
Coordinated by:

**Smith & Bybee Lakes Wildlife Area
Management Committee**
Patt Opdyke, Chair

Metro

600 NE Grand Ave.
Portland, OR 97232
(503) 797-1515

Smith & Bybee Lakes Management Committee Meeting

Tuesday, April 26, 2005
5:30 p.m. – 6:30 p.m.
Metro Regional Center, 600 NE Grand Ave.

NOTE CHANGE OF ROOM: Room 370A

Portland, Oregon 97232

AGENDA

Welcome, introductions	(Opdyke)	5:30 - 5:35 pm
Review/Approve Feb 22 and Mar 29 meeting notes	(Opdyke)	5:35 – 5:40 pm
NRMP review and discussion - Environmental Assessment and projects	(Opdyke, Stewart)	5:40 – 6:20 pm
Updates	(All)	6:20 – 6:30 pm

✓ DU found steelhead in SB wetlands

**Summary Meeting Notes
Smith and Bybee Wetlands Management Committee
April 26, 2005**

In attendance:

Patt Opdyke, Chair *	North Portland Neighborhoods
Troy Clark, Vice Chair *	Portland Audubon Society
Pam Arden *	40-Mile Loop Land Trust
Larry Devroy *	Port of Portland
Nancy Hendrickson *	Portland Bureau of Environmental Services
Jim Sjulín *	Portland Bureau of Parks and Recreation
Dale Svart *	Friends of Smith & Bybee Lakes
Dan Kromer	Metro Parks – Willamette District Manager
Elaine Stewart	Metro Parks – Natural Resource Scientist
Pat Sullivan	Metro Parks
Paul Vandenberg	Metro Solid Waste & Recycling

* denotes voting SBLMC member

The meeting was called to order at 5:35 p.m.

Consideration of February 22 and March 29 meeting notes

The February 22 meeting notes were approved as submitted (6 in favor, 1 abstention). In the March 29 meeting notes, references to any gaps in the “Existing Environmental Impacts”, pgs. 23 and 24, should have included “wildlife” as well as “wildlife habitat”. With that addition, the March meeting notes were approved (5 in favor, 2 abstentions).

Old Business

Elaine Stewart is following up on a request for the definition of “passive recreation” as provided in the SCORP.

Reference was made to the Metro decision to change rename named Smith and Bybee Lakes Wildlife Area to Smith and Bybee Wetlands Natural Area. The headings on future Management Committee meeting notes and agendas will reflect that change. There is a need for consistency in the NRMP Goal Statement and in the Objectives as well, when referring to the area as wetlands rather than lakes.

NRMP – review and discussion – Environmental Assessment and projects

Elaine described two major purposes of the NRMP as: 1) to facilitate the review process when necessary and 2) to provide guidance in managing the site.

A “running tally” of the Management Committee’s progress in reviewing/updating the Natural Resources Management Plan was distributed by Elaine. (See *attached*.) She plans to provide such an updated record from each meeting in which the revision work is part of the agenda.

The first section of the “tally” consisted of the goals and objectives as “cleaned up” with suggestions and comments from the Committee. Section two included Items that came up in

the discussion but weren't relevant to the section being worked on at the time. Section three listed management tasks that are coming up during the meeting but are not actually part of the Management Plan.

The Committee's assignment for this meeting was to review and assess pgs. 19 through 30 of the NRMP. As a second handout, Elaine provided an Environmental Assessment Update (see attached). In the discussion that followed, Committee members suggested:

- Include a section on Existing Conditions in 2005 as well as the one on Existing Conditions in 1989.
- Discuss what occurred to bring about the changes since 1989.
- Place the section on 1989 conditions in the Appendix rather than leaving it in the main body of the document, to preserve the link between 1989 and 2005 conditions without interrupting the flow of the document.
- Examine the "Potential Environmental Projects" (pgs. 24–30) as listed in 1990 and assess which are in progress, which have been completed, which never will be, and how to proceed with those remaining.
- For the sake of clarity, follow an outline format rather than leaving the text in paragraphs.

Elaine asked that anyone believing other significant impacts exist beyond the five major ones listed on pg. 24 contact her and she will add them to that list.

The committee went through the Potential Environmental Projects and noted those that have been completed. The 12 projects are listed below along with their status:

ENV1 – Smith and Bybee Lakes Water Quality Monitoring Program – **Ongoing.**

ENV2 – Flood Gate in the Existing Water Control Structure – **Completed.**

ENV3 – Dynamic Hydraulic Model of the Columbia Slough and Smith and Bybee Lakes- **Completed (and parts of it ongoing in Remedial Investigation work).**

ENV4 – Modify Existing Storm Outfall from BN Property – **EPA recently investigated the site and is not requiring cleanup. No further information is available.**

ENV5 – Construct New Outfalls for Maximum Habitat and Water Quality Protection – **As outfalls are replaced, new outfalls have improved stormwater treatment. The NRMP does not provide for additional outfalls beyond those identified in Figure 5.**

ENV6 – Clear the North Slough and the Mouth of Columbia Slough – **Completed.**

ENV7 – Habitat Enhancement and Restoration Projects – **Ongoing.**

ENV8 - Connecting Columbia Slough with Bybee Lake Dam Across the Narrows in Bybee Lake and an Opening at the West End of Bybee Lake – **Unlikely to proceed; the Committee recommended in 1996 that this project move forward only if necessary after the water control structure was built.**

ENV9 – Construction of Large-Scale Wetlands at Ramsey Lake for the Treatment of CSO Effluent – **Completed; the Committee noted that these wetlands are not used for CSO treatment.**

ENV10- Water Augmentation (groundwater wells or Columbia River) – **Project shelved indefinitely (not economically feasible).**

ENV11– Dredging to Create Mud Flats Fish Channels and Boating Trails – **Project shelved indefinitely (no longer considered ecologically appropriate).**

ENV12– Wetlands Nursery and Lab – **Project shelved indefinitely (plant materials are available through other means).**

Updates

- Steelhead may have been captured in the two-way fish trap in the water control structure.
- Reminder of Grand Opening of the Smith & Bybee Wetlands Natural Area on Sunday, May 15 from 11 a.m. to 4 p.m.

Next meeting – May 24, 2005

Homework - Committee members to consider what are the impacts at the Natural Area, as they can point to objectives.

Troy Clark will chair the May 24 meeting in Patt Opdyke's absence.

Elaine may have updates on the trail feasibility study.

Meeting was adjourned at 6:50 p.m.

Environmental Assessment Update

Hydrology and Vegetation

- The water control structure referred to on page 19 of the NRMP was replaced in 2003 with a structure that provides passage for juvenile salmonids and has the capability to retain water in the wetlands or to open the wetlands to the North Slough. The new structure is managed to retain high water levels in winter and spring, to draw down water in the summer, and maintain daily tidal exchange with North Slough in late summer and fall.
- The site hydrology is now dominated by the wetlands' connection to North Slough, although evapotranspiration is important in late summer and fall when the wetlands have been drawn down. The wetland classification is once again palustrine, rather than lacustrine.
- Constant high water levels in the 1980s and 1990s decimated the extensive forested willow areas referred to on page 19. With recent drought years and the new hydrologic regime, willow forest is successfully regenerating around the perimeter of the wetlands.

Water Quality and Landfill

- From 1991-1996 a cover was constructed over all of the buried waste at the landfill, effectively preventing further intrusion of rainwater into the waste, and thereby preventing further leaching of contaminants. The cover significantly reduced leachate seepage around the landfill perimeter.
- Based on measurements of the elevation of liquid in the landfill, the so-called "leachate mound" has decreased in elevation at a very slow rate since the landfill cover was completed. This is the result of the constrained movement of surrounding groundwater due to low-permeability soil under and around the waste.
- A remedial investigation of the landfill is scheduled to begin during the summer of 2005, and will involve an in-depth evaluation of groundwater and surface water movement and quality in the vicinity of the landfill, and throughout much of the SBW.
- The City of Portland's combined sewer overflow (CSO) project that began in 1991 has significantly reduced CSO by keeping stormwater runoff out of the combined sewer system. By 2000, the City had completed the Columbia Slough Big Pipe project that collects the sewage and stormwater that once overflowed into the Columbia Slough during rainfall.

Fish and Wildlife

- At least 117 species of birds have been documented at Smith-Bybee. The site is used by a wide variety of birds, including waterfowl (wintering and nesting), neotropical migrants (nesting), raptors (year-round and migratory species), shorebirds (migrating and nesting) and grassland birds (wintering, migrating and nesting). ESA-listed birds that use Smith-Bybee include bald eagles (wintering, nesting, roosting) and peregrine falcons (feeding). Scavenging birds are not abundant on the landfill since closure was completed.

- Fish use of Smith-Bybee is very different from the scenario documented in the NRMP. Warm-water fishes and carp are less important components of the ecosystem now that the wetlands are drawn down annually. The fishway in the new water control structure ensures that juvenile ESA-listed salmonids can access and use the wetlands as feeding, resting and refuge habitat.
- Western painted turtles were not mentioned in the NRMP, yet Smith-Bybee has one of only two remaining significant populations in the state of Oregon. Management of several areas within the site is aimed at optimizing habitat conditions for turtles.
- A few notable species can be added to the list of macroinvertebrates for the site. Freshwater mussels are known to inhabit Smith-Bybee; one of these (California floater) is a Species of Concern (i.e., potential ESA candidate). The Oregon floater and the rare winged floater also occur in the wetlands.

Selected Results From Studies and Reports

Shu-Guang Li, and Thomas Lowry, 1995. St. Johns Landfill Groundwater Modeling System: Predicting Leachate Mounding, Fluxes and Offsite Migration, Technical Report EWR-9-95, Portland State University. Prepared for Metro.

- If the lakes were reconnected to tidal flow, groundwater upwelling to Bybee Lake would occur, however, the strength of water exchange between the lake and aquifer would be very weak.
- Lake levels do not affect groundwater movement in the lower aquifer around St. Johns Landfill. Rather, it is a function of the Willamette and Columbia River levels on groundwater regional flow. If contaminants were to move in the lower aquifer from the landfill toward Bybee Lake, it would be at a very slow mean regional flow, by molecular diffusion.
- Movement of contaminants from the solid waste into surrounding aquifers is significantly inhibited by low permeability soil under and around the waste.

Scott Wells, 1995. Hydraulic and Water Quality Modeling of Opening Smith and Bybee Lakes to the Lower Columbia Slough, Technical Report EWR-6-95, Portland State University. Prepared for Metro.

- If the lakes were reconnected to tidal flow Willamette River water would be the source of nearly all water entering the wetlands through the North Slough.
- Any effects of contaminants from the landfill in the North Slough would be reduced because of high dilution -- on the order of 1000.

Hart Crowser, 2004. St. Johns Landfill Annual Environmental Monitoring Report 2003

- Groundwater flow rates and direction around SBW are influenced by complex changes in the elevation of the overbank silt aquifer and pressure in the underlying sand and gravel aquifer system. Factors that influence groundwater flow rates and direction include precipitation events and elevation changes of the Willamette and Columbia rivers.

Hart Crowser, 2005. St. Johns Landfill Remedial Investigation Work Plan

- In 1992 Metro installed a series of nested piezometers at the landfill and in the surrounding wetlands. They are used to measure groundwater elevation from the bottom of the landfill to the top of the gravel aquifer.
- Vertical and horizontal movement of groundwater is variable in direction and slow around the landfill and vicinity, and is largely a function of elevation changes of the Willamette and Columbia rivers. This is demonstrated by the correspondence between groundwater elevations (as measured using piezometers) and elevations of the rivers.

Section 1: Draft Revisions

GOAL STATEMENT

The goal of the Management Plan is to protect and manage the Smith and Bybee Lakes area as an environmental and recreational resource for the Portland region. The lakes will be preserved as historical remnants of the Columbia River riparian and wetlands system. They will be maintained and enhanced, to the extent possible, in a manner that is faithful to their original natural condition. Only those recreational uses that are compatible with environmental objectives of the Management Plan will be encouraged.

Objectives

1. Control water level in order to manage the natural areas' environmental system, including manipulation to mimic historic hydrology, control invasive species and support native plant communities.
2. Provide for and maintain habitat diversity representative of lower Columbia River floodplain wetlands and other habitats that historically occurred in the area.
3. Maintain and enhance water quality in the natural area.
4. Implement a monitoring program to assure early detection of potential environmental problems, and to quantify management programs.
5. Provide access to Smith and Bybee natural area which supports appropriate types and levels of recreation.
6. Encourage appropriate types and levels of recreational activities which are compatible with environmental objectives.
7. Incorporate Smith and Bybee Lakes into local and regional greenspace, wildlife habitat and trail systems.
8. Develop upland areas in a manner which is compatible with the preservation of the wetlands and use of the lakes for passive recreation.
9. Provide opportunities for wetland and environmental system research and education.
10. Develop appropriate funding strategies to implement environmental and recreational improvement projects.
11. Provide opportunities for compensation to private land owners for public use of their property.
12. Provide an organizational structure to manage all natural area properties as a single management unit to ensure consistent implementation of the Management Plan.
13. Integrate management of the natural area with management of the St. Johns Landfill property.
14. Minimize and mitigate unwanted impacts originating outside the natural area such as light and noise.

(mark-up version)

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3. Maintain and enhance water quality in the lakes natural area.
4. Implement a monitoring program to assure early detection of potential environmental problems, and to quantify management programs.
5. Provide access to Smith and Bybee Lakes natural area which supports appropriate types and levels of recreation.
6. Encourage appropriate types and levels of recreational activities which are compatible with environmental objectives.
7. Incorporate Smith and Bybee Lakes into local and regional greenspace, wildlife habitat and trail systems ~~the Metropolitan Wildlife System Project, Metro's Regional Natural Areas Program, and the 40 Mile Loop recreational trail system.~~
8. Develop upland areas in a manner which is compatible with the preservation of the wetlands and use of the lakes for passive recreation.
9. Provide opportunities for wetland and environmental system research and education.
10. Develop appropriate funding strategies to implement environmental and recreational improvement projects.
11. Provide opportunities for compensation to private land owners for public use of their property.
12. Provide an organizational structure to manage all lakes natural areas properties as a single management unit to ensure consistent implementation of the Management Plan.
13. Integrate management of the lakes natural area with management of the St. Johns Landfill property ~~when landfilling activities are terminated.~~
14. Minimize and mitigate unwanted impacts originating outside the natural area such as light and noise.

4-26-05

Section 2: Items Held for Discussion with Other Portions of NRMP

1. Potential new policy or goal sentence: "Priority will be given to wildlife and habitats over education and recreation values."
2. Broaden the financial base of Smith & Bybee from the trust fund. Develop additional funding resources to meet the needs of Smith & Bybee Lakes. This could be done in a policy statement or as an objective.

4-26-05

Section 3: Management Tasks and/or Recommendations

1. Formalize a memorandum of understanding (MOU) between specific property owners regarding development/management.

4-26-05