

Protecting the River Avon SAC / SSSI

prepared by the River Avon SAC planning forum



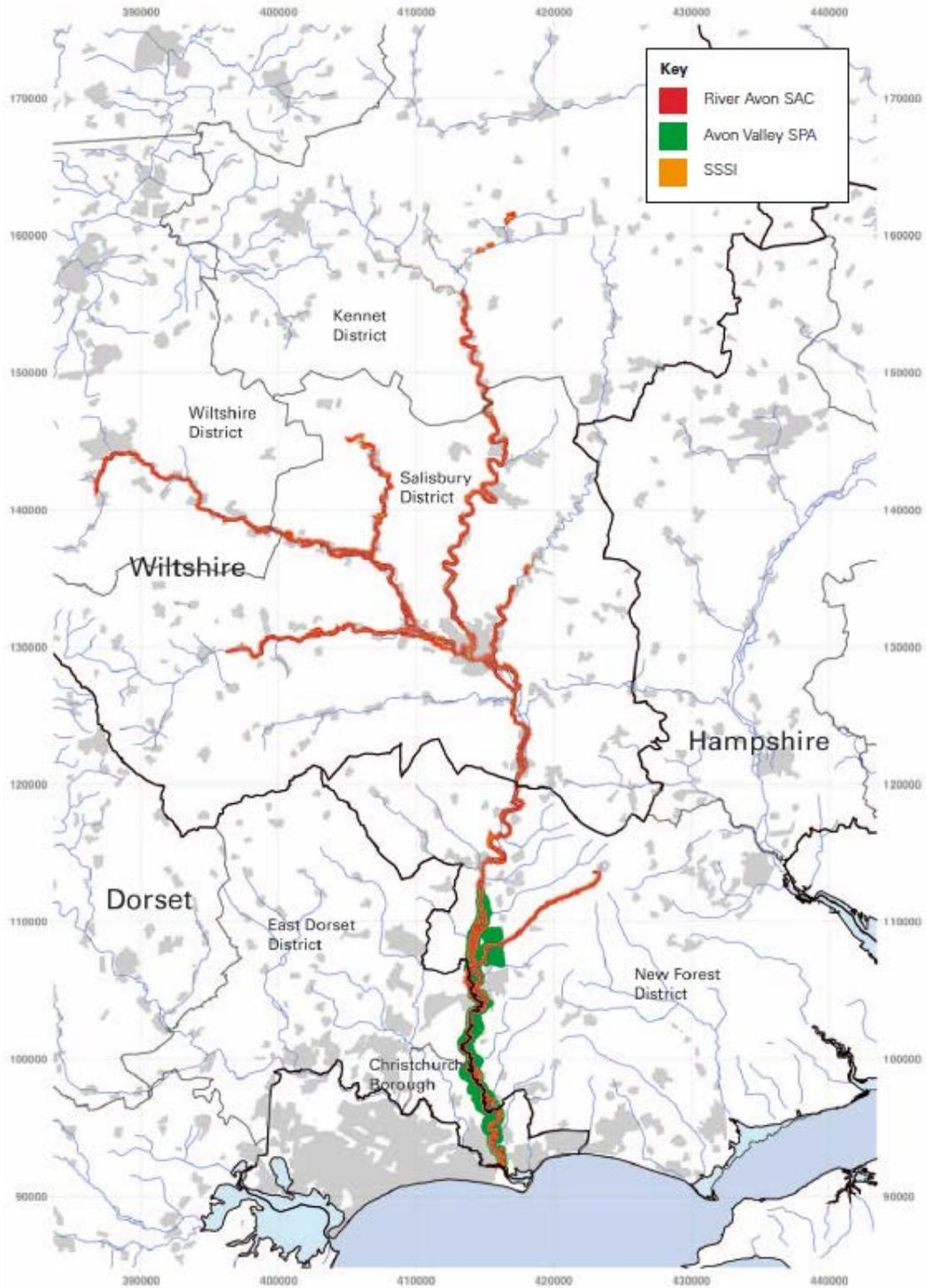
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Extent of statutory designation on the River Avon



Introduction

The beauty and wildlife value of the River Avon and its tributaries means that this site is one of the region's greatest environmental assets. This internationally designated area is afforded a very high level of legal protection, which places significant duties on decision-makers to prevent damage to the rivers and the wildlife communities they support, particularly with respect to development proposals.

It is important for all development to be environmentally sustainable so that we can continue to enjoy our natural environment into the future. We believe that development can occur within the river valleys of the Avon system without detriment to the wildlife interest of the site. Even where potential impacts are identified, they can frequently be addressed through the adoption of relatively simple measures. **Early consultation** and the provision of clear supporting information will allow these measures to be identified, resulting in savings for the applicant in the time and cost of gaining planning permission. Failure to provide sufficient information is likely to result in significant delays or the refusal of any application.



This guidance has been prepared by the River Avon SAC planning forum. It is aimed at individuals and organisations who may wish to undertake developments that could affect the wildlife interests of the Avon.

For additional developers guidance produced by the Environment Agency, see <http://www.environment-agency.gov.uk/business/sectors/32695.aspx> .

Why is the river important?



The River Avon is one of the most diverse chalk streams in the UK, with over 180 species of plants, one of the most diverse fish faunas, and a wide range of aquatic invertebrates. The River Avon is a Site of Special Scientific Interest (SSSI) and therefore forms part of the nation's finest natural heritage. The site is also internationally recognised, and was confirmed as a Special Area of Conservation (SAC) in 2000. The SAC includes a number of rivers and adjacent habitats (as indicated on the map above showing the extent of statutory designations on the River Avon.)

The lower reaches of the Avon Valley are also internationally designated as a Special Protection Area (SPA), for its bird interest. Issues affecting the SPA are not specifically covered in this article. Further consultation is advised in relation to developments in this area.

How can development impact the SAC and its wildlife?



The SAC should be seen in its wider context, particularly as part of the floodplain. It is important to realise that activities which happen some distance from the rivers may damage their ecology and wildlife. The location of a development is therefore often more important than its size.

For example, a single barn conversion some distance from the river with a private waste water treatment system discharging relatively nutrient rich water into the river via a ditch may have greater impact than a larger housing development located closer to the river but on mains sewerage.

The location of the proposed development should therefore be considered in detail to establish whether a pathway to the river system exists, particularly in relation to construction phase impacts. For larger developments, impacts on groundwater may also need to be considered.

Where such a pathway exists, all potential impacts arising from a development need to be considered, both direct and indirect. Guidance on specific hazards and how the risk of them arising may be reduced is provided in the table of potential effects. The hazards identified are:

- Siltation
- Nutrient enrichment
- Toxic contamination
- Physical changes
- Drainage
- Disturbance
- Groundwater flows

Although primarily concerned with development requiring planning permission, these principles could be applied to other works which require building regulations or other permissions such as a Flood Defence Consent from the Environment Agency, consent from Natural England or a felling licence from the Forestry Commission.

Legislation puts a duty of care on landowners to be proactive in the control and eradication of non-native invasive plant species, such as Japanese knotweed and giant hogweed. Parts of these plants and any soil contaminated with them are classified as controlled waste and are legally required to be removed and disposed of by a licensed waste control operator. More information can be found at the Environment Agency website here:

The Water Framework Directive (WFD) has implications associated with the Hampshire Avon. The catchment is sensitive to increased nitrate loading. This causes continued deterioration in quality and an increased need for water treatment, which is a contravention of Annex 7.3 of the WFD Chemical Status and Quantitative Status.

Climate change is set to have various impacts on the built environment. These include increased flood risk, subsidence, storm damage and higher day-time/night-time temperatures. Due care and consideration must be given to development and the SAC to ensure that the impact of these risks is reduced.

Early discussions



Information is required to support most applications. Where a proposal has the potential to affect the SAC, the information requirements are likely to be greater, in line with this guidance note. Failure to provide sufficient information to support your application is likely to result in costly delays in determination and may constitute grounds for refusal.

In order to ensure that the information you are providing is sufficiently comprehensive, early discussions with the local planning authority, (who may also consult Natural England and the Environment Agency) are essential before proposals are finalised. For larger developments which could have water supply and sewage disposal implications, water companies should also be consulted over whether existing infrastructure can accommodate increased demand.

Supporting your application



The table below provides guidance on methods to avoid or mitigate the potentially damaging effects most commonly arising from development. Note that such a table can never be exhaustive and other considerations may be relevant to your proposal. We recommend that the table should be used to ensure that any potential hazards relating to the completed proposal or its construction are addressed, and this information used to support your application. Your application will need to demonstrate clearly how potential impacts are to be avoided. Developments are likely to require a Construction Method Statement (CMS); larger developments may also require a Construction Environmental Management Plan (CeMP) (see box 1). Potential developers may find it advisable to engage the services of a suitably qualified ecologist to assist with the preparation of these documents.

Wherever possible, the developer should consider contributing to the sustainable management of the river corridor. The developer has the opportunity to consider a range of habitat improvements within their plans to benefit wildlife. Sustainable Drainage Systems (SuDS), water recycling and other water saving measures should also be considered to reduce the overall environmental impact of the proposal.

How will this information be used?

The information will be used by the planning authority to undertake a Habitats Regulations Assessment to determine whether the proposal is likely to have a significant effect on the SAC. If so, the planning authority will then undertake an 'Appropriate Assessment' to identify the implications of the proposal for the site and whether sufficient mitigation methods could be designed to remove or significantly reduce the level of impact before any permission is granted. This assessment is required in law.

Where impacts are likely, an Environmental Impact Assessment (EIA) may also be required to be undertaken by the developer. The requirement for EIA is beyond the remit of this guidance and the local planning authority should be contacted for advice on whether an EIA is needed for individual developments.

Table of potential effects

| Hazards | Development activities | Potential effects on the SAC | Information to be submitted in support of the planning application | Further information |
|---|---|--|--|---|
| Siltation (Silt/mud/clay particles are deposited in the water, making it 'muddy'.) | <ul style="list-style-type: none"> • Exposing bare ground • Stockpiles • Discharge of silty water (e.g. pumped from excavations). | Increased siltation can smother the river bed, killing fish eggs and larvae and damaging river plants and habitats. It can also kill adult fish by clogging their gills, It can also lead to nutrient enrichment of the river – see below. | Measures to prevent silt-laden runoff affecting the site may include: <ul style="list-style-type: none"> • seeding and covering stockpiles, • regular brushing of site roads • the provision of a temporary drainage or settlement system | |
| Nutrient enrichment (Water is “fertilized” causing increased plant growth and accumulation of organic matter that can degrade water quality.) | <ul style="list-style-type: none"> • Farming activities – fertilizer run-off • Cemeteries • Wastewater effluent (municipal and industrial) • Runoff and leachate from waste disposal systems • Runoff and infiltration from animal feedlots • Septic tank leachate • Urban run-off • Runoff from construction sites • Untreated sewage | The ecosystem balance is upset, less oxygen is dissolved in the water, toxic algal blooms and bacteria can occur, all of which can kill numerous plant and animal species. | Measures to prevent nutrients entering the SAC may include: <ul style="list-style-type: none"> • remove polluting/high nutrient chemicals before discharge • create riparian buffer zone between development site and watercourse | |
| Toxic contamination (poisonous chemicals enter the river system directly or indirectly) | <ul style="list-style-type: none"> • Stored construction plant • Stored chemicals and materials, including concrete • Use of chemicals around watercourses • Solid/ liquid wastes resulting from bridge maintenance • Contaminated surface water drainage | Pollution of river via surface and groundwater, resulting in death and damage to flora and fauna. | Measures to prevent any toxic contamination may include: <ul style="list-style-type: none"> • sensitive location of laydown areas, plant and machinery, • safe and secure storage of oils and chemicals, • follow best practice for refuelling procedures or other high risk activities • established emergency procedures • appropriate containment systems • incorporation of sustainable site drainage systems (SuDS) into development proposals | EA pollution prevention guidelines: www.environment-agency.gov.uk/business/topics/pollution/39083.aspx Pollution incident telephone hotline (freephone 24hr service) 0800 807060 |
| Physical changes | <ul style="list-style-type: none"> • Works and works traffic close to river banks/in floodplain. • Modification of river banks or beds e.g. retaining walls, laying of pipes across the river bed | Permanent habitat loss or fragmentation of habitat. Temporary damage to bankside or river vegetation could result in loss or disturbance of habitats if poorly timed. | Measures to prevent physical damage may include: <ul style="list-style-type: none"> • Avoid working on the river banks wherever possible • Permanent modification is likely to be problematic therefore look for alternative solutions. • Limit construction areas in floodplain as far as possible. • Provide temporary fencing to restrict access to river banks • Use geotextiles and low ground pressure vehicles to spread weight and prevent any breaking up of ground surface. | |

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|--|--|---|--|---|
| Drainage | <ul style="list-style-type: none"> Reduction in flood storage and interference with flood passage Changes in flow and hydrology Creation of impervious areas e.g. car parks, industrial areas, housing development Land drainage activity Road drainage | <p>Increased flood risk and interference with natural flow.</p> <p>Impervious surfaces may generate large pulses of potentially contaminated runoff, causing flooding and scouring problems. Large impervious areas may also reduce groundwater recharge.</p> | <p>Information to be provided on drainage arrangements may include:</p> <ul style="list-style-type: none"> Produce flood risk assessment Details of design and capacity of proposed surface water drainage system Inclusion of appropriate compensation and mitigation measures Incorporate principles of sustainable drainage systems (SuDS) Maintenance requirements and responsibilities | <p>EA guidance on producing a flood risk assessment: www.environment-agency.gov.uk/research/planning/82584.aspx and www.gov.uk/government/publications/development-and-flood-risk-practice-guide-planning-policy-statement-25</p> |
| Disturbance | <ul style="list-style-type: none"> Temporary construction activity Increased public access to riverside | <p>Disturbance to flora & fauna may affect their distribution, breeding success and ultimately survival.</p> | <p>Measures to prevent disturbance may include:</p> <ul style="list-style-type: none"> Keep noisy plant as far away as possible from the river. Consider timing and use of plant or working methods to minimise noise and vibration, particularly during the fish spawning season 'Buffer' areas by the river to minimise public disturbance | |
| Groundwater flows (Water flowing beneath the surface of the ground) | <ul style="list-style-type: none"> Excavations below the water table e.g tunnelling, gravel extraction, construction of foundations | <p>Groundwater quality may be compromised</p> <p>Changes in groundwater flow may affect flows in different sections of river and result in changes to the habitat</p> | <p>Measures to prevent impact on groundwater quality and quantity may include:</p> <p>Depending on the scale of development a groundwater risk assessment may be necessary. This is likely to require extensive survey.</p> <ul style="list-style-type: none"> Incorporate water efficiency measures | <p>Guidance on how to improve water efficiency: www.environment-agency.gov.uk/homeandleisure/drought/31783.aspx and www.savewatersavemoney.co.uk/</p> |

Your checklist

- Be aware of your environment.
- Engage in early discussions with local planning authorities, Natural England, the Environment Agency and water companies
- Ensure you have all relevant ecological surveys carried out and are aware of any further survey or mitigation work needed to allow development
- Plan to avoid impacts
- Provide sufficiently detailed information to support your application
- Allow for costs and time to undertake the above

Box 1. Construction Method Statements and Construction Environmental Management Plans

Construction Method Statements (CMS) provide details of methods of working to prevent construction impacts. Such details can include construction site locations and boundaries, materials to be used, plant to be used on site, temporary works designs and methods of mitigation to eliminate construction impacts. The important feature of a CMS is the level of detail it contains – it must contain adequate information to provide the reassurance that construction impacts can be controlled.

Construction Environmental Management Plan (CEMP) is usually prepared for larger developments to provide a framework that outlines the general approach to how construction activities will be planned and implemented in accordance with environmental legislation and commitments in the planning application and / or environmental statement. A CEMP should include the following information:

- Roles and responsibilities of project managers and environmental staff to ensure implementation of the CEMP.
- Procedures for training and awareness to ensure all site personnel are aware of their environmental responsibilities.
- A register of environmental commitments and risks. This register should then be used as the basis for an action plan which details the specific actions necessary to comply with all environmental requirements.
- Procedures for checking and corrective action including regular inspections and monitoring, internal audits and reporting.
- Specialist environmental procedures and guidance notes e.g. control of noise and vibration, pollution incident control and reporting.

Box 2 Roles of the Organisations

Local Planning Authorities

Responsible for considering planning applications, local planning authorities provide development control services for minerals and waste and highways projects, housing and employment sites. All local planning authorities have statutory responsibilities to undertake appropriate assessments with respect to developments likely to have a significant effect on a European site and must request an Environmental Impact Assessment where significant effects to the environment are predicted. Local planning authorities consider the advice of Natural England and the Environment Agency when making these decisions. In addition, local authorities have responsibilities to maintain and promote biodiversity, including during provision of public services.

Natural England

Natural England is the government's advisor on the natural environment in England including its landscapes, biodiversity, geology and soils, natural resources, cultural heritage and other features of the built and natural environment. Natural England designates SSSIs and recommends the designation of internationally important sites. It has special responsibility for the conservation and enhancement of sites proposed and designated as SSSI or as internationally important sites such as SACs. Like the Environment Agency, Natural England is a statutory consultee for planning applications which may affect these sites and can recommend to the local authority the refusal of planning permission or the imposition of certain obligations or conditions. Consent from Natural England is also needed where owners of SSSI wish to undertake certain activities about which they have been notified.

Environment Agency

The Environment Agency is the leading public body protecting and improving the environment in England and Wales. It is the Environment Agency's job to make sure that air, land and water are looked after by everyone in today's society, so that tomorrow's generations inherit a cleaner, healthier world. The Environment Agency is a statutory consultee with respect to planning applications that may affect rivers, floodplains or aquifers. Its work also includes tackling flooding and pollution incidents, reducing industry's impacts on the environment, cleaning up rivers, coastal waters and contaminated land, conserving natural resources and improving wildlife habitats.

Contact Links

Natural England - www.naturalengland.org.uk/regions/south_west/

Environment Agency - www.environment-agency.gov.uk/contactus

Hampshire County Council - www.hants.gov.uk

Dorset County Council - www.dorsetforyou.com/county

New Forest District Council - www.nfdc.gov.uk

East Dorset District Council - www.dorsetforyou.com/east

Wessex Water - www.wessexwater.co.uk

Christchurch Borough Council - www.dorsetforyou.com/Christchurch