Smith and Bybee Lakes Management Committee
Subcommittee Meeting on the Water Control Structure- Summary Notes
August 16, 2000 Metro Regional Center Room 270 5:30pm to 7:00pm

In Attendance:

- Jim Morgan, Metro Regional Parks and Greenspaces
 Elaine Stewart, Metro Regional Parks and Greenspaces
 Dennis O'Neil, Metro Regional Environmental Management, St. John's Landfill
- Nancy Hendrickson, City of Portland, Bureau of Environmental Services
 Denise Rennis, Port of Portland, Natural Resources Manager
 Bill Egan, Oregon Bass and Panfish Club, sportsman
 Frank Opila, Friends of Smith and Bybee Lakes
- Troy Clark, Portland Audubon Society, meeting facilitator
 Denis O'Brien, Metro Regional Parks and Greenspaces, meeting recorder
- indicates Smith and Bybee Lakes Management Committee Member

Meeting opened with introductions and Troy Clark volunteering to facilitate the meeting.

The task of this subcommittee was to determine whether new information exists that should cause the management committee to reverse its 1996 recommendation.

Elaine Stewart distributed an information packet to attendees. This packet included a goal statement from the Natural Resource Management Plan, results of scientific research conducted at the lakes, technical advisory committee notes recommending replacement of the present structure, and notes from previous management committee meetings approving the project. Elaine continued presenting an overview of the current situation and how the existing recommendation was reached.

In 1982, an earthen dam was placed at the southeast corner of Bybee Lake where the North Slough of the Columbia Slough connects to the lakes system. This structure was constructed in reaction to an outbreak of avian botulism in the waterfowl population inhabiting the lower Columbia River system. By impounding the wetlands complex, the USFWS hoped to curb the spread of the disease and initiate dispersal of the waterfowl population, thus reducing mortality. The result of this action was the creation of a static lake system. The disruption of the natural hydrology effectively prevented any tidal influence and water exchange from the lower Columbia and Willamette Rivers via the Columbia Slough.

Elaine emphasized that restoration is the reinstatement of the driving ecological processes within the environment. This statement is echoed in a position paper from the Society of Wetland Scientists that was provided in the information packet for members to read. At Smith and Bybee Lakes, a driving ecological process is hydrology. Therefore, any successful restoration should include techniques that return the area to its historical hydrological regime or at least provide a method for mimicking the hydrological processes that created, shaped, and nurtured the environment of the lower Columbia River flood plain.

The present control structure allows water to drain from the lakes until the level reaches the 5.5 foot bottom arc of the spill pipe culvert, which has a flap gate placed on the North Slough end of the pipe. The flap gate was installed to prevent North Slough water from entering the lakes. River levels have to exceed 13.5 feet mean sea level in order to top the levees and enter the lakes along the south perimeter of Bybee Lake. Modeling of the lakes system has shown that groundwater intrusion does not play a significant role in the hydrology at the lakes. The water the lakes store is mostly a result of precipitation, with a portion of the volume entering the system during high water events when the North Slough tops the levees along the south perimeter of Bybee Lake. In the dry season, the majority of the water volume is lost due to

evaporation. With the current control structure in place, seasonal and tidal fluctuations are largely absent.

Bill Egan recalled estimates of 1200 to 2000 duck fatalities a season at the lakes during the late 1970's avian botulism outbreaks at the lakes. Elaine directed members to a letter from the USFWS in their packet, stating that loss of habitat is a greater concern than avian botulism, and outbreaks in the Pacific Northwest are relatively minor when compared to other regions.

Members reviewed recommendations from the 1995 Technical Advisory Committee (TAC). The committee membership included natural resource managers and scientists from local, state, and federal resource agencies, as well as the private sector. The first recommendation made by the TAC was to replace the existing water control structure.

Historically, the lakes system has been an area of slow sediment deposition.

Oregon DEQ 303(d) of the Clean Water Act lists Smith and Bybee Lakes of non-compliance under the parameters of pH, Habitat Modification, Flow Modification, Aquatic weeds and algae, and Biological Criteria. Elaine noted that all of the above, except pH, are directly linked to the 1982 impoundment of the lakes.

Denise and Nancy both expressed concern over effects to the current biota and the potential for allowing invasive plants to colonize throughout the wildlife area. Denise asked for information on any research done to identify future habitat changes and responses by specific wildlife species to those changes. Elaine outlined the management strategy for controlling reed canarygrass and the habitat components that will be restored for wildlife such as shorebirds, neotropical migrant avifauna, and migrating juvenile salmonids.

Troy asked Bill Egan for his view on how warm water fishes would respond to the proposed action and resultant tidal marsh effect. Bill said that some of the fishes would move with the water into the river, but that some would likely stay in the deeper portions of the lakes and could die.

Bill delivered an idea to construct a pumping system to Smith Lake from the sewage treatment plant on Columbia Boulevard, thus providing a continual water supply to the lakes. Bill stressed his concern over having a pumping device in place prior to dam removal.

Jim Morgan stated that the recommendations made by the management committee in 1996 are an attempt to balance the resource concerns for a variety of interest groups.

Frank wondered if anything could be learned from other locales, such as Oaks Bottom, Sturgeon Lake, and other places that have similar water control concerns and techniques.

Elaine mentioned the need for providing off-channel habitat for juvenile Chinook salmon and the devastation of aquatic habitat due to the abundance of common carp in the lakes.

Toward the close of the meeting, some potential issues were raised:

Provide for a steady source of water (pumping available)

Concern for western painted turtle population

Effects of allowing water exchange from slough to lakes and vice versa

Other designs for controlling water

Troy asked, "What are the time lines for acquiring permits, design, construction, etc.?"

Meeting was adjourned shortly after 7 pm pst.