

IX. Conclusion

Currently Lake of the Lilies is extremely shallow and on the verge of drying out entirely. During summer periods of limited precipitation, areas of the lake bottom become exposed. The dredging of Lake of the Lilies would have a threefold benefit. It would increase the stormwater storage capacity of the lake which would result in better flood control during storm events, increase wildlife habitat, and ensure continued aesthetic beauty of a lake environment for the residents of the Borough of Point Pleasant Beach and visitors alike. For the above stated reasons, the conclusion of this study is that the dredging of Lake of the Lilies is necessary.

Option A was selected for several reasons:

- Eliminates problem of finding a staging, dewatering and final disposal site, which are the most troublesome consequences of a dredging project.
- Limits additional required sediment sampling and testing since material will remain within same ecosystem.
- Creates additional deep water habitat for freshwater fish species.
- Creates additional high quality upland area, which will be designated a wildlife sanctuary.



It is estimated that the dewatering operation would be limited to 200 cubic yards/day. It would take 720 20-cubic yard truck loads to remove all the dewatered material from the lake to the landfill. At an estimated 8 trucks/day, it would take 90 days to complete.

The dewatering/trucking activities would impact additional residential properties around the lake and along the trucking routes through added air and noise pollution.

- Estimated time to complete:
 - 90 construction days for dredging and final disposal = 18 weeks
- Estimated cost to dredge:

\$54.55/cy or Total \$981,834.00

A cost estimate for this option has been included at Attachment 6.

C. **No Action**

The no action alternative is to simply leave the lake as it currently exists today. This, of course, would not result in any benefits to the local water quality and wildlife habitat, but also would have no associated costs or environmental impacts. It is anticipated that at some point in the future, the dredging of Lake of the Lilies would eventually become necessary to prevent total infill, and this dredging will only become more expensive as time goes on.



the area designated on the EPA maps, it is considered to be an EPA Priority Wetlands. Wetlands designated as EPA Priority Wetlands have one (1) or more of the following criteria:

- a.) Unique habitat for fauna or flora;
- b.) Unusual or regionally rare wetland types;
- c.) Ecologically important and under threat of development;
- d.) Important to surface water systems;
- e.) Critical to protect water supplies; and
- f.) Valuable for and provide flood storage capacity.

An on-site wetland delineation determined that the majority of the perimeter of Lake of the Lilies is fringed by an area of freshwater wetlands. As depicted by the wetland line on the pre-dredge survey map (Attachment 5), this wetland area ranges from non-existent to a maximum of approximately 50' wide on Lot 8. Since the entire water area of Lake of the Lilies is less than four (4) feet in depth, it is also considered a wetland area and regulated by the NJDEP.

According to the EPA Priority Wetlands Map, the project site does not fall within a region of EPA Priority Wetlands, therefore, the wetlands which were mapped on the site are not classified as EPA Priority Wetlands.

H. Hydrology

The Ocean County Soil Survey does not include discussion of hydrologic traits such as the depth to high water table for the soil types existing at the project site (PN, PO, UP) since they are not

