



**WATER RESOURCES MANAGEMENT PLAN**

**RESPONSE TO THE REPRESENTATIONS ON  
PORTSMOUTH WATER'S  
PUBLIC HEARING STATEMENT**

**APRIL 2010**

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1. **INTRODUCTION**

This response has been prepared to assist the Inspector appointed to consider the Company's Water Resources Management Plan at a Public Hearing as directed by the Secretary of State for the Environment, Food and Rural Affairs in his letters dated 3 August and 8 December 2009.

In order to minimise the volume of information submitted to the Inspector in this Response, the Company avoids repetition of the background issues and the legislation already set out in the draft Water Resources Management Plan (dWRMP) and the Public Hearing Statement.

Following notification of the Public Hearing timetable set out in the Secretary of State's letter dated 8 December the following actions have been completed as set out below:-

- (i) Two initial representations on the Company's earlier draft Water Resources Management Plan were made to Defra prior to preparation of the Statement of Common Ground and the Company's Public Hearing Statement. These were received from:-
  - Consumer Council for Water (CCW)
  - Planning for Urban South Hampshire (PUSH)
- (ii) On 26 January 2010 a Statement of Common Ground (SOCG) between the Company and the Environment Agency (EA), was published covering the issues identified in the Annex to Defra's letter of 3 August 2009 and the Environment Agency's (EA) Advice Report dated 1 May 2009.
- (iii) On 9 February 2010 the Company's Public Hearing Statement was published, setting out the full particulars of the case it proposes to put forward at the Hearing, together with the documents to which the Statement refers.
- (iv) Five representations have been made to Defra on the Company's Public Hearing Statement by the following organisations:
  - The Environment Agency (EA)
  - Consumer Council for Water (CCW)
  - Water Services Regulatory Authority (Ofwat)
  - Natural England (NE)
  - Rowlands Castle Parish Council
- (v) This Response is now prepared for the Inspector to provide him with further information upon the issues raised in the Annex to the Defra letter and the Environment Agency's Advice Report, in preparation for the Public Hearing.

## 2. **BACKGROUND**

The Company draws the Inspector's attention to the various Act, Orders, Regulations and Directions which direct the Company's activities in providing public water supplies to domestic households and commercial premises in South East Hampshire and West Sussex.

The Company highlights its prime duty under Section 32 of the Water Industry Act 1991 to ensure that it "develops and maintains an efficient and economical system of water supply within its area for providing water supplies to those that demand them". In discharging that duty it must have regard for the impacts that its actions will have upon the water environment together with the consequences of those actions which will impact upon its customers water charges.

The need for long-term planning for the provision of adequate water resources has long been a consideration for the Company, and this issue is now placed on a statutory footing by S37B of the Water Industry Act 1991 (as amended by the Water Act 2003) and the Water Resources Management Plan Regulations 2007.

In preparing its long-term plans the Company pays regard to the important role played by the provision of safe, secure public water supplies in the fabric of the community today. The Company does not believe that the public expects it to take unnecessary risks with the provision of their water supplies. The provision of sufficient and secure supplies is a reasonable expectation of the developed society which exists in the South East of England today and in the future.

### 2.1 **The Challenges Facing the Company**

In preparing its draft Water Resources Management Plan, the Statement of Response, the Public Hearing Statement and this Response to the Representations the Company reflects upon its long history of maintaining the security of public water supplies to the people of South West Hampshire and West Sussex. It has done so through careful long-term planning for the provision of adequate water resources, and in a most economic way. The result is that Portsmouth Water's customers currently enjoy secure public water supplies at the lowest prices in England and Wales.

In setting out the responses in this document the Company pays regard to the need to continue its record of ensuring careful investment in measures which minimise the impacts upon its customers water charges whilst respecting the sensitive environment in which it operates. The responses are presented to the Inspector in a long-term context having regard to a number of major challenges which the Company must face in the 25 years ahead. These are:-

- A significant number of new homes are planned for the South East of England with an expectation that there will be enhanced development in the PUSH (Planning for Urban South Hampshire) growth area.
- An increased population occupying these new homes as forecast in the Regional Spatial Strategy (The South East Plan).
- The potential for rising per capita consumption from domestic households resulting from reduced occupancy in households driven by demographic change.
- The need to deliver reduced abstraction from a number of abstractions to protect the very important European Habitats Sites which play an important part in the local environment.
- The expectation that climate change will result in hotter, drier summers and warmer, wetter winters. This is likely to reduce the summertime yields of sources whilst at the same time leading to increased summertime demand for water supplies.

- The need to constrain the currently rising demand profile in support of the government's water strategy (Future Water 2008) which aspires to a fall in per capita consumption to 130 l/h/d by 2030.
- The requirement for the UK to implement the Water Framework Directive which has identified the need for ecological investigations in the majority of river and streams across the Company's area. There is the potential therefore for a need for further reductions of currently available abstraction.

## 2.2 **Portsmouth Water's Response to the Challenges**

In drafting its Final Plan Portsmouth Water has developed a long-term strategy which incorporates both demand management measures and the development of resilient new water resources. It believes that its strategy will:-

- Deliver a universal metering while minimising the financial impact upon customers and respecting the potential hardship that compulsory metering could impose upon those already having difficulty paying water bills.
- Enable the Company to take account of tariff policies currently being developed in the period to 2015 so that their benefits can be maximised for a Company with low charges.
- Deliver the potential for the implementation of new tariff structures, in the future, which together with regulatory and legislative support for wider demand management measures could lead to significant changes in per capita consumption by customers.
- Enable the Company to deliver the Habitats Regulations sustainability reductions for the protection of important environmental sites as early as possible whilst the potential to provide further reductions to meet future Water Framework Directive obligations is also strengthened.
- Incorporate the development of a major new water resource to maximise the use of its existing resources whilst providing important Green Infrastructure for amenity, recreation and wildlife habitat creation in the PUSH growth area.

The Company urges the Inspector to pay careful attention to the Company's duties to its customers and the natural environment in developing a realistic, prudent and sustainable solution to their respective water needs for the next 25 years.

3. **REPRESENTATIONS RECEIVED**

The Company received two representations from CCWater and PUSH following Defra's initial invitation for stakeholders to make comments on the Company's Plans and the issues that Defra had highlighted in the Annex to their letter of 3 August 2009.

- CCWater's representation was a common letter covering the public inquiries for Thames and South East Water and the Public Hearing for Portsmouth Water. It raised a number of general issues of concern, much of which was expanded in its later detailed representation on the Company's Public Hearing Statement.
- The PUSH representation covered detailed issues relating to the Company's proposals set out in its draft Water Resources Management Plan and the subsequent Statement of Response.

Following publication of the Company's Public Hearing Statement on 9 February 2010 the Company has received, via Defra, five further representations from stakeholders but none from members of the general public.

- The Environment Agency provided a 212 page document consisting of a comprehensive 33 page representation together with a number of annexes including two statements from Environment Agency staff.
- CCWater, Ofwat, Natural England and Rowlands Castle Parish Council provided shorter representations focussing upon key issues that they believed were important for the Inspector to address. These were not necessarily consistent with list of issues identified in the Annex to the letter from the Secretary of State dated 3 August 2009.

4. **RESPONSES TO THE REPRESENTATIONS**

In recognition of the relatively low number of representations upon the Company's Public Hearing Statement, the Company has sought to separately address the representation of each organisation below.

In preparing our responses to each of the representations, the Company has sought to assist the Inspector by commenting upon whether or not the specific issues have been raised in previous representations and/or whether or not they are referred to in the Annex to the Secretary of State's letter of 3 August 2009.

Wherever possible the Company has sought to keep the responses as brief as possible by providing references to other documents in the public domain rather than attaching them as annexes or appendices.

4.1 **Initial Representation from Consumer Council for Water London and South East dated 19 January 2010**

The Consumer Council provided Defra with an initial representation covering the three Water Resources Management Plans of Portsmouth Water, South East Water and Thames Water.

The Representation raised no specific challenges on any of the companies' Plans until such time as Statements of Common Ground and Company Statements were published. The Representation principally referred to its representations on each of the previous Draft Plans. It did identify further issues for the attention of each of the Inspectors responsible for the three Hearings/Inquiries, these issues being:-

- New information quantifying the distributional effects of Compulsory Metering
- Consequences of high levels of metering for revenue stability
- Independent Review of Metering and Water Charging (The Walker Review)

***Portsmouth Water Response***

*These issues are however covered in greater detail in the Consumer Council for Water's subsequent response to the Company's Hearing Statement and as a result the Company's response is set out in relation to that later response below.*

#### **4.2 Planning for Urban South Hampshire dated 22 January 2010**

The Company advises the Inspector that PUSH (formerly Partnership for Urban South Hampshire) did not previously make representation on the Company's draft Water Resources Management Plan. However several of its constituent organisations did make separate representations.

In its representation PUSH identifies the eleven local authority organisations it represents. It also sets out the key policy frameworks and the environmental context within which those organisations are expected to deliver the requirements of the approved South East Plan (sometimes referred to as the Regional Spatial Strategy).

##### **4.2.1 Section 3 – Meeting Demands of South Hampshire**

PUSH considers that any future strategies and plans should seek to minimise the uncertainty over water supply and to minimise risk of there being insufficient supply to serve the development required by the South East Plan (section 2.10). Specifically PUSH supports a precautionary approach to the assessment of water supply and demand (section 3.2 and 3.5). PUSH believes that the Company is taking a precautionary approach in order to ensure that supplies can be maintained.

###### *Portsmouth Water Comments*

*The Company notes the PUSH view regarding the uncertainties associated with demand management measures and the lack of suitable mechanisms to deliver the retrofitting of water efficient devices (section 3.3).*

*The Company notes the PUSH view that a strategy of reducing demand needs to be complimented by proposals to enhance supply to minimise the risk of shortages occurring. The Company welcomes the PUSH support for a twin-track solution of demand management measures together with the development of new resources (section 3.4).*

*The Company welcomes the support given by PUSH for the development of a new winter storage reservoir at Havant Thicket as the means to achieve this balanced approach (section 3.4 and 5.1).*

*The Company welcomes the support for its precautionary approach for dealing with the unpredictable source yields resulting from the impacts of climate change. It notes the concerns raised with regard to the proposals for increased abstraction from the River Test which may impact upon the River Itchen's sustainability solutions currently proposed (section 3.5).*

##### **4.2.2 Section 4 Havant Thicket Winter Storage Reservoir**

*It is the view of PUSH that, in proposing the development of Havant Thicket Winter Storage Reservoir, the Company is attempting to minimise the risks of meeting the needs of the area in the future (section 4.1 and 4.2).*

*It believes that it is important that Havant Thicket is included in the Company's Plan so that appropriate forward planning can commence. This will also enable the land for the reservoir to be safeguarded (sections 4.3 and 4.4).*

*PUSH refers to the importance that the reservoir will make o the Green Infrastructure Agenda as well as the potential for accommodating additional development in the future.*

###### *Portsmouth Water Comments*

*The Company welcomes the fact that PUSH has recognised the very long lead in time needed to bring forward a large infrastructure project of this kind, noting the need for the project to be included in the Water Resources Management Plan, to enable the necessary forward planning to take place (section 4.3). Work on preparing the planning application is well advanced, however, if the planning application is delayed because the reservoir is removed from the Company plan, this will have significant consequences.*

- All of the work completed between 2004 to 2010 to prepare the supporting documentation for the reservoir planning application (ecology surveys, traffic surveys, extensive public consultation etc) will quickly become out of date and need to be repeated. The lead in time for the new reservoir would then increase. As a result this important regional resource will not be available to the Company at the time of predicted need, nor be available as a regional contingency in the time frame in which it may be needed in South East England, especially if demand management measures fail to deliver the optimistic targets. When assessing the regional need the EA have previously asked if the timescale for the Havant Thicket Winter Storage Reservoir could be brought forward. This flexibility in regional water planning will not be possible if the documents already prepared for the reservoir planning application are "mothballed".*
- Following six months of public consultation in 2008 and 5 years working with the Stakeholder Group, the reservoir has received enormous support from local people and organisations. Indeed after an extensive public consultation exercise, which included a mail shot to 17,000 local people and exhibitions at three locations over 10 days, only 5 people to date have indicated that they proposed to object to the reservoir application, which is exceptional given the very large population which live adjacent to and within 3 km of the site.*

*The Company notes the statements which identify the potential risks to the South East Plan if the Havant Thicket Winter Storage Reservoir site cannot be safeguarded in Development Plan Documents (section 4.4).*

*The contribution that the proposed reservoir would make to the Green Infrastructure, agenda and its sub-regional importance in South Hampshire is noted. In particular the Company welcomes the recognition provided in the PUSH response that the reservoir could help to ease pressure on sensitive coastal habitats (section 4.5).*

*The Company notes the view expressed that the PUSH area might need to accommodate additional development beyond that already proposed in the South East plan (section 4.6).*

#### 4.3 **ENVIRONMENT AGENCY DATED 25 FEBRUARY 2010**

The Environment Agency has provided a comprehensive representation dated 25 February 2010 on the Company's Hearing Statement as required by the process set out in the Secretary of state's letter dated 8 December 2009. In addition it also provides a number of annexes setting out its technical opinion on issues raised in its representation.

The Company has confined its response to the representations made in the main text which is divided into Sections 1 to 6 (and not 1 to 8 as stated in paragraph 2.3.1 of the Environment Agency's representation).

The Company notes that the Environment Agency's representation raises a number of issues that have not previously been raised by the Environment Agency in its earlier representations on the draft Water Resources Management Plan.

The Company notes that in preparation of its representations the Environment Agency has not based them upon the Company's Hearing Statement as outlined in the Directions set out by the Secretary of State in his letter of 8 December 2009.

Given the scale of the Environment Agency's representation, the Company has chosen to respond to each individual paragraph where it believes a response is required.

##### 4.3.1 **Section 3 Background**

##### 4.3.1.1 **Paragraphs 3.1.1. to 3.1.5**

The Agency sets out the key legislative issues relating to the preparation of statutory Water Resources Management Plans.

##### ***Portsmouth Water's Response***

*The Company acknowledges these statements and draws the Inspector's attention to the Environment Agency's objective to "ensure the security and sustainability of future water supplies, balancing the needs of water users and the environment". In highlighting this statement we believe that the Inspector should recognise that, given the importance of such plans, the Company should prepare its Plan with prudence and without taking undue risks with the security of the supplies to its customers in the 25 years ahead.*

##### 4.3.1.2 **Paragraph 3.1.6**

The Agency sets out its view and its role in the Water Resources Management Plan process.

##### ***Portsmouth Water's Response***

*It would help our understanding of the role of the Environment Agency in relation to the approval of our Water Resources Management Plan and the conduct of the Hearing into the Plan if we could be advised of the regulations and/or legislation which provide for the Agency to act as an "adviser to the Secretary of state".*

##### 4.3.1.3 **Paragraph 3.1.7**

The Agency sets out provisions relating to timescales for Water Resources Management Plans as well as the technical guidance set out in the Water Resources Plan Guidelines which it has provided.

**Portsmouth Water's Response**

*The Company recognises the technical guidance, which the Environment Agency has provided, and which the Company has used in preparing its Water Resources Management Plan.*

*Whilst it notes that the Agency refers to the Guidelines having been published in November 2007 and again November 2008, it draws the Inspector's attention to the fact that the Agency did not provide the latter document to Portsmouth Water until 6 January 2009. This was, just 25 days before the Company was due to publish and submit its Statement of Response to the Secretary of State and too late for the Company to make significant changes to its Plans*

*With such a short period of time available, the Company was not able to incorporate all of the new requirements included in the revised guidelines into the drafting of its Plan.*

**4.3.1.4 Paragraph 3.1.8**

The Agency sets out the sequence of events, from its perspective, relating to Portsmouth Water's Water Resources Management Plan.

**Portsmouth Water's Response**

*In paragraph 3.1.8.5 the Environment Agency refers to a series of meetings between the Agency and the Company although the Company only has a record of one meeting being held in relation to the preparation of its Water Resources Management Plan. This took place on 27 September 2008.*

*In paragraph 3.1.8.7 the Environment Agency correctly refers to an email sent to Defra. It does not make reference to the exchange of emails leading up to that time when the Company, in attempting to assist the Environment Agency who we understand was acting as adviser to Defra, provided several additional reports to the Environment Agency. The Environment Agency refused to consider the reports claiming that the reports needed to be in the public domain for them to be considered as evidence albeit that there appears to be no requirement to this effect stated in the Regulations and the Company has not otherwise been formally advised of such a requirement.*

*The Company had confirmed in its exchange of emails, that it was its intention to incorporate the additional reports in the public domain through its publication of the Final Plan.*

**4.3.1.5 Paragraphs 3.2.1 to 3.2.6**

The Environment Agency sets out the Agency's and the Government's policy, practice and approach to water resources planning.

**Portsmouth Water's Response**

*The Company recognises the over-arching principles set out in these paragraphs but reminds the Inspector that there are overriding legislative and regulatory constraints which impose restrictions upon statutory water undertakers activities.*

*In its Hearing Statement (Section 1.11) the Company has set out the actions it believes are necessary to enable per capita consumption to move towards the government aspiration by 2030.*

*The Company draws attention to the recent Ofwat Final Determination for Portsmouth Water which will result in a 7% fall in average water charges from £93 to £86 per year for customers between 2010 and 2015. The Company expresses its view that such a decision does nothing to encourage its customers to reduce the amount of water that they use.*

*The Company notes the Environment Agency's view of the "twin-track" approach which is consistent with the Government's Future Water Strategy. The approach is not however consistent with the Agency's own Water Resources Planning guidelines which require an "even-handed" assessment of the financial, environmental and social costs of both demand management and resource development options to be considered for a Least Cost Appraisal for the resolution of supply/demand deficits. A truly "twin track" approach evaluates the overall costs and benefits of both demand management and resource development options and then seeks to select those providing overall best value.*

#### **4.3.1.6 Paragraphs 3.3.1 and 3.3.2**

The Environment Agency refers to the collaborative work conducted to optimise the water resources of the South East of England and the inclusion of the Company's supply area as one of "serious water stress" by The Water Industry (Prescribed Conditions) (Amendment) Regulations 2007.

##### **Portsmouth Water's Response**

*The Company reminds the Inspector that it has been involved in the collaborative work referred to by the Agency, and as a result of this work, it developed a bulk supply to Southern Water Services which was completed in 2004 and used by Southern Water to alleviate supply problems in their area in 2005 and 2006.*

*The Company also advises the Inspector that its Draft Plan, Statement of Response and the final Plan prepared for the Public Hearing Statement have all included assessments of the costs and benefits of Compulsory Metering as required by the Water Resources Management Plan (No. 2) Direction 2007. Programmes of Compulsory Metering were evaluated for each of these documents and the Final Planning Solution for each one incorporated a Compulsory Metering Programme..*

#### **4.3.1.7 Paragraphs 3.4.1 to 3.4.5**

The Agency identifies links between Water Resources Management Plan's and other Plan processes, principally those relating to water company investment plans ie Ofwat Business Plans and drought planning which is again covered by a statutory process.

The Agency states that the Company has not presented any assessment of the impact of a changed level of service upon its supply/demand balance.

##### **Portsmouth Water's Response**

*In paragraph 3.4.2 the Environment Agency states that Ofwat uses the Water Resources Management Plan to assess the supply/demand elements of the Company's Business Plan. Whilst this may be an issue for Ofwat to comment upon, it is the Company's view that the supply/demand element of the five yearly Business Plan is expected to be a comprehensive statement of the Company's requirements which substantiate any necessary water resource based investment. As far as it is aware the Company does not believe that Ofwat relies upon the Water Resources Management Plan for assessing the Company's resources investment needs.*

*In Section 1.5 of the Hearing Statement the Company sets out the impact that its changed Level of Service has upon the peak demands that it plans to meet through the Water*

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*Resources Management Plan. It recognises that it does not specifically identify the scale of the change but the impacts of all changes are clearly shown in the Baseline Supply/Demand balance assessments outlined in Section 3.1 of the Hearing Statement.*

#### **4.3.1.8 Paragraph 3.5.1 and 3.5.2**

The Environment Agency sets out the public nature of the statutory water resource planning process and then observes that, in its view, the Company has not adhered to the letter and spirit of the legislation. It believes that, as a result, it has found it difficult to analyse the reported changes to the Company's Draft Plan.

The Agency records a number of specific issues in paragraphs 3.5.2.1 to 3.5.2.7.

#### **Portsmouth Water's Comments**

*In general terms the Company finds the Agency's comments unhelpful since the extent of its consultation consisted of:-*

- *Draft Plan  
Full copies sent to Environment Agency, Natural England, English Heritage, Southern Water, South East Water;  
Executive Summaries sent to Ofwat, MPs, MEPs, Environment Minister, Chief Executives and Leaders of Local Authorities;  
A4 Posters to – Main Libraries, Local Authorities*
- *Statement of Response  
Complete document sent to all Stakeholders who had made representations on the draft Water Resources Management Plan*

*Despite offers made to the Environment Agency to explain the Draft Plan and the Statement of Response, only one meeting was held with the Environment Agency on 26 September 2008.*

*The Company is disappointed with the comment raised in paragraph 3.5.2.1 since it believed that its Statement of Response comprehensively stated the effect of the changes it had made to its Plan. It did not provide supporting evidence for the changes at that date as the Water Resources Management Plan Direction did not appear to require evidence to be submitted at that time.*

*In paragraph 3.5.2.2 the Environment Agency refers to the Company's revision to its Statement of Response which was submitted to Defra on 12 March 2009, posted on the website and copies to Stakeholders. An explanation of the reason for the changes was included in the letter.*

*In paragraph 3.5.2.3 the Environment Agency has referred to what it believes to be inconsistencies in the Company's Hearing Statement. These were discussed with the Environment Agency on 16 February 2010. Misunderstandings were clarified in relation to the savings associated with metering of households as well as the calculation of peak demands. The Environment Agency undertook to provide the Company with any further inconsistencies it believed it had identified, but these have not yet been received.*

*In paragraph 3.5.2.4 the Environment Agency states that the Company has still not placed sufficient information, on important elements of its Plan, in the public domain and questions the Company's presentation of its peak demand forecast. The methodology used by the Company for calculation of peak demand is set out in the draft Water Resources Management Plan (Section 3.7) with the detailed justification included in Appendix E of the Plan. The Peak Demand was revised for the Statement of Response following a change in*

*planned Levels of Service resulting from the representations made on the draft Water Resources Management Plan. The methodology has been clearly set out in Section 1.5 of the Hearing Statement and this was explained again in detail to the Environment Agency staff at a meeting held on 22 March 2010. The Water Resources Management Plan Guidelines clearly state that the tables which support the Plan do not require the microcomponent analysis to be completed for peak demands.*

*The methodology used is entirely consistent with the Peak Water Demand Forecasting Methodology (UKWIR 06/WR/01/7), the methodology which is referred to in Section 7.1.2 of the Guidelines.*

*All of this information including the Water Resources Management Plan Planning Tables containing the detailed forecasts has been appended to the Hearing Statement and is therefore in the public domain.*

*In paragraph 3.5.2.5 the Environment Agency questions the demand data on which the Company bases its per capita consumption demand forecasts. In its Hearing Statement (Section 1.1.1.3) the Company confirms that its historical trend line has been based upon outturn data from its Domestic Consumption Monitoring Database and that this trend line has been consistent with Government forecasts developed in 1996. It is this trend line which has been used as the starting point for future projections which are set out in Section 1.3.3 of the Hearing Statement. References to Ofwat June Return data relate to annual outturn data and the outturn for the base year of 2006/07 is not used as the "starting point" for the forecast. The Company has repeatedly advised the Environment Agency of this fact.*

*In paragraph 3.5.2.7 the Environment Agency refers to an "unsatisfactory relationship" with the Statement of Common Ground, suggesting that it believes that the Hearing Statement should be confined to issues which are not agreed between the Environment Agency and the Company. Notwithstanding the fact that relatively few issues were agreed as "common ground" in the Statement of Common Ground, the Company believed that, for the benefit of other Stakeholders, it should respond to all of the issues raised in the Annex to the Defra letter of 8 December 2009. It also reports that it did raise this potential inconsistency of interpretation in a letter to Defra of 10 December 2009, and this was recognised in the Defra response of 16 December 2009.*

#### **4.3.2 Hearing Scope and Issues**

##### **4.3.2.1 Paragraph 4.1 to 4.3**

The Environment Agency's Representation sets out the key issues identified by Defra in the Annex to its letter of 3 August 2009, and the Environment Agency's Advice Report of May 2009.

Paragraph 4.3 sets out key issues of common ground identified by the Statement of Common Ground as well as those issues where common ground between the Environment Agency and the Company could not be agreed.

##### ***Portsmouth Water's Response***

*The Company acknowledges and accepts the statements which are as they are set out in the Statement of Common Ground.*

##### **4.3.2.2 Paragraph 4.4**

The Environment Agency advises that the agreed Statement of Common Ground does not set out the full technical detail and that the Agency has provided it, where it appears helpful, in its Annex.

**Portsmouth Water's Comment**

*The Company is not certain what information the Environment Agency is referring to since the Statement of Common Ground contains a number of Annexes. For the technical detail it has provided to be helpful, the Environment Agency needs to provide the Inspector with a reference as to where the detail can be found in the Annex.*

**4.3.2.3 Paragraph 4.5**

The Environment Agency records its inability to record agreement to issues raised in various documents supplied during preparation of the Statement of Common Ground "unless and until the relevant documentation is placed in the public domain".

**Portsmouth Water's Comment**

*The Company has published all of the documentation referred to in the Statement of Common Ground either with that statement or alternatively in its Hearing Statement. It has also pressed the Agency staff in subsequent meetings to identify any areas which might now be considered common ground but none to date have been forthcoming.*

**4.3.2.4 Paragraph 4.6**

The Agency states that its role at the Hearing will be to "advise and assist the Secretary of State, through the Inspector, in determining how the power of direction under WIA 1991 s37 should be exercised".

**Portsmouth Water's Comment**

*The Company's understanding of the Environment Agency's role in relation to the Hearing is that the Agency is to advise and assist the Inspector in reaching a decision so that the Inspector can then make a recommendation to the Secretary of State.*

**4.3.3. SECTION 5 – KEY ISSUE 1 - DEMAND FORECASTING**

**4.3.3.1 Paragraph 5.1.2.1**

The Environment Agency criticises the Company's demand forecasts for not using a micro-component approach. It goes on to challenge the Company's choice of a "most likely" forecast for population and housing forecasts suggesting that the Company should have conducted a sensitivity analysis to identify the impacts of its solution.

**Portsmouth Water's Comments**

*The Company advises the Inspector that the Environment Agency did not raise this issue in its representation on the draft Water Resources Management Plan. It is not referred to in the Advice Report to the Secretary of State (May 2009) nor is it specifically raised in the Annex to the Secretary of State's letter dated 3 August 2009.*

*Whilst the Agency's representation expresses the view that the demand forecast should use a micro-component approach, this is not a requirement of Section 7.1 of the Water Resources Planning Guidelines. The Company has developed its approach entirely in accordance with the Guidelines setting out its key assumptions both in its draft Water Resources Management Plan (Section 3.1) and again in its Hearing Statement (Sections 1.1, 1.3 and 1.4).*

*The Environment Agency's Water Resources Planning Guidelines require companies to develop household and population forecasts on a consistent methodology which meets the requirements of Methods of Estimating Population and Household Projections (EA 2007). Current population and representative site data and projections are derived from both the Office of National Statistics (ONS) and the Department for Communities and Local Government.*

*Following problems in developing forecasts for previous plans, Portsmouth Water and eight other water companies decided to commission a joint forecast which would ensure consistency for both water resources and wastewater resources between, the companies in the region. Experian were commissioned to develop both "trend" and "policy" based household and population projections. Given the expected divergence between the two forecasts, it produced a "Most Likely Scenario" which it believed the most accurate for water resource planning purposes. The Company understands that all of the nine companies adopted the Experian forecasts in their Plans.*

*Population and Household forecasts were allocated spatially by utilising "Output Area" (OA) level projections so that these were representative for each water company area.*

#### **4.3.3.2 Paragraph 5.1.2.2**

The Environment Agency questions the validity of the derivation of base year data for unmeasured and measured domestic demand forecasts.

##### **Portsmouth Water's Comments**

*The Company advises the Inspector that the Environment Agency did not raise this issue in its representation on the draft Water Resources Management Plan. It is not referred to in the Advice Report to the Secretary of State (May 2009) nor is it specifically raised in the Annex to the Secretary of State's letter dated 3 August 2009.*

*The Company is disappointed that its explanations to date, both verbally in its meetings with the Environment Agency leading up to the preparation of the Statement of Common Ground and in its Hearing Statement, continue, in the opinion of the Environment Agency, to provide insufficient justification of the derivation of its base year data for the demand forecasts.*

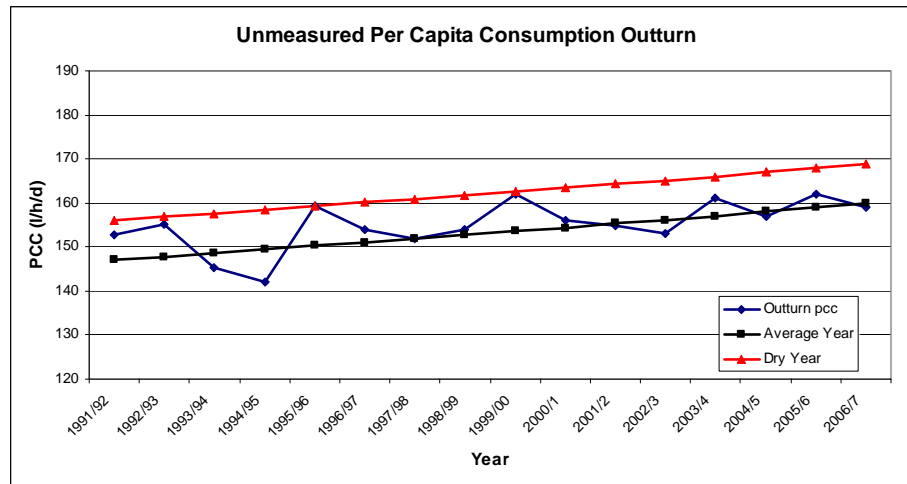
##### *Unmeasured Demand*

*For the draft Water Resources Management Plan the Company set out, in Section 3.1.2, the basis of its unmeasured consumption forecast using historical data from 1999/2002 through to the base year of 2006/07. Analysis of the outturn data from the Company's Domestic Consumption Monitoring Database from the previous fifteen years enabled it to derive a trend of rising per capita consumption. This trend was remarkably close to the forecast predicted by the Government from the Department of Environment Report "Climate Change and the Demand for Water" (P. Harrington – 1996), rising per capita consumption being driven by the influences of climate change and reducing household occupancy.*

*The trend line identified from the data produced an assumed per capita consumption of 160 l/h/d for the "base year" of 2006/07. The Company's June Return to Ofwat reported an outturn per capita consumption of 159 l/h/d. The summer of 2006 was relatively dry but the 2006/07 was not a drought year for Portsmouth Water although drought restrictions were in place in other parts of South East England during the summer of 2006. As a result the Company believes that its outturn per capita consumption was typical of a normal/average year. Since the outturn was within 1% of the normal/average trend the Company saw no reason to revise any of its data.*

*For the draft Final Plan/Hearing Statement the Company has updated the information to utilise the 2007/08 as its base year.*

The unmeasured per capita consumption trend line based upon outturn data rises slightly above 160 l/h/d for the 2007/08 year whilst the outturn for 2007/08 was 159 l/h/d which was consistent with the normal/average weather conditions experienced.



#### Measured Demand

For the draft Water Resources Management Plan the Company was unable to utilise a trend based upon measured consumption outturn data. This is due to the fact that its measured household database was in early years heavily populated by meter optants who had chosen to be metered to enable them to use garden sprinklers. As a result the Company had recorded a dramatic fall from over 200 l/h/d in the late 1990s as the overall database was influenced by cautious households who had opted under current legislation for the measured tariff. The graph in the 2004/05 Annual Report for the Domestic Consumption Monitor included at Appendix 2 in the Hearing Statement amply demonstrates this point. It was not until the 2004/05 year that measured per capita consumption was less than unmeasured per capita consumption.

The Company was therefore unable to reconcile any trend for measured households and it has relied upon published national data to assume that per capita consumption in those households will be 10% less than unmeasured households. This is as stated in Section 3.1.2 of the draft Water Resources Management Plan and is repeated in sections 1.3, 2.5 and 2.6 in the Public Hearing Statement.

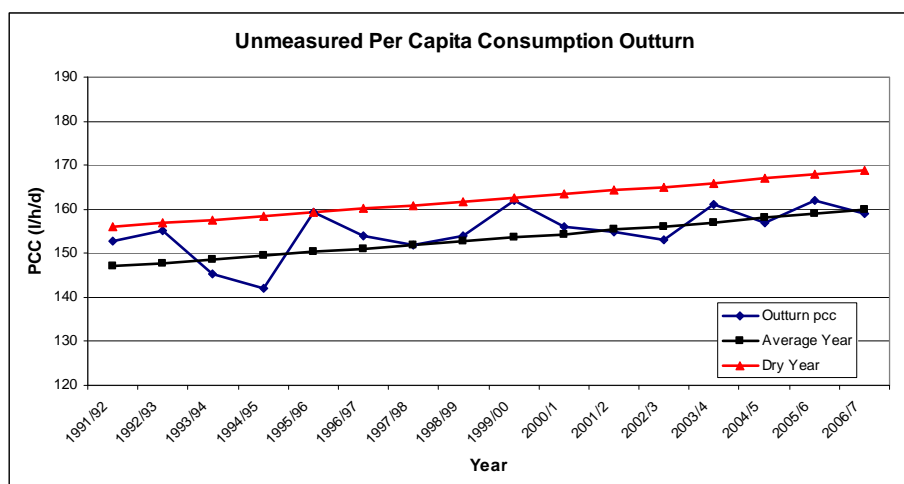
#### 4.3.3.3 Paragraph 5.1.2.3

The Environment Agency states in its Representation that the Company has not justified its dry year forecast by not analysing historical demand to establish dry year base demand figures.

#### Portsmouth Water's Comment

The Company advise the Inspector that the Agency did not raise the issue in its representation on the draft Water Resources Management Plan. It is not referred to in the Advice Report to the Secretary of State (May 2009) although its raised in the Annex to the Secretary of State's letter of 3 August 2009.

The company draws the Inspector's attention to its Domestic Demand Forecast in the draft Water Resources Management Plan (Section 3.1.2.4 and reproduced below) to highlight the fact that it has developed a dry year trend, shown in red line, from the outturn data from its unmeasured domestic consumption monitoring database.



*This graph was reproduced in the Public Hearing Statement, at 1.1.1.3, and represents an additional 9 l/h/d of average consumption in a dry year by comparison with a normal/average. The summer of 1995 was a dry year with high temperatures and hence the Company believes that it has demonstrated an analysis of historical demand associated with particular weather conditions.*

**4.3.3.4 Paragraph 5.1.2.4**

The Environment Agency states that the Company has not justified its assumption in relation to its dry year initial period demand forecast

**Portsmouth Water's Comment**

*This is an issue which was not raised in the Agency's initial representation on the draft Water Resources Management Plan nor the Advice Report to Defra (May 2009) nor was it raised in the preparation of the Statement of Common Ground.*

*The forecast change to the Company's customer base has been included in Baseline and Final Planning Forecasts and a spreadsheet showing the application of peaking factors to the changing customer base was provided to the Environment Agency on 19 January 2010. The effects of those changes were included in the full demand forecast tables included in Appendix 3 of the Public Hearing Statement.*

**4.3.3.5 Paragraph 5.1.2.5**

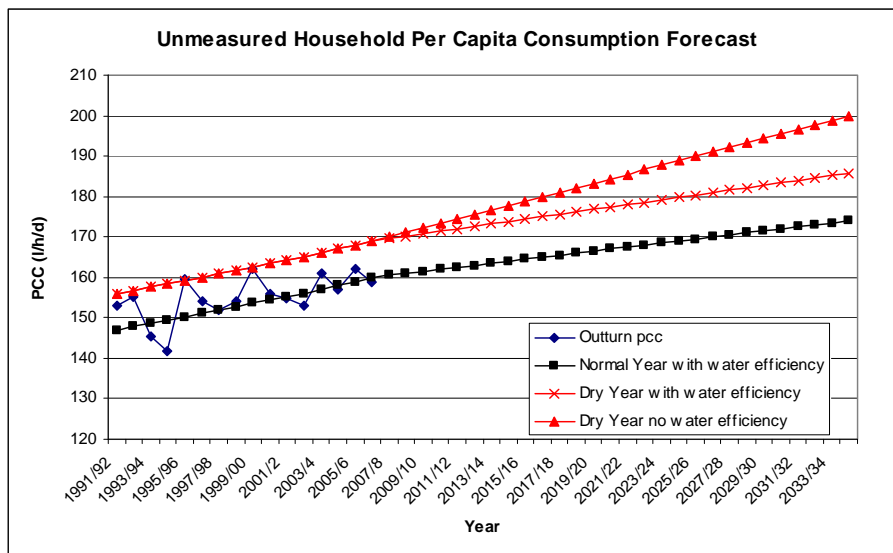
The Environment Agency states that the Company's trend based unmeasured and measured per capita consumption forecasts are not "fit for purpose".

**Portsmouth Water's Comment**

*This is an issue which was not raised in the Agency's initial representation on the draft Water Resources Management Plan, or the Advice Report to Defra (May 2009). It is not raised as an issue in the Annex to the Secretary of State's letter dated 3 August 2009 nor was it raised in the preparation of the Statement of Common Ground.*

*The Water Resources Management Plan Guidelines (s7.5) require companies to set out their approach to demand forecasting which the Company believes that it has done in Section 3.1.2 of its draft Water Resources Management Plan and again in Sections 1.3 and 1.4 of the Public Hearing Forecasts.*

Whilst the Environment Agency states its belief that trend-based projections are not "fit for purpose" the Company highlights the fact that its experience since 1996 has been remarkably consistent with the Government forecasts that were prepared at that time.



#### 4.3.3.6 Paragraph 5.1.2.6

The Environment Agency believes that the Company's assumption that the measured household demand saving of 10% is not justified as it believes that studies suggest this figure to be 15%.

#### Portsmouth Water's Comment

*This is an issue which was not raised in the Agency's initial representation on the draft Water Resources Management Plan, or the Advice Report to Defra (May 2009) nor was it raised in the preparation of the Statement of Common Ground.*

*To date the Company has seen relatively little impact upon peak demand resulting from the metering households. The last Domestic Consumption Monitoring Report which it published (included at Appendix 2 of the Public Hearing Statement) showed that peak demand from measured households was almost exactly the same as that of unmeasured households ie 228 l/h/d vs 227 l/h/d.*

*The Environment Agency refers to a number of studies from the 1990s, in Section 4.6.9 of Annex 1 to their representation which suggest greater demand savings whilst the Company, in its Hearing Statement (Sections 2.4 and 2.5), refers to more modest savings of approximately 10% which are set out in a number of national documents produced by Ofwat, Defra and the recent Walker Review.*

*In attempting to reconcile such differences the Company has undertaken some further research utilising data submitted by Southern Water to Ofwat in its annual June Return. The data relates to the Isle of Wight area, which geographically is very close to the Company supply area, and much of which was comprehensively metered as part of the National Metering Trials in the early 1990s. The data for both unmetered and metered properties is represented below.*

| Isle of Wight                           | 2007  | 2008  | 2009  |
|---|-------|-------|-------|
| Average Unmeasured Consumption (MI/d)   | 1.90  | 2.73  | 1.72  |
| Peak Week Unmeasured Consumption (MI/d) | 2.59  | 3.80  | 2.57  |
| Unmeasured Peaking Factor               | 1.36  | 1.39  | 1.49  |
| Average Measured Consumption (MI/d)     | 14.87 | 15.25 | 14.66 |
| Peak Week Measured Consumption (MI/d)   | 20.39 | 18.25 | 22.08 |
| Measured Peaking Factor                 | 1.37  | 1.20  | 1.51  |

(Source: June Return data)

The data shows that in two of the three years the peaking factor, ie the relationship between peak week demand and average demand, is largely the same for both measured and unmeasured households. This suggests therefore that measured customers are not influenced by their tariffs to save more water than unmeasured customers during the summer periods.

In light of the research results to date and coupled with the Company's low water charges, the Company believes that its 10% saving assumption at both annual and peak demand periods is justified.

#### 4.3.3.7 Paragraph 5.1.2.7

The Environment Agency claims that the company has not justified its water efficiency assumptions and in particular the demand savings associated with metering.

##### **Portsmouth Water's Comments**

The Company notes that the Environment Agency did not raise this issue in its representation on the draft Water Resources Management Plan. It was not raised in the Environment Agency's Advice Report to Defra (May 2009) but was covered in the Annex to the Defra letter of 3 August 2009.

It remains an issue of Uncommon Ground with the Environment Agency and as a result the Company's approach to its water efficiency assumptions is fully explained in Section 1.8 of its Hearing Statement. The Company is unaware of what additional justification the Environment Agency expects and will be pleased to be advised of this.

The Company has also clearly set out its metering assumptions in Sections 2.4 and 2.5 of the Hearing Statement.

#### 4.3.3.8 Paragraph 5.1.2.8

The Environment Agency believes that the Company has not made a serious assessment of the extent to which it could move towards the Defra aspiration of a per capita consumption of 130 l/h/d by 2030.

##### **Portsmouth Water's Comments**

The Environment Agency was amongst a number of organisations which made reference to the government aspiration in its representations on the draft Water Resources Management Plan. It is also raised in the Environment Agency's Statement of Advice Report to the Secretary of State (May 2009) and is subsequently included in the list of issues in the Annex to the Secretary of State's letter of 3 August 2009.

*The Company did not include any reference to the Defra aspiration in its draft Water Resources Management Plan as "Future Water", as the Government's strategy was not published until just before the submission of the draft Plan to Defra for "security clearance". The Company's Statement of Response briefly referred to the Defra aspiration stating that the Company would address the issue in its Final Plan.*

*The Company recognises the importance that the water environment plays in the everyday life of the community today. As a result of that recognition it supports the government's long-term aspiration but highlights the need for legislators and regulators to play their part in changing the behaviour of customers to deliver what will be a 20% reduction in their consumption. This is against a backdrop of rising consumption from the effects of climate change and the reduction in household sizes due to demographic change.*

*The Company believes that Section 1.11 of its Hearing Statement does reflect a serious assessment of the challenges facing the Company in moving towards the Government aspiration since its view is that concerted regulatory and legislation support will be needed to encourage the behavioural change which will deliver significantly lower per capita consumption by its customers.*

#### **4.3.3.9 Paragraphs 5.1.2.9 and 10**

The Environment Agency provides concluding comments based upon the detail set out in paragraphs 5.1.2.1 to 5.1.2.8

##### ***Portsmouth Water's Comments***

*The Company notes these statements as concluding comments and refers the Inspector to the detailed responses set out in relation to paragraphs 5.1.2.1 to 5.1.2.8.*

## **KEY ISSUE 2 – METERING**

#### **4.3.3.10 Paragraph 5.2.2.1**

The Environment Agency confirms that the Company has clarified its assumptions of the impact of metering (Statement of Common Ground Issue 1.3.4) and then expresses a view that this is a change from its draft Water Resources Management Plan and that the change has not been explained.

##### ***Portsmouth Water's Comments***

The Company believes it has fully justified the assumptions made in relation to demand savings from metering.

#### **4.3.3.11 Paragraph 5.2.2.2**

The Company believes that this issue is already addressed by the Environment Agency and the Company in the text relating to paragraph 5.1.2.6 above.

#### **4.3.3.12 Paragraph 5.2.2.3**

The Environment Agency states that the Company has not identified significant wider benefits of metering other than carbon emission impacts.

### **Portsmouth Water's Comments**

*The Company advises the Inspector that this issue was not raised in the Environment Agency's representation upon the draft Water Resources Management Plan. As a result of its inclusion in the issues raised in the Annex to the Secretary of State's letter of 3 August 2009, the Company has provided further consideration on the wider benefits of metering in its Public Hearing Statement in Section 2.6.3.*

#### **4.3.3.13 Paragraph 5.2.2.4**

The Environment Agency states that the Company has not provided sufficient details of alternative metering programmes with alternative savings and costs, and the impacts these might have upon its plan.

### **Portsmouth Water's Comments**

*The Environment Agency did not raise this issue in its representation in the draft Water Resources Management Plan although it did urge the Company to conduct its Compulsory Metering programme at a faster rate. As a result of this, and several other, representations the Company incorporated two further alternative programmes in its Statement of Response together with an assessment of the impact of "Change of Occupier" metering. These alternative programmes anticipated the same level of universal "dumb" metering being completed at an earlier date. "Dumb" Metering is described as the installation of simple mechanical meters which have to be physically read by meter readers.*

*Given the overall low cost of water in Portsmouth Water's area, the Company was unable to justify the additional costs of utilising alternative technologies for automatic reading of meters, since little was known in the Industry of the potential savings associated with such technologies.*

*In light of the inclusion of this issue in the Annex to the letter from the Secretary of state of 3 August 2009, the Company has outlined its further information in Section 2.5 of its Hearing Statement. The Company has not considered other alternative options with different levels of savings and/or costs without any satisfactory published evidence to support such alternatives.*

*Recent decisions by regulators to enable Southern Water to utilise new technology and varied tariffs may provide opportunities for other alternatives in the future. The Company will be pleased to evaluate other such alternatives for future Plans once the results of such initiatives are made available.*

*Although the Agency suggests that the Company considers different proportions between the numbers of meter optants and compulsorily installed meters, it fails to recognise that the overall level of demand saving would be the same as the Company assumes a 10% saving for both!*

#### **4.3.3.14 Paragraph 5.2.2.5**

The Environment Agency believes that the Company has not provided sufficient explanation of its choice of metering programme and it goes on to say that the percentage of customers metered is not stated, although it then believes that its forecasts are not consistently represented in the planning tables included in Appendix 24 of the Hearing Statement.

### **Portsmouth Water's Comments**

*The Company notes that the Environment Agency raised questions about the Company's Metering Programme in its representation on the draft Water Resources Management Plan.*

*As a result of this and several other representations the Company included alternative metering programmes and carried out further customer research in advance of the preparation of the Company's Statement of Response.*

*The Company recognises that it has not stated in its previous documentation that it expects meter penetration to rise to 85% of all existing households as a result of Compulsory Metering. It is unlikely that meter penetration can exceed this level as a number of properties constructed by local authorities in post-war years were provided with shared supplies which the Company believes will be impractical to meter.*

*Portsmouth Water recognises that the completion of the metering programmes would be slightly in advance of 2030, principally due to the "rounding of numbers" used in the forecasts rather than any ulterior motive.*

### **KEY ISSUE 3 – OPTIONS APPRAISAL AND PREFERRED OPTIONS SELECTION**

The Environment Agency raises a number of concerns regarding the Company's Options Appraisal and Preferred Options Selection. The Company's responses to each point raised are provided separately.

#### **4.3.3.15 Paragraph 5.3.2.1**

The Environment Agency notes that the Company has provided two dry year supply demand balance scenarios but believes that the Company has not presented any reasons as to why the peak demand scenario is selected as its critical period.

#### **Portsmouth Water's Comments**

*The Company draws the Inspector's attention to the fact that this issue was not raised in the Environment Agency's representation to the draft Water Resources Management Plan, nor the Statement of Common Ground. The Company advises the Inspector that this issue was not raised in the Environment Agency's Advice Report to the Secretary of State (May 2009) nor was it included in the Annex to the Secretary of State's letter of 3 August 2009.*

*The Company advises the Inspector that the Environment Agency, in Section 4.3 of its representation it states that "it is this scenario (peak week demands) that provides the primary driver for investment". The Company also draws the Inspector's attention to the fact that in its previous plans in 1999 and 2004, both of which it submitted to the Environment Agency, the peak demand period was clearly stated as the Company's critical period.*

*Section 3.7 of the Company's draft Water Resources Management Plan clearly sets out the Company's reasons for the peak demand period is its critical period for water resources planning these being principally that it has no significant long-term storage reservoirs.*

*In any case the Summary (Section 4.3) of the supply/demand balance which shows that at average demand the balance remains in surplus until the final year of the Plan whilst at peak demand a deficit occurs in 2011/12 which after 2015 grows throughout the planning period. Thus for the Company the peak demand period is the principal driver for supply/demand investment.*

*A revised peak demand supply/demand assessment was included in the Statement of Response (Section 4.3.2).*

*In the Company's Hearing Statement the Company has repeated the graphical plots in Section 3.1. In Section 3.1.4 the Company sets out the supply/demand graphical representations. The text accompanying in the representations clearly shows that it is the peak demand period which is critical for maintaining a balance of supply and demand.*

**4.3.3.16 Paragraph 5.3.2.2**

The Environment Agency makes reference to the simplicity of the screening process used by the Company for identifying the list of options taken through to financial analysis.

The Agency accuses the Company of "lumping together" many demand side options which results in the loss of individual merits of each of them.

***Portsmouth Water's Comments***

*The Company draws the Inspector's attention to the fact that although the Agency did raise concerns regarding the options appraisal in its initial representation on the draft Water Resources Management Plan, the Company was unaware that this referred to its initial screening of options*

*The Company advises the Inspector that it did set out its approach to screening its options in Section 5.2 of the draft Water Resources Management Plan and it provided a detailed assessment of that process in Appendix 17. The Company assumed that the Environment Agency's representation related to the appraisal of the feasible option considered and not the screening process.*

*The Assessment which was used for the draft Water Resources Management Plan was developed by consultants working for Portsmouth Water as part of its preparations for the Havant Thicket Winter Storage Reservoir development. The screening process was undertaken during a stakeholder workshop, at which members of the Agency's staff were present.*

*Section 5.2 of the draft Water Resources Management Plan also refers to regional work with the Environment Agency (Section 5.2.4) which had resulted in the addition of further options, two of which were effluent re-use schemes. Of the 15 options selected for financial analysis, eight of them were demand management schemes and each was separately costed.*

*For the Statement of Response and for the final Plan the Company has added two alternative metering programme options. A review of the initial list of nineteen schemes, has indicated that some are no longer suitable for resolving the critical period deficit and so ten schemes have now been taken through to the Least Cost Appraisal in the Hearing Statement. Of these, seven are demand management schemes which are separately costed.*

A separate explanation for the removal of each of the nine schemes from the feasible options list is provided in Section 3.2.4 of the Public Hearing Statement.

The Company advises the Inspector that the assertion from the Environment Agency that Company lumped together demand management options is a contradiction to the findings of the report "Technical review of economic analysis in WRMPs – Overview Report" (Document 50 in the Environment Agency's Response). The report on page 34 Section 5.2 states "For example, Portsmouth Water considers five different options for water management, in addition to metering and leakage. Each option is described in the plan and detailed cost-benefit analysis of all these options is presented in the report, including the associated carbon costs. An evaluation of the risk associated with each option is also carried out and presented."

**4.3.3.17 Paragraph 5.3.2.3**

The Agency expresses a number of criticisms of the Company's process for Options review.

**Portsmouth Water's Comment**

*The Company draws the Inspector's attention to the fact that such specific criticisms were not made on the Company's draft Water Resources Management Plan, although the Agency was unhappy with the approach used..*

*The Company believes that its response to paragraph 5.3.2.2, which outlines the appraisal included in Section 3.2.4 of the Public Hearing Statement, is sufficient to answer such criticisms.*

**4.3.3.18 Paragraph 5.3.2.4**

The Environment Agency expresses views that the Company should make best use of its existing resources and where possible improve yields.

**Portsmouth Water's Comments**

*The Environment Agency did refer to source yields in its representation on the Company's draft Water Resources Management Plan, as it believed that a reassessment was needed following the drought of 2005/06 in Sussex and Kent. This was despite the fact that the Company had pointed out that it had not suffered drought conditions during that period and it set out its reasons for that view in Section 2.1 of the draft Water Resources Management Plan. Notwithstanding this, yield reassessments were undertaken at three sources and these are referred to in Section 2.1 of the draft Water Resources Management Plan.*

*In Section 2.5 of the draft Water Resources Management Plan the company set out the known consequences, referred to as sustainability reductions, of the Environment Agency's Review of Consents of Abstraction Licences required by the Habitats Regulations. All but one of the Company's abstraction licences have been implicated by the review and the Company is currently in the process of agreeing reductions to its licences where Site Action Plans have been finalised, Alternatively in some catchments "post implementation monitoring" is being required to determine that habitats whether or not being affected and the outcome from each of the sources implicated, is not yet known.*

*The Environment Agency did not raise this issue in its Advice Report to the Secretary of State (May 2008) nor is it raised as an issue in the Annex attached to the Secretary of State's letter of 3 August 2009..*

*The Company also advises that the Environment Agency's Southern Region has a stated presumption against further groundwater abstraction across the whole of the region.*

*The Company advises the Inspector that Catchment Abstraction Management Reviews undertaken in 2005 (CAMS) confirmed that all of the Company's sources were in catchment management units which are classified by the Environment Agency as either "over-abstracted" or "over-licensed".*

*Despite the above constraints the Company's draft Water Resources Management Plan and the Statement of Response did incorporate the possibility of further groundwater development. However following a review of the Environment Agency's notification of its National Environment Programme (NEP) in November 2008 which required investigations of the impact of abstractions on the rivers Hamble, Wallington, Ems and Lavant under the requirements of the Water Framework Directive, these possibilities were withdrawn.*

*The Company asks the Inspector to note that the Company's proposal to develop Havant Thicket Winter Storage Reservoir, which the Agency has chosen to criticise on a number of occasions in its representation, is in fact a demonstration of the company's desire to maximise the use of its existing resources. The proposal is based upon the utilisation of surplus yield during the winter period from its Havant and Bedhampton springs source by*

*pumping that surplus to a winter storage reservoir on land at Havant Thicket. The availability of this surplus yield has recently been confirmed by an appropriate Assessment carried out as a result of the Environment Agency's Habitats Regulations Review of Consents and the issue of a revised abstraction licence..*

**4.3.3.18 Paragraph 5.3.2.5**

The Environment Agency refers to the Company's rejection of the "conjunctive management" of resources to optimise yield of sources.

***Portsmouth Water's Comments***

*The Company draws the Inspector's attention to the fact that the Environment Agency did not explicitly raise this issue in its representation on the draft Water Resources Management Plan nor was it included in its Advice Report to the Secretary of State (May 2008). Its representation on the draft Water Resources Management Plan did however recommend the strategic sharing of resources between companies.*

*The Company also notes that the Environment Agency did not raise this issue during the course of preparation of the Statement of Common Ground.*

*Notwithstanding the issues raised above the Company advises that its plan incorporates the use of all sources at peak demand aside from operational outage which is set out in Section 2.4 of the draft Water Resources Management Plan. There are no options for "conjunctive management" since all sources are selected at full capacity.*

*The Company confirms however that it is able to minimise the cost of operations at other than peak periods.*

**4.3.3.19 Paragraph 5.3.2.6**

The Environment Agency states that it believes that the Company has utilised assumptions which have resulted in it "screening out" options in order to influence the final preferred solution.

***Portsmouth Water's Comments***

*The company asks the Inspector to note that this issue was not raised in the Environment Agency's representation on the draft Water Resources Management Plan nor was it raised in the Environment Agency's Advice report to the Secretary of State (May 2008).*

*It was not raised in preparation of the Statement of Common Ground.*

*The Company understand that the Environment Agency believe the Company have screened out options using the AISC, this was the case in the draft Water Resources Management Plan but was revised in the Statement of Response and draft Final Plan/Hearing Statement, as detailed in Section 3 of the hearing statement. The Company have attempted to demonstrate/explain this to the Environment Agency in a meeting on 22 March 2010.*

**4.3.3.20 Paragraph 5.3.2.7**

The Environment Agency questions the assumptions applied in relation to the costs and output utilisation of options. It goes on to state its belief that the Company has introduced bias into its calculations.

**Portsmouth Water's Comments**

*The Company advises the Inspector that the Environment Agency did not raise this issue in its representation on the draft Water Resources Management Plan nor was it included in the Advice Report to the Secretary of State (May 2008).*

*The Company also notes that the Agency did not raise this issue in the preparation of the Statement of Common Ground.*

The Company advises the Inspector that the appraisal of options was undertaken by consultants Arup and followed the relevant guidance on the assessment of costs, capital and operating, environmental social and carbon. The details of the AISCs were submitted to the Environment Agency as part of the draft Water Resources Management Plan. The Company advises the Inspector that a report commissioned by the Environment Agency and Defra 'Technical review of economic analysis in WRMPs - Overview Report' (referred to as Document 50 In the Environment Agency's list of available documents) on page 55 states:

*"Another good example is provided by Portsmouth, whose plan provides a good assessment which reports (both in the main document and in an Annex) the detailed outcomes of the cost benefit assessment for each metering option considered. The company has carried out detailed cost-benefit analysis of the two options and estimated AISC to be 512 and 318 p/m<sup>3</sup> for peak week for change of occupancy and compulsory metering; 97 and 73 p/m<sup>3</sup> for average demand. Interestingly, the delivery of both options in terms of water saving is the same and equals 7.7 Ml/d. It seems that the company is fully aware that every metering option is associated with significant costs and presents a comprehensive overview of the analysis underpinning this conclusion."*

*Further, in Section 5.2 on page 34 the report states that generally other demand management options apart from leakage and metering, are assessed from a qualitative point of view. Portsmouth Water is given as an example of an exception, with options described and a detailed cost benefit carried out. The report did not suggest bias towards any particular scheme was introduced.*

*The following feedback on the draft Water Resources Management Plan the AISC calculations were reviewed to take account of improved data for carbon impacts, and to include further metering schemes though the fundamental approach is unchanged and consistent with the Economics of Balancing Supply and Demand.*

*The approach employed by the Company when considering the capacity and utilisation of schemes does not introduce bias to the process as the Environment Agency recognise in 5.3.2.13.*

**4.3.3.21 Paragraph 5.3.2.8**

The Environment Agency expresses a number of concerns relating to the AISC, AIC and carbon costs associated with the options. It goes on to suggest that the Company has biased costs towards resource schemes and against demand management resources.

**Portsmouth Water's Comments**

*The Company advises the Inspector that the Environment Agency did not raised this issue in its representation on the draft Water Resources Management Plan nor was it raised in the Advice Report to the Secretary of State (May 2008).*

*The Company also advises that the Environment Agency did not raise this issue in the preparation of the Statement of Common Ground.*

*The Company finds that the Environment Agency's views are somewhat at odds with the statements in one of the reference documents listed in its representation. Document 50 entitled "Technical Review of Economic Analysis in Water Resources Management Plans" (Frontier Economics – September 2008) states that "Portsmouth Water presents a detailed cost-benefit analysis of all the large resource schemes considered in the draft Water Resources Management Plan. The analysis also includes an assessment of the carbon costs and an evaluation of the risk associated with each option".*

*In Section 4.4.1 of the Statement of Response the Company confirmed that AISCs for all schemes were reviewed for the Final Plan.*

**4.3.3.22 Paragraph 5.3.2.9**

The Environment Agency states that the Company has utilised the AISC of options as part of its selection criteria and then goes on to highlight the differences between capacity and utilisation costs which could significantly influence these AISCs.

**Portsmouth Water's Comments**

*The company advises the Inspector that the Environment Agency did not raise this issue in the representation upon the draft Water Resources Management Plan nor was it included in the Statement of Common Ground.*

*The Company refers the Inspector to the Company's Hearing Statement (Section 3.2.4) where the Company admits that Option 2 – Change of Occupier Metering is confirmed as being ruled out because its AISC is greater than the other alternative Metering Options being Options 21a, 21b and 21c. The Company confirms that none of the other options are excluded on the grounds of their AISC. The evaluation of each is included in the Hearing Statement (Section 3.2.4).*

**4.3.3.23 Paragraph 5.3.2.10**

The Environment Agency believes that the use of capacity based utilisation assumptions have favoured supply-side options and that benefits and/or savings associated with demand management options have been ignored or dismissed.

**Portsmouth Water's Comments**

*The Company advises the Inspector that this issue was not raised in the Environment Agency's representation of the draft Water Resources Management Plan nor was it included in the Statement of Advice Report to the Secretary of State (May 2008).*

*The Company also notes that it was not included by the Environment Agency in the preparation of the Statement of Common Ground.*

*The Company advises the Inspector that the statement made regarding the capacity utilisation is a direct contradiction of the statement in paragraph 5.3.2.13 where the EA state that "nor does it seem bias by consideration of capacity". For clarity, the Company reiterates that no capacity based assumptions have been used to screen or rank options and consequently no bias has been introduced to larger capacity options.*

*The Company confirms that any savings that are not needed have been dismissed. This includes annual average savings from demand management schemes and resource schemes. This approach is consistent with a utilisation approach outlined in the Economics of Balancing Supply and Demand.. The suggestion that savings from demand management schemes that are not required should be included is contrary to the first sentence in paragraph 5.3.2.10.*

*The cost savings and carbon savings from lower annual average water use have not been ignored. The impact of reduced annual average water use is clearly detailed in the AISCs calculations provided to the Environment Agency with the draft Water Resources Management Plan and revised versions supplied alongside the Hearing Statement. The Company notes one error when the carbon savings for cistern displacement devices was calculated on peak water saved rather than average, this error is not material.*

**4.3.3.24 Paragraph 5.3.2.11**

The Environment Agency proposes that alternative AISC/AIC calculations, included in its Annex as to its representation, would result in a potentially different solutions to the one selected by the Company.

***Portsmouth Water's Comments***

*The Company advises the Inspector that the AISCs were prepared by consultants Arup using Company specific data and assumptions in order that they may accurately reflect the Company's position.*

*The Company advises the Inspector that the only option screened on the basis of AISCs is change of occupier metering. The Options Appraisal Process is clearly detailed in Section 3.2 of our Hearing Statement and clearly states the reasons why options have been considered unfeasible and not been taken through to full least cost appraisal.*

**4.3.3.25 Paragraph 5.3.2.12**

The Environment Agency sets out the final pool of options used for the Least Cost Appraisal.

***Portsmouth Water's Comments***

*The Company notes this statement by the Environment Agency as an accurate representation of part of its Options Appraisal process.*

**4.3.3.26 Paragraph 5.3.2.13**

The Environment Agency sets out the Company's Net Present Value (NPV) analysis which is utilised to evaluate the various scenarios which are identified as delivering solutions to the Company's supply/demand deficit.

***Portsmouth Water's Comments***

*The Company is aware that the Environment Agency was amongst a number of organisations who expressed reservations about the simplicity of the process utilised to evaluate its options in the draft Water Resources Management Plan.*

*In the Statement of Response the Company undertook to improve that evaluation and it has set out that revised approach in Section 3.3 of its Public Hearing Statement. It provided that information to the Environment Agency during the preparation of the Statement of Common Ground but unfortunately the Agency did not have sufficient time to fully evaluate the appraisal before publication of the Statement. The Company is encouraged by the Environment Agency's expression of the appraisal being an improvement.*

*The Company believes that the Environment Agency's concerns over costs are addressed in responses to earlier paragraphs.*

**4.3.3.27 Paragraph 5.3.2.14**

The Environment Agency state a solution exists that the Company have not considered which has a lower NPV.

***Portsmouth Water's Comments***

*The Company advises the Inspector that Section 3.3 of the Company's Hearing Statement clearly sets out the final planning scenario selected by its Least Cost Appraisal.*

*The Company advises the Inspector that in preparing alternative scenarios the Environment Agency is selective in the assumptions it applies and it does not revise the whole forecast.*

**4.3.3.28 Paragraph 5.3.2.15**

The Environment Agency questions the Company's decision to maintain leakage at its current level whilst at the same time proposing the development of new resources.

***Portsmouth Water's Comment***

*The Company advises the Inspector that the Environment Agency did make specific reference to the Company's plans to reduce leakage in its draft Water Resources Management Plan. It recommended that the Company included further leakage reduction measures in its Final Plan. It did not make any reference to leakage in its Statement of Advice Report to the Secretary of State (May 2009) nor was it specifically raised in the issues outlined by the Secretary of State in the Annex to the letter of 3 August 2009.*

*The Company advises the Inspector however that the final planning solution identified in its Public Hearing Statement (Section 3.4.4) no longer incorporates the leakage reductions outlined in its draft Water Resources Management Plan and Statement of Response.*

*The Company has set out in its draft Water Resources Management Plan, its Statement of Response and its Public Hearing Statement (Section 1.7) the necessity for the Company to ensure that leakage is controlled on an economic basis. The Financial Regulation, Ofwat, would not support a decision by the Company to sanction additional expenditure to reduce leakage which would cost more than the additional costs of pumping, treating and distributing the volume saved.*

*In Section 2.6.2 of the Public Hearing Statement the Company highlights both the leakage reductions expected from the metering of households but also the overall increase in leakage from new properties. In maintaining overall leakage at its current level over the planning period, the increased number of households will represent a fall in leakage from 99.20 litres/prop/day to 75.9 l/prop/day, a fall of 23%.*

*The Company also reminds the Inspector that in identifying its optimum solution the Company must pay regard to the costs of solutions. If the Net Present Value of a scenario containing resource development is cheaper than a scenario containing leakage reduction then the Water Resources Management Plan guidelines expect the Company to select the lower cost option.*

**4.3.3.29 Paragraph 5.3.2.16**

The Environment Agency encourages the Company to consider opportunities for sharing resources with other companies, suggesting that such opportunities might support the development of Havant Thicket Winter Storage Reservoir. It concludes that the Company has not presented a convincing case for the use of the reservoir as a shared resource.

### **Portsmouth Water's Comments**

*The Company advises the Inspector that this issue was raised in the Agency's representation in the draft Water Resources Management Plan although it was not referred to in the Advice Report to the Secretary of State (May 2009). It did not feature in the list of issues included in the Annex to the Secretary of State's letter of 3 August.*

*It was not raised as an issue by the Environment Agency during the preparation of the Statement of Common Ground.*

*Previous collaborative work between water companies in the South East of England and the Environment Agency led to the development of a bulk supply from Portsmouth to Southern Water Services which was commissioned in 2004 and used by Southern Water Services extensively during 2005 and 2006. In the Company's draft Water Resources Management Plan the Company referred to the Regional Modelling Exercise being co-ordinated by the Environment Agency and as a result the existing bulk supply was assumed to continue to be used throughout the planning period. Although early modelling results suggested that further bulk supplies might be needed which would support the development of Havant Thicket Winter Storage Reservoir neither of the neighbouring companies approached Portsmouth Water during the preparation of draft Water Resources Management Plans. As a result the Company was not able to incorporate further bulk supplies in its baseline demand forecast. Section 7 of the draft Water Resources Management Plan highlighted the potential implications associated with the sustainability reductions which were required to both Portsmouth Water and Southern Water's sources on the River Itchen, although it did not highlight the potential for Havant Thicket Winter Storage Reservoir to play a major part. This was due to the fact that the Environment Agency had expressed its view that all sustainability reductions were to be implemented by 2015 and it was not feasible for Havant Thicket Winter Storage Reservoir to be completed in such a short timescale. The Company did also highlight the high financial and environmental costs associated with alternative solutions.*

*On 28 November 2008 the Environment Agency wrote to Portsmouth Water to provide their latest view on the shared resource strategy for the Water Resources in the South East (WRSE). Annex 1 to the letter confirmed that: "The regional model does tend to select the Havant Thicket Reservoir, though much later in the planning period than Portsmouth Water suggests in its draft Water Resources Management Plan. We support Havant Thicket reservoir as a potential contribution to the River Itchen sustainability reduction solution but we are not satisfied a case has been made for it if only promoted to satisfy demand (per capita consumption) growth within Portsmouth Water." Then in relation to bulk supplies to Southern Water, "The regional model selects improvements of the existing Bulk Supply to Southern Water to become an "annual average" and peak supply. In some model scenarios it selects "duplication" of the existing transfer capacity as well. Portsmouth Water already provides an important bulk supply to the Sussex North resource zone. This can already also be used to support Southern Water's Sussex Coast (Worthing) resource zone. Portsmouth Water's future ability to maintain or enhance this support is an important element of strategy focus." This letter is included at Appendix 3 to the Environment Agency's Response to Portsmouth Water's Hearing Statement, 25 February 2010)*

*The Environment Agency did set out its views on the need for shared resources to be developed in its representation on the Company's draft Water Resources Management Plan. In the Company's Statement of Response (Sections 4.2.4 and 4.5) the Company provided a detailed explanation of the work undertaken by the WRSE Modelling Group in 2008. The Statement of Response highlighted the fact that a Memorandum of Understanding had been developed between the Southern Water Services, Portsmouth Water and the Environment Agency to consider the options available for resolving the sustainability reductions on the River Itchen. The majority of these are to be delivered by Southern Water Services. The Company referred to the WRSE Modelling Report, which was made available in January 2009, and which referred to the potential for Havant Thicket*

*Winter Storage Reservoir to contribute to resource sharing opportunities. Notwithstanding such statements both South East Water and Southern Water Services provided written confirmation that no new bulk supplies from Portsmouth were being included in their plans albeit that Southern Water Services confirmed the need for the existing supply to continue throughout the planning period. In deriving the Final Planning Solution for the Statement of Response, the Company did make reference to the potential for the development of Havant Thicket Winter Storage Reservoir to contribute to the resolution of the issue on the River Itchen or to augment supplies to Southern Water Services Sussex area.*

*The Company does refer to the potential for Havant Thicket Winter Storage Reservoir to contribute to regional solutions in Section 3.4.4.1 of its Public Hearing Statement.*

**4.3.3.30 Paragraph 5.3.3.**

The Environment Agency concludes that its concerns and the questions raised within its representation necessitate a full "revisit" of the options appraisal prior to promoting Havant Thicket Winter Storage Reservoir and the submission of its next Water Resources Management Plan due in 2014/15.

**Portsmouth Water's Comment**

*In its representation on the draft Water Resources Management Plan the Environment Agency stated its view that the Company should revise its options appraisal and selection to reflect industry practice. Although this was carried out by the company to some degree for its Statement of Response, the methodology used was not demonstrated in that document.*

*The Company has sought to demonstrate the Least Cost methodology utilised in its Public Hearing Statement (Section 3.2 and 3.3) which it believes are now consistent with the Water Resources Management Plan Guidelines and industry best practice. It sees no reason to delay the Havant Thicket Winter Storage Reservoir scheme further at this stage but recognises that in any case it will again revisit its appraisal for the next Water Resources Management Plan in 2014/15.*

**4.3.3.31 Paragraph 5.4.2.1**

The Environment Agency raises concerns that the Company has not provided cost data for meter optant installation in a manner which is consistent with other measures and this makes comparisons impossible.

**Portsmouth Water's Comment**

*The Company advises the Inspector that this issue was not raised in the Environment Agency's representation on the draft Water Resources Management Plan nor was it included in the Statement of Advice Report to the Secretary of State (May 2008).*

*It was however raised in the Defra letter dated 3 August 2009 and during the course of the preparation of the Statement of Common Ground the Company supplied data in an email dated 19 January 2010. The Environment Agency's representation is the first notification that the Company has received that they believe this information to be inadequate.*

**4.3.3.32 Paragraph 5.5.**

In paragraphs 5.5.1 to 5.5.8 the Environment Agency highlights its view that the Company's Water Resources Management Plan should be the subject of an Appropriate Assessment under the Habitats Regulations. It goes on to raise concerns that the Company has not explicitly acknowledged the risks associated with deciding not to undertake one.

### **Portsmouth Water's Comments**

*In the representations on the Company's draft Water Resources Management Plan, the Environment Agency expressed the view that "the assessment of the plan must include a statement on the likely significant effects of the plan on relevant European sites". If the plan is thought likely to be significant, an appropriate assessment will need to be undertaken.*

*A number of organisations, but not the Environment Agency, expressed views that the Company should conduct an Appropriate Assessment at the Plan level and not at project level as proposed in the draft Water Resources Management Plan. For preparation of its Statement of Response the Company highlighted the fact that the majority of existing abstractions and their potential impacts upon designated sites, had been subjected to Appropriate Assessments conducted by the Environment Agency as part of the Habitats Regulations Review of Consents. The outcome of those assessments had developed into EA Site Action Plans and the resulting licence sustainability reductions had been incorporated in the draft Plan.*

*The Company sought legal advice which indicated that an approved plan need not confirm every detailed element, since these would be individually required in order to gain planning permission for any project which might have an impact upon a designated site.*

*The Company confirmed in its Statement of Response that it would prepare Appropriate Assessments for specific projects and it made reference to its ongoing work in relation to Havant Thicket Winter Storage Reservoir. The Environment Agency recognises this work in paragraph 5.5.4.1*

#### **4.3.4 SECTION 6 - CONCLUSIONS**

Paragraphs 6.1 to 6.6 largely repeat the issues raised in detail in Section 5 of the document. The Company provides responses to issues not already covered earlier in this Response to Representations.

##### **4.3.4.1 Paragraph 6.2**

The Environment Agency makes reference to the issues associated with the dry year demand forecast which are outlined in Section 5.1 of its representation. The Agency goes on to question the rights of the Company's customers to water their gardens.

### **Portsmouth Water's Comments**

*The Company has responded to the issues raised within Section 5.1 of the Agency's representations.*

*Whilst the Company notes the Environment Agency's view, it advises the Inspector that the Company is not at liberty to determine the purpose for which its customers draw their supplies unless sanctioned in accordance with legislative provisions enacted for such purpose.*

##### **4.3.4.2 Paragraph 6.3**

The Environment Agency expresses a number of general statements about the inadequacies of the Company's Plan. It considers that there are many concerns now as with the draft Water Resources Management Plan, and that there is insufficient justification or evidence used for the assumptions made.

**Portsmouth Water's Comments**

*The Environment Agency expresses a number of its opinions in the paragraph which the Company believes that it has answered separately in its responses to the paragraphs in Section 5 above.*

*The Company finds it difficult to understand that the Environment Agency's concerns are "at least as strong now as when its representation on the draft Water Resources Management Plan was submitted". Since then the Company has revised downwards its Level of Service, revised its outage assessment, updated its headroom assessment and significantly revised Options and Least Cost Appraisal methodology (as noted in the Environment Agency's representation 5.3.2.13).*

**4.3.4.3 Paragraph 6.4**

The Environment Agency expressed its concerns regarding the inclusion of Havant Thicket Winter Storage Reservoir in the Company's Plan, and the basis for the Company's decision.

**Portsmouth Water's Comments**

*The Company notes that there is a brief response to the Environment Agency's doubts about the justification for Havant Thicket Winter Storage Reservoir in its representation on the Company's draft Water Resources Management Plan.*

*The Environment Agency did not raise its concerns in its Statement of Advice Report to the Secretary of State (May 2009). Concerns regarding the justification for the reservoir proposed are however outlined in the Annex attached to the Secretary of State's letter of 3 August 2009.*

*The Environment Agency did not raise specific concerns regarding the proposal in the preparation of the Statement of Common Ground.*

*The Company draws the Inspector's attention to Section 3.4.4 of the Company's Hearing Statement which determines that were the Company able to deliver completion of Havant Thicket Winter Storage Reservoir by 2018/19, Scenario 9 of the Least Cost Planning Appraisal would deliver the lowest NPV of all of the options considered. However planning and construction constraints do not enable the Company to deliver such a solution in the timescale available, and as a result a higher cost option needs to be selected. Analysis of the four of the next lowest cost scenarios is set out in Section 3.4.4.2 of the Public Hearing Statement and the Company provides justification of its selection of the Final Planning Solution in Section 3.4.4.4.*

**4.3.4.4 Paragraph 6.5.1**

The Environment Agency expresses its view that if the Company were to make different assumptions on the impact that metering might have upon its demand forecasts then a very different solution might be possible for the Company.

**Portsmouth Water's Comments**

*The Company refers the Inspector to its responses to the issues raised by paragraphs 5.2.2.1 and 5.2.2.2. of the Environment Agency's representation.*

*The Company recognises that a different solution might be required if such different assumptions on metering savings were included although the Company advise that the solution proposed by the Environment Agency might not be selected through the Least Cost Appraisal.*

#### 4.3.4.5 **Paragraph 6.5.2**

The Environment Agency repeats its recommendation that it believes that micro-component analysis should be the primary method used for forecasting and that it has included an alternative forecast in the Annexes to its representation.

##### **Portsmouth Water's Comments**

*The Company advises the Inspector that the Environment Agency did not raise this issue in its representations on the draft Water Resources Management Plan nor was it raised in the Statement of Advice Report to the Secretary of State (May 2009).*

*The Environment Agency did raise this issue in the preparation of the Statement of Common Ground and as a result the Company has provided a reconciliation of its trend-based forecast with a micro-component analysis in Section 1.6 of the Hearing Statement. This issue is raised in paragraph 5.1.2.1 of the Environment Agency's representation and the Company maintains its view that a micro-component based forecast is not a "requirement" of the Water Resources Management Plan Guidelines.*

#### 4.3.4.6 **Paragraph 6.5.3**

The Environment Agency is critical of the Company's "unambitious approach" to demand management which lacks commitment to the achievement of the Defra aspiration for per capita consumption to fall to 130 l/h/d by 2030.

##### **Portsmouth Water's Comments**

*The Company recognises that amongst several stakeholders the Environment Agency raised this issue in its representation on the Company's draft Water Resources Management Plan. In its Statement of Response the Company recognised that a response to the Government's aspiration needed to be included in its Final Plan.*

*The Environment Agency referred to this issue in its Statement of Advice Report to the Secretary of State (May 2009) and it was included in the Annex to the Secretary of State's letter dated 3 August 2009. As a result the issue was explored during the discussions held to prepare the Statement of Common Ground and the Company's view is explained in detail in Section 1.11 of the Public Hearing Statement.*

*The Company advises the Inspector that it considers that given the importance that the public attaches to its public water supplies, it is not for the water company to adapt a risky approach which at some point in the future may compromise the security of those supplies. Despite the Company's efforts to encourage a change of consumption behaviour by its customers, water efficiency activities, to date, have only had limited success. Due to the need to minimise the financial implications for its customers, the Company is constrained by the regulatory framework to developing new initiatives which are driven by economic justification ie they must produce a financial saving to the Company which offsets the costs.*

*In Section 1.11 of the Hearing Statement the Company embraces the government's principles and it sets out its views on some of the changes it believes will be needed to deliver a very significant fall in per capita consumption. The recent announcement by Southern Water Services of its proposal to implement seasonal tariffs represents a significant shift in policy by regulators which may allow the companies, in the future, to apply financial incentives to influence customer behaviour. The Company proposes to assess the potential for the use of such tariffs in its annual reviews and more specifically in the development of its next Water Resources Management Plan in 2014.*

*The Company believes that, until it sees the impacts of significant changes in policy driving demonstrable reductions in consumption behaviour, then it would be unwise to take unacceptable risks with its water resources planning.*

**4.3.4.7 Paragraph 6.5.4**

The Environment Agency concludes that the inclusion of a "most likely" housing growth scenario in the Company's demand forecast results in the provision for 20,000 more households in 2030 than would be required for a "policy based" forecast. This results in a peak week demand forecast of an additional 10 Ml/d.

***Portsmouth Water's Comments***

*The Company advises the Inspector that the Environment Agency did not make representations on this issue in its representations on the draft Water Resources Management Plan. A number of other stakeholders made responses to the need for housing forecasts to be updated following revision to the South East Plan and these were used for the preparation of the Statement of Response.*

*The Environment Agency made reference to its concerns in the Statement of Advice Report to the Secretary of State (May 2008) and again in the preparation of the Statement of Common Ground. As a result the Company has set out the basis of its household forecasts in Section 1.2 of the Hearing Statement.*

*The Company advises the Inspector that it has used the forecasts developed by Experian, an independent market leader in the field of population and housing forecasting. Experian were appointed by eight water companies in the South East of England to evaluate the forecasts in the Regional Spatial Strategy and for these to be spatially distributed to water company supply areas. The Company has no reason to doubt the Experian forecasts. It also presumes that forecasts for some of the other companies, who utilised the same information, have been found to be acceptable.*

**4.3.4.8 Paragraph 6.5.5.**

The Environment Agency repeats its views expressed in paragraph 5.3.2.16 that it has encouraged the Company to consider the opportunities to share resources with other companies which might be able to form a case for Havant Thicket Winter Storage Reservoir.

***Portsmouth Water's Comments***

*The Company refers the Inspector to the Company's comprehensive response to paragraph 5.3.2.16 which covers this issue.*

**4.3.4.9 Paragraph 6.5.6**

The Environment Agency repeats a number of its concerns previously raised in paragraphs 5.3.2.6, 5.3.2.7, 5.3.2.10, 5.3.2.11 and 5.3.2.15.

***Portsmouth Water's Comments***

*The Company draws the Inspector's attention to the Company's individual responses to the paragraphs above. It has nothing further to add.*

**4.3.4.10 Paragraph 6.5.7**

The Environment Agency makes reference to the Company's Least Cost Appraisal which has been presented in the Public Hearing Statement and suggests that with alternative cost assumptions a different ranking of scenarios could be produced. It also suggests that cheaper combinations of options are also available.

***Portsmouth Water's Comments***

*The Company maintains that the method and data it has used for its Least Cost Appraisal is considered to be robust and accurate.*

**4.3.4.11 Paragraph 6.5.8**

The Environment Agency reiterates its concerns addressed in paragraph 5.5 of its representation regarding the Company's failure to acknowledge the risks associated with the absence of a Habitats Regulation Assessment at "plan level"..

***Portsmouth Water's Comments***

*The Company refers the Inspector to the Company's response to paragraph 5.5 of the Environment Agency's representation.*

**4.3.4.12 Paragraph 6.6**

The Environment Agency highlights the importance of the sensitive environments in and around the Company's supply area. It stresses the need for the Company to identify economical solutions which maintain supplies to customers and protect the environment.

***Portsmouth Water's Comments***

*The Company believes that the Agency's statement is one of the over-arching principles of a water resources management plan.*

*The company highlights the fact that in preparing its plan it has respected the very important environments in which it operates by providing for the sustainability reductions required as a result of the Habitats Regulations Review of Consents.*

*The Company recognises the need for the requirements of the Water Framework Directive to be delivered in this respect it refers to the considerable number of investigations which are due to be undertaken over the next five years. No allowance is made for the impacts that these investigations might have upon the Company's abstractions.*

*The Company's plan is based upon maintaining the security of supplies that its customers have come to expect from a company with over 150 years of public water supply service. The Company has approached its Plan with a prudent approach which adopts a low level of risk and this is demonstrated by the low level of "Headroom" in the plan for uncertainties.*

*Portsmouth Water's customers enjoy the cheapest public water supplies in England and Wales and their expectation is that the Company will continue to seek out the most economical way of maintaining supplies in the years ahead. The Company has therefore focussed its approach upon providing a long-term solution which is low-cost and also reflects the expectations of Government. Thus although the lowest cost solution for Portsmouth Water would be to provide for new water resources and ignore the requirement to manage demand the Company has adopted a relatively low-cost solution which delivers both and at relatively low risk for its customers and the environment. The Final Planning Solution selected incorporates the development of universal metering over a period to 2030*

*with the development of new water resources at Farlington Water Treatment Works and with the Havant Thicket Winter Storage Reservoir. These new resources provide the potential not only for meeting the needs of Portsmouth Water's customers for many years beyond the current planning horizon but also to assist in the resolution of sustainability issues on the River Itchen and to contribute to further resource sharing across the Southern Region.*

#### 4.4 **CONSUMER COUNCIL FOR WATER (MARCH 2010)**

Following CCWater's initial representation in January 2010, (Section 4.1 above) it provided a detailed representation on the Company's Hearing Statement in March 2010. CCWater focuses its response upon four key issues:-

- Demand Forecasting
- Aspirations for Per Capita Consumption
- Resource Development/Havant Thicket Winter Storage Reservoir
- The Impact of Compulsory Metering

In its response to the Representation the Company responds to each of these issues individually.

The Company recognises the concerns raised by CCWater in respect of the social impact of Compulsory Metering. The Company advises the Inspector that it has paid regard to the social impacts of Compulsory metering in preparing its Plan but since the company is in an area of serious water stress there is a statutory requirement for the Company to conduct an economic analysis of the benefits and costs of metering set out in the Water Industry (Prescribed Conditions) (Amendment) Regulations 2007..

The Company advises the Inspector that the Company does not have a responsibility to direct social policy.

##### 4.4.1 **Demand Forecasting**

CCWater raises the key factors it considers appropriate to utilise in the preparation of the Company's plan. CCWater expects to see a balanced approach to identifying solutions which avoid undue risks in terms of security of supplies for customers and recognises affordability of water services as an issue.

It supports the need for robust analysis of population and property forecasts and notes that Portsmouth Water and its neighbouring companies have sought consistency by utilising the same research to derive household and population forecasts..

##### ***Portsmouth Water's Comments***

*The Company has addressed the factors raised by CCWater in preparing its Plan and it has specifically addressed the issues of security of supplies and affordability by the balanced application of both demand management and resource development in its Least Cost Appraisal.*

*The Company's population and housing forecasts are indeed replicated from the joint research used by all of the companies in the South East of England. This research is based upon the Regional Spatial Strategy (South East Plan) and was a "most likely" scenario which the Company understands is developed from changes in fertility and migration assumptions.*

*The Company expects that its consultants, Experian, will be available at the Public Hearing to provide a fuller explanation of the "most likely" scenario which the Company believes has been used by all of the companies in the South East for their Water Resources Management Plans.*

*The Company notes that a key issue for CCWater is ensuring security of supplies, indicating that no single approach should be overly relied upon (section 7). Ensuring security of*

*supplies requires a balanced twin track approach, including development of new resources, as set out in the Company plan. Repeated customer surveys have indicated that our consumers value safety and security of supplies as the highest priority. These surveys have also confirmed that customers support the development of the Havant Thicket Winter Storage Reservoir as a means of securing water supplies.*

#### **4.4.2 Per Capita Consumption**

CCWater highlights the challenges associated with the Government and the Environment Agency's aspirations for per capita consumption to reduce to 130 l/h/d by 2030. CCWater questions the potential to achieve such a goal especially given its conflict with long term trends of increasing water use. Whilst recognising the fact that a number of factors are likely to constrain the continuing rise in demand it remarks upon the absence of sufficient data to provide sufficient long term compliance.

CCWater refers to the fact that where companies have reflected the Government's aspiration, it is aware that the resulting uncertainties associated with such a forecast have resulted in significantly greater headroom allowances in their forecasts than that currently proposed by Portsmouth Water.

#### ***Portsmouth Water's Comments***

*The Company has little to add to CCWater's statement which it believes represents an independent view of the difficulties facing the Company in responding to the government's challenge.*

*The Company believes that at this point in time, its forecasts are both robust and prudent. If in the future where significant reductions in per capita consumption are demonstrated through innovative metering and water efficiency programmes, it would be reasonable to apply such reductions in the preparation of future plans subject to their being both economic and supported by the various regulators.*

#### **4.4.3 Havant Thicket Winter Storage Reservoir**

CCWater refers to the Environment Agency's challenge to the Company in strengthening the case for the Reservoir through wider regional benefits. It highlights the work undertaken by the WRSE Modelling Group which seeks to optimise the resources in the South East to identify an integrated solution.

CCWater also highlights the dangers of deferring investment on major resource development during an economic downturn, since it recognises the need for long term investment. It goes on to state the need for major investments to be fully justified using cost benefit analysis especially given the fact that it is customers who will be responsible for providing the funding through increased charges.

#### ***Portsmouth Water's Comments***

*The Company welcomes the statement by CCWater that "the need for additional water resources in the next 25 years remains clear and needs to be part of a fully integrated water management strategy for the region."*

*The Company is aware of the desire by other stakeholders to see the Havant Thicket Winter Storage Reservoir promoted as a regional resource and it has been willing to do so by offering bulk supplies to neighbouring companies. In 2004/05 work was completed to enable transfer of a bulk supply to Southern Water, this played an important role in helping Southern Water through the 2005/06 drought. To date no specific requests have been received (see Response to Environment Agency's Representation paragraph 5.3.2.16 for a detailed explanation) although the Company refers to the WRSE Modelling, which is co-*

*ordinated by the Environment Agency, and which identifies the Reservoir as a potential solution to the River Itchen Sustainability Reductions and also to support future bulk supplies to Southern Water Services' Sussex area.*

*The Company has taken account of the recession in house-building in its housing and population forecasts, although it has forecast that accelerated house-building in the period to 2015 will result in the projections being in line with Experian forecasts from 2015 onwards. A detailed explanation of the assumptions made for dealing with the impacts of the recession upon housing forecasts is provided in Section 1.10 of the Public Hearing Statement.*

*The options appraised in the final Plan/Hearing Statement are prepared on the basis of identifying the financial, social, carbon and environmental costs and benefits of each. It is then through selecting different combinations of the feasible options in various scenarios, the Least Cost Appraisal, identifies the optimum solution on a cost benefit analysis basis. The full appraisal methodology is set out in Section 3.3 of the Public Hearing Statement.*

*Section 17 of the CCWater response refers to "the pros and cons of deferring such investment need to be considered in the short and longer term, as the costs and benefits of these assets will impact on current and future generations. "A key benefit of moving forward with the Havant Thicket project is that completion of the reservoir and the associated recreational and educational infrastructure will deliver significant social, economic and community benefits to the region sooner. CCwater have been a member of the Stakeholder Group since 2004 and are aware of the many long term associated benefits that will arise from the reservoir project. These are summarised in the response to Natural England representations paragraph 5.3.4.*

#### **4.4.4 Metering**

CCWater raises a number of concerns about the proposal to implement universal metering over the period to 2030. It expresses significant concerns about any acceleration of the Company's programme which would add to the Company's charges and could lead to serious affordability issues for certain customer groups.

CCWater raises a number of distributional effects which could lead to very significant impacts upon water bills for certain households, both for unmetered households and larger households which have been compulsory metered. Although not specifically identified the impacts upon sewerage bills for households compulsory metered also has to be considered.

Affordability impacts are raised especially having regard to the possibility of the development of social tariffs which are being promoted in the draft Floods and Water Bill. CCWater also refers to the impacts on revenue collection for Portsmouth Water especially in light of recently published research from Veolia Water South East.

It considers that it would be misguided for the Company's metering to be accelerated without full consideration given to the distributional, affordability and revenue impacts of such a programme. It highlights the need for the Secretary of State to recognise his duty to pay regard to households on low incomes, especially in light of the recommendations of the Walker Review on meter charging.

#### ***Portsmouth Water's Comments***

*The Company acknowledges many of CCWater's statements as being key elements it has considered in its desire to promote a metering strategy which minimises the financial impacts upon the customers it serves. It was for just these reasons that in its earlier draft Water Resources Management Plan that it proposed a 25 year programme which would gradually phase in Compulsory Metering.*

*The Company notes that CCWater believe that it would "be misguided to press Portsmouth Water to increase the rate of metering until there is more certainty about the way that the social impacts can be mitigated."*

*Representations from a number of stakeholders who criticised the "unambitious" approach caused the Company to review its options for the Statement of Response and led it to carry out customer research in the Autumn of 2008. That research did not reveal a majority support from customers for compulsory metering considered.*

*In recognition of the Government's water strategy, Future Water, which anticipates universal metering in seriously water stressed areas by 2030, the Company three alternative Compulsory Metering programmes, over 5, 15 and 20 years, in its Public Hearing Statement (Section 2.5).*

*The Company's proposals have principally been developed on the basis of the utilisation of low cost "dumb meters" being installed in meter boxes on the public highway, since more sophisticated metering technology is yet to be proven and the level of savings associated with such an approach are largely unknown. The Company has not considered the possibility of the implementation of variable tariffs since, until very recently, these have not been well received by Regulators and little evidence exists on their impacts.*

*CCWater raises a number of very significant issues which must be addressed in the development of Compulsory Metering programmes in the years ahead. The Company is keen to assess the progress and the effects of Southern Water's programme to compulsorily meter all of its customers between 2010 and 2015. The Company believes that its proposed metering programme over 20 years appropriately addresses CCWater's issues. The programme will be reviewed for the next Plan with a view to enhancing its effectiveness in the light of its own and other companies' programmes over the first few years of their implementation.*

4.5 **WATER SERVICES REGULATORY AUTHORITY (OFWAT) – 11 MARCH 2010**

In its representation on the Company's Hearing Statement Ofwat sets its principal duties as the economic regulator of the water industry in England and Wales. It sets out the key activities it performs in fulfilling its duties.

In its representation, Ofwat supports the Environment Agency's concerns regarding the following issues:-

- The Demand Forecast including population and housing growth as well as the per capita consumption forecast
- The costs and benefits of metering
- The Company's Options Selection Process

It highlights some specific issues in a separate Annex to which the Company will respond individually.

In addition it refers to the Periodic Review process which is used by Ofwat to set price limits for water charges and makes reference to its most recent determinations which it set out in November 2009. Its representation refers to the direction that it gave to water companies to exclude from business plans significant expenditure to address climate change on the supply/demand balance. It did however put in place arrangements for an interim determination of price limits if companies were able to demonstrate a need for investment using relevant analysis of the latest UKCPO9 climate change scenarios.

***Portsmouth Water's Comments***

*Ofwat provided a comprehensive representation on the Company's draft Water Resources Management Plan, as a consequence of which significant changes were made to a number of the assumptions in the Company's Plan.*

*The Company's Level of Service was revised following further customer research, Outage and Headroom risks were revised, sustainability Reductions confirmed and a revised Least Cost Appraisal methodology adopted. Several more changes were made and so the Company notes that the number of issues raised by Ofwat in this representation is considerably less than that raised on the Draft Plan.*

*The Company is disappointed that Ofwat makes reference to the three issues raised above for the following reasons.*

- ***Demand Forecast***

*Ofwat made no reference to any concerns regarding the Demand Forecast in its earlier representation on the draft Water Resources Management Plan other than the need to incorporate housing allocating from the final South east Plan and also to incorporate the effect of its water efficiency targets.. The Company has provided a more extensive explanation of that forecast in Sections 1.1 to 1.4 of its Public Hearing Statement. The Company draws the Inspector's attention to the more detailed explanations provided in its response to the Environment Agency's representations, principally set out in paragraphs 5.1.2.1 to 5.1.2.8.*

- ***Costs and Benefits of Metering***

*Ofwat did make reference in its detailed representations on the draft Water Resources Management Plan to the need for the Company to consider the impact of the efficiencies of installing compulsory meters on a street by street basis in its Final Plan.*

*Following Ofwat's and other stakeholders representations on the draft Water Resources Management Plan, the Company has developed three alternative Compulsory Metering programmes together with Change of Occupier metering and the costs and direct benefits have been included in the AISC calculations which are used in the Least Cost Appraisal. The alternative programmes together with their associated costs and benefits are set out in Sections 2.5 to 2.7 of the Public Hearing Statement. The assessment of each within the Least Cost Appraisal is outlined in Section 3.2.4 of the Public Hearing Statement.*

- **Options Selection Process**

*The Company advises the Inspector that Ofwat was amongst a number of stakeholders who raised concerns about the Company's Options Appraisal process outlined in the draft Water Resources Management Plan. As a result the company undertook, in its Statement of Response, to update that process for the Final Plan.*

*The Company draws the Inspector's attention to the updated methodology and the subsequent appraisal which is set out in Sections 3.2 and 3.3 of the Public Hearing Statement.*

*The Company responds to the detailed issues referred to by Ofwat in its Appendix below.*

#### 4.5.1 **Issue 1.1. Climate Change**

Ofwat recognises that during the course of preparations of its draft Water Resources Management Plan, the UKCP02 climate change scenarios were the only tool available to the Company for assessing the impact of climate change. Ofwat considered that those scenarios were not sufficiently robust and that new UKCPO9 forecasts should be used in order to justify significant investment.

##### **Portsmouth Water's Comments**

*The Company advises the Inspector that Ofwat did not raise this issue in its representation on the draft Water Resources Management Plan. In fact Ofwat actually stated its expectation that the Company should include the climate change impact on deployable output in its Final Plan!*

*The Company notes that this issue is not raised by Defra in the Annex to the Secretary of States letter of 3 August 2009.*

*For the draft Plan the Company had been unable to satisfactorily confirm the impacts of climate change upon deployable output. Following representations made by Ofwat and others the Company utilised the methodology set out in the Water Resources Management Plan Guidelines, **the Effects of Climate Change on River Flows and Groundwater (UKWIR 2007)**, to calculate the impacts of climate change on flow in the river Itchen. This work was conducted by consultants and the results have been included in Appendix 13 of the Public Hearing Statement.*

*It had been expected that the new UKCP climate change scenarios would be published in 2008 and that these might be available for water companies to use for their Final Water Resources Management Plans and Final Business Plans. In the event the scenarios were not published until 2009 and due to their complexity it now appears unlikely that the outcome of an industry wide project to identify the impacts will not be available until 2013. As the Company was required by Water Resources Management Plan Guidelines to include climate change impacts in its Water Resources Management Plan it has done so using the latest work available ie UKCIP02 projections. These were not acceptable to Ofwat and so*

*for the Company no investment driven by climate change is likely to be approved by Ofwat for funding considerations until at least 2013. It is therefore unlikely to commence until after the preparation of the next Water Resources Management Plan.*

**4.5.2 Issue 1.2 Target Headroom**

Ofwat suggests in its representation that the significant surplus which exists at the end of the planning period, which results from the development of Havant Thicket Winter Storage Reservoir, implies that the Company is planning for additional uncertainties. As a result it does not accept this as justification for the development of the reservoir.

***Portsmouth Water's Comments***

*The Company advises the Inspector that the level of risk included in the Company's initial Headroom calculation was raised by Ofwat in its representations on the draft Water Resources Management Plan. As a result the Company revised its Headroom calculations and the results were included in its Statement of Response.*

*The Company reminds the Inspector that the issue of Headroom was not raised in the Annex to the letter from the Secretary of State dated 3 August 2009.*

*Notwithstanding the above, the Company advises the Inspector that the Company has not used additional uncertainties to justify the development of Havant Thicket Winter Storage Reservoir. The Company advises that following the representations made by several stakeholders on the Draft Plan its target headroom at the end of the planning period is at a very low level. This is in recognition of the prudent forecast that it has developed in its supply and demand forecasts.*

*The Company highlights the justification of its Final Planning Solution in Section 3.4.4.4 of the Public Hearing Statement. The Company does refer to the significant surplus which does exist at the end of the planning period citing such a surplus as the potential for providing a longer term benefit for the Company and/or the region. However it should be noted that the benefit is not reflected in the calculation of the NPV of the final planning solution.*

**4.5.3 Issue 2 Reservoir Size**

Ofwat expresses its view that the Company should consider alternative sizes of reservoir as options in its plan for consideration alongside other options in the Least Cost Planning Appraisal. It refers to the similar comments included in its representation on the draft Water Resources Management Plan.

***Portsmouth Water's Comments***

*The Company notes that although the Annex to the Secretary of State's letter dated 3 August 2009 does not specifically refer to reservoir size it does question the clarity of the Company's Options Appraisal process.*

*The Company advises the Inspector that in its Statement of Response the Company stated that "even with the development of a 30 Ml/d option, the Final Planning Solution is unlikely to provide a surplus in 2035 at peak demand period". The Company also referred to the ongoing work which was being undertaken by the Havant Thicket Winter Storage Reservoir Stakeholder Group in respect of the consideration of alternative sizes for the reservoir. The initial work undertaken by Entec in 2006 as part of the Engineering Study was further developed for a public consultation exercise carried out by Arup in early 2008. The Entec Reservoir Master Plan Options is now included in Annex 1 of this response, and this study identifies eight alternatives which were considered by the Stakeholder Group. This included*

*consideration of smaller reservoir size options. There were serious concerns about the feasibility, achievability, environmental impact and cost effectiveness of these options.*

*Following discussions with the Stakeholder Group a decision was reached that Option 1 represented best value for money and this was taken forward for the pre-planning application public consultation exercise carried out in the spring of 2008..*

*The embankment slopes of that option, were however, subsequently modified for the exercise, in order to reduce the loss of ancient woodland by realigning the southern embankment of the reservoir.*

#### **4.5.4 Issue 3 Climate Change Impact on Havant Thicket Winter Storage Reservoir**

Ofwat advises that the Company should assess the potential impact of climate change on the Havant and Bedhampton Springs source in its assessment of the use for the reservoir.

##### ***Portsmouth Water's Comments***

*The Company advises the Inspector that Ofwat did, in its representations on the draft Water Resources Management Plan refer to the need for climate change impacts on the Havant Thicket Winter Storage Reservoir project to be assessed.*

*The Company reminds the Inspector that this issue was not raised in the Annex to the Secretary of State's letter dated 3 August 2009.*

*The Company recognises that it has not specifically responded to the earlier Ofwat representation. Initial yield analysis prepared for the Company by Entec as part of the early design work during the Amp4 (2005/10) Period has revealed that the overall springs yield would provide sufficient surplus from the reservoir to withstand a two-year drought. The Company undertakes to update this assessment once the impacts of the UKCP09 scenarios are available for a reassessment of groundwater yields and the EA and Ofwat can agree an appropriate approach. This will then be used to update the yield assessment for the reservoir proposal.*

*Predictions on climate change indicate that in the future winters will be wetter, taking excess water from the springs in winter when the flow is high and storing it for use in dryer summers provides a very sustainable solution to meeting water supply needs in the Company area of supply. The Company is confident that they can operate the reservoir within the newly applied Environment Agency abstraction licence restrictions to maintain a minimum flow in the streams supplied by the springs, to ensure that there is no significant impact on the Harbour.*

#### **4.5.5. Issue 4 - Water Efficiency Savings**

Ofwat asks for clarification in its representation that demand savings resulting from water efficiency measures in the Company's Plan are in addition to the savings associated with meter options.

##### ***Portsmouth Water's Comment***

*The Company advises the Inspector that water efficiency savings were referred to in the Annex to the Secretary of State's letter dated 3 August 2009.*

*The Company advises that in Section 1.3 of its Hearing Statement it sets out the water efficiency savings which are assumed in its forecasts for unmeasured household consumption. The impacts of meter options are additional to those related to water efficiency measures.*

#### 4.6 **NATURAL ENGLAND – 9 MARCH 2010**

Natural England is a statutory consultee and has submitted a representation as it also did on the Company's draft Water Resources Management Plan.

Natural England's representation is referred to within the document as a "Statement of Case" albeit that it makes reference to the issues set out in the Company's Public Hearing Statement.

Natural England sets out its status and functions and refers to the legislative framework that is particularly relevant to the Company's activities in the natural environment. These are principally in respect of environmental protection in Sections 3 and 4 of the Water Industry Act 1991.

In paragraph 4 of its representation, Natural England sets out its position at the Hearing and highlights the issues it raises. These are expanded by them in paragraphs 5, 6, 7 and 8 and the Company responds separately to each of these issues.

##### 4.6.1 **Paragraph 5 Havant Thicket Winter Storage Reservoir**

Natural England provided very little comment upon the Havant Thicket Winter Storage Reservoir (HTWSR) proposal in its representation on the draft Water Resources Management Plan. It did refer to the significant landscape impacts which would need "careful assessment through the EIA process". It also encouraged the Company to highlight any potential biodiversity benefits that might be possible.

##### ***Portsmouth Water's Comments***

*The Company acknowledges that a high quality landscape design will be required. This is a matter for the Havant Thicket Winter Storage Reservoir planning application. A landscape and heritage assessment is required to inform the landscape design to be submitted with the planning application, as set out in the Environmental Impact Assessment Scoping Report sent to Natural England in February 2009. Meetings have already taken place with local authority and English Heritage representatives and identify key elements of the landscape design.*

*The Company has already completed four years of ecological survey work in order to ensure that there is a comprehensive knowledge of the habitats and species currently present at the site. This is required to ensure that appropriate mitigation measures are put in place.*

*The Company has already recognised the potential biodiversity benefits that the reservoir could provide. It is already working with the Forestry Commission and Hampshire County Council to provide a woodland wildlife corridor to both link and enhance the woodland habitats to the north and south of the site. The creation of new wetland habitats on the northern margins of the reservoir together with the development of wildflower habitats on the southern embankment slopes are proposed to be formulated for the planning application through dialogue with Natural England, the Hampshire and Isle of Wight Wildlife Trust and Hampshire County Council.*

##### 4.6.1.1 **Paragraph 5.1.1**

Natural England highlights the relevant statutory habitats designations affecting Langstone Harbour which is currently the recipient of the surplus freshwater flow from the Havant and Bedhampton Springs.

**Portsmouth Water's Comments**

*The Company acknowledges the various habitats designations with which it is fully conversant.*

*The Company advises the Inspector that it is a proportion but not all of the surplus springs flow which is proposed to be used by the Company to fill and refill Havant Thicket Winter Storage Reservoir.*

*The Company highlights the fact that the Environment Agency has recently undertaken a Habitats Regulations Review of Consents for the Havant and Bedhampton Springs abstraction licence which currently is used to supply water to the City of Portsmouth and the surrounding area. The Appropriate Assessment conducted for that Review resulted in the publication of a number of Site Action Plans in 2007 covering the areas cited by Natural England. The result has been that a revised abstraction licence for the Springs has been voluntarily agreed by the Company and issued by the Environment Agency which incorporates a reduction in the overall licensed abstraction quantities coupled with new minimum residual flow conditions for the two principal streams discharging into the designated habitats of Langstone Harbour.*

*No new abstraction licence is required to fill the reservoir, nor will any variation be required to the existing abstraction licence. The Company will only divert water from the springs to fill the reservoir at times of excess flow, this will primarily be during the winter months. A monitoring regime has been agreed with the Environment Agency to demonstrate that the Company is complying with the condition on maintaining the minimum flow requirements to the streams which flow in to Langstone Harbour. Predictions on climate change indicate that in the future winters will be wetter, taking excess water from the springs in winter when the flow is high and storing it for use in dryer summers provides a very sustainable solution to meeting water supply needs in the Company area of supply. The Company is confident that it can operate the reservoir within the newly applied licence restrictions.*

**4.6.1.2 Paragraph 5.1.2**

Natural England identifies its concerns with regard to the potential impact that a reduction in freshwater flows might have upon Langstone Harbour.

**Portsmouth Water's Comments**

*As highlighted in the response to paragraph 5.1.1 above the Company advises that an Appropriate Assessment has already been conducted by the Environment Agency through the Habitats Regulations Review of Consents process and it has concluded that the new licence conditions agreed are now sufficient to ensure protection of the habitat. An Appropriate Assessment in respect of the reservoir proposal has been commissioned by the Company and will be submitted with the planning application.*

**4.6.1.3 Paragraph 5.1.3**

Natural England highlights the need for an Appropriate Assessment to be conducted under Regulation 48 of the Habitats Regulations where a project might impact upon the management of a designated site. Until this assessment is completed, it cannot be assumed that the project will not adversely affect the site.

**Portsmouth Water's Comments**

*The Company is fully conversant with this requirement and draws the Inspectors attention to the fact that its consultants, Arup, wrote to Natural England (7 May 2008) stating that it was starting work on an Appropriate Assessment and seeking agreement to the approach to be*

taken to the assessment. On the 8 July 2008 Natural England confirmed that a Stage 1 Screening was appropriate. There followed an exchange of emails clarifying the detail of the assessment. This confirmed that the key issues to be addressed by the assessment were the potential impact on designated sites / features of;

- *The abstraction from Havant and Bedhampton Springs (see response to paragraph 5.1.1).*
- *Potential changes in water quality from discharges from the proposed reservoir to the streams which feed Langstone Harbour (Note: Initial modelling indicates that stream water quality will be improved once the reservoir is in place).*
- *The impact of increased flows to the Harbour which might occur during the emergency draw-down of the Reservoir, should this ever be required.*

*Further dialogue via correspondence and meetings with representations from Natural England's Lyndhurst Office has referred to Arup's ongoing work in assessing the impacts of:-*

*The Company confirms that the Appropriate Assessment is continuing with the intention of submitting this work in conjunction with the Environmental Impact Assessment(EIA) which would be required as part of a detailed Planning Application. Based on the initial work undertaken, the consultants have indicated that they are confident that the stage 1 assessment will be sufficient to support the planning application and meet the requirements of statutory consultees for the Appropriate Assessment. On completion of the Appropriate Assessment a full copy of the draft report will be forwarded to Natural England and the Environment Agency.*

#### **4.6.1.4 Paragraph 5.2.1**

Natural England has referred to the need for the protection of European Protected Species and highlights the presence of Dormice and Bechsteins Bats at the Havant Thicket site. Natural England sets out the actions that would be necessary if licences needed to be granted to enable the development to proceed.

#### **Portsmouth Water's Comments**

*The Company advises the Inspector that this issue was not raised in the representation on the Company's draft Water Resources Management Plan nor was it raised as an issue in the Annex to the Secretary of State's letter dated 3 August 2009. The Company believes that this is an issue to be addressed at the planning application stage.*

*The Company does however recognise the importance of this particular issue of which it is fully conversant. In August 2004, the Company invited Natural England (then English Nature) to join its Havant Thicket Winter Storage Reservoir Stakeholder Group so that it could be appraised of progress on the detailed preparations for the reservoir proposal. English Nature declined the offer on the basis that the proposal did not affect any statutory nature conservation sites although it agreed that the Hampshire Isle of Wight Wildlife Trust, who were represented, would handle ecological matters relating to the case. The Wildlife Trust have been an active member of the Stakeholder Group..*

*Out of courtesy, data from the Reservoir Options Appraisal Process and the Baseline Ecological Surveys, being undertaken as part of the preparation for the Environmental Impact Assessment, was sent to Natural England in June 2007 and since then dialogue has continued with staff from the Lyndhurst Office. Additional dormouse surveys were completed in 2008 and the findings were shared with Natural England in November 2008. The latest exchange of information relating to further bat, woodland vegetation and bird surveys took place in July 2009.*

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*Portsmouth Water fully recognises both the Company's and Natural England's responsibilities which will be addressed in the EIA, and which are required to accompany any planning application. The mitigation strategy will set out how European Protected Species Licence requirements will be met. Timescales for the project will allow sufficient time for the necessary licences to be obtained and for the mitigation work to be put in place.*

**4.6.1.5 Paragraph 5.2.2**

Natural England highlights the necessity for the consideration of three key issues before a licence can be granted and it raises this as a potential factor in the development of the reservoir proposal.

***Portsmouth Water's Comments***

*The Company does not underestimate the difficulties associated with the granting of licences in respect of Protected Species it however anticipates that a mitigation strategy can be developed in discussion with its consultants, the Forestry Commission and Natural England which would enable the development to proceed.*

**4.6.1.6 Paragraph 5.3.1**

Natural England refers to areas of ancient woodland that might be lost as a result of the development of the reservoir proposal.

***Portsmouth Water's Comments***

*The Company advises the Inspector that this issue was not raised in Natural England's representation on the draft Water Resources Management Plan nor is it listed as one of the issues highlighted in the Annex to the Secretary of State's letter of 3 August 2009. The Company believes that this is a matter to be addressed at the planning application stage. The Company is aware of the presence of Ancient Woodland on and adjacent to the reservoir site. The Company also recognises the importance of Ancient Woodland as a valuable biodiversity resource, although it is important to note that none of the woodland on or adjacent to the site is designated as a Site of Special Scientific Interest.*

*Following completion of the early ecological survey work the southern boundary of the reservoir was moved north to avoid the main block of Ancient Woodland with the highest biodiversity and wildlife value. This woodland remains in the ownership of the Company, but will no longer be lost to the reservoir. Instead the reservoir will be located 25m to the north of this woodland to ensure that the woodland is not damaged during the construction of the reservoir. In addition, habitat enhancements to the improve the woodland edge will form part of the mitigation strategy.*

*There are four small blocks of woodland which remain within the reservoir boundary. Three of the blocks are small single species plantations which were planted for timber since 1950, the trees are very tightly spaced and as a result the wildlife interest is limited. The fourth block, known as The Avenue, is an 85m wide strip of trees, which is heavily used by the public. This woodland was believed to have been cleared in around 1870, although the trees subsequently grew back before the bulk of the surrounding woodland was cleared again early in the 1950's. This was before Portsmouth Water purchased the site, leaving the narrow strip of trees that remain today.*

*The Company has worked with the Forestry Commission to develop a woodland mitigation and management strategy. The Company has already held discussions in 2009 with staff from Natural England's Lyndhurst Office regarding the preparation of an appropriate mitigation strategy for the habitats and species present at the site.*

**4.6.1.7 Paragraph 5.3.2**

Natural England refers to the presence of Dormice in the woodland areas at the reservoir site as well as the use of the Avenue as a "flight corridor" for Bechsteins Bat which links the Forestry Commission woodland with that in the Staunton Country Park.

***Portsmouth Water's Comments***

*The mitigation strategies outlined in responses to representations on paragraphs 5.2.2 and 5.3.1, and which are due to be incorporated in any planning application, are expected to address the issues raised by Natural England. This will include a mitigation strategy for protected species. A key component of the mitigation strategy will include the creation of a new woodland corridor on the east side of the reservoir site, which will link the existing woodland blocks to the north and south, providing a new wildlife corridor and flight line for bats. It is important to recognise that radio tracking of Bechstein's bats (under licence) has confirmed that the bats do use other routes to commute and that the important maternity roost was not located on the reservoir site.*

**4.6.1.8 Paragraph 5.3.3**

Natural England advises that National Policy dictates planning permission should not be granted for development that results in the loss of deterioration of Ancient Woodland unless the development would outweigh the loss of the woodland habitat.

***Portsmouth Water's Response***

*The Company advises the Inspector that this issue was not raised in Natural England's representation on the draft Water Resources Management Plan nor is it listed as one of the issues highlighted in the Annex to the Secretary of State's letter of 3 August 2009.*

*The Company recognises the importance of Ancient Woodland as a valuable biodiversity resource but expects that the mitigation proposals will be sufficient to overcome such concerns. This will be set out in the detailed Planning Application for the reservoir proposal. The Company believes that the issues related to Ancient Woodland are matters to be addressed at the planning application stage.*

**4.6.1.9 Paragraph 5.3.4**

Natural England believes that the Company has not given adequate weight to the policy to protect Ancient Woodland in its Plan and additionally that it has not reflected social and environmental costs in its Havant Thicket Winter Storage Reservoir option.

***Portsmouth Water's Comments***

*The Company advises the Inspector that this issue was not raised in Natural England's representation on the draft Water Resources Management Plan nor is it listed as one of the issues highlighted in the Annex to the Secretary of State's letter of 3 August 2009.*

*The Company believes that it has given adequate weight to the policy to protect Ancient Woodland. As indicated in the Company response to 5.3.1, the location of the reservoir embankments have been moved in order to avoid the loss of a significant area of Ancient Woodland.*

*In addition, in 2007 the Company did investigate alternative reservoir layouts in an attempt to identify a solution which could avoid the loss of the thin strip of woodland known as The Avenue. These options were discussed with the Havant Thicket Winter Storage Reservoir*

*Stakeholder Group. Unfortunately none of the alternative options proved to be feasible / viable.*

*The potential alternative site for the reservoir purchased by the Company in the 1960's at Southleigh Forest, has also been dismissed as an option. The Southleigh Forest site is completely covered in woodland, the majority of which is designated as Ancient Woodland, with an even larger area identified as a Site of Importance for Nature Conservation (SINC). The use of this site would result in a much greater loss of Ancient Woodland and SINC habitat. The Southleigh Forest woodland supports a diverse range of bat species, including the rare Bechstein's bat. The woodland includes mature coppice which provides ideal habitat for dormice, other protected species such as badger are also present. A full alternative site assessment review is being prepared to support the planning application.*

*The fact that the Company has moved the reservoir location to avoid the main Ancient Woodland blocks to the north and the south demonstrates that appropriate consideration has been given to this issue and action taken to minimise the loss of Ancient Woodland.*

*In addition, social and environmental costs (AISCs) have been assessed, in line with the appropriate guidance. It is important to recognise that the development of the reservoir would deliver an enormous amount of social and environmental benefit much of which is difficult to quantify. Benefits would include:*

- *The reservoir would provide an important recreational amenity in a particularly deprived area of South East Hampshire*
- *It will provide a significant contribution to the PUSH Green Infrastructure Strategy*
- *It will provide a new wetland habitat which will help to overcome the potential loss of nearly inter-tidal habitats from sea level rise, whilst adding to the biodiversity of the site*
- *It will provide a significant educational facility for the local school and college communities*

#### **4.6.2 SECTION 6 – DEMAND FORECASTING AND PER CAPITA CONSUMPTION**

Natural England raises its concerns that the Company's per capita consumption forecast is well above the government aspiration of 130 l/h/d. It recognises that the Environment Agency has presented alternative evidence and it notes that with a relatively small supply/demand deficit forecast, a modest reduction in the demand projection would obviate the need for any reservoir development.

##### ***Portsmouth Water's Comments***

*The Company acknowledges that Natural England raised this issue in its representation on the draft Water Resources Management Plan and this was included in the list set out in the Annex to the Secretary of State's letter of 3 August 2009.*

*The Company believes that it has fully explored the reason for projecting a cautious demand forecast, with a low level of risk, in Sections 1.1 and 1.3 of the Public Hearing Statement. It recognises that its forecasts are not consistent with the Government's aspirations but it sets out its reasons for not currently being able to confidently predict such a significant fall in per capita consumption in Sections 1.11 of the Public Hearing Statement.*

4.6.3 **SECTION 7 – IMPACTS ON WASTEWATER**

Natural England raised the issue of the impacts of the Company's future demand forecasts upon the wastewater system and the resulting discharges to marine and inter-tidal habitats.

***Portsmouth Water's Comments***

*The Company advises the Inspector that this issue briefly mentioned by Natural England in its representation on the draft Water Resources Management Plan although it was not raised in the Annex to the Secretary of State's letter dated 3 August 2009.*

*Whilst the Company recognises the potential for increasing water supply demand to impact upon wastewater inflows to the sewerage system, it has not previously considered this as an issue for its Water Resources Management Plan. The Company also notes that there is no reference raised for consideration of wastewater flows in the Water Resources Management Plan Guidelines.*

4.6.4 **SECTION 8 – GENERAL CONCLUSIONS**

In drawing its general conclusions Natural England makes reference to the issues already covered in detail in the earlier paragraphs.

***Portsmouth Water's Comments***

*The Company considers that its responses to the representations made in response to the detailed representation above provide adequate response to the concluding statements outlined in paragraph 8.*

4.7 **ROWLANDS CASTLE PARISH COUNCIL – 16 MARCH 2010**

Rowlands Castle Parish Council, a member of the Havant Thicket Winter Storage Reservoir Stakeholder Group since its inception in 2004 passes comment on the basis of the Company's data but also raises specific issues regarding traffic and car parking associated with the proposal to construct Havant Thicket Winter Storage Reservoir.

It recognises that such issues are principally a matter for the planning stage of the project.

***Portsmouth Water's Comment***

*The Company advises the Inspector that the Rowlands Castle Parish Council has not previously made representation on the draft Water Resources Management Plan and the issues raised are principally related to the planning elements of one part of the final planning solution selected.*

*The Company are pleased to note that Rowlands Castle Parish Council;*

- consider that the presentation of the Water Resources Management Plan and discussion of plans for the reservoir has been both open and fair,*
- fully support the company plan.*

*The Company are aware that the Parish Council have concerns about the potential impact of increased traffic, associated with the recreational use of the reservoir. Traffic issues are a matter for consideration at the planning application stage.*

*Further traffic surveys were commissioned in 2009, these gathered data on traffic flow and queue lengths at local roundabouts. The additional survey information is being used to inform the Transport Assessment to be submitted with the planning application.*

*To minimise impacts of construction and recreational traffic a new access route has been selected which is close to junction 2 of the A3(M). Provision of this new route will avoid the need for traffic to pass through Leigh Park or Rowlands Castle. The route was selected following consultation with the Stakeholder Group and a public consultation exercise in 2008. A clear majority of respondents (79%) were in favour of the new northern access route.*