

Subject:	Groundwater Quality		
Date of Meeting:	20 October 2014		
Report of:	Executive Director of Environment, Development & Housing		
Contact Officer:	Name:	Giles Rossington	Tel: 29-1038
	Email:	Giles.rossington@brighton-hove.gov.uk	
Ward(s) affected:	All		

FOR GENERAL RELEASE

Note: The special circumstances for non-compliance with Council Procedure Rule 3, Access to Information Procedure Rule 5 and Section 100B(4) of the Local Government Act 1972 (as amended), (items not considered unless the agenda is open to inspection at least five days in advance of the meeting) were that it was not possible to fully sign-off the report in time for despatch.

1. PURPOSE OF REPORT AND POLICY CONTEXT

- 1.1 At the July 2014 OSC meeting, members considered the Annual Performance Update 2013-14, focusing particularly on the 'exception reporting' of issues with a red 'RAG' rating.
- 1.2 Members evinced a particular interest in the issue of Groundwater Quality – i.e. the condition of the aquifers which provide all of the city's potable water supply. Members asked for more information on this issue, and mooted the possibility of establishing a scrutiny panel to examine it in depth.
- 1.3 Section 3 of this report provides some more detail on the issue of groundwater quality. However it is apparent that the city council does not take a lead role on groundwater quality; for more in-depth information we will need to contact other bodies such as the Environment Agency, South Downs National Park and Southern Water.

2. RECOMMENDATIONS:

- 2.1 That OSC members consider and comment on the information included in this report; and
- 2.2 If members wish to further progress the issue, agree that a sub-group of members (nominated by the Political Groups) supported by Overview & Scrutiny officers should be appointed to scope groundwater quality; and, should the sub-group believe there is the potential for members to add value to the ongoing work, to establish a scrutiny panel to do so.

3. CONTEXT/ BACKGROUND INFORMATION

- 3.1 The corporate Annual Performance Update 2013-14 includes the following with regard to groundwater quality (performance against this measure is rated at '0' and the RAG rating is RED):

Environment Agency Assessment of groundwater status in Brighton and Hove

Performance Summary:

The result of '0' represents an assessment that groundwater is poor. '2' represents an assessment that groundwater is good. '1' represents an assessment that groundwater is good but at risk of being poor. This coding has been adopted by the council to make it easier to report performance in scorecards.

Commentary

The Brighton Chalk remains at poor status under the Water Framework Directive as determined by the Environment Agency.

The Challenges and Choices consultation was published on 22 June 2013 and confirmed the results of our recent interim classification work that showed the Brighton Chalk is now at poor status for groundwater quality due to the rising trends in nitrate as well as due to water abstraction. This is significant as 100% of the city's drinking water comes from the chalk aquifer - groundwater.

The Chalk is at risk for urbanisation, nitrate, phosphate, pesticides, chlorinated solvents, nitrate trends, saline intrusion and as a Drinking Water Protected Area. We are seeing decreasing trends in atrazine but do see occasional detections of other pesticides in the groundwater.

The Brighton Chalk is at poor status for groundwater quantity due to the water balance test and the potential impact of surface waters. There are investigations into groundwater abstractions in the catchment. There is an ongoing investigation at Lewes Winterbourne, which is not compliant for water resources and is not supporting good ecological status. There is also a Brighton and Worthing Chalk groundwater model currently being developed.

The Environment Agency is currently setting up a local partnership (the Brighton Chalk partnership) to deliver improvements to groundwater quality using both urban and rural interventions. The partners include Southern Water, South Downs National Park Authority, the Environment Agency, Brighton Biosphere, Natural England, Brighton and Hove City Council and Brighton University. The rural part will be modelled on a catchment sensitive farming style of approach, and the urban part will focus on looking at improving drainage issues near water supplies with known problems.

Accountable Director: Various depending on the source of the issues

- 3.2 In addition to featuring as a measure against which the council reports, the council's Corporate Plan 2011-15 (2014-15 update) commits the city council to "manage the impact of human activity on our groundwater resource" (p48). There is also a specific commitment that the council will "take action with partners to protect the city's water supply, our focus being on preventing pollutants in the groundwater, minimising the loss of clean water at source and reducing water demand" (p49).

- 3.3 100% of Brighton & Hove's drinking water is extracted from the aquifers that are situated under agricultural land to the north of the city. Much, but by no means all, of the land above the aquifers is owned by the city council and leased to tenant farmers. There is no obvious alternative means of supplying the city with potable water – desalination and piping water in from other parts of the country are technically possible, but only at a considerable financial and environmental cost.
- 3.4 The principle risk to aquifer quality is pollution from agricultural use (most obviously from the run-off of nitrate fertilisers). Nitrate pollution can take up to 50 years to percolate through the soil, so to a degree the problems we currently face may be as much to do with historical as with current farming practices. There are also risks of contaminated water finding its way into the aquifers from the city itself, both from industrial and residential sources.
- 3.5 Contamination of the water supply carries the potential risk of rendering the aquifer unusable. A more likely consequence is that the water requires additional treatment before it can be used, significantly increasing the financial and environmental costs of extraction.
- 3.6 The obvious mitigation of this risk consists of working to reduce the run-off of pollutants into the aquifer, for example by encouraging farmers to adopt best practice in terms of their use of potentially hazardous chemicals. However, recent studies have indicated that the great majority of our tenant farmers already follow best practice in this regard. Another option may be to pay farmers to manage some agricultural land as chalk grassland or woodland, which would greatly reduce nitrate use and potential run-off, though this would need to be factored into the council's budgetary position.
- 3.7 An allied issue, included in the Corporate Plan priorities but not in corporate performance reporting, is that of water quantity. There is a finite amount of water in our aquifers – and adverse weather conditions (particularly dry winters) could put our supply at risk. The obvious mitigation here is to reduce domestic demand for water, principally by fitting more homes with water meters. Currently, Southern Water has an extensive programme of water metering investment.
- 3.8 Improving groundwater quality (and maintaining sufficient quantity) is necessarily a partnership exercise, involving the city council, the Environment Agency, Southern Water, the South Downs National Park, the Brighton Biosphere and other bodies. This work is led by the Environment Agency, rather than the council, although a range of BHCC teams are involved in this work.
- 3.9 Should OSC members wish to pursue this issue further, it is recommended that the OSC should approve the establishment of an informal sub-group of elected members (nominated by the Political Groups) to scope the issue, and potentially to form a scrutiny panel to examine it in-depth – should it become apparent that there is the potential for a cross-party group of elected members to add value to the ongoing partnership work.

4. ANALYSIS & CONSIDERATION OF ANY ALTERNATIVE OPTIONS

- 4.1 Members could choose not to pursue this issue further or to immediately establish a scrutiny panel. However, given that this issue has not yet been scoped, it is recommended that an informal sub-group is initially established to determine whether there is the potential for scrutiny members to add value.
- 4.2 Members could choose to defer any decision until they have received a full officer scoping report. However, this would delay the establishment of a scrutiny panel until at least January 2015, whereas the establishment of an informal sub-group as an initial step would allow member-led work to commence much sooner.

5. COMMUNITY ENGAGEMENT & CONSULTATION

- 5.1 None to date, but scoping, if approved, would potentially include engagement with community groups

6. CONCLUSION

- 6.1 The issue of groundwater quality has proved more difficult to scope than envisaged, largely because the city council does not take a lead role in the partnership work associated with this issue and there is therefore no single officer or team with a holistic understanding of the issues.
- 6.2 Members are therefore requested to agree to establish an informal sub-group to work with officers to undertake an initial scoping exercise and to determine whether further member-led work is required.

7. FINANCIAL & OTHER IMPLICATIONS:

Financial Implications:

- 7.1 There are no direct financial implications arising from the recommendations in this report.

Officer time and other costs associated to the production of this report and the Annual Performance Update has been funded from existing revenue resources.

Any costs associated to carrying out further progress in relation to groundwater quality measures will require additional financial support which has not been identified. The financial implications of this will be reviewed and included in future reports to Committee.

Finance Officer Consulted: Steven Bedford

Date: 14/10/14

Legal Implications:

- 7.2 None directly – the OSC has powers to establish scrutiny panels to examine issues of corporate or citywide significance.

Lawyer Consulted:

Name

Date: dd/mm/yy

Equalities Implications:

- 7.3 None directly, although the contamination of groundwater is likely to increase costs to the consumer, with a disproportionate impact on deprived communities.

Sustainability Implications:

- 7.4 This is a core sustainability issue and sustainability would be a significant focus of any scoping exercise.

Any Other Significant Implications:

- 7.5 None identified.

SUPPORTING DOCUMENTATION

Appendices:

None

Documents in Members' Rooms

None

Background Documents

1. Annual Performance Update 2013/14 (report to Policy & Resources Committee July 2014)
2. Brighton & Hove City Council Corporate Plan 2011-15 (2014-15 Update)

