
PEAKIRK NEIGHBOURHOOD PLAN 2016 - 2030

Water Study



OUR VILLAGE - OUR FUTURE

Peakirk Neighbourhood Plan

Water Study

This study forms part of the Peakirk Neighbourhood plan. It supports the plan by setting out a summary of the water infrastructure within the Parish boundary. It consists of evidence obtained from documents produced by Peterborough City Council in line with the Core Strategy.

Other organisations that are able to provide a substantial evidence base for this study include:

The Environment Agency
Anglian Water.

The evidence in this study will be used to inform the plan and underpin its objectives.

The Water Study is made up of two main components, Strategic Flood Risk Assessment and Water Cycle Study. This study investigates the availability of water supply, treatment and infrastructure for Peakirk and identifies the areas which may be prone to flooding.

FLOOD RISK

The following information provides an indication of the possibility of flooding in our area. The information comes from the Environment Agency's Flood Risk Assessment which uses ground levels, predicted flood levels, information on flood defences and local knowledge.

Floods can happen anywhere at any time, caused by rising ground water levels, burst water mains, excessive rainwater as well as flooding from rivers and the sea.

The most common sources of flooding are:

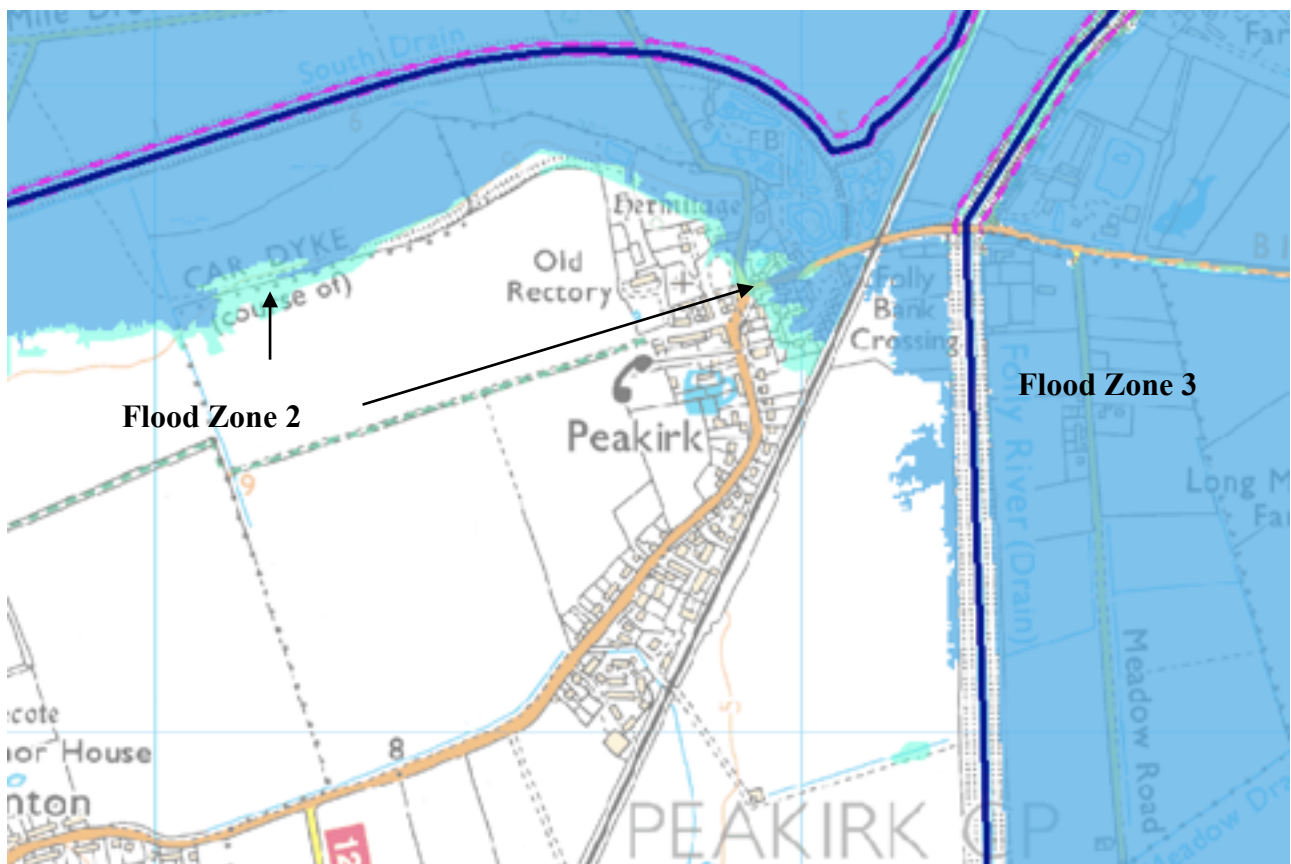
River flooding
Coastal flooding
Surface water flooding
Sewer flooding
Groundwater flooding.

There are a number of organisation that help when flooding occurs. These are:

- Environment Agency
- County Council and Unitary Authority
- Lead Local Flood Authorities (LLFA)
- District Council
- Town and Parish Council
- Police
- Fire and Rescue Service
- Water companies
- Electricity, gas and telecommunication companies
- Flood plan co-ordinator, Flood wardens/volunteers.

Further information can be found at - www.environment-agency.gov.uk - Flood plan guidance for communities and groups (PDF,89KB) - flooding minimising the risk.

Part of the parish is in an area that is defined as At Risk From Rivers or Sea.



As can be seen by the map only a small section of the village is at risk from flooding these are the North and East sides shown in green and blue.

The possibility of flooding is described in three categories, Low, Moderate and Significant. The location of Peakirk is in an area that has a moderate chance of flooding flood zone 2 and Flood Zone 3.

The Environment Agency categorises Flood Zone 2 as land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding.

Flood Zone 3 - land assessed as having a 1 in 100 or greater annual probability of river flooding or a 1 in 200 or greater annual probability of flooding from the sea

Further information may be obtained from the following organisations:

| | |
|--------------------|---|
| Environment Agency | Managing Flood Risk - <i>River Welland Catchment Flood Plan</i> |
| Environment Agency | Flooding minimising the Risk - <i>Flood plan guidance for communities and groups.</i> |

| | |
|-----------------------------|---|
| Peterborough City Council - | Peterborough Flood and Water Management - <i>Supplementary Planning Document.</i> |
|-----------------------------|---|

| | |
|---------------------------|--|
| Peterborough City Council | Strategic Flood Risk Assessment - <i>Level 1 and Level 2</i> |
|---------------------------|--|

DRINKING WATER QUALITY INFORMATION

Anglian Water's region is divided into 160 water supply areas called Public Water Supply Zones. Peakirk is in the Etton supply zone. Anglian water carry out 146000 tests each year on water samples taken from customers taps to ensure the quality of the drinking water.

Tests and sample are regulated by the Water Supply (Water Quality) Regulations.

Source

The drinking water for supply for Peakirk comes from a surface water source. (river or reservoir)

Hardness

The drinking water for Peakirk is classified as hard.

Fluoride

Anglian Water state that they do not add fluoride to the drinking water. However there is naturally occurring fluoride present in all drinking water supplies.

Chlorine

Anglian water state it is important to disinfect water supplies to ensure that it contains no harmful organisms. Chlorine is used to disinfect water supplies. A small amount of ammonia is also added in the process so that the water supply is chlorinated.

Work in the Peakirk Area

To ensure continued excellent drinking water supplies Anglian Water carry out work to ensure they continue to meet the legal requirement limits specified in the Water Supply (Water Quality) Regulations 2000 (as Amended). This is known as a programme of Work.

Work to be carried out in the Peakirk area

Metaldehyde and Total pesticides - Completion Date 31/03/2015

WASTE WATER

Anglian Water is responsible for all of the public sewers that run through the village.

Waste or foul water from Northborough flows to the pumping station adjacent to the old wild fowl trust at the North end of the village. It is then pumped through the village to the pumping station at the Glington end of the village. From there it is pumped to Werrington and on to the Waste Water Treatment Works at Flag Fen.

Over the past six years there have been incidents with the pumping station at the Glington end of the village. On a number of occasions the pump has ceased to work, partly due to increased rain fall or surface water entering the pipe network. When a pump failure occurs the water backs up in the pipes back towards the village. This causes inconvenience for a number of properties. The drains fill with the backed up water/waste. This results in these properties being unable to use any water facilities until the levels have subsided. Anglian water are made aware of the problem every time it occurs.

List of recent dates when incidents have occurred:

6th Dec 2012
28th Dec 2012
29th Dec 2012
21st Jan 2013
23rd/24th August 2013
23rd May 2014
25th May 2014
2nd May 2015
Mid Jan 2016
27th Aug 2016
10th Sept 2016.

Information has been gained from several engineers who have investigated pump failure and back-flow. One cause was that the water holding sump had silted to a level that cause the pump starting mechanism to fail.

During times of failure excess water is diverted into Carr Dyke at the side of the Sandlings roadway. This is to try to prevent flooding of property.

Anglian Water confirmed completion of a repair to the vulnerable parts of the rising main associated with the Peakirk (St Pegas Rd) pumping Station.

They state that, should any further deterioration occur, they will consider replacement of a further section. However presently there are no further works planned.

Further to this, in January 2014 we were informed that pipework between Peakirk and Werrington had failed and would have to be replaced. Anglian Water were contacted as to the extent of the work to be carried out. They were asked if the capacity of the pipe could be increased to allow water from the pumping station to be carried away more quickly and help prevent failure of the pump.

Anglian Water stated that the failure was due to a burst in the pipeline. 1.5km would be replaced this was like for like. It would not increase the capacity of the pumping station. It would not decrease the possibility of the pump failing.

In May 2014 after heavy rain, the pump again failed. The foul water backed up in the sewers in part of the village. This caused a number of properties to be without waste-water facilities for unto 6 hrs.

Because of the vulnerability of the pumping station, questions were put to Anglian Water planning liaison department regarding the capacity of the pumping station being able to support any further development in the Village.

Firstly, Anglian Water has a duty to ensure that the sewerage network is fit for purpose and is maintained as appropriate.

The sewerage network serving Peakirk is a foul only network. Anglian Water would need to make certain that any future growth has a suitable surface water drainage strategy which does not include a connection to the foul sewerage network.

Foul water from any future growth will have an impact on the existing foul sewerage network. The infrastructure requirements will depend on the location and size of the development. All sites will be connected to the existing sewerage network. This may require the network to be upgraded. Any upgrade will be funded by the developer through the provisions of water act 1991.

Developers have to consider flooding on development sites including fluvial and surface water. They should seek to reduce flood risk and incorporate Sustainable Drainage Systems (SuDS). Surface water will not be permitted to be discharged into the public foul sewerage system.

Brown-field sites marked for development must completely remove any surface water currently discharging into the foul system.

From this information foul water from a development will be discharged into the existing sewerage system but surface water should not.

Questions were also put to the Welland and Deeping's Internal Drainage Board as to any major work scheduled for the Welland / Peakirk area in the near future.

Their response: 'Other than routine maintenance work there are no schemes planned at present'.

June 2014

Representatives of Anglian Water attended a Parish council meeting on 23rd June. They were informed of the continuing problems from the pumping station at the Glington end of the village and at the pumping station opposite the old Wild Fowl Trust site. We were assured they would be looked into.

During periods of heavy rainfall there is the flooding problem between the Ruddy Duck public house and the Monument. Peterborough City Council is looking into this problem.

Further Information about Clean or waste water can be found at:

[anglianwater.co.uk](http://www.anglianwater.co.uk)

Peterborough Water Cycle Study - Detailed Strategy

<http://www.anglianwater.co.uk/developers/planning/encroachment.aspx>