

Supporting document

Faughan Groundwater Body Chemical Classification – Supporting Information 2021



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Environmental Setting

The Faughan Groundwater Body is situated within the North Western River Basin District and is designated as a Drinking Water Protected Area in line with The Water Environment (Water Framework Directive) Regulations (NI) 2017 because it is considered capable of supplying more than 10 m³/d of water for drinking water supply.

A large landfill site, the Mobuoy Road Waste Site, is located within the boundary of the Faughan Groundwater Body and the River Faughan forms the western boundary of the site. The Faughan groundwater body provides baseflow to the River Faughan. This stretch of the river is designated as an Area of Special Scientific Interest (ASSI) and a Special Area of Conservation (SAC) that supports an Atlantic salmon population of international importance. Importantly Northern Ireland Water (NI Water) abstracts raw water from the River Faughan approximately 2 miles downstream of the site at Clog hole to supply its Carmoney water treatment works (WTW) which provides drinking water to its 58,000 customers in the North West.

Mobuoy Road waste

The Mobuoy road waste site is an unauthorised landfill site containing an estimated volume 1,165,000m³ of infill which includes construction and demolition waste, domestic wastes, metallic wastes and a mixture of all of these. The site is actively generating leachate and with no engineering controls in place to contain the leachate. There has been impact to the Faughan Groundwater body but as yet no impact has been detected in the River Faughan from the waste deposits. The Department of Agriculture and Rural Affairs (DAERA) plans to ensure remediation of the site and is currently developing remediation options.

Surface Water Impact

NIEA has an extensive monitoring programme in place at the Mobuoy road waste site. To date there has been no impact on the River Faughan from the Mobuoy Road Waste Site. NIW has a contingency plan in place for the Carmoney works to ensure the safety of the drinking water supply. However, until the site is remediated the risk to the River Faughan and to the Drinking Water Abstraction at Cloghole remains

Faughan Groundwater Body – Chemical Status

The NIEA conducted an assessment of the damage from the Mobuoy Road Waste site on the Faughan Groundwater Body using data collected during the 2nd River Basin Cycle 2015-2021.

The assessment of damage was completed in September 2019 using groundwater monitoring data collected between 2015 and 2019. Elevated chemical parameters recorded in the groundwater were assessed using two of the groundwater classification tests outlined in UK TAG paper 11b¹ (i): Test 7 - Drinking water Protected Area (DWPA) Test and; (ii) Test 8 - General assessment of quality. The groundwater quality in the Faughan Groundwater Body failed both of these tests resulting in poor status for both tests. Groundwater chemical classification is based on the one-out all-out system, as required by the WFD. If any one of the tests results in poor status, then the overall classification of the body will be poor. Therefore the Faughan Groundwater body is classified as having **poor chemical status**.

Data Release Constraints

The monitoring data which has been used to inform this classification is relevant to on-going enforcement proceedings concerning the site and subsequently is subject to disclosure restrictions.

¹ UK Technical Advisory Group paper 11b(i) released in April 2019, 'Chemical classification for the purposes of the water framework directive and the groundwater directive'



For further information:

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