

Future Trend: Groundwater Safeguard Zones

Trend definition and relevance to DWMP

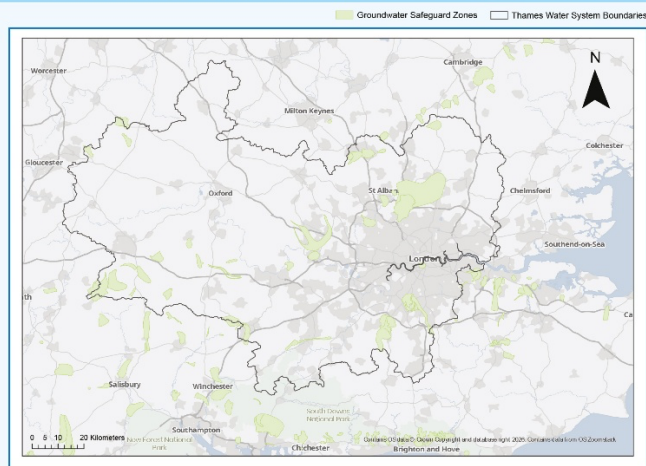
Groundwater Safeguard Zones are designated around public drinking water supplies where additional measures are needed to protect groundwater from pollution. Under the Water Framework Directive¹, Drinking Water Protected Areas must be identified and safeguarded to prevent deterioration in water quality, helping to minimise the level of treatment required for drinking water production and protect these vital water resources for the long term.

Groundwater Safeguard Zones (highlighted in green in the figure below²) are an important consideration in our DWMP, helping to identify areas where focused management of wastewater infrastructure can support the protection of groundwater resources and the wider environment. One of our performance indicators measures the length (km) of foul or combined sewer located within protected zones, where there is a potential risk of groundwater pollution from sewer exfiltration³. This helps us identify higher-risk assets, prioritise investment, undertake monitoring and target interventions that reduce groundwater pollution risks while protecting groundwater quality and supporting regulatory compliance.

Stage of DWMP used	
Risk assessment	✓
Plan development	✓
Impact/Importance	
Short term (2035)	Medium
Medium term (2045)	Medium
Long term (2055)	Medium
Example PIs affected by this trend	
	Groundwater pollution

Trend description, uncertainty and potential impact on our region

Groundwater Safeguard Zones in the Thames Water region



- Growing concerns over nitrates, phosphorus and emerging contaminants, may lead to additional Groundwater Safeguard Zones being designated across our region, where groundwater is identified as being at risk. As the evidence base develops and environmental standards evolve, the extent of protected areas may increase, placing a greater proportion of our wastewater network within sensitive groundwater catchments.
- We will continue to work closely with the Environment Agency to identify potential future designations and understand the implications for our wastewater network and investment planning. Where appropriate, these will be considered within this DWMP and, where designation timelines extend beyond the current planning period, incorporated into future plans, potentially DWMP33, to ensure interventions are targeted to protect drinking water sources and support our long-term regulatory compliance.



References

- 1 GOV.UK, 'The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017' 10/04/2017, [Water Environment \(Water Framework Directive\) \(England and Wales\) Regulations 2017](#).
- 2 Environment Agency Catchment Data Explorer – Protected Areas Data for Thames River Basin District and Drinking Water Safeguard Zones (Groundwater) dataset. Map produced by Thames Water. Accessed July 2025.
- 3 Thames Water 'Performance Indicator Methodology – Groundwater Pollution'. DWMP28. March 2026, [Performance Indicator Methodology – Groundwater Pollution](#).

