# **NORTH EAST**

Water availability has traditionally been secured through large reservoirs and significant amounts of rainfall on the Pennines keep flows at a positive level. Abstraction is very limited in the north of the region, with the majority of agrictural abstractions found in Yorkshire. Currently, in Northumberland and Co. Durham, irrigation is only used for some field vegetables and potatoes, unlike Yorkshire where large areas of field vegetables and potato crops are irrigated.

The area has seen significant flood damage to all farm types and sectors (from upland livestock to lowland arable and glasshouses) and the number of flood events is increasing. This, coupled with a reduction in or withdrawal of maintenance and a lack of conveyance maintenance on main rivers, is increasing the risk to farming business. This is further exasperated by large areas being mapped for flood storage (to protect urban areas) without the farmers being aware.

In Northumberland, there was no major issues with drought until 2020 when the county experienced the driest spring since 1891 (when records began).

In Yorkshire, water availability changed in 1995 after 'The Great Yorkshire Drought' with significant investment in the public water grid to connect the ground, river and reservoir water network together. Mains water issues are predominantly focused on high demand spikes and the subsequent reduction in pressure impacting housed livestock. Many members abstract water (fluvial and ground water) for irrigation, and after a recent increase in Hands Off Flow stop notices coming in earlier and for longer, members are now starting to look at storage options or new boreholes. Flooding from fluvial sources is increasing, both due to increased heavy rainfall events in the uplands and the fact that many towns and cities are located within steep valleys, close to rivers or within the flood plain.

Funding of hard defences in urban areas has often increased the risk to landowners downstream. But now the focus is on the use of natural processes (like holding water on farmland) to safeguard communities and businesses downstream. This often allows great economic development in these urban areas, with limited reward or acknowledgement of liability or business risk. Tidal flooding is impacting both the coastline and the Humber Estuary. The tidal surge of 2013 devastated large areas of farmland and property in the outer and inner estuary. These areas are now seen by the developing Humber 2100+ strategy as opportunity areas to hold flood water to protect other communities around the estuary or create compensatory habitats to offset the rising defences.

Groundwater flooding has always been a challenge along the East Yorkshire Chalk, but this is also the main source of water for the River Hull, increasing the risk of fluvial and surface water flooding.







## **Regional priorities:**

### **Potable water:**

Many livestock and horticultural members have switched to mains water due to increased security and quality. The issue comes when there is a drop in water pressure or their sector is included in a drought plan and they do not get enough warning. Members are also starting to switch their homes and diversification units onto mains water as supply, quality and testing of other sources becomes problematic and costly. This often results in them finding issues with their supply - the cost to connect to the grid can be high - or that their pipework is a private supply and has multiple other parties connected without formal agreements.

### Irrigation:

This is linked to volatility in the marketplace. Having a licence has a financial benefit to the business and often results in the business making money (the cash crop in the rotation). We are seeing increased pressure from reduced river flows and a need to safeguard these for environmental reasons first, before food production. We also have the complexity of some licences being issued by the Canal and Rivers Trust with their own charging mechanism. There is also limited benefit (often more cost) to abstract from rivers in high flow. This often results in other sources (groundwater) being used, when any abstraction from high flows could have multiple benefits. We are also seeing an intransigence in the abstraction system where those who take steps to reduce water use have the potential to lose volume.

#### Flood:

The increased pressure on farmers to 'stop floodwater' by using their assets - without a clear longterm process or plan for reward, or often acknowledgement that their business matters - is damaging many opportunities for working together. This is complicated by a multitude of parties engaging farmers or imposing schemes on famers' land through legal powers (often pushed beyond their legal remits). Added complexity comes in the different funding streams, and different outcomes different groups may want - flood schemes also creating habitat or habitat schemes that create flood storage capacity - often without the farmers knowledge, agreement, or reward but leaving the liability with them.





