Groundwater Flood Risk Update Environment

Thames Area

16 January 2024

Current situation

Groundwater levels have responded to recent rainfall and have risen at our observation boreholes:

- Draycot in the Upper Og Valley
- Longacre in the Lambourn Valley
- Water Acre in the Upper Aldbourne Valley
- Northfield Farm in the Great Shefford area
- Chapel Wood in the Leckhampstead area
- Hodcott 2 in West Ilsley, East Ilsley, Compton, Chilton and West Hagbourne
- Farringdon in the Alton, Chawton and Lower Farringdon areas
- Tile Barn Farm¹ in the Crondall, Sherborne St John, Basingstoke and Buckskin areas

Groundwater levels at these locations are currently above the level that requires early awareness. This briefing note has been issued to provide an update on these high levels.

Upper Og Valley

In response to recent rainfall, groundwater levels have risen above the level that requires early awareness at the Draycot borehole in the Upper Og Valley. The groundwater level at this location is higher than normal for this time of year but is currently falling. This observation site is more responsive to individual rainfall events compared to our other observation boreholes in the Chalk aquifer. Therefore, there is potential for levels to start increasing again if we receive heavy rainfall. We issued a groundwater flood alert on 02 January 2024 for the areas at risk of groundwater flooding in the Upper Og Valley, and this will remain in force. We will continue to monitor the situation closely and provide an update as this changes.

Lambourn Valley

In response to recent rainfall, groundwater levels have risen above the level at which groundwater flooding may affect communities, and a groundwater flood alert to be issued, determined from the Longacre borehole in the Lambourn Valley. The groundwater level at this location is higher than normal for this time of year but is currently slowly declining. The catchment remains sensitive to rainfall due to saturated ground and groundwater levels may start to rise again in response to any further rainfall. We issued a groundwater flood alert on 27 November 2023 for the areas at risk of groundwater flooding in the Lambourn Valley and this will remain in force. We will continue to monitor the situation closely and provide an update as this changes.

Upper Aldbourne Valley

In response to recent rainfall, groundwater levels have risen above the level that requires early awareness, and the level at which a groundwater flood alert is issued, determined from the Water Acre borehole in the Upper Aldbourne Valley. The groundwater level at this location is currently high but slowly declining. The catchment remains sensitive to rainfall due to saturated ground. Therefore, levels may start to rise again if we receive further rainfall. A groundwater flood alert was issued on 10 January 2024 for the areas at risk of flooding in the upper Aldbourne Valley and this will remain in force. We will continue to monitor the situation closely and provide an update as this changes.

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¹ Tile Barn Farm Observation Borehole is currently offline, and levels are being derived from two nearby proxy sites. We have good confidence in the relationship between these levels. Works are underway to replace this site in the near future.

Great Shefford area

In response to recent rainfall, groundwater levels have risen above the level at which groundwater flooding may affect communities and a groundwater flood alert has been issued determined from the Northfield Farm borehole in the Great Shefford area. The groundwater level at this location is higher than normal for this time of year and has currently stabilised at this high level. The catchment remains sensitive to rainfall due to saturated ground and levels may start to increase again as we receive further rainfall. A groundwater flood alert was issued on 02 January 2024 for the areas at risk of groundwater flooding in the Great Shefford area and this will remain in force. A pumping plan is available to mitigate groundwater flood impacts in this area. We will continue to monitor the situation closely and provide an update as this changes.

Leckhampstead area

In response to recent rainfall, groundwater levels have risen above the level that requires early awareness at the Chapel Wood borehole in the Leckhampstead area. The groundwater level is higher than normal at this location and is currently slowly rising. The catchment remains sensitive to rainfall due to saturated ground and levels may continue to increase as we receive further rainfall. Currently, no groundwater flood alert has been issued for this area, however, at the current rate of rise an alert may be issued in the next few days. We will continue to monitor the situation closely and provide an update as this changes.

West IIsley, East IIsley, Compton, Chilton and West Hagbourne

In response to recent rainfall, groundwater levels have risen above the level at which groundwater flooding may affect communities and a groundwater flood alert has been issued determined from the Hodcott 2 borehole in West Ilsley, East Ilsley, Compton, Chilton and West Hagbourne. The groundwater level is higher than normal for this time of year at this location and is currently rising. The catchment remains sensitive to rainfall due to saturated ground and levels may continue to increase as we receive further rainfall. A groundwater flood alert was issued on 06 January 2024 for the areas at risk of groundwater flooding in West Ilsley, East Ilsley, Compton, Chilton and West Hagbourne and this will remain in force. We will continue to monitor the situation closely and provide an update as this changes.

Alton, Chawton and Lower Farringdon areas

In response to recent rainfall, groundwater levels have risen above the level that requires early awareness at the Farringdon borehole in the Alton, Chawton and Lower Farringdon areas. The groundwater level is higher than normal at this location and is currently slowly rising. The catchment remains sensitive to rainfall due to saturated ground and levels may continue to increase as we receive further rainfall. A groundwater flood alert was issued on 09 January 2024 for the areas at risk of groundwater flooding in Alton, Chawton and Lower Farringdon and this will remain in force. We will continue to monitor the situation closely and provide an update as this changes.

Crondall, Sherborne St John, Basingstoke and Buckskin areas

In response to recent rainfall, groundwater levels have risen above the level that requires early awareness at our indicator sites near the Crondall, Sherborne St John, Basingstoke and Buckskin areas. The groundwater level at this location is higher than normal for this time of year and is rising. The catchment remains sensitive to rainfall due to saturated ground and levels may continue to increase as we receive further rainfall. Currently, no groundwater flood alert has been issued for this area, however, with the current rate of rise an alert may be issued over the next few days. We will continue to monitor the situation closely and provide an update as this changes.

Summary of other Groundwater sites

Groundwater levels at the majority of our indicator sites are higher than normal for this time of year. Following recent heavy rainfall events, groundwater levels are increasing or stabilising at high levels at almost all our sites. A rising trend is expected to continue in response to rainfall over the winter period. We continue to monitor groundwater levels and will update this briefing note and issue flood alerts as/when appropriate.

Forecast risk of flooding

The forecast for today (16 January) is cold but dry, with a good deal of winter sun. This cold, dry weather is forecast to continue throughout the week until Saturday when more mild, wet conditions are anticipated. In the longer term (although more uncertain), these milder conditions are expected to bring spells of rain, with wetter than normal conditions most likely persisting through to late-January.

We will:

- Closely monitor the need for groundwater flood alerts
- Add more sites to this briefing note in the coming weeks, if required
- Keep this under review and continually monitor the rainfall received

More details of the forecast predictions can be found in the monthly Water Situation Report for England. This can be found at: Monthly Water Situation Report - England

What we're doing

We will continue to monitor groundwater levels across the area.

We are removing blockages from rivers in the area to ensure they flow freely.

We are talking with the local authorities and other responding partners to ensure they are aware of the situation.

Actions and Advice

Call Floodline on 0345 988 118 or visit <u>check for flooding on GOV.UK</u> to find out if you can register to receive free Flood Alerts for flooding from groundwater.

Check the river, sea, groundwater and rainfall levels on GOV.UK.

Please review your individual and community group flood plans.

Check pumps and any other flood protection equipment you have.

Keep drains and gullies around your property free of debris.

Move valuables from basements and cellars.

Next update

As flood risk increases with the continuing rising groundwater trends, we will update this briefing note weekly (or sooner if the situation significantly changes).

Further information

For information on groundwater levels and the water situation report visit the **Environment Agency** - **GOV.UK** website.

You can get practical advice on what to do before, during and after groundwater flooding on our <u>check</u> <u>for flooding</u> website.

You can also check the five day flood risk outlook online.

Contacts

For more information on the flood alert service and to find out what messages you are registered to receive, call Floodline on 0345 988 118.

Alternatively, you can contact the following for additional information.

Environment Agency Customers & Engagement: enquiries_THM@environment-agency.gov.uk Environment Agency National Customer Contact Centre: 03708 506 506 Environment Agency Incident Reporting Hotline: 0800 807060