DEPARTMENT OF THE ARMY
PORTLAND DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2946
PORTLAND, OREGON 97208-2946

REPLY TO
ATTENTION OF:

May 31, 2003

Operations Division
Regulatory Branch
Corps No. 200200175

Ms. Elane Stewart
Metro, Smith and Bybee Lakes Wildlife Area
600 NE Grand Avenue
Portland, Oregon 97232-2736

Dear Ms. Stewart:

The purpose of this letter is twofold: 1) To convey the status of your request for Department of the Army authorization to enhance the historic functions and values, and provide fish passage at Smith and Bybee Lakes; and 2) Provide you an opportunity to review public comments that were received during the Public Notice, and respond to issues that were raised.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the described activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the described activity, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the described activity will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers solicited comments from the public, including Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. All comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. All comments received, as well as your response to these comments will be used in the preparation of the Corps Environmental Assessment pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The Corps received written comments (Enclosure 1) during the 30-day public comment period, which closed May 8, 2003. The issues raised by these comments are as follows:

a. Identification of cultural resource sites relative to the boundaries of the proposed project area, or copies of previously completed cultural resource survey report for this site, if available [please note that we have also requested this information from the Confederated Tribes of the Grand Ronde. Once this information is obtained the Corps will determine, in coordination with the Tribe and you, whether a survey of this site is warranted.]

b. Water control management plan, with clarification regarding intent to drain the lakes, and extent of continued operation of the lakes.

c. Claim that Metro is taking a 'piecemeal' approach to projects surrounding St John Landfill. Identify other Metro project previously permitted, or planned within the vicinity.

d. Presence or absence of hazardous sediments to dredged and disposed, potential contamination of lakes and North Slough from landfill leachate. (Is this site listed under CERCLA?)

e. Effectiveness of proposed "Pool chute style fishway".

Also, it is the Corps understanding that USFWS initiated formal consultation with the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) under the Federal Endangered Species Act (ESA) and the Magnuson-Stevens Act for the protection of Essential Fish Habitat regarding listed species. Please provide an electronic version of the biological assessment that was completed for this consultation. (This information will assist in the preparation of the Corps NEPA environmental assessment, and a copy of the signed biological opinion, when available.

Finally, a March 13, 2003 message from Ducks Unlimited, Mr. Chuck Lobdell, indicated that a design revision is underway. Please forward a copy of the revised design drawings, and text summary.

If you have any questions regarding this letter, please contact Ms. Mary J. Headley at the letterhead address or telephone (503) 808-4392.

Sincerely,

Lawrence C. Evans
Chief, Regulatory Branch

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Copies:
Oregon Division of State Lands (Jarvie)

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METRO

June 20, 2003

Lawrence C. Evans
Mary J. Headley
Corps of Engineers
P.O. Box 2946
Portland, OR 97208-2946

Dear Mr. Evans and Ms. Headley,

This letter is in response to your letter of May 31, 2003, regarding Corps permit #200200175. In that letter, you listed five issues and requested additional information regarding those issues from Metro. That information is attached and I believe it will adequately address the concerns in your letter. The attachments provide considerable information; in the interest of answering the Corps' questions, I chose to risk providing too much information, rather than too little. Metro is committed to an open, transparent process, both for obtaining this permit and conducting the water control structure project.

Please contact me if you have questions, comments or need clarification regarding this response or other aspects of Metro's permit request. I can be reached via telephone at 503-797-1515, or via email at stewarte@metro.dst.or.us.

Sincerely,

Elaine Stewart

Elaine M. Stewart
Smith and Bybee Lakes Wildlife Area Manager

Enc.

Response to Issues in May 31, 2003 Corps of Engineers Letter

a. Cultural Resources

The Corps letter requests information on cultural resource sites. Metro has some documentation of such resources on file; copies of the Oregon Archaeological Survey records are enclosed. These survey records indicate several sites of interest, none of which is in the project area. It is not surprising that the survey shows no sites of interest near the project site. The area has been previously disturbed, and the existing dam is composed of earth that was excavated from the surrounding area in the early 1980s and placed in the stream channel.

Metro contacted the U.S. Fish and Wildlife Service's Cultural Resources Team and filed a RCRC. Although we do not expect any resources of interest, we have requested that they conduct a walk-through survey prior to construction.

b. Water Control Management Plan

The Corps requested more information regarding draining the wetlands and the extent of continued operation of the lakes. The primary objective of the project is to restore to the maximum extent possible the natural hydrology to these large wetlands, with the understanding that during some periods of the year water will need to be physically retained within the wetlands for vegetation management. Metro has a certificate of water right from the Oregon Water Resources Department to store water in the wetlands (Permit 45974 and Reservoir Permit R-8298).

To understand the water management strategy, one must understand the area's historic hydrology. Successful ecological restoration depends on restoring underlying ecological processes to the extent possible; in wetland restoration, the key process is hydrology. Historically, the entire wetland complex was seasonally and tidally inundated, and featured a mosaic of forested and emergent floodplain wetlands. The historic hydrologic regime was characterized by winter flooding that receded in late winter and early spring. Late spring rains and snowmelt caused water to rise again in the spring freshet. Water levels would drop dramatically in summer with the dry weather, exposing mudflats. Modifications to this hydrologic regime over the past 70 years, due to construction of dams and dikes on major rivers and filling of wetlands, have dramatically changed the frequency and duration of flooding in the region's wetlands. The loss of the spring freshet may be the most dramatic difference between current and historic hydrology in the region's rivers and wetlands.

The primary purpose for water management is to allow Metro to mimic the historic water regime, particularly the spring freshet, by prolonging the recession of floodwaters out of the wetlands. The long drawdown period simulates historic conditions by slowly exposing the shallow areas as mudflats in early summer, during the warming period that favors native plant communities. This is crucial to restoring native vegetation and in controlling reed canarygrass because the latter is a cool-season plant that starts growing earlier in the year than the desired native emergent plants. An unmanaged wetland would drain in February, and the subsequent

reed canarygrass invasion would effectively outcompete native wetland species, resulting in a monoculture. Current water management practices on the Columbia and Willamette rivers provide no assurance that sufficient water would be released in late spring to re-flood the wetlands and manage the invasive reed canarygrass.

The annual management cycle for the wetlands will begin in late fall or winter, with the first heavy rains of the season. The water control structure will be used to hold rising waters in the wetlands. The water will be held as high as possible, up to an elevation of approximately 11.5 feet (NGVD 29 datum). The speed with which the wetlands will fill depends on rainfall and on river management (Columbia and Willamette); it will vary from year to year.

Water will be held in the lakes through spring until early summer, to provide habitat for waterfowl and juvenile salmonids, and to control reed canarygrass. Beginning in late May or early June, a slow drawdown will occur. The drawdown will continue until July or August, depending on the amount of water in the lakes.

Both wetlands (Smith Lake and Bybee Lake) will be nearly dry by the end of the summer. One box culvert in the water control structure will remain completely open from this time until late fall or winter, when the first heavy rains of the season occur. The wetlands will be open to tidal flow during the late summer-early winter seasons.

The management approach depicted in the previous paragraphs may be adapted as experience is gained with the new structure and we are able to see how the wetland system responds. For example, if the drawdown proved too slow to provide adequate passage for juvenile salmonids, a more rapid drawdown would be instituted. The wetlands may not be actively managed in all years, depending on vegetation response and fish passage. Metro will monitor the response of vegetation, fish and wildlife and will practice adaptive management.

This water management approach is intended to provide a number of benefits:

- Control of reed canarygrass on the fringes of the wetlands, where water can be impounded at sufficient depth;
- Provision of more than a thousand acres of off-channel rearing and refuge habitat for juvenile salmonids;
- Support of native bottomland hardwood forest – approximately 350 acres of willow forest were lost with the conversion of the wetlands to impounded lakes and will naturally regenerate as the appropriate hydrology is re-instituted;
- Support of native emergent plant communities – hundreds of acres of emergent wetland plants will be restored;
- Provision of wintering habitat for waterfowl;
- Exposure of mudflats for migrating shorebirds in summer;
- Support of the aquatic plant community via control of non-native carp with the annual drawdown;
- Removal of Smith and Bybee lakes from Oregon DEQ's 303(d) list – parameters such as habitat modification and aquatic weeds are directly related to the existing structure; it should be noted that DEQ will consider the lakes part of the Columbia Slough system when the new structure is in place.

c. Approach to Projects Surrounding St. Johns Landfill

Metro's management of the Smith and Bybee Lakes Wildlife Area is governed by two plans, the Natural Resources Management Plan for Smith and Bybee Lakes and the St. Johns Landfill Closure Plan. These plans provide a framework for all projects conducted within the wildlife area's boundary (which includes the landfill). Obviously, all projects are not conducted simultaneously, since funding, planning and design, permitting and other tasks cannot be timed to coincide for all of the projects. Metro's projects are certainly not "piecemeal" – they are all consistent with the guiding management plans for the site. Work on the St. Johns Landfill is also consistent with city, state and federal permits relating to stormwater runoff, gas collection, air emissions, etc.

The Corps asked Metro to list other projects previously permitted or planned within the vicinity:

- 1997 repair of erosion damage to the landfill levee fronting Columbia Slough near the confluence with North Slough (Nationwide Permit Verification, case # 97-1220).
- 2000 repair of landfill levee erosion areas including a site along the North Slough (Corps permit number 1999-01055).
- Current water control structure permit application.
- Planned 2004 facility improvements, which will include canoe launch improvements on the north side of Smith Lake, which may require a Corps permit.

Other projects not requiring Corps permits include:

- 1996 – 2001 revegetation of more than 90 acres of forest within the wildlife area.
- Planned 2003 addition of soil to the landfill cover in an area near the North Slough.
- Planned 2003 excavation and revegetation of a site east of Smith Lake (to conform with Portland's balanced cut and fill requirements relating to the 2000 landfill levee repair).
- Planned 2003 revegetation of 12 acres of forest on the north side of the wildlife area.

d. Hazardous Sediments

The St. Johns Landfill is ***not*** listed on the EPA's National Priorities List (NPL) and commonly referred to as the "Superfund" list. The landfill ***is*** listed on CERCLIS – the Comprehensive Environmental Response Compensation and Liability Information System, a database maintained by EPA under CERCLA. The site's presence on CERCLIS does not mean that it will be elevated to the NPL – CERCLIS is simply a comprehensive list of sites which have been investigated by EPA.

The St. Johns Landfill is on a confirmed release list and inventory of hazardous substance sites maintained by Oregon DEQ (site #164). The landfill is a highly regulated site that is monitored by Metro and regulated by EPA and DEQ. Metro will continue all monitoring activities after the water control structure is installed.

The Corps' letter asked for information regarding the presence or absence of "hazardous sediments" in the material that would be removed from the existing dam, as well as any

"potential contamination" of the lakes and North Slough from landfill leachate. There are several aspects to this question. Metro is testing the soil that will be removed from the earth dam and will dispose of it appropriately. Since the soil was "borrowed" from surrounding upland areas for placement in the North Slough, upland use for road repair or habitat enhancement will probably be appropriate. If, however, the soil proves too contaminated for this use, Metro will transport it appropriately to an approved disposal facility.

Regarding "potential contamination" of the lakes and North Slough, it is helpful to begin with an overview. First, there is background pollution throughout the Columbia Slough system, including the lakes. The attached "Summary: Smith-Bybee Lakes Management Area – 1994-95 Screening Level Risk Assessment" reviews a project conducted by the City of Portland's Bureau of Environmental Services, including work in the wildlife area performed by Metro. The BES's sediment project characterized sediments in the Columbia Slough watershed and prioritized sites for additional work. About 65 sampling sites were located in the wildlife area; sites were located in the Columbia Slough, North Slough and both lakes. Of these sites, only three were flagged by BES as priority sites. These three sites were located adjacent to combined sewer overflow outfalls and private industrial properties with known high levels of contaminants.

Overall, the Columbia Slough sediment study results indicate that current ecological and human health risks within the wildlife area are comparable to the rest of the Columbia Slough system. This is not surprising, since the lakes, North Slough and Columbia Slough were hydrologically connected for much of the last century, when most of the pollution in the system was generated. Even when dams separated the lakes from the North and Columbia sloughs, events such as the 1996 flood moved considerable amounts of water and sediments throughout the lower Columbia Slough system, overtopping the banks surrounding the lakes.

Any perception that the lakes are pristine is misplaced. The attached graphs of sampling results for arsenic, chromium and lead compare levels found in sediments in the two lakes and in North Slough. The levels of these contaminants found in the lakes is comparable to that found throughout the North Slough; in fact, levels of these contaminants are often higher in the lakes. The "E. N. Slough" station is very close to the earth dam that will be partly removed. Screening values are not available for Oregon (DEQ is in the process of establishing them) but NOAA and Washington DOE values are provided on the graphs for perspective. The attached data tables provide additional information in case the Corps wants more details.

Surface water monitoring of Columbia Slough, North Slough and the lakes provides similar results to sediment monitoring – levels of potential leachate indicators do not differ greatly among sites (see attached table). Because of the background levels of pollution in this system, it is extremely difficult to ascribe pollutant levels to a particular source. Metro has taken actions to prevent leachate movement from the landfill to surrounding surface water and groundwater. The landfill cover is designed to prevent creation of leachate by preventing rainwater from permeating the landfill. A cutoff wall was installed along approximately 1,000 ft. of the perimeter dike between the landfill and North Slough to prevent leachate movement from the landfill into the slough.

This year, Metro is conducting a remedial investigation and risk assessment under DEQ supervision (as part of the closure permit process) to determine the extent of any ecological and human health risks posed by the landfill and additional remedies that may be implemented to reduce or eliminate those risks. As mentioned previously, the St. Johns Landfill is a highly regulated site with an extensive monitoring program in place and close supervision by regulatory agencies. Metro is committed to good stewardship of the landfill and the rest of the wildlife area.

e. Fishway Effectiveness

One of Metro's goals for this water control structure project is adequate fish passage to allow use of the wetlands by downstream migrating salmonids. Metro worked with a NOAA Fisheries biologist and hydrogeologist on the fishway design via the ESA consultation process, and we appreciated their assistance and expertise. Our initial design was modified as recommended by NOAA Fisheries; if they believe the design is sufficient, Metro is certainly satisfied.