# Report to the Cabinet

Report reference: C-026-2014/15
Date of meeting: 6 October 2014



Portfolio: Environment

Subject: Survey of the River Roding and associated bridges in the Roding

**Valley Recreational Area** 

Responsible Officer: Qasim (Kim) Durrani (01992 564055).

Democratic Services: Gary Woodhall (01992 564470).

#### **Recommendations/Decisions Required:**

(1) To agree that in order to assess the condition of the River Roding and the risk of damage to the bridges and other assets a technical survey is carried out of the entire length of the River Roding where it flows through Council owned land in Roding Valley Recreational Area (RVRA);

- (2) Subject to recommendation above to agree a DDF bid of £15,000 for 2015/2016 for the appointment of specialist engineering surveyors; and
- (3) To report the findings and any recommended action of the survey to a future Cabinet.

#### **Executive Summary:**

River Roding is one of the two major river systems flowing through the District. The responsibility for the management and upkeep of rivers falls to Riparian Owners (those land owners or occupiers through whose land a river passes). The responsibility for the management of the Roding Valley Recreational Area (RVRA) falls to various partners (Loughton Town Council, Buckhurst Hill Parish Council) and Essex Wildlife Trust, for areas in their management control that fall within the boundary of RVRA.

The last river condition survey of the River Roding through the RVPA was carried out in 2003. As a result a number of works were carried out to manage the risk to members of the public using the RVPA. Ongoing monitoring of the river, its banks and associated structures is carried out as suggested in the 2003 survey. In view of ongoing erosion damage it is now considered necessary to carry out another comprehensive survey of the river and the structures.

As the land owner it is felt that the District Council should take the lead in carrying out the investigation and work in partnership with town and parish councils to implement any necessary actions identified.

#### **Reasons for Proposed Decision:**

To establish the extent of river erosion along the River Roding and any potential impact on the associated structures especially the three bridges, identify remedial works, and manage the risk to the users of the RVRA.

#### Other Options for Action:

It cannot be recommended to ignore the risk of injury to public and damage to property by allowing the risk of erosion to continue.

## Report:

- 1. The Council is the land owner of the RVRA which is managed under various arrangements. For example the Council has signed a long term lease agreement with Loughton Town Council (LTC), Essex Wildlife Trust (EWT) manage a section under a management agreement and although no formal agreement exists with Buckhurst Hill Parish Council (BHPC) they carry out selective management of the part of RVRA that is within their Parish boundary.
- 2. River Roding is one of the two major rivers in the District, River Lee being the other. The Rover Roding and its catchment tributaries form an essential part of the watercourse and drainage system in the District. Erosion of river banks is a natural occurrence and the Roding is no exception. However the straightening of the stretch of the River through RVPA at the time of construction of the M11 has exacerbated the speed of erosion. It is for this reason that this stretch of the river requires a more frequent, than what would be expected for similar rivers, monitoring and intervention.
- 3. The previous river survey to assess the effects of erosion and siltation, formally known as 'morphological survey' was conducted by the River Restoration Centre in 2003. One of the conclusions of the investigation was that the Roding is trying to recover from the straightening of the river section at the time of the construction of the M11 motorway. This causes some very high water flow speeds in parts of the river which then contributes to erosion, and consequently results in transportation of silt further down the river. The report recommended a series of actions to address areas of high risk to the public or loss of land, these included: hard engineering works like removal of steel piles from the bed of the river, soft/green engineering works consisting of live willow spiling (planting live willow stakes and rolled willow bundles) to stabilise river banks, diversion of a public foot path, tree planting and ongoing monitoring of the river. These works have assisted in managing erosion along the River. However, over the last few years accelerated erosion has been observed at stretches of the river, one stretch being very close to a public foot path. The maintenance of the footpath is the responsibility of LTC, who has been monitoring the impact on the path and has placed warning signs in the area.
- 4. There are three bridges across the River Roding through the RVPA: The Charlie Moules Bridge, The Fishermans Bridge and The Arboretum Bridge. These enable pedestrian access across the River. These bridges are currently maintained as and when required. Following some concerns surrounding the state of Charlie Moules Bridge an engineering survey was produced by John Pryke & Partners, Consulting Engineers in August 2012. The costs of recommended remedial works, for maintaining the existing structure, costed by means of a competitive process, came in at £24,960. It was considered prudent to not carry out the remedial works, only make the bridge safe for use, and consider a wider scheme that addressed accessibility (particularly for disabled users) and sustainability issues resulting in an improved legacy.
- 5. Due to recent erosion of the river banks some measures have been taken to reduce the risk to users. These include fencing off river bank near a public footpath and essential works like regarding of the approach ramps of the Charlie Moules Bridge to make it safe, some willow planting, soft/green engineering works, allowing the vegetation to grow in certain

places at the river edge and inspections by officers to monitor these critical sites. It is recognised that a more detailed assessment is required to better manage the risk of erosion and avoid any further deterioration. For example if erosion in certain sections of the River continues unabated then there could be a longer term risk to some of the playing fields or the lake (an asset to local residents and the fishing club) which could result in a great environmental loss as well as pollution of the river if the silt in the lake got into the river. This could impact the rental income as well as reduce the amenity value of the RVRA. It is proposed that a river morphological survey be carried out of the River Roding from Chigwell Lane to Roding Lane to identifying the level of erosion of the banks of the river, and a structural condition survey of the three bridges to assess the level of risk to users and, if necessary, propose remedial measures (recommendation 1).

- 6. The activities required during the survey will include desk top research, visual inspections, structural assessment and possibly intrusive tests. At this stage no quotations have been obtained and it is officer estimation that the cost of acquiring external engineering surveyors for the survey of River Roding and structural engineers for assessing the condition of the three bridges and identifying remedial measures is not likely to be more than £15,000. (recommendation 2).
- 7. If physical works are identified as a result of the proposed surveys then depending on the nature of the repairs/refurbishment there are various options: LTC would share the costs of any works within its boundary, any works to the River itself will be carried out by the Council. BHPC, who have not signed the lease agreement, have been contacted to clarify their responsibilities. A report will be brought to a future Cabinet setting out the outcomes of the surveys and any financial implications. (recommendation 3).

## **Resource Implications:**

There is no ongoing budget allocation for the maintenance and upkeep of the RVRA. The Council's budget for carrying out works in the RVRA ceased when the south of the District was parished in 1997.

LTC and BHPC pay the Council for grass cutting of the area of the ground within their respective boundary.

#### **Legal and Governance Implications:**

The Council is the Riparian Owner for this stretch of the River Roding by virtue of freehold ownership of the Roding Valley Recreational Meadows and the local Nature Reserve. The Council has responsibility for the river banks and ensuring adequate health and safety for members of the public using the area; subject to the terms and conditions contained within any existing agreement or arrangement with a third party such as LTC or BHPC.

A failure to carry essential maintenance and repairs work to the Main River and associated assets could result in the Council and other owners/occupiers becoming liable under the Land Drainage Act. This could result in an enforcement notice by the Environment Agency.

# Safer, Cleaner and Greener Implications:

The Council is committed to action to make public open spaces safer, cleaner and greener to enhance the quality of life.

#### **Consultation Undertaken:**

BHPC have been consulted and a response is awaited.

LTC have been made aware of the previous surveys and the Council will work with them to seek improvement in the condition of the Charlie Moules Bridge.

EWT have previously helped with "soft" landscaping work along the river even when the areas concerned were outside of their remit. They are aware of the proposals to carry out surveys.

## **Background Papers:**

Cabinet Report 2 February 2004 item 135.

#### **Risk Management:**

Flooding is listed as a predominant risk in the Council's Risk Register and therefore the Council is under a statutory duty to take reasonable action to eliminate or mitigate the risk having identified it.

If a condition survey of the river banks and associated structures is not carried out then the risk of injury to the users of the RVRA will increase. This risk is associated with the injury risk arising from the users of the footpath, where erosion is causing the river bank to move closer to the path. There is a financial risk due to the loss of amenity land and/or loss of income if rentable football pitches are compromised.



# **Due Regard Record**

# Name of policy or activity:

What this record is for: By law the Council must, in the course of its service delivery and decision making, think about and see if it can eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. This active consideration is known as, 'paying due regard', and it must be recorded as evidence. We pay due regard by undertaking equality analysis and using what we learn through this analysis in our service delivery and decision making. The purpose of this form is as a log of evidence of due regard.

When do I use this record? Every time you complete equality analysis on a policy or activity this record must be updated. Due regard must be paid, and therefore equality analysis undertaken, at 'formative stages' of policies and activities including proposed changes to or withdrawal of services. This record must be included as an appendix to any report to decision making bodies. Agenda Planning Groups will not accept any report which does not include evidence of due regard being paid via completion of an Equality Analysis Report.

**How do I use this record:** When you next undertake equality analysis open a Due Regard Record. Use it to record a summary of your analysis, including the reason for the analysis, the evidence considered, what the evidence told you about the protected groups, and the key findings from the analysis. This will be key information from Steps 1-7 of the Equality Analysis process set out in the Toolkit, and your Equality Analysis Report. This Due Regard Record is Step 8 of that process.

Date / Name	Summary of equality analysis
	The RVRA is enjoyed by a wide section of the community and is considered a district wide asset. As such the Council has to be cognisant of the needs and requirement of all residents and visitors while managing the RVRA.
	Out of the specific group or characteristics that the Council has a legal duty to have due regard for the following are affected:
	<ul><li>(a) Age (elderly or infirm)</li><li>(b) Disability</li></ul>
	There are some provisions for those with disabilities (fishing platform on the lake as well as paved footpath along the river). If the assessment of the bridges result in the requirement to construct new then efforts would be made to ensure any new structures are complaint with the requirements for disabled access. This would enable the use of new areas of the RVRA to the public.