Good afternoon,

As you are a member of a multi-agency flooding group, we are getting in touch today to provide an update on the work we have done so far to tackle flooding across the Anglian Water region.

In response to the flooding of last winter (2023/2024), our teams have been working hard to make sure we are prepared for this winter and reduce the risk of flooding.

Being prepared for flooding

Work so far this year includes:

- Carrying out extensive CCTV surveys over 670km of pipes to identify weak points of groundwater infiltration into the sewer network, and relining sewers where possible.
- Installing nearly 40,000 sewer monitors to find and fix issues to our network before they take place.
- Using satellite technology to spot potential sewage leaks on more than 93,000km of pipes.
- Installing nature-based solutions and sustainable urban drainage schemes across the region to address surface water flooding.
- Investing in expanding capacity in our networks with storm water storage at our water recycling centres. Since 2020 we have increased storm water storage by approximately 63,000m³ or 25 Olympic swimming pools.

In addition, since April we have spent more than £4.7 million on planned preventative maintenance to our assets alone.

As we head into the new year, we wanted to share key flooding information to help residents and businesses if they experience issues.

Who to contact for help with flooding issues:

For high or overflowing rivers: call the Environment Agency on 0800 80 70 60 for help and advice.

Flood water from highways, run off from fields or issues with land drainage: Contact the local council – you can find their contact details <u>here</u>. Most flooding caused by rainwater will subside once the rain stops. If it's causing a danger to life call 101 or 999.

Clearing up debris left over from the flooding: Speak to the local council to get help to clean up silt and mud left behind by receding rain or flood water.

If there's been any flooding from Anglian Water sewers, they will attend as soon as possible to clear up, but only once they've helped customers who have flooding inside their homes or problems with their water supply.

A new water or sewerage issue: Anglian Water will be closely monitoring our network in the area, but if there is a problem, the quickest way to do it is online <u>here</u>. Alternatively, customers can call the 24/7 customer services team on 0345 7145 145. For more help and advice, visit the Anglian Water <u>Flood Hub</u>.

Reduce blockages to reduce flooding

After flushing the toilet or rinsing the dishes, most people don't think about what happens to their wastewater – but Anglian Water do. Our teams find rubbish like wet wipes, nappies, period products, fat, oil, grease and more in the sewer network which causes blockages. But 80% of blockages are avoidable.

From wiping bottoms, to removing make up, to keeping things clean – wipes are handy to have around. But they take thousands of years to break down because they aren't bio-degradable, so they belong in the bin and not down the loo.

11 billion wet wipes are disposed of each year – and the number of skips we fill with rubbish like wipes would stack up as high as Mount Everest. To avoid blocked pipes and keep sewers clear we all need to **Just Bin It**. Just bin it to help keep the sewer pipes clean by:

- Only flush the 3Ps: Pee, Poo and Paper
- Bin wet wipes and sanitary products
- Once cooled, bin any cooking fat, oil or grease

For more information visit: <u>Down plugholes and toilets</u>

Please also see our **Just Bin It** poster attached which would be good to share if you can please.

Stage A - 70% completed

- Groundwater Model
 - North East Anglian Chalk Groundwater Model updates complete and now calibrated to Winter 20/21. Main work included calibration of recharge and runoff model properties in the Burn catchment to better match observed flows in the River Burn. As we know the River Burn is predominantly groundwater fed and less impacted by surface water runoff. This was not reflected in the original NEAC regional groundwater model as this groundwater input is a local occurrence. Main changes were around assumptions with the glacial till and permeability (hydraulic conductivity) in order to increase the amount of recharge to groundwater and reduce runoff in the River Burn catchment, such that the observed responses could be better matched.
 - Dec 20 and Feb 21 outputs match the gauged record reasonably well now, not perfect but is much better than previous iteration of the model.
 - Flows based on a 200m grided output along the main river corridors, these will be translated over to the fluvial model.

Fluvial Model

- River Burn hydraulic model has now all critical structures included from surveys
 original EA model had 33 missing.
- Key flow structures (weirs, gates) associated with Union Mills and Millstream have been added and assumptions around positions and operation during Winter 20/21 particularly at Millstream structures. No further comments regarding model stabilisation.
- Goose Beck channel survey complete and combined with updated River Burn model and will be run firstly for calibration events (Dec 2020 and Feb 2021).
- Results of calibration run in early December to ensure model can be validated against past key flood events. LLFA to advise if further amendments are required. LLFA to consult Parishes if necessary on validity of results
- Once LLFA/EA happy with results from calibration events, full sweep of design events to be run. Completion estimated Q1 2025

Stage B – Appraise Long List of Options (not started)

 Called "options screening" stage whereby a long list of options are agreed with RMA Partners/Parishes and then appraised on their technical, environmental & economic merits. Landowner compatibility also considered. Happy to take suggestions from Parishes.

Stage C - Modelling of Short Listed Options (LLFA to secure funding) Q2 2025

- If there are viable options to take forward from Stage B, which could be built, then will need to test these in the model to see their impact on groundwater/river levels before and after investment.
- This will provide evidence and facts required to seek partnership funding (government grants/ private & public contributions)

Current Long list Options:

1 NFM Upstream on Waterden Lane (NCC Led)

- 2 NFM in North Creake field upstream of village hall (EA Led)
- 3 Larger bore pipe in Front Street (600mm) + deeper goose beck+ two new road crossings
- 4 Bypass the Millstream Lowered Spillway and Larger pipe under A149 for IDB system
- 5 Groundwater Abstraction to large reservoirs
- Bypass channel around Union Mills and under Overy Rd back into the Burn. New weir introduced are entrance of the lake. Norfolk Rivers IDB to provide sketch.
- 7 Bigger Pumps on the foul system? Cat 3 discharge issues though?
- 8 Link 7 to a wetland area for water quality polishing
- 9 Land drains along lines of foul sewers?
- 10 Tidal overpumping?
- 11 Shallow basins in the Green, Burnham Market

We intend to have a virtual stakeholder workshop at the end of January 2025, followed by a meeting with the Parishes. We will co-ordinate meeting dates nearer to the time.

I hope this is useful

Regards

Mark

Mark Ogden, Flood & Water Manager

Infrastructure Tel: 0344 800 8020

Email: <u>llfa@norfolk.gov.uk</u> for any pre-planning or statutory consultee enquiries

Email: suds@norfolk.gov.uk for ongoing flood alleviation schemes Email: pfr@norfolk.gov.uk for all property flood resilience projects

Email: water.management@norfolk.gov.uk for any reports of flooding, watercourse regulation

or general enquiries

You can report flooding to the Norfolk Flooding Hotline on 0344 800 8013





Multi Agency Group

Minutes: MAG001 Norfolk Groundwater Challenges

Date:05.12.2024

1 Attendees Back to top

Name	Name	Name
Robert Kelly (Norfolk CC)	Alison Demonty (West Norfolk DC)	Rory Sanderson (EA)
Dannielle Claridge (AECOM)	Cllr Christopher Martin (Gayton PC)	Cllr Peter Gidney (Gayton PC)
Dennis Clark (Burnham Market	Rachel Paterson (PA James Wild MP)	Mark Ogden (Norfolk CC)
PC)		
Cllr Michael de Whalley (Gayton	Tom Hunter (Water Management	Alan Loy (Grimston PC)
PC)	Alliance)	
Keith Israel (Grimston PC)		

2 Minutes and Actions

Back to top

Review of actions from previous meetings

- Dave Robson (DR) offered to meet offiline regarding planning with Victoria Crerand (VC) and Hannah Wilson (HW) - Alison Demonty (AD) reported that DR is awaiting a response from HW
- Rory Sanderson (RS) will share the slides from his presentation with some explainatory notes Completed
 18/10
- Robert Kelly (RK) asked other members of the NSFA comms group to support VC and RS in delivering comms
 messages and attending local meetings completed, see feedback below
- It was suggested that he comms group could look at producing a one-sheet document with useful contact numbers and information for residents Alice Russell (AR) has not received any information from the group regarding this, ongoing





Update from Burnham Market Parish Council Meeting

Dennis Clark (DC)

o Reported that the meeting had slightly lower attendance than expected, being the first meeting since February. The meeting discussed the actions that had taken place and tried to focus on what is improving for them. DC reported that Anglian Water commented that if there is any flooding this year there will be tankers provided. There was also discussion around sluices, particularly the key sluice on Overly Road as there are residents that suffer when the sluice is closed; as it cannot be opened by members of the public, due to being on private land, the Environment Agency repesentative said they would look at the legal aspect around who was responsible for ensuring that it was being used appropriately. Electronic copies of local flooding maps that show the likelihood of flooding have been provided, and these have been distributed to parishoners.

Mark Ogden (MO)

 Explained that there is information about the wider groundwater study that could be distributed to the parish council. The dates for the stakeholder virtual workshop are in January, once this has been approved for distribution it will be sent over. See action list.

Tom Hunter (TH)

• The meeting discussed the conveyance through Burham Market and the issues this brings, as well as the mills and conversation with the owners of the mills.

• RS

- O Has spoken with the legal department regarding the Overly Road sluice and they are looking at Anglian bylaws. Once these have been clarified and actions that can come from this are determined, these will be actioned. See action list.
- The upstream catchment was discussed and approaches to investigate this further; a groundwater catchment specialist has been consulted, and it has been established that these local actions should be possible and could have an impact on the groundwater level in the area.

RK

- Highlighted that more has happened in the last 6 months than has previously been achieved, and it
 would be useful to share this story with the parish. RK speak with Sarah Moreton (SM) about
 communications to be issued. See action list.
- Burnham working group been scheduled.

Update from River Burn Working Group

See update above from DC.





Groundwater Monitoring Update

- RS
- Discussed the slides with the group on rainfall summary and the impact of Storm Babet. It was noted that October rainfall was below average, and lower than the same time last year.
- o The soil moisture deficit slightly improved to last year.
- Slides will be circulated and added to the distribution list. See action list

Update from Gayton & Grimston

- Alan Loy (AL)
 - Mentioned that at the last meeting it was discussed that future building work may be able to tap into the sewer system without checking the capacity, and explained that it would be useful to check capacity.
 - o RK explained that it would not be possible to deny the connection, and stated that VC could share information regarding this Ongoing action, see action list number 23.
- Michael de Whalley (MdW)
 - The parish council met on 02.12.24, and they discussed the draiange issue between Lynn Road and Chapel Road. Specific points of concern were raised regarding the extent of the works being done. Soil waste has not been removed as per the original specification, and there are concerns that the spoil near the ditches will be washed back in. The culverts have not been cleaned as they are below the silt level, and are blocked. This has been passed on to the Highways team. TH suggested MdW send details of concerns over for him to investigate. See action list
- RK
- This information will be fed back into the next working group. See action list
- Christopher Martin (CM)
 - Requested an update on the works that were being done, however there were no representatives from Anglian Water to discuss.

Communications

- RK
- A lot has changed and this needs to be shared better. See update section above and action list number 29.

AOB

- MO
 - Requested that RK discuss with Anglian Water updating communications. See update section above and action list number 29.
- AD
- There are a couple of meetings next week about welfare provisions, both internal and with partners.
 Rachel Paterson (RP) queried whether it would be useful for the MP office to attend or receive a briefing afterwards.
 RK hihglighted that the NSFA and NRF resilience meetings were possibly more helpful to attend, RP to attend, and determine if welfare meeting attendance is needed in future.





CM

 Queried if working groups were available for councillors to attend. RK confirmed and will send an invite. See action list

23 - ongoing	Dave Robson offered to meet offiline regarding planning with Victoria Crerand and Hannah Wilson	Dave Robson/Victoria Crerand /Hannah Wilson
26 - ongoing	It was suggested that the comms group could look at producing a one-sheet document with useful contact numbers and information for residents	NSFA comms group members
27	Mark Ogden to distribute information on groundwater study, once this has been approved at the stakeholder virtual workshop in January 2025	Mark Ogden
28	Environment Agency RS to determine legal actions around Overly Road sluice and share information and possible actions around this	Environment Agency
29	Robert Kelly to speak with Sarah Moreton about communications to be issued regarding the update on works to present	Robert Kelly
30	Rory Sanderson to circulate rainfall summary slides to the distribution list.	Rory Sanderson
31	Michael de Whalley to send over details of concerns from the parish council meeting to Tom Hunter to investigate.	Michael de Whalley and Tom Hunter
32	Robert Kelly to feedback information from the parish council meetings at the next working group.	Robert Kelly
33	Robert Kelly to send an invite to the councillors to attend the working groups.	Robert Kelly

Next Meeting: Friday 24th January 2025 at 1pm.

From: Robert Kelly <robert.kelly@norfolk.gov.uk>

Rob Kelly

Water Management Director - Norfolk Strategic Flooding Alliance

County Hall, Martineau Lane, Norwich, NR1 2DH

Error! Filename not specified. Error! Filename not specified. Error! Filename not specified.

Error! Filename not specified.

From: Dennis Clark < dennisclark19@me.com Sent: Tuesday, January 7, 2025 7:35:50 PM
To: Robert Kelly robert.kelly@norfolk.gov.uk

Cc: Caroline
cr: Caroline
parishclerk@burnhammarketparishcouncil.gov.uk

Subject: Fwd: Union Mills, and Burnham Market Flooding

WARNING: External email, think before you click!

Dear Rob,

Here is a message from a resident of Union Mills reacting to my report in the local parish magazine regarding our open meeting we held in Burnham Market.

It seems to turn the sluice issue on its head regarding the comments from our Parishoners in Joan Shorts Lane and the Overy road.

Can and should the Alliance team discuss this matter and help me with a response.

Kind regards

Dennis Sent from my iPhone

Begin forwarded message:

From: john snook < snookjt@outlook.com > Date: January 7, 2025 at 5:06:49 PM GMT

To: dennisclark19@me.com

Subject: Union Mills, and Burnham Market Flooding

Dear Dennis,

Thank you for returning my call. As I explained, I am one of the residents at Union Mills, Overy Road, and we were very upset by the comments in the recent Parish Magazine. My purpose in making contact was to invite you and any other interested Councillors to pop over for a site meeting to understand the water control arrangements

we have in place at the mill. There is clearly a complete misunderstanding of the situation and the water flow regime, leading to some ill-informed views.

Since you are still involved with the flooding issues in Burnham Market, and you explained that there is a further committee meeting soon, perhaps we can set out some pointers in this email to pass onto your fellow members:-

- 1. The flooding in Burnham Market, arising from the Goosebeck, is obviously a major concern to us all and for those experiencing flooding very distressing. We understand that this an emotional issue.
- 2. We have control of several sluice gates which control the level of the mill pond at the mill.
- 3. There are 4 residents on site with access to the sluice gates to ensure the pond is regulated. In addition, I also have 3 other local people who regularly check that all is well, in periods of my absence. So, the levels are checked pretty constantly by authorised personnel.
- 4. These arrangements are regularly inspected by the E.A. to ensure the channels are free flowing. (c2xpa).
- 5. The flow patterns and flooding are complex and relate to the whole catchment of the Burn. We have been liaising with the various authorities for some years, notably most recently with Steve Halls. I am sure you are aware of his efforts. We held a site meeting with all interested parties a few months ago, to discuss our problems, ref below.
- 6. Contrary to the overall flooding issue, our very local problem is <u>maintaining an adequate level of water</u>. The general poor flow of water we are suffering is causing a

build- up of pond weed, in turn causing blockages which happened last year.

An interesting historical reference is that it would now be impossible to operate the mill as originally intended due to poor levels. The mill pond is now only of amenity value.

- 7. Contary to the impression given in the Parish magazine, we are not able to control the flow and drainage of the Goosebeck. This bypasses the mill pond and exits straight under the road. We can show you the flow pattern when you visit.
- 8. The flow to the mill pond comes via the Anglian plant, from Burnham Thorpe etc. we have been complaining that our poor flow is caused by Holkham abstracting water for irrigation. The timing appears coincidental(!), but Steve Halls and team believe that the Burn is silting up, and this is causing the problem in the Creakes.
- 9.My overall understanding is that this complex problem will involve substantial works and significant capital to solve. Including major excavation up stream. The problems in Burnham Market have been exacerbated by new building work and loss of natural drainage and storage. We can show you the ideas locally to us if you are not aware of these.
- 10. We have suffered from a spate of trespassing in recent years which has been very upsetting, culminating last year in criminal damage. This caused the sluice gate to be out of action for some months. In turn, we have had to install a lock on the gate. It is clear from the minutes that this trespassing continues! Sadly for the first time in 20 yrs of residence I have had to put a privacy sign on my gate.

I trust this note is useful to you and colleagues, and can I repeat our invitation to come along and see the situation on

the ground? We are anxious to clarify the mis understandings suggested by the recent public meeting.

Sorry to write at such length

Thank you and kind regards, John