United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

ADDRESS ONLY THE DIRECTOR,
FISH AND WILDLIFE SERVICE

MAY 2 2003

Memorandum

To: Regional Directors, Regions 1-7
Manager, California Nevada Operations

From: Director

Subject: Guidance for the Establishment, Use, and Operation of Conservation Banks

This memorandum transmits guidance that will help Service personnel evaluate proposals to establish conservation banks (attached). This guidance provides a collaborative incentive-based approach to endangered species conservation, which if used in coordination with other tools available to the Service, can aid in the recovery of the species. Due to the beneficial aspects derived from this guidance we are establishing it effective immediately. As with any program, however, the Service will review and monitor use of this guidance for the establishment of conservation banks, and may choose to revise, update, and improve this guidance in the future. Consequently, when implementing this guidance, Service personnel should encourage discussion and obtain feedback from landowners, applicants, owners of conservation banks, or other members of the public.

This memorandum is intended to be applied to conservation bank proposals submitted for approval on or after the date of this guidance and to those in early stages of planning or development. It is not intended for the guidance to be retroactive for banks that have already received agency approval. While it is recognized that individual conservation banking proposals may vary, it is the intent of this guidance that the fundamental concepts be applicable to future conservation banks.

Attachment

Guidance for the Establishment, Use, and Operation of Conservation Banks

I. Introduction

A. Purpose and Scope of Guidance

This document provides guidance on the establishment, use, and operation of conservation banks for the purpose of providing a tool for mitigating adverse impacts to species listed as threatened or endangered under the Endangered Species Act of 1973, as amended. This guidance can also be used to aid in the establishment of banks for candidate species. The Service envisions that banks will mainly be used for candidates in conjunction with Candidate Conservation Agreements with Assurances or as a precursor to a multiple species Habitat Conservation Plan effort that covers listed and non-listed species.

The policies and procedures discussed herein are applicable to the establishment, use, and operation of public conservation banks, privately sponsored conservation banks, and third party banks (i.e., entrepreneurial banks). The guidance they provide is intended to help Service personnel; (1) evaluate the use of conservation banks to meet the conservation needs of listed species; (2) fulfill the purposes of the ESA; and (3) provide consistency and predictability in the establishment, use, and operation of conservation banks. In this regard, it is important to apply consistent standards and principles of mitigation whether mitigating through conservation banks or through other means. The purpose of this policy is not to set the bar higher for conservation banks than for other forms of mitigation, but articulate generally applicable mitigation standards and principles and to explain how they are to be accomplished in the special context of conservation banks.

Conservation banks are a flexible means of meeting a variety of conservation needs of listed species. The use of conservation banks should be evaluated in the context of unavoidable impacts of proposed projects to listed species. In some cases, the use of off-site banks may be the only mitigation option when on-site conservation measures are not practicable for a project or when the use of the bank is environmentally preferable to on-site measures. In general, no two conservation banks will be used or developed in an identical fashion. However, as demand for conservation banking increases, it is important that the essential components and operational criteria of conservation banks are standardized to ensure national consistency.

B. Background

Conservation banking is attractive to landowners and land managers because it allows conservation to be implemented within a market framework, where habitat for listed species is treated as a benefit rather than a liability. From the Service's perspective, conservation banking reduces the piecemeal approach to conservation efforts that can result from individual projects by establishing larger reserves and enhancing habitat connectivity. From a project applicant's perspective, it saves time and money by identifying pre-approved conservation areas, identifying "willing sellers," increasing flexibility in meeting their conservation needs, and simplifying the regulatory compliance process and associated paperwork. From the landowner's perspective, it provides a benefit an opportunity to generate income from what may have previously been considered a liability.

Directing smaller individual mitigation actions into a bank streamlines compliance for the individual permit applicants or project proponents while providing a higher benefit to the natural resources. Banking allows a collaboration of private/public partnerships to maintain lands as open space, providing for the

conservation of endangered species. Local communities as a whole benefit by being assured that their natural resources will be protected and open space maintained.

Conservation banking can bring together financial resources, planning, and scientific expertise not practicable for smaller conservation actions. By encouraging collaborative efforts, it becomes possible to take advantage of economies of scale (both financial and biological), funding sources, and management, scientific, and planning resources that are not typically available at the individual project level.

1. What Is a Conservation Bank?

A conservation bank is a parcel of land containing natural resource values that are conserved and managed in perpetuity, through a conservation easement held by an entity responsible for enforcing the terms of the easement, for specified listed species and used to offset impacts occurring elsewhere to the same resource values on non-bank lands. Bank parcels are typically large enough to accommodate the mitigation of multiple projects. A project proponent will secure a certain amount of natural resource values within the bank to offset the impacts to those same values offsite. The bank is specifically managed and protected by the banker or designee for the natural resource values. The values of the natural resources are translated into quantified "credits." Typically, the credit price will include funding for the long-term natural resource management and protection of those values. Project proponents are, therefore, able to complete their conservation needs through a one time purchase of credits from the conservation bank. This allows "one-stop-shopping" for the project proponent, providing conservation and management for listed species in one simplified transaction.

A bank can be created in a number of different ways: (1) acquisition of existing habitat; (2) protection of existing habitat through conservation easements; (3) restoration or enhancements of disturbed habitat; (4) creation of new habitat in some situations; and (5) prescriptive management of habitats for specified biological characteristics. Banks can be created in association with specific projects, or can proceed from a circumstance where a project proponent sets aside more area than is needed for the immediate project, or where the specific project and is willing to protect the remaining area and thus generate credits, or where the specific project is implemented over a longer period of time. A conservation bank can also be created as an entrepreneurial effort in anticipation of an independent customer base with a number of different potential projects.

Once conservation banks are established, conservation banks each credit they sell is considered to be part of the environmental baseline. As a result, future project evaluations and listing or delisting decisions can be made in a more stable ecological context. This stability is one of conservation banking's greatest assets, both from the an ecological and economic standpoint. For this reason, it is particularly important that conservation banks be established in perpetuity, regardless of the future status of the species for which the bank was initially established.

2. Wetland Mitigation Banking vs. Conservation Banking

The wetland mitigation banking policy was finalized in November of 1995*(60* FR *58605).* The main concept behind wetland mitigation banking is similar to that of conservation banking; to provide compensation for adverse impacts to wetlands and other aquatic resources in advance of the impact. Under the guidelines established for section 10 of the Rivers and Harbors Act and section 404 of the Clean Water Act, impacts to wetlands are mitigated sequentially by avoiding impacts, minimizing impacts, and then, as a last resort, compensating for those impacts. Compensatory mitigation involves creating, restoring, or enhancing lost function and values of the wetlands. In the absence of mitigation

banking, this often led to small, isolated wetlands being restored without long-term value. Wetland mitigation banking was used to consolidate smaller mitigation requirements for wetland impacts. Typically, the mitigation bank policy focused on establishing credits based on the restored or enhanced value of the area, and discouraged the establishment of "preservation" banks. This makes sense when the functions of wetlands on the landscape are considered in the context of a no net loss policy.

Conservation banking transferred the concept of wetland mitigation banking into endangered and threatened species conservation with a few slight differences. While in wetland mitigation banking the goal is to replace the exact function and values of the specific wetland habitats that will be adversely affected by a proposed project, in conservation banking the goal is to offset adverse impacts to a species. These different goals account for differences in the policies guiding operations of the two banks. In contrast to mitigation banks, an appropriate function of conservation banks is the preservation of existing habitat with long-term conservation value to mitigate loss of other isolated and fragmented habitat that has no long-term value to the species. It forces the Service to evaluate all issues surrounding banking in the context of the benefit to the species a sharply contrasting standard to that of wetland banking, where the focus of mitigation is on maintaining function and values present in a particular watershed.

Endangered species conservation banking has been implemented in California since 1995, where the Service has worked with the State of California Department of Fish and Game (CDFG). The CDFG policy on conservation banking describes conservation banks as:

> A conservation bank is privately or publicly owned land managed for its natural resource values. For example, in order to satisfy the legal requirement for mitigation of environmental impacts from a development, a landowner can buy credits from a conservation bank, or in the case of wetlands, a mitigation bank. Conservation banking legally links the owner of the bank and resource agencies, such as the Department of Fish and Game or the U.S. Fish and Wildlife Service.

II. Policy Considerations

The Services intent is that this guidance be applied to conservation bank proposals submitted for approval on or after the effective date of this guidance and to those in early stages of planning or development. We do not intend for the policy to be retroactive for banks that have already received agency approval. While we recognize that individual conservation banking proposals may vary, our intent for this guidance is that the fundamental concepts be applicable to future conservation banks.

Conservation banking can assist both the section 7 and section 10 processes in reaching their goals. Many activities authorized under these processes result in adverse effects to listed species, including habitat loss or modification. One way to offset these types of impacts is to include in the project design a plan that involves the restoration and/or protection of similar habitat on- and/or off-site. Purchasing credits in conservation banks is one method of protecting habitat off-site or on-site.

A. Authorities

1. Section 7

Section 7(a)(1) of the ESA requires that all Federal agencies ...in consultation with and with the assistance of the [Service], utilize their authorities in furtherance of the purposes of [the ESA] by carrying out programs for the conservation of [listed species]. Section 7(a)(2) of the ESA also requires each Federal agency to consult with the Service regarding effects of their actions to insure that the continued existence

of listed species will not be jeopardized and that designated critical habitat will not be destroyed or adversely modified. Impacts to listed species are minimized by including conservation measures for the listed species in the Federal agency's project description. These conservation measures could include, if appropriate, protection of off-site listed species habitat through purchase of credits in a conservation bank.

2. Section 10

Section 10(a)(1)(B) of the ESA authorizes the Service to issue to non-Federal entities a permit for the incidental take of endangered and threatened species. This permit allows a non-Federal landowner to proceed with an activity that is legal in all other respects, but that results in the incidental taking of a listed species. A habitat conservation plan, or HCP, must accompany an application for an incidental take permit. The purpose of the HCP is to ensure that the effects of the permitted action on covered species are adequately minimized and mitigated and that the action does not appreciably reduce the survival and recovery of the species. Mitigation may include off-site protection of the listed species and its habitat and may take the form of purchasing credits in an approved conservation bank. Credits must be acquired by the permittee prior to commencement of actions authorized by an incidental take permit and intended to be mitigated by those credits.

B. Planning Considerations

1. Goals and Objectives

The overall goal of any conservation bank should be to provide an economically effective process that provides options to landowners to offset the adverse effects of proposed projects to listed species. The goal of a bank should be focused on producing conservation benefits for the species for which the bank is being established. For instance, many species are facing the threat of habitat loss and fragmentation. By consolidating and managing the high-priority areas in a reserve network, the threat of fragmentation may be reduced and the species can be stabilized. The species recovery plan and conservation strategy can help provide are among the tools available to develop the goals and objectives for establishing conservation banks. The important point in establishing a bank is to site banks in appropriate areas that can reduce the threat of fragmentation and provide management measures that address other threats that a species might encounter, such as cowbird parasitism, non-native invasion, or disruption of natural disturbance regimes.

2. Conservation Strategy

Any conservation strategy that the Service develops should identify threats, conservation needs and actions that address those threats and needs in the service area. This information can then help the Service evaluate whether the banking concept, the geographic location, the size, and management for the species is appropriate. The recovery plan can help guide the Service in evaluating whether creation of a bank will contribute to the conservation needs of the species. However, in instances where the recovery plan is not specific, is not available or is outdated, the Service may consider options to assess bank effectiveness. One option is to develop a local step down approach or strategy to addressing the needs of the species.

The conservation strategy or species conservation needs should address the factors which caused the species to be listed and must be based on sound scientific principles. The main threat to a majority of the listed species is habitat loss and fragmentation of the remaining habitat. To reduce this threat,

conservation biology principles have often been used to conserve populations of species in a reserve network, consisting of core populations that are interconnected by dispersal corridors. Conservation banking can aid in such a strategy by adding conservation areas that are permanently managed to the reserve network.

3. Principles of Conservation Bank Evaluation

Both section 7 and section 10 require the evaluation of a project's adverse effects to a species and determine whether proposed project, together with any offsetting measures, will jeopardize the continued existence of the species. The adverse effects and offsetting measures are evaluated in the context of the current status of the species and the threats to the species. Implicit in the approval of a conservation bank, is the recognition that adverse effects to a species may be offset by the conservation improvements offered by the bank. The Service is agreeing that projects which include adequate mitigation of impacts through the purchase of bank credits are consistent with the conservation needs of the species covered by the bank.

For the Service to determine whether to approve a proposed bank, the Service should determine whether the bank will provide adequate mitigation for the species. When the Service evaluates a proposed mitigation package that is intended to offset adverse effects to listed species, the Service evaluates whether the mitigation will fit within the conservation needs of the species.

For instance, if a proposed project involved habitat loss, the offsetting measure may be to conserve habitat in a location that contributes to the overall conservation strategy of the species, which may be located in a corridor or core area that supports essential breeding habitat. The conservation bank will provide mitigation to offset impacts and therefore should be evaluated in the same fashion. The best way to justify approving a bank is to evaluate whether the bank fits into the overall conservation needs of the listed species the bank intends to cover.

Two issues of paramount importance in evaluating any conservation bank are the siting of the bank and its management program. Although recovery plans for individual species will rarely, if ever, identify particular parcels as desirable sites for conservation banks or other conservation actions, they often identify broader areas within which recovery efforts will be focused. Conservation banks sited in these areas can create mitigation opportunities that both increase the options available to regulated interests and contribute to the conservation of the species. For species without recovery plans, or with plans that do not clearly identify those areas where recovery efforts will be primarily focused, conferral with the Service is especially important, to identify those areas it regards as of particular value in conserving the species.

For many species, individual conservation banks are seldom large enough, by themselves, to support a viable population of a threatened or endangered species over the long term. But if the bank is located next to an existing area managed for the conservation of that species, even a small conservation bank may increase the likelihood that a viable population can be maintained there. Similarly, if a bank is sited to encourage dispersal between two areas managed for the conservation of the species, the bank may increase the likelihood of the species surviving at both locations and thus provide a benefit proportionally larger than its actual area. In some instances, banks may be able to provide replacement habitat for species currently occupying nearby unmanaged habitats at risk of becoming unsuitable because of succession. Sites that otherwise appear to be good locations for conservation banks may turn out, on closer examination, to be inappropriate because of anticipated land-use changes in the surrounding area. These and other considerations relevant to the siting of a conservation bank should be taken into account at the outset and discussed with the would-be banker's to ensure that needs for species conservation is compatible with the banker's objectives.

No less important than siting is the bank's management program. Seldom will the needs of a threatened or endangered species be met on a completely unmanaged piece of property. More commonly, an active management program--to control invasive exotic species, replicate natural disturbance regimes; prevent an area's use by off-road vehicles, illegal garbage dumpers or others; and address myriad other threats--is essential to ensure that the potential conservation value of a particular property is realized and maintained. These management needs should be anticipated and provided.

4. Eligible Lands

Conservation banks may be established on Tribal, local, private, or State lands where managing agencies maintain or will maintain habitat in the future. Use of conservation banks on Federal lands is not precluded under this guidance, although there may be special considerations concerning applicability of conservation banks on Federal lands. Therefore, future guidance will be forthcoming on this point. Until such time, use of conservation banks on Federal lands would occur only on a case-by-case basis after review and approval by the Director.

Land used to establish conservation banks must not be previously designated for conservation purposes (e.g., parks, green spaces, municipal watershed lands), unless the proposed designation as a bank would add additional conservation benefit. For instance, it may be advantageous to place in a conservation bank the biological and habitat benefits that a species has gained under a Safe Harbor Agreement, where the landowner would agree to maintain those resource values in perpetuity.

Where conservation values have already been permanently protected or restored under other Federal, State, Tribal, or local programs benefitting federally listed species, the Service will not recommend, support, or advocate the use of such lands as conservation banks for mitigating impacts to species listed under the ESA. This includes programs that compensate landowners who permanently protect or restore habitat for federally listed species on private agricultural lands, as well as easement areas associated with inventory and debt restructure properties, lands protected or restored for conservation purposes under fee title transfers, lands protected by a habitat management agreement (unless the agreement is extended in perpetuity by a bank agreement), or habitats protected by similar programs. For example, lands conserved under the section 6 habitat conservation plan land acquisition grant program would not be available for conservation bank establishment. Where Federal funds have been used in the establishment of a bank, the allocation of credits to the bank will be proportionate to the non-Federal contribution. A bank capable of sustaining 10 credits, but with a 50 percent Federal contribution, will be allocated 5 credits.

5. Site Selection

The Service will give careful consideration to the ecological suitability of a site for achieving mitigation. The Service will evaluate the location, size, and configuration of the proposed bank. Additional items to consider when determining the suitability of an area as a conservation bank might be topographic features, habitat quality, compatibility of existing and future land use activities surrounding the bank, and species use of the area.

Conservation biology principles suggest that conserving large, unfragmented habitat blocks, to reduce the edge effect, in a reserve network will help to maintain viable populations. A conservation bank could be large enough to maintain a viable population within its boundaries or be situated in a strategic location that would add to an already established conserved area. The conserved area might be a privately owned

mitigation site established under an habitat conservation plan, or a State park . Banks could also be sited between two larger areas in a corridor that will maintain connectivity for dispersing individuals.

Bank boundaries should ordinarily be drawn so as to exclude developed areas or other areas that cannot reasonably be restored. Potential banks that encompass such areas should only be approved if the activities that will occur on these areas will not impact the value of the bank for conservation or if the resulting value will be sufficient to warrant conservation in spite of the developed areas. However, if the latter is the case, we must have the assurance that the impacts will not change over time in a manner that will decrease the value of the bank. Factors to consider include, but are not limited to, activities that may result in incidental take, habitat degradation, and contamination.

It is also possible to establish conservation banks within the boundaries of a proposed project, such as an HCP planning area, if it is both feasible and appropriate given the habitat type and species needs. If the project plan area contains sufficient land and the project impacts are fairly localized, it may be possible, or even desirable, to designate a conservation bank within its boundaries. Ultimately, the credits purchased from a conservation bank must provide biologically comparable habitat to the area affected by the activity to be mitigated.

6. Inclusion of Buffer Area

In general, it is important that banks be of sufficient size to ensure the maintenance of ecological integrity in perpetuity. However, the minimum or maximum sizes of parcels of land designated as a conservation bank will be determined on a case-by-case basis depending on the needs of the species proposed to be covered in the bank, the location of the bank, and the habitat values that are provided. Bank boundaries must encompass all areas that are necessary to maintain the habitat function specific to the species covered by the bank, which may include the appropriate buffer against edge effects from adjacent land use.

These buffer areas may not always consist of habitat that is necessary for the species included in the bank. However, limited credits may be given for the inclusion of these buffer areas only to the degree that such features increase the overall ecological functioning of the bank.

7. Role of Restoration, Enhancement, and Creation of Habitat

Conservation banks will rely on a range of strategies to achieve and maintain mitigation in perpetuity on existing functioning and occupied habitat for a majority of those species facing threats of habitat loss and fragmentation. Such strategies include preservation, management, restoration of degraded habitat, connecting of separated habitats, buffering of already protected areas, creation of habitat, and other appropriate actions. The preservation strategy will be employed for those species in which the habitat is not easily restored or created, or the information on how to accomplish the restoration or creation of habitat is either not known or unreliable. Other species may rely heavily on creation or restoration of habitat as part of a conservation bank. The reliance on restoration, enhancement, or creation of habitat as part of a bank strategy will be species specific. All conservation banks will must have an element of management that will maintain the habitat for the species in the bank.
Conservation banks can be used in instances where significant restoration, enhancement, or creation of habitat are necessary. However, an appropriate credit system will need to must be developed to address these situations. If restoration is proposed as part of the conservation bank, appropriate measures should be implemented to increase the likelihood of success. One way to increase the likelihood of success is to

require some method of ensuring performance, such as authorizing sale of credits only upon completion and verification of restoration outcomes.

One strategy is to designate preservation credits for the protection of existing habitat and restoration credits for the restoration, enhancement, and preservation of areas not currently providing suitable habitat. The need for this type of distinction will vary depending on the specific ecological situation and the conservation strategy being employed. For example, we may determine that a species cannot afford any reduction of its total available habitat. For this reason, we may require the development of a process that provides for one acre to be protected and one acre to be restored for every acre of habitat destroyed. Taken to its full extent, this conservation strategy would result in half of the existing habitat being protected with the remaining habitat being replaced through habitat restoration.

C. Criteria for Use of a Conservation Bank

1. Project Applicability

Activities regulated under section 7 or section 10 of the ESA may be eligible to use a conservation bank, if the adverse impacts to the species from the particular project are offset by buying credits created and sold by the bank. Credits from a conservation bank may also be used to compensate for environmental impacts authorized under other programs (e.g., State or local regulatory programs, transportation projects, NEPA or State equivalent). In no case may the same credits be used to compensate for more than one activity; however, the same credits may be used to compensate for an activity that requires authorization under more than one program. In other words, once a credit is sold to offset an adverse impact, that same credit cannot be sold again.

2. Service Area

In general, the Service Area of a conservation bank is identified in the bank agreement and defines the area (e.g., recovery unit, watershed, county) in which the bank's credits may be used to offset project impacts. In other words, if proposed projects fall within a specific conservation bank's Service Area, then the proponents of those projects may offset their impacts, with the Services approval, by purchasing the appropriate number of conservation credits from that bank. In the event that the proposed projects fall within the Service Area of more than one conservation bank, then the project proponents would have the option of using any of the banks or perhaps even more that one bank.

Designation of the Service Area should be based on the conservation needs of the species being conserved. For this reason, banks generally should be located within areas designated in recovery plans as recovery units or other applicable recovery focal area, and their Service Areas should correspond to the recovery areas in which they are located. If there is no applicable recovery plan, banks should be sited, and Service Areas should be designated, to serve a comparable purpose.

Two exceptions to the preceding general guidance should be noted. First, some projects may be located outside a recovery unit. Banks located within recovery units should be able to provide credits for such projects. In such situations, the project to be mitigated will have little or no detrimental impact on recovery prospects, and the mitigation bank will aid those prospects.

A second exception to the general guidance regarding Service Areas concerns projects located in recovery units and undertaken *after* the recovery objectives for those areas have been achieved. Such projects should be able to buy mitigation credits from banks located in other recovery units. Allowing such

projects to do so will help achieve the recovery objectives in the recovery unit where the bank is located, without hurting these objectives in the area of the project requiring mitigation.

The Service Area is an important component for the bank owner who will need to evaluate the marketability of their banks, i.e., the potential demand for their conservation credits. The individual bank owner has the responsibility to determine if a bank will be profitable. The bank agreement should clearly define any constraints that are found within the Service Area. These might include exclusion of areas that are key to a regional reserve system, such as projects that occur within corridors or core reserve areas. Or, a particular bank in a county could have a Service Area corresponding to the regional plan boundary, yet limit projects using the bank to those that are in fragmented, isolated, highly urbanized areas not contributing to the regional reserve system.

3. Credit System

Credits are the quantification of a species' or habitat's conservation values within a bank. The conservation values secured by a bank are converted into a fixed number of credits that may be bought, sold, or traded for the purposes of offsetting the impacts of private, State, local, or Federal activities. In its simplest form, one credit will equal one acre of habitat or the area supporting one nest site or family group. Credit values are based upon a number of biological criteria and may vary by habitat types or management activities. When determining credit values, some of the biological criterion that may be considered include habitat quality, habitat quantity, species covered, conservation benefits, including contribution to regional conservation efforts, property location and configuration, and available or prospective resource values.

In general, the credit system for a conservation bank should must be expressed and measured in the same manner as the impacts of the development projects that will utilize the bank. For instance, if a development project will permanently remove some amount of habitat acreage and a number of pairs of a species, then the bank's credits should be expressed in terms of acreage and pairs. If effects are evaluated in terms of losses of family groups due to timber activities, then the bank credits should be established in terms of the number of family groups being conserved. The method of calculating bank credits should be the same as calculating match project impact debits.

In some instances a bank may contain habitat that is suitable for multiple listed species. When this occurs, it is important to establish how the credits will be divided. For instance, once a project buys a credit for one species, that credit cannot be sold again for another species. If the proposed project impacts multiple species and the bank contains the same multiple species, then the credits can be sold for in-kind replacement. As a general rule, overlapping multiple species credits can overlap for a single project, but not multiple projects.

If the bank is a preservation bank, the credits should be based on the biological values of the bank at the time the bank agreement is established. Because some populations may vary in size due to natural dynamics, an agreement should be made, before the bank agreement is finalized, as to the number of credits in the bank, especially if the credits are based on the number of individuals or nesting pairs. This is a risk both for the Service and the banker. The risk to the Service is that the credit overestimates the average populations of the bank. The risk for the banker is that the agreement could be made in a low population year, depressing the amount of credits that the bank could have received. A study might be undertaken to determine the average populations occupying the bank, but this would be time consuming and expensive for the banker and the Service.

An alternative would be to use incentives to arrive at a fair accounting for both the banker and the Service. An initial allocation of credits could be made to the bank based on the best available information on species average population sizes. This number would be set on the low end of the spectrum. Additional credits would then be awarded to the banker based on subsequent performance. When mutually agreed-upon mitigation outcomes or conservation milestones are reached the standards that must be met in order to earn credits above the initial allocation the Service would authorize the additional credits.

At the time that the first credit in a bank or phase of a bank is sold, the land within the bank or its phase must be permanently protected through fee title or a conservation easement, with any land use restrictions set in perpetuity for the land legally established. Consequently, once any credit in a given bank or phase is sold, the entire area is automatically and legally protected, regardless if the rest of the credits in the bank or phase are sold, thereby eliminating future fragmentation of habitat.

Every conservation banking agreement should specify the methods for determining credits within the bank and debits outside the bank, setting performance standards to calculate credit availability, and devising accounting procedures to track the creation and use of such credits. If several conservation banks are created for the same species, the Service will use a consistent methodology for determining credits in each of them and make that methodology publicly available. That methodology should also be consistent with the methodology used to determine mitigation requirements for activities mitigated by means other than the purchase of credits from conservation banks.

Credits associated with a mitigation activity (as well as debits associated with an activity requiring mitigation) should reflect an assessment of the degree of beneficial (or detrimental) impact of the activity on the prospects for the affected species' survival. In theory, population viability analyses could be used to quantify the degree of impact on survival prospects. In practice, however, the information needed for rigorous population viability analyses is often unavailable. As a result, the units of currency may take the form of surrogates for the extent of impact on population viability, such as occupied acres or nesting pairs beneficially or detrimentally affected. In determining credits or debits, the same types of activities may be weighted differently depending on where they occur (e.g., nearby or far from existing protected areas), or other factors (e.g., quality of habitat at the affected site). The rationale for any differential weighting schemes should be clearly articulated in the mitigation agreement or elsewhere.

4. Phased Establishment

Conservation banks may be divided into sub-areas and implemented in phases. This approach is useful and appropriate in many circumstances. A prospective bank manager may not be sure there will be sufficient demand to use all of the potential credits. Therefore, the banker may decide to implement a conservation bank on only a portion of the habitat area during the first phase of the bank. Later phases of the bank would be added if and when the credits from this first phase are exhausted. Other situations justifying a phased approach include those in which a potential banker can only afford to enhance or manage a portion of the entire habitat area until revenue from the first phase is received, or when a potential project proponent is uncertain about the level of impact he or she will be creating over time and thus is uncertain how many conservation credits will be required.

Alternatively, the Service may want to seek the implementation of a bank in a phased manner. For example, in a situation where there is uncertainty regarding the level of future biological need within a specific area, it may be desirable to implement a process in which high-quality habitat receives priority designation for protection, and lands of lesser quality habitat or lands targeted for ecological restoration or enhancement activities would be designated for secondary phase protection. This would increase the likelihood of protecting habitat of the greatest ecological value, with habitat of lesser ecological value

being protected only if needed.

A non-phased approach with a similar outcome would be to use weighted credits. Preservation of an acre of high-quality habitat might earn one credit, while preservation of an acre of low-quality habitat might earn half a credit. This would eliminate the need to prioritize land types for mitigation purposes. So long as the credit and debit methodology ensures that adverse impacts are fully compensated by corresponding beneficial actions of banks, it will not matter whether the first phase of a bank is high-quality or low-quality habitat. As a general rule, if the differences in habitat quality are sufficient to justify prioritization, then they are also sufficient to justify weighted credit valuations.

If a phased approach is to be taken, each phase must be evaluated on the assumption that its conservation value can stand on its own in the event that the additional phases are not added to the conservation bank in the future. For instance, if the species conservation strategy identifies the need for conservation areas to be established with a minimum size of 200-acres for the species population to be viable and the first phase of the bank is proposed for only 100-acres, then the Service may not want to approve the proposed phasing structure.

5. Relationship of the Bank to the mitigation requirements

The most important consideration for any mitigation requirements - irrespective of variation between species and site specificity - is that they should be proportionate to be proportional to the extent of the impact and consistent from project to project. Mitigation requirements for individual projects may or may not be compatible with use of conservation banks. For example, the most appropriate mitigation for a particular project may involve emphasizing on-site preservation or restoration due to important local functions such as habitat protection for a species with a limited geographic range. There may be circumstances warranting a combination of on-site and off-site conservation measures, and, in these circumstances, conservation banks could be a useful tool. Conservation banks will only be available for use by projects that affect a species covered by the bank. In general, a bank established to provide credits for one group of species cannot be used to offset impacts to a species not part of the group, unless the Service establishes that the bank can provide the necessary conservation values to additional species, and implements the legal instruments to effect the change. The Service will approve the use of the conservation bank and establish the number and type of credits to offset impacts from a particular project.

In many situations, mitigation ratios are used to establish the amount of credits that will need to be purchased. While use of ratios may be based initially on a general knowledge of the relationship between the amount of habitat remaining and what should be conserved to achieve the site-specific conservation strategy, every adverse impact will need to be evaluated individually. In some circumstances, the ratios can be based on qualitative factors such as scale of impact or quality of habitat. This allows different ratios to be applied to ensure mitigation proportionate to the impact. For example, a project involving loss of habitat that is small in magnitude and low in quality due to isolation might be expected to mitigate at a ratio of 1:2 (one bank acre to two project acres), while a project with a large area in high quality habitat might be expected to mitigate at a ration of 2:1 (two bank acres to one project acre). Any mitigation ratio used, regardless whether the ratio is greater than, less than, or equal to 1:1 , must be based on sound biological rationale that is easily explained, readily understood, and consistently applied by the Service.

6. Coordination with Other Levels of Government

Conservation banks covered by this policy are those established to meet the requirements of the ESA. State or local laws may also impose requirements that can be met by the measures provided for in a conservation bank. When that is the case, the Service requires that the relevant state or local government

entity be given an opportunity to participate in the development of a conservation banking agreement and to become a party to it. The Service will coordinate its requirements with those of State or local government entities to the extent possible in order to minimize expenses, burdens, or duplicative requirements for bank sponsors, project proponents, and other governmental agencies. Although the Service will encourage the appropriate State and local governmental agencies to participate in the development of conservation banking agreements and to become parties to them, the failure of such other agencies to participate in developing, or to sign an agreement that otherwise meets the requirements of this policy and of the ESA, shall not preclude the Service from entering into such an agreement. Any State and local agencies that participate in the bank agreement should be part of the Conservation Bank Review Team (CBRT) established to monitor the establishment, use, and operation of the conservation bank

7. Public Review and Comment

The bank credits will be sold in conjunction with incidental take of listed species exempted under section 7 or authorized under section 10 of the ESA. Both of these processes have opportunities for public review. Section 7 consultations are conducted when Federal agencies propose projects that have adverse effects to listed species. The Federal action agencies are required to consider reasonable alternatives and analyze those impacts through the National Environmental Policy Act, which includes public review of the project including mitigating factors. Through the section 10 process, all applications for permits authorizing the taking of listed species must be noticed by the Service for at least a 30-day public comment period. The use of credits from an established bank to mitigate actions in a HCP will require a permit application, notice, and opportunity for public comment.

If approving the bank agreement is controversial, the Service may want to publish in the Federal Register advance notice of its intent to do so and invite public comment on the proposed agreement. If there are significant public concerns about the design or operation of a conservation bank, it is better to discover them before approving a banking agreement than afterward.

D. Long-Term Management and Monitoring

1. Management

Incorporating management into the bank agreement is key to the bank's success. With few exceptions, listed species and their habitat cannot be conserved without management of the conservation property. An active management program may consist of halting and removing illegal trash dumping, preventing trespassing that might include off-road vehicle use, and/or imitating the natural disturbance regimes that might include prescribed burns. The ultimate goal for any management plan will consist of maintaining the habitat for the continued use by the listed species conserved on site.

The amount of credits earned by a bank and available for sale to Service Area projects for mitigation are *implicitly* contingent on the banks exercise of appropriate management to safeguard in perpetuity the species or habitat conservation values upon which the credits are based. This may require a range of management practices and responses, including those customarily identified as adaptive management practices. The choice of management strategies and the responsibility for engaging them to meet bank goals reside with the bank sponsor. As a general rule, species or habitat conservation value outcomes (e.g., numbers of nesting pairs and family groups, or enhanced or created habitat) not the implementation actions that are causal to those outcomes and values are the standards by which the Service will evaluate banks and authorize issuance and sale of mitigation credits. In cases of phased development, banks that perform and produce good results earn more credits, and banks that perform poorly and produce inferior

results earn fewer credits. Such an outcome-based management framework provides a robust, market-driven incentive for bankers to engage appropriate management practices and to take all necessary action to safeguard the conservation values that constitute the banks permanent capital. While conducting management activities on the bank, the bank owner should be cautious not to degrade the status of other sensitive species.

Management of conservation banking areas can also include other non-mitigation related activities which involve public access. If sound professional judgment is exercised in determining the compatibility of a particular use in a particular bank area, there is no reason to exclude the public from these areas. Exercise of common-sense consideration of the biological constraints, public safety, and conflicts between uses and compliance, can result in a property that satisfies the habitat requirements of the species protected, while providing enjoyment and education to the public. While each mitigation bank will have its own set of constraints, this guidance is intended to encourage public access where it is appropriate and does not impinge on the primary function of habitat preservation.

2. Monitoring

Monitoring is the responsibility of the conservation bank. The scope of the monitoring program should be commensurate with the scope of the conservation actions undertaken by the bank. Biological goals of the bank provide a framework for developing a monitoring program that measures progress toward meeting those goals. The appropriate protective measures and level of monitoring will vary by individual circumstance, and an effective monitoring program should be sufficiently flexible to allow modifications, if necessary, to obtain the appropriate information. Monitoring provisions to measure and assess habitat protection, restoration, or creation activities should be included in the conservation banking agreement. Those provisions will include components to: (1) evaluate compliance based on current levels of credit authorization; (2) determine if biological goals and objectives are being met; (3) provide feedback information for subsequent management changes and adaptations, including remedial actions if necessary; and (4) substantiate and authorize additional increases in bank credits resulting from habitat restoration or creation activities, including phase-in of additional bank lands.

The monitoring program will be conservation bank-specific and will be based on sound science. The monitoring methods and standards should be structured to compare the results from one reporting period to another period, or to compare different areas within the conservation bank. Monitoring should be conducted at time intervals appropriate to the banks management strategy. Monitored units should reflect the units of measurement associated with the biological goals (e.g., if a biological goal is in terms of numbers of individuals, the monitoring program should measure the number of individuals). Standard survey or other previously established monitoring protocols should be used. Though the monitoring for each ecosystem and each situation may differ, some factors that may be important to monitor include vegetative growth, the presence of invasive species (both plant and animal), water quality, and listed species presence. Although the specific methods used to gather necessary data may differ depending on the species and habitat types, monitoring programs should use a multi-species approach when appropriate. In summary, the monitoring measures must be clearly identified in the bank agreement and they should be commensurate with the conservation goals of the bank.

To determine the level of success and identify problems requiring remedial action, the bank sponsor is responsible for monitoring the conservation bank in accordance with monitoring provisions identified in the bank agreement, and approved by the Service. The parties to the agreement should establish a CBRT that oversees the establishment, use, and operation of the conservation bank. Monitoring reports should be submitted to the CBRT in accordance with the terms specified in the bank agreement.

3. Remedial Actions

Every conservation banking agreement must include provisions for a dispute resolution process applicable if the owners of the conservation bank fail to meet their obligations under the conservation banking agreement. The dispute resolution process must also provide a method for disposal of the property to a third party capable of continuing the management of the property for species protection in the event of the current owners inability to continue the operation of the bank for any reason. If necessary, a bond equal to the present value of the management costs may be posted or some other mutually agreed to form of surety may be used to ensure performance. The Agreement must contain provisions for contingencies that a prudent man would plan for, however, not every single possible contingency need be addressed. The bank should not be held responsible for offsetting acts of nature that are unforeseen, or foreseeable but unpredictable, such as earthquakes, floods, or fires.

The conservation banking agreement will stipulate the general procedures for identifying, implementing, and funding remedial measures at a bank in the event of unexpected contingencies (fires, floods, etc.), particularly after credits have been sold by the bank. Contingencies that occur prior to the sale of credits may result in the temporary suspension of the recognition of those credits, pending full or partial remedial action. These remedial measures will be based on both information in the monitoring reports and the Services on-site inspections. The Service, in consultation with the bank sponsor, will decide on the need for remediation.

4. Funding Assurances

The bank agreement must identify and include a requirement for adequate funding to provide for the conservation bank's perpetual operation, management, monitoring, and documentation costs. Therefore, the amount of funding that will be necessary for the ongoing management program should be clearly articulated in the bank agreement. If the incentive/outcome based system is used, the funding to maintain the increased values on the site, on which an increase in credits is based, must also be assured.

The bank agreement should discuss the funding assurances for activities, including habitat management, taking place before, during, and after the sale of credits. A management plan should be prepared to help determine the appropriate amount of funding. The management plan should include the activities necessary to implement the biological goals and objectives. Funding for the start-up of the management program should be separate from the requisite endowment for ongoing actions. These initial costs may include up-front costs to the bank owner, including, but not limited to: purchase of the habitat, any enhancements or clean-up required, and property taxes. Additionally, there may be consultant or legal fees associated with developing and managing the conservation bank.

Since the management of the bank will be in perpetuity, a good strategy for long term funding is to establish a non-wasting management endowment (i.e., a fund that generates enough interest each year to cover the costs of the yearly management). This endowment could be established by including the cost of management into the price per credit. As credits are sold, an agreed-upon portion of the proceeds can be deposited into a non-wasting endowment fund or escrow. The size of the required endowment will depend on certain factors that could include the amount of habitat associated with each credit, the land management activities, the amount or degree of habitat restoration needed, the "risk" of such restoration failing over time, the rate of inflation, and the interest rate. For example, low interest rates and a significant active management of the bank lands will require a larger endowment. As a contingency, a time limit should be established for full funding of the non-wasting endowment. The bank owner may have to supplement the endowment at the end of the time limit, if all of the credits have not been sold.

It may also be possible for the conservation bank to support certain agreed upon revenue generating activities (e.g., bird watching, hiking, grazing, etc.), if these activities do not conflict with the conservation goals of the bank or the intent of the compensation for impacts (e.g., in certain ecological situations, grazing may be a needed management tool). Such monies may be held in escrow or other long-term money management accounts to insure they are available when needed.

E. Establishment of the Conservation Bank

A conservation bank agreement is a legal agreement between the conservation bank owner and a regulatory agency such as the Service or other participating State and/or Federal agency that identifies the conditions and criteria under which the bank will be established and operated. The agreement contains information on the exact legal location of the bank and its Service Area, how credits will be established and managed, and how the bank will be funded, managed, and protected in perpetuity. It will deal with issues such as allowable activities and access, and it will identify requirements such as environmental contaminants surveys and appropriate monitoring programs. The conservation bank agreement itself, once completed, should be signed by the Regional Director.

1. Management Plan

Conservation banking agreements must include a management plan identifying any habitat or other management activities that will be needed, the endowment necessary to carry out such management in perpetuity, activities allowed to occur on the lands, and monitoring and reporting requirements for management objectives. The bank manager is responsible for fulfilling the obligations of the final management plan. Therefore, it is important to accurately estimate budget needs up-front. If an increase in credits through management actions have been given the management plan should be updated to reflect the new management needs on the bank. The conservation bank management plan should at a minimum discuss the following issues:

1 Property description, including geographical setting, adjacent land uses, location relative to regional open space plans, geology, and cultural or historic features on-site.

2. Description of biological resources on-site, including vegetation map.

3. Identification of activities allowed and prohibited on the conservation banks land.

4. Identification of biological goals and objectives for the bank.

5. Management needs of the property, including control of public access, restoration or enhancement of habitats, monitoring of resources, maintenance of facilities, public uses, start-up funding necessary, budget needs and necessary endowment funds to sustain the budget, and yearly reporting requirements. Any special management requirements that are necessary to implement the biological goals and objectives of the bank should also be discussed in detail.

6. Any monitoring schedules and special management plan activities, including adaptive management practices.

7. Any decision trees or other structures for future management.

2. Agreement

The main components of a bank agreement are listed below. Because each conservation bank is unique, additional items not listed here may be requested for inclusion in the bank agreement by one or more of the parties as needed. When defining the terms of the bank agreement, keep in mind that both parties' implementation and involvement in the conservation bank will be governed by these terms, unless the conservation bank is further amended by agreement of both parties.

1. A general location map and legal description of the property, including GPS coordinates if possible.

2. Accurate map(s) of the bank property on a minimum scale of 7 minutes. U.S. Geological Survey quad map or finer scale, if available.

3. Name of the conservation bank.

4. Name of the person(s)/organization(s) to hold fee title to the conservation bank.

.

5. Name of the person(s)/organization(s) who will have management responsibility for the conservation bank and for how long. This entity must have demonstrated experience in natural lands management.

6. Name of the person or entity who will hold a conservation easement on the property.

7. Preliminary title report indicating any easements or encumbrances on the property, including Native American hunting, fishing, and gathering rights. This information should be supplied early in the bank evaluation and development process to ensure that the conservation banks goals are compatible with other current or planned activities on the property.

8. An enumeration of the types of potential activities that may include public access and that are compatible with the property's primary function as habitat for species.

9. A description of the biological value of the bank, including habitats and species. This may include a vegetation map and biological resources inventory.

10. Number and kind of conservation credits within the bank. Final credit numbers and any constraints on types of credits to be sold will be determined by the Service in accordance with a methodology clearly set forth in the agreement.

11. An accounting system to track credits, funding, and other reporting requirements.

12. Description of the Service Area of the bank. The appropriate Service Area will be determined by the Service and with the bank owner/manager.

13. Description and delineation of each bank phase, if more than one phase is proposed. The description will include phase boundaries, the number of conservation credits associated with each phase, explanation for why the use of phases is preferred, and the agreed upon process for terminating the bank prior to the implementation of all phases.

14. Compliance with applicable State and Federal laws such as State endangered species acts.

15. Results of a Phase I hazardous materials survey for the property.

16. A review of mineral and water rights associated with the property.

17. Discussion of any prescriptive rights on the property (e.g., road access, etc.),

18. An agreement to accurately delineate in the field all boundaries of the bank property, including any bank phases, and construct any required fences before the first conservation credit is sold, fee title transferred, or conservation easement granted.

19. An agreement to remove any trash, structures, or other items on-site that would otherwise reduce the long-term biological value of the site before the first conservation credit is sold, unless otherwise agreed to.

20. Provisions for the Service to enter the property for inspections, quality control/assurances and other duties as needed.

21. Performance standards that must be achieved.

22. Contingency management, funding, and ownership plans in the event that the bank owner and/or manager fails to fulfill the obligations as listed under the bank agreement and management plans, including an applicable dispute resolution process to address these contingencies.

23. A management plan for the bank property.

III. Definitions

For the purposes of this guidance document the following terms are defined:

Bank Sponsor - any public or private entity responsible for establishing and, in most circumstances, operating a conservation bank.

Conservation Actions - the restoration, enhancement, or preservation of species habitat for the purpose of reducing adverse impacts to listed species populations.

Conservation Bank - a site where habitat and/or other ecosystem resources are conserved and managed in perpetuity for listed species expressly for the purpose of offsetting impacts occurring elsewhere to the same resource values.

Conservation bank review team - an interagency group of Federal, State, tribal and/or local regulatory and resource agency representatives that are signatory to a bank agreement and oversee the establishment, use, and operation of a conservation bank.

Conservation Easement - a recorded legal document established to conserve biological resources in perpetuity, and which requires certain habitat management obligations for the conservation bank lands.

Credit - a unit of measure representing the quantification of species or habitat conservation values within a conservation bank.

Endowment Fund - an investment fund maintained by a designated party approved by the Service as a non-wasting endowment to be used exclusively for the management of the conservation bank lands in accordance with the management plan and the conservation easement.

Debit - a unit of measure representing the adverse impact to a listed or sensitive species at an impact or project site.

Enhancement - activities conducted in existing species habitat, or other resources, that increase one or more ecosystem functions.

Fee title - a fee title estate is the least limited interest and the most complete and absolute ownership in land; it is of indefinite duration, freely transferable and inheritable.

Management Plan - means the plan prepared to manage the conservation bank to, at a minimum, maintain the listed species value on the bank. This includes on-the-ground management activities, funding, and monitoring and reporting requirements.

Non-wasting management endowment - an account that generates enough interest each year to cover the costs of the yearly management.

Off-site conservation - conservation actions occurring outside the boundaries of a project site.

On-site conservation - conservation actions occurring within the boundaries of a project site.

Preservation - the protection of existing ecologically important habitat or other ecosystem resources in perpetuity through the implementation of appropriate legal and physical mechanisms.

Restoration - reestablishment of ecologically important habitat and/or other ecosystem resource characteristics and function(s) at a site where they have ceased to exist, or exist in a substantially degraded state.

Service area - the geographic area (e.g., watershed, county) wherein a bank can reasonably be expected to provide appropriate conservation benefits for impacts to habitat and off-site impacts can be offset by purchase of credits in the bank. The geographic area for which a conservation banks credits may be applied to offset debits associated with development activities.