



METRO

Smith & Bybee Lakes Management Committee Meeting Notes

Metro Regional Center
Room 370A
Tuesday, April 23, 1996
5:30 PM

In Attendance:

Paul Vandenberg	Metro - Regional Environmental Management
Tim VanVormer	Port of Portland
Joe Pesek	Oregon Dept. of Fish & Wildlife
Mary Abrams	City of Portland, Bureau of Environmental Services
Anne McLoughlin	Friends of Smith & Bybee Lakes
Pat Lee	Metro - Regional Parks & Greenspaces Dept.
Neil Schulman	Metro - Regional Parks & Greenspaces Dept.
Rich Gebhart	Friends of Smith & Bybee Lakes
Gerald H. Wright	Fuel Processors
Eve Vogel	Portland Audubon Society
Jeffrey A. Kee	Friends of Smith & Bybee Lakes
Troy Clark	Friends of Smith & Bybee Lakes
Mikey Jones	Interested Citizen
Jim Sjulian	City of Portland, Bureau of Parks & Recreation
Jim Morgan	Metro - Regional Parks & Greenspaces Dept.
Patricia Sullivan	Metro - Regional Parks & Greenspaces Dept.

Eve Vogel opened the meeting with a reminder that today's agenda would involve making one of the bigger decisions that the committee has been called upon to make. She proposed a set timeline, that discussions be very specific and that the committee begin with the overview and background information Jim Morgan put together and handed out at the last meeting. It is important, Eve pointed out, that all members start with the same basic information.

It was decided the agenda would be divided up as follows:

1. Review of overview handout and background information
Questions and clarifications
2. Technical Advisory Committee recommendations and rationale
Questions and clarifications
3. Discussion and comments
4. Vote

Joe Pesek pointed out that the Meeting Agenda for April 23rd, mailed out to members the week prior, did not include an action item, i.e., taking a vote on a recommended option. It was requested that the Agenda be amended to reflect the action item: "Vote". An **amended Agenda** will be mailed to members with the April 23rd Meeting Notes.

Mikey Jones requested that a record be kept as to who votes, how they vote and what organization they represent. He believed that a quorum of voting members was not present.

Jim Morgan preceded his overview with an announcement of a job posting which will be open to the public on Thursday, April 25th. It is for a Wildlife Management position at Smith & Bybee Lakes. He also handed out copies of the Meeting Notes from the Technical Advisory Committee meeting held Monday, April 22nd. Although Management Committee members were provided excerpts from it, the complete draft form of the "Diagnostic and Feasibility Study of Smith & Bybee Lakes, April, 1996" is available should members require it. It is a compilation of all the studies on the lakes area that have been done over the last few years and includes a reference to historical studies. As comments and suggestions on the document are still being forwarded to him, he would prefer members wait for the edited and polished version to be distributed. It was brought to his attention at the Technical Advisory Committee (TAC) meeting that one issue was not referred to specifically - that of storm water, although it was imbedded in other parts of the document, such as the sediment survey. As it is a significant topic which merits attention, Jim discussed it in his overview.

As was mentioned in the summary, in **June of 1995**, the **TAC made a recommendation**, for maximum enhancement of all the values discussed in the handout, to **mimic water levels and fluctuations** observed currently in the Columbia River at the confluence with the Willamette. There are a number of water management options that could produce such a result. All the studies and the summary presented to the Technical Advisory Committee and the Management Committee lead to the common recommendation to restore to historic conditions. This includes studies by DEQ, USGS, Fishman Environmental, fisheries survey, water quality tracking, the St. Johns Landfill ground water modeling, biota studies, hydrodynamic water quality modeling as well as auxiliary information, a risk assessment provided by Metro Regional Environmental Management.

Proceeding through the relevant issues, Jim brought up **water quality**. The water in the lakes is generally eutrophic and the rate of eutrophism has been increasing at a high rate. This is due to internal loading and recycling of nutrients. This is indicative of poor water quality. [Note: Eutrophic: condition of a lake or pond rich in nutrients which cause excessive growth of aquatic plants, esp. algae. The resulting bacteria consume nearly all the oxygen, esp. during warm weather, affecting fish.] Any option to improve water quality should allow either the water within the lakes to be replaced periodically with lower nutrient water or the water levels in the lakes to fall to expose the sediments, which would interfere with the recycling of nutrients.

Jim proceeded to review the other **issues affected by opening the lakes** including sediments, landfill impact and recreational use. Based on biological surveys in the area, the impact of turning the tidal marsh into a reservoir has reduced the **species diversity of vegetation**. Reed canarygrass was discussed as prime habitat for Oregon's **mosquitoes**. As long as there is the ability to control the canarygrass, Multnomah County Vector concerns are met.

In terms of **fisheries**, during most years, there is a least one period when the water levels are high enough to overtop the dikes and fish are able to move in and out of the systems; most of the year, however, the lakes are separate. Fisheries are dominated by carp, which comprises 90% of the biomass.

According to Jim, **avian botulism** was one of the reasons the dam was originally put in years ago. As the disease occurs during periods of low water levels, it was a measure taken to give access to birds affected by the disease. The idea was to keep water levels higher and lower the occurrences of exposed mud flats to decrease the probability of an outbreak, as well as providing access to dead birds. The possibility can never be eliminated, but it can be minimized by having a larger inundated area. It was a concern of the TAC that the management option they recommend be able to deal with this potentially serious problem. In response to a request for clarification, there is no clear answer as to how much water needs to be pumped at how fast a rate to be effective. It depends on many factors including how many birds are affected and what the initial water level is. In answer to the cost of pumping, Jim will obtain figures based on a worst case scenario. Pumping is a feasible approach; the question is cost and who will bear it.

The committee moved on to discussion of **the two TAC recommendations**. Jim explained that the first was a **minimum option- (Option III)** to remove the existing earthen dam and structure, replace it with an open structure that will allow unobstructed flow in and out of the lakes through the North Slough on a daily and seasonal basis, while having the ability to retain water in the lakes and the ability to pump water from the Columbia River into the lakes.

Option IV, the TAC referred to as its **"Cadillac" option**. As described in Jim's excerpt from the draft Diagnostic/Feasibility Study, this plan "provides the most opportunities for exercising water management options. . . . It includes removal of the dam, replacing it with an open structure, having the ability to pump, separating the western arm of Bybee Lake with an adjustable weir, and directly connecting the western arm of Bybee Lake with the Columbia Slough with an adjustable weir and tide gate."

Questions were then put to Jim.

Who will make the choices? *This committee.*

Any guess on level of costs? *Recommendations would involve a fairly low tech system, but access will be needed - a trail or road to the structure.*

If the committee exercises the minimum management recommendation of the TAC, will the area between the sloughs disappear? *It is disappearing now. This is part of the natural process of tidal sloughs.*

Were these the committee's only two recommendations? *Yes, it chose a minimum option, in which all of the components are recommended, and an ultimate option, the parts of which exceed Option III, would be desirable but not mandatory.*

Discussion and comments followed. Joe emphasized the importance of the phrase "ability to pump" as differentiated from "to pump". Jeff added that monitoring the movement of sediments and water quality is vital. He preferred the committee take a slower approach in its decision-making, considering all that must be evaluated. Addressing concerns of a plan component which would monitor water quality, Mary reminded the committee that the system is a eutrophied one, not a pristine one. Routine monitoring of the lakes area may be coupled with

the monitoring in the Columbia Slough system conducted by Portland BES through some form of intergovernmental agreement which might be arranged with the city. Eve stated she is convinced that changing the hydrology is key to any plan chosen, that there is not a great difference in the quality of water in the lakes and in the slough, and that the change in hydrology should be more of a benefit than a detriment. In addition, she noted the advantage of putting in a structure that has the option of closure.

Mary Abrams moved that the committee "give instructions to Jim (Morgan) to cost out, bring it next time for discussion and consider a recommendation on whether to go with the "Cadillac" or the minimum option." Jeff Kee seconded the motion. The motion passed six votes in favor and no votes in opposition.

In response to Mikey Jones' request that the record reflect the vote in detail, it is reported below:

Voting Committee Member	Organization	Vote
Joe Pesek	Oregon Dept. of Fish & Wildlife	Yes
Jeff Kee	Friends of Smith & Bybee Lakes	Yes
Jim Sjulín	City of Portland, Bureau of Parks & Recreation	Yes
Mary Abrams	City of Portland, Bureau of Environmental Services	Yes
Pat Lee	Metro, Regional Parks & Greenspaces	Yes
Tim Van Wormer	Port of Portland	Yes

The necessity of an additional meeting for the Management Committee being obvious, it was scheduled for Tuesday, May 21st.

Recommendations to Smith and Bybee Lakes Management Committee for Phased Approach to Habitat Enhancement

submitted by Jim Morgan 6/25/96

Smith and Bybee Lakes Management Committee, with the support of the Technical Advisory Committee, has endorsed management options for the enhancement of aquatic habitat in the lakes area. Two options were endorsed: one option is considered the minimum action needed to effectively control and enhance the hydrology necessary to achieve management objectives, and the second option is considered the maximum practical approach for achieving management objectives.

Minimum Option

**Removal of Existing Dam and Control Structure
Construction of Open Structure with Ability to Retain Water
Ability to Augment Water by Pumping**

Maximum Practical Option

**Removal of Existing Dam and Control Structure
Construction of Open Structure with Ability to Retain Water
Ability to Augment Water by Pumping
Separate Western Arm of Bybee Lake with an Adjustable Weir
Connect Western Arm of Bybee Lake Directly with the Columbia Slough**

Recommended Phased Approach to Implementation

Phase I

Implementation of the minimum option can proceed while additional information is gathered for determining environmental impacts and costs of implementing the remaining items in the maximum practical option. Cost estimates are for capital only.

1. Removal of existing earthen dam could be done at the time of construction of the replacement structure since the necessary equipment will be available and the removed material will be useful in construction of the new structure. The existing structure may have salvage value that would offset the cost of removal. Removal should occur at the same time of construction of the replacement structure.
Cost: May be cost neutral as part of constructing new structure.
2. An existing design used by Ducks Unlimited appears to an appropriate design for allowing unobstructed flow while having the ability to retain water. This simple structure is relatively inexpensive, with engineering and project management costs at a minimum due to existing plans and engineering experience in implementation.
Cost: Estimated \$ 287,500

3. Three options are available for providing the ability to pump water into the lakes at any time of year: pump from the Columbia River, pump from groundwater wells, or pump from the Columbia Slough. A permit exist for the first source while no permits exist for the latter two sources.

Cost from Columbia River:	\$700,000
from groundwater wells:	\$2,000,000
from Columbia Slough:	\$15,000 - 25,000

4. Implement monitoring plan to evaluate impact of opening lakes to direct influence of river hydrology, before and after construction of the replacement structure. Acquire additional information, including lake bathymetric data, impact of fill and access necessary for construction of adjustable weir separating the western arm of Bybee Lake, and model flows between proposed connection between Bybee western arm and the Columbia Slough.

Phase II

Phase II would include exercising the remaining portions in the maximum practical option: separating the western arm of Bybee Lake and providing a direct connection with the western arm to the Columbia slough.. The remaining activities in the maximum practical option may not be practical without the implementation of the minimum option. This data will be gathered in the implementation of Phase I, as discussed above. We would proceed with Phase II only after we learn from Phase I.