WETLAND BANK PROSPECTUS

The Wetland Bank of Idaho

Prepared for United States Corps of Engineers

Prepared by

The Wetlands Group, LLC

Garden City, Idaho

1.	Introduction	
2.	Bank Locations and Service Areas 2.1. Site Selection	4 4 6
	Mallard Farms Mitigation Bank	
3.	Bank Development Plan 3.1. Goals and Objectives 3.2. Phasing Plan 3.3. Existing Conditions Boise City Greenbelt Lands Mitigation Bank Sites Payette River Mitigation Bank Strut Ranch Mitigation Bank	8 9 9 10
	Mallard Farms Mitigation Bank 3.4. Proposed Conditions Overall Bank Sites Phase 1 Aquatic Resource Creation, Restoration, Enhancement, and Preservation 3.5. Change in Function Overall Bank Sites	12 12 12 14
	Flood Proofing Opportunities	
4.	Crediting and Debiting Procedure	16 16 16 18 19
5.	Maintenance and Monitoring Provisions 5.1. Monitoring	21 21
6.	Existing Delineation Reports	23
7.	Real Estate Provisions	24
8.	Financial Assurances	25
9.	Bank Closure Plan	

July 2006

9.2. Future Uses of the Bank Site	26
Appendices	
A – Project Site Maps	
B – Memorandum of Agreement with City of Boise	
C – Letters of Intent from Landowners	
	ABLES
Table 1. Wetland Functions and Values for all Community Types	14
Table 2. Credit Release Schedule for Creation and Restoration Credits	17
Table 3. Credit Ratios for Various Methods of Wetland Mitigation	20
Table 4. Credit Ratios for Out of Kind Wetland Mitigation	20

1. Introduction

The following umbrella wetland bank prospectus information is submitted in accordance with the Proposed Rule on Losses of Aquatic Resources. The proposed rule was published in the Federal Register on March 28, 2006. This prospectus also complies with *Federal Guidance for the Establishment, Use and Operation of Mitigation Banks* as published in the November 28, 1995, Federal Register. It is intended that this prospectus information be used as a reference document and attachment to a formal Wetland Banking Instrument (hereafter referred to as "Instrument") that will be developed. This document, as well as the Instrument, has or will be modified, approved, and administered by the Interagency Review Team (hereafter referred to as "IRT"), which may include representatives from the: 1) U.S. Army Corps of Engineers (Corps), Walla Walla District, Walla Walla and Boise Regulatory Offices; 2) U.S. Environmental Protection Agency (EPA), Region 10, Boise Office; 3) U.S. Fish and Wildlife Service (USFWS), Pacific Region, Boise Office; 4) Federal Highway Administration (FHWA), Boise Office; 5) Idaho Fish and Game (IFG); and 6) the Idaho Department of Environmental Quality (IDEQ). At the time this document was prepared, the agencies that have chosen to participate in the IRT are the Corps, IDEQ, IFG, and EPA.

The umbrella wetland bank will be known as the Wetland Bank of Idaho, hereafter referred to as "Bank," and will be operated as an entrepreneurial enterprise by The Wetlands Group, LLC (hereafter referred to as "Bank Sponsor"). The Bank Sponsor is a full service wetlands design and construction company and will self perform all phases of the development and implementation of the mitigation bank. The Wetland Bank of Idaho is seeking an umbrella mitigation banking instrument, which will be used to establish mitigation banks on multiple sites. The umbrella mitigation bank instrument (UMBI) is provided for in the proposed rule and will authorize future sites through modifications of the original mitigation banking instrument. The mitigation banking instrument will be approved for the initial mitigation bank site(s), and subsequent mitigation bank sites under the "umbrella" instrument will be added to that instrument as amendments, approved and signed by the IRT.

The Bank comprises a suite of nine sites that are identified in this prospectus. The central purpose of the Bank is to provide compensatory mitigation for losses of aquatic resources, which help sustain or improve watershed function, and to support the objective of the Clean Water Act, which is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. 1251(a)). The Bank will create, restore, enhance, and preserve aquatic resources on approximately 480 acres of land ecologically suitable for providing the desired aquatic resource functions. These aquatic resource functions, in turn, will be used as compensatory mitigation for impacts which result from activities authorized under Section 404 of the Clean Water Act that occur in the Boise and Payette River drainage basins. Ultimately, the Bank will contribute positively toward achieving the Federal Wetland Program's "no net loss" goal.

The high-quality ecological characteristics of the aquatic resources will provide superior value and function as compensatory mitigation. In addition, the large scale of the Bank and its regional proximity to other natural resources of importance can create extended ecological value. The created and enhanced aquatic resources will be designed as self-sustaining, functional systems typical of the Boise Front and Valley County aquatic resource ecotypes.

In the site selection process, a high priority has been placed on selecting the Bank sites based on how each one fits within the watershed and how each one can contribute to the overall watershed function. For this reason, site selection has focused on locations with previously drained or degraded forested wetlands, wetlands that have been converted to agricultural uses, and areas that have the greatest potential for discharge into Waters of the U.S. and jurisdictional wetlands. Such an approach considers how the types and locations of compensatory mitigation projects will provide the desired aquatic resource functions, and will continue to function over time in a changing landscape. It also considers the habitat requirements of important species, habitat loss or conversion trends, sources of watershed impairment, and current development trends, as well as the requirements of other regulatory and non-regulatory programs that affect the watershed, such as stormwater management or habitat conservation programs.

The Bank will be implemented in phases to meet, in advance, the market demand for mitigation credits. Information provided in this document is intended to apply to the Bank as an entire entity. Information is presented for the first phase of aquatic resources improvements only. Subsequent phases will be designed to reflect future conditions and demands, and will be approved as addenda to the Instrument.

Need for Mitigation Banking

From 1780 to 1980, approximately 56% (386,000 acres) of Idaho's wetlands were lost to drainage, dredging, filling, leveling, flooding, and other anthropogenic alterations (Hahn, Schimdt, Murphy and Fields 2005). As the result of strengthened wetland regulations, policies, and conservation activities, the rate of wetland loss has decreased significantly in the past 20 years. Although the rate of wetland loss has decreased, a demand for wetland mitigation in the Boise and Payette River watersheds will likely continue as the Ada, Canyon, and Valley counties experience accelerated population growth and development.

The current development trends show that Ada and Canyon counties are growing rapidly. The combined populations of these counties have grown from 432,000 in 2000 to 524,906 in 2005 and are expected to reach 825,000 in 2030. This growth is reflected in the new residential units permitted for construction in Ada and Canyon counties. New residential units permitted in Ada County have increased from 4,522 units in 2001 to 7,831 units in 2005. Also, the county has a substantial back log of building planned in the county as demonstrated by preliminary plats (plats which have received preliminary approval from city or county) filed for residential and non-residential properties that indicate 10,939 acres planned for development, with an additional 4,101 acres of final plats that were approved in 2005 (Compass 2005).

In Canyon County, new residential units permitted for construction have increased from 2,517 units in 2001 to 3,213 units in 2005. Preliminary plats for Canyon County residential and non-residential properties show 5,147 acres planned for development and 2,641 acres have already received final plat approval. As large scale development continues in the Treasure Valley and Valley County, it will not be feasible to avoid all wetland areas. In cases where avoidance is not possible, mitigation will be required.

As Ada, Canyon, and Valley counties have grown over the years, watershed conditions have changed. Prior to the 1980s and the advent of the "Farm Bill of 1985", the majority of wetlands lost in Idaho were likely associated with agricultural practices such as draining wet areas to increase productivity. Since the 1980s, impacts to wetlands have been primarily associated with

development activities. This is particularly true of developments along the Boise River in the vicinity of the Boise (ex. Harris Ranch), Eagle, Star, Nampa, and Caldwell. Many of these developments have encroached upon wetlands, floodplains, riparian habitat, and adjacent upland habitat, and these developments have increased urban runoff and resulted in the loss wetland functions and values. The wetland functions and values lost include groundwater recharge for irrigation wells; flood flow attenuation in areas along the Boise River in Boise, Eagle, Nampa, and Caldwell; sediment/nutrient/toxicant retention; endangered species habitat for species such as the bald eagle; and wildlife habitat along the riparian corridor. All functions and values listed in Table 1 (see section 3.5) have been and will continue to be affected by development.

Along with residential and commercial development comes the need for infrastructure improvements and creation. The Idaho Transportation Department as well as other highway departments have experienced significant difficulty in identifying appropriate mitigation for projects. In 2006, the Idaho Legislature approved a funding mechanism for significant increases in the construction of highway projects across the state. The Treasure Valley is the most populated area in the state and will require several large-scale transportation projects to support growth in Ada, Canyon, Gem, Boise, and Valley counties. At least two of the proposed highway projects will cross the Boise River and will certainly require wetlands mitigation.

In recent years, a number of reasons have surfaced hat that make mitigation sites along the Boise River and Payette River desirable. Specifically, mitigation along these river systems would enhance the functions and values of the watershed and help to buffer impacts to the existing system. In the past year, with the continued development along the Boise River, flooding and the potential for flooding have become public issues. Mitigation sites along the Boise and Payette Rivers have the potential to increase flood flow attenuation. The Boise and Payette Rivers are heavily used for recreation and mitigation along them will provide education outreach opportunities. A significant advantage of mitigation banking along the Boise and Payette Rivers is that directing mitigation to fewer larger sites is more efficient and provides for greater ecological benefit to the existing environment.

2. Bank Locations and Service Areas

2.1. Site Selection

The nine distinct sites described in this prospectus have been carefully evaluated to provide the maximum potential for the Bank to meet the goals and objects outlined in Chapter 3. The nine sites have been selected based on their ability to successfully establish self-sustaining aquatic resource complexes that will be protected in perpetuity. Innovative partnerships with private landowners and city governments have been formed to bring these sites into the banking prospectus. The sites, as shown on the figures in Appendix A, are individually named as:

- Boise City Park Lands Wetland Mitigation Bank six locations
- Payette River Mitigation Bank
- Strut Ranch Mitigation Bank
- Mallard Farms Mitigation Bank

2.2. Locations

Boise City Park Lands Wetlands Mitigation Bank

The Wetlands Group LLC has signed a Memorandum of Agreement (MOA) with the City of Boise to provide for the designation of specific City-owned and managed park and open space properties as prospective mitigation receiving sites. This MOA, included in Appendix B, provides the general terms of agreement to license, plan, construct, and manage the banked aquatic resources on specified park and open space properties for the long term. As outlined in the MOA, the City of Boise shall:

- a) Authorize and reserve portions of the following parklands for potential mitigation banking activities as part of The Wetlands Group's Prospectus to the Corps:
 - Willow Lane Athletic Complex Greenbelt lands, Figure 7 (Does not include previously permitted mitigation)
 - Marianne Williams Park open space areas, Figure 8
 - Hyatt Hidden Lakes Preserve, Figure 9 (Does not include previously permitted mitigation)
 - Warm Springs Golf Course Greenbelt lands, Figure 10
 - Warm Springs Park natural areas, Figure 10
 - Julia Davis Park Cottonwood Creek flume, Figure 11

Site maps are provided in Appendix A, figures 2 and 7 through 11 for the six city locations. These six sites provide a unique opportunity to restore habitat and enhance aquatic resources in an urban setting. The six sites vary greatly in their banking opportunities. For example, one site comprises an existing 22-acre central wetland in a 44-acre site at the Hyatt Hidden Lakes

Preserve. This site has the remarkable ability to become a significant pocket of wildlife habitat in the midst of established residential neighborhoods. The remaining acres that could be banked would be determined in the subsequent phases of the license agreement development. The Wetlands Group LLC is currently working on the site overseeing the implementation of the wetlands compensation package for the Ada County Highway District (ACHD), Maple Grove Extension Project. In addition, we have contracted with the ACHD to monitor the performance standards for the newly constructed wetlands at the site over a three-year period.

Opportunities for Success

The four riparian open space sites within the city present a tremendous opportunity to implement the City's ordinances and open space resource management plans related to protecting and enhancing the riparian lands along the Boise River. Currently, the loss of black cottonwoods along the Boise River due to cumulative impacts and current development trends severely threaten the viability of the trees in the riparian corridor. Black cottonwoods in the corridor consist of decadent stands that are not regenerating. The riparian corridor and the black cottonwoods provide a critical component in the life stage development of federal and state designated threatened and endangered species (bald eagle) as well as other protected nongame species (great blue heron).

An additional site, Cottonwood Creek, offers a very unique opportunity. Cottonwood Creek is a tributary to the Boise River and the final mile of this stream is confined to a concrete flume in downtown Boise. The last 440 feet of the flume lies buried underneath Julia Davis Park and can be "daylighted" to restore a natural open stream channel in this public park. The new open channel for Cottonwood Creek will provide aquatic and riparian habitat off the main channel of the Boise River, and because of its location in downtown Boise, this project will be highly visible to the public. The project would develop about one acre of bankable aquatic resources in the park. Once daylighted, Cottonwood Creek will provide fish habitat and educational and recreational opportunities in a highly visible location within a popular city park across the street from the Boise State University and University of Idaho Ecohydraulics research center.

The City will provide the Bank Sponsor access to these sites for future mitigation banking activities subject to negotiation of the terms and conditions of individual site licenses. In addition, the City may provide additional park lands for the mitigation banking in the future.

Benefits

Entering into this partnership arrangement with The Wetlands Group LLC provides the City substantial potential benefits. The City would not need to fully fund construction of all its potential aquatic resource areas, nor would it need to actively seek individual developers to construct mitigation projects as with the fee-in-lieu program. In addition, partnering with the Bank Sponsor should ensure that the City can maximize the size of new aquatic resource areas. Early coordination with Corps staff in the Boise field office and Walla Walla District indicates support for the City to develop a license agreement with the Bank Sponsor. Corps staff indicated that the key benefit from their point of view is that these aquatic resource improvements will be owned by the City. Public ownership, management, and maintenance are viewed as the best means to demonstrate a long-term commitment to preserving constructed wetlands and other aquatic resources. The Bank Sponsor and City of Boise license agreement provides a basis for many tangible benefits for the community, developers, government agencies, wildlife, and the environment.

Payette River Mitigation Bank

The Payette River Mitigation Bank is located on the east bank of the North Fork of the Payette River near the lower end of Long Valley, in Valley County, near Cascade, Idaho. The site is currently being operated as a working ranch and has 393 acres available for aquatic resource banking. This site could restore previously drained or degraded forested wetlands and wetlands than have been converted to agricultural uses in the Payette River drainage. The site is located directly above the Cabarton Road Bridge crossing of the North Fork of the Payette River. Clear Creek meanders directly though the middle of the proposed site and provides ample hydrology for the site. The site slopes toward the river (southwest) and elevations range from 4,716 to 4,740 feet above mean sea level. The entire site is roughly 0.50 mile long and on average 0.25 mile wide. The site is graphically shown in Figures 5 and 12.

Valley County is experiencing some significant growth pressures along the Payette River corridor. This site is optimal for establishing palustrine forested, palustrine emergent and palustrine scrub-shrub aquatic ecosystems, because this site once supported these functions and values. The proximity of the site to SH 55 and potential impacts to the wetlands along the roadway corridor provide the Idaho Transportation Department the option to mitigate impacts from highway improvements at this Bank. This site will also provide the entire Payette River watershed a location to address the trend in aquatic resource and habitat loss and preserve aquatic resources at a large site in perpetuity.

Strut Ranch Mitigation Bank

Strut Ranch mitigation bank is located on the north bank of the Lower Boise River in Canyon County in the Boise River watershed, four miles west of Notus, Idaho (Figures 3 and 13). The Bank was selected due to its location on an abandoned meander of the Boise River. The site is relatively flat and has excellent water delivery from the Boise River. The entire site is roughly 0.15 miles long and on average 0.20 mile wide. Approximately 60 acres are available for aquatic resource banking.

The Strut Ranch site offers the opportunity to establish palustrine emergent and palustrine scrub-shrub wetlands with minor site modifications. The abandoned river meander provides the opportunity to restore functions of the river system that have been lost since the river no longer experiences flooding events at a scale that significantly modifies its bed and banks. Under the modified hydraulic regime, the entire Boise River system is moving toward a potential catastrophic aquatic resource loss. Since upstream impoundments (reservoir projects) were installed, the area has been converted to agricultural uses. Constructing an aquatic resource mitigation bank at this site will move the lower Boise River system closer to the desired condition of being a self-sustaining, high functioning, aquatic resource system within the riparian corridor in perpetuity.

Mallard Farms Mitigation Bank

Mallard Farms Mitigation Bank is located on the south bank of the Lower Boise River in Canyon County in the Boise River watershed, 0.5 mile south of Parma, Idaho (Figures 3 and 14). The Bank site was selected because it is one of the largest contiguous single owner farms in the Lower Boise River Drainage. The large size of the site provides the unique ability to develop a

200-acre aquatic resource mitigation bank. The entire site is roughly 0.60 mile long and on average 0.50 mile wide.

The Mallard Farms site provides an excellent opportunity to preserve diverse age class stands of black cottonwood as well as connect the site to the existing stands with palustrine forested wetlands. The site has some existing palustrine emergent and palustrine scrub-shrub wetlands and offers the opportunity to create more of these wetland types with carefully planned upland buffers to develop a highly functioning, connected, and diverse aquatic resource banking site.

2.3. Service Area

The goal of the Bank is to provide appropriate and practicable compensation for unavoidable adverse impacts to Waters of the U.S. within its service areas after all appropriate and practicable measures to avoid, minimize, and repair and restore unavoidable adverse impacts have been exhausted by the Clean Water Act §404 permit applicant.

The Bank will provide credits to a principal service area to compensate for unavoidable, adverse impacts to jurisdictional wetlands. The principal service area includes:

- Portions of the Boise River, Payette River, Weiser River, and Snake River drainages.
- Irrigation and drainage ditches originating from or returning to portions of these waterways. The referenced service areas correspond to the 3rd order Hydrologic Unit Code (HUC) 170501, respectively, according to the USGS.

The Bank service area encompasses several continuous 8 digit HUCs (e.g., 17050114) to provide the Bank the best opportunity to fulfill the watershed approach contained in the recent mitigation banking proposed rule. The service area was determined by selecting an area that is large enough to support an economically viable mitigation bank while ensuring that appropriate aquatic resources provided by the Bank will effectively compensate for adverse environmental impacts across the entire service area. The geographic service area is graphically described on figures 4 and 6. Any aquatic resource impacts which occur within the described service area, subject to Corps approval, will be eligible for credit withdrawal from the Bank.

Secondary service areas are proposed to include all tributary hydrologic units to the Boise River basin. At the Corps' discretion, wetland impacts that occur outside of the primary service area, but within the secondary area, will be eligible for credit withdrawal.

3. BANK DEVELOPMENT PLAN

3.1. Goals and Objectives

Goals and objectives for the Bank are as follows:

- 1) To create and enhance a sufficient acreage of aquatic resources to meet the expected demand for credits within the defined service areas. The sites, as selected, have the available resources from which to create approximately 315 acres of aquatic resources from uplands and to enhance approximately 60 acres of existing wetland, restore approximately 30 acres of previously drained or filled wetlands, and to preserve approximately 75 acres of forested wetlands. Construction of aquatic resource improvements (i.e., wetland creation and enhancement) will be phased in accordance with market demand.
- 2) To create, restore, and enhance wetland types appropriate to the ecoregion and that generally match the wetland types that are being impacted within the service areas. A mixture of wetland types will be created in the first phase of improvements. Trends in demand for various wetland types will be tracked with time and this information will be used to refine plans for subsequent phases of improvements.
- 3) To utilize water as delivered from the Boise River, North Fork Payette River, Clear Creek, and groundwater to create self-sustaining hydrologic support systems for the created and enhanced wetlands. Improvements will be constructed in the water delivery on sites to raise and stabilize the existing groundwater table in certain locations and create permanent diversion points for surface water flows. Improvements will be designed to allow flexibility in regulating water (i.e., the ability to raise and lower the water surface elevations) during the wetland establishment period. Once the wetlands are established, the structures in the delivery infrastructure can be fixed to permanent settings that require no subsequent human intervention.
- 4) To utilize the banked aquatic resources and wetlands to the greatest extent possible to make a positive ecological contribution to the larger Boise River watershed. Efforts will be made to integrate the Bank project with other natural resource activities in the watershed through coordination with environmentally active entities. In consultation with the state and federal resource agencies, wildlife and floral species of local and regional interest can reasonably be accommodated within the Bank improvements. The design of the created wetlands will consider water quality, as a secondary benefit, such that source waters can be improved, as reasonable. Future consideration will be given to develop water quality credits if it is found to be appropriate.

3.2. Phasing Plan

Phase 1 of the Bank improvements will create approximately 100 acres of wetlands from upland areas, enhance 20 acres, and restore 10 acres of aquatic resources from previously altered wetlands. Phase 1 will also preserve 25 acres of aquatic resources. In addition, Phase 1 will

establish and maintain 5 acres of riparian areas and/or upland buffers around the restored, enhanced, or preserved aquatic resources where necessary to ensure the long-term viability of those resources.

Consistent with the overall goals and objectives of the umbrella Bank, the subsequent phases will bank 160 acres of aquatic resources per phase upon completion of Phase 1 construction and achievement of performance standards. The phasing plan provided in this prospectus is tentative and will be adjusted to match market demand.

Plans for subsequent phases of the Bank will be developed as addendums to the umbrella Instrument. Detailed descriptions for improvements in subsequent phases are not provided since their design will be dependent upon future conditions and demands, and as such, these plans will be reviewed by the IRT.

3.3. Existing Conditions

Boise City Greenbelt Lands Mitigation Bank Sites

The lower Boise River watershed begins at Lucky Peak Dam and continues approximately 40 river miles to the confluence with the Snake River near Parma, Idaho. This watershed is approximately 1,300 square miles and contains about one-third of Idaho's population. Land use varies from urban and suburban uses to agricultural farmland. Approximately 163,270 acres of irrigated farmland are contained in the watershed. Irrigation water is diverted from the lower Boise River and distributed through a series of canals and ditches to individual farms. The return water from the agricultural fields, as well as storm runoff, is collected in privately owned drains that discharge to the lower Boise River.

The lower Boise River and its adjacent floodplain make up the local setting for this site. The greenbelt lands consist of approximately 87 acres of bankable aquatic resource improvements to the existing riparian buffer and uplands.

Five of the mitigation sites are in undeveloped areas adjacent to the Boise River and the Hyatt Hidden Lakes Preserve is approximately one-half mile south-southeast of the river (Figure 2). The mitigation sites adjacent to the river consist of upland areas as well as topographic lows that provide numerous opportunities for aquatic resource mitigation creation, restoration, and enhancement. These areas exhibit some standing water in the spring and appear to have supported a larger black cottonwood stand in the past. The existing dominant understory vegetation is primarily weedy species.

Natural flows in the Boise River have been drastically modified by three existing storage projects: Anderson Ranch, Arrowrock, and Lucky Peak. These reservoirs are operated as a system for flood control, irrigation, and recreation. Short reaches of levees have been built along the river by local landowners, Ada and Canyon counties, and local flood control districts. The reservoirs and levee system through Boise and Garden City provide flood protection well below the 100-year flood event level. In addition, low flow conditions over the past eight years have led to the growth of trees and brush in the channel, and this has significantly reduced the channel's capacity to contain flood events. Minor flooding begins when flows at Glenwood Bridge exceed 4,500 cubic feet per second (cfs), and major flooding begins at 7,200 cfs. The reservoir projects are operated to a target flood control flow of 6,500 cfs but, because of

unseasonably warm weather conditions, the target flow has been exceeded 13 times since construction of the Lucky Peak Project in 1954. None of the proposed bank sites will have construction within the 6,500 cfs line.

Because the three upstream reservoir projects have provided a higher degree of flood protection, urban development has encroached on the natural floodplain. The natural fluvial processes have been modified so extensively that black cottonwood trees, so vital in maintaining wintering areas for bald eagles and many other fish and wildlife, can no longer be regenerated. Low winter flows and the disruption of natural flood flows and runoff cycles also adversely affect fish and portions of the riparian zones. These proposed aquatic resource improvements are intended to take steps to address this problem and regenerate a portion of the riparian community.

The groundwater table at the Bank sites is relatively high, either at or within 2 to 4 feet of the ground surface throughout most of the sites. Groundwater fluctuations are minor given the proximity of the sites to the Boise River. Several small springs are evident, and are likely to be hydrologically connected to the local groundwater table. f needed, surface water can be diverted from the Boise River under the City's existing water rights to supplement hydrology at the constructed aquatic resource areas.

The City of Boise sites offer the ability to develop 30 acres of mitigation during Phase 1 to establish the Bank. Implementation and phasing of the aquatic resource mitigation at the City of Boise Park sites will be further refined as the mitigation plan and the legal instrument are developed.

Payette River Mitigation Bank

The site is currently undeveloped, having historically been used for a cattle ranching operation. A portion of the property has a topographic low area between the North Fork of the Payette River to the west and the floodplain bench to the east. This area exhibits some standing water in the spring and it appears that the site may have supported wetland vegetation in the past. The existing dominant vegetation is pasture grass. The Bank Sponsor will acquire a permanent conservation easement and will define access points from the county road easement east of the site. This site can support 150 acres of aquatic resource improvements for Phase 1 and subsequent phases.

The Natural Resource Conservation Service (NRCS) mapped the soils on this site in the Valley County Soil Survey. The soils (Blackwell mucky silt loam) that have not been disturbed on this site demonstrate hydric characteristics in many areas. Blackwell mucky silt loam (depression areas) is listed on the Valley County hydric soils list. The current soils are producing grasses, some riparian shrubs, and some wetland grasses and grass-like plants. A variety of upland grasses, forbs, and woody species surround the depressional areas.

The current cover for this area consists of sparse ponderosa pine, lodgepole pine, upland grasses and forbs, some willows, and wetland grasses and reed canarygrass in the depressional areas with some sedges and rushes. This cover has great potential to be converted to a large, contiguous wetland and riparian area. This conversion could include grass wetland meadow, shrub, and tree communities.

Strut Ranch Mitigation Bank

The site currently supports approximately 20 acres of degraded wetlands in the abandoned Boise River meander. The entire site, including existing wetlands, is intensively grazed at this time by domestic cattle. A water delivery ditch bisects the property and can be effectively used to distribute water anywhere on the site. The topography at the site is relatively flat and the site slopes to the south toward the river. The groundwater table is relatively high, either at or within 2 to 4 feet of the ground surface throughout most of the site. Groundwater fluctuations are minor given the baseflow in the Boise River throughout the year. Several small springs and seeps are evident, and are likely to be hydrologically connected to the local groundwater table. Surface water will be diverted under existing water rights from the Boise River to feed all of the larger newly constructed aquatic resource and wetland areas.

Currently, the owners flood low lying areas during the non-growing season to attract waterfowl for hunting.

Upland areas surrounding the existing wetlands are used for basic agricultural production. Degraded vegetative and water quality conditions typical of overgrazed areas are not evident.

Soils within the Bank site are classified according to the NRCS Soil Survey as Chance fine sandy loam 0 to 1 percent slope, Moulton loam 0 to 1 percent slope, and the undifferentiated mapping unit, Notus soils. The dominant soil in the unit is the Notus fine sandy loam 0 to 1 percent slope. In most years, the soil is partially saturated for a period of 3 to 6 months. The soil is seldom entirely dry for more than 3 months. Runoff is very slow and the erosion potential is minimal.

Mallard Farms Mitigation Bank

The site is currently undeveloped, having historically been used for a cattle ranching operation. This site can be constructed in subsequent phases of the final build out of the Bank. Aquatic resource improvements are not anticipated at this site for Phase 1.

Boise River water can be diverted from several locations to virtually anywhere on the site using the existing delivery infrastructure. The Boise River floodplain has created a complex of existing wetland types, which occur in scattered locations at the site in natural depressions and abandoned river meanders. Although small, several of these existing wetland areas are found within the Bank site.

The groundwater table is relatively high, either at or within 2 to 4 feet of the ground surface throughout most of the site. Groundwater fluctuations are minor given the baseflow in the Boise River throughout the year. Several small springs and seeps are evident, and are likely to be hydrologically connected to the local groundwater table. Water diversions from the Boise River feed a few of the existing wetland areas. The site also is the potential location for 10 acres of wetland mitigation for the Idaho 16 Highway Improvements Project, SH 44 to Emmett. The conceptual mitigation plan approved as part of the Finding of No Significant Impact by FHWA in 2005 identified a 10-acre site as appropriate to mitigate the impacts from the build out of the Idaho 16 highway project.

Currently, the owners flood low lying areas during the non-growing season to attract waterfowl for hunting.

Upland areas surrounding the existing wetlands are used for basic agricultural production. The entire site is currently intensively grazed by domestic cattle. Degraded vegetative and water quality conditions typical of overgrazing are evident. Crops such as alfalfa and silage are grown on portions of the adjoining upland area.

Soils within this site are classified according to the NRCS Soil Survey as Moulton loam 0 to 1 percent slope and the undifferentiated mapping unit, Notus soils. The dominant soil in the unit is the Notus fine sandy loam 0 to 1 percent slope. In most years, the soil is partially saturated for a period of 3 to 6 months. The soil is seldom entirely dry for more than 3 months. Runoff is very slow and the erosion potential is minimal.

3.4. Proposed Conditions

Overall Bank Sites

Up to 480 acres of wetlands can be created, restored, enhanced, or preserved within the boundaries of the described Bank sites. The sites, as selected, have the available resources from which to create approximately 315 acres of aquatic resources from upland areas, enhance approximately 60 acres of existing wetlands, restore approximately 30 acres of former or degraded aquatic resources, and preserve approximately 75 acres of forested, palustrine, and scrub-shrub wetlands.

Phase 1 Aquatic Resource Creation, Restoration, Enhancement, and Preservation

The proposed conditions are described in general terms and will be further developed in the mitigation plan. The proposed conditions will apply to all of the Bank sites.

Restoration of existing, degraded wetlands and construction of new wetlands will be accomplished in accordance with a detailed construction plan, developed as part of the mitigation plan. These efforts may include:

- Clearing and grubbing
- Salvaging plant materials and topsoil
- Excavating and placing earth and rock
- Installing water control structures to properly establish hydrology to germinate and grow native hydrophytes and to better manage weedy species
- Installing seed, cuttings, and container plants of native and naturalized vegetation
- Implementing temporary and permanent best management practices for erosion and sedimentation control

All disturbed ground will be repaired and restored by successful revegetation with the appropriate species, planting methods, and sources of plant materials approved in advance with the assistance of the resource agencies and the IRT. The construction plans along with a drawing of planting zones and a list of plant/seed species for each zone will be included in the mitigation plan. The planting plans will show the proper placement of plantings within the overall project design.

The grading plans will be created by a wetland ecologist, and designed to create the appropriate permanent and seasonal saturation levels within the mitigation site for supporting the desired aquatic resource habitat. The plant zones will ensure proper placement of salvaged vegetation and plantings to create similar habitat characteristics that will ensure sustainability at the site.

Aquatic resource and wetland community type improvements will be constructed in phases beginning with the initiation of earthwork and structures for Phase 1 on or around September 2006 and planting in November 2006. The location and schedule for future phases will be determined after monitoring and evaluation of Phase 1.

Water control structures for vegetation establishment may be installed at the topographic inlet and outlet of the creation area where required. New structures will be designed to divert base flows to the new aquatic resource and wetlands areas. The hydrology to all the Bank sites will be designed to be self sustaining. Establishment hydrology may be required in the early development of the bank but will not be the sole source or necessary source of hydrology. An open ditch may deliver the water a short distance to the opening of a wetland basin. Within the wetland basin, a thalweg channel may be contoured to provide an area of habitat characterized by slow-moving deeper water designed to provide open water habitat vegetated by submerged aquatics. The structure will be designed to overtop (under normal operating conditions) at a specific elevation. The outlet structure will be designed to allow flexibility in setting water elevations above the overtopping elevation during the establishment and maintenance period.

The newly developed aquatic resource areas will be designed to blend with the existing pockets of natural wetlands and riparian and upland buffers. This approach will create a biologically diverse site with connectivity to a large and highly functioning wetland complex.

The wetland complexes will be excavated in the existing upland areas using the Bank Sponsor's wetland construction company. Prior to flooding, the soil will be grubbed, disked, and tilled to create a suitable substrate for planting. An emphasis will be placed on collecting plant stock from the site and using the salvaged plants to the maximum extent possible.

During construction, fencing will be erected to keep cattle out of the improvement areas on a semi-permanent basis.

All of the wetlands to be created can be classified according to Cowardin et al., 1979, as follows:

System: Palustrine **Subsystem:** None

Classes: Forested, Emergent Wetland, Scrub-Shrub, Aquatic Bed **Subclasses:** Persistent, Deciduous, and Rooted Vascular Aquatics

The wetland types can be further categorized as:

Water Regime Modifier:

saturated (saturated at or near surface) seasonally flooded (0 > to 6 inches inundation) intermittently exposed (6 inches to 2.5 feet inundation) permanently flooded (year round inundation)

These wetland types represent the significant majority of those that occur locally and within the ecoregion, as per the stated goals and objectives of the Bank.

3.5. Change in Function

Overall Bank Sites

Identified wetland functions and values will be improved in the watershed as shown in Table 1.

Table 1. Wetland Functions and Values for all Community Types

Function	Value	Comments
Groundwater recharge	High	A significant source of groundwater recharge, some early season recharge may occur during flooding to localized areas within the flood zone. Groundwater recharge is from infiltration of snow melt and rainfall throughout the area. Water enters the Boise River alluvial basin as subsurface seepage and surface flows generated from overland runoff. The runoff component is intercepted by the wetlands. This filtered and stored water will move vertically from the wetland to the underlying groundwater aquifer.
Groundwater discharge	Med	The scrub-shrub wetland areas along the streams of this proposed project are dominated by snowmelt flood events. The wetlands will be seasonally flooded, indicating that groundwater will not be recharging the wetland continuously in most locations.
Flood flow alteration	High	Riparian vegetation helps to attenuate flood action by reducing water velocity. Urbanization in the watershed is rapidly increasing stormwater runoff volumes. This regional increase in wetland acreage will provide greater capacity in the watershed for storing and attenuating flood flows.
Sediment removal/stabilization	High	Productive grass and shrub riparian areas reduce water velocity, allowing sediment to drop out of suspension and be deposited. Sediment will continue to be a significant component of urbanized stormwater runoff. The increase in wetland acreage will provide greater capacity for filtering and immobilizing sediment. Sediment production in the localized setting will decrease with the phased removal of cattle grazing in some of the proposed Bank locations.
Sediment/nutrient/ toxicant retention	High	All sites will provide nutrient/toxicant trap zones from agriculture and silvaculture practices. Improvement will be gained in the watershed through generalized filtration and assimilation of groundwater, surface water, and storm flows.
Production export/food chain support	High	The designed systems will have the ability to export organic plant material into downstream waters. They also provide a greater diversity of food chain support.
Aquatic diversity/abundance	High	The proposed wetland communities and their streams throughout the project areas will support an abundance of fish or invertebrates.
Threatened or endangered species habitat	High	Designed sites will contain habitat for bald eagles, small/large mammals, amphibians, birds, and microand macro-invertebrates. The systems will provide root systems that create undercut banks for streams.
Species of concern	High	Designed sites will contain habitat for great blue heron, small/large mammals, amphibians, birds, and micro- and macro-invertebrates. The systems will provide root systems that create undercut banks for streams.
Wildlife diversity/abundance for breeding	High	Designed sites will generally support a variety of wetland-dependent species of birds during the breeding season. The vegetation diversity of existing grass meadows is limited to two or three dominant species. An increase in wetland size and quality will attract more waterfowl and wildlife that can utilize the corridor area for fulfilling their life requisites.
Wildlife diversity/abundance for migration/wintering	Med	These areas generally support a variety of wildlife for wintering purposes. They are used by some species during migration. The proposed aquatic resources improvements will increase the abundance of the habitat in the watershed and the potential for its use.
Wetland-dependent bird species	Med	The establishment of the Bank will provide substantially more habitat for wetland-dependant birds.
Uniqueness	High	The establishment of the aquatic resources as a Bank may be the first of its kind in the watershed.
Recreational/ educational potential	Med	Hunting and fishing may occur on a limited basis. Bird-watching is expected to increase in the Boise park lands. Educational potential is excellent in all the proposed locations.

Flood Proofing Opportunities

All of the aquatic resource function improvements described in the proceeding subsection hold true for all areas included in Phase 1. Of notable merit is the depressional configuration of the Payette River, Strut Ranch, and Mallard Farms sites. Being topographically depressed and isolated allows for the sites to rate very high for generalized flood control and associated water quality and sediment control functions. A large volume of Boise River runoff can be stored, attenuated, and filtered within the depression. Also, the Marianne Williams site within the Boise City parks lands offers the potential to provide very high functional enhancement. This site provides excellent opportunities for flood proofing as well as creating significant off-channel habitat through developing and restoring the Walling ditch.

3.6. Buffer Zones and Wildlife Corridors

The Bank will place a high priority on establishing and maintaining upland buffers around the created, restored, enhanced, or protected aquatic habitats to ensure those habitats can be self-sustaining. Buffers may augment aquatic resource functions and help increase the overall ecological functions of the compensatory mitigation sites. The Bank will develop compensatory mitigation credit for upland areas within a compensatory mitigation site, if those uplands increase the overall ecological functioning of the compensatory mitigation site or other aquatic resources in the watershed or ecoregion. For example, uplands may provide connections between aquatic habitats that are essential to preserve certain species, such as amphibians.

A 100-foot buffer zone set-back may be observed along property boundaries and roadways where possible in the larger sites. These buffer areas will be vegetated to provide a visual and noise barrier from adjacent development. A combination of native trees (e.g., black cottonwood), shrubs (e.g., chokecherry, plum, willow), and grass varieties will be planted in the buffer. Deviations to the buffer zone may be considered by the IRT, but only where adequate measures are proposed to mitigate for noise and visual impacts to wildlife.

Wildlife corridors will be developed where possible to a width of 300 feet on the large sites. This distance has been proven to allow wildlife to move within the site and access adjacent habitat. The wildlife that has been observed on the sites include mule deer, elk, wild turkeys, fox, coyote, and white-tail deer as well as many other species. The proposed corridors are envisioned to allow the existing species to move through the site to adjacent habitat and to migrate during seasonal changes.

4. CREDITING AND DEBITING PROCEDURE

4.1. Assessing Eligibility for Impacts

Wetland credits will only be allowed for the increase in wetland acreage and or wetland function. The degree of ecological "lift" at the bank sites will be demonstrated by meeting the performance standards. Credits will generally be made available to any private or public sector individual, organization, agency, or entity that is seeking mitigation credits as authorized by a Section 404 permit. All authorized projects associated with Nationwide, Regional General, or Individual permits can qualify for credit purchase from the Bank, subject to Corps approval and the 404 b(1) guidelines, as applicable. While any authorized permit activity is considered eligible to use the Bank, at the Corps' discretion, this Bank will focus largely on providing compensatory mitigation credits for Individual and Nationwide permit activities.

The Corps will determine which types of wetland impacts are suitable for withdrawal of credits from the Bank. It is suggested that all palustrine type impacts (including all classes and subclasses within this system) be considered appropriate for credit withdrawal since the Bank will contain all highly functional palustrine wetland types. It is further suggested that lacustrine wetland types be considered, on a case-by-case basis, for credit withdrawal at the Bank where it can be reasonably demonstrated that the net functional gain by applying credits will be equal to or greater than the anticipated gains from other mitigation alternatives.

4.2. Assessing Eligibility for Credits

Early sale of creation and enhancement credits will be allowed before the mitigation meets performance standards and is fully functioning. Credit eligibility for the 160 acres in phase one of the Bank are divided into three categories for aquatic resources. The categories are: creation and restoration credits, enhancement credits, and preservation credits.

Aquatic Resource Creation and Restoration Credits

Bank credits for creation and restoration will become available for debiting as described in Table 2 on the following page.

Aquatic Resource Enhancement Credits

In Phase 1, 20 acres of aquatic resources will be enhanced allowing 13.3 acres of available credits. Bank credits for enhancement will become fully available for debiting upon execution of the long-term protection for the acres to be enhanced as well as completion of enhancement activities demonstrating an ecological lift. The enhancement activities will be described in the mitigation plan that will be developed for the Bank.

Aquatic Resource Preservation Credits

In Phase 1, 25 acres of aquatic resources will be preserved allowing 2.5 acres of available credits. Bank credits for preservation will become fully available for debiting upon execution of the

long-term protection for the acres to be preserved. The preservation acres will be described in the mitigation plan that will be developed for the Bank.

Table 2. Credit Release Schedule for Creation and Restoration Credits

Acres Available		9	% of Total Credits	
by Milestone	Milestone achievement		in Phase	Cumulative
17.25 Available	Banking Instrument signed ¹		15.00%	15.00%
19.55 Available	Construction completed with demonstrated wetland hydrology		17.00%	32.00%
19.55 Available	Vegetation established to meet interim performance standards		17.00%	49.00%
58.65 Available	Performance criteria met, conservation easement signed, and endowment established for maintenance		51.00%	100.00%
115 acres	7	Total	100.00%	

^{1.} Subsequent phases will not require a new banking instrument, but will be approved as addenda to the existing umbrella instrument. Approval of addenda will be the appropriate milestone to use in place of *Bank Instrument Signed* for future phases.

The milestones cited in Table 2 are defined as follows:

- Bank Instrument Signed (anticipated September 2006). All parties to the bank instrument have signed and dated the document and the original has been returned to the Corps' office as part of the permanent administrative record. The conceptual and final site plan will be accepted by the Corps and implemented as such. This will include the clearing and grading of the site(s). The location of Phase 1 construction sites will be determined in the mitigation plan. The Instrument will allow for initial debiting of a percentage of the total credits projected at the Bank's maturity.
- Construction completed with demonstrated wetland hydrology. The wetlands will exhibit a sustaining wetland hydrology which meets the minimum requirements for saturation within 12 inches of the ground surface for at least 14 consecutive days during the growing season.
- Vegetation established to meet interim performance standards. The planting plan as described in the approved text and drawings in the mitigation plan is fully executed and the plant material has demonstrated post-installation viability. The planting plan may include any or all of the following: plug installation, woody material installation, live cuttings, seeding, and mulching. Post-installation viability is viewed as: 1) a minimum of 20% aerial coverage, on average, comprised of herbaceous and woody plant material, or a combination, and 2) a minimum of 50% of the actual cover must be representative of what was planted and seeded.
- **Performance criteria met** . Criteria described in the section below will be used to define achievement of compliance success and functional success.

Performance Criteria

Phase 1 of the Bank improvements will create approximately 100 acres of wetlands from upland areas, enhance 20 acres, and restore 10 acres of aquatic resources from previously altered wetlands. Phase 1 will also preserve 25 acres of aquatic resources. In addition, Phase 1 will establish and maintain 5 acres of riparian areas and/or upland buffers around the restored, enhanced, or preserved aquatic resources where necessary to ensure the long-term viability of those resources.

The target for Phase 1 of the Bank of the restoration effort is to create and restore approximately X acres of forested wetlands, X acres of scrub-shrub wetlands, and X acres of emergent wetlands. Each of the mitigation wetland types shall be described and tied to a specific reference wetland site. Each site may have its own reference site. The target acreages will be used to predict total credits that will be available for the mitigation bank. One credit will be equal to one acre of created or restored wetland that is fully functioning and meets the performance standards or compliance standards. Actual credits available will be determined by calculating the wetland acreage that meets the parameters identified in the Corps' 1987 Wetland Delineation Manual. Credits for each type of wetland (forested, scrub-shrub, emergent) will be identified in the Instrument and approved by the IRT prior to debiting credits from the Bank to maintain an accurate accounting of credits and debits.

The following performance criteria may be modified once reference sites have been identified for each Bank site. The reference sites selected will be used to evaluate the appropriateness of the following criteria as they relate to each site and wetland types at the sites. The monitoring reports conducted for each of the Bank sites will demonstrate the Bank's overall trend toward meeting the performance criteria below or criteria identified from the reference sites. All modifications to the performance criteria will be approved by the IRT.

- Wetland Delineation: A wetland delineation of the created and restored mitigation wetlands shall be prepared using the Corps' 1987 Wetland Delineation Manual to document the presence of wetlands and acreage of mitigation areas.
- *Hydrology:* The wetland will exhibit a sustaining wetland hydrology which meets the minimum requirements for saturation within 12 inches of the ground surface for at least 14 consecutive days during the growing season.
- Vegetation:

Non-native, volunteer wetland species will not comprise more than 20% of the total cover. Noxious weeds shall cover less than 10% of the restored Bank sites in the 3rd year following completion of construction and planting activities. A noxious weed control plan shall be developed and approved by the IRT.

Created and restored emergent wetlands shall achieve at least 80 percent total areal cover (of which no more than 20 percent shall be from shrubs and trees combined), shall contain at least three native emergent wetland species, and shall not have any application of supplemental water for at least 1 year. Emergent wetlands shall meet the criteria for emergent wetlands described in the *Classification of Wetlands and Deepwater Habitats of the United States* by Mr. Lewis M. Cowardin, 1979, Washington, D.C. 20240, 131 pages (Cowardin).

Created and restored scrub-shrub wetlands shall achieve at least 50 percent total areal cover from shrubs (with any trees providing less than 15 percent areal cover), shall contain at least two native emergent wetland species and two native scrub wetland species, and shall not have any application of supplemental water for at least 1 year. Scrub-shrub wetlands shall meet the criteria for scrub-shrub wetlands described in Cowardin 1979.

Created and restored forested wetlands shall achieve at least 50 percent total areal cover; shall contain at least two native emergent wetland species, two native shrub wetland species, and one native tree wetland species; and shall not have any application of supplemental water for at least 1 year. Forested wetlands shall meet the criteria for forested wetlands described in Cowardin 1979.

• *Soils:* Evidence of an aquic moisture regime, inferred through the presence of surface or near-surface groundwater.

4.3. Non Wetlands

Any areas that exceed the water depth criteria for wetlands (i.e., 2 meters deep) or remain unvegetated due to excessive water depth or flow will not be considered a jurisdictional wetland. Open water components associated with jurisdictional waters may be approved for compensatory mitigation credits as reviewed and approved by the IRT.

4.4. Crediting Ratios

On the basis of "no net loss", each acre of wetland created at the Bank can be considered equivalent to one acre of wetland impacted within the Bank's primary service area. If the Corps requires a Section 404 applicant to mitigate on a one to one ratio (defined here as one acre of mitigation for each acre of impact), then the applicant could purchase one acre of wetland from the Bank for every impacted acre to fulfill their mitigation requirements. The Corps may, at its discretion, require a higher mitigation ratio of the applicant (i.e., two to one or five to one). In this case, the applicant could purchase two or five acres of wetland for every impacted acre from the Bank to fulfill their mitigation requirements. Aquatic resources created will need to be fully functioning and meet the performance standards before the final credits will be realized.

Outside of the Bank's primary service area but within the secondary service area crediting ratios will be 1.5:1 (1.5 acres of functioning created or restored wetland may be purchased to mitigate for 1 acre of impacted wetland). The Corps may approve the trading of credits at the Bank for impacts outside of both the primary and secondary service areas. In this case, the ratios of mitigation to impact will be determined solely by the Corps on a case–by-case basis. Credit ratios for various types of mitigation are shown in tables 3 and 4.

Table 3. Credit Ratios for Various Methods of Wetland Mitigation

Mitigation Method	Credit Ratio if Performance Standards Satisfied
Creation	1:1
Restoration	1:1
Wetland Enhancement	1.5:1
Wetland Preservation	10:1
Upland Buffer Protected (fenced) or Created	1.5:1

Table 4. Credit Ratios for Out of Kind Wetland Mitigation

Kind of Wetland Impact to Kind of Wetland Mitigation	Ratio if Performance Standards Satisfied
Emergent : Scrub-Shrub	2:1
Emergent: Forested	3:1
Scrub-Shrub: Emergent	Not Allowed
Scrub-shrub: Forested	1.5:1
Forested: Emergent	Not Allowed
Forested: Scrub-shrub	Not Allowed

4.5. Accounting Procedures

The Bank Sponsor will assume responsibility for tracking credits in a Master Accounting Ledger as per:

- 1) the schedule of availability, versus
- 2) the actual number of credits sold or available.

The Master Accounting Ledger will be maintained by the Bank Sponsor. An updated copy of the ledger will be provided to the IRT after each sale transaction has been completed by the Bank Sponsor.

5. MAINTENANCE AND MONITORING PROVISIONS

5.1. Monitoring

To document pre-improvement conditions and to establish a baseline for monitoring purposes, pre-implementation photographic records will be assembled, on a per phase basis, prior to any work being conducted. Photographs will be taken at fixed reference points and submitted to the IRT in both digital and hard copy formats.

Annual monitoring of the wetland mitigation will be conducted and documented in annual reports by the Bank Sponsor. Monitoring will begin in the first full growing season following planting and will extend through the fifth full growing season for emergent and scrub-shrub wetlands and tenth full growing season for forested wetlands following planting. Monitoring reports will be prepared according to phases of improvements. The monitoring reports will be submitted to the IRT by December 1 of each year following the growing season evaluated. Monitoring Mitigation reports will include the following:

- Documentation of actual construction activities and completed mitigation measures (first season report only).
- Documentation describing the hydrology and vegetative plantings and conditions.
- Updates on the mitigation performance standards and the Bank achievement of them.
- A photographic record illustrating the site from the pre-established, baseline reference points.
- A map illustrating permanent photograph and sampling points.
- Identification of any failures of mitigation performance standards and a description of any measures needed to bring the site into compliance with the mitigation plan.

5.2. Maintenance

The Bank Sponsor will determine and implement maintenance activities on an on-going basis as needed. The maintenance period for each phase of improvements will extend from the completion of construction through four full growing seasons. Typical maintenance activities may include, but not be limited to, the following:

- Water level control during plant establishment
- Weeding
- Pruning
- Fertilization
- Corrective grading

- Fence repair
- Installation of wildlife exclusion structures
- Refinement of water control structures
- Replanting or reseeding of vegetation

The annual monitoring reports will notify the IRT of annual maintenance activities at the sites.

5.3. Adaptive Management

During the maintenance/monitoring period, certain improvement phases or portions of improvement phases, may not meet or maintain the milestone achievements as outlined. It is the responsibility of the Bank Sponsor to implement adaptive management during the maintenance period to ensure that the improvement areas are upgraded to meet all of the milestone achievements. If the Bank Sponsor is not adequately addressing corrective actions through the annual maintenance work, the IRT can request in writing that the Bank Sponsor prepare a remedial plan. The Bank Sponsor shall prepare the remedial plan, submit it to the IRT for their information, and implement the plan according to a schedule agreed to with the IRT.

If the milestone achievements as outlined in this plan are not in full force at the end of the prescribed monitoring/maintenance period (i.e., four full growing seasons following the completion of construction), then the monitoring/maintenance period will be extended until the milestones have been fully achieved.

The Bank Sponsor will not be responsible for remediating damages that occur to the Bank that are attributable to natural catastrophes such as flood, drought, disease, regional pest infestation, etc. that are beyond the design parameters and or control of the Bank Sponsor. The determination of such catastrophic occurrences will be evaluated through the use of all naturally-occurring reference wetlands that exist within a two-mile radius of the Bank site.

6. Existing Delineation Reports

A formal jurisdictional delineation of wetlands was performed by the City of Boise on all existing park properties. A copy of the delineation report resides in the files at the Corps' office in Boise, Idaho and is included as part of this Prospectus by reference.

7. REAL ESTATE PROVISIONS

Prior to construction the Bank Sponsor shall receive, from the present fee owner of the wetland improvement areas, license agreements to the underlying real property and water rights sufficient to ensure the perpetual viability of the Bank. Copies of the license agreement(s) shall be furnished to the IRT prior to construction of each approved phase. During the period extending from construction through Bank closure, the Bank Sponsor agrees to not use, or authorize for use, any improved areas within the Bank for any purpose which interferes or conflicts with its conservation purposes, other than those specified herein.

8. FINANCIAL ASSURANCES

8.1. Construction-Related

The Bank Sponsor agrees to provide financial assurances for each particular phase of the Bank in amounts sufficient to ensure that the work in the Instrument will be completed and to provide for the long-term management of the successfully established wetland and aquatic habitat. Performance bonds covering 100% of the construction costs will be secured prior to construction for presold credits. The bond will be released or reduced over time and eventually eliminated when the interim performance standards are met.

8.2. Maintenance-Related

An endowment will be used as the long-term assurance for retaining the resource values of the mitigation activity. An endowment will also be an advantageous way for sponsors to fund the permanent stewardship of a bank. Further, the establishment of an endowment helps the bank developer to find a third party willing to accept permanent responsibility for the project under the bank permit either through the transfer of fee title or donation of a conservation easement. Whoever holds the endowment does so essentially for the benefit of the public and must, therefore, provide sufficient safeguards. The mitigation site shall be preserved in perpetuity with a conservation easement managed by an entity with proven experience in such management, and approved by the Corps. In this case, the Bank Sponsor will identify a nonprofit or a community foundation to administer the endowment fund and potentially hold the conservation easement in perpetuity. The entity must meet the requirements in Idaho Code Section 55-2102 (2) (2004), must be an established conservation organization or land trust whose primary mission is to protect land for conservation purposes, and must have documented experience in managing lands and the financial resources to manage a conservation easement in perpetuity. Annual reporting of financial results will be available to the IRT. The endowment will be funded based on a percentage of the credit sale price.

9. BANK CLOSURE PLAN

9.1. Conservation Easement

Upon completion of the monitoring/maintenance requirements for the wetland improvement phases and the sale of all possible credits on non City of Boise property, the wetland conservation easements will be transferred to an approved 501(c)(3) non-profit organization (hereafter referred to as "Foundation"). The Foundation will be responsible for the long-term stewardship of the property consistent with the original goals and objectives for the Bank and the terms of the conservation easements. No active management of the wetlands by the Foundation will be required as the wetlands are designed to be self-sustaining. The following provisions will be incorporated in concept in the easement document:

- The easement property(ies) will be managed in their existing state as wetland open space in perpetuity.
- No property improvements will be allowed to occur that would directly or indirectly interfere with the continued existence of the wetland in its existing state.
- Public access will be controlled and generally limited to the perimeter areas of the easement; no public access will be allowed to conflict with the stated functions of the wetland improvements; or any public access that is contemplated in the future must first be reviewed by the IRT.
- Private access by the landowner, conservation easement holder, maintenance easement holders, and agreed upon leases is allowable.

The Bank Sponsor has relayed the associated draft conveyance information to the IRT. Final details associated with the conservation easement document will be reviewed and approved by the IRT prior to the easement's final conveyance. Copies of the signed transaction will be provided to the IRT. The Bank Sponsor will assume responsibility for and continue to maintain the improvement areas during any period that may ensue between completion of the monitoring/maintenance requirements and the transfer of the Bank to the conservation easement holder.

In the case of the City of Boise properties, no conservation easement is expected. The City will assume responsibility for the improved sites and will monitor and maintain the improved sites once performance standards are met.

9.2. Future Uses of the Bank Site

Controlled access at or around the periphery of the Bank boundaries may be acceptable if it will not significantly detract from wildlife usage of the site. Controlled public access to the site would be a new use and, as such, would require review and approval by the IRT prior to its implementation. If grazing is necessary on the Bank sites, a grazing plan shall be developed with IRT approval. Fences shall be installed and maintained to manage the grazing.

Hunting on the privately owned sites will not be affected and will continue.

Project Site Maps

Memorandum of Agreement with the City of Boise

Letters of Intent from Landowners