

**Bobcat Marsh Mitigation Bank
Adopted Long-Term Management Plan**
November 13, 2013

NWP-2010-601

Prepared collaboratively by the Partners:

Oregon Department of Transportation, Port of Portland, City of Hillsboro, Clean Water Services

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Attachment:

Figure 1: Long-term Management Plan Map

Appendix:

Interagency Agreement #25960

I. Introduction

A. Purpose of Establishment

The Bobcat Marsh Mitigation Bank (Bank) was established in partnership with Jackson Bottom Wetland Preserve (owned by the City of Hillsboro), Clean Water Services (District), the Port of Portland (Port), and the Oregon Department of Transportation (ODOT) who are referred to herein as the Partners. The Bank has been constructed within the boundaries of Jackson Bottom Wetland Preserve (JBWP) and is being funded by the Port and ODOT for the purpose of offsetting wetland impacts for Port and ODOT projects. The Bank was constructed and planted upon permit issuance and an as-built report was completed. The Mitigation Bank Instrument (MBI) was approved by the Interagency Review Team (IRT) co-chairs, including the Department of State Lands (DSL) and the United States Army Corps of Engineers (COE).

The Bank property comprises 18 acres owned by the City, 15.66 acres of which are wetlands. The Bank legal description is illustrated in the MBI. The primary goals of the Bank are to enhance 11.14 acres and restore 4.52 acres of Hydrogeomorphic (HGM) class slope flat wetlands and to sustain the associated wetland functions long term. For the Cowardin system, types will include Palustrine Forested (PFO), Palustrine Scrub/Shrub (PSS), and Palustrine Emergent (PEM), seasonally flooded wetlands. The general long-term desired conditions are depicted on the Long-term Management Plan Map (Figure 1).

B. Purpose of this Long-term Management Plan (LTMP)

The purpose of this long-term management plan is to ensure the Mitigation Bank is managed, monitored, and maintained for the goal of sustaining wetland functions as described below in perpetuity. This long-term management plan establishes objectives, priorities and tasks to manage and maintain the Bank pursuant to the Mitigation Bank Instrument Agreement (MBI). It is the intent of this LTMP to be consistent with and supplement the City-adopted management Plan for the larger Jackson Bottom management area.

C. Land Management and Responsibilities

The City of Hillsboro is the long-term steward responsible to defend the bank site from any encroachment, manage the endowment fund, and use annual revenues to conduct management per this plan. Jackson Bottom Wetland Preserve (JBWP) is a non-profit organization established for the sole purpose of protecting and maintaining the entire preserve, including the Bank area. The JBWP staff manages the 635+/- acre preserve on behalf of the City.

The Steward (City) will implement this long-term management plan, managing the Bank in perpetuity to preserve its habitat and conservation values. Long-term

management tasks will be funded through an endowment transferred to the Steward from ODOT and the Port to be managed by the Steward. The Steward is not obligated to spend money from outside of the endowment to manage the Bank. However, the Steward remains responsible for assessing whether the endowment is adequate to fund the ongoing maintenance of the Bank, and to prioritize tasks as needed. As the land owner, the Steward is also responsible for all duties of land ownership. Responsibilities are further detailed in an Interagency Agreement #25960 signed by ODOT, The City of Hillsboro, Clean Water Services (District) and the Port of Portland (collectively, the Partners) (Appendix).

II. Property Description and Conservation Values

The implemented Compensatory Wetland Mitigation Plan maximizes floodplain interaction and enhances floodplain wetland and habitat functions. The once linear Jackson Bottom Slough has been improved to increase floodplain contact via shallow meandering swales, large woody debris and installation of woody and rigid vegetation. This change in topography provides increased duration and depth of flooding. The Conservation Values thus created include 15.66 acres of wetland with diverse hydroperiods and dominated by native vegetation including trees, shrubs, and herbs.

Long-term management objectives are as follows:

1. Maintain floodplain wetland hydrogeomorphology and diverse hydroperiods;
2. Ensure surface water during the wettest times of year will encounter resistance from rigid vegetation and large woody debris, and will follow an indirect path from inflow at the north end to the outflow at the south end of the Bank;
3. Vegetation at the site will be managed for native species dominance and invasive species will be actively managed.

III. Conservation Threats and Management Limitations

A. Conservation Threats

Threats to wetland values over the long-term include nutrients, hazardous materials, sediment deposition and garbage from stormwater inputs from upstream activities within an urbanizing watershed. The Bank is downstream of non-native and invasive plant species including reed canarygrass seed and other propagule sources. Other seed sources may include neighboring properties throughout the Tualatin Basin. Nutria may damage vegetation or some of the existing berms within JBWP and beaver activity may cause damage to vegetation and dam portions of the site, either reducing or increasing inundation time and elevation. This Bank was designed to reduce these risks; however, human

intervention may be necessary if wetland acres diminish or, percent of non-native or invasive vegetation threatens conservation values.

B. Management Constraints

There are several District utility easements over the Bank; however, the District will restore the Bank vegetation, topography, and other characteristics consistent with local, state and federal regulations in the event that disturbance of the easements is required.

IV. Management and Maintenance

The overall goal of long-term management is to sustain the ecological functions and Conservation Values of the Bank. Routine monitoring and minor maintenance tasks are intended to sustain the Bank in perpetuity. Monitoring shall be conducted by professionals with the knowledge, training, and experience to evaluate ecological functions and recommend and/or implement corrective activities.

The monitor will conduct an annual early season and late season walk-through to examine and make note of the stability and ongoing conditions and trends of the Bank. The following elements will be evaluated:

Monitor	Maintenance
<ul style="list-style-type: none"> Invasion of exotic or undesirable species 	<ul style="list-style-type: none"> Control invasives
<ul style="list-style-type: none"> Native plant survivability / dominance 	<ul style="list-style-type: none"> Replant as needed
<ul style="list-style-type: none"> Condition of the box culvert 	<ul style="list-style-type: none"> Repair and replant
<ul style="list-style-type: none"> Erosion and deposition 	<ul style="list-style-type: none"> maintain
<ul style="list-style-type: none"> Beaver and nutria activity 	<ul style="list-style-type: none"> Trap and repair damage
<ul style="list-style-type: none"> Maintain floodplain wetland hydrology 	<ul style="list-style-type: none"> Maintain or replace structures
<ul style="list-style-type: none"> Litter and vandalism 	<ul style="list-style-type: none"> Clean and repair

Vegetation management will be the primary ongoing task at the site. Native vegetation will dominate at the site and invasive species will be maintained at levels that allow objectives to be met. The cover or density of native vegetation should be at sufficient levels to achieve the expected functions and values. Invasive species, especially new populations, should be controlled and are defined as those plants appearing on the Oregon Department of Agriculture Noxious Weed List and reed canary grass. Non-native species will be controlled in the event that the coverage begins to develop a mono-culture in an area or increases to the point that they are degrading the conservation values of the

Bank. These activities include mowing, hand pulling, and herbicides to control weeds and replanting/seeding as necessary.

Litter and debris will be routinely removed from the site as necessary. Damages from vandalism will be repaired. Signage will be maintained as determined by the Steward. Incompatible uses, such as farming, livestock and off-road vehicle use, will be prevented.

The Bank is contained within the JBWP which is in a City of Hillsboro Sensitive Natural Resources Overlay (SNRO) Zone. This is the City of Hillsboro's highest level of restriction of uses and it does not allow development of significant Wetlands, Riparian Corridors and Wildlife Habitat within the City of Hillsboro city limits. JBWP is identified in the adopted "List of Significant Goal 5 Natural Resource Sites in Hillsboro and the City of Hillsboro Goal 5 Natural Resource Inventory and Assessment Report (Ord. No. 5066/9-01)". The City of Hillsboro "adopted" by signature a Cooperative Improvement Agreement with ODOT, Port of Portland, and Clean Water Services (IGA 25960). This agreement fulfills the DSL requirement for a property protection instrument for the bank. On page 6 of the Cooperative Improvement Agreement Amendment 1 it states:

"Beyond the monitoring period, the City shall maintain this site in perpetuity and in accordance with the Bobcat Marsh Compensatory Wetland Plan for the Hillsboro Airport Parallel Runway Project... or the Mitigation Bank instrument to be developed during the Mitigation Bank permitting process."

V. Transfer, Replacement, Amendments, and Notices

A. Transfer

The Steward may assign or transfer responsibility for land management, endowment management, and/or endowment ownership only with prior written approval of the Partners and co-chairs (DSL and Corps) in accordance with terms of the Intergovernmental Agreement (IGA 25960) as well as the MBI. The Steward must not transfer the land to a public or non-governmental agency without first notifying the co-chairs and recording a conservation easement. The endowment must transfer with the management responsibilities and must continue to be dedicated to management of the site. Such changes to this long-term management plan shall be incorporated by amendment approved in writing by all partners, DSL, and the Corps. Subsequent parties assume the appropriate responsibilities described in this long-term management plan, unless otherwise amended in writing.

B. Remedies

In the event the Bank no longer provides the intended Conservation Values the Steward will implement remedial action. This may include restoration, control of

invasive vegetation, planting or seeding native species, or modification of hydrology. The Steward shall not be responsible for remedying natural events that alter the Bank landscape. If the Steward fails to implement the duties described in this plan and is so notified of such failure in writing by any of the Partners, DSL, or Corps, any party may request a meeting with Partners and regulators to resolve the failure.

C. Amendments

The Steward may propose revision of the long-term management plan if necessary to meet management objectives and sustain the Conservation Values of the Bank. Substantive changes to this LTMP that involve any reduction of the Conservation Values must be approved in writing by DSL and Corps. Any amendments to the Interagency Agreement 25960 will follow procedures established in that agreement; however any changes that alter responsible party or sustaining the Conservation Values shall be approved only with prior notice and written consent of DSL and Corps.

D. Notices

Any notices regarding this long-term management plan shall be directed as follows:

Steward: City of Hillsboro
Natural Resources Manager, Jackson Bottoms Wetland Preserve
150 E. Main Street
Hillsboro, OR 97123

DSL:
Oregon Department of State Lands
Attn: Wetland Mitigation Specialist
775 Summer St NE
Salem OR 97301

Corps:
Mitigation Banking Coordinator
U.S. Army Corps of Engineers CENWP-OD-GP
333 SW First Avenue
Portland, OR 97204

VI. Funding and Task Prioritization

A. Funding

Restoration and enhancement of the Bank was funded through ODOT and the Port. Long-term management of the Bank, as described herein, shall be paid for

with a non-wasting endowment. The amount shall be paid to the Steward upon approval of the LTMP. ODOT and the Port will split the costs of the endowment payment. The Steward shall own and be responsible for managing the endowment. Long-term management of the Bank will begin upon bank closure. Until the long-term management phase begins, all endowment income shall be reinvested as part of the endowment account. Therefore, the endowment account must be managed to ensure it provides revenue for ongoing management of the site in perpetuity.

Table 1 contains a summary of the anticipated annual costs of long-term management of the Bank. These costs include estimates of time and funding needed to conduct the basic monitoring site visits and vegetation management. The initial size of the endowment (\$117,640) reflects an estimate of the amount needed to generate sufficient income to pay long-term management costs in perpetuity assuming a capitalization rate of 4.5%.

Table 1. Anticipated Annual Costs of Long-Term Maintenance and Management

Work Elements	Target Completion	Units	Unit Price	Total Annualized Cost
Mowing to control exotic species	Fall	10 acres +/-	\$60	600
Spot Spray	Spring, Summer	1 acres	\$200	200
Monitor Invasive species	Spring/Summer	10 hours	\$50	500
Nutria control	Spring/Summer	6 hours	\$40	640
Facilities Maintenance (signage, fencing, etc.)	Ongoing	Misc Costs	Varies	332.60
Litter and Vandalism repair	Ongoing	Misc. Costs	Varies	340
Management & Monitoring Record-keeping	Ongoing	20	\$50	1000
Materials	Ongoing	Misc. Costs	Varies	700
Administration				500
Subtotal				4812.60
Contingencies (10%)				481.20
Total				5,293.80

Because management costs and investment returns are uncertain, there is no

guarantee that the endowment income will be sufficient to pay these costs in full. The endowment principal is intended to remain intact.

B. Task Prioritization

Prioritization of tasks, including tasks resulting from new requirements, may be necessary to maintain the intended functions of the wetland mitigation bank. The Steward shall determine task priorities and funding to determine which tasks will be implemented. In general, tasks are prioritized as follows:

- Tasks required by a local, state, or federal agency;
- Tasks involving repair of grade control structures;
- Tasks necessary to maintain or remediate habitat quality and
- Tasks that monitor resources.

