

Steeping River Working Group

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Steeping River Hydraulic Modelling

➔ Improved model:

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

Steeping River Hydraulic Modelling

➔ 9 Model Runs

➔ Three different flows scenarios

- 5% (1 in 20)
- 2% (1 in 50)
- 1% (1 in 100)

➔ Three Channel scenarios

- Hard Bed – Original design bed level
- Soft Bed – Current bed level
- No Channel Maintenance – No weed control

Steeping River Hydraulic Modelling

➔ Results

➔ Main River overtopping occurs in:

- 1% Soft Bed
- 1% No Channel Maintenance
- 2% No Channel Maintenance
- 5% No Channel Maintenance

➔ Drain overtopping occurs in:

- All 9 scenarios

Flood Risk Hard and Soft Bed

- ➔ No properties at Risk from Main River Overtopping for Hard and Soft Bed in all flow scenarios
- ➔ No properties at risk of flooding from Drains for the 5% (1 in 20) and 2% (1 in 50) scenario
- ➔ 1 property at risk from Drains for the 1% (1 in 100) scenario

Flood Risk from No Weed Control

- ➔ No weed control floods a further 3 properties
- ➔ No weed control increases the volume and area of land flooded increasing the likelihood of a defence failure
- ➔ No weed control reduces the Main River Standard of Protection down to 5% (1 in 20)
- ➔ It reduces conveyance and increases risk in the IDB drains

Next Steps

- ➔ Typical Annual Enhanced Maintenance
 - ➔ De-bushing and Tree removal – Feb/March
 - ➔ Weed boat - May
 - ➔ Weed rake - September
 - ➔ Grass cutting – March/July/August
 - ➔ Bank access improvements – Starting April 17
 - ➔ Bank Repairs - TBC
 - ➔ Toe repairs – TBC
- ➔ Grant and Contributions from IDB will fully fund this programme to 2021

Next Steps

➔ Wainfleet Improvement Plan

- ➔ Meet with the community to discuss requirements
- ➔ £60k contributions from ELDC and LCC to deliver additional works.

Next Steps

- ➔ Partnership working
 - ➔ Environment Agency
 - ➔ Lindsey Marsh Drainage Board
 - ➔ East Lindsey District Council
 - ➔ Lincolnshire County Council

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