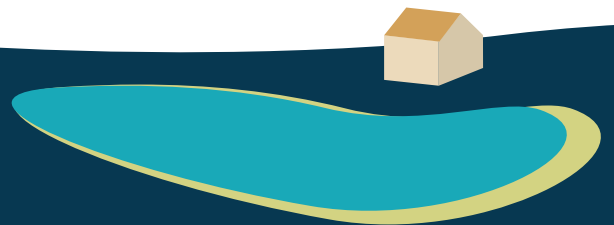


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FISHERIES AND FLOODING



Northamptonshire
County Council
Flood Toolkit



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Flood plains are now known to be beneficial to fish, however, rivers in flood can be damaging to fisheries.

Climate change is likely to bring more erratic and volatile weather that will change the dynamics of watercourses. The timing of a flash flood can be unpredictable and the associated impacts can cause to the loss or escape of fish.

A high number of young fish (in particular) have been found to permanently reside in an area that they have been “washed in to”.



What can be done to prevent fisheries from flooding?

Research has demonstrated that a more complex watercourse loses proportionately fewer fish compared to a simple channel. Therefore opening up backwaters and channels, encouraging a meander, well considered planting on banks and diversifying bank and bed materials will to some extent reduce the likelihood of fish loss during flooding conditions.

Young fish are the most vulnerable and are more susceptible to:

- Being washed away by flood waters
- Being stranded whilst taking advantage of the flood plain
- Disease
- Pollution from the surrounding land and incoming waters
- Predation.

The most obvious solution to losing young fish is to give them somewhere to hide:

- Allow free passage to backwaters, channels and areas off of the main river run
- Provide undercuts on the inside of a meander
- Provide diverse and penetrable but stable substrata i.e. gravels, cobbles and boulders within a short distance of each other
- Site stable boulder outcrops on the river bed; and
- Place tree trunks that have been fixed in position for river rehabilitation – that do not affect the flow of water and increase flood risk by causing an obstruction.

Other things that can be done:

- General maintenance of surrounding watercourses and culverts (see leaflets 2, 4 and 15 in this series).
- Cleaning and / or improvement of the feed and return silting basins (restrictions apply). This will require permission and consents.
- Grilles and trash screens should be cleared and maintained on a regular basis.
- Connect known puddle areas for fish to return through when waters recede. This will require permission and consents
- Build a protection channel which is higher than the pond.

Enclosed Fisheries

Enclosed fisheries will normally have flood mitigation measures in place. There should be a means to reduce the capacity of the ponds/lakes, usually via an outfall into a watercourse. Bunds and banks often contain or protect the ponds from any flash flooding.

Enclosed fisheries that experience flooding regularly can apply for consent to build an emergency spillway.

Diseased and Alien Fish Species

The health of the fish is likely to have been put at risk during a flood event and the need to restock is a possibility. It may be worth carrying out a health check of your fish before introducing more fish. More information about what to look for and how to carry out a health check can be found at <https://www.gov.uk/fish-health-checks>

There is a responsibility to protect the watercourse from any introduction of fish or fish spawn that has not been licensed even if the species farmed are naturally found in the watercourse. This is enforced by the “Water Framework Directive” the “Salmon and Freshwater Fisheries Act 1975” and “Regulation (EU) No 304/2011” to prevent disease and alien species introduction.

If there is cause to believe fish or spawn has escaped in to a watercourse, whether after a flood for any other reason, the Environment Agency should be notified immediately.

Since the quality of the water in the ponds is likely to have changed after a flood event, tests should be carried out.

Further Advice

Lots of advice can be found on the Fisheries and Aquaculture Department Web site http://ftp.fao.org/fi/cdrom/fao_training/FAO_Training/General/x6708e/x6708e11.htm#214

Legislative Considerations

Salmon and Freshwater Fisheries Act 1975
<http://www.legislation.gov.uk/ukpga/1975/51>

Council regulation (EC) No 1100/2007 establishing measures for the recovery of the stock of European eel:
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:248:0017:0023:EN:PDF>

The Eels (England and Wales Regulations 2009 No 3344
<http://www.legislation.gov.uk/uksi/2009/3344/made>

Water Resources Act
<http://www.legislation.gov.uk/ukpga/1991/57/contents>

Permission to move live fish to or from a fishery

<https://www.gov.uk/permission-to-move-live-fish-to-or-from-a-fishery>

Import or export live fish and shellfish

<https://www.gov.uk/import-or-export-live-fish-and-shellfish>

Fish Health Inspectorate

<https://www.gov.uk/government/publications/fish-health-inspectorate-service-charter/fish-health-inspectorate-service-charter>

 **Key Contacts**

The Bedford Group of Internal Drainage Boards carries out consenting on watercourses on behalf of Northamptonshire County Council

<http://www.idbs.org.uk/>

Environment Agency

Tel: **03708 506 506** Email: enquiries@environment-agency.gov.uk



Floodline number: 0345 988 1188



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