



Belfast City Council

Report to:	Parks and Leisure Committee
Subject:	Reservoir Supervision and Maintenance
Date:	10 November 2011
Reporting Officer:	Rose Crozier, Assistant Director of Parks and Leisure Department
Contact Officer:	Damien Lavery, Landscape Planning and Development Unit, Parks and Leisure Department.

1	Relevant Background Information
	<p>In February 2011 there was a minor overflow of water from the upper pond in the Waterworks. In investigating the underlying reasons for this, discussions were held with the Rivers Agency. During these discussions they indicated that in Great Britain duties are placed on owners of reservoirs and water retaining structures under the Reservoirs Act 1975 (as amended) to have required inspections carried out by 'qualified' reservoir panel engineers to ensure that necessary measures are taken to ensure the integrity of water retaining structures.</p> <p>The Act is considered as established good practice in the supervision and maintenance of reservoirs. The term 'enforcement authority' as used within the Act, being the body which has legal powers to ensure action is taken to carry out all measures recommended in the interests of safety is not currently applicable in Northern Ireland. However, there is still an onus on the reservoir owner to put into practice any recommendations made in that they are ensuring best practice.</p> <p>Northern Ireland is in the process of developing a separate Reservoirs Bill in a similar manner to the "Reservoirs (Scotland) Act 2011". The development of the proposed Bill is at consultation stage involving representatives of various organisations including local district councils, NI Water, NI Environment Agency, the Ulster Farmers Union, the Ulster Angling Federation and the Institution of Civil Engineers (ICE). The proposed legislation is scheduled to be introduced by 2013 and will ensure that reservoirs are managed and operated to minimise the risk of failure thereby protecting human life, the environment, cultural heritage and economic activity from flooding.</p>

	<p>Three water retaining structures owned by the council have been identified as:</p> <ul style="list-style-type: none"> • Waterworks Upper Pond and Lower Pond dam structures; • Boodles Dam at Ligoniel Park; and • Half Moon Lake, off Suffolk Road. <p>The council has been pro-active in commissioning a survey for the first of these structures, the Waterworks Upper Pond and Lower Ponds.. The inspection was carried out by URS Scott Wilson, Belfast and the report was produced in July 2011.</p> <p>The report was followed by recommendations from URS Scott Wilson, Belfast regarding the implementation of a formal inspection and reporting system for the Waterworks Upper Pond and Lower Pond structures.</p> <p>A number of recommendations for remedial measures were identified by their report and steps are currently being taken to implement these recommendations.</p>
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2	Key Issues
	<p>There is no current framework for the regular formal inspection and provision of condition surveys for any water retaining structures within council parks estates.</p> <p>Failure to undertake regular formal inspections may mean that repairs which otherwise would be minor, may require major work, resulting in significant cost.</p> <p>The council needs to implement a formal inspection and reporting system for its water retaining structures, in line with current best practice and forthcoming legislation.</p> <p>It is anticipated that once inspection reports for all sites are completed a plan for remedial works will be put in place.</p>

3	Resource Implications
	<p><u>Finance</u> In order to undertake a robust inspection process, independent inspections will be required at each of the three dam sites identified.</p> <p>A previous inspection of the Waterworks Upper Pond and Lower Pond dams cost £7,835.00 excluding VAT. It is anticipated that inspections of Boodles Dam, Ligoniel Park and Half Moon lake may have similar costs.</p> <p><u>Human Resources</u> Staff from the Landscape Planning and Development Unit within the Parks and Leisure Department will be required to procure, engage and liaise with external consultants regarding inspection of the three dam structures city wide.</p>

	<p>Inspection and survey reports will be carried out by external consultants. The system of inspections may make provision for the regular visual inspections of the dam structure by Landscape Planning and Development Unit staff of the Parks and Leisure Department. This will be incorporated alongside other existing inspections therefore incurring minimal resource issues.</p>
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4	Equality and Good Relations Implications
	None.

5	Recommendations
	<p>Members are asked to agree to the establishment of an inspection process in line with current best practice for all appropriate water retaining structures.</p>

6	Decision Tracking
	<p>Committee decision to be implemented by the Assistant Director of Parks and Leisure.</p>

7	Key to Abbreviations
	None.

8	Documents Attached
	None.