

Steeping Activity Programme 2021/22

Action No.	Action	Who	Detail
1.1	Continue effective weed management throughout the catchment.	EA, LMDB	Routine annual programme of work.
1.2	Investigate dredging to achieve a minimum water depth of 1.5m all year round to reduce weed growth.	EA, LMDB	<u>Phase 1</u> (Steeping River confluence with Wainfleet Relief Channel to Thorpe Culvert) - completed 2020/21. <u>Phase 2</u> (Wainfleet Relief Channel: Lenton's Bridge to Thorpe Culvert and downstream of the railway culvert east of Wainfleet) - planned for Autumn 2021.
1.4	Explore the opening of Haven House and Burgh Sluices to lower river levels ahead of potential higher river levels.	EA	Assemble evidence relating to flood risk benefits, incident response operation, asset management, ecology and water resources. Decide on future sluice operation.
1.5	Investigate reducing pumping from Thorpe Culvert Pumping Station during times of increased flow – either by short term storage in the lowland system or by emergency discharge to Bell Water Drain.	EA, LMDB, W4DIDB	Modelling of W4IDB System on-going. Modelling of Thorpe Culvert Pumped System 2021/22. Inspection of Culverts under river planned for 2021 with refurbishment in 2022.
1.6	Continue refining the operation and effectiveness of Burgh Sluice, Wainfleet Clough Outfalls and Haven House Sluice (including door opening mechanisms) for all flow conditions.	EA	Assemble evidence relating to flood risk benefits, incident response operation, asset management, ecology and water resources. Decide on future sluice operation.

Action No.	Action	Who	Detail
2.1	Work with town and parish councils to help them understand their local flood risk now and in the future by supporting them with the	LCC, EA, ELDC, LMDB, W4DIDB, AW,	Wainfleet Town Council and the surrounding Parishes are working together on a joint Community Emergency Plan for the area. The current community

	creation, and testing, of Community Emergency Plans that cover all locally identified emergencies. This to include exploring community flood mitigation measures such as fixed/demountable barriers.	NFU, Town and Parish Councils	focus on responding to Covid 19 has slowed this work. The intention is to progress this in the coming year with support from LCC, ELDC and the EA. A new weather station linked to the County Emergency Centre is planned along with an Emergency Kit to help resilience.
2.2	Work with residents to help them understand their flood risk now, and in the future, so they can be prepared. This means they will know how to reduce the impact of any flooding and recover more quickly.	LCC, EA, ELDC, LMDB, W4DIDB, AW, NFU, Community	Continue raising awareness of EA Flood Warning Service, personal flood plans, checking insurance cover. To include property flood mitigation measures to reduce impact e.g. air brick covers, door/window barriers, ditch clearance, permeable paving, gravel.
2.3	Work with businesses, the agricultural sector and infrastructure owners to help them understand their flood risk and how they can be prepared to reduce the impact of any future flooding and recover more quickly.	NFU, EA, LCC, ELDC, LMDB, W4DIDB, AW, Businesses	Continue raising awareness of EA Flood Warning Service, business flood plans, checking insurance cover. To include property flood mitigation measures to reduce impact e.g. air brick covers, door/window barriers, ditch clearance, permeable paving, gravel.
2.5	Continue improving the EA Flood Warning Service by updating the catchment and flood forecasting models. This will improve the timeliness and accuracy of flooding warnings and enable work towards a community-based flood warning service.	EA	Work expected to be completed by late summer 2021. Following this a review of the flood warning areas will be undertaken.

Action No.	Action	Who	Detail
3.1	Undertake annual visual inspection of flood defences as part of a routine inspection programme to identify defects.	EA	Next annual inspection due in September 2021.
3.2	Prioritise repairs for the identified defects to flood defences.	EA	<u>Vermin removal:</u> <ul style="list-style-type: none"> between Little Steeping and Firsby railway (right bank)

			<ul style="list-style-type: none"> • downstream of Firsby Clough (right bank) • downstream of Wainfleet Clough <p><u>Defence repairs:</u></p> <ul style="list-style-type: none"> • Repairs on concrete plank floodwall between Crows Bridge and Salem Bridge. • Repairs to floodwall on Havenside. Highway drain to be jetted to help with road drainage. • Re-profiling of left bank on Lady Waths Beck between Great Steeping and the old railway bridge. • Vegetation clearance and removal of redundant bridge upstream of B1195. <p><u>Structures:</u> Burgh Sluice pointing doors to be replaced.</p>
3.3	Review, plan and carry out routine maintenance to flood defences e.g. grass cutting, vermin control, protected species etc.	EA	Several grass cuts are planned during the 2021/22 financial year. Ongoing defence repair works may make access to some locations difficult but increased traffic is likely to keep the grass level lower than normal.
3.4	Plan and deliver a phased programme of toe protection (Steeping River – Warth’s Bridge to Salem Bridge and downstream of A52; Wainfleet Relief Channel).	EA	<u>Wainfleet Relief Channel</u> – left bank between Thorpe Culvert railway and Spilsby Road. <u>Steeping River</u> – left bank Crows Bridge to Havenside.
3.6	Plan and deliver works to increase the resilience of the raised embankments protecting the western side of Wainfleet to overtopping and the effects of climate change.	EA + partners	Work on developing the business case and options available has started and will continue throughout the year. Work will continue to identify and apply for additional funding.
3.9	Liaise with adjacent landowners/occupiers to improve access to defences	EA	Ongoing and delivered through local engagement with landowners.

	for inspection and maintenance. Discuss activities which could impact on defences such as land management, Environmental Permitting regulations and protected species etc.		
3.11	Undertake works on the surface water drainage outfall at Haven Side to prevent river water flowing back up and onto the road	EA/LCC	Cleanout drainage system of any debris. Replace flap valve on outfall if needed.

Action No.	Action	Who	Detail
4.1	Investigate methods and locations in the upper catchment for natural flood management/working with natural processes to achieve flow reductions/natural water storage and wider multiple benefits. The opportunities in the upper catchment would be the focus for biodiversity net gain, compensatory habitat and any species relocation as a result of limitations to consider such in more sensitive lower catchment defence areas. The right partners being involved in opportunity decision making is important when the time is right for upper catchment design and implementation.	EA, NFU + partners	This next phase of work this year will continue to see landowner engagement and opportunities being identified following the engagement being worked up to establish potential designs, timescales and deliverability of those individual projects. We hope that the current engagement programme will have resulted in the first phase of the delivery programme by year end.
4.2	Work with landowners to investigate changes to land management practices across the catchment to reduce silt coming into the system.	EA, NFU + partners	As above.