

Forecast for 2015

Yorkshire

March 2015

The initial prospects for water resources availability for spray irrigation in Yorkshire for spring - summer 2015 is GOOD for much of North Yorkshire, all of West and South Yorkshire, and MODERATE in East Yorkshire and the River Derwent catchment in North Yorkshire.

Background

Water levels are at normal levels in most of the rivers across Yorkshire. In the Derwent catchment, river flows have generally been in the 'below normal' range during January and February and have now dropped to 'notably low'. The soils are saturated. Recent rainfall means water levels are now near normal in the majority of our aquifers although levels are below average for the time of year in the Chalk and Corallian Limestone aquifers. Rainfall levels in December 2014 and January 2015 in the east of the Yorkshire area were below average and this has reduced the recharge of the Chalk and Corallian Limestone aquifers. If we have average rainfall throughout Spring we would expect to implement restrictions on abstraction for spray irrigation from surface water in the River Derwent and East Yorkshire at some point during late spring/early summer.

The Met Office is currently forecasting changeable conditions for the rest of March which is expected to lead to average rainfall amounts.

Forward look

Spray irrigation prospects are currently favourable for most of the Yorkshire Area for spring - summer 2015. This does not rule out a return to lower river and groundwater levels should we have a hot dry summer but we currently expect that there will be good supplies of water to meet irrigation demands.

Abstraction in the region is primarily controlled by conditions on licences and licence holders must ensure that they adhere to these at all times. If dry weather develops and river flows and groundwater levels drop we may implement 'Hands Off Flow' (HOF) or 'Hands Off Level' (HOL) conditions on licences in the irrigation season, with the greatest risk particularly in East Yorkshire and on the River Derwent. HOF and HOL conditions don't just apply to spray irrigation licences. If restrictions are necessary they will be applied across the board to all abstraction licences with such conditions.

A summary of the situation in each of the areas is as follows:

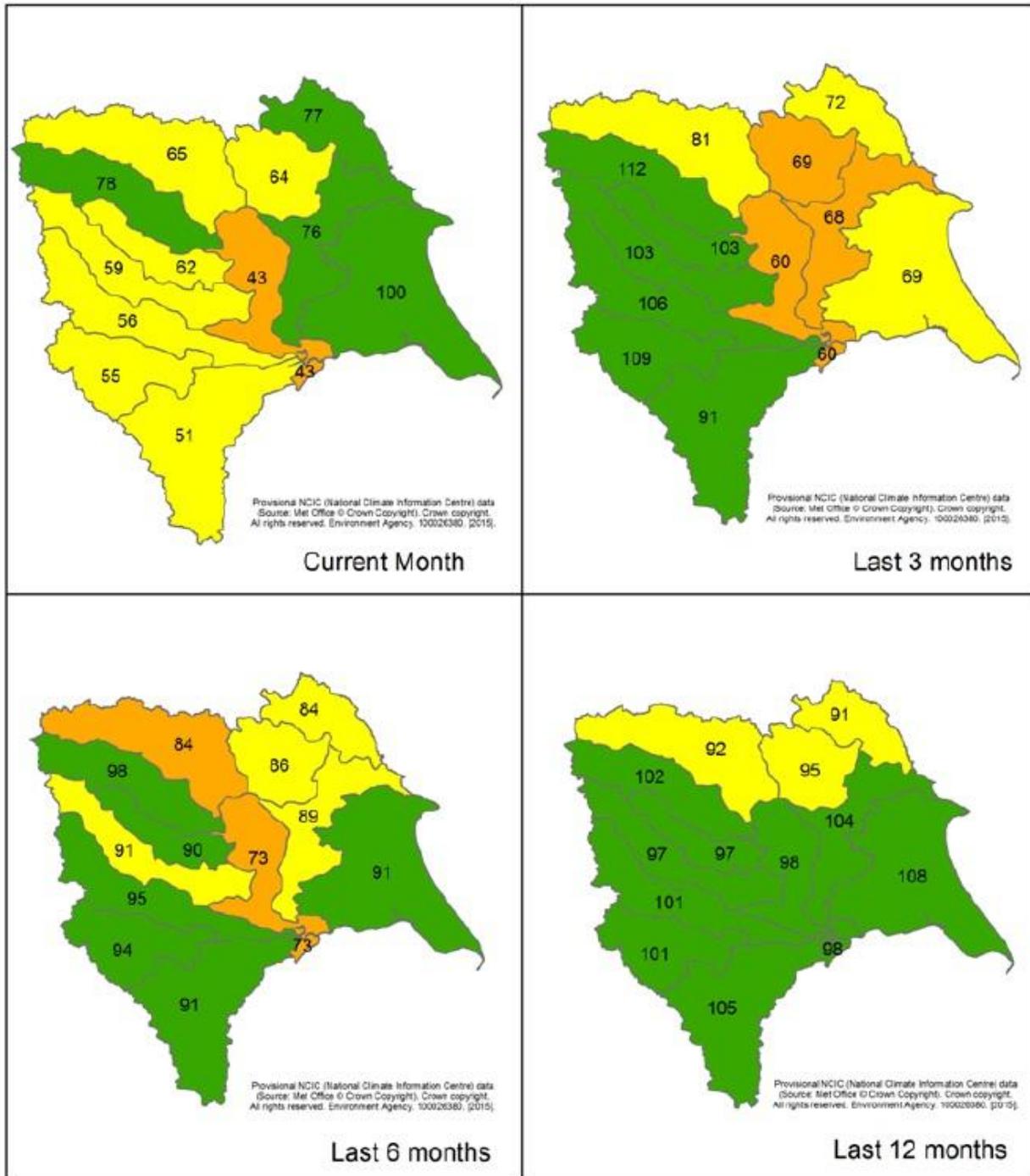
East Yorkshire rivers, River Derwent & chalk aquifer – River Hull, West Beck, Mires Beck, River Derwent and tributaries. Prospects here are MODERATE. Below average rainfall in December and January means river levels have dropped and levels in the Chalk and Corallian Limestone aquifers are below normal for the time of year. If we receive normal rainfall throughout Spring we expect that we may need to implement 'Hands Off Flow' (HOF) or 'Hands Off Level' (HOL) conditions on abstraction for spray irrigation during late spring/early summer.

North Yorkshire rivers & sandstone aquifer, West Yorkshire rivers and South Yorkshire rivers – Prospects here are GOOD. Water levels in rivers and groundwater aquifers are normal or high. If a dry spring and summer does materialise it is still possible that we may need to implement 'Hands Off Flow' (HOF) or 'Hands Off Level' (HOL) conditions on licences as we would in any normal year, however we think the risk is low.

Rainfall

During February 2015, the Hull & Humber had received the long term average (LTA) rainfall while the rest of the area was below average. The Ouse had only received 43% of its LTA in February. Cumulatively, the central and north eastern / eastern areas have recorded below LTA for the last 3 months while Yorkshire as a whole has recorded below LTA rainfall for the last 6 months. For the most up to date water situation report please visit our website here:

<https://www.gov.uk/government/statistics/water-situation-report-yorkshire-and-north-east>



customer service line
03708 506 506

incident hotline
0800 80 70 60

floodline
0845 988 1188

www.environment-agency.gov.uk

Ensuring your business is resilient to Drought

Climate change predictions suggest the extremes of weather we have seen in the last few years are likely to become more frequent in the future. It will become increasingly important to ensure we are as resilient as possible to periods of reduced water resource and drought. The section below gives you some ideas on what you could consider before and during a drought to help make your business more resilient.

We will work with abstractors to minimise the impact of drought and related restrictions on businesses in the future. If you have ideas on things such as voluntary initiatives to conserve water whilst reducing the impacts of imposed restrictions in your area, or would like to set up an abstractor group in your area to work together to improve resilience, please get in contact, our details are at the end of this newsletter.

We continue to recognise the importance of irrigation to the agricultural industry in the region and will aim to work with farmers and others to try to minimise, where possible, the impact of any dry weather on their businesses.

Abstraction is primarily controlled by conditions on licences and licence holders must ensure that they adhere to these at all times. We would encourage all abstractors to review their licences to ensure that they continue to meet their needs. In areas across England in 2009 and 2010, some farmers experienced difficulties lifting crops from dry ground and found that their abstraction licences didn't cover abstraction beyond the end of September. You may also need to extend the winter season on your licence from February to March.

For those farmers who wish to extend their licensed abstraction period, we strongly recommend that you apply now to formally vary your licence. In most cases these variations will be relatively straight forward and will provide you with long term drought resilience without the need to talk to us in the future for a temporary dispensation. This is particularly important as the allowances in the last few years are unlikely to be made in the future as more farmers formally vary their abstraction periods.

We do have powers to further restrict the abstraction of water for irrigation from rivers, streams and underground sources, and will use those powers should the situation become critical. If such a situation arises, however, we will always seek to achieve as much as possible through voluntary savings before imposing formal restrictions. Total bans will only be used as a last resort.

What can irrigators do?

- For their part, irrigators are encouraged to take such actions as they can to minimise the impacts on the environment and their businesses. Please talk to us now about actions you can take (our contact details are at the end of this document).

Abstraction Licences

- Check your licence details and, at all times, adhere to licence conditions.

Voluntary Restrictions

- Comply with voluntary restrictions where they are requested. This will delay, and may avoid the need for more formal restrictions.

Storage Reservoirs

- Take every possible opportunity to ensure that winter storage reservoirs are as full as possible by the start of the irrigation season;

- Continue to plan for the future. Is there an opportunity to convert from direct summer abstraction to high flow storage? The Rural Development Programme for England (RDPE) may be able to help with funding.

Irrigation Management

- Make sure that meters are in good working order and properly fitted;
- Check irrigation systems and replace worn or broken items before the start of the season;
- Make sure that irrigation systems are properly set up and operated in accordance with an accurate and reliable irrigation scheduling system;
- Ensure you are prepared to change your irrigation plans if necessary;
- Prioritise crops and fields in terms of water need;
- Choose irrigation times carefully, e.g. avoid the heat of the day; irrigate at night, if possible;
- Undertake a water audit. Know the cost of your water, calculate crop per drop.

Abstractor Groups and Guidance

- Where appropriate, discuss issues, share ideas etc. with neighbouring farmers. A number of local liaison groups already exist for this purpose. Consider setting up a group?
- Maintain an awareness of developing guidance from academic institutions and farming organisations (e.g. NFU, UKIA, Cranfield University etc.);
- The Environment Agency has a range of literature available to help support your business including Rain Water Harvesting; Think about Installing an Irrigation Reservoir and adopting Best Metering Practice.

Definitions

Prospects for spray irrigation are defined as ‘Good’, ‘Moderate’ or ‘Poor’.

Good	Water levels are average or above average and supplies are expected to be safe. There is a possibility of minor local controls on abstraction from surface water in late summer if the weather is exceptionally hot and dry.
Moderate	Water levels are low. Some controls on surface water abstraction are possible by mid-summer if the weather is hot and dry. Controls on abstraction from groundwater are possible in small, sensitive groundwater areas.
Poor	Water levels are well below average. Soil moisture deficit is developing early and significant restrictions on abstraction from surface and groundwater are probable.
Exceptionally high	Value likely to fall within this band 5% of the time
Notably high	Value likely to fall within this band 8% of the time
Above normal	Value likely to fall within this band 15% of the time
Normal	Value likely to fall within this band 44% of the time

- Below normal** Value likely to fall within this band 15% of the time
- Notably low** Value likely to fall within this band 8% of the time
- Exceptionally low** Value likely to fall within this band 5% of the time

Please contact us if you would like more information on any of the above ideas or have ideas of your own to assist you and/or other abstractors to improve their resilience.

If you have any questions or would like to feedback comments about the prospects report please contact Julie Dracup, 0113 8196373, julie.dracup@environment-agency.gov.uk

An electronic version of this document is available on the NFU website here:
<http://www.nfuonline.com/about-us/our-offices/north-east/environment-and-land-use-latest-news/water-use-in-the-north-east/>

We will continue to provide ongoing updates to our Spray Irrigation prospects in order to give as much detail as we can on possible restrictions, their likely timing and magnitude across Yorkshire.
