

Upper Ouse Recovery Plan

What we know

The pollution incident affected more than 25km of the River Great Ouse between Brackley and Thornton. Thousands of fish were lost and the invertebrate community was heavily impacted too. Fish stocks have since been assessed and we now have a better idea of the impact of the incident, (unfortunately we are unable to share this information). We know that invertebrates are also beginning to recover and fish have been seen in the affected length.

Restoring the river

Ideally we would want to improve the speed of the recovery and capacity of the river to carry aquatic life. In terms of fish and insect life, the river will recover naturally, however, this was a large scale incident covering more than 25km. The river's ecology will re-colonise naturally but depending on species and other factors, this could take months to decades. Restoration works will speed that process up, provide improved diversity and potentially improve on what was there before.

The aim of river restoration is to improve the river's natural characteristics making it a more sustainable and varied environment. Options include:

- Removing barriers to help fish migrate naturally, speeding up recovery. We are funding the appraisal of a major barrier to improve fish passage in the middle of the affected length
- Increasing flow speeds to reduce silt deposits, improving fish spawning and invertebrate communities
- Improving marginal features planted berms and large in-channel features which provide cover and foraging areas for fish and other wildlife.

Most of these improvements will have an instant impact and provide further benefits over time, however, delivering each one requires varying timescales, investment and approvals. The sooner improvements are implemented, the sooner we will see the benefits.

Boosting fish stocks

We do not want to only rely on fish farm reared fish as we would prefer to use fish from the same catchment that have survived naturally. As well as stocking fish farm reared fish we also plan to move fish from other areas of the Ouse and smaller tributaries to boost stocks in the affected lengths.

We will assess the likely impact on the source water (where we are planning to remove fish from), as well as how many are needed to boost stocks in the affected stretch of the river.

Fish Farm fish

Moving fish from a stillwater to a river can be risky due to the potential spread of parasites, diseases and non-native species therefore Environment Agency does not allow this. However we will allow stocking into a river from a fish farm. We have plans to supplement stocks with roach, dace and chub over the next 5 years from Calverton Fish farm. The first of these, 8,000 chub around 12-15cm in length will arrive in February 2019. These fish will be stocked around Buckingham in various locations, through to Thornton – we are taking into account the number of barriers (weirs etc.), which will prevent natural spread.

Assessing stocks

We are planning further surveys to assess the fishery upstream and downstream of the impact zone and assess the likely impact of using fish from these zones to re-stock the affected length.

Fish stocking plans

We need to know what species of fish we would expect to find in the river to establish the density and composition of fish species needed. We use a specific model to do this which works on elevation, location and current data to provide an idea of the type of fish expected in any given waterbody. This is specific to each location, not a whole river catchment.

We are aiming to stock 50% of the expected density over the next 5 years and will assume nature will naturally boost that closer to the expected density estimate over time.

We would expect a natural recovery of other species like brown trout, lamprey, minnow, bullhead, stone loach, gudgeon and stickleback. These species are less easy to move because removal might impact the source water. For these species, improving the habitat where they current are (upstream of the affected stretch) will assist in bolstering their natural numbers. Improving the habitat in the affected stretch is especially important for when they naturally arrive.

Assessing recovery

We are also reviewing a possible research project to help us understand the recovery process.

Timing

February/March

- Initial fish stocking – 8,000 chub
- Lower River cropping, Thornton to Stony Stratford.

March

- Upper River Surveys
- River Mill fish passage assessment report finalised
- Spawning habitat improvements installed at one location.