

Submitted to River Leen Strategy SEA Scoping Report Consultation
Submitted on 2026-07-31 10:04:03

Relevant plans, programmes and strategies

1 Do you agree that we have included all relevant plans, programmes and strategies and adequately taken account of those listed?

Neutral

2 Are there other documents specifically relevant to the River Leen Strategy that have not been listed and should be taken into account?

Are there other documents specifically relevant to the River Leen Strategy that have not been listed and should be taken into account?:
N/A

Baseline information and key environmental issues and opportunities

3 Are there any baseline information sources that are relevant to the River Leen Strategy that have not been listed and should be taken into account?

Are there any baseline information sources that are relevant to the River Leen Strategy that have not been listed and should be taken into account?:

4 Do you agree that the environmental issues and opportunities identified accurately reflect those that are relevant to the River Leen Strategy?

Disagree

5 Are there any other environmental issues or opportunities that should be considered within the SEA?

Are there any baseline information sources that are relevant to the River Leen Strategy that have not been listed and should be taken into account?:
No – We suggest that a more nuanced consideration of groundwater is required to take into account surface water-groundwater interactions, groundwater contamination and interaction between groundwater quantity (levels) and caves. Section 4.4.4 Groundwater bodies and Section 4.5.3 Hydrogeology covers the groundwater system associated with the River Leen. The report identifies groundwater level change as an important but secondary issue within the River Leen catchment. It does not undertake a detailed groundwater assessment at this stage, but it highlights several hydrogeological trends and risks that will need consideration during strategy development. The River Leen corridor overlies important Principal and Secondary aquifers, with alluvial deposits along the river providing connectivity between groundwater and surface water. The area is classified as having medium to high groundwater vulnerability, meaning that changes in groundwater conditions can affect both groundwater quality and consequently the river water quality. The report notes a long-term rise in groundwater levels across the Nottinghamshire coalfield following the closure of deep coal mines. As pumping ceased, groundwater has been rebounding towards more natural levels. However, the abandoned mine workings are likely to be deeper than the principal aquifers, Permo-Triassic Sandstones and may not directly affect the shallow groundwater table and therefore may not affect flows in the River Leen. It also records anecdotal evidence that groundwater levels within Nottingham, particularly around Basford, may be recovering due to the decline of historical industries that formerly abstracted significant quantities of groundwater for activities such as brewing, mining, bleaching and manufacturing. Reports of groundwater entering basements and cellars have been received by Nottingham City Council. Rising groundwater levels are recognised as a potential environmental risk because higher groundwater can mobilise contaminants associated with historic mining and industrial activity, potentially affecting the quality of: • Surface waters (including the River Leen) • Groundwater • Soils All of which could ultimately pose a risk to groundwater quality and therefore have the potential to contaminate groundwater resources and affect the provision of potable water. The report highlights the presence of several Source Protection Zones associated with public water supplies, indicating that future interventions should consider impacts on groundwater quality and contaminant mobilisation. Changes to the groundwater system could have an indirect impact on the caves themselves, particular those already identified as having a groundwater quantity problem such as the Broadmarsh caves. Increasing groundwater levels can result in flooding of the caves which affects cultural assets such as tanning pits resulting in them being at risk of being eroded. However, the reduction in groundwater levels in the caves could result in desiccation and lead to the sediments associated with the tanning pits collapsing. Groundwater controls may also need to be considered for other archeologically important features such as burial grounds where desiccation can prove detrimental to the human remains buried in these features. Further, consideration of climate change and how this may affect the amount of recharge both natural and in the urban environment should be considered both in terms of the groundwater systems and its interaction with the River Leen but also its impact on groundwater levels in the caves.

Assessment framework

6 Do you agree with the proposed assessment framework and approach to undertaking the SEA?

Disagree

7 Do you have any other comments that you wish to make regarding the approach and scope proposed for the SEA?

Are there any baseline information sources that are relevant to the River Leen Strategy that have not been listed and should be taken into account?:
Caves are not assessed as a separate topic in the report (section 4.9); instead, they are referenced only as part of the cultural heritage and geological baseline (see below). It is recommended that the caves are treated separately as a unique cultural asset within Nottingham. This is important given the

number of the caves in Nottingham City (~800) and their heritage value (many are scheduled monuments). The report identifies Nottingham Castle Rock as a Local Geological Site, noting the presence of "numerous caves cut into the sandstone beneath the castle." These caves are recognised as part of the geological and heritage significance of the site. The report also identifies the rock-cut houses north of Castle Boulevard as a Scheduled Monument. These cave dwellings form part of Nottingham's nationally important underground heritage and are listed among the designated heritage assets within the study area. Within the cultural heritage section, the SEA acknowledges the concentration of designated and non-designated heritage assets in Nottingham City and highlights the need to protect heritage significance when developing the River Leen Strategy. This would implicitly include cave-related heritage assets where they could be affected by future interventions. The assessment framework includes an SEA objective to "Protect, conserve and enhance the historic environment", with indicators relating to the condition, protection, resilience, understanding and public engagement with heritage assets. Nottingham's cave network would therefore fall within the scope of future heritage assessments, although no cave-specific assessment criteria are proposed. The SEA document recognises Nottingham's caves as heritage and geological assets, particularly around Nottingham Castle, but does not provide a detailed assessment of cave systems, groundwater interactions, stability risks, or impacts of River Leen interventions on the wider cave network. Their consideration is largely confined to the broader cultural heritage baseline and heritage-protection objectives. Whilst there is a limited assessment of caves within the cultural heritage section, given their importance, it is necessary to treat them as a distinct and separate cultural heritage issue.

SEA objectives, questions and indicators

8 Do you agree with the objectives, questions and indicators that we have identified?

Neutral

9 Are there any other objectives, questions or indicators that you think should be included in the SEA of the River Leen Strategy?

Are there any baseline information sources that are relevant to the River Leen Strategy that have not been listed and should be taken into account?:
N/A

Contact details

10 Please provide your email address below

Email address:
BGSPolicy@bgs.ac.uk