to compensate for the loss or degradation of tidal wetlands, nor viceversa. Decisions regarding out-of-kind mitigation are typically made on a caseby-case basis during the permit evaluation process. The banking instrument may identify circumstances in which it is environmentally desirable to allow out-of-kind compensation within the context of a particular mitigation bank. Mitigation banks developed as part of an area-wide management plan to address a specific resource objective (e.g. restoration of a particularly vulnerable or valuable wetland habitat type) may be such an example.

6. Timing of Credit Withdrawal

The number of credits available for withdrawal (i.e., debiting) should generally be commensurate with the level of aquatic functions attained at a bank at the time of debiting. The level of function may be determined through the application of performance

standards tailored to the specific restoration, creation or enhancement activity at the bank site or through the use of an appropriate functional assessment methodology.

The success of a mitigation bank with regard to its capacity to establish a healthy and fully functional aquatic system relates directly to both the ecological and financial stability of the bank. Since financial considerations are particularly critical in early stages of bank development, it may be appropriate to allow limited debiting based upon a projected level of aquatic functions at a bank (e.g. 15% of the total credits projected for the bank at maturity). However, it is the intent of this policy to ensure that those actions necessary for the long-term viability of a mitigation bank be accomplished prior to any debiting of the bank. In this regard, the following requirements should be satisfied prior to debiting: (1) Banking instrument and final mitigation plans have been approved; (2) bank site has been secured; and (3) appropriate financial assurances have been established. In addition, initial physical and biological improvements should be completed within the first full growing season following initial debiting of a bank. The temporal loss of functions associated with the debiting of projected credits may require higher compensation ratios. Further debiting of the bank should not occur until the allocated projected credits have accrued and additional credits have accrued to match proposed debiting.

Credits based solely on the preservation of existing aquatic resources may become available for debiting immediately upon implementation of appropriate legal protection accompanied by appropriate changes in land use or other physical changes, as necessary.

7. Crediting/Debiting/Accounting Procedures

Credits and debits are the terms used to designate the units of trade (i.e., currency) in mitigation banking. Credits represent the accrual or attainment of aquatic functions at a bank; debits represent the loss of aquatic functions at an impact or project site. Credits are debited from a bank when they are used to offset aquatic resource impacts (e.g. for the purpose of satisfying Section 10/404 permit or FSA requirements).

An appropriate functional assessment methodology (e.g. Habitat Evaluation Procedures, hydrogeomorphic approach to wetlands functional assessment) acceptable to all signatories should be used to assess wetland and/or other aquatic resource restoration, creation