Neighbourhood Planning
Guidance Note 19

Sustainable water management in Herefordshire

April 2013 - Revised August 2015

Herefordshire Council

Water management will be an important issue for many Neighbourhood Development Plans. This will either be due to local flooding, capacity for future water treatment or presence within the River Wye river catchment. This guidance note has been produce to help you understand the issues and how to find the information required.

This guidance note has been produced to provide information to assist the production of your Neighbourhood Development Plan; it includes details regarding flooding, water treatment capacity, water conservation and environmental water quality within the river catchments. It should be noted that situations are likely to change during the production of your Neighbourhood Development Plan therefore regular contact with Herefordshire Council, Environmental Agency and local water companies is advised.

What is sustainable water management?

Sustainable water management means minimising our impact on the healthy functioning of the water cycle. Changes occurring to the climate mean that we are likely to experience an increase in the intensity, severity and frequency of extreme weather events such as droughts, storms and floods, which could dramatically impact on the way we need to manage water. There is a finite capacity within the environment, and it cannot simply provide more and more water as a result of increased consumption rates or overall demand. Equally there is a limit to the amount of waste water that can be safely returned to rivers without having a detrimental effect. These issues are expanded below.

The issues:

- **Site allocations and policies in flood risk areas**

  Changes in rainfall patterns, land management and land use, combined with more frequent occurrence of extreme weather events will present increased flood risk. Although flooding cannot be wholly prevented, its impacts can be avoided or reduced through good planning and land management. The Strategic Flood Risk Assessment 2009 (SFRA) aims to ensure that planning policies and site allocations will not increase the risk of flooding both within the site itself and the surrounding area, and to identify and promote measures that will minimise flood-risk and/or enhance flood resilience.

  Your site selection procedure should take account of any flooding issues within your Neighbourhood Area. These could be fluvial (from watercourses) or surface water, groundwater or sewer flooding. Your criteria should aims to ensure inappropriate development does not take place in areas at high risk of flooding.

  Areas at risk of fluvial flooding are those falling within Flood Zones 2 and 3 as defined on the Environment Agency's website. Environment Agency flood maps can be accessed via their website here.

  Flood Zone 3 refers to land where the indicated annual probability of flooding is 1 in 100 years or less.

  Flood Zone 2 refers to land where the indicated annual probability of flooding is between 1 in 100 years to 1 in 1000 years.

  Flood Zone 1 is the area of low probability of flooding (in excess of 1 in 1000 years) and in line with national and local policies and the 'Sequential Test' should generally be used in preference to land in other zones.

  Where no reasonable sites are available within Flood Zone 1, the 'Exception Test' may be applied where certain forms of development may be permitted in Flood Zones 2 and 3 depending upon their level of vulnerability.

  Further details are identified in Technical Guidance to the National Planning Policy Framework (NPPF) and paragraphs 100-104 of the NPPF.

  Your site search criteria should highlight potential flooding information for each site considered.

  The Environment Agency have produced a proforma entitled 'Herefordshire Council Neighbourhood Plan – Environment Agency Consultation Pro-forma', which is included in appendix 2 and available to download on the Neighbourhood Planning webpages. This should be completed and sent to the Environment Agency to accompany your Reg 14/draft plan consultations. This will able the Environment Agency to provide you with specific comments on potential allocation sites and policies within your draft plan and enable you to address any issues raised prior to submission.

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It should be noted that some watercourses have not been modelled on the Environment Agency maps, these are usually for watercourses with a catchment of less than 3km^2. Further assessment will be required if sites as chosen within or adjacent to unmodelled watercourses and advice should be sought from Herefordshire Council in the first instance.

- **Water Conservation and efficiency**

With respect to water conservation and efficiency of use, the Core Strategy sets out targets for reduced consumption in association with new development, which in turn will result in decrease flow entering the sewer system. This approach will also help to reduce flows entering waste water treatment infrastructure, thereby assisting to manage the level of nutrients in the River Wye Special Area of Conservation (see Policy SD4).

The availability of water resources to meet demand during the plan period has been examined and Dwr Cymru-Welsh Water's Water Resource Management Plan identifies that there are sufficient water resources available to meet demand during this plan period until 2031. Additionally Severn Trent has confirmed that Core Strategy growth has been included within the high level investment programme. Therefore demand for water should not be an issue for your Neighbourhood Plan.

While agricultural water use lies largely outside planning control, it is a significant contributor to the water cycle conditions within Herefordshire. Your Neighbourhood Development Plan could consider the potential for farmers to capture and store surplus water for future use thereby reducing the need to abstract water from other sources, while enhancing biodiversity. However, reservoirs in particular will alter landscapes and habitats on a permanent basis and care on siting and design is essential.

Land management practices can also play a vital role in managing flood risk and water quality at a local level; for example, the creation and restoration of wetlands and woodlands can reduce the level of flooding, and in some cases remove the risk of local flooding altogether. These practices also improve water quality in addition to producing wider environmental benefits, including encouraging an increase in wildlife species and habitats and reducing carbon.

- **River water quality**

The water quality of Herefordshire's main rivers and their tributaries is of strategic importance. High levels of phosphates have been identified as particular problems with concentration levels exceeding targets along part of the rivers. This needs to be addressed during the plan period and will be important to the overall environmental considerations for your Neighbourhood Development Plan.

The Rivers Wye, Lugg, Teme and Clun are Sites of Special Scientific Interest (SSSIs) and furthermore, the River Wye, including part of the River Lugg (downstream from Hampton Court Bridge), part of the River Clun (downstream of Marlow, Shropshire) and Downton Gorge on the River Teme are also designated as Special Areas of Conservation (SACs).

Both levels of designation require efforts to be made to ensure the whole river catchment achieves and then remains resilient in terms of supporting river habitats. Under the Water Framework Directive (WFD) it is imperative that proposals for growth do not adversely affect river water quality, this includes watercourses within the river catchments and associated lakes and ponds. Appendix 1 identifies river sub-catchment areas within Herefordshire.

The Environment Agency has responsibility for water quality and ecological objectives and Natural England has responsibility for ensuring SSSIs and SACs achieve 'favourable condition'. Currently, all parts of the river SSSIs are in unfavourable condition although some are recovering. Therefore consultation with both of these bodies is essential during the preparation of your Neighbourhood Development Plan.

Each Neighbourhood Area will be screened to assess whether a Habitat Regulation Assessment (HRA) is required (further details can be obtained within Guidance Note 9). It is important that any recommendations within the HRA for your Neighbourhood Development Plan are taken into consideration. Neighbourhood Development Plans cannot progress to submission if there is likely to be any significant effects on a European site.

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- **Waste Water environmental capacity (quality of treated effluent)**

Wastewater from most new development within the county will connect to sewage treatment works. Such treatment works are potentially point sources of pollution especially if they are unable to achieve acceptable standards of discharge, either directly or indirectly into rivers. Septic tanks and other activities such as agricultural practices form more diffuse sources of potential pollution.

The county's rivers have a finite capacity to accommodate discharges arising from development before their water quality is adversely affected, and improvements to the management of waste water will be required to ensure both the achievement of the watercourses conservation objectives.

The Environment Agency and Natural England have prepared a Nutrient Management Plan aimed to control and reduce phosphate within the River Wye SAC and in doing so seek to identify actions to enable additional development. The Nutrient Management Plan and associated Action Plan identify the management actions required to achieve the conservation objectives target for phosphate by 2027. High levels of phosphates have been identified as particular problems with concentration levels exceeding targets.

Sections of the River Wye SAC where the water quality targets are already exceeded will be subject to measures to reduce nutrients in line with the targets. New development must not compromise the ability of the Nutrient Management Plan to deliver the necessary overall reductions along these stretches. Your Neighbourhood Development Plan will need to be minded to these measures.

Increases in flows to sewage treatment works lead to increases in nutrients in watercourses, as discharges have set nutrient concentrations. Reducing flows to sewage treatment works can therefore contribute to reducing nutrient levels in the receiving watercourses. The separation of foul and storm water will have similar benefits.

Four of the works assessed however are highlighted as requiring a new permit in order to accommodate further growth. These are located at Kingsland, Luston and Yarpole, Lyonshall and Bosbury. Liaison with the water companies is these areas will be important to ensure that your Neighbourhood Development Plan policies and proposals take account of this requirement. Any development may need to be phased to the later stages of your plan period when solutions can be implemented.

Appendix 3 contains information with regards to the environmental capacity of Waste Water Treatment Works. Those works with identified constraints are indicated in amber or red. If your Neighbourhood Development Plan falls within an area covered by a works indicated as amber or red, then policies or phasing of development will need to be included to demonstrate a solution.

- **Water treatment capacity (network and pipes)**

One issue which is often of concern while developing your Neighbourhood Plan will be the capacity of the water treatment works to accommodate future growth.

Local water companies are responsible for providing and maintaining sewage treatment works at a standard to meet permitted conditions. If works are required then it may be necessary to phase new development within your Neighbourhood Plan. However, there may be an additional requirement for developer contributions or Community Infrastructure Levy funding to make further improvements.

Dwr Cymru/Welsh Water and Severn Trent Capital Investment Programmes are undertaken through a rolling Asset Management Programme (AMP) which seeks to fund large scale utility (water/sewerage/ wastewater treatment works) infrastructure works. Currently AMP 5 is being implemented (2010-2015) and some areas have seen/are seeing investment as part of this.

AMP 6 period will cover April 2015 until March 2020
AMP 7 will cover 2020–2025
AMP 8 will cover 2025–2030
AMP 9 will cover 2030-2035

There following more specific details have been supplies by DCWW:

Market Towns

Dwr Cymru/Welsh Water have indicated that there are no insurmountable constraints over the plan period to 2031 with regard to DCWW infrastructure in any of the market towns.

Bromyard

There are no capacity issues at Bromyard Waste Water Treatment Works to accommodate the growth levels proposed within the Core Strategy. However the existing water supply network would require upsizing. This could be provided through the water requisition provisions of the Water Industry Act 1991 and Section 106 of the Town and Country Planning Act/ the Community Infrastructure Levy.

Kington

There is currently no capacity at the Kington Waste Water Treatment Works. Improvements to the Kington WWTW will form part of DCWWs AMP7 (2020-2025) and development in Kington will need to be phased to the latter part of the plan period.

Ledbury

DCWW does not provide sewerage services to Ledbury (this is undertaken by Severn Trent Water), but does provide the water supply network for which there are no issues in accommodating the growth.

Leominster

Leominster's New Road WWTW is able to accommodate the level of growth proposed. The trunk watermains require upsizing. Delivery can come forward in a timely manner as any potential developers can fund the upgrades through the requisition provisions of the Water Industry Act 1991 and Section 106 of the Town and Country Planning Act/the Community Infrastructure Levy.

Ross-on-Wye

The Lower Cleeve WWTW that serves the town currently has limited capacity. As such a phased delivery of the planned growth during the plan period will be required, with the additional capacity coming forward as part of one of DCWWs future AMP submissions, dependent on the scale and pace of development. The supply of water to Ross-on-Wye is undertaken by Severn Trent Water, but it is understood that there is no issue.

Rural Areas

Many areas of rural Herefordshire have no public Waste Water Treatment Works or indeed exceedingly small assets which only serve that particular settlement. In such instances, even a moderate amount of development can be considered disproportionate to the size of the asset.

Therefore DCWW have indicated that when they are consulted by you at Regulation 14/draft plan stage, they will be able to provide more detailed representation as specific sites and numbers will have been identified. A proforma has been supplied to assist consultation with DCWW and is contained within appendix 4

Whilst DCWW have indicated that there are no insurmountable constraints to the growth proposed in the settlements indicated within the Core Strategy, a number of the smaller Waste Water Treatment Works require improvements in order to accommodate the growth proposed.

Any improvements to these Waste Water Treatment Works would be subject to DCWWs future regulatory investment (AMP7, AMP8 and AMP9), and as such development will need to phased to the latter part of your Neighbourhood Development Plan period in certain villages.

Given the size of some of the Waste Water Treatment Works serving the smaller villages, it may not be feasible to increase the capacity of the Waste water Treatment Works. In these instances, the provision or connection to a package sewage treatment works (discharging to a watercourse or soakaway), or septic tank (discharging to soakaway) can be considered.

Appendix 5 provides information on the current capacity of Waste Water Treatment Works. Those works with identified constraints are indicated in amber or red. If your neighbourhood plan falls within an area covered by an 'amber' or 'red' works, then policies or phasing will need to be included within your plan to demonstrate a solution.

It should be noted that capacity will alter with time and this should be used for indicative purposes only. Use of the two pro-formas provided during consultations with the Environment Agency and Welsh Water will assist obtaining up to date information.

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Appendix 1 - River sub catchments

River Subcatchment Area

Herefordshire Council

NORTH Scale 1: 216,000

Herefordshire Council

Neighbourhood Planning guidance notes available:

Deciding to produce a Neighbourhood Development Plan

1. Which is the right tool for your parish
2. What is a Neighbourhood Development Plan
3. Getting started
4. A guide to procedures
5. Funding

Plan Production

6. Developing a Vision and Objectives
7. Generating options
8. Writing planning policies
9. Environmental Assessment
10. Evidence base and information requirements
11. Implementation and Monitoring
12. Best practice community engagement techniques
13. Statutory consultees
14. Writing a consultation statement
15. Planning and other legislation
16. Web enabling your plan
17. Using OS based mapping
18. Glossary of planning terms

Topics

19. Sustainable Water Management in Herefordshire
20. Guide to settlement boundaries
21. Guide to site assessment and choosing allocation sites
22. Meeting your housing requirements
23. Conservation issues
24. Recreational areas
25. Renewable energy
26. Transport issues
27. Community Infrastructure Levy

Additional Guidance

28. Setting up a steering group
29. Creating a questionnaire
30. Community facilities
31. Conformity with the Local Plan (Core Strategy)
32. Examinations of Neighbourhood Development Plans
33. Guide to Neighbourhood Development Plan Referendums
34. Tourism
35. Basic Conditions
36. Your plan - Contributing to sustainable development