## **Barrowford Memorial Park Lake Improvements:**

**Background:** The park lake over time has become silted up through a variety of reasons and the depth has been drastically reduced. Pendle Borough Council and the Friends of the Park group have been discussing solutions for several years but the best solution and funding has been a concern.

Several solutions have been suggested some of which involved draining the lake which due to the nature of its construction should be avoided as a prolonged spell without the weight of water could cause severe deterioration of the sides and puddled clay bottom. Recently Pendle sent silt samples of for analysis to see if it was feasible to simply suck out the silt into a tanker and spread on agricultural land. The results showed that the silt would be categorised as contaminated waste and not suitable for use on agricultural land but could be used on non-agricultural land.

The silt being classed as contaminated waste would have to be disposed of at an appropriate waste site, which would increase the disposal cost and bearing these factors in mind the Friends Group came up with an alternative solution retaining the silt on site and causing the least disruption to the park for users.

**Proposal:** The land rear to the lake creates a natural amphitheatre in the steep banking that surrounds that end at the bottom of this banking is a small flat area leading to a man-made wetland pond and a further dry area leading to the back of the lake.

A possible solution which could be carried out in phases could be implemented.

- 1. Create a bund from gabions to the rear of the wetland area from an appropriate point to the north of the banking to an appropriate point south taking in as much of the flat area to the rear of the wetland pond as is practicable. The bund should be lined with an appropriate permeable membrane; a temporary drain should be dug to the front of the bund and linked back into either wetland pond or lake. The water silt mixture could be pumped directly from the back half of the lake to behind the bund and left to drain/settle/dry with the water finding its way back into the lake until the desired level is achieved. (Appendix 1)
- 2. The rear bund can be accessed through the widest access points and as the bund is on dry land it can be safely built at a pace that suits the council
- 3. Pumping and drying sludge to a solid can be a time consuming business which would involve filling the bund with the water sludge mixture and allowing the water to drain off and the silt to harden this process would need repeating numerous times until the bund was full of solid matter. The locating of this main bund to the rear of the wetland area would reduce the impact of the work on the rest of the park and also reduce the security fencing needed.
- 4. The gabion bund would help stabilise the banking through this area whilst the stones in the cages will provide habitat for creatures such as newts, toads and other insects.
- 5. The raising of the overflow level could increase the water level by 15-20cm.

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At the feasibility meeting a further suggested gabion bund within the rear of the lake was unnecessary as adequate storage for the silt could be created behind the bund. The work could include improvements to the footpaths through the wetland area and the creation of both a wetland margins to the lake.

**The Scheme and Costings:** The design, scale and cost of the work is being carried out by Pendle's officers and when the scheme is costed funding will be sought from several sources including both The Lifestyle Event and Barrowford Show Ltd., and will involve applications for grant funding possibly from the Lottery and other funding sources.

