APPLICATION FOR GAME BIRD STAMP FUNDS

Game Bird Program
Oregon Department of Fish and Wildlife
3406 Cherry Avenue NE
Salem, OR 97303

I/We,

Metro, 600 NE Grand Ave., Portland, Oregon, 97232-2736

,hereby make application for financial assistance under the terms and conditions of the Game Bird Program in the amount of $ 17,500. The total cost of the project is $ 592,500, as shown on pages 2 & 7.

I/We understand that if this project is approved for funding by the ODFW Game Bird Committee, we will be required to:

- Submit a final report within 30 days of project completion to the Upland or Migratory Game Bird Program Managers.
- Return any unused Stamp funds to the Upland or Migratory Game Bird Programs.

Signature: _____ Date: 10/20/04

Position: CHIEF FINANCIAL OFFICER

Watershed Manager Approval: _____

Date: _____

GAME BIRD PROGRAM

Project Proposal

1. Project Title: Smith and Bybee Lakes Wetland Restoration

2. Applicant: Metro, Portland, Oregon

   Address: 600 NE Grand Avenue

   City/State/Zip: Portland, Oregon 97232-2736 Phone: (503) 797-1515

   Signature: _____ Date: _____

3. Location: ODFW Region: Northwest Region

   ODFW Watershed District: North Willamette Watershed District

   County Multnomah Township/Range/Section 2N / 1E & 1W / 36

4. Type of Project (check):

   Habitat Improvement XXX Research ____

   Other (specify) _____

5. Proposed Start Date: fall 2003 – Project is approximately 95% completed

6. Estimated Cost of Project: $592,500

7. Stamp Fund Request: $17,500

8. Briefly explain what the project proposes to do (i.e. acres treated, miles of fence, species benefited, etc.):

   This project contributes to the enhancement of over 1,200 acres of wetland habitat at Smith and Bybee Lakes Wildlife Area. A new water control structure was 95 percent installed in 2003 to restore a tidally influenced seasonal wetland at this site, providing tremendously improved habitat conditions for waterfowl. Final elements need to be completed for the structure to achieve full benefits and to protect the investment.

Send Applications to: Oregon Department of Fish & Wildlife
3406 Cherry Avenue NE
Salem, Oregon 97303
Attn: Game Bird Program

Project Objective:

(a) What is the objective of the proposed project?

The project objective is to restore a large, tidally influenced seasonal and semipermanent wetland. The installation of a new water control structure enables site management to provide a complex of open water, bottomland hardwood forest, emergent wetland and mudflat habitats in Bybee Lake (400 acres) and Smith Lake (800 acres). The new water control structure replaces an earth dam and obsolete structure that permanently impounded water, causing habitat degradation. Effects of the old structure include destruction of 350 acres of bottomland hardwood forest, loss of hundreds of acres of emergent wetland and complete loss of mudflat habitat. The new structure is reversing this degradation and will facilitate control of invasive species (e.g., reed - canarygrass) that thrived under the previous hydrologic regime.

(b) How will the project benefit upland or migratory game birds and/or their associated habitat?

The restoration of over 1,200 acres of seasonally flooded, tidally influenced wetland habitat will result in greatly improved habitat conditions for waterfowl. Flooding depth and duration support the re-establishment and proliferation of native wetland plant species that provide food and cover to migrating, wintering and breeding waterfowl. It is expected the wetland will become dominated by species including: wapato, rice cutgrass, beggars tick, various smartweeds, nutsedges and other species. Many of these plants proliferated during the first year of the new water management approach and will serve as a plentiful food resource for wintering waterfowl, as well as providing habitat for invertebrates that are also an important food resource. After less than a year of operation, benefits to waterfowl, wading birds and shorebirds are already apparent:

- Emergent wetland vegetation provided abundant cover, nesting, and/or feeding habitat for waterfowl, primarily mallards and Canada geese but also American coot, gadwall and blue-winged teal. Wetland habitat near forested areas also supported numerous wood duck pairs.
- Open water served as wintering habitat for tens of thousands of waterfowl including Canada goose, mallard, American wigeon, lesser scaup, Northern shoveler, ring-necked duck, bufflehead, green-winged teal, ruddy duck, common merganser, hooded merganser and others.
- During spring migration, the species listed above used the site as well as Northern pintail, canvasback, redhead, blue-winged teal, cinnamon teal and other less-common waterfowl. This fall, numbers of green-winged teal, mallards and American wigeon were in the thousands as of early October.
- Although not game birds, benefits to other birds are apparent and serve as indicators of habitat quality at a site that is also used by game birds. Dozens of pie-billed grebe and American coot nested in the flooded wetlands in summer 2004. Hundreds of great egrets, great blue herons and double-crested cormorants are using the wetlands this fall, as well

as a large group of American white pelicans and flocks of female common mergansers. Numerous flocks of shorebirds are stopping during their fall migrations, including Western and least sandpiper, long-billed dowitcher, greater and lesser yellowlegs, spotted sandpiper, killdeer and others.

Smith and Bybee Lakes Wildlife Area is located within the Portland city limits. Public uses at the site include wildlife viewing, environmental education and paddling. Hunting is not allowed at Smith-Bybee; it contributes to waterfowl production in the Pacific Flyway by serving as important nesting, migration and wintering habitat for birds that may be accessible to the hunting public elsewhere. Sauvie Island Wildlife Area and Ridgefield National Wildlife Refuge are located near Smith-Bybee; flocks making local movements may use Smith-Bybee as a temporary refuge during hunting season or may fly into the other open areas from Smith-Bybee.

Project Location: (Attach a map and provide description of the location and how to get there from a major highway.)

A labeled aerial photograph of the project site is attached as Figure 1. The water control structure is located in a part of the wildlife area that is not open to the public. (Contact Elaine Stewart at 503-797-1515 if a site visit is needed.) The public parking lot is located on North Marine Drive between the Expo Center and Kelley Point Park. Take I-5 to exit 307; go west on North Marine Drive for 2.2 miles. Turn left at the large brown and white wildlife area sign.

Procedure: Specifically describe how the project will be conducted--use separate page for additional information, drawings or pictures.

Installation of the new structure is nearly complete (Figure 2). At 95 percent completion, the structure was operational as of December 2003. It allows capture and impoundment of water during winter and spring to provide open water habitat for wintering and migrating waterfowl and control of reed canarygrass. In addition, a fish ladder has been installed to allow juvenile salmon to utilize the wetlands as rearing habitat during the winter months. The structure allows drawdown of the wetlands during the summer. By late summer, Bybee Lake receives daily tidal exchange from the Columbia/Willamette system (Smith Lake, separated by a meandering channel from the structure, does not fluctuate with the tides). This hydrology promotes the re-establishment of native wetland plants.

Most of the project has been completed, however, parts of the project require additional funding. This proposal seeks $17,500 to pay for a series of trash racks to be added to the water control structure. The trash racks are critical to fulfill the desired objective of the project. Fast-moving woody debris can damage the structure, and it also can become lodged in the reverse tidegates that are used to flood the wetlands, allowing water to flow back out when it should be retained. It is unsafe to manually remove debris from the tidegates when water is flowing. This problem could be avoided with metal trash racks installed on the four openings on the North Slough side of the structure to deflect debris.

In addition to protecting the structure, the trash racks will indirectly support the habitat improvements that result from operating the structure. The trash racks will prevent large adult carp (but not other fish) from entering the wetlands during the spring, when carp are actively looking for spawning sites. Carp have serious, negative impacts on waterfowl habitat, directly competing with waterfowl for aquatic invertebrates and disturbing the substrate during feeding activities. Carp's churning of the substrate disrupts and uproots aquatic plants and loads silt into the water column, which also inhibits aquatic plant growth. In other areas where carp numbers are high, such as Malheur National Wildlife Refuge, waterfowl numbers have fallen (by over 90 percent in some cases). The installation of these trash racks is critical for the Smith-Bybee wetlands to achieve their full function and habitat value.

The metal trash racks will be installed on each of the four openings on the North Slough side of the structure to deflect debris. Each rack will be approximately 8 ft. wide by 10 ft. tall to match the dimensions of the four sets of box culverts that make up the structure. Racks will be constructed from A36 bar and A53 pipe welded together to form a vertical rack system; they will be galvanized for corrosion protection.

Scheduling: What is the estimated project schedule?

(a) Start Date (final phase) October 22, 2004 Completion Date: December 15, 2004
(b) List major project activities and time schedule for each.

Activity	Time (month/year)
Fabrication and installation of trash racks	October-December 2004

Participation: (Will other organizations participate in the project? If so; list and describe participation, and attach letters of commitment).

Participating Agency/Individual — Activity
Metro: grant writing, permitting, site management, funding
Ducks Unlimited: Engineering, permitting, grant writing, construction management, funding
Oregon Department of Forestry: funding
Oregon Department of Fish and Wildlife: funding (contract pending: R&E program)
Columbia Land Trust: funding
Oregon Watershed Enhancement Board: funding
City of Portland Bureau of Environmental Services: funding

Funding:

(a) List other sources and amount of project funds (include in budget on page 5).

Columbia Land Trust (NAWCA grant – cash): $196,000
Oregon Watershed Enhancement Board (cash): $180,000
Portland Environmental Services (cash): $63,000
Ducks Unlimited, Inc. (cash and in-kind): $56,000
Metro (cash and in-kind): $50,000
Oregon Department of Forestry (cash): $25,000
Oregon Dept. of Fish and Wildlife (Restoration and Enhancement): $8,000 (pending)

(b) Have any conditions been placed on the funds listed in (a) which may affect the completion of the project? If so, identify and explain.

No.

Project Maintenance and Monitoring:

(a) Who will maintain the project and fund long-term maintenance and/or operation if needed?

Metro is the property owner and will be responsible for all management and maintenance of the site. Metro has staff dedicated to the site that check the structure at least weekly, perform drawdown and other tasks, and maintain the structure.

(b) What element(s) of the project will be monitored, how often, for how long?

Metro checks the structure at least once per week and will monitor the trash racks. Several monitoring projects will document the effectiveness of the structure in restoring wetland habitat, and will provide the basis for adaptive management at the site. Metro conducts qualitative weekly bird counts (including waterfowl) at the wildlife area and will continue to do so for the foreseeable future. Portland State University and Metro are monitoring 30 transects annually to document vegetation changes – reed canarygrass control and support of native wetland plants – and determine the effectiveness of the current hydrologic management plan. Ducks Unlimited and Metro are monitoring fish passage and use of the wetlands, particularly by juvenile salmonids. The vegetation and fish monitoring are funded through June 2005, and Metro is working on additional funding to carry both projects through June 2007.

Project Cost Estimate: (provide as much detail as possible)

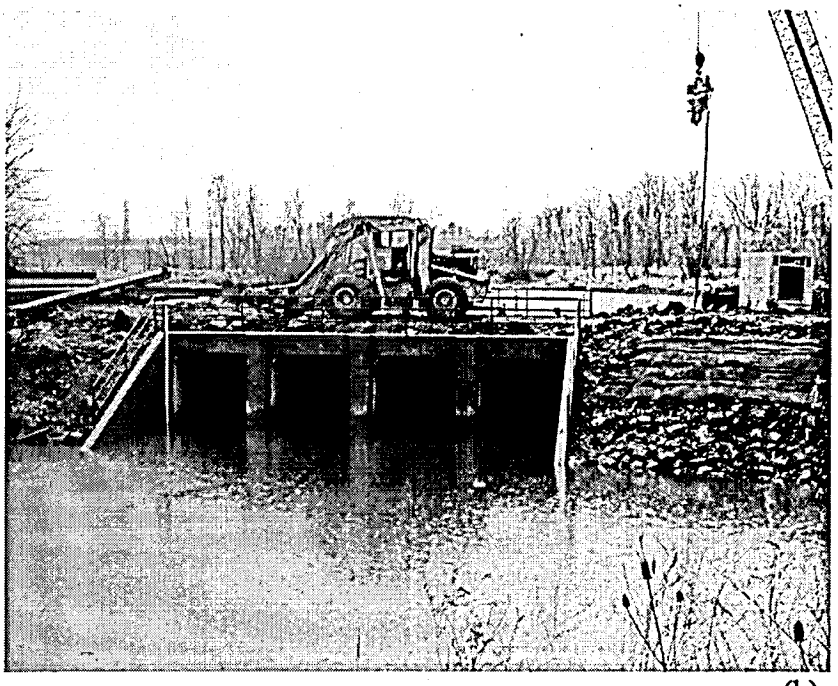
Category	Stamp Funds	Other Funds[1]	Total Cost
Administration			
Engineering/Biological	$2,500	$72,000	$74,500
Overhead/Admin.	$0	$59,000	$59,000
Total	$2,500	$131,000	$133,500
Construction Materials[2]			
Water control structure materials, lump sum	$0	$200,000	$200,000
Trash racks	$12,500	$ 2,500	$15,000
Contract Services[3] (itemize)			
Install water control structures	$0	$239,000	$239,000
Install trash racks	$2,500	$ 2,500	$5,000
TOTAL COSTS	$17,500	$575,000	$592,500

[1] List detail in funding (page 4).
[2] Provide amounts and cost per unit.
[3] Attach subcontractor estimates.

Figure 1. Smith and Bybee Lakes Wildlife Area

Figure 2. Smith-Bybee water control structure, showing headworks under construction (a) and North Slough opening at the end of construction (b) Trash racks will be installed on the North Slough side.

(a)



(b)