

**Open Report on behalf of Richard Wills,
Executive Director responsible for Democratic Services**

Report to:	Flood and Drainage Management Scrutiny Committee
Date:	03 March 2017
Subject:	Outcome of the River Steeping Working Group

Summary:

The Flood and Drainage Management Scrutiny Committee approved the formation of a Working Group on the 26 February 2016 to consider local concerns relating to the River Steeping. It was agreed to hold the Working Group once proposed remodelling of the river had been completed by the Environment Agency.

Actions Required:

The Flood and Drainage Management Scrutiny Committee is invited to consider and comment on the outcomes of the River Steeping Working Group and to:-

- 1) Support the proposed enhanced work programme of maintenance (fully funded until 2021) as set out in the report; and support continued partnership working and local engagement in developing future maintenance plans beyond 2021;
- 2) Endorse further discussions between Officers, Environment Agency and Natural England in relation to maintaining bank integrity and promoting safer river banks, highlighting local concerns in relation to burrowing animals;
- 3) Support timely community engagement with residents and businesses to determine local priorities as part of the Wainfleet Improvement Plan additional works;
- 4) Support the local community in exploring options for desilting where appropriate, in conjunction with the identified local priorities and in the interest of the economic wellbeing of Wainfleet.

1. Background

On the 26 February 2016 the Flood and Drainage Management Scrutiny Committee approved the formation of a Working Group to consider local concerns relating to the River Steeping. It was agreed to hold the Working Group once the proposed remodelling of the river had been completed by the Environment Agency.

The Working Group held a meeting on Monday 30 January 2017. The membership of the Working Group included Councillors C L Strange, V Ayling, M Brookes, I G Fleetwood, A Bridges, C Pain and East Lindsey District Councillor T Ashton.

Also in attendance were, Councillor C J Davie (Executive Councillor for Development), David Hickman (Environment Commissioner), Mark Welsh (Flood Risk and Development Manager), Norman Robinson (Environment Agency), Deborah Campbell (Environment Agency), Greg Smith (Environment Agency), David Sisson (Lindsey Marsh Drainage Board, Andrew McGill (Lindsey Marsh Drainage Board) and Joanne Watson (Lindsey Marsh Drainage Board)

2. Outcomes

The outcome of the Steeping River hydraulic modelling includes: -

- Latest Survey data on Siltation
- Incorporates Lindsey Marsh Drainage Board Drains:-
 - Thorpe Culvert
 - Crown Farm
- Comparison of different channel scenarios

The improved hydraulic modelling of the River Steeping includes nine model runs, showing three different flow scenarios - 5% (1 in 20), 2% (1 in 50) and 1% (1 in 100). In addition, for each of the three different flow scenarios, three channel scenarios are considered –

- Hard Bed – Original design bed level
- Soft Bed – Current bed level
- No Channel Maintenance – No Weed Control

The nine maps considered by the Working Group can be found at Appendix A.

The result of the improved hydraulic modelling indicate that Main River (River Steeping) overtopping would occur in four out of the nine scenarios - 1% Soft Bed, 1% No Channel Maintenance, 2% No Channel Maintenance and 5% No Channel Maintenance. In addition, it was identified that Internal Drainage Board (IDB) drain overtopping occurs in all nine scenarios.

Flood Risk Hard and Soft Bed

No properties were identified as at risk from Main River overtopping on the Hard and Soft Bed models in all of the detailed flow scenarios. In addition, no properties were identified at risk of flooding from IDB drains on the 5% (1 in 20) and 2% (1 in 50) scenarios. However, one property was identified as at risk of flooding from IDB drains on the 1% (1 in 100) scenario.

Flood Risk from No Channel Maintenance

The result of No Channel Maintenance / No Weed Control would be an increased risk of flooding to a further three properties (in addition to the one property identified above). The Working Group was advised that a further impact of no weed control would be the increase in volume and area of land flooded and a possible increase in the likelihood of a flood defence failure. An additional highlighted impact of no weed control would be a reduction in the Main River Standard of Protection down to 5% (1 in 20), a reduction in the conveyance and an increased risk in the IDB drains.

Additional Concerns

At the Working Group meeting on 30 January 2017 discussion took place with regards to maintaining river bank integrity moving forward. Concerns from burrowing animals on the river banks were highlighted; however it is important to note that animal damage is just one of the factors to be addressed in maintaining bank integrity.

The Working Group was informed by Councillor C J Davie that additional discussion needed to take place with Government about the impact of legislation on river bank integrity. Norman Robinson (Environment Agency) confirmed that fresh discussions were planned with the Government and Natural England on this matter.

Next Steps

An agreement has been reached to undertake a programme of enhanced maintenance on the River Steeping with grant and contributions from the Internal Drainage Board, which is part of the fully funded programme to 2021.

The enhanced maintenance programme proposes to include:

- De-bushing and Tree removal – Feb/March 2017
- Weed boat – May 2017
- Weed rake – September 2017
- Grass cutting – March/July/August 2017
- Bank access improvements – Starting April 2017
- Bank Repairs - TBC
- Toe repairs – TBC

In addition, a £60k contribution from East Lindsey District Council and Lincolnshire County Council has been identified to deliver additional works as part of a wider Wainfleet Improvement Plan. The focus of this funding will be advised and determined through a meeting with the community to discuss local requirements and priorities.

3. Conclusion

The Flood and Drainage Management Scrutiny Committee is invited to consider and comment on the outcomes and recommendations of the River Steeping Working Group and to consider the following actions required: -

- Support the proposed enhanced work programme of maintenance (fully funded until 2021) as set out in the report; and support continued partnership working and local engagement in developing future maintenance plans beyond 2021;
- Endorse further discussions between Officers, Environment Agency and Natural England in relation to maintaining bank integrity and promoting safer river banks, highlighting local concerns in relation to burrowing animals;

- Support timely community engagement with residents and businesses to determine local priorities as part of the Wainfleet Improvement Plan additional works;
- Support the local community in exploring options for desilting where appropriate, in conjunction with the identified local priorities and in the interest of the economic wellbeing of Wainfleet.

4. Appendices

These are listed below and attached at the back of the report	
Appendix A	Steeping Model 2017 5% (1 in 20) Soft Bed Model 2% (1 in 50) Soft Bed Model 1% (1 in 100) Soft Bed Model 5% (1 in 20) Hard Bed Model 2% (1 in 50) Hard Bed Model 1% (1 in 100) Hard Bed Model 5% (1 in 20) No Maintenance 2% (1 in 50) No Maintenance 1% (1 in 100) No Maintenance
Appendix B	Comparison of Model Runs 5% (1 in 20) Scenario 2% (1 in 50) Scenario 1% (1 in 100) Scenario
Appendix C	River Steeping Working Group Presentation from the Environment Agency.

5. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Daniel Steel, Scrutiny Officer, on behalf of the River Steeping Working Group.