

## **Natural England's Summary of Water Resource Management Plans**

### **1.0 Background and Natural England's objectives**

- 1.1 Water Resource Management Plans (WRMPs) define how each water company will meet customer demand over the next 25 years, including tackling growth and dealing with climate change.
- 1.2 The Environment Agency is the licensing authority for abstraction licences and advises Defra on the content of the plans. Natural England has provided responses to the Secretary of State on all the plans for the companies in England. The Welsh plans have yet to be released by the Welsh Assembly Government.
- 1.3 Natural England's role in the consultation process is to ensure that water companies can deliver their statutory obligations for Natura 2000 sites, SSSIs and Biodiversity Action Plans (BAP). Natural England also has an objective under PR09 to promote more sustainable methods for tackling water quality and water resource problems at source through catchment based approaches that deliver multiple objectives, and to promote climate change mitigation and adaptation. We will be looking to where this can be achieved through the WRMPs and included in water company business plans.

### **2.0 Natural England's assessment**

- 2.1 Natural England assessment has focused on the following:
  - Delivery of requirements for the natural environment in relation to protected areas, wider biodiversity and recreation
  - Compliance with the relevant environmental duties under the Habitats and Birds Directive, the Countryside and Rights of Way Act and Biodiversity
  - Water efficiency and demand management measures
  - Longer term sustainability around growth and development, carbon footprint and source protection.
- 2.2 Annex 1 contains a summary of comments for each company plan.

### **3.0 High level messages and issues from the WRMPs**

#### **3.1 Delivery of requirements for the natural environment and compliance with environmental duties**

- 3.1.1 Prior to companies putting together their plans the Environment Agency sent out advice letters to each company with the list of sites in their Restoring Sustainable Abstractions (RSA) programme, only a few of these have specific reductions, as the remainder are still under investigation. The WRMP guidance does not enable companies to plan for future sustainability reductions that are still under investigation, with the result that the plans only include specifically known reductions. Natural England would like to see a 'strategic' figure provided for all potential sustainability reductions by the Environment Agency, this would help company planning over the longer timeframe, particularly as some of the current investigations are likely to lead to specific reductions in future.
- 3.1.2 Most plans include the schemes required to deliver specific reductions for the RSA programme, but there are some schemes missing and there is very little planned implementation of schemes in the South East region; this information is included in detailed responses to each WRMP and company draft business plans.
- 3.1.3 Very few of the plans have fully assessed the environmental impacts of their proposals on the natural environment, nor have they indicated how they will deliver their SSSI duty or wider biodiversity and

landscape duties. None of the plans have been informed by a Habitats Regulations Assessment, and most will require one.

- 3.1.4 Most plans fail to appreciate broader biodiversity objectives. There is a need for wider planning to reduce overall abstraction pressures and deliver objectives such as the Wetland Vision (<http://www.wetlandvision.org.uk/>) a partnership project to restore more extensive areas of wetland at a landscape scale (a UK BAP objective). This will require the water companies to work closely with Natural England to identify sustainable locations for such future wetlands, taking future water availability into account; an issue in particular in the water stressed areas of Eastern and Southern England.
- 3.1.5 Some plans would benefit from being aligned with other plans such as management plans for AONBs and National Parks, particularly Northumbrian, United Utilities, Wessex and Bournemouth & West Hampshire.
- 3.1.6 South West appears to be the only the plan that has assessed the impacts on water-based recreation.

## **3.2 Water efficiency and demand management**

- 3.2.1 Some company plans have very strong metering campaigns, particularly all companies in the South East region (except Portsmouth), plus Cambridge, Anglian, South West and Tendring Hundred. Others could do much better on metering, particularly Severn Trent, whose limited metering campaign appears inconsistent with their Strategic Direction Statement.
- 3.2.2 Over the 25 year planning period, whilst many companies are predicting a trend that slowly reduces their average per capita consumption (PCC), many are still high and all are predicting an average PCC higher than 130 litres/person/day by 2030. This is at odds with the Government's own Water Strategy *Future Water* (whose vision includes average PCC of 130 or 120 l/p/d) demonstrating a real need for companies to get to grips with water efficiency and measures to tackle demand management.
- 3.2.3 Water efficiency and demand management proposals feature very strongly in all company plans in the water-stressed South East region. However, closer scrutiny of the plans reveals that the allowance for demand savings is small and there is scope for most companies to deliver much greater demand savings.

## **3.3 Longer term sustainability**

- 3.3.1 The plans demonstrate mixed awareness and response to the issues around population growth and development. In particular we consider that South West and United Utilities have not included these sufficiently in their planning at this stage.
- 3.3.2 There is a lack of collaboration between neighbouring water company resource planning where resources are shared or where deliver better outcomes could be delivered for both the consumer and the environment if resources were shared. This particularly affects: Portsmouth and Southern, Severn Trent and South Staffordshire.
- 3.3.3 Only two plans appear to propose a reduction in carbon footprint and greenhouse gas emissions. Most plans propose an increase in greenhouse gas emissions in the longer term; this is also at odds with the Government's Water Strategy, *Future Water*. There is a real need for company plans to ensure the full range of alternative sustainable measures that will reduce future carbon footprint and greenhouse gas emissions have been explored and incorporated into their planning, including a greater emphasis on demand management and source protection.

## Annex 1 – Summary of Natural England’s comments for each Water Resource Management Plan

### Water and Sewerage Companies (WaSC)

Water Company	Comments
<b>Anglian &amp; Hartlepool</b>	The plan has a welcome metering rate (90%) based on consumption assumptions with reducing average PCC, but it could be more ambitious on demand management given the water stresses in the area. A broader approach is needed to tackle RSA, N2K, SSSI and wider BAP with a clear strategy for reducing overall abstraction pressures on wetlands. All RSA schemes are included, but there is no information on wider SSSI and BAP duty. HRA is required on specific proposals. The SEA was very difficult to link to the actual WRMP.
<b>Northumbrian &amp; Essex &amp; Suffolk</b>	Overall: Plan very weak on analysis of environmental impacts for both company areas. No SEA was undertaken despite our recommendations (and those of EA) to do so. NW: Limited information provided to fully assess impacts on SSSIs and BAP. No information provided on BAP enhancement, but there could be opportunities through catchment based proposals and further opportunities would be available to use the plan to align with the emerging management plans for the Northumbrian National Park and 2 AONBs in the North East region. It is unclear how they will reduce GHG. No reference made to the North East Strategy for the Environment, which recognises the importance of the regions’ water resources and the need for their protection, sustainable use and management. Average PCC remains the same throughout the life of the plan. E&S: Limited information to assess impacts on N2K and SSSIs. The plan needs more ambitious targets for demand management and needs a broader approach for tackling unsustainable abstraction and wider BAP. More detailed advice has been provided from the EA on RSA which the company have yet to take into account. Average PCC aims to slowly reduce but still at 150l/p/d.
<b>Severn Trent</b>	Some potential designated sites, N2K and BAP issues where more detail will be needed on potential impacts. Significantly more could be done for BAP. The RSA programme is included but there are some outstanding investigations which will need to be factored in. It is unclear how the company has worked with South Staffs Water on the groundwater zone overlap area. The plan aims to reduce leakage in the short term, but will then allow it to rise, there is limited metering which is restricted to certain areas; this is inconsistent with the SDS. There are problems with nitrates, but no catchment schemes proposed (nb: some mention in draft business plan). Average PCC aims to slowly reduce to 135l/p/d.
<b>Southern</b>	The plan does not address impacts on N2K and SSSIs and excludes the River Itchen sustainability reductions. The SEA has focused on damage limitation to BAP, with no consideration for enhancement or restoration and no allowance has been given to future sustainability reductions that are currently under investigation (but the WRMP guidance prevents this). The SEA recognises landscape impacts, but has not assessed them. The SEA only considers the impacts of new resources and has not assessed current impacts, which is a significant issue for the River Itchen and other RoC work. The plan needs to be joined up with Portsmouth Water. The plan has very good demand management proposals, aggressive metering strategy and leakage below ELL. The plan assumes a demand increase countered by demand management measures resulting in a high average PCC. GHG set to rise.
<b>South West</b>	Lack of information to understand impacts on designated sites, N2K and BAP. The list of feasible options includes a high level screen, but inadequate assessment of negative impacts. Ambitious targets for metering, but could do more on leakage, and average PCC proposed around 150 l/p/d. No HRA, but sites affected are listed. Duties on SSSI, landscape, BAP are considered but not fully assessed – and there could be impacts on East Devon AONB. Plan doesn’t take full account of RSS proposed increases in growth. Company are developing a range of catchment proposals and keen to take these forward.
<b>Thames</b>	The results of RoC are not available to inform the plan and sustainability reductions will be needed in some areas, eg: The Kennet and Lambourn. No HRA, some assessment of SSSIs, but no allowance made for outcome of the BAP AMP4 investigations and any possible sustainability reductions that may be needed as a result. The SEA recognises the landscape impacts around the proposed Upper Thames Reservoir – subject to further EIA. There is a strong focus on demand management through leakage reduction and water efficiency. Despite growth issues the plan assumes that demand will not rise significantly. There are proposals to reduce leakage below ELL, metering at 80% by 2020 and these will be supported by a water efficiency strategy for customers. Average PCC rising trend above 160 l/p/d. The plan proposes a small net reduction in carbon. No mention of catchment management, but real potential for tackling nitrates and pesticides (nb: some mention in draft business plan).
<b>United Utilities</b>	Insufficient information to assess the impacts on designated sites, N2K and BAP, and some inconsistency of information. SSSIs are not mentioned. BAP and landscape are mentioned, but limited on how the plan will protect and enhance these features. The plan does not refer to the fact that large amounts of water are currently abstracted from SSSI and N2K rivers and lakes, and that many are within the Lake District National Park. This is a missed opportunity to increase public awareness and gain support for demand management. The plan does not appear to maximise demand management options, and is focused on enhancing supply. Leakage reduction is less than stated in their SDS and unclear alignment with RSS. Average PCC is slowly reducing to below 140l/p/d.
<b>Welsh Water</b>	Not released by Welsh Assembly Government.

<b>Wessex</b>	The preferred option is an integrated water supply grid, but it is not clear whether this will be sufficiently robust to deliver the favourable condition requirements of SSSIs in the area. The grid could deliver wider BAP and landscape objectives, but the supporting SEA is very generic, there is no HRA and it is not easy to understand impacts on N2K or SSSI. The alternative WR plan proposal also involves uncertainties for designated sites and BAP. The plan has a welcome emphasis on water efficiency, including tariff trials. Average PCC is heading in the right direction with a decline to below 140l/p/d. The plan could usefully explore water neutrality for growth areas identified in the RSS. The plan does not fully address issues around tackling raw water quality from source; the preferred options are mainly for blending with a very unclear message on the role of catchment management. The plan does not show any meaningful carbon reduction.
<b>Yorkshire</b>	Lack of information on proposed increases in abstraction making it difficult to assess impacts on designated sites, N2K and BAP. No HRA, no information on compliance with SSSI duty, no reference to BAP duty. Effects on landscape are considered but inadequate mitigation proposed. New homes will be low PCC, but average remaining above 140l/p/d.

### Water-Only Companies (WoC)

<b>Water Company</b>	<b>Comments</b>
<b>Bournemouth &amp; West Hants</b>	Impact on environment and landscape appears neutral. The company focus is on demand management, rather than new supplies. However, there may be issues if demand changes and so final plan will need a better assessment of N2K, SSSIs, BAP and landscape – including the New Forest National Park. Average PCC remaining high, along with increasing GHG. More effort could go into tackling raw water problems at source, which could include wider BAP objectives.
<b>Bristol</b>	Limited information to fully assess impacts on designated sites, N2K, BAP and landscape; however most of the preferred options appear to have a neutral affect on the environment. There is heavy focus on supply rather than demand management & water efficiency. Average PCC is set to remain above 160l/p/d. The plan also needs a better focus on raw water quality at source to develop catchment schemes – rather than increasing spending on water treatment and increasing GHG. No SSSI/BAP enhancement proposed, but there are opportunities around proposals at Chew Valley Lake, Cheddar Reservoir and Blagdon Lake. The extension of Cheddar reservoir has not been fully assessed against designated sites, landscape and BAP.
<b>Cholderton</b>	Plan is proposing to increase supply with average PCC remaining high up to 180 l/p/d through increasing abstraction and no use of demand management measures. No assessment has been made on this impact on designated sites, N2K and BAP. There is a nitrates issue which could be tackled through a catchment scheme, which could then deliver wider multiple benefits. Metering is limited to 35% by 2035, GHG are proposed to rise, and there may be issues associated with infrastructure to support import of bulk supply from neighbouring company. The company propose to offset impacts with tree planting, whilst very worthy, much more could be done to reduce demand management, increase water efficiency and increase use of renewable energy.
<b>Dee Valley</b>	Not released by Welsh Assembly Government.
<b>Cambridge</b>	Plan is accompanied by an environmental report which identifies key issues which we agree with. The plan includes current RSA reductions but needs to include possible future ones identified by the EA and these will need more assessment, particularly HRA. Metering proposed at 88%, with average PCC reducing but still above 140l/p/d. Plan needs to be more ambitious with demand management because of the stresses in the area, and needs to acknowledge delivery of wider SSSI and BAP duties.
<b>Folkestone &amp; Dover</b>	The final plan will need amending to take account of RoC outcomes at Dungeness. The plan does not have an HRA, there are potential impacts on SSSIs and BAP and no plans to tackle water resource issues on these. However, the plan is a leading example to other companies in the South East region on demand management. There are proposals for 96% metering by 2012, an average PCC target around 134 l/p/d, introduction of socially responsible tariffs and reduction in overall demand, despite significant growth. The plan is proposing a reduction in carbon footprint and GHG. The plan is unclear about issues around raw water quality and there is the potential to develop catchment-based schemes with the company.
<b>Portsmouth</b>	The plan has tried to integrate RoC, although no HRA, and recognises the uncertainty around Southern Water's plan. This plan needs to be integrated with Southern Water because of the joint reliance on the River Itchen. Most SSSIs impacts have been captured and some BAP benefits mentioned, but wider issues and enhancements not considered. The SEA also recognises landscape impacts. Leakage is set below ELL, with compulsory metering expected by 2035 – way behind other companies in the South East region, with a rising demand and average PCC rising to above 170 l/p/d. The levels of service in this plan, particularly around hosepipe bans, are much higher than other companies in the South East and should be revised to reflect the water stresses in the area to promote better water efficiency and demand management with customers. The plan identifies groundwater risk from nitrates which will require a catchment solution.
<b>South East</b>	Limited assessment of designated sites impacts, N2K and BAP. The proposal for Broad Oak reservoir is likely to have a significant effect on SSSIs, including direct loss of SSSI. No allowance has been made in the plan for future sustainability reductions that will be likely for BAP requirements. The plan proposes reducing leakage below ELL, 90% metering by 2020, an average PCC for new housing at 130 l/p/d, but assumes that demand will rise higher than other companies in the South East region to an average of over 170l/p/d. Water efficiency programme is weak and customer research placed great importance on tackling this, therefore needs to be better and the company ought to consider sharing solutions with neighbouring companies. GHG set to rise.

<b>Water Company</b>	<b>Comments</b>
<b>South Staffs</b>	The options in the plan have not been fully assessed against environmental impacts (designated sites, N2K and BAP). The plan assumes no further sources of water are required, but does include unconstrained and feasible options in relation to future sensitivity scenarios, where an HRA would then be required. Company is not aiming to reduce overall impact on the environment in relation to designated sites and wider biodiversity. But in the longer term the company will need to consider further reductions. Whilst the RSA programme has been included, the company do need to have a long term plan for reducing abstraction in current stressed areas as indicated in the CAMS and some sites are still under investigation. The metering programme could be better; the plan is not looking to reduce leakage below ELL, average PCC slowly reducing but remaining above 140 l/p/d, there is some uncertainty over future housing provision. Water efficiency planning is driven by the need to reduce carbon emissions and this is the only plan looking to make carbon reductions in line with Government targets.
<b>Sutton &amp; East Surrey</b>	Limited assessment of designated sites impacts, no HRA and no mention of BAP enhancement, although not expected to be risks to SSSIs. The plan proposes reducing leakage below ELL, with full metering by 2035, large scale tariff trials and average PCC for new housing at 125 l/p/d. But demand is set to rise and average PCC expected to rise above 180l/p/d. GHG to rise. The plan identifies a risk to supply from pesticides and we would support a catchment based approach to tackling this.
<b>Tendring Hundred</b>	Unclear on exact nature and location of sources of new water and impacts on designated sites, N2K and BAP. No HRA, or SEA. Strong metering campaign – 90% by 2015, but average PCC assumed to rise to above 140 l/p/d. There is no clear strategy for reducing overall abstraction pressures on wetland habitats.
<b>Three Valleys</b>	Some assessment of designated sites impacts, N2K and SSSIs, but no allowance made for any sustainability reductions on BAP where studies are currently underway to understand the impacts. No major designated sites issues, but recognised widespread problem of low flows affecting non designated rivers. There is a legacy of overabstraction in a high demand area and the new resource proposals are likely to generate further problems and the SEA understates these impacts. The plan proposes leakage below ELL, but does not take account of wider sustainability benefits of reducing leakage further in highly water stressed areas. Metering is proposed at 90% by 2020, average PPC reducing slowly from current high but still above 160 l/p/d by 2035. The plan forecasts a rise in demand which is unsustainable, but is focused on trying to manage demand and making better use of existing resource, rather than new supplies, a much greater emphasis on demand management is needed to drive down PCC. The plan identifies the risk from nitrates and pesticides in the catchment, which would benefit from catchment management.

## **Glossary:**

AONB	Area of Outstanding Natural Beauty
BAP	Biodiversity Action Plan
ELL	Economic level of leakage
CAMS	Environment Agency Catchment Abstraction Management Strategy
EIA	Environmental Impact Assessment
GHG	Greenhouse gas emissions
HRA	Habitats Regulations Assessment
N2K	Natura 2000 site
PCC	Per Capita Consumption - measured in litres/person/day
RSS	Regional Spatial Strategy
RoC	Environment Agency Review of Consents
SSSI	Site of Special Scientific Interest
SEA	Strategic Environmental Assessment
RSA	Environment Agency Restoring Sustainable Abstractions data
AMP4	Water company Asset Management Plans approved in 2004 for the period 2005-2010
SDS	Water company Strategic Direction Statement
WRMP	Water Resource Management Plan