

Flooding from Groundwater

Hampshire

21 December 2023

Current situation

Groundwater levels in Hampshire are significantly high and continue to rise. Since the last time this Briefing Note was issued on 24/11/2023, between 85 and 170mm of rain has been recorded in Hampshire. This is higher than the average rainfall expected during that time and is in addition to an extremely wet October and very wet November.

In all communities across Hampshire, groundwater levels are very high for this time of year. Several communities across Hampshire are now experiencing groundwater flooding impacts, such as winterbourne streams flowing, flooding to land, roads, and cellars, and impacts to the sewerage networks.

The table below shows rainfall data values recorded at Otterbourne, near Winchester, up to 21 December 2023 (this gauge is used statistically for comparisons because of its very long term record).

Month	Hampshire at Otterbourne (near Winchester)						
	Total rainfall	Long Term Average Rainfall	% of Long Term Monthly Average	Wettest		Driest	
	(mm)	(mm)		mm	year	mm	year
August	82.6	61.2	135%	168.6	1931	3.8	1940
September	81.3	71.3	114%	196.5	1968	1.0	1929
October	172.9	78.6	219%	227.6	2020	4.6	1969
November	126.4	83.1	152%	244.0	2002	8.9	1945
December	103.6	93.5	111%	244.5	1934	12.3	1926

Flood Alerts are currently in force for the following communities in Hampshire:

Vernham Dean, Upton and the Bourne Valley
 Villages surrounding Andover
 Hursley
 Bramdean and Cheriton
 Twyford and Hensting

Meon Valley from East Meon to Soberton
 Hambledon
 Finchdean, Dean Lane End and Rowlands Castle
 Cranbourne Chase area
 Salisbury Plain area

Forecast risk of flooding

Dry weather is forecast until Monday 25/12/2023. The rate at which groundwater levels are rising is expected to slow down during this time. There is an indication that there will be a return to unsettled weather from Boxing Day. Heavy or prolonged rainfall will cause groundwater levels to rise once more, increasing impacts experienced.

If we have a wetter than average end to December 2023 and start to January 2024, minor groundwater flood impacts could be possible in any location this winter.

If we receive average rainfall between December 2023 and February 2024, it could be possible that any communities will experience groundwater flooding impacts in Hampshire later this winter.

The graphs below show data from some of our key indicator boreholes up to the 21st December 2023. Current water levels (shown in red) are compared to long term average data.

(Note: the data shown on these graphs is representative of groundwater levels impacting communities. We have an extensive groundwater monitoring network. In our assessment of flood risk, we use data from many sites along with data from these key indicator boreholes).

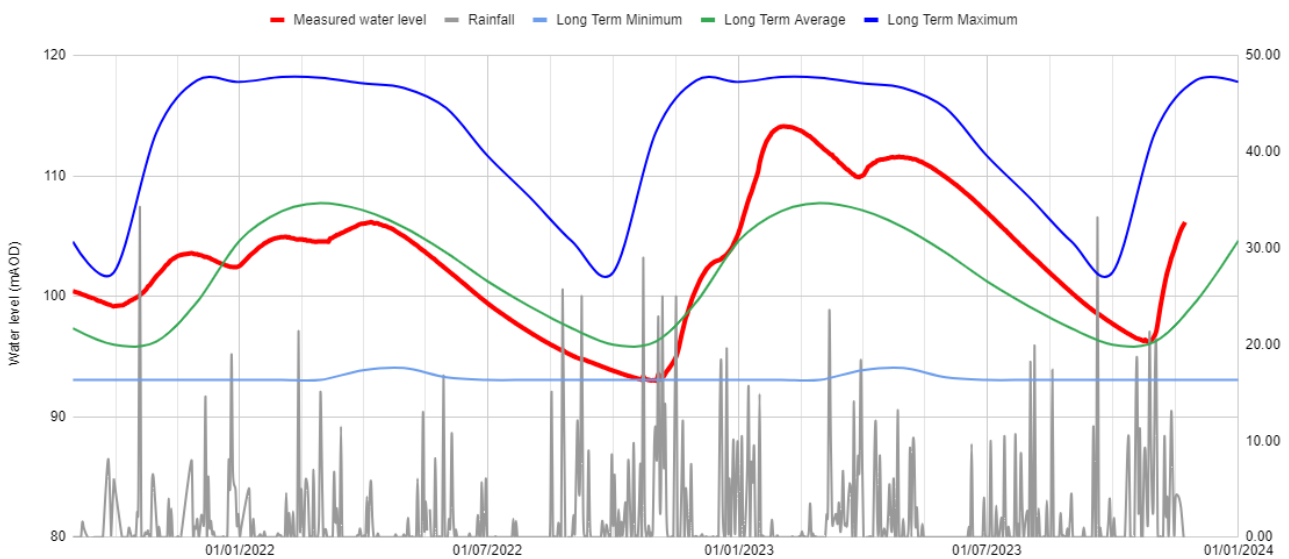
Basingstoke and Buckskin, Crondall and Sherborne St John

The Tile Barn Farm borehole is currently out of service and an alternative permanent site is being progressed. Meanwhile we are using other boreholes in North Hampshire to help predict levels in the areas listed above. Levels are high and rising slowly by approximately 3cm per day. At the current rate of rise, groundwater in this area will reach the critical level towards the end of the winter period. However, the rate of rise is expected to continue to slow in response to the recent drier conditions. Groundwater flooding impacts are possible in this area if further heavy rain is recorded over this winter season.

Alton

Groundwater levels at Alton, Chawton and Lower Farringdon are high and rising. In Farringdon, levels are rising by 17cm per day. Groundwater is currently 6m below the critical level. At the current rate of rise, a Groundwater Flood Alert for this area could be issued in three weeks' time. However, the rate of rise is slowly declining so this will require further heavy rainfall.

Groundwater levels at Farringdon



Customer service line
03708 506 506
www.environment-agency.gov.uk

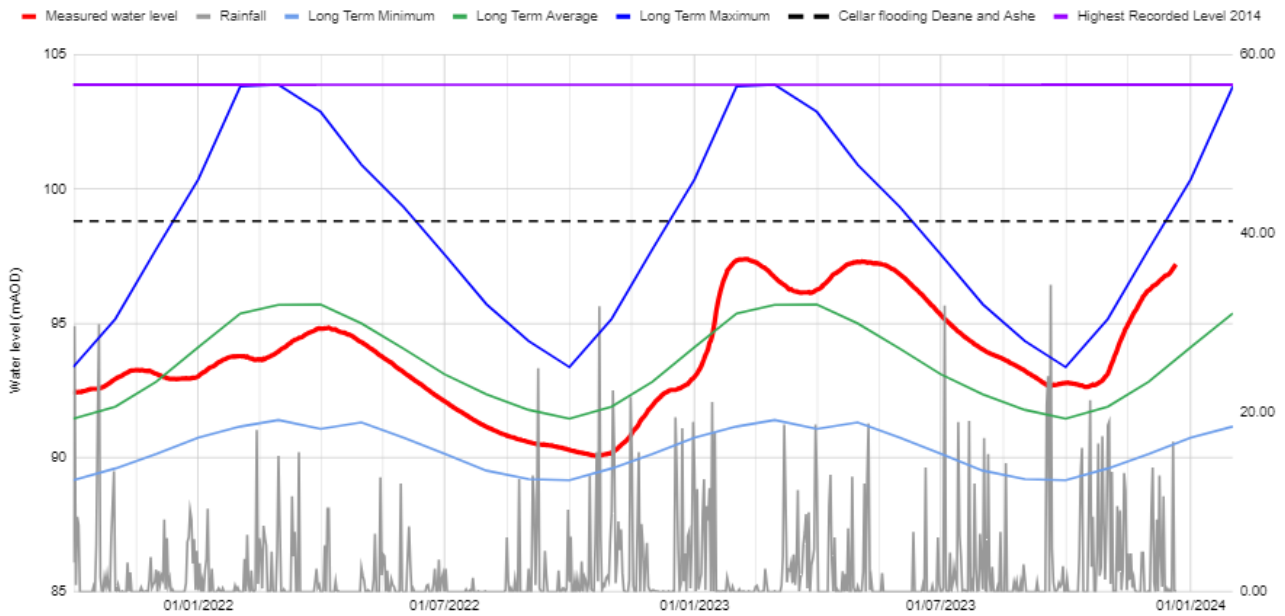
Incident hotline
0800 80 70 60

Floodline
0345 988 1188

Deane and Ashe, North East Hampshire

Groundwater levels in Deane and Ashe are high and rising. At Oakley, the groundwater level is rising by 8cm a day and is 1.3m below where we'd consider issuing a Flood Alert for onset of cellar flooding. If above average rainfall is recorded in the end of December 2023 and January 2024, then cellar flooding impacts could occur in Deane from mid-January 2024.

Groundwater levels at Oakley



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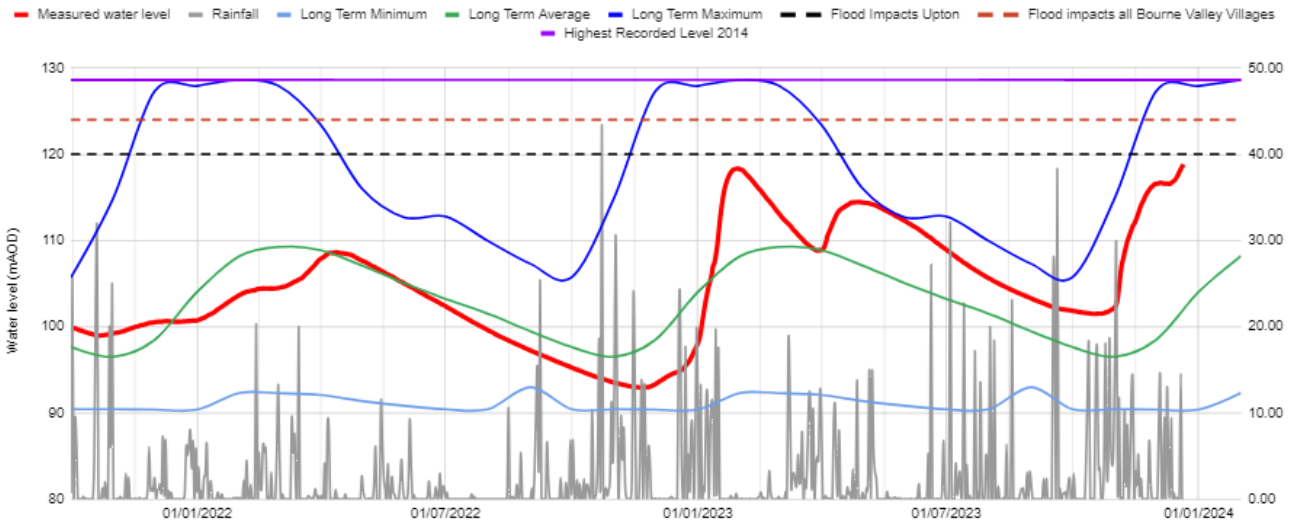
Incident hotline
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Floodline
0345 988 1188

Bourne Valley

A Flood Alert is in force. Groundwater levels are significantly high and rising. At our borehole in Vernham Dean, the level is rising by approximately 29cm per day. The River Swift / Bourne Rivulet is now flowing. Groundwater has started to affect the sewerage network in Stoke. Cellar flooding in Upton is possible from Christmas Day. If above average rainfall is recorded in the next few weeks then it is possible that cellar flooding impacts could occur in Vernham Dean, Hurstbourne Tarrant, Stoke or St Marybourne from early to mid-January 2024. In Upton, please remove valuables from cellars and if you have pumps to help reduce water levels, please ensure they can operate. We advise residents in the Bourne Valley to be prepared for flooding impacts this winter.

Groundwater levels at Vernham Dean



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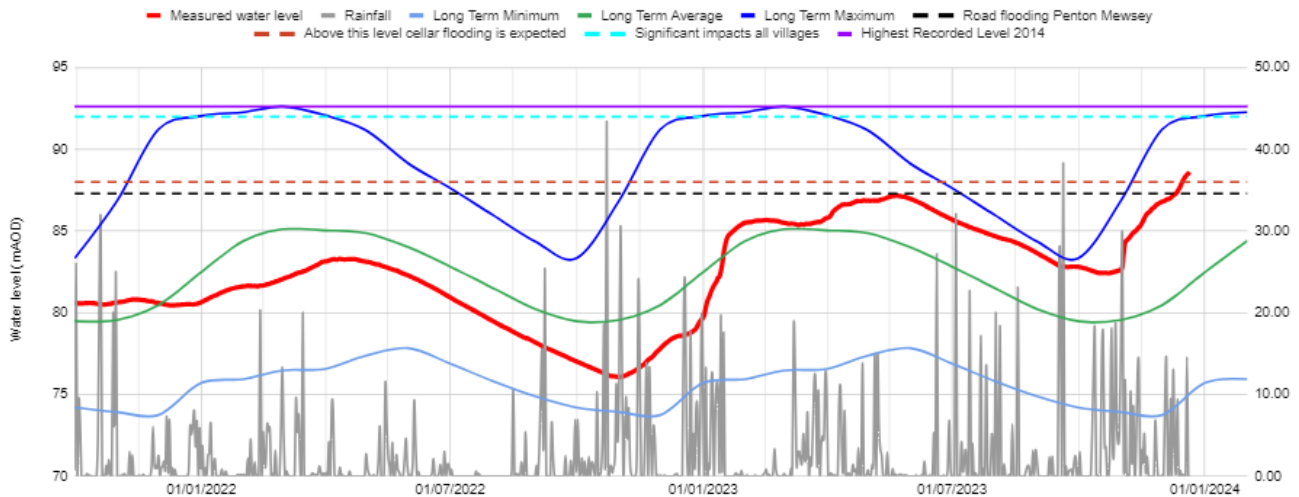
Incident hotline
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Floodline
0345 988 1188

Villages Surrounding Andover

A Flood Alert is in force. Groundwater levels in the villages surrounding Andover are significantly high and rising. At our borehole in Clanville Gate, levels are rising by around 9cm per day. In Appleshaw and Hatherden, cellar flooding is ongoing. Groundwater is affecting the sewer network in Penton Mewsey and the main road at Penton Grafton. It is possible that the spring at Biddesden will begin flowing from Christmas Eve 24/12/2023. Cellar flooding in Penton Grafton and groundwater emergence into Dean and Down Road, Kimpton is possible from Christmas Day 25/12/2023. Cellar flooding in Penton Mewsey is possible in the next few weeks with further heavy or persistent rainfall.

Groundwater levels at Clanville Gate



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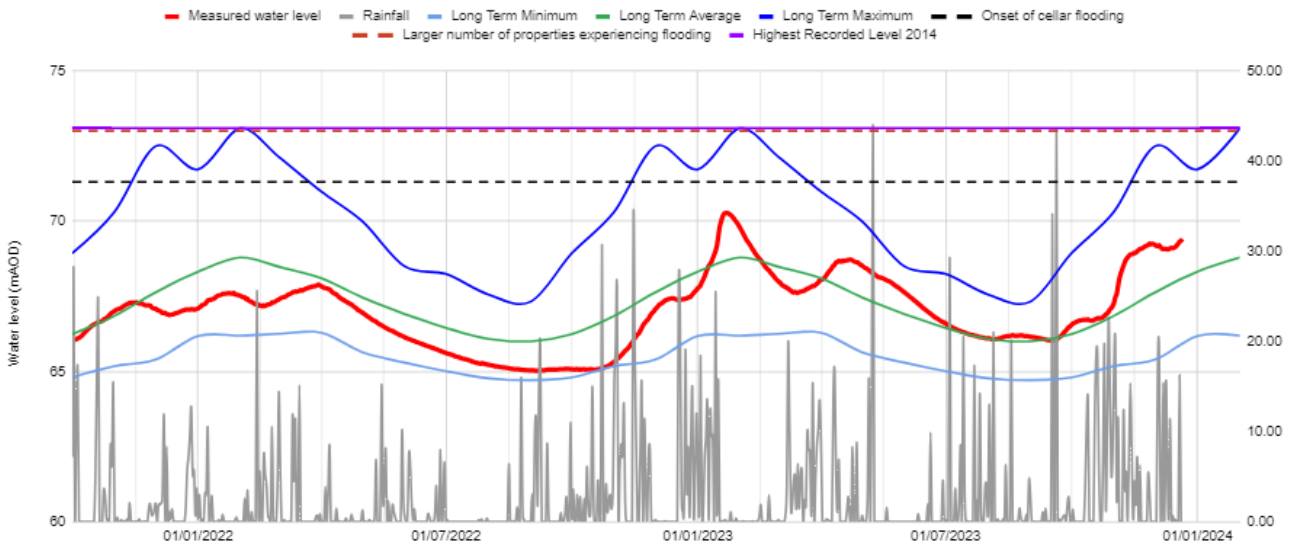
Incident hotline
0800 80 70 60

Floodline
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Sutton Scotney and Chilbolton

Groundwater is high and rising. At the borehole in Upper Cranbourne, the level has risen by 6cm in the last 24 hours. Groundwater is 1.6m below the level we expect the spring next to the Abbots Mitre pub to begin flowing, and 2.1m below where we expect onset of cellar flooding along Oxford Road, Sutton Scotney. If heavy or persistent rain is recorded at the end of December 2023 and January 2024 then it is possible that cellar flooding along Oxford Road, Sutton Scotney could occur from late-January 2024.

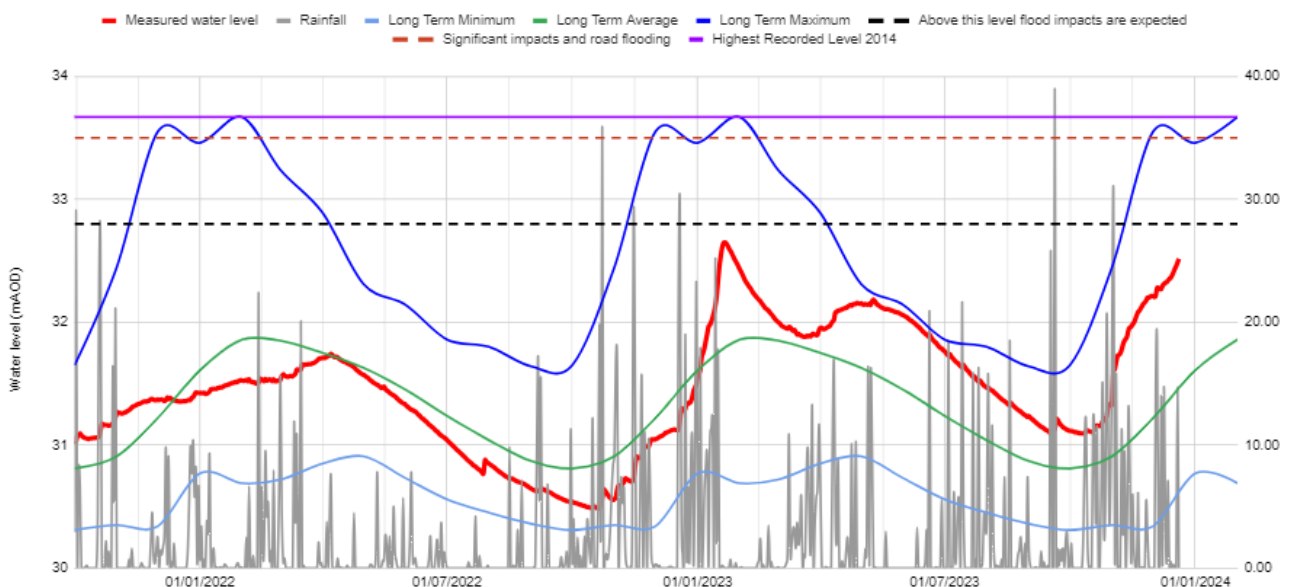
Groundwater levels at Upper Cranbourne



King's and Little Somborne

Groundwater is high and rising slowly. At our borehole in Kings Somborne, levels are rising by 2cm per day and the current level is 26cm below where we expect the onset of cellar flooding in Kings Somborne and Little Somborne. If heavy rainfall is recorded in the next week, then it is possible that groundwater flooding will begin to impact cellars before the New Year.

Groundwater levels at King's Somborne



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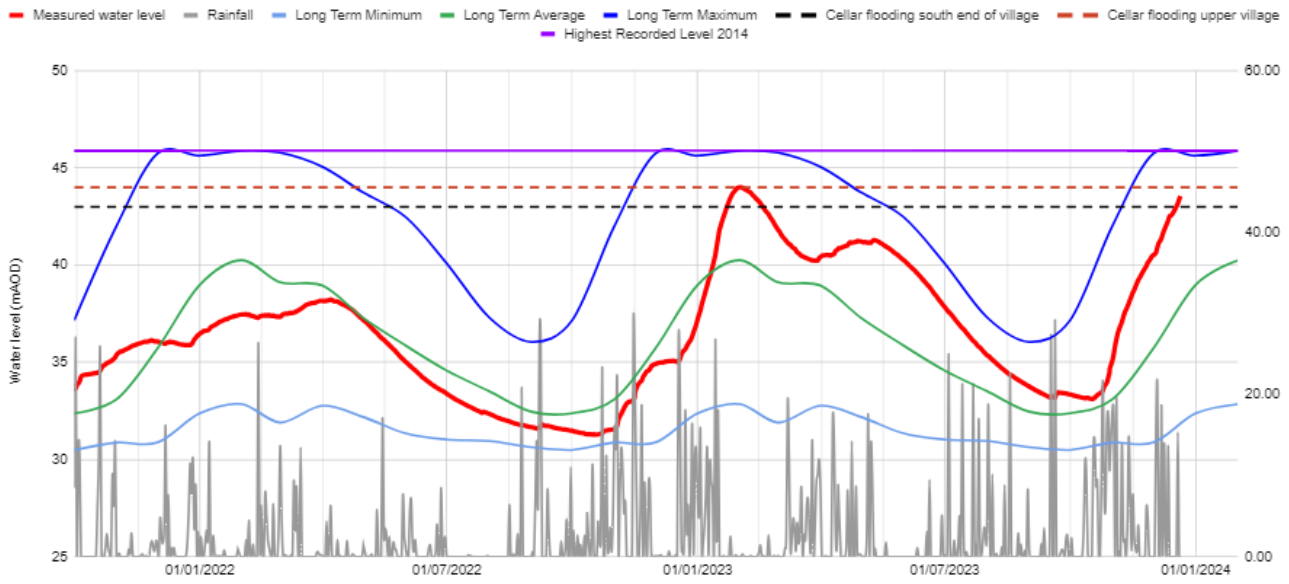
Incident hotline
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Floodline
0345 988 1188

Hursley

A Flood Alert is in force. Groundwater is high and rising by 16cm per day. Cellar flooding in the south end of the village and the Dolphin Inn pub, as well as impacts to the sewerage network, is expected to have just started. If heavy or persistent rainfall is recorded in the next couple of weeks, it is possible that cellar flooding in the upper village could occur before the New Year, and internal property flooding could be possible in January 2024.

Groundwater levels at Hursley

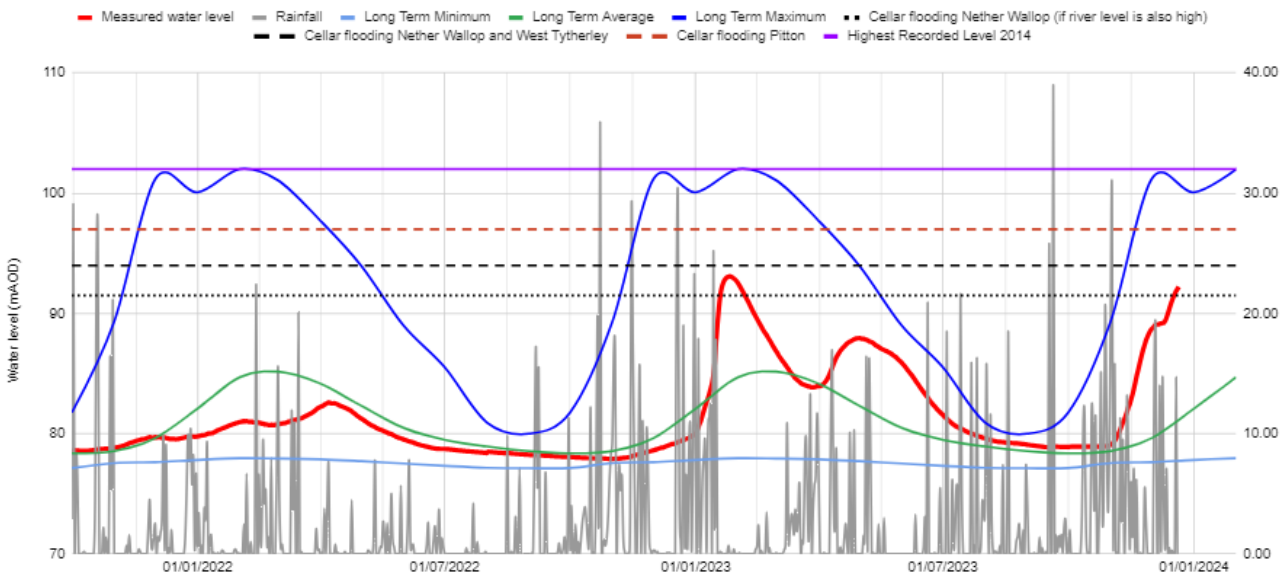


Customer service line 03708 506 506 www.environment-agency.gov.uk	Incident hotline 0800 80 70 60	Floodline 0345 988 1188
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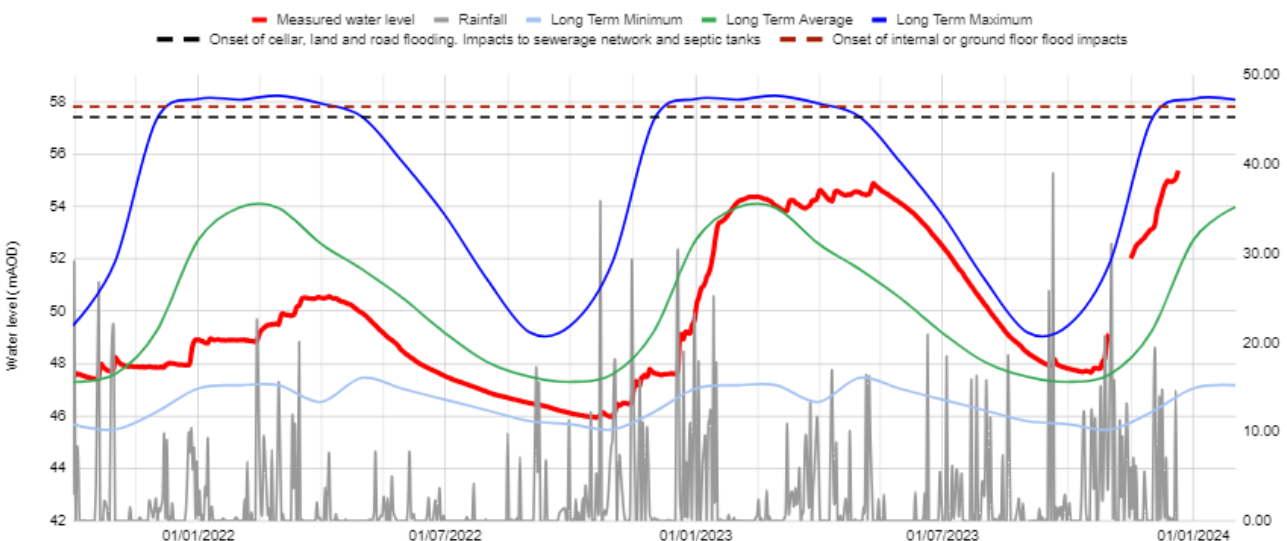
Pitton, West Tytherley, Nether Wallop and Broughton

Groundwater is high. At Lopcombe Corner, the level is rising by 18cm per day and is 1.8m below where we expect the onset of cellar flooding in Nether Wallop. At West Tytherley, the level is rising by 15cm per day and is 2.1m below the level we would expect the onset of cellar flooding in the village. If above average rainfall is recorded in the next few weeks, then groundwater flooding impacts could begin occurring in Nether Wallop over the Christmas period, and in West Tytherley, Pitton and Broughton in the New Year. We advise that residents should check ditches (where safe), ensure pumps are operational, look at flood plans and prepare for onset of groundwater flooding over the coming weeks. The pump at Pitton may be required in January 2024.

Groundwater levels at Lopcombe Corner



Groundwater levels at West Tytherley



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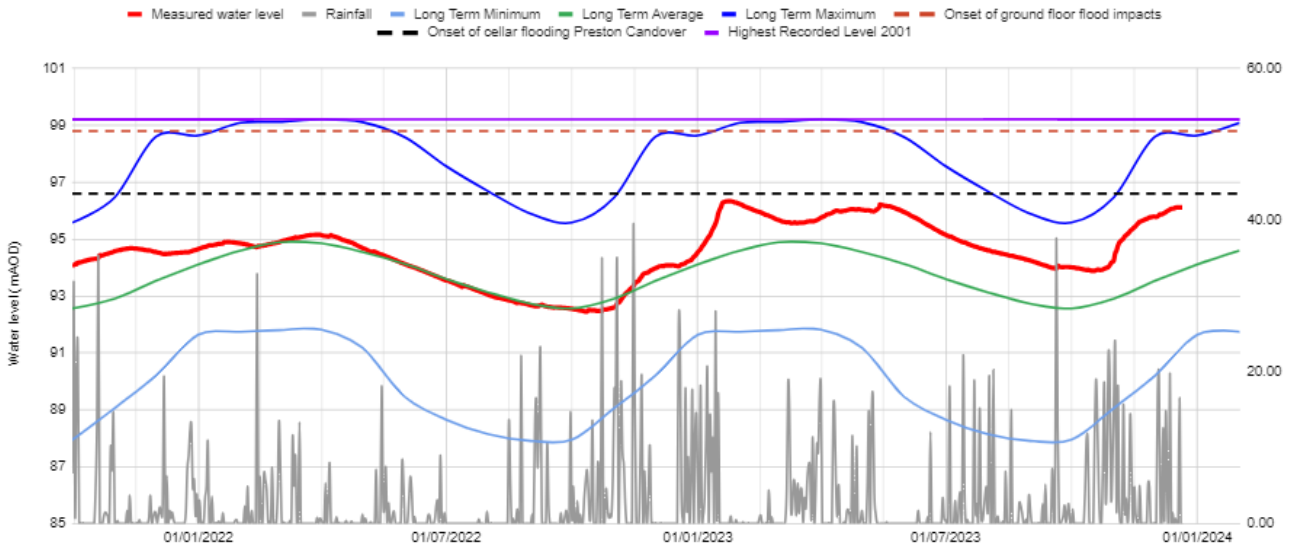
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Preston Candover, Old Alresford and Bishop's Sutton

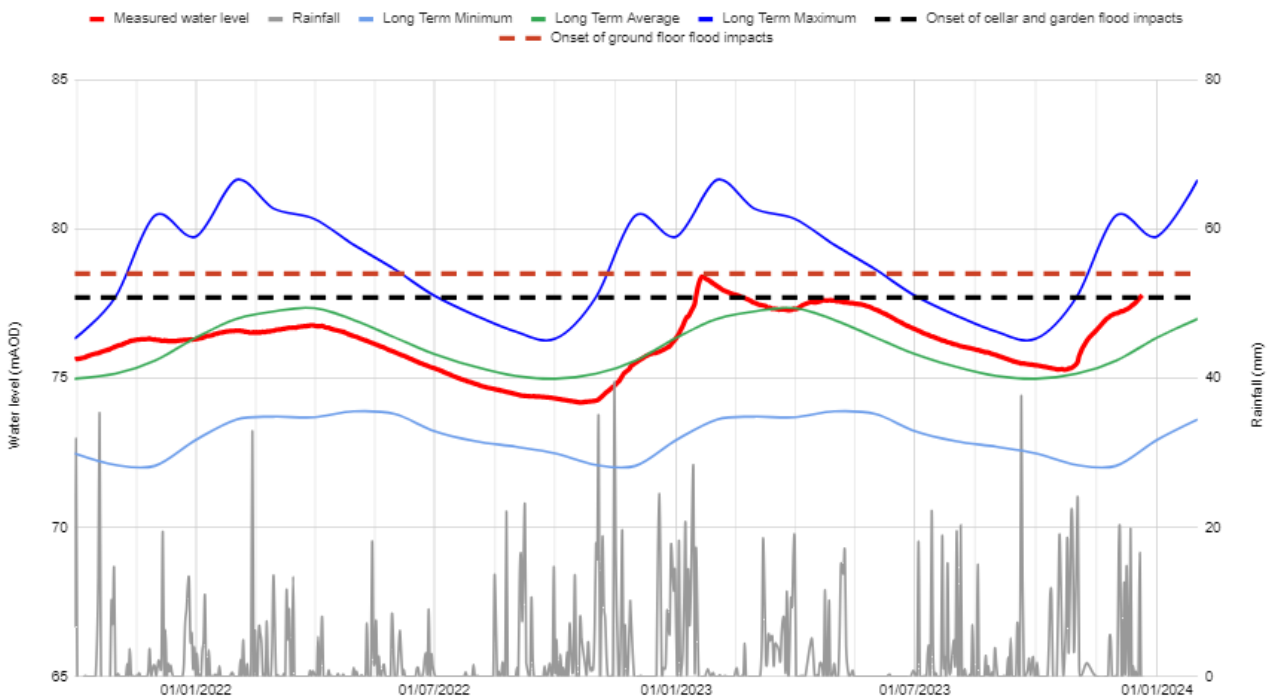
In Preston Candover, groundwater is high and rising by approximately 3cm per day. The level is currently 34cm below where we expect that a small number of properties will need to start pumping water out, this could occur from early to mid-January 2024 with further heavy rainfall in the next few weeks.

Groundwater levels at Preston Candover



In Old Alresford, groundwater is high and rising by 4cm per day. The level is currently 1.2m below the level we would expect a property in Old Alresford to experience internal flooding. If December 2023 is wetter than average then groundwater flooding impacts could occur from January 2024.

Groundwater levels at Lanham Lane



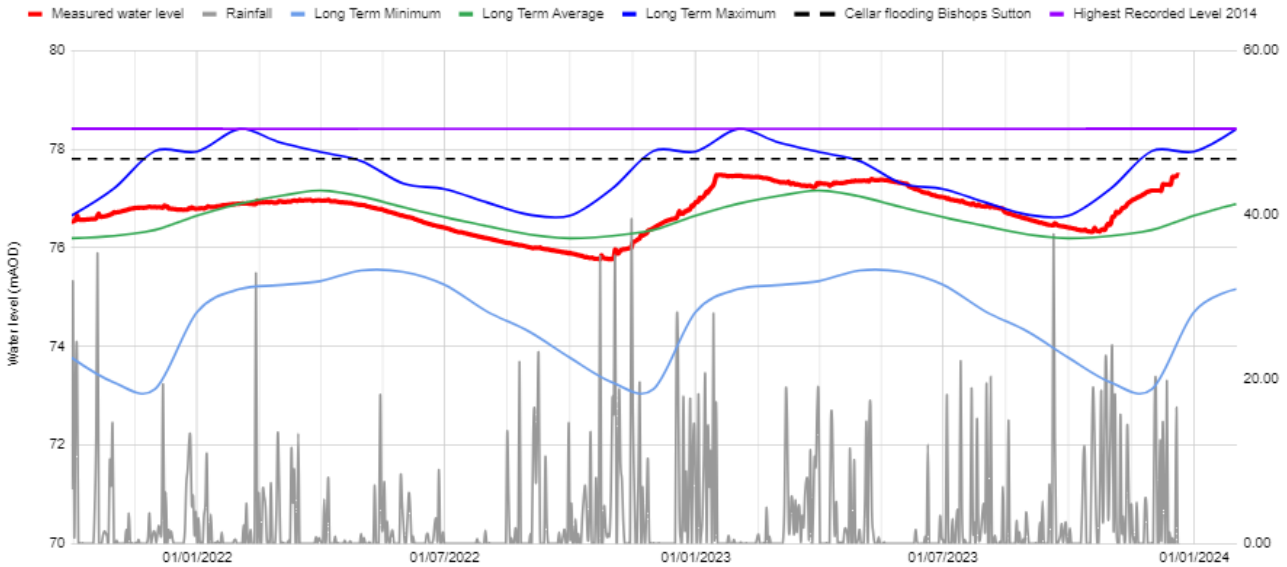
Customer service line
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Incident hotline
0800 80 70 60

Floodline
0345 988 1188

At Bishops Sutton, groundwater is high and rising by 3cm per day. The current level is 32cm below the level of onset cellular flooding, impacts to septic tanks and flooding of roads (B3047). If heavy or persistent rain is recorded in the next few weeks then groundwater flooding impacts could occur in early January 2024.

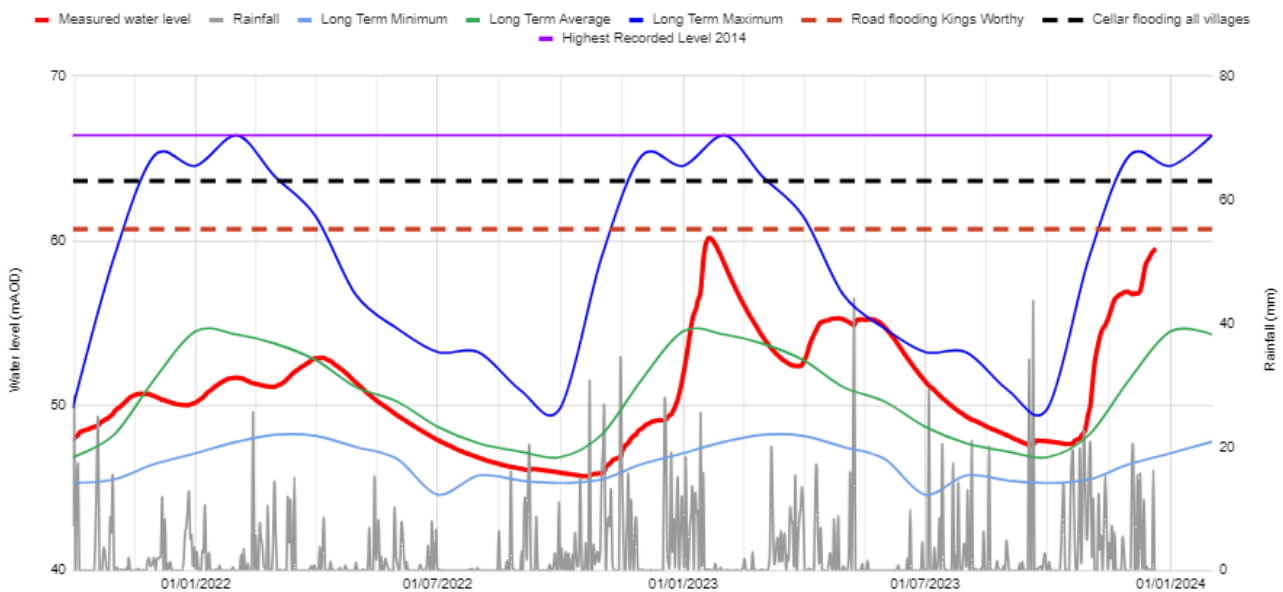
Groundwater levels at Bishop's Sutton



Littleton, Headbourne, Kings Martyr Worthy, Chilland and Easton

We use the borehole at Harestock to provide information for the villages in the alert area. Groundwater at our borehole in Harestock is high and rising by 6cm per day. The current level is 1m below where groundwater will start to impact Springvale Road through Kings Worthy, and 2m below the level of onset of cellular flooding in Martyr Worthy, Chilland and Easton. If above average rainfall continues through December 2023, then cellular flooding in all villages could occur from January 2024.

Groundwater levels at Harestock



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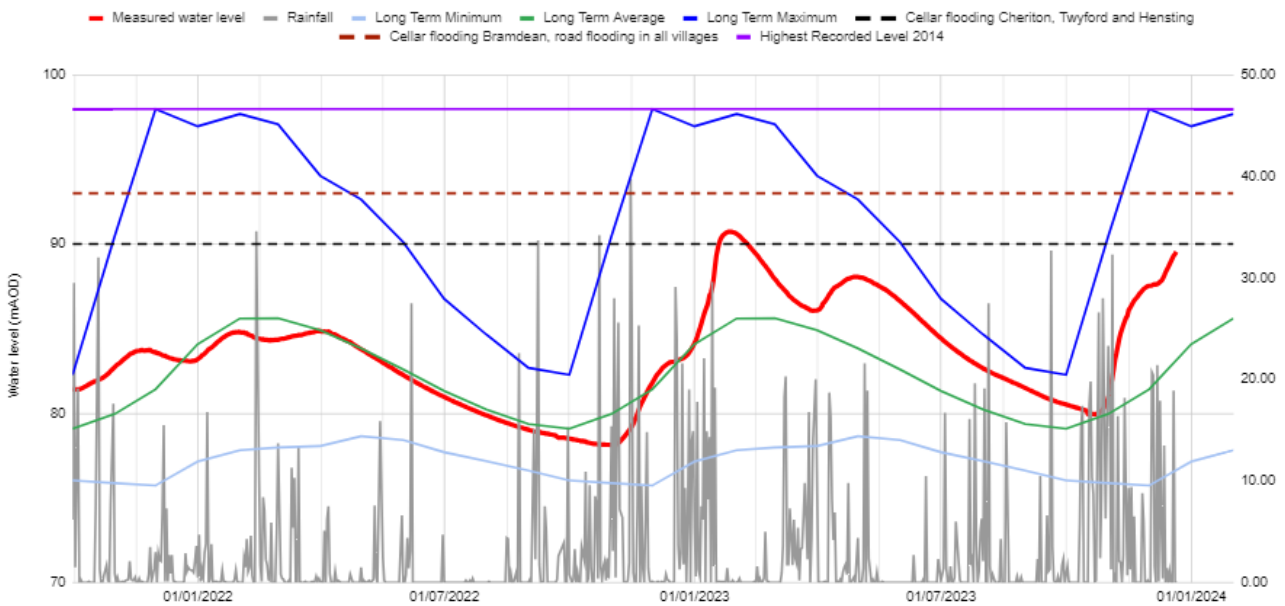
Incident hotline
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Floodline
0345 988 1188

Bramdean and Cheriton, Twyford and Hensting

Flood Alerts are in force for all villages. Groundwater is high and rising. The level at our West Meon Hut borehole, which we use to help forecast levels in the above villages is rising by 12cm per day. Cellar flooding in Cheriton, Twyford and Hensting is possible in the next four days, although the groundwater level may just peak before this occurs. Septic tanks could struggle to operate effectively in early January 2024. Cellar flooding in Bramdean is possible from January 2024. We advise residents in all villages to ensure that any pumps used to help reduce water levels can operate.

Groundwater levels at West Meon Hut



Customer service line
03708 506 506
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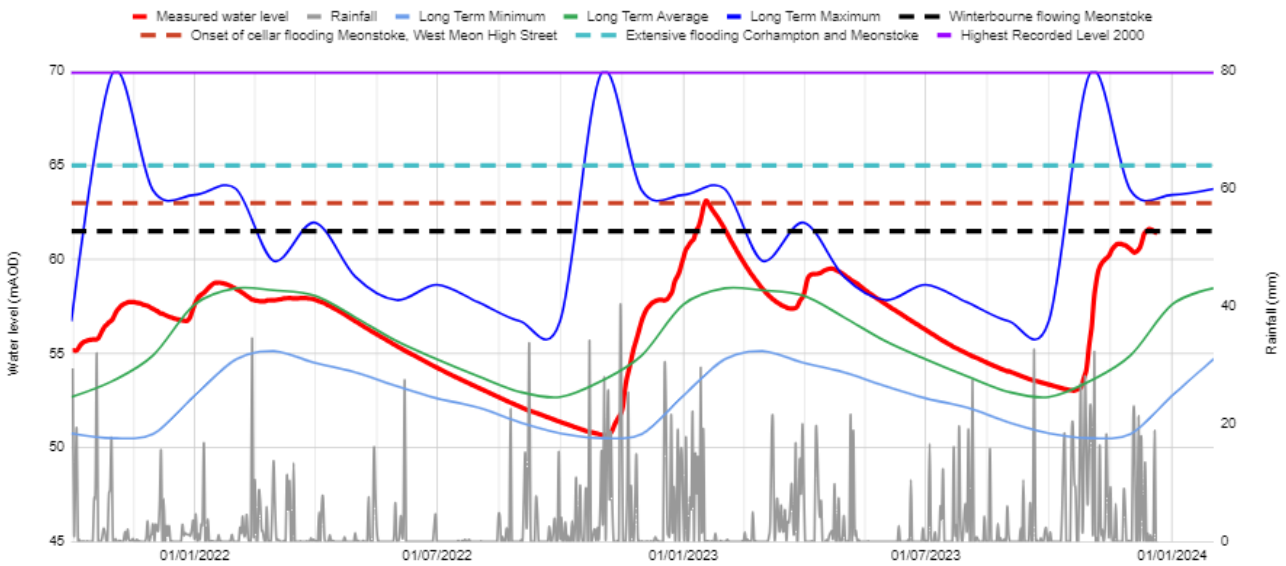
Incident hotline
0800 80 70 60

Floodline
0345 988 1188

Meon Valley

A Flood Alert is in force. In the Meon Valley, groundwater is high but now falling after a week of mostly dry weather. The Winterbourne is now flowing at Meonstoke, and at Rectory Lane, there is a small amount of water ponded around the electricity sub-station. The level at our borehole at Pound Lane is currently 1.6m below the level of cellar flooding. It is possible above average rainfall through December 2023 or January 2024 could cause cellar flooding from mid-January 2024. We advise that residents remain prepared for flooding impacts during this winter season.

Groundwater levels at Pound Lane



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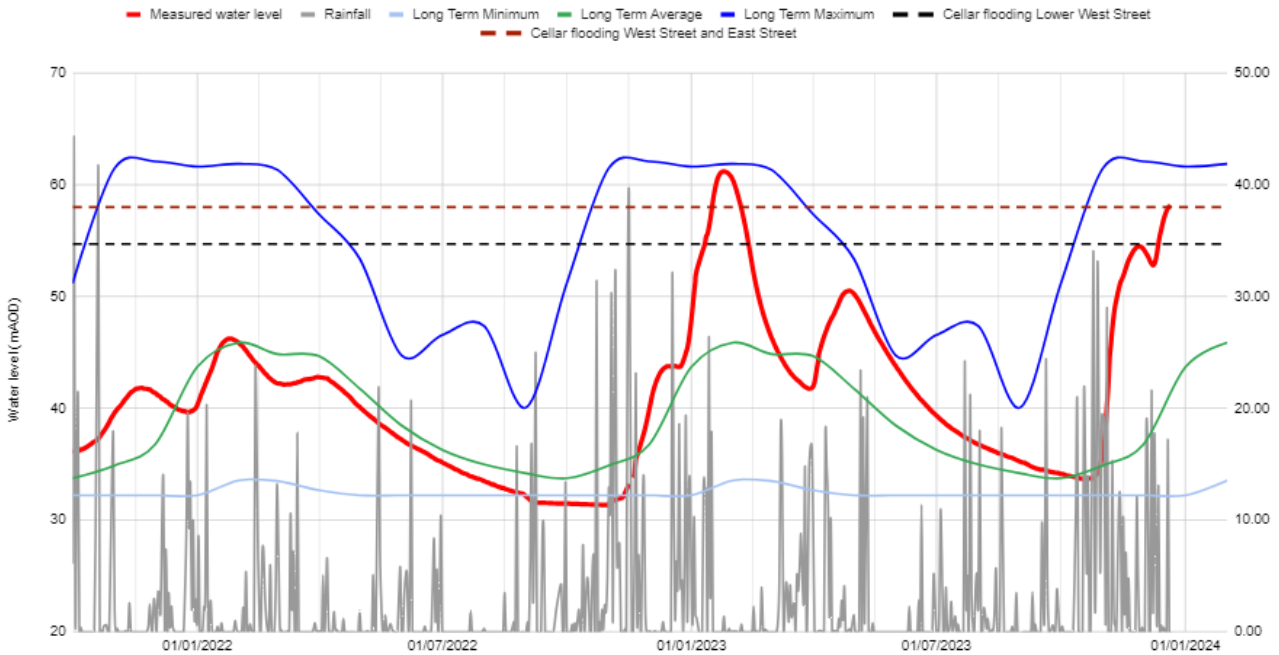
Incident hotline
0800 80 70 60

Floodline
0345 988 1188

Hambledon

A Groundwater Flood Alert is in force. In Hambledon, groundwater levels are high and rising. In the last 24 hours, the groundwater level at Whitedale Farm has risen by 12cm. Currently, a number of cellars on West and East Street are being affected. Groundwater is impacting the sewerage system and Fareham Road is flooded. If further heavy rainfall is recorded in December 2023 or January 2024, then more cellars in Hambledon are expected to begin experiencing impacts. If you use pumps to reduce water levels, we advise that you ensure they are operating effectively.

Groundwater levels at Whitedale Farm



Customer service line
03708 506 506
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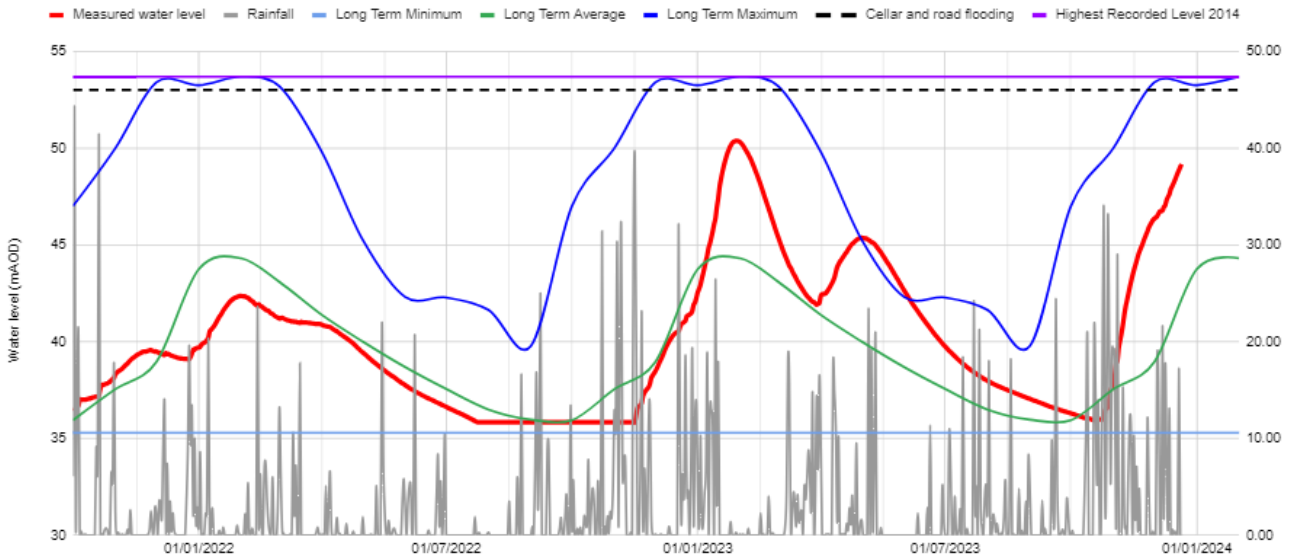
Incident hotline
0800 80 70 60

Floodline
0345 988 1188

Denmead

Groundwater is high and rising by 14cm per day. The current level is 3.8m below where we would expect groundwater to cause flooding to Anmore Road and impact on the sewage network. Groundwater flooding impacts could occur in Denmead later this winter if December 2023 and January 2024 are wetter than average.

Groundwater levels at Rookwood Farm



Customer service line
03708 506 506
www.environment-agency.gov.uk

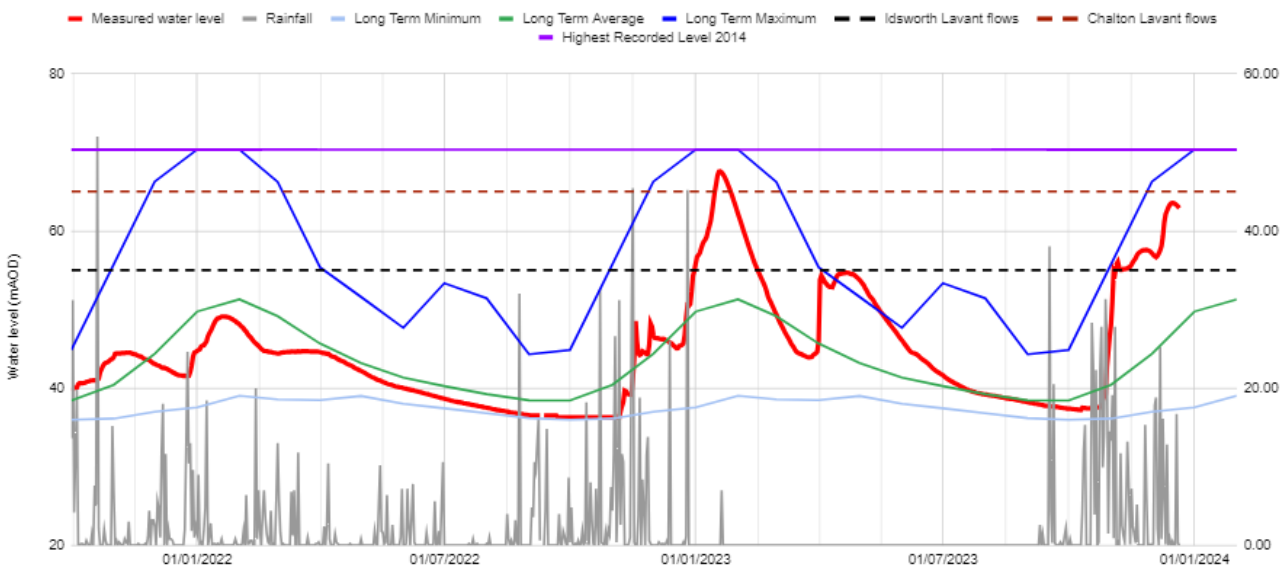
Incident hotline
0800 80 70 60

Floodline
0345 988 1188

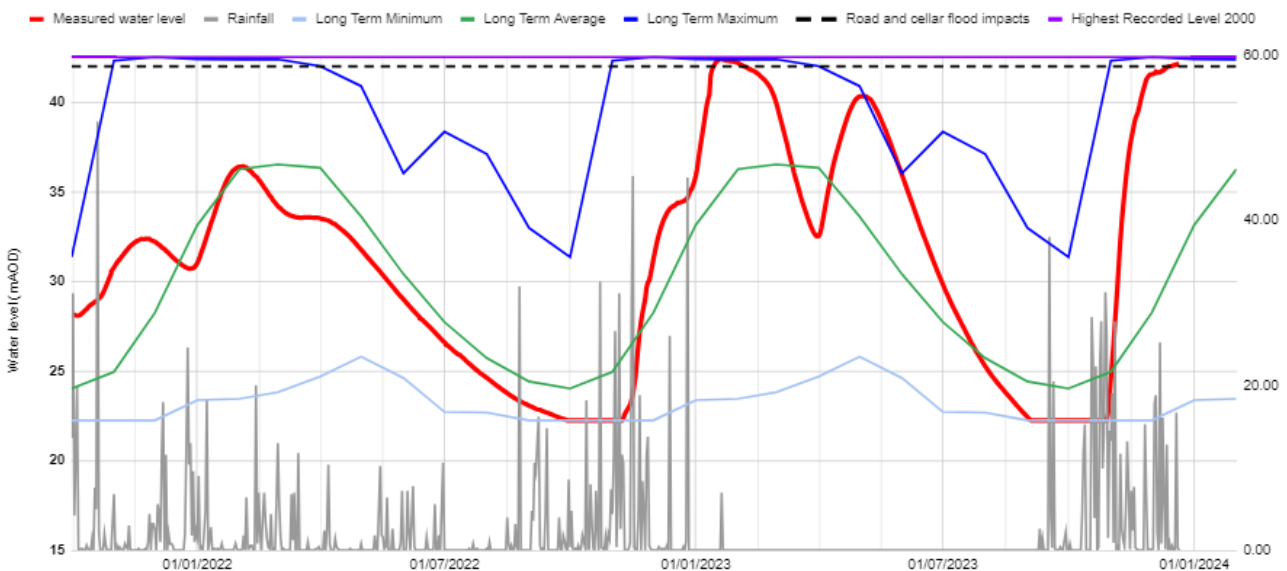
Finchdean, Dean Lane End and Rowlands Castle

A Groundwater Flood Alert is in force. In Finchdean, Dean Lane End and Rowlands Castle, groundwater levels are high. The Idsworth and Chalton Lavants are both flowing through all villages. A small number of properties are requiring pumps to reduce water levels. Flood water is affecting roads and land throughout the area. Surface water flooding may occur during heavier rain events. We advise that all residents remove valuables from cellars, and ensure pumps used to reduce water levels can operate.

Groundwater levels at Chalton



Groundwater levels at Carpenters Finchdean



Customer service line
03708 506 506
www.environment-agency.gov.uk

Incident hotline
0800 80 70 60

Floodline
0345 988 1188

What we're doing

We will continue to monitor the levels and their response to further rainfall. We will be using our technical knowledge and experience alongside our flooding procedures to assess the risk of flooding.

We will issue Flood Alerts to communities when flood risk to property increases.

Actions and Advice

1. Keep an eye on the latest rainfall and groundwater levels on our website

We recommend opening this site in Google Chrome - some Microsoft internet browsers restrict access to Google Sites.

<https://sites.google.com/view/groundwatergraphs>

Unfortunately you cannot copy and paste the link above into an internet browser. Some computers are preventing hyperlinks from taking you directly to our site.

Our site is secure, has a valid security certificate, and we do not ask for or take any information.

If our site does not open...

- You can type the address into your internet browser. Preferably Google Chrome, or Safari for Apple.
- Or you can click on the link above, and then click on the 'Groundwater Graphs - Google Sites; Groundwater levels in Hampshire and Sussex' page.
- Alternatively, search for 'Groundwater Graphs' on the internet. It is normally the first result.

If for any reason you are restricted from accessing our site, typing out the address into Google Chrome or Safari (on Apple devices), or searching for 'Groundwater Graphs' on the internet (again in Google Chrome) should open the page.

2. Property owners should think about what you'll do if flooding occurs where you live, don't wait until flooding happens. We have a [leaflet](#) offering practical advice to help you reduce the impact of flooding from groundwater.

3. We offer a Groundwater Flood Alert service for the following locations. If you want to receive Groundwater Flood Alerts then please ensure you register and that you keep your contact details up to date. If you wish to amend your registration then call Floodline on 0345 988 1188 (24 hour service) or go online at <https://www.gov.uk/sign-up-for-flood-warnings>.

Basingstoke and Buckskin
Sherborne St John
Alton
Crandall
Deane and Ashe in North Hampshire
Vernham Dean and Bourne Valley
Villages Surrounding Andover
King's Somborne and Little Somborne
Pitton, West Tytherley, Broughton and Nether Wallop
Sutton Scotney and Chilbolton

Bishop's Sutton
The Candovers and Old Alresford
Bramdean and Cheriton
Hensting and Twyford
Hursley
Meon Valley
Hambledon
Finchdean and Rowlands Castle
Denmead

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Littleton, Kings, Headbourne, Martyr Worthy, Chilland, Easton

4. We encourage Parishes at risk to develop a community Flood Plan, identifying local issues and working with the different agencies to prepare for and respond to flooding should it occur.
5. Where safe to do so, Parish Flood Action Groups may wish to walk local watercourses and check ditches to ensure there are no blockages.
6. Please make sure you are familiar with where to view groundwater data and information on our website (see links in the section below).

Next Groundwater Briefing Note Update

This briefing note will be updated by Friday 19th January 2024, or earlier if we feel necessary. If heavy rain should occur in the meantime, it is likely that more Groundwater Flood Alerts will be issued before this Briefing Note is updated.

Further Important Information

The latest Flood Alert information can be found on the GOV.UK website at:

<https://check-for-flooding.service.gov.uk/>

You can view daily groundwater levels compared to average and maximum and indicative impact thresholds on our website here:

<https://sites.google.com/view/groundwatergraphs>

Please note that data displayed is raw and not quality assured.

You can view sub daily groundwater levels on the Gaugemap website at:

www.Gaugemap.co.uk

Please note that data displayed on Gaugemap is raw and not quality assured.

We also publish a water situation report which can be found on the Gov.UK website at:

<https://www.gov.uk/government/collections/water-situation-reports-for-england>

Contacts

If you would like any further information on groundwater levels please contact us by emailing ssdenquiries@environment-agency.gov.uk.

For any queries about our Flood Warning Service please contact Tom Woods on 02084 745940 or email thomas.woods@environment-agency.gov.uk.

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