

## Rainfall and groundwater level information - December 2023

### Rainfall average

Station: Waddington

Climate period: 1991-2020

Month	Rainfall (mm)	Cumulative (mm)
January	47.61	47.61
February	38.37	85.98
March	36.43	122.41
April	44.28	166.69
May	47.02	213.71
June	60.32	274.03
July	60.33	334.36
August	58.29	392.65
September	51.97	444.62
October	61.40	506.02
November	56.93	562.95
December	51.86	614.81
<b>Annual</b>	<b>614.81</b>	

### Rainfall actual

Station: Waddington

Year 2020 2021 2022 2023

Month	Rainfall (mm)			
	2020	2021	2022	2023
January	27.8	89.6	19.6	36.0
February	99.4	45.6	62.6	12.6
March	17.6	14.8	41.5	74.6
April	13.2	5.2	14.4	52.8
May	11.0	91.4	63.8	37.0
June	61.6	40.2	27.6	25.4
July	59.2	82.6	19.6	108.8
August	64.6	27.4	60.8	36.4
September	27.6	56.4	61.2	69.6
October	81.0	73.4	99.0	165.6
November	23.2	21.2	82.8	50.8
December	90.2	60.8	44.6	99.4
<b>Annual</b>	<b>576.4</b>	<b>608.6</b>	<b>597.5</b>	<b>769.0</b>
<i>% of average</i>	<i>93.8%</i>	<i>99.0%</i>	<i>97.2%</i>	<i>125.1%</i>

Waddington is the nearest Met Office station to Heighington and we use its data to provide an approximation for local rainfall.

### Groundwater Level

The groundwater level stated here is for the Stow 2 borehole, which is located near to Brinkle Spring Lane, Heighington.

The level is specified in metres (mAOD).  
mAOD= Meters above ordnance datum.

This gives the actual elevation of the groundwater level referenced to the mean sea level at the UK Ordnance datum at Newlyn, Cornwall. All elevations in the UK are derived from this datum.

The groundwater level stated here is for 09:00 on the 15th day of the month specified (or the nearest day if data is missing).

Year 2020 2021 2022 2023

Month	Groundwater level (mAOD)			
	2020	2021	2022	2023
January	8.70	8.95	8.44	9.31
February	8.19	9.49	7.44	7.89
March	8.65	8.09	8.30	7.18
April	7.28	6.96	7.63	8.23
May	6.20	6.20	6.57	7.65
June	4.85	6.89	5.59	6.66
July	4.40	6.29	4.06	5.55
August	3.60	5.63	2.82	6.17
September	3.74	4.31	3.25	5.09
October	3.70	5.07	3.20	6.32
November	4.61	5.55	7.56	9.29
December	5.81	6.65	8.59	10.03
<i>Yearly Average</i>	<i>5.81</i>	<i>6.67</i>	<i>6.12</i>	<i>7.45</i>

### Recent Flood Events

Dates	Approx Cumulative Rainfall (mm)			Event Peak Beck Level (m) above weir	Event Peak Groundwater Level (mAOD)	
	12 mnth	3 mnth	2 mnth			
20/12/2012 - 29/12/2012	<u>827</u>	251	179	0.31	10.26	
7/11/2019 - 19/11/2019	<u>835</u>	<u>323</u>	<u>219</u>	0.42	10.38	
20/10/2023 - 2/11/2023	747	272	<u>235</u>	0.77	8.29 (but climbing to 9.8 later)	Babet
3/1/2024 - xxxx	795	<u>342</u>	182	0.55	10.64	Henk

Heighington suffered localised flooding in the periods stated above. Flooding seems to occur when the groundwater level exceeds 10mAOD. The cumulative rainfall specified in the table immediately above is a best estimate for the preceding rainfall to the date of the flood event. Flooding tends to occur when the rainfall in the preceding period of 2 months, 3 months or 12 months exceeds 200mm, 300mm or 800mm. The localised flooding in October 2023 was principally caused by excessive rainfall in a very short time caused by Storm Babet, in the period 18/10/2023-21/10/2023 98.8mm at Waddington. During this flood event the groundwater level remained below 10m(AOD). However, above average rainfall in December 2023 followed by Storm Henk, with rainfall of 31.9mm during the period 1/1/2024-3/1/2024, pushed the groundwater level sharply above 10mAOD on 3/1/2024.

Heighington Parish Council provides information about rainfall and groundwater level to inform residents of the potential for localised flooding. We also hope the information will be of wider interest (e.g. for gardeners and farmers).

We thank the Environment Agency for providing the groundwater level data.

You can sign up for the Government's Flood Alert system here:

<https://www.gov.uk/sign-up-for-flood-warnings>

Information about monthly rainfall for Waddington is available online here (typically updated early in the following month):

<https://www.metoffice.gov.uk/research/climate/maps-and-data/historic-station-data>

Information about average rainfall for Waddington is available online here:

<https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages>

Up to date information about the level of Heighington Beck (which runs through the village) is available online here:

<https://check-for-flooding.service.gov.uk/station/6061>