Matter 1 Hearing Statement

Habitats Regulation Assessment

350 words, Inspector; 775 CAUSE

Issues

Is the Habitats Regulations Assessment [HRA] Report dated July 2019 [EB/083] compliant with the requirements of the Conservation of Habitats and Species Regulations 2017 and any other relevant legislation and caselaw?

Will the Section 1 Plan, with the NEAs' relevant suggested amendments, ensure that all the necessary mitigation measures will be implemented effectively?

As outlined in our consultation response, we have concerns about water supply and waste water in the Section 1 Plan.

With regards to the HRA, we found that the NEA evidence has not ruled out adverse impacts on the integrity of European coastal habitats sites.

Since 30 September (the close of the consultation), new evidence has come to light. We set this out in an appendix "Water, Section 1 Plan", which we hope will assist the Inspector.

There are too many unknowns, too many risks and too many unanswered questions for a project of the magnitude proposed. We agree with the concerns set out in Mr Gibson's hearing statement.

Questions

(In responding to the questions, would the NEAs and Natural England please address the specific criticisms of the HRA Report and the Plan contained in the comments made by Dr Gibson on behalf of Wivenhoe Town Council.)

Questions for the North Essex Authorities and Natural England

1. Should the HRA have taken account of the implications for European sites1 of development beyond 2033 proposed in the Section 1 Plan?

2. Does the HRA properly identify the sensitive areas of the Colne Estuary in terms of nesting, roosting and feeding for qualifying bird species?

3. How would funding of the mitigation measures proposed in the Essex Coast Recreational disturbance & Mitigation Strategy HRA Strategy Document [the RAMS document] (July 2019) [EXD/050] be affected if only two or one of the proposed garden communities were to be found sound?

Questions for all participants, including the NEAs and Natural England

4. Does the HRA take adequate account of the implications for European sites of the Section 1 Plan in respect of:

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(a) water use and waste water?

We refer to government guidance on habitats assessment which we quoted in our consultation response and which states**, *"The competent authority may agree to the plan or project only after having ruled out adverse effects on the integrity of the habitats site."*** We continue to maintain that the evidence available does not allow us to conclude that adverse effects can be ruled out.

In addition, the HRA notes that an increase in demand for water abstraction and treatment resulting from growth proposed in the Local Plan **could result in 'Likely Significant Effect' on EU sites and that it is unclear whether measures proposed will be sufficient to avoid these effects.**

The sewage from two new towns (up to 9,000 homes and 24,000 homes respectively) is to be pumped to Rowhedge, situated on the River Colne. Figure 5 shows how this relates to RAMSAR sites, SPAs and SACs and Figure 6 shows vulnerability of aquifers and rivers.

In our consultation response, we noted that:

- the Integrated Water Management Strategy warns, *"the scale and location of development poses a number of significant challenges around provision of water supply, wastewater services and management of flood risk."*
- we had concerns about unrealistic assumptions in the IWMS, and therefore it is impossible to ascertain whether Water Framework Directive compliance is achieved for the Plan;
- "it may be possible that the quality conditions required to protect water quality and ecology are not achievable"
- any application for a new or revised discharge permit would require water quality assessment to determine whether it is theoretically possible to achieve quality conditions
- we have concerns about the assumptions around supply. We question whether proposed supply interventions (see Figure 4) are adequate, fundable, will be delivered, and if so when. Figure 4 also sets out the latest groundwater situation, October 2019. If sufficient water cannot be supplied from other areas, then the additional pumping proposed from Colchester's aquifer may have a resultant impact on EU sites. Not known, as far as we know, because not assessed. In this regard we note the issues in areas to the west of Essex where chalk streams, and the River Cam, are under extreme stress due to over-abstraction from the aquifers. One council has already agree to hold the water company to account and it is likely that the future will see even greater pressure to reduce abstraction and thus limit the water to be shared.

Combined Sewer Overflows (CSOs)

Figures 2 and 3 show some data on CSO's happening already, at current levels of development. We also note two recent incidents[1] involving Anglian Water, in which it was fined, one a sustained sewage leak and one a sewage spill.

A WWF report[2] concluded that water companies are relying on CSOs to compensate for lack of capacity in sewer infrastructure. The report found that the more sewage sent down the line, the

[1] https://www.endsreport.com/article/1666651/water-firm-fight-fish-kill-compensation-decision
[2] https://www.wwf.org.uk/sites/default/files/2017-12/Flushed%20Away__Nov2017.pdf

more likely it is to overspill and end up in a river or other watercourse. It also noted that sewage works in catchment protected by the EU habitats Directive must meet stricter phosphorous targets. Clearly, with the intention to pump the waste from two new towns, one at East Colchester and one at Marks Tey, to a pumping station situated in an EU site should be ringing some serious alarm bells.

(b) powered paragliding?

(c) loss of feeding grounds at Tendring Colchester Borders GC for lapwings and golden plovers?

Lapwings (and geese) regularly come inland to the West Tey and 'Monks Wood' area, where they graze on arable land. We have not seen this loss of arable land addressed in the HRA.

5. Would implementation of the mitigation measures proposed in the RAMS document [EXD/050] ensure that the Section 1 Plan (either alone or in combination with other plans or projects) would not adversely affect the integrity of any European site?

No. See consultation response and reply to Q4a.

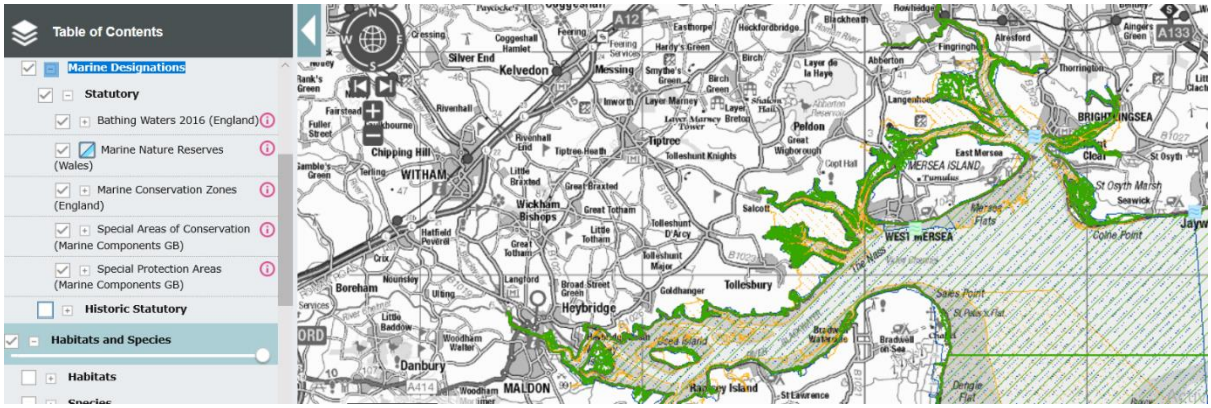
In addition, we seek to understand the impact of the mitigation package on the viability of the Plan. The per dwelling payment does not appear in the Hyas appraisals *("The overall cost for the mitigation package is £8,916,448 in total from today until 2038. The tariff per dwelling for this period is currently calculated at £122.30*"), and we ask why it has not been included. Can the mitigation measures be afforded? Will the payments be 'front loaded' into the site preparation phase, to ensure mitigation measures are in place before construction begins?

6. Would the policies of the Section 1 Plan (including if necessary the relevant amendments suggested by the NEAs) provide sufficient certainty that the necessary mitigation measures will be implemented in order to ensure that the Section 1 Plan (either alone or in combination with other plans or projects) would not adversely affect the integrity of any European site?

No. See reply to question 4a and CAUSE consultation response (Water Paper), and reply to Q4a.

We also seek to understand how the impact of waste water treatment on EU sites would be assessed in the event that the Gateway 120 proposal to build a new waste water plant at West Tey becomes the preferred option at a later date. (We have set out problems with this option in our consultation response and in Matter 6). It would seem that this option would simply move the waster water impact issue to the Blackwater for West Tey, while still leaving uncertainty around the

impact on the Colne with regards to East Colchester GC. This map is from DEFRA Magic Maps and shows the extent of SPAs and SACs.



Appendix – next page

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Water, Section 1 Plan,

Hearing Statement appendix

Summary – many concerns remain about how water will be supplied to the garden communities and how wastewater will be treated. Figures in this appendix:

1. Waste water treatment options, CBBGC
2. Water Recycling Centres capacity to expand
3. Combined Sewer Overflows
4. Supply
5. EU sites maps
6. Vulnerable rivers & aquifers

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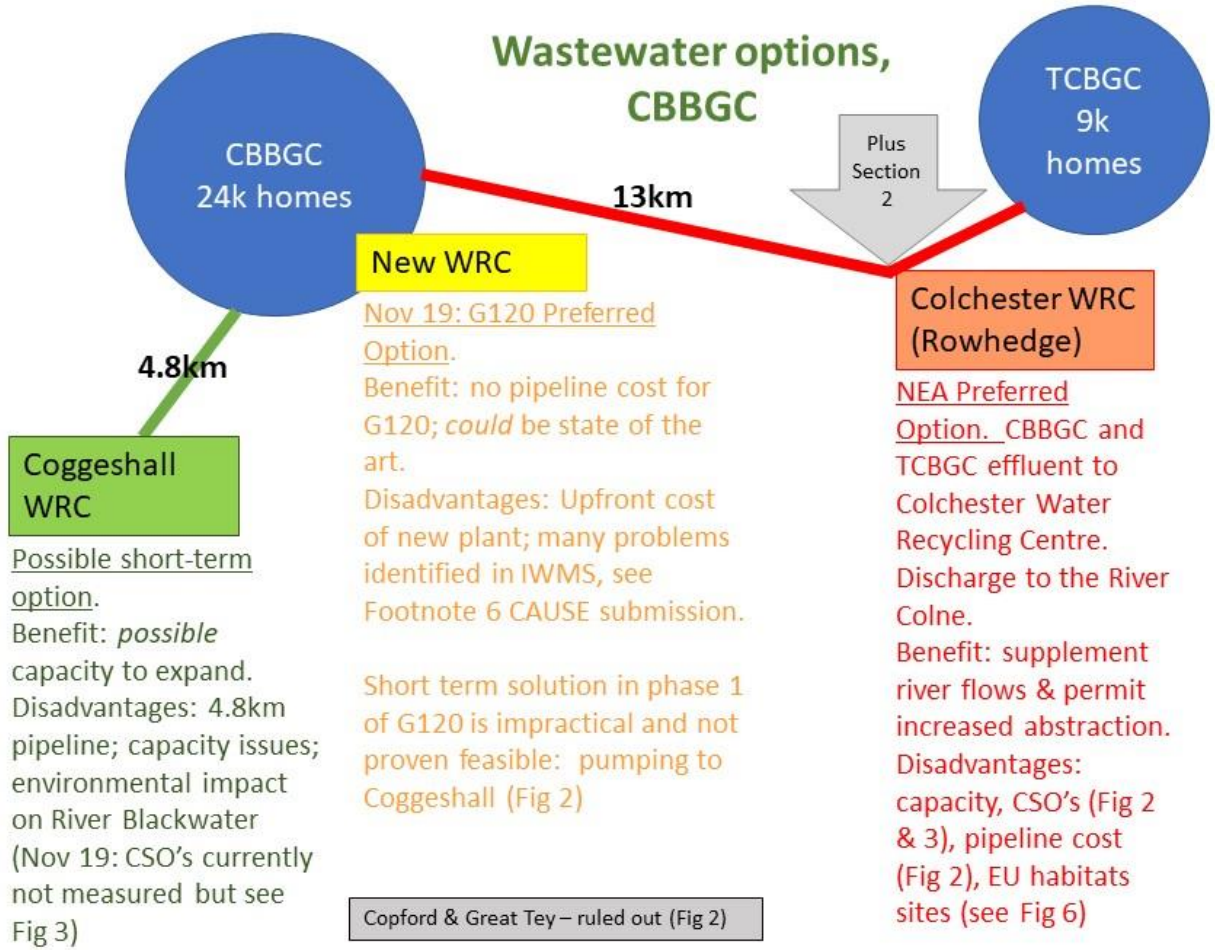
Water appendix for hearing statement Figure 1



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QUESTIONS

WRC upgrades*

When? Capacity? Impact of Section 1 PLUS Section 2?

Impact of Tiptree's sewage on Coggeshall WRC (Nov 2019)?

What likelihood of application by AWS for new or revised discharge permit being granted?

What impact on rivers, RAMSAR etc?

Pipelines (developer pays)

When will they be built?

Is £13.3m in Hyas enough? (Nov 2019: Norfolk AW 3km pipeline cost £6.5m)

West Tey - Coggeshall pipeline 4.8km uncosted but c£5m-£10.5m

*In general, water recycling upgrades required for additional growth are wholly funded by Anglian Water through business planning process from customer bills as determined by Ofwat.

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Water appendix for hearing statement Figure 2

CAUSE

Waste Recycling Centres which could serve West Tey						IWMS 5.3 Headroom			
WRC	West Tey comment IWMS	Anglian Water L/T Plan	No of CSOs	% growth 2020 to 2025	% growth 2020 to 2045	Headroom cax after growth (m3/d)	Ma no addtl houses GCs	Head-room cax after growth	% of permitted flow after GC growth) *
Coggeshall	Nov 2019 - we understand Tiptree WRC is at capacity & sewage is to be pumped to Coggeshall. What impact will this have on Coggeshall's capacity? From IWMP: Limited cax. Potential land available but significant upgrades requiredCoggeshall WRC was identified as the most appropriate potential Option 2 for CBB garden community. This option would require significant upgrades to the existing WRC, as well as approximately 4.8 km of new pipeline and a new pumping station. The indicative pipeline route identified would potentially cross a number of rural fields and a small number of minor roads, therefore there would be minimal disruption to public access. Denitrification of the additional flows to Coggeshall WRC would need to be considered	Additional WRC flow capacity AMP7 (20-25) £1.48m; CSO investigations AMP7 £0.019; CSO improvments AMP8 (25-30) £0.4m. Design horizon of scheme delivered in AMP7 = 2032	3	21	42	-506	24,000	-10,147	-454%
Great Tey	Would require complete rebuilding of the works; opposition due to nearby Roman sites; discharges into Roman River which is small & regularly dries up in summer months; therefore capacity for significant additional discharge is limited due to env cax	0				22	24,000	-9618	-6773%
Copford	No land for expansion as surrounded by designated sites	Additional WRC flow capacity AMP7 (20-25) £5.6m & 8 (25-30) £3.6m	5	8	92				
Birch	At 70% capacity								
Colchester WRC (Rowhedge)	of the local topography and environment designations was undertaken to identify a potential pipeline route and suitability for new pumping infrastructure. This option would require approximately 13 km of new pipeline (£13.3m in Hyas, staged payments) and a new pumping station. The pipeline route would need to cross the Roman River and a major dual carriage road (the A120), as well as the B1022, the B1025, the B1026 and a number of minor roads.	Inreased drainage capacity - SuDS & upsizing (Defined scheme) AMP7 £6.6m; AMP8 £`0.63m; AMP9 (30-35) £22.9m; CSO investigations AMP7 £0.09 ; Additional WRC flow capacity AMP8 £10.8m	25	11	29	1,419	24,000 +	-11,642	-40%
	*Application through application by AWS for new or revised discharge permit is req'd								

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Water appendix for hearing statement Figure 3

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Combined Sewer Overflows

Below is the latest CSO Spill Data for Colchester, an extract of the most recent data return Anglian provided to the EA relating to spills during 2018. See also data in Fig 2, although unclear over what period spills were recorded.

To what extent has the impact of these spills on EU sites downstream been measured and to what extent has the impact of future spills when garden community waste is pumped to Colchester been measured?

EDM Return for Anglian Water Annual 2018

Period selected from 01/04/2018 to 31/12/2018 Colchester CSO Spill Data

Water Company Name	Site Name	Permit No.	Activity Reference (if more than one discharge) on permit	Shellfishery (Only populate for storm overflows that have Shellfish water EDM requirements)	Bathing Beach (Only populate for storm overflows that have bathing water EDM requirements)	Total Duration (hours) of all spills prior to processing through 12-24 hour counting method	Counted spills using 12-24hr counting method	% of reporting period EDM operational
Anglian Water	Colchester - Hunting Gate CSO	ASETS19244	CSO	Colne, Pyfleet	N/a	7.07	37	97.50%
Anglian Water	Colchester - Hythe Bridge	AW2TSE00863	CSO	Colne, Pyfleet	N/a	0.10	2	100.00%
Anglian Water	Colchester - Rowhedge Albion St CSO	ASETS15689	CSO	Colne	N/a	0.50	6	100.00%
Anglian Water	Colchester - Rowhedge Regent Court CSO	ASETS15688	CSO	Colne	N/a	22.63	12	100.00%
Anglian Water	Colchester - Royal London Middleborough EO	ASENF19245	EO	Colne, Pyfleet	N/a	2.43	3	84.63%
Anglian Water	Colchester - St Albans Rd CSO	ASENF4126/19246	CSO	Colne, Pyfleet	N/a	19.87	5	5.37%

- Anglian Water reports annually on the spill frequency for a number of our CSOs to Environment Agency (EA). Not all of CSO permits currently have a permit requirement to record/report the spill frequency.
- There was no reporting requirement for Coggeshall in 2018.
- The spill data for 2019 is not currently available as the data will be produced at the end of this year and verified before Anglian Water provides this to the EA in February 2020.

Water appendix for hearing statement Figure 4

Supply to the GCs

Will the proposed solutions* deliver sufficient capacity? What certainty? When? What population growth is assumed? What is the "alternative future" Ofwat refers to? What will the impact be on vulnerable aquifers and rivers (see Fig 6)?

NOV 19: Anglian Water has confirmed that new reservoirs are currently options only. No decisions have been taken about whether these options will be included in the next WRMP to be published in 2024.

SOURCES OF WATER SUPPLY

Now - Anglian Water: 8 reservoirs, 8 direct supply river intakes (50%); groundwater abstraction (50%): 200 water sources; over 450 boreholes. Affinity supplies Tendring.

***Future** - *Proposed* local supply solutions: East Suffolk transfer (from Ipswich to Colchester via a new 22km long pipeline); amendment to Ardleigh Reservoir Operation, to make more water available from the reservoir to supply the garden communities extension to Ardleigh reservoir); groundwater development, (utilising an existing licenced borehole in the Colchester area), from IWMS. National – new South Lincolnshire reservoir proposed.

***NOTE** – CAUSE has addressed concerns about assumptions around water use, grey water & water neutrality in our consultation submission & does not repeat this here. We have looked at IWMS, WRMP, OFWAT, NEA evidence base. None give us reassurance that supply will be adequate for the Plan.*

STRESSES

OCT 19: Environment Agency water situation report, East Anglia:

- "81% of indicator sites across the area remain below normal or lower with 50% of sites notably low or lower. Two sites in the chalk aquifer (Cam and Lark) have had some response but remain with notably low flows as the chalk aquifer has yet to show significant recharge."
- "The Lodes-Granta groundwater support scheme has 5 out of 6 pumps operating with 3 of these operating 24 hours a day. The Rhee groundwater support scheme has 7 out of 8 pumps operating with 5 of these operating 24 hours a day. The pump on the Hiz groundwater support scheme has been operating 24 hours a day"
- 2 out of 5 reservoirs still below normal

Groundwater levels in the East at their lowest for nearly 30 years

20 August 2019 News

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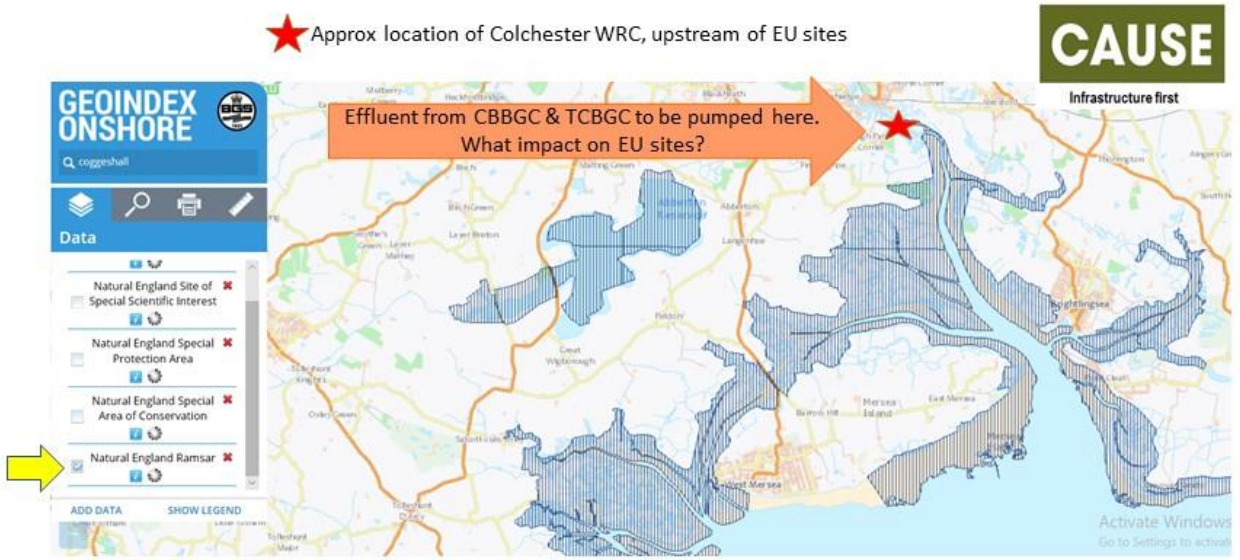
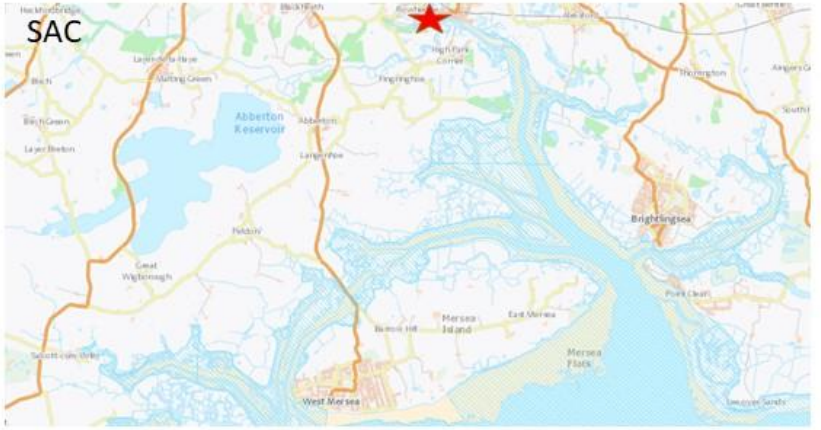
Water appendix for hearing statement 5

Background for reference Vulnerability – RAMSAR, SPAs, SACs,

Types of designation referred:

- **Ramsar sites** are areas of wetland which are designated of international importance under the Ramsar Convention (1971).
- **Special Protection Areas** (SPAs) are sites which support rare, vulnerable and migratory birds.
- **Special Areas for Conservation** (SACs) are sites which support high-quality habitats and species.





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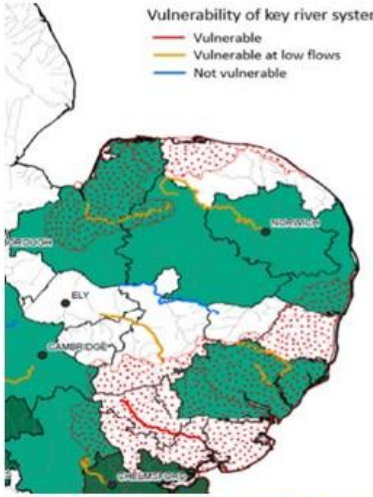
Water appendix for hearing statement 6

Background for reference: Vulnerability – rivers & aquifers

Note:

1. Vulnerable river system north Essex
2. High vulnerability aquifer under Colchester, Rayne, Saling and medium around and around Coggeshall area



Sources: Anglian Water DRMWP 2019 & DEFRA Magic Map; https://www.anglianwater.co.uk/news/groundwater-levels-in-the-east-at-their-lowest-for-nearly-30-years/