



# South Forty Foot Catchment

Managing the risk of flooding

February 2015

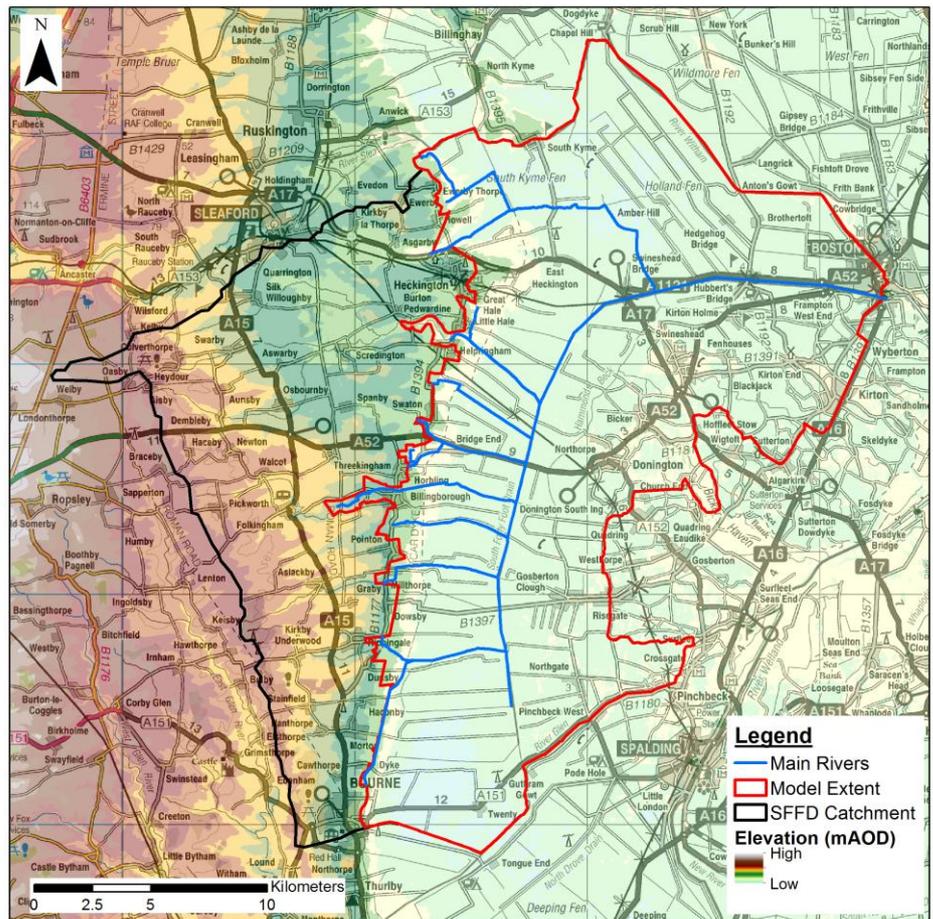
**This newsletter is to inform you what we are doing to manage flood risk in the South Forty Foot Catchment.**

## What is the South Forty Foot Catchment?

The South Forty Foot Catchment is the geographical area where watercourses flow into the South Forty Foot Drain, also known as the Black Sluice Navigation. The South Forty Foot Drain takes water from the fenland area of South Lincolnshire into the Boston Haven at Black Sluice Pumping Station (see map on right showing the catchment).

We are responsible for operating Black Sluice Pumping Station and maintaining the South Forty Foot Drain and some of its feeder drains. Black Sluice Internal Drainage Board operates on both banks of the South Forty Foot Drain, lifting and pumping land drainage water into it from its thirty seven sub-catchments.

During normal conditions gravity sluices at Black Sluice Pumping Station discharge the flows from the South Forty Foot Drain when the tide is low. When there are high flows in the South Forty Foot Drain during high tides, the pumping station operates to pump out fluvial flood water into the Boston Haven. The pumping station, built 68 years ago, is now in need of refurbishment.



## Black Sluice Pumping Station

On 5 December 2013, the East Coast Tidal Surge flooded the pumping station, 'causing 3 of the 5 pumps to be damaged to a point they no longer operate. Due to the age and condition of the pumps and the lack of flood risk benefit, the decision was taken not to undertake costly repair of the pumps. As a result the pumping station now has only two operational pumps with half of the original pumping capacity. To repair the pumping station and refurbish it will cost around £15-£20million - which is significantly more money than we have for this project. This has increased the need to explore alternative flood risk management solutions for the catchment.

Although the pumping station is still beneficial for land drainage purposes, there are only 8 homes and 4 non-residential properties in the lowland area which benefit from a reduced risk of flooding by the operation of the pumping station - these have already been contacted separately.

Most of the flood risk within the catchment is in the highland villages - which our modelling shows are not influenced by Black Sluice Pumping Station. As a result, our earlier investigations concluded that maintaining the pumps cannot be justified on flood risk grounds alone.

## Options for reducing flood risk

It is likely that a combination of the options below will be needed to manage the risk of flooding in the South Forty Foot Drain catchment:

Lower Catchment Options	Upper Catchment Options
Black Sluice Pumping Station (at Boston) - turn the pumps off (including decommission works)	Store water upstream of high ground villages (such as Billingborough, Horbling and Swaton)
Black Sluice Pumping Station - Pumps off & Additional Gravity Discharge at Boston	Increased maintenance
Black Sluice Pumping Station - Pumps off & Spillways along the South Forty Foot Drain	Flood relief channel/bypass flood storage
Black Sluice Pumping Station - Pumps off & Property Level Flood Protection within the low fenland part of the catchment	More substantial upstream flood storage (e.g. reservoir)
Black Sluice Pumping Station refurbishment	Alterations to the watercourses flowing into the South Forty Foot Drain
Widening of South Forty Foot Drain	Property level flood protection
Transfer of flood risk management assets to Black Sluice Internal Drainage Board to manage as land drainage assets	
New South Forty Foot diversion channel around Boston	
Containment (larger flood storage reservoirs)	

## Public consultation events

We would like to know what you think about the options for reducing flood risk in the South Forty Foot Catchment. We are holding two public consultation events - the events will be run as drop-ins meaning you can come along at any time to speak to a member of the project team.

**11 March 2015 - Billingborough Village Hall, 2pm - 7pm**

**12 March 2015 - Bicker Village Hall, 2pm - 7pm**

## Any questions?

Contact: Kevin Abbott (Environment Agency Project Team)

Email: [kevin.abbott@environment-agency.gov.uk](mailto:kevin.abbott@environment-agency.gov.uk)

Tel: 01522 785933