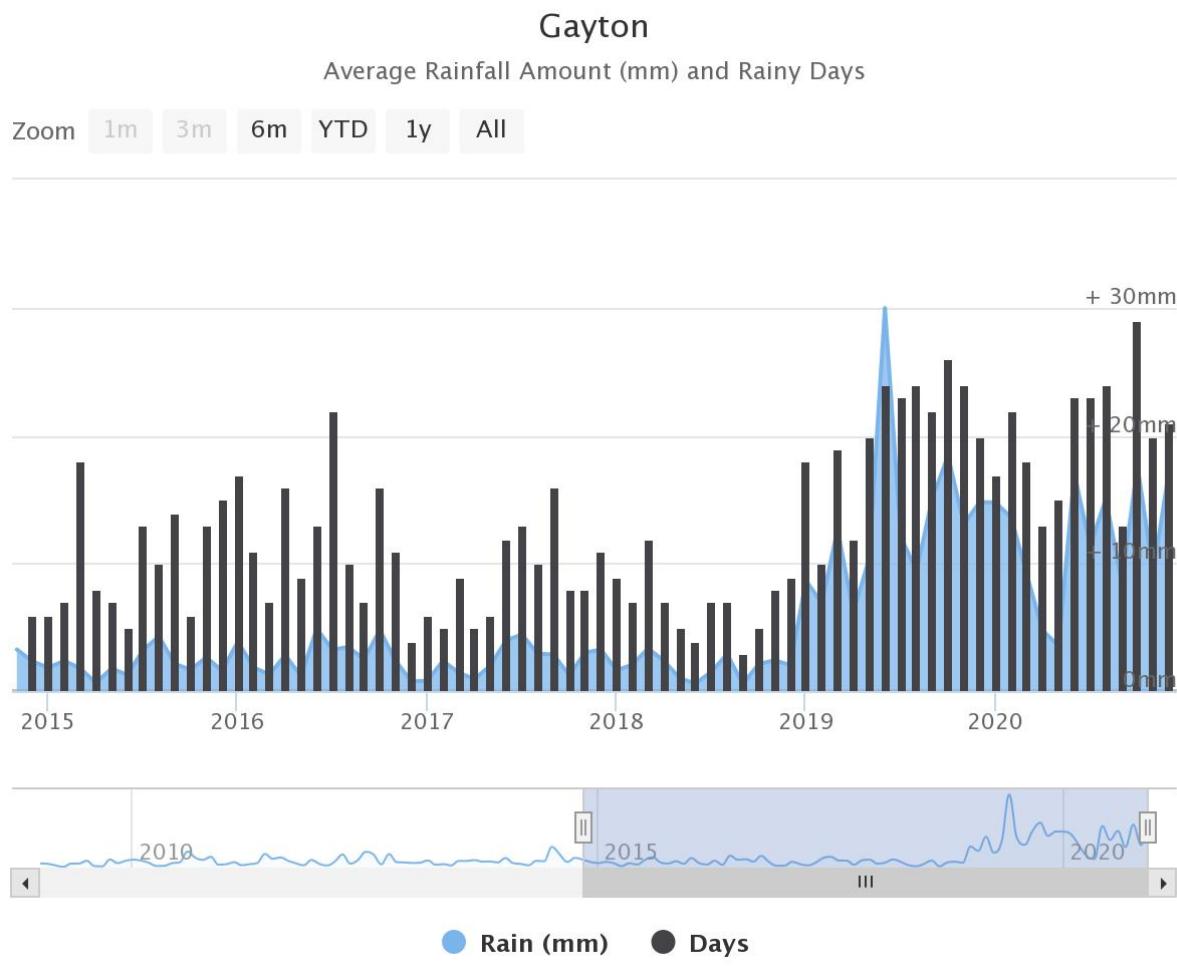


Flooding and Drainage Issues in Gayton January 2021

Introduction

In the recent weeks there have been a plethora of drain issues within the village that have caused consternation and distress to local residents. There has been a period of excessive rainfall which appears to be an evolving picture of increased precipitation through recent years.

The graph below shows actual rain quantity in the blue shaded area and a bar graph of the number of rainy days, it should be noted that although the number of rainy days is increased over previous years the amounts of rainfall have increased by around 3 times from 2018. (Source ---worldweatheronline.com)



This increase in rainfall has caused multiple problems which can be categorised into three main issues

1. Rain-soaked ground causing a rise in the natural water table which is at record highs. (Flooding from groundwater) This has caused localised flooding where natural soakaway drainage has not been able to cope, this has been highlighted by the groundworks for the school and Rampant Horse development flooding. The School groundworks have flooded with every rain shower and indeed in periods of little rain due to the high water table. This water has needed to be pumped from the site into the drains which has blurred the other issues in the village drainage scenario.

2. Drains in Springvale Estate on both sides of the Roads have backed up and overflowed causing flooding and sewage escape from the drainage system, Anglian Water have attended these issues (although there have been delays) as they have been reported and attended to them and cleaned up sewage escapes where they have occurred. This issue would appear to be blockages of fat, human waste and sanitary products.
3. Drains have been backing up and causing gardens to flood with sewage at the lowest point in the system which is a more difficult problem to solve as this will require Infrastructure improvements not only in Gayton but also further downstream at Grimston and beyond.

The issues will be looked at in turn and mitigation/remedial actions suggested!

1. Rain Soaked Ground

Due to the extremely high levels of rainfall experienced in the last two years, groundwater levels are at a level that has not been seen since the 1980s. The current level is 0.55 which, combined with excess levels of surface water from high levels of rainfall, has resulted in gardens becoming flooded and the building sites at the new school and Rampant Horse, which have had surface soil excavated, flooding. It has not helped the drainage issues with the surface/ground water from the school site being pumped into the drains which has clouded some public opinion into thinking that this is the cause of some of the surface flooding issues in the village. It has contributed to it but is not the direct cause.

The photographs show flooded gardens which may be as a result of the high water table or possibly the localised drain issues discussed next.



Flooded garden in Winch Road



Flooded garden in Winch Road



Flooded garden in Winch Road



Flooded garden in Winch Road

Mitigation measures suggested

- Ensuring as much surface water as possible is channelled into dykes and ditches and the channels leading to them are kept clear.
- Drainage systems to foul drains are kept clear of blockages.
- Trees are planted wherever possible as they take up a fair amount of groundwater.

Reference material:-

<https://www.gov.uk/government/collections/groundwater-current-status-and-flood-risk>

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/297421/flho0911bugi-e-e.pdf

2. Drains in Springvale

The drains in Springvale have been overflowing causing water to back up the drains and sewage to be released into residents' gardens. This has subsequently happened not just to both sides of Springvale but also along Cedar Way. This issue is exacerbated by the length of time it is taking Anglian water to respond due to their heavy workload in the area which is really unacceptable to residents whose gardens are covered in sewage. This appears to be an issue with the drains becoming blocked with fat, wet wipes, sanitary products etc.

A check on the road drains in the village also shows a high proportion to be blocked with silt, leaves etc leading to flooding at times of heavy rainfall.

The photographs below show this issue.



Flooding from manhole ---Springvale



Sewage flooding ---Springvale



Sewage overflow—Springvale



Sewage overflow—Springvale



Examples of blocked road drains



Mitigation measures suggested

- Anglian Water/Highways to carry out a planned maintenance programme to ensure drains do not become blocked, which is given an ongoing commitment.
- That Longhurst Housing Group take ongoing responsibility for the maintenance of the surface water systems on Springvale Estate and maintain the gulleys on the estate.
- Residents need to be aware that they are responsible for the drainage from their own property to the connection with the mains drainage.
- That a Village campaign is carried out to alert people to the issues of disposing of fat, wet wipes and sanitary products down the drains leads to these types of problems with the drains.

Website: -

<https://www.anglianwater.co.uk/in-the-community/protecting-our-environment/why-keep-it-clear/tips-for-the-home/>

3. Drains backing up and causing gardens to flood with sewage

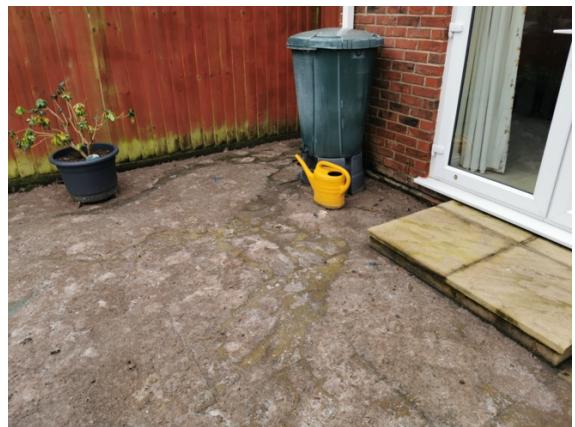
This has been a serious and ongoing issue for a number of years particularly in times of high rainfall when the sewage system backs up due to cross contamination with surface water and lack of capacity further downstream or lack of regular maintenance of the pumping stations causing failure. This necessitates a contractor (Currently IWJS tankers) to be positioned at strategic points in our village and Grimston and Pottrow in order to pump sewage direct from the system which is then transported for processing to Kings Lynn.

A few years ago the houses at the lowest point in the village were regularly flooded with sewage and to mitigate this Anglia Water fitted a non-return valve in the system in order to prevent the problem occurring at these properties, however all this has achieved is the flooding of the next properties upstream. On four occasions between Christmas and 28th January gardens of at least four villagers have been severely flooded with sewage and drainage systems (Toilets and sinks) in these homes have been unusable. This on any account is a totally unacceptable situation and urgent steps must be taken to prevent this from happening in the future.

The following photographs show gardens flooded with sewage which by anyone's standards is disgusting!



8 photos of residents gardens flooded with sewage (2 gardens are shown of adjoining properties)





The problem shown above is well known to Anglian water who at times of heavy rainfall use contract tankers to remove excess effluent from the system at various points in our village as well as in Grimston and Pott Row. The excess effluent is removed by tanker direct to Kings Lynn for processing.

A tanker driver who was stationed in Pott Row at the pumping station was asked if he was tankering effluent away because of a breakdown at the pumping station answered “no, not at all---it’s because the pumping station can’t cope!” I have not spoken with Anglian Water engineers who may have a different version!

Gardens at the lowest point in the village shown in the photographs above have now been flooded with effluent four times since Christmas 2020 and the owners are beginning to despair, they have been flooded despite the tankering operation, which is a clear sign that the infrastructure is unable to cope despite the best efforts of Anglian Water. This is a totally unacceptable situation given that the system cannot cope at the present time and there are still around 100 planning permissions for properties which have been granted in Gayton and at least 30 in Grimston and PottRow which will only exacerbate the current situation, making the issue of effluent escape in residents properties more prevalent.

This is a comment from an affected resident:-

“I have now been flooded three times since Christmas Eve, leaving with garden mess as per photos but also the 4 houses here have not been able to use downstair toilets and in our case, neither can we use the kitchen sink or any downstair hand basins because the foul water is backed up and therefore none of these can drain away. The total number days we have been without these facilities, in our case, is 17 since Christmas eve.”

I do not know what infrastructure changes are required but it will be a major project and investment on Anglian Waters part to install larger bore pipes through the system or upgrade the pumping capacity, but it is my belief that housing development should be stopped until a satisfactory effluent removal system can be guaranteed. A glance through the planning portal shows the concerns of Anglian Water as far back as 2016 in the following correspondence taken from the portal:-

From: Bull Sue [<mailto:sBull@anglianwater.co.uk>]
Sent: 17 February 2016 13:05
To: David Parkin
Subject: FW: 15/01786/OM Stave Farm, Chapel Rd, Pott Row & 15/01888/OM Manor Farm, Back Street, Gayton

Dear David,

Further to our telephone conversation this morning, I write to summarise the current stance on planning applications and potential growth in the Gayton/Pott Row area:

We have responded to applications: 15/01776/OM (29 dwellings), 15/01946/OM (24 dwellings), 15/01838/OM(18 dwellings), 15/01786/OM(27 dwellings) and 15/01888/OM (40 dwellings).

Water Recycling Centre capacity

AW agreed a new consent with the Environment Agency in 2015 for the Grimston Water Recycling Centre that serves Gayton and Pott Row. I am pleased to advise this means under this consent we currently have capacity to accommodate all the potential growth that has recently been submitted as planning applications that we have made representation on as part of the consultation process.

Foul Sewerage Network

There is limited capacity in the foul sewer system to accommodate growth so that if all recent planning applications were to come forward network upgrades would be required. If you are minded to grant permission to more than one of these applications , we would recommend a drainage condition is applied to ensure a drainage solution is identified and agreed before commencement on site and implemented before connection of dwellings to the sewerage system is made .

In our discussion this morning, I advised of the potential options for the upgrades to be implemented. Although there is provision within the Water Industry Act 1991(WIA) for upgrades to be carried out by Anglian Water, this would have to be considered and approved by our regulator, OFWAT, through our Business Planning process that operates in five year cycles. We are currently in our 2015- 2020 plan and work has already commenced on our next plan (2020-2025). These timescales , even if a scheme were to be approved for inclusion in the Business Plan are unlikely to fit in with the timescale for the planning applications currently being considered.

There are a number of options whereby the developer can instigate the necessary upgrades and these will be more viable for these applications as the developer will have more control over the timings.

These include :

- Section 98 of the WIA whereby the applicant requisitions AW to carry out the necessary upgrades to enable the development to connect to the sewerage system. The developer will pay a contribution to the capital cost of the upgrades (a reduction to the capital cost will apply based on the income AW will receive over a 12 year period from the sewerage charges from each of the new dwellings that is part of the development).
- Section 104 of the WIA whereby the applicant enters into an adoption agreement with AW. The applicant, subject to AW vetting and approval, designs and constructs the necessary upgrades and on completion, transfer to AW to become part of the public sewerage system.

We strongly recommend the applicants approach AW via our pre planning service (details can be found at : <http://www.anglianwater.co.uk/developers/pre-planning-service-.aspx>). This will assess the proposal and identify a viable drainage solution. To date we have received pre planning enquiries for sites 15/01946/OM and 15/01786/OM. There may be some benefit for collaboration between neighbouring developers whereby a joint solution could be achieved.

Unrelated to capacity , I note that application 15/01786/OM is located close to a AW pumping station (to the north east corner of the site). We have recommended a condition is applied to ensure that the design layout is such that no dwelling or

associated garden is located nearer than 15m distance from the pumping station. This is to prevent risk of nuisance/loss of amenity to the occupiers of the dwellings.

I hope this clarifies the situation but please do not hesitate to call me if you want to discuss further.

Regards

Sue Bull
Planning Liaison Manager

Anglian Water Services Limited
Tel Office: 01733 414690
Thorpe Wood House, Thorpe Wood, Peterborough, PE3 6WT
www.anglianwater.co.uk

From: David Parkin [<mailto:David.Parkin@West-Norfolk.gov.uk>]
Sent: 16 February 2016 17:01
To: Rhodes Mark
Subject: 15/01786/OM Stave Farm, Chapel Rd, Pott Row & 15/01888/OM Manor Farm, Back Street, Gayton
Importance: High

EXTERNAL MAIL

Dear Mr Rhodes

Please call me urgently to discuss your consultation response to the above applications and others in Gayton, Grimston & Pott Row. This matter is now pressing and urgent. My telephone number is 01553 616468.

Actions suggested

- In the first instance Gayton and Grimston Parish Councils should join forces, (perhaps including residents in any committee?) in order to exert influence on the relevant agencies which will include, Anglian Water, Internal Drainage Board, Environment Agency, Highways Authority (perhaps others) and finally the Planning Authorities at BCKL&WN. The issues present should be taken forward under the guidance and leadership of both PCs
- Residents in affected areas need to be given some assurance that these issues are being taken seriously, perhaps a follow up meeting with Anglian Water as a starting point?
- Perhaps development of the village should be halted until resolution to the foul drainage issues are resolved?

Charles Muff

27/1/2020