

**TONBRIDGE & MALLING BOROUGH COUNCIL**

**STREET SCENE and ENVIRONMENT SERVICES ADVISORY BOARD**

**31 August 2021**

**Report of the Chief Executive**

**Part 1- Public**

**Matters for Recommendation to Cabinet - Non-Key Decision (Decision may be taken by the Cabinet Member)**

**1 NATURAL FLOOD MANAGEMENT PROJECTS**

**This report provides information on two projects in the borough that it is proposed could be supported through an agreed £20,000 allocation in the Business Rates Retention Pilot reserve earmarked for Natural Flood Management.**

**1.1 Background**

1.1.1 In September 2020, the Economic Regeneration Advisory Board endorsed a programme of initiatives to support the local economy using the Business Rates Retention Pilot reserve. Within this programme, an allocation of £20,000 was earmarked towards Natural Flood Management.

1.1.2 Natural Flood Management is when natural processes are used to reduce the risk of flooding and erosion, and includes measures such as leaky dams, restoring bends in rivers and creating wetlands. These measures are coming more common as a tool to mitigate against flooding, alongside more engineered solutions.

1.1.3 Given the focus of the Business Rates Retention Pilot reserve, the main aim of this allocation was to focus on flood mitigation efforts that have a positive bearing on the local economy. However, it is also noted that any such measures do have much wider benefits, especially in terms of meeting the aims of our Climate Change Strategy, especially with regards to Climate Change resilience, and helping to improve biodiversity.

1.1.4 In sourcing potential projects, discussions were undertaken with both Kent County Council and the Environment Agency. Whilst there were limited opportunities across much of the network in the borough either due to the size and scale of the rivers, or because Natural Flood Management work had already been completed, there were two projects that met both the economic requirements of the funding and the use of Natural Flood Management – at Leybourne Lakes Country Park and Ightham Mote. Both of these projects have been supported by the Environment Agency and Kent County Council over the years.

## **2. Leybourne Lakes Country Park**

- 2.1. In May 2021, a site visit with the Head Ranger at Leybourne Lakes Country Park and the Kent Countryside Partnership took place to discuss Phase 2 of the Leybourne/Snodland Mill Stream Restoration Scheme, along with future plans.
- 2.2. Phase 1 of the scheme took place in 2019 and has helped to realign and naturalise an artificially straightened section of the stream to improve its biodiversity and to assist in alleviating flood risk in the local area. This initiative has been hugely successful not only in terms of its environmental benefits but it has also created an attractive feature for visitors to the park.
- 2.3. Phase 2 of the scheme is currently in development and will be downstream from Phase 1. However, with additional funding support the creation of two new wetland habitat features within the park can be achieved (see Appendix 1).
- 2.4. These new wetland areas will contribute towards creating valuable additional habitat for critically endangered species, such as water voles, whilst also providing approximately an additional 985 cubic metres of flood storage capacity. It is planned that the spoil from the excavation of the wetland areas will be used to create a serpent-shaped mound (sown with wildflower seed), which will provide additional wildlife habitat and an additional topographical feature for visitors to the park to enjoy.
- 2.5. It is proposed that the wetland habitat features will be planted up with a range of low growing and less invasive taller species of marginal aquatic native plant plugs, including common comfrey, fool's watercress, water figwort, great yellowcress, water mint, meadowsweet and purple loosestrife.
- 2.6. In total, the creation of the new wetland habitat and associated habitat features is costed at £8,000.

## **3. Ightham Mote**

- 3.1. Ightham Mote is one of the borough's key visitor attractions, with 166,000 visitors in 2017/18. However, like most organisations operating in the tourist economy, visitor numbers have been severely reduced since March 2020 as a result of covid-19 restrictions, along with the number of volunteers on the site.
- 3.2. The National Trust has been undertaking improvements to the surface water drainage and flood protection at Ightham Mote near Sevenoaks in Kent for a number of years. The approach has been to undertake subtle interventions to manage water flow and prevent flooding without negative impacts on the buildings, gardens or their setting.
- 3.3. The House (Mansion) and Cottages are situated in a steep sided and wooded valley surrounded by farmland owned by the National Trust. Ightham Mote's setting is defined by the valley, stream, north and south lakes and the moat that surrounds the Mansion (see Appendix 2). There are also stone bridges on the east and west and a timber bridge on the north side of the Mansion.

- 3.4 There are historic and continuing problems with waterlogged gardens, periodic flooding and managing water flow that adversely affect the heritage assets. Management of the water flow can change from acceptable to critical within an hour of severe rain and this has happened three times in living memory, approximately every 25 years. The last flood was in 2016, affecting the gardens and interiors of the Mansion and Cottages.
- 3.5 In 2015 The National Trust received a report from a hydrologist/engineer that advised on possible strategies and remedial works: the report and on-site knowledge has informed all the interventions completed to date.
- 3.6 The following list of interventions follow the sequence (north to south) of the watercourse and lakes. A number of these have been implemented, but a number of them require implementation:

**Wet woodland (north of the map provided above)** - A watercourse runs east west through woodland, within the Trust's ownership, and discharges into a silt trap adjacent to Mote Road. The undergrowth is cleared and woodland coppiced as part of the Estate management, ensuring water flow is restrained and discharged. This work is ongoing.

**Mote Road Silt Trap (the small pond in the top left-hand corner of the map provided)** - A shallow pond was dug in 1992/93 acts as a silt trap to the Mote Stream at the western edge of Mote Road. This has been cleaned and minor adjustments made to the weir to improve the outflow. A small weir discharges water into the drain that passes under Mote Road and into the northern gardens. Maintenance is ongoing

**Mote Stream: leaky dams (feeding into the North Lake)** - The stream passes through a play area and then meanders approximately due south towards the North Lake, passing under three bridges. Construction of leaky dams to restrain water flow, creating temporary ponds in valley. These have now been implemented.

**North Lake (and outflow from the North Lake)** – This is a relatively shallow man-made lake with informal east and west banks, retained at the south by a dam. The dam provides a grassed walkway and viewpoint towards the mansion. There are two areas of outstanding work required on the North Lake – desilting in order to increase water capacity (this was last undertaken in the 1980s) and improvements to the outflow from the lake including a new control mechanism. These works will cost in excess of £50,000.

**Silt Traps (directly to the south of the North Lake)** - these require desilting and repair to improve water retention. This will cost in the region of £40,000.

**Culverts (run under the North Lawn and discharge into the moat)** – works to improve these culverts have recently been completed.

**Moat Walls** – repair and restoration works undertaken.

**South Lake** – was desilted in 2015, but an improved spillway is required in order to better control the discharge out of the lake. This has been costed at £35,000.

#### **1.4 Proposed Allocation of Funding:**

1.4.1 Given that both locations are key visitor attractions in the borough that require flood mitigation measures to be implemented, the two proposals are seen as a good fit for the Business Rates Retention Pilot funding that has been allocated towards Natural Flood Management. As such, it is proposed that the £20,000 allocation be split as follows:

- Leybourne Lakes Country Park - £8,000 contribution towards the Leybourne/Snodland Mill Restoration Project.
- Ightham Mote - £12,000 contribution towards the improvement works at the North Lake.

#### **1.5 Legal Implications**

1.5.1 There are no legal implications arising from this report.

#### **1.6 Financial and Value for Money Considerations**

1.6.1 £20,000 has been allocated towards this project from the Business Rates Retention Pilot reserve.

#### **1.7 Risk Assessment**

1.7.1 Not applicable

#### **1.8 Equality Impact Assessment**

1.8.1 The decisions recommended through this paper have a remote or low relevance to the substance of the Equality Act. There is no perceived impact on end users.

#### **1.9 Recommendations**

1.9.1 That the contents of this report **BE NOTED**.

1.9.2 That the proposed £8,000 contribution towards the creation of new wetland habitat at Leybourne Lakes Country Park **BE AGREED**.

1.9.3 That the proposed £12,000 contribution towards flood mitigation works at Ightham Mote **BE AGREED**.

The Cabinet Member for Economic Regeneration and the Chief Executive confirm that the proposals contained in the recommendation(s), if approved, will fall within the Council's Budget and Policy Framework.

Background papers:

Nil

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