Keeping you informed

Fishlake Flood Recovery - flood defence repairs and improvements

February 2021

Storm Christoph

Last month, Storm Christoph brought heavy rain to very wet ground and full rivers. Throughout the incident we worked closely with our partners on the ground and local resilience forums to warn and inform, operate flood defences and help keep people safe. Where permanent repairs had not been completed, temporary defences were in place.

The spillway upstream of Stainforth Bridge did operate and water cascaded into Woodhouse Ings. This is how it would normally operate because this is what it has been designed to do.

The river level peaked on Thursday 21st January at Fishlake and Kirk Bramwith. Doncaster and Environment Agency teams were already present, carrying out patrols and inspecting flood defences. Our operations team continued to liaise with local flood wardens who were also monitoring the situation closely.

Above: Pumping operations at Fishlake

Pumps were deployed to Fishlake washlands to help pump water back into the River Don. These pumps and the Internal Drainage Board pumping station move 2.4 million litres of water an hour back into the River Don.

We are extremely grateful to everyone in the community who has supported the ongoing work to protect homes and properties in Fishlake and would like to take this opportunity to offer our warmest thanks. While we can never prevent all flooding, we will always do everything we can to protect communities at risk and following Storm Christoph, we have received no reports of property flooding.

Following all incidents, we carry out a post storm inspection of our flood defences. These inspections may reveal additional work required to what we have already carried out or planned for as part of the current recovery work. This could have the potential to extend the current work programme being carried out.

What repairs and improvements have happened since the last newsletter?

Although construction progress has been affected by Storm Christoph, our contractors have now recommenced this vital work. On behalf of the Environment Agency, we would like to reassure you of our commitment to support local communities, the Government and NHS England by abiding by the measures set by the Government during the current COVID-19 outbreak. This is to ensure the ongoing safety of both the public, our staff and our contractors.

Permanent Repairs Completed:

Fishlake Nab:

Piling works at Fishlake Nab are now complete. This has reduced seepage of water through the flood embankment and retaining wall.

Above: Works complete at Fishlake Nab

We have also raised this section in line with the immediate upstream and downstream levels of the embankment to 7 mAOD **(mAOD or 'Meters Above Ordnance Datum' is used by the ordnance survey for deriving altitude or a spot height on maps).**

Storm Christoph has been the first test of this repair. The risk of water spilling over the top at this location as observed in the 2019 incident, has been reduced preventing a waterfall effect damaging the earth that supports the wall. In the main the new piles have also been successful. However, residents next to Stainforth Bridge did see seepage through the adjoining sheet piled wall and ground to the rear of these piles. Short term works to reduce this seepage will be progressed with long term more substantial repairs to be made.

Far Bank Lane:

Stop log 1 (demountable defence) Nab Lane:

A ramp has been installed to create a permanent passive defence. **A 'passive' defence is one that is self-operating without the requirement for human intervention during a flood incident.** There is also a concrete beam at the top to ensure a consistent level of defence and to prevent damage by vehicles. This has replaced the need to use demountable stop logs during a flood increasing resilience.

Above: Passive defence complete – Far Bank Lane

Stop Log 2 (demountable defence) Bank House Farm:

A ramp has also been installed at Bank House Farm to create a permanent passive defence.

Above: Kerb installed and stoning up access track to ramp at Bank House Farm

Retaining wall on Far Bank Lane:

The retaining wall holding the embankment up was in poor condition. To ensure the embankment has the support it needs during an incident and to prevent the risk of failure, this has now been reinforced with concrete.

Above: Concrete reinforcement Far Bank Lane

Vegetation clearance and tree works:

Vegetation clearance has continued and tree works have been completed on Far Bank Lane between Meadow View Cottage and Thacker Lane. This is to allow the embankment to be rebuilt.

Woodhouse Green: The low spot at the top of the embankment has been repaired and backfilled with earth ensuring a consistent level of defence. We have also installed bio degradable erosion protection matting to protect the surface until the grass becomes established.

Above: Low spots repaired at Woodhouse Green

Telemetry:

A temporary telemetry site has been installed in Woodhouse Ings. It is now live and this river level data, along with the data from the River Don telemetry, can be viewed at River and sea levels in England - GOV.UK (flood-warning-information.service.gov.uk)

The Fishlake Flood Warning is issued from the River Don telemetry. We use this data alongside other considerations such as forecasts. This temporary telemetry will assist us to better understand the washland and how it operates, and it will also help the community monitor the filling of the washland and be better informed on any progressing flood incident.

Above: Temporary Telemetry installation at Woodhouse Ings

Look ahead

- Repairs to Sour Lane penstock raising spindle and culvert clearance (**a penstock is a sluice or gate or that controls water flow).**
- Structural survey on Taining Drain culvert.
- Repairs to the red brick arch structure over Taining Drain.
- Fencing off repairs to prevent damage from grazing damage during spring to autumn.
- Steel sheet piles around the outfall pipe on Fishlake Nab to reduce seepage of water through the embankment.
- Raising Taining Drain left bank to ensure a consistent level of protection with the rest of the barrier bank.
- Repairing and widening the embankment from Taining Drain to Fishlake Nab to improve the embankment and aid with future maintenance activities.
- Adding a kerb edge to support the embankment along Far Bank Lane which is becoming increasingly undercut from traffic.
- Repairing an area of the riverside embankment near Taining Drain outfall where seepage has been observed.

Community Resilience:

Alongside Doncaster Council, we are supporting the Fishlake Flood Action Group and Flood Wardens to develop the 'Fishlake Community Flood Plan' which will cover the actions the community and wardens would take in the event of another flood incident. We have also delivered several Flood Warden training sessions attended by many of both the new and existing Fishlake Flood Wardens.

Keeping you informed:

Where it is safe, will continue to work closely with residents, landowners, voluntary groups and flood wardens to ensure the local community is kept informed and we are grateful for their support and cooperation. We have recently published a website where we will share details of all recovery work across South Yorkshire. You can access this page at: https://consult.environment-agency.gov.uk/yorkshire/south-yorkshire-flood-recovery-information-page.

If you have any questions about any of the work we are carrying out across please contact us at: SYPSO@environment-agency.gov.uk