Issue Evaluation 2018: Sample answers

*Reading and evaluating sample answers helps you to develop your exam technique. State the WWW and EBI for each answer. Highlight the sections of the answer that you think will get the student lots of marks. Steal those phrases and if relevant apply them in the exam!*

**Describe the distribution of rainfall in Figure 1. (4)**

Student A

It is wetter in the west, for example in NW Scotland. This is because the land is higher up and the water gets evaporated from the Atlantic Ocean, meaning that it will bring rain. The east is drier.

Student B

The overall pattern is that most rain falls in the western part of the UK. For example the north-west Scotland has the largest area of annual rainfall over 2800mm and most of the western coastline has over 1000mm of rainfall each year, which is high. In contrast, eastern parts of the UK have lower rainfall e.g. Newcastle, London and much of central England have 500-749mm of rainfall each year.

**Suggest reasons for the pattern of water stress in England. (6)**

Student C

Water stress is serious in the south-east and central parts of England. This is because there’s lots of people and industry in an area of low rainfall. The north has low levels of water stress as it is wetter and has less people.

Student D

Water stress is serious in the south-east and central parts of England. This is because of a large demand of water due to the high population density and overall population, and the use in agriculture. This high demand causes water stress due to the low levels of supply e.g. annual rainfall below 749mm. Areas in northern and parts of south-western England have low water stress due to the lower demand because of a smaller population and higher levels of rainfall e.g. over 750mm.

**Describe the location of Abingdon (3)**

Student E

Abingdon is in Oxfordshire near to the River Thames.

Student F

Abingdon is in Oxfordshire, about 6km south-west of Oxford. It is 0.6km west of the River Thames and is east of Marcham village. It is in grid square 4896 on the OS map.

**Do you think that the proposed Abingdon reservoir should go ahead? (9 & 3 SPaG)**

Student G

I think that the reservoir should go ahead this is because the UK is short of water and with more people, there’s going to be more pressure to supply water to homes, farms and industries. The site for the reservoir is good as it is clay soil. The area also has a low rainfall and there may be more droughts in the future. Without the reservoir, the south-east will not have enough water. Another reason for the reservoir to be built is that it could be used for water sports and tourists, which will create jobs and money for the area. A final reason is that the alternative ideas for reducing water shortages such as water conservation through efficient appliances and fixing leaks, will not save enough water to make up the supply that is needed.

Student H

On balance, I think that the reservoir should go ahead. My first reason is that there are already serious levels of water stress in the south-east as shown by Figure 1. The low levels of rainfall in the Thames Basin (737mm – Fig 2) and the threat of more droughts linked with climate change (identified by Thames Water in Figure 2), makes a water deficit a real threat. It makes sense to transfer water from water surplus areas where they have over three times the amount of rainfall than areas in the south-east. This has been done successfully from Kielder Reservoir. The site is only 4km from the River Thames, meaning it’s a suitable site for transferring water. Furthermore, the OS map shows a disused canal (4695) to the north-east of the proposed site, which could be opened up again, which would save costs in transferring the water.

Another argument supporting the reservoir relates to the increasing demand from people – Figure 1 states that “non-household demand is expected to increase by 200 million litres / day between 2005 and 2030” and that each person will use 16 litres more per day. Furthermore from Figure 1, I’ve calculated that water demand in the south-east will rise by 14% by 2030, which is linked to the growing population of the Thames Basin by 100,000 each year (Fig 3). This evidence shows that water stress is going to increase in the future and that we need solutions, such as the reservoir to maintain good supplies.

A third argument in favour is that it would create a range of “recreational opportunities”, as described in Figure 3, where it shows that Farmoor Reservoir has been a real success at attracting tourism to the area, which has then added money to the economy, leading to a multiplier effect.

Although I think that the Abingdon Reservoir should go ahead, I do recognise that there are some challenges, for example one environmental challenge that GARD are concerned about is that it may “destroy natural habitats” and that it can be “visually intrusive” (Fig.3). However, I think that these challenges can be overcome by taking steps such as those that are at Farmoor Reservoir, e.g. creating a wetland trail and nature-reserves (Fig 3), which is linked to the “environmental facility” stated by the local resident in Fig 3. The social issues that have been raised about HGVs disrupting local residents (e.g. in Marcham) during the construction phase are fairly minor compared to long term water security that the reservoir would bring.

The alternatives to the reservoir include water conservation by reducing leaks and having more efficient water appliances. However, I do not believe that these will save enough water to meet the growing demand that Thames Water expects.

To conclude, despite some concerns from some people, there are more points in favour of the reservoir. The arguments supporting it, especially about the increasing demand due to population growth (extra 700 million litres of water needed / day in the south-east by 2030), outweigh the challenges, many of which can be overcome.