

Herefordshire Water Steering Group
Water Resources Report
03 February 2012

1. Introduction

- 1.1 This report seeks to provide a position statement by Herefordshire Water Steering Group concerning water resource availability with regard to proposed growth as set out in Herefordshire Council's preferred options Core Strategy. The report sets out the methodology and conclusions whether there are any likely significant effects upon protected Natura 2000 sites as a result of water resource availability, particularly the River Wye Special Area of Conservation (which includes the River Lugg from Hampton Court Bridge).
- 1.2 The Core Strategy needs to be deliverable while remaining compliant with the Habitat Regulations. In order to achieve this, it is necessary to identify that sufficient water resources are available for the proposed growth and that increased abstractions would not detrimentally impact the River Wye SAC.
- 1.3 Water resource is concerned with sufficient water being available to meet the growth demands during the plan period. Water supply is concerned with the delivery of the available water resources to the end user. Water supply tackles issues regarding infrastructure requirements potentially based on hydraulic modelling. Water supply is reliant upon site specific constraints and opportunities. The Core Strategy sets out broad locations of growth and is not site specific and accordingly detailed water supply issues will be examined within site specific development plan documents or at application stage.
- 1.4 Information set out in this report is based on a series of background documentation and Water Steering Group meetings.
 - Herefordshire Council's Outline Water Cycle Study (September 2008)
 - Herefordshire Council's interim Habitat Regulations Assessment
 - Herefordshire Council's iterative Water Report
 - Minutes from Herefordshire's Water Steering Group

2. Background

- 2.1 In January 2009 Dwr Cymru Welsh Water (DCWW) published their draft Water Resource Management Plan (dWRMP) outlining how water resources and supply were to be managed over a 25 year supply.
- 2.2 During the production of the dWRMP the Environment Agency Wales were undertaking their Habitats Review of Consents (RoC). The RoC imposed sustainability reductions on DCWW. However, following an internal review at EA, further undertakings were required on the RoC and due to this DCWW withdrew their dWRMP in order to await the outcome.
- 2.3 Due to this delay it is unlikely that an adopted Water Resource Management Plan would be adopted prior to the submission, examination and adoption of Herefordshire Council's Core Strategy. Accordingly Herefordshire Council

had the responsibility to identify and progress an alternative method of ensuring sufficient water resources were available to meet the increased in demand without detrimental impacts upon Natura 2000 sites.

- 2.4 At the first Water Steering Group meeting (21 April 2011), NE stated that they were in agreement with EA regarding water resource and supply sustainability targets used during the Habitat Regulations Review of Consents. EA believed that the evidence base and original work on the RoC had not identified any necessary reductions within Herefordshire to ensure habitats compliance. As a result of this first meeting it was agreed that the following stages would ensure that there were sufficient water resources and that there would be no detrimental impact upon water sensitive European Sites.
- Stage 1: Reassurance from DCWW that, based on RoC sustainability reductions and up-to-date information, there is sufficient water resources to meet increase demand without impacting on European Sites.
 - Stage 2: Confirmation from NE that EA RoC sustainability reductions meet with conservation objectives.
 - Stage 3: Inclusion within policy wording requiring the review of housing numbers if it is demonstrated that water resources are not available.
 - Stage 4: Development is phased to avoid impacts on water resources.
 - Stage 5: High level water efficiency targets are included in the Core Strategy.

3. Reassurance from DCWW (Stage 1)

- 3.1 Following the Water Steering Group meeting, Herefordshire Council contacted DCWW Water Resource department to clarify DCWW's position regarding water resources (email sent 01 June 2011). This request for information was answered at the second Water Steering Group meeting (14 July 2011) where DCWW confirmed that there are sufficient water resources to meet the increases in demand throughout their operating area and detailed the key differences between water supply and water resource availability.
- 3.2 From the information provided by to DCWW and the subsequent discussions at the WSG meetings, Herefordshire Council are satisfied that DCWW have sufficient resources to meet increase demand. As stated in paragraph 1.3 the resultant need for infrastructure requirements can only be examined on a site specific level.
- 3.3 Further to this DCWW published their draft water resource management plan and accompanying Habitat Regulations Assessment (31 October 2011) which was subject to a 12 week consultation process. While the results of this consultation have yet to be published, the draft documentation states that there are sufficient water resources to meet demand during the plan period. The HRA also incorporates the sustainability reductions of the Review of Consents. Accordingly the HRA concludes no likely significant effects on any water resource sensitive European Site. Furthermore the Water Resource Management Plan is subject to regular review to account for any changes experienced during the plan period. Herefordshire Council will liaise with

DCWW on this matter to ensure that there are no detrimental impacts on growth within Herefordshire. Should such an impact arise, Herefordshire Council will report this through the Annual Monitoring Report process and thus initiating a review of policy.

- 3.4 Appendix A contains the summary sheets from DCWW's draft Water Resource Management Plan for all water resource zones in Herefordshire.

4. NE and EA agreement (Stage 2)

- 4.1 During the first WSG meeting it was stated that NE are in agreement with EA RoC sustainability targets (WSG meeting 21 April 2011 minutes, page 6). Accordingly confirmation was required from EA that the RoC does not impact upon water abstraction licences in Herefordshire.
- 4.2 Confirmation has been provided by EA that based on up-to-date information; the current position of the RoC is unlikely to have significant detrimental impacts upon DCWW's water abstraction licences in Herefordshire (WSG meeting 14 July 2011).

5. Work undertaken by Herefordshire Council (Stages 3, 4, 5)

Draft Core Strategy Housing numbers:

- 5.1 Herefordshire Council's autumn 2010 Core Strategy preferred options document incorporated the housing requirements as set out in the West Midlands Regional Spatial Strategy phase 2 revision. This revision is unlikely to be adopted with the Localism Act 2011 revoking the Regional Strategies.
- 5.2 Herefordshire Council's undertook public consultation on a revised preferred options Core Strategy from September – November 2011. However, a driving factor behind the revised housing figures was based on comments received during the 2010 preferred options consultation. Queries were raised regarding the deliverability and potential environmental impact of the proposed growth. Outlined below is a comparison breakdown between the 2010 and 2011 housing growth preferred options.

Core Strategy plan period 2006 – 2026		Core Strategy revised plan period 2011 – 2031	
Settlement	Housing growth	Settlement	Housing growth
Hereford	8500	Hereford	6500
Leominster	2500	Leominster	2300
Ledbury	800	Ledbury	800
Kington	200	Kington	200
Ross-on-Wye	1000	Ross-on-Wye	900
Bromyard	500	Bromyard	500
Rural Areas	4500	Rural Areas	5300
Total	18000	Total	16500

- 5.3 Correspondence with DCWW regarding water resource availability was based on the original preferred options figures. DCWW confirmed that there were sufficient resources available but site specific issues would need to be examined. This will be done in site specific development plan documents and

/ or planning applications. As the housing figures have been reduced, it is felt that comments received from DCWW are still applicable.

Mitigation:

- 5.4 While an element of uncertainty remains, albeit only minor (paragraph 4.3), it is necessary for Herefordshire Council to include sufficient mitigation techniques to ensure no detrimental impacts upon the River Wye SAC from abstraction.
- 5.5 While it is recognised that there is an increase in development allocated to the rural areas, policies relating to specific growth state that growth is subject to local environmental constraints. These constraints would any potential impacts on Natura 2000 sites. Specific rural sites will be identified in future site specific development plan documents which themselves will be subject to HRA as a matter of law.
- 5.6 Notwithstanding the above, the draft Core Strategy contains policies covering Design and Sustainable Water Management which sets out the need for water conservation and efficiency in all developments. .

Sustainable Design:

- 5.7 The Core Strategy policy states that developments are expected to incorporate Government design guidance particularly Code for Sustainable Homes (CfSH) and BREEAM standards or subsequent targets. These targets involve decreasing water consumption in future developments.

Sustainable Water Management:

- 5.8 A single policy was proposed within the preferred options Core Strategy covering sustainable water management putting an onus on development proposals to demonstrate sufficient infrastructure requirements.
- 5.9 Following consultation and discussions with members of Herefordshire Water Steering Group a second policy has been added which expands upon the principles of the single policy with greater reference to for development proposals to demonstrate no detrimental impact to water quality.
- 5.10 Accordingly sufficient protection is contained within the Core Strategy to ensure that housing development will not be delivered in places where there would be any detriment to water availability and/or resultant impact upon Natura 2000 site.
- 5.11 Alongside the above, the Infrastructure Delivery Plan for the Core Strategy sets out a phased approach to development. While EA's RoC has identified no water resource issues through imposing reduced extraction licences, Herefordshire Council will set out the timeframe for which development will be delivered. This timetabling for development, alongside the general policies covering water resources, will ensure that resultant development does not cause detrimental impacts to water reliant Natura 2000 sites.
- 5.12 Alongside the above, the regular review proposed within DCWW's Water Resource Management Plan (paragraph 3.3) will highlight any unforeseen changes to the content of the document. Accordingly through liaising with

DCWW, Herefordshire Council will be able identify and undertaken necessary amendments to policies as required.

6. Conclusions

- 6.1 Dwy Cymru Welsh Water has confirmed that there are sufficient water resources within their administrative control to meet the growth demands of Herefordshire Council's Core Strategy (stage 1).
- 6.2 EA and NE are in agreement regarding sustainability targets relating to water resource. EA has confirmed that it is particularly unlikely that the RoC will have implications on water abstraction licences in Herefordshire (stage 2). Details of precise water supply issues can and will be examined at site specific levels. Continual monitoring of Core Strategy policies through the Annual Monitoring Report process and liaising with DCWW will allow for a responsive plan making system should alterations be required (stage 3).
- 6.3 Notwithstanding the changes to the housing growth (stage 4) during the Core Strategy plan period, Herefordshire Council has included general policies within the Core Strategy that are to guide the structure of future developments (stage 5). Three of the general policies are of specific benefit to water resource availability. These policies ensure that new developments incorporate measures of water efficiency and conservation within their design which will address Natura 2000 protection at a site specific level.
- 6.4 The five stages required under option 2 have been achieved. Under emerging government legislation (Localism Act 2011), an onus remains on Local Planning Authorities to continually monitor the impact and delivery of planning policies. Accordingly should the position regarding water resource availability alter (e.g. as a result of the publication of DCWW Water Resource Management Plan) then Herefordshire Council will be able to proactively mitigate the impacts.

Appendix A

Welsh Water
dWRMP - consultation doc.
31 Oct 2011 - 23 Jan 2012

8111 Whitbourne

The WRZ is located in east Herefordshire adjacent to the Worcestershire border and supplies the rural towns and villages in the area surrounding Bromyard. The supply is from a single abstraction from the River Teme at Whitbourne some 20 km upstream of the Teme confluence with the River Severn.



Operationally it is possible for limited support to be provided from Broomy Hill WTW through network adjustment. As such, there is small internal import of water from the Hereford WRZ. There are no exports of water.

PR04 Status

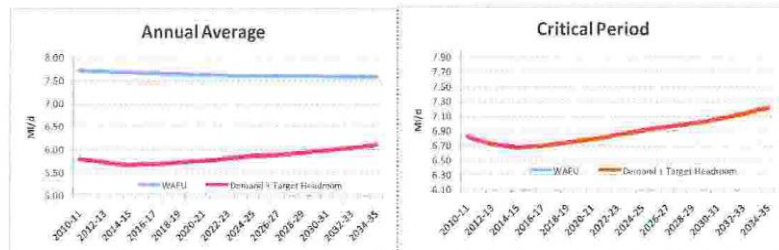
This zone was in deficit to a maximum of 0.1 Ml/d. To resolve this, a combination of leakage and pressure reduction and water efficiency schemes for non-household customers was implemented with a total capital expenditure of £0.2 million. Network reconfiguration has resolved future deficits within Whitbourne by enabling an increased transfer from Hereford CUS.

2008 Draft Plan Status

This zone was in surplus under the Annual Average planning scenario whilst under the Critical Period planning scenario supply is equal to demand.

Current Status

The Annual Average planning scenario is in surplus throughout the planning period, whilst under the Critical Period planning scenario supply is equal to demand as a result of the transfer from the Hereford CUS. The maximum surplus under the Annual Average scenario is 2.01 Ml/d in 2014/15.



Zonal Level of Service

>1 in 33 years

Final Planning Solution

No schemes required.

8105 Llyswen

The WRZ covers the small rural communities in and around Hay-on-Wye.

A single source supplies this WRZ and is based on an abstraction from the River Wye at Llyswen.

There are no exports or imports of water for Llyswen.



PR04 Status

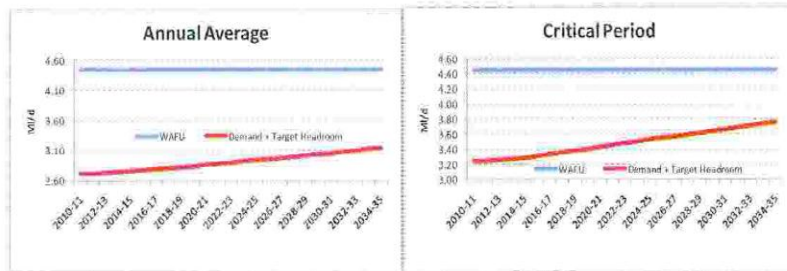
This zone was in surplus.

2008 Draft Plan Status

This zone was in surplus.

Current Status

Both the Annual Average and Critical Period planning scenarios are in surplus throughout the planning period. The maximum surplus under the Annual Average scenario is 1.74 MI/d in 2011/12 and 1.20 MI/d under the Critical Period scenario in 2011/12.



Zonal Level of Service

>1 in 33 years

Final Planning Solution

No schemes required.

8101 Ross on Wye

As the name suggests, this WRZ covers the small area and hamlets surrounding the market town of Ross-on-Wye.

The WRZ is supplied in its entirety by the Bulk Supply of potable water from Severn Trent Water's (STW) Mitcheldean WTW. Our existing Alton Court Borehole has been withdrawn from routine supply and is preserved as a standby source in the event of a drought.



The raw water for Mitcheldean WTW is abstracted from the River Wye at Lydbrook. Whilst the licence is held by STW, the licence conditions specify that 9 MI/d supplies the Ross-on-Wye WRZ. Should the Ross-on-Wye demand be less than 9 MI/d the licence conditions preclude STW from using the balance within their own Lower Severn resource WRZ.

There is an internal import of water from the Hereford WRZ. There are no exports of water.

PR04 Status

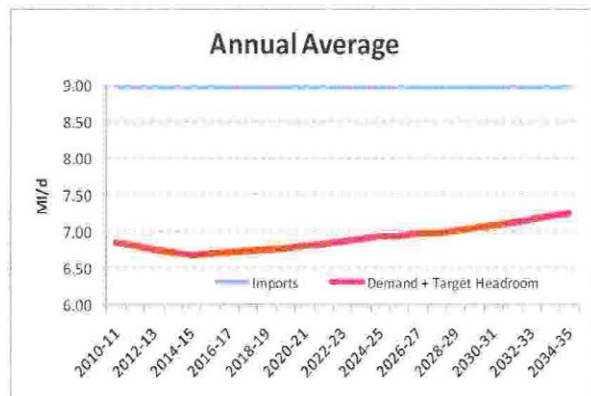
This zone was in surplus.

2008 Draft Plan Status

This zone was in surplus.

Current Status

Only the Annual Average planning scenario is reported for this WRZ and it is in surplus throughout the whole planning period, reaching a maximum of 2.32 MI/d in 2014/15.



Zonal Level of Service

>1 in 33 years

Final Planning Solution

No schemes required.

8107 Pilleth

This WRZ supplies the small rural area surrounding Presteigne. The WRZ also extends into the adjacent catchment of the River Teme and serves Knighton. Around 7500 people are supplied in total.

The WRZ is supplied from a single source of four boreholes located in the gravel aquifer adjacent to the upper River Lugg at Pilleth. Industrial usage in Presteigne is a disproportionately large component of demand in this WRZ and we supply a number of large industrial users of water.



There are no exports or imports of water for Pilleth.

PR04 Status

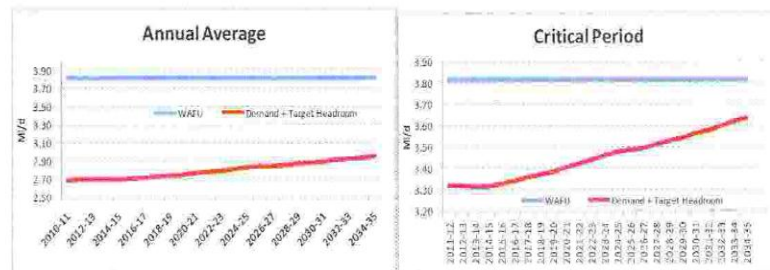
This zone was in surplus.

2008 Draft Plan Status

This zone was in surplus.

Current Status

Both the Annual Average and Critical Period planning scenarios are in surplus throughout the planning period. The maximum surplus under the Annual Average scenario is 1.12 MI/d in 2014/15 and 0.50 MI/d under the Critical Period scenario in 2014/15.



Zonal Level of Service

>1 in 33 years

Final Planning Solution

No schemes required.

8110 Vowchurch

This WRZ covers the small rural area south of Hay On Wye supplying approximately 6200 people.

The WRZ is supplied by four boreholes that abstract from the gravel aquifer adjacent to the River Dore at Vowchurch. The River Dore is a tributary of the Monnow that in turn is a tributary of the River Wye.



Welsh Water has invested significantly in Vowchurch, identified previously as a deficit zone, to reduce leakage and promote water efficiency. Additionally network developments in the Hereford WRZ have extended the customer supply area of that zone, significantly reducing customer demand in Vowchurch.

There is a small internal import of water from the Hereford WRZ. There are no exports of water.

PR04 Status

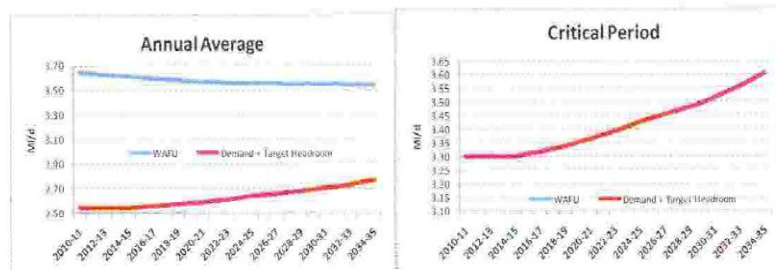
This zone was in deficit to a maximum of 0.2 Ml/d. To resolve this, a combination of leakage and pressure reduction and water efficiency schemes for non-household customers was implemented with a total capital expenditure of £0.2 million.

2008 Draft Plan Status

The Annual Average planning scenario was in surplus however, the Critical period planning scenario was in deficit throughout the planning period. To resolve this a scheme to upsize a trunk main from our Hereford zone was selected. Welsh Water early started and completed the installation of the new main sections in late 2008 to enable the transfer of water from our Hereford zone.

Current Status

The Annual Average planning scenario is in surplus throughout the planning period, whilst under the Critical Period planning scenario supply is equal to demand as a result of the 2008 Draft Plan infrastructure scheme to transfer water in from Hereford. The maximum surplus under the Annual Average scenario is 1.09 Ml/d in 2011/12.



Zonal Level of Service

>1 in 33 years

Final Planning Solution

No schemes required.

8103 Hereford Conjunctive Use System

As the name suggests, this WRZ covers the city of Hereford and the surrounding area and rural villages as far north as Leintwardine.

The supply is dominated by an abstraction from the River Wye at Hereford which feeds Broomy Hill WTW. The Dunfield boreholes and Leintwardine borehole serve small local areas of the WRZ. There is an abstraction from the River Lugg at Byton which is currently not used; however, it is retained for potential emergency use.



There are small internal exports of water from the Hereford WRZ to the Ross-On-Wye, Whitbourne and Vowchurch WRZ's. There are no imports of water.

PR04 Status

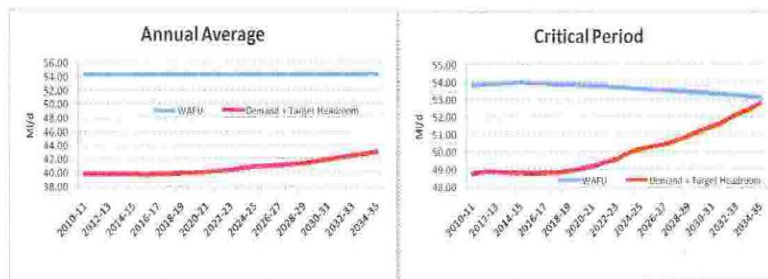
This zone was in surplus.

2008 Draft Plan Status

This zone was in surplus.

Current Status

Both the Annual Average and Critical Period planning scenarios are in surplus throughout the planning period. The maximum surplus under the Annual Average scenario is 14.63 MI/d in 2015/16 and 5.19 MI/d under the Critical Period scenario in 2014/15.



Zonal Level of Service

>1 in 33 years

Final Planning Solution

No schemes required.

