



# South Wiltshire Core Strategy

**Topic Paper 18:**

***Water Management***

July 2009

**WILTSHIRE COUNCIL**

**LOCAL DEVELOPMENT FRAMEWORK**

**TOPIC PAPER 18**

**WATER MANAGEMENT**

**APRIL 2009**

**WILTSHIRE COUNCIL  
LOCAL DEVELOPMENT FRAMEWORK  
TOPIC PAPER 18  
WATER MANAGEMENT**

**APRIL 2009**

---

**CONTENTS**

- 1. Introduction**
- 2. Natura 2000 sites and Habitats Regulations Assessment**
- 3. The River Avon SAC**
- 4. The HRA of the South West Regional Spatial Strategy**
- 5. Water Abstraction**
  - 5.1. Background
  - 5.2. Water resources and the draft RSS
  - 5.3. Water resources, the Panel report and the Secretary of States changes
  - 5.4. The review of consents and the water resource management plan
  - 5.5. The core strategy approach to water abstraction
- 6. Water Quality**
  - 6.1. Water Quality and the River Avon SAC
  - 6.2. Water Quality and the RSS
  - 6.3. The core strategy approach to water quality
- 7. Changes as a result of Sustainability Appraisal, Strategic Environmental Assessment, Habitats Regulations Assessment and editing refinement**
  - 7.1. The nature of the suggested changes
  - 7.2. Suggested changes: water efficiency
  - 7.3. Suggested changes: water quality
  - 7.4. Suggested changes: editing
  - 7.5. The Revised Policy

## 1. Introduction

- 1.1. The South Wiltshire Landscape is also characterised by streams which cut through the underlying chalk geology. The aquatic environment is made up of five main chalk river systems which include the Avon, Nadder, Wylye, Borune and Ebbles. Collectively these form the River Avon Special area of Conservation (SAC) which is an international designation. The chalk river system supports a wide variety of fish and invertebrates and the SAC designation affords protection to the habitat in its entirety.
- 1.2. This topic paper deals specifically with the issues of water supply and quality within the SAC and how these might be impacted by the planned growth.
- 1.3. The topic paper collates evidence from various sources including the Environment Agency, Wessex Water and Natural England (NE). The approach to Flood risk within south Wiltshire is dealt with separately in topic paper 6 and is not therefore covered in this paper.

## 2. Natura 2000 sites and Habitats Regulations Assessment

- 2.1. In order to attempt to tackle the decline in European biodiversity, important sites for nature conservation in countries across Europe are afforded protection under the Habitats Directive and the Birds Directive. These Directives have established a network of European protected sites which include Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). SPA's are designated under the Birds Directive in order to protect rare, vulnerable and migratory birds while SACs are designated under the Habitats Directive and promote the protection of flora, fauna and habitats. Combined, SPA's and SAC's create the Europe-wide 'Natura 2000' (N2K) network of European sites and provide a refuge for wildlife.
- 2.2. The UK Government transposed the European directives in UK law by way of the *Conservation (Natural Habitats) Regulations 1994*<sup>1</sup>. The UK Government also affords Ramsar sites, the same level of protection as N2K sites. Ramsar sites are designated in order to protect wetland habitats which are important areas for migratory birds. Following a European Court of Justice ruling, the habitats regulations were amended to clarify that the habitats regulations apply to development plans. The amendments to the habitats regulations were published in 2007<sup>2</sup>.

---

<sup>1</sup> Conservation (Natural Habitats) Regulations 1994 [www.opsi.gov.uk/si/si1994/uksi\\_19942716\\_en\\_1.htm](http://www.opsi.gov.uk/si/si1994/uksi_19942716_en_1.htm)

<sup>2</sup> Conservation (Natural Habitats) (Amendment) Regulations 2007  
[www.opsi.gov.uk/si/si2007/pdf/uksi\\_20071843\\_en.pdf](http://www.opsi.gov.uk/si/si2007/pdf/uksi_20071843_en.pdf)

- 2.3.** Following the 2007 amendments, the Habitats Regulations require Local Development Framework (LDF) documents to be assessed in order to determine whether either, alone, or in combination with other plans or policies, there will be a likely significant effect on one or more N2K site. This process is known as the Habitats Regulations Assessment (HRA).
- 2.4.** Each N2K site has one or more ‘qualifying features’ which are the reason for designation and can include individual species or habitat types. For each of the qualifying features there are environmental factors that maintain the qualifying features in ‘favourable condition’. Collectively, the favourable conditions for each feature maintain the sites integrity. The favourable conditions can be varied for both species and habitats and include such things as water and air quality, population size and species mix amongst others.
- 2.5.** The favourable conditions can be used as a mechanism for quantifying the impact that a plan or policy might have on a N2K site. Simply put, if a given policy or proposal has a negative effect on a favourable condition then it is likely to be having a negative effect on one or more qualifying features. Depending on the significance of this impact, the policy or proposal needs to be altered to include mitigation measures to avoid or reduce the effects.
- 2.6.** The HRA process is designed to assess these impacts and is split into 3 distinct stages which are summarised in the table below.

| <b>Stage</b>                              | <b>Task</b>   | <b>Outcome</b>  |
|---|---|---|
| <b>Stage 1:</b><br>Screening              | Describe the Plan<br><br>Identification of potential effects on N2k sites<br><br>Assessing the effects on N2K sites | Where effects are unlikely, no further action is required and ‘finding of no significant effect report’ is prepared. Where effects are likely or there is a lack of information to prove otherwise, proceed to stage 2. |
| <b>Stage 2:</b><br>Appropriate Assessment | Impact prediction of the plan<br><br>Evaluate conservation objectives.<br><br>Where impacts are                     | Appropriate assessment describing the plan, N2K baseline conditions, the adverse effects of the plan on the N2K site and how these will be avoided or mitigated.  |

|   |   |   |
|---|---|---|
|   | <p>considered to affect a qualifying feature, identify and assess alternative options.</p> <p>If no alternatives exist, define and evaluate mitigation measures</p> | <p>If effects remain after all alternatives and mitigation measures have been considered, proceed to stage three.</p> |
| <p><b>Stage 3:</b><br/>Assessment where no alternatives exist</p> | <p>Identify imperative reasons of overriding public interest (IROPI)</p> <p>Identify potential compensatory measures</p>  | <p>This stage should be avoided.</p>  |

**Table 1: Stages in HRA (adapted from SW Regional Spatial Strategy)**

2.7. The early stages of the HRA process should ensure potential effects are eliminated through suitable changes to the plan. The IROPI are likely to be justified only in a very limited number of cases and will require engagement with the Government and European Commission.

### 3. The River Avon SAC

3.1. The primary qualifying feature and reason for designation of the River Avon SAC is the extensive lowland chalk river habitat it provides. Other qualifying features include plant species (stream and river water-crowfoot), fish (sea lamprey, Atlantic Salmon) and molluscs (Desmoulin's whorl snail).

3.2. Water quality and the flow of the river Avon are two of the most important favourable conditions. The rate of flow can have a major effect on the river habitat and its ability to support the qualifying features. The rate of flow maintains such things the velocity, water depth, oxygen levels, turbidity and temperature. In turn, the right combination of these factors is critical in maintaining the qualifying features in a favourable condition. Equally, water quality is critical in maintaining favourable conditions for the qualifying features. Factors such as of pH and the right balance of dissolved oxygen, copper and zinc and phosphate are all important in maintaining the river and the species it supports in a favourable condition.

3.3. A more comprehensive description of the qualifying features and the favourable conditions for the River Avon SAC is contained within Appendix 2 of the South Wiltshire core Strategy HRA<sup>3</sup>.

<sup>3</sup> South Wiltshire Core Strategy HRA: Appendix 2 [www.salisbury.gov.uk/planning/forward-planning/local-development-framework/preferred-options.htm#po-further](http://www.salisbury.gov.uk/planning/forward-planning/local-development-framework/preferred-options.htm#po-further)

## **4. The HRA of the South West Regional Spatial Strategy**

- 4.1.** The latest iteration of the South West Regional Spatial Strategy (RSS) includes the Secretary of State's Proposed Changes to the original draft document. These changes to the RSS require the provision of approximately 592,800 new homes to be provided in the region over the 2006-2026 plan period. Within the Salisbury housing market area (South Wiltshire) the RSS requires the provision of enough land to accommodate 12,400 dwellings and 13,900 Jobs over the plan period.
- 4.2.** The South West RSS has been subject to a HRA<sup>4</sup> which considers the potential impact of the strategy on the numerous N2K sites within the region. The South West HRA has highlighted water abstraction and water pollution as being the two key issues affecting the River Avon SAC
- 4.3.** The increased levels of development over the plan RSS period are likely to result in higher demand for water for both domestic and commercial use. Likewise, the increased growth will have an impact on water quality through increased nutrient loading from sewerage treatment works. As mentioned above, both water quality and water flow are critical in maintaining the River Avon SAC in favourable condition.
- 4.4.** In respect of these two issues, the SW HRA was unable to conclude that the Proposed Changes would have 'no adverse effect' on the integrity of the River Avon SAC. This is primarily due to lack of information regarding the significance of effects relating to water abstraction and water quality and the increase in housing to be provided. Both of these issues are summarised in separately in sections 5 and 6 of this document.

## **5. Water Abstraction**

### **5.1. Background**

- 5.1.1.** Groundwater and surface water (reservoirs and rivers) sources are used to supply both domestic and commercial water needs. Due to variations in the availability of water and changes in average rainfall, a public water supply network ensures a security of supply. The public supply system relies on a network of canals, rivers and pipelines to move water around from where it is available to where it is needed.

---

<sup>4</sup> SW RSS HRA Final Report [www.gosw.limehouse.co.uk/portal/regional\\_strategies/drss?pointId=109242](http://www.gosw.limehouse.co.uk/portal/regional_strategies/drss?pointId=109242)

5.1.2. The planning of for the public water supply system is based of 'water resource zones'. These zones are the areas within which all water resources are interconnected and can be shared. Those living and working within a water resource zone experience the same level of risk of supply failure. The Salisbury SSCT falls within the 'Wessex East' Water resource zone and is operated by Wessex Water. This resource zones is dominated by the River Avon SAC and public water supply is drawn from ground water sources. It should be noted that the Wessex East water resource zone straddles the boundary between the south west and south east regions.

5.1.3. As already mentioned the demand for water can have an effect on the flow in the Avon which in turn can have an effect on the integrity of the River Avon SAC. A system of licensing by the Environment Agency (EA) ensures that minimum river flows are protected during dry periods when consumer demand is highest. Water companies produce water resource plans which set out how they deliver a secure supply while being economically, socially and environmentally sound. Licence conditions are set that protect the Avon as they develop new sources or upgrade existing infrastructure to meet growing demand.

## **5.2. Water resources and the draft RSS**

5.2.1. In order inform the production of the RSS, the Environment Agency undertook a study<sup>5</sup> which reviewed the impact of the forecasted RSS growth on public water supplies. The study was based on water resource zones and explored the potential consequences of increased growth in the region. This was done by investigating scenarios of 10%, 25% and 50% above Regional Planning Guidance (RPG10) targets of 20,200 dwellings per annum between 1996 and 2016.

5.2.2. The study also forecast the likely effect on supply of different water efficiency scenarios, these being no saving, 8% and 21% water efficiency. For the purposes of the study, homes were assumed to become more water efficient through the installation of 6 litre flush toilets and efficient taps for both 8% and 21%. Additional measures such as water efficient white goods and showers were assumed for the 21% efficiency scenario.

5.2.3. This study culminated in the production of surplus/deficit maps which indicate where and when shortfalls would arise. In terms of

---

<sup>5</sup> Environment Agency (March 2005) Regional Spatial Strategy: South West (RSS10) Housing Growth and Water Supply in the South West of England 2005 to 2030.

the Wessex East zone, the study concluded that the modelled levels of growth would not result in deficits of water supply.

5.2.4. Following refinements to the housing projections by the Regional Assembly, the EA re ran their modelling work using the same methodology as the March 2005 study. The updated modelling work<sup>6</sup> included greater precision over the allocation of growth within each local authority boundary and the relationship between this the Water Resource Zones. As with the previous modelling work, the forecast levels of growth do not trigger water deficits in the Wessex East resource zone.

5.2.5. As the RSS went through its next iteration, further assessment of the supply and demand for water was undertaken by the EA. A further study carried out in March 2007<sup>7</sup> forecast the impact of total growth within the South West Region as being approximately 26,500 dwellings per annum. As with the January 2006 study, this study attempted to allocated development to each local authority area and forecast different water efficiency scenarios. The findings of this study concluded that 26,500 dwellings could be incorporated within the region without detriment to water supply. This was on the understanding that new dwellings would be built with water efficiency savings of 21% and that planned improvements by water companies are carried out. Specifically in Salisbury the study found that the Wessex East water resource zones would a surplus.

5.2.6. As well as setting levels of growth across the region, the draft RSS contained a policy (policy G) which would have required all new development to built to level 3 of the Code for Sustainable Homes (CfSH) and larger development to be built to code level 5. The CfSH is a way of measuring and quantifying the sustainability of new development which can be rated between 1 (low) to 6 (high)<sup>8</sup>. The CfSH levels are gained by achieving criteria set across nine categories of sustainable design which includes minimum standards for water efficiency. The higher the code rating, the more water efficient the building needed to be.

5.2.7. At the examination in public (EiP) of the draft RSS the EA made representation to the Panel that *'Sufficient water is available within*

---

<sup>6</sup> Environment Agency (January 2006) Regional Spatial Strategy: South West Housing Growth and Water Supply in the South West of England 2005 to 2030. Supplementary Report 1

<sup>7</sup> ENTEC (March 2007) Public water supply modelling for the draft South West RSS Housing growth figures (Technical note for the Environment Agency.

<sup>8</sup> DCLG (Feb 2008) The Code for Sustainable Homes Setting the standard in sustainability for new homes <http://www.communities.gov.uk/documents/planningandbuilding/pdf/codesustainhomesstandard.pdf>

*Salisbury provided the RSS overall secures higher standards of water efficiency in new homes<sup>9</sup>.*

### **5.3. Water resources, the Panel report and the Secretary of States changes**

- 5.3.1. The outcome of the EiP was the 'panel report' which was published in 2007<sup>10</sup>. The Panel recommended numerous changes to the draft RSS including an increase in the level of growth proposed across the south west region from 26,500 pa to 28,500 pa. Within South Wiltshire the panel report recommended that growth over the plan period should increase from the 9200 included in the draft RSS to 12400.
- 5.3.2. The impact of these proposals on water supply was tested by the EA and the results summarised in a short report in March 2008<sup>11</sup>. This revised assessment also took into account the revised geographic distribution at the district scale. The results of this iteration of the study again showed that the levels of development in Salisbury proposed by the panel could be accommodated provided that policy G is implemented.
- 5.3.3. The panels recommendations were submitted to the Secretary of State (SoS) who published there alterations to the RSS in July 2008. The SoS changes to the include the provision of 29,603 dwellings per annum. Although the overall level of development across the region increased, the level of growth in South Wiltshire remained the same as the panel recommendation (i.e 12400). Whilst the level of development proposed by the SoS remained the same in south Wiltshire and only marginally higher in the rest of the region, the water efficiency standards are less stringent.
- 5.3.4. The changes to Policy G are explained in detail within the 2<sup>nd</sup> Addenda to topic paper 1 which accompanies the submission draft of the South Wiltshire core strategy<sup>12</sup>. Essentially the changes to policy G bring the policy back into alignment with the national position on the CfSH and the phased improvements to the building regulations. The phased improvements to the building regulations mean that, as of 2010, new dwellings will be built to a standard equivalent CfSH Level 3, with further improvements in 2013 and 2016.

---

<sup>9</sup> Environment Agency Response to SW RSS EiP Matter 4/11 Salisbury HMA sub-regional strategy

<sup>10</sup> South West EiP Draft RSS for the South West Panel Report (December 2007)

<sup>11</sup> Environment Agency (March 2008) Water Supply and Housing Growth in the South West of England. RSS Panel Report December 2007

<sup>12</sup> Wiltshire Council (2009) Topic Paper 1 Addenda 2: Climate Change

5.3.5. As evidenced above, the recommendations from the EA with respect to water supply advised that growth could be accommodated, but that water efficiency needed to be implemented. The HRA of the proposed changes to the RSS was unable to conclude 'no significant effects' at three separate N2K sites, one of which was the River Avon SAC. This was principally due to the alterations to policy G which will not now ensure that new development includes high water efficiency standards. A further contributing factor is the impact that existing abstraction licenses are having on the integrity of the River Avon SAC.

5.3.6. HRA of the proposed changes recommends that, if policy G is altered to remove the minimum requirements of the CfSH, the RSS should be made flexible enough to react to local circumstances relating to water supply. These alterations are included within the revised policy G and its supporting text. The alterations ensure that water supply is listed as an example of local circumstances which could warrant more stringent water efficiency measures being applied at the local level.

5.3.7. The supporting text to policy RE6, which relates to water abstraction, has been altered to allow local circumstances to be considered. This policy specifically names the River Avon SAC, as a site which is sensitive to increased levels of water demand.

#### **5.4. The review of consents and the water resource management plan**

5.4.1. Alongside the EA's water supply modelling work being used to inform the RSS, the EA have also been undertaking a review of consents (RoC).

5.4.2. The RoC looks at the impact of the current abstraction licenses on the integrity of the River Avon SAC. The review does not take into account future demand or water efficiency. Further details of the review of consents is available in the final report but essentially the licence for abstraction will be reduced by 23.5Ml/d. This reduction is necessary as the review of consents has concluded that current licensed abstraction levels are having an impact on the integrity of the River Avon SAC. It should be noted however, that in many cases the licensed amount is more than what is actually taken abstracted.

5.4.3. This reduction in abstraction licence is taken into consideration by Wessex Water in their Water Resource Management Plan (WRMP) which is currently in draft format<sup>13</sup>. The WRMP covers a 25 year

---

<sup>13</sup> Wessex Water (2008) Draft Water Resource Management Plan ([www.wessexwater.co.uk/water-and-sewerage/threecol.aspx?id=578](http://www.wessexwater.co.uk/water-and-sewerage/threecol.aspx?id=578))

period (2010 to 2035) and sets out how Wessex Water will balance population growth, housing developments, changing patterns of household and commercial water use to ensure water supply while at the same time protecting the environment. The WRMP has highlighted that there will be deficiencies in supply following the reduction in consents proposed by the EA but also proposes a strategy to deal with this issue. The WRMP is discussed further in Topic Paper 17- Infrastructure but suggests that a more integrated water supply grid will enable demand to be met even with the license reductions.

5.4.4. The EA comments<sup>14</sup> on the SoS proposed changes to the RSS state that the accompanying HRA of the proposed alterations to the RSS is 'unnecessarily cautious'. The HRA arrived at this conclusion due to the fact that the EA's initial advice was based on the draft RSS figures (9400) rather than those proposed (12400). However the EA draw attention to the fact that those abstraction licenses which have been shown to have an impact on the River Avon SAC are due to be modified as detailed in the WRMP. The modelling that has informed review of consents and WRMP has determined that a safe level of abstraction can be achieved. This is the case even in a worst case supply/demand scenario where licenses are utilised to their limits and in combination. The EA conclude that this leaves enough contingency even considering the difference between the Draft RSS figures and proposed changes.

## **5.5. The core strategy approach to water abstraction**

5.5.1. As mentioned above, the proposed RSS has been altered to remove the stringent regionally applied water efficiency standards but enables LPA's to impose tougher local standards where these are deemed necessary.

5.5.2. The council held two meetings in order to investigate the situation, and secure an acceptable way forward for the core strategy<sup>15 16</sup>. At these meetings that EA confirmed that, there was no strong case for water efficiency standards to be imposed at the local level. This mainly due to the environmental benefits arising from the reduction in licensed abstractions and the improvements contained within Wessex Water's WRMP.

5.5.3. The improvements proposed by Wessex Water to deal with the cut in abstraction licences (namely the completion of the 'grid') form a

---

<sup>14</sup> Environment Agency (October 2008) Proposed Changes- Regional Spatial Strategy South West

<sup>15</sup> Water Summit I Minutes (5 February 2009)

<sup>16</sup> Water Summit II Minutes (26 March 2009)

major part of their Asset management Plan (AMP4). This sets out Wessex Water's 5 year investment plan. This needs to be submitted for approval by the water industry regulator (OfWAT). There is a possibility that OfWAT do not approve funding for some or all of the improvements in the in the AMP4. If this were the case improvements to water efficiency would be more of an issue. With this being this being the case, it is proposed that the core strategy include a policy relating to water efficiency as a precautionary measure until such time as the AMP4 has been approved.

5.5.4. That the level of water efficiency proposed during the EA's early modelling work was equivalent to Level 3 of the CfSH. However, this level of efficiency is due to be implemented national though improvements to the building regulations in 2010. However,

5.5.5. Due to the diverse nature of non residential development, there is no universal standard for water consumption. It is recognised that there is a financial incentive for businesses to implement water efficiency measures.

5.5.6. The approach agreed upon at the meetings for the core strategy was to include a policy within the core strategy will require new residential development to be built to a water efficiency standard equivalent to CfSH Level 3.

**Core Policy 15 - Water Efficiency and the River Avon Special Area of Conservation**

In order to protect the River Avon SAC, all new residential development will be required to incorporate water efficiency measures to a minimum standard equivalent to Level 3 of the 'Code for Sustainable Homes'.

Non residential development will be required to incorporate water energy efficiency measures in their developments. Developers will be expected to submit details of how water efficiency has been taken into account during the design of proposal.

5.5.7. This policy will need to be reviewed once a decision has been reached by OfWAT on the AMP4. The policy will also need to be reviewed once the alterations to the building regulations have been made. Although these have been committed to, they are not actually in place at the time of writing; the inclusion of the policy is a precautionary approach.

## **6. Water Quality**

### **6.1. Water Quality and the River Avon SAC**

6.1.1. As well as issues related to water abstraction, the HRA of the proposed modifications has also raised the issue of water quality. The principle concern is the level of phosphate (P) discharged into river.

6.1.2. The amount of phosphate (and other chemicals) discharged into watercourses has an impact on water quality which in turn can have a detrimental impact on biodiversity. Excess levels of P can cause phytoplankton to reproduce rapidly and creating 'algal blooms' in the water. These in turn can use up the available oxygen in the water which can disrupt other organisms within the water course. This process is called 'eutrophication'.

6.1.3. The principle source of phosphates in the environment is agricultural fertilisers can end up in surface. However, other sources of phosphates include detergents and those used for specialist industrial uses, all of which generally end up at sewage treatment works.

6.1.4. The management of phosphates from agricultural land is beyond the control of spatial planning and will need to be dealt with by other agencies. The Environment Agency sets restrictions on nutrient loads which can be discharged by water companies from sewage treatment works (STW). Phosphate is removed by a process known as 'Phosphate Stripping' which requires the sewage to be dosed with a product which precipitates the P out of solution.

6.1.5. The agreed P level target for the River Avon SAC is 60mg/l and is a measure of favourable condition. This target has been agreed by both the EA and NE and is embedded in the favourable condition table for the River Avon. However it is exceeded across most of the SAC length.

6.1.6. Contributions to phosphate levels in the river from point source (eg STW) and diffuse sources are roughly equal.

### **6.2. Water Quality and the RSS**

6.2.1. The RoC carried out by the EA confirms that the Wessex Water, has invested heavily in achieving the restrictions which limit nutrient loads in discharges.

- 6.2.2. Through the RoC the EA require each STW to remove their proportional contribution to phosphate load in the river. The long term improvements at STW sought by the EA have been secured as part of the AMP4 and are expected to be delivered by March 2010. However, the improvements at Salisbury STW do not remove the problem despite delivering a significant reduction in P discharge. Despite this, the EA has concluded, as part of the RoC HRA, that there are no adverse effects on the integrity of the SAC. This is because over all, the Wessex Water improvements remove their proportional contribution by over 90%.
- 6.2.3. Alongside the RoC EA carried out a review of waste water treatment and disposal issues within the main settlements<sup>17</sup> to help inform the draft RSS. This first report was based on the assumption that there would be an increase in sewage flow of 25%.
- 6.2.4. In this report the EA express concern about P levels from STW around Salisbury. This is related to the fact that the current level of treatment at Salisbury is at 'best available technology' (BAT) and further reductions in P levels will therefore be problematic.
- 6.2.5. Following the EiP, the EA revisited their earlier advice to take account of the Panels proposed increase in housing numbers (from 9200 to 12400). This new report<sup>18</sup>, still highlights Salisbury as an area of concern because some STW have headroom within the tight discharge limits already set, others are already operating close to the limits.
- 6.2.6. The EA's conclusion in relation to the RSS growth is that future growth can be accommodated within the limits set out in the RoC and that the water quality situation in the SAC is made 'no worse'.
- 6.2.7. Despite the EA's position, NE advises<sup>19</sup> that the P target required to reach favourable condition is still exceeded even with the reduction in P discharge from STW. Natural England's view is that it is not possible to conclude 'no adverse effect on site integrity' due to the in combination effect with other sources of P within the catchment.
- 6.2.8. In light of the advice received from the both NE and EA, the HRA of the proposed changes to the RSS has concluded that there would be a significant effect on the River Avon SAC. The supporting text to

---

<sup>17</sup> Environment Agency (February 2006) Regional Spatial Strategy South West (RSS10) Waste Water Treatment and Disposal: A summary of the environmental issues affecting the main settlements.

<sup>18</sup> Environment Agency (March 2008) Housing Growth and Waste Water Treatment Observations from the Environment Agency.

<sup>19</sup> Natural England (March 2009) Natural England Advise- South Wiltshire Core Strategy Habitats Regulations Assessment

RSS policy RE6 and HMA11 was amended following recommendations in the HRA.

6.2.9. The alterations to policy RE6 and HMA11 highlights the potential impact of future development could have on abstraction and water quality at various N2K sites. The reworded text paves the way for LPA's to introduce innovated water management policies following discussion with NE, the EA and water companies.

### **6.3. The core strategy approach to water quality**

6.3.1. As mentioned in section 5.5 above, a series of meetings have been held between the EA, Wiltshire Council and the EA. These discussions aimed to agree an approach to water quality that would be acceptable to all parties and are documented in the minutes.

6.3.2. As evidenced from the minutes, the approach agreed upon is to produce an integrated Phosphate Management Plan (PMP). This will ensure that there is a focus on continued ecological improvement within the river Avon SAC. The PMP will include a more detailed study of other sources of P in the River Avon SAC such as those from septic tanks. The terms of reference for this PMP are still being discussed by the main competent authorities. However there is agreement that the production of this plan and its implementation will be sufficient for South Wiltshire Core Strategy HRA to conclude 'no significant effects'.

6.3.3. In order to ensure that the PMP has sufficient status, the following policy has been developed for inclusion in the core strategy.

#### **Core Policy 16 - Managing Phosphate Levels in Watercourses**

All strategic developments identified in the Core Strategy will be required, by means of financial contribution to a Management Plan, to ensure that their development will not cause detriment to watercourses through the unmitigated addition of phosphates.

## **7. Changes as a result of Sustainability Appraisal, Strategic Environmental Assessment, Habitats Regulations Assessment and editing refinement**

### **7.1. The nature of the suggested changes**

7.1.1. The draft core strategy and the initial policy text shown above were subjected to a sustainability appraisal (SA) and also appraisal under the Habitats Regulations, Strategic Environmental Assessment

Regulations. These appraisals produced a number of recommendations for how to improve and strengthen the policy

7.1.2. At the same time as the SA, SEA and HRA assessment of the core strategy, the initial draft was subjected to editing to ensure that central and regional policy are not repeated and to take account of recommendations for Government Office of the South West (GOSW). These editing changes resulted in numerous structural changes to the document and also the removal of a number of policies.

## **7.2. Suggested changes: water efficiency**

7.2.1. The SA/SEA scores the water efficiency policy highly against the environmental sustainability criteria. It recognises that there will be an additional cost incurred by house builders but concludes that these will not be significant and would themselves contribute to savings in running costs. The SA/SEA report has concluded that policy 15 should remain unaltered.

7.2.2. The HRA of the core strategy concludes that there will be no adverse effect on the River Avon SAC. The HRA has not recommended any change to the policy. However, attention is drawn in the report to the fact that, following changes to the building regulations, the policy may be superseded.

## **7.3. Suggested changes: water quality**

7.3.1. As with the water efficiency policy, the SA/ SEA concludes that the policy performs well against the environmental sustainability criteria. The reports conclusion of the recommends that the wording of the policy is altered to allow for alternative means of avoiding and mitigating impact on the River Avon.

7.3.2. The HRA has suggested that the wording of this policy is altered to include the words 'such as 'before 'by means of financial contribution'. This rewording will allow developers the option of addressing mitigation through other means, particularly until a PMP is completed.

## **7.4. Suggested changes: editing**

7.4.1. Although the wording of policies 15 and 16 above did not alter significantly, the structural changes in the document resulted in the policy numbering being changed. Policy 15 (water efficiency) became policy 22 while policy 16 (managing phosphates) became policy 23.

## **7.5. The Revised Policy**

- 7.5.1. The wording of the water efficiency policy will remain unaltered while the phosphate management policy will be revised in light of the SA/SEA/HRA for inclusion in the submission draft....

### **Core Policy - Managing Phosphate Levels in Watercourses**

All strategic developments identified in the Core Strategy will be required, such as, by means of financial contribution to a Management Plan, to ensure that their development will not cause detriment to watercourses through the unmitigated addition of phosphates.