

December 2019

# PR19 final determinations

**Wessex Water – Cost efficiency additional  
information appendix**

## **PR19 final determinations: Wessex Water – Cost efficiency additional information**

# **Assessment of growth-related cost adjustment claims: flooding programme and sewage treatment works capacity**

## **1 Our draft determination**

At draft determination we assessed growth-related expenditure within our base econometric models. We considered this approach to be better than the use of stand-alone growth models or a bottom up assessment of company proposals. Including growth related costs in our econometric models is appropriate as they share similar characteristics, as set out in our 'PR19 final determinations: Securing cost efficiency technical appendix'.

Wessex Water submitted two costs adjustment claim related to growth expenditure in its revised business plan in April 2019. One related to sewer flooding costs and another for growth at sewage treatment works. We rejected the claims and made no adjustment to our base allowance.

## **2 Stakeholder representations**

Wessex Water does not agree with the base plus approach we took at slow track draft determinations. It considers key variables relating to the growth expenditure are omitted from the base econometric models. More specifically, it considers that:

- The absence of new connections as a cost driver means the models are not funding companies at their expected growth rates, leading to some companies being under-funded and others being over-funded.
- Sewer flooding is driven by improvements to the service provided rather than purely by the number of new connections.
- Investment is required to address sewage treatment works (STW) growth when the works are reaching capacity and will be made in step changes rather than a gradual increase in the number of connections.

Wessex Water proposes that our final suite of models includes cost drivers associated with new development, STW growth and sewer flooding. If this is not possible, it suggests that adjustments should be made to base plus cost allowances.

Wessex Water also consider that we should use its own forecast of connected properties. Its new connections forecasts have been agreed with Defra and the Secretary of State and it therefore sees no rationale for diverging from these agreed forecasts.

Wessex Water submits two cost adjustment claims in relation to wastewater growth.

The first claim relates to sewer flooding. Wessex Water argues that the new base models do not fully reflect the scope of work required to deliver the targets and programme of work it has agreed with stakeholders. It argues:

- Its performance in sewer flooding is industry leading.
- Its chalk geology is unique and the impact of geology is not explained by model drivers. It states that some sewer overflows can operate for many days due to sewer inundation caused by groundwater infiltration. It sets out that the industry standard storm overflow assessment framework (SOAF) encourages it to improve the performance of its frequent spilling overflows. Its proposal to seal sewers is to prevent the groundwater ingress.
- Requests funding to develop drainage and wastewater management plans (DWMPs). DWMPs are a new obligation and the associated cost is not reflected in the historical costs.
- Requests an additional allowance for its partnership working programme.

### **3 Our assessment, reasons and final decision**

For final determinations, we retain our approach of including growth related expenditure in our base econometric models and use the Office for National Statistics household growth projections.

To address the lack of an explicit growth cost driver, we have also made an adjustment depending on whether the company operates in an area with a relatively high or low forecast of population growth, relative to the historical average for the sector. This follows representations made at draft determinations that the models did not adequately compensate for companies with a high growth forecast. We also consider that the models overcompensate for companies that operate in an area with a low growth forecast. We consider that using the symmetrical adjustment approach set out in our PR19 methodology best accommodates for these factors.

As the population growth forecast in Wessex Water for the period 2020-25 is higher than the historical average growth rate in the sector, we make a positive adjustment

to the company's wholesale water base allowance of approximately £1.9 million, and a positive adjustment of approximately £10 million to its wholesale wastewater base allowance. More details of our approach can be found in our 'Securing cost efficiency technical appendix'.

Below we assess Wessex Water's cost adjustment claims relating to wastewater. We provide more detail of our assessment in Wessex Water's Cost Adjustment Claim Feeder Model (FM\_CAC\_WSX).

### **3.1 Sewage treatment works (STW) capacity**

Wessex Water estimates a shortfall of around £27 million for STW capacity expenditure (£59 million versus an estimated allowance of £32 million).

Wessex Water highlights investment at Poole STW which is the single biggest investment, contributing around £11 million (or 20%) of its total STW capacity claim. All remaining investments are for relatively smaller schemes. Overall, we see no evidence that Wessex Water's requirement for capacity expansion is different to any other company.

Wessex Water also notes that 50% of the total programme relates to growth at small STWs. Much of this relates to the Dry Weather Flow (DWF) schemes (£19.8m) for four STWs. We consider that while the on-site options appear to have been considered and costed, there is insufficient evidence that the options to pump-away have been explored at a detailed level. For example, in the Burton case, the pump-away options do not appear to consider the associated sales of land made vacant by closing the existing facilities. There are several precedents where we have allowed companies to offset the sales proceeds directly with the associated 'new build' assets rather than insisting such amounts are passed through the land sales RCV adjustment, as is the norm. In areas where land values are high, this can significantly reduce the amount of expenditure to be funded by customers.

We do not make a cost adjustment to our base in respect of this claim as we consider that Wessex Water does not provide sufficient evidence to demonstrate that its circumstances are sufficiently different to other water companies. We note that we apply a positive adjustment to Wessex Water's wastewater modelled base allowance of around £10 million to account for it operating in a relatively high growth area, and our econometric base cost models include explanatory variables to control for economies of scale at STWs (e.g. load treated in STW bands 1 to 3 and load treated in STW band 6).

## **3.2 Sewer flooding cost adjustment claim**

Although Wessex Water describes the adverse effects of the groundwater inundation on the performance of the sewers located in its region, it does not sufficiently evaluate the impact on sewer flooding to enable derivation of the investment requirements associated with the proposed infiltration reduction. Wessex Water also does not appear to be uniquely affected according to the evidence it presents within its representation (see Figure 1). The four other companies with chalk geology do not submit a sewer flooding related claim. We therefore do not make an adjustment to our modelled allowance in respect of the company's chalk geology.

We agree that some additional investment is required to develop DWMPs to ensure a more consistent basis for long-term planning of drainage and wastewater services as recognised by the 21st Century Drainage Programme supported by Water UK, Defra and the EA. We make an allowance of £6.6 million.

We expect Wessex Water to deliver a significant risk reduction of sewer flooding for properties from its base allowance and meet our stretching performance commitments. All companies are funded to deliver a common service level for reducing sewer flooding under our base allowance. We do not make an additional enhancement allowance for the proposed programme of partnership working as it contributes to meeting internal and external performance commitment levels. If the company delivers a more stretching sewer flooding performance, it will be able to earn outperformance payments under the outcome delivery incentive framework. For the final determination, we maintain our decision not to make a further cost adjustment in respect of the specific sewer flooding programme above.

**Figure 1: Chalk geology in England and Wales**



Source: Wessex Water Draft Determination Representation. Document 'Representation C10 Sewer Flooding'.

Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We regulate the water sector in England and Wales.

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December 2019

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