Lake Luxembourg Conservation Pool Project Frequently Asked Questions

1. What is happening in the lake?
   The project area is confined to the Conservation Pool (17-acre area upstream of the Woodbourne Rd crossing) and a portion of an adjacent agricultural field owned by the County. Key components of the project are:
   - The removal of approximately 15,000 cubic yards of sediment from the Conservation Pool
   - Regrading portions of the pool to restore original function and facilitate future maintenance
   - Seven (7) acres of wetland vegetation will be planted to provide cleaner water and enhance wildlife habitat as designed in conjunction with the PA Fish and Boat Commission and the U.S. Fish and Wildlife Service.
   - Wooden structures will be installed within the pool to provide resting and feeding areas that will create and improve wildlife habitat and viewing opportunities

2. Why is this project being done?
   Constructed in 1977, the Conservation Pool portion of the lake was expected to capture sediment to maintain water quality in Lake Luxembourg for a century. However, with heavy development pressure locally in the 1980s and 1990s, the Conservation Pool reached capacity by 1990. Now, each storm event pushes sediment out of the pool into the main lake—reducing water quality. Land use has stabilized, and upstream water quality projects have been completed, so the stage has been set for this project to restore the sediment storage capacity of the pool. Upon completion, the lifespan of the dam and reservoir will have been extended, and the community asset that is Lake Luxembourg maintained.

   Sediment removal within the Conservation Pool achieves several goals:
   1. Increases the capacity of the pool to store future sediment deposition
   2. Increases the depth of the water which decreases the capacity for algal growth
   3. Provides an access point for future conservation pool/wetland maintenance.

   Planting pool margins with wetland vegetation similarly achieves several goals:
   1. Wetland plants encourage sediment deposition in the pool, not in the Lake body
   2. Rooted, emergent plants will use Nitrogen and Phosphorus in the pool, reducing the amount of nutrient pollution in the lake.
   3. Emergent wetlands provide habitat for a diversity of wildlife, including rare and protected species.

   Realization of these goals will improve water quality throughout the lake thereby improving recreational enjoyment and aesthetics.

3. How is this project managed and funded?
   The Bucks County Conservation District (BCCD) has been working with watershed stakeholders, most notably the County Department of Parks and Recreation, Pennsylvania Department of Environmental Protection and US Environmental Protection Agency, over the past 25 years to
develop watershed management plans to guide the process of implementing practices to improve water quality in Lake Luxembourg. This project to modify and enhance the 17-acre of Lake Luxembourg Conservation Pool has been identified in multiple watershed plans as a critical component to the overall restoration of Lake Luxembourg. The BCCD has secured over $1.3 million dollars (a mixture of federal and state funding), which is partially matched by a monetary commitment of the County to complete this project. While the project is being implemented on County property, the BCCD was well-prepared to take on the management of this project given their multi-decade experience implementing water quality improvement projects in this watershed and throughout the County.

4. Why does the lake need to be lowered for this project? How will lowering the water level impact wildlife and lake users?

The Conservation Pool must be dewatered to remove accumulated sediment safely and efficiently. Since Woodbourne Rd restricts some water flow between the Conservation Pool and main portion of the lake, the main lake level need only be lowered about 3.5ft. Lowering the lake to this depth will mostly empty the conservation pool, with pumps and other mechanical means removing the rest, allowing for restoration work in the conservation pool. The partial dewatering of the lake itself will maintain open water areas throughout the construction window for recreational, fish, and wildlife use. Near shoreline areas will have exposed sediment from August through December 2022. This will complicate access for recreational access. The attached map depicts the estimated location of the water’s edge during lake drawdown.

5. How long will the lake level be lowered?

Lake lowering will start in mid-July 2022, to accommodate heavy machinery access to the Conservation Pool in August 2022. The lower water level will be maintained through October 2022, possibly into December. During this time, sediment removal, shoreline grading, and stabilization will take place. The lake will return to normal water level in January 2023.

6. Why are you completing this work during the peak of the recreational season?

Core Creek Park is fortunate to be home to a pair of nesting bald eagles; however, because the eagle nest is very close to the project activities the US Fish and Wildlife Service requires that major construction activity be limited to August 1 through December 31 to avoid negative effects on the birds during their nesting season (annually January 1 through July 31).

7. How will the project affect recreational use?

The current plan is to allow for recreational boating and fishing on the lake so long as it remains safe. Core Creek Boat Rental will remain open. Adjustments may be required as the project gets underway and as conditions change.
8. What is the anticipated schedule of major project activities?

The project started in December 2021 with the installation of a barrier to nesting red belly turtles. Major project activities are broken into 4 key phases and estimated timeframes are shown as color bars in the table below:

<table>
<thead>
<tr>
<th>Phase 1: Turtle barrier</th>
<th>December 2021</th>
<th>January 2022</th>
<th>February 2022</th>
<th>March 2022</th>
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<td>Phase 2: Dewater &amp; grade CP¹</td>
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<td>Phase 3: Restore Ag field²</td>
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<td>Phase 4: CP¹ wetland planting</td>
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Notes:
1) CP = Conservation Pool
2) Agricultural field restoration activities allowed within bald eagle nesting window per US Fish and Wildlife Service because the eagles are acclimated to agricultural activities on site