ENGLISH NATURE

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A guide to developers

Rivers Kennet and Lambourn Sites of Special Scientific Interest

working today
for nature tomorrow

English Nature is the Government agency that champions the conservation of wildlife and geology throughout England.

This is a West Berkshire Council Advice Note in partnership with English Nature and the Environment Agency.

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ENVIRONMENT AGENCY

West Berkshire COUNCIL

Guidance to developers - Rivers Kennet and Lambourn

Introduction

The Rivers Kennet and Lambourn are arguably West Berkshire's greatest landscape, recreation and wildlife assets. Not only are they important locally, both rivers are of national scientific importance. These rivers and their characteristic wildlife are designated as Sites of Special Scientific Interest (SSSI). Furthermore, the River Lambourn, with its typical water crowfoot vegetation and valuable fish community including brook lamprey and bullhead, is recognised as internationally important and has been identified to the European Community as a candidate Special Area of Conservation (cSAC).

The River Kennet SSSI stretches from Wiltshire to Woolhampton, Berkshire. The SSSI includes stretches used as the Kennet and Avon Canal, as well as many of the little side streams which used to power mills or were part of the water meadows which were found through the valley in the past. The River Lambourn is SSSI and cSAC from its source above Lambourn to where it meets the River Kennet.

These national and international designations mean that there is special protection in law for the wildlife which live in the rivers and therefore the natural processes which support them. The protection of the rivers is dependent upon on all of us. West Berkshire Council, English Nature and the Environment Agency have their own responsibilities (Box 1), but all three bodies have a duty to conserve and enhance the River Kennet and Lambourn SSSIs.

Box 1 Roles of the 3 organisations

Environment Agency
Is the government's watchdog for rivers and streams and is responsible for ensuring the proper management of rivers. The Environment Agency does not generally own watercourses. Consent from the Environment Agency is needed for any works in, over, under or within 8 metres of a 'main river' (these are rivers or parts of rivers which are of strategic importance for drainage) and any structures which may affect the flow of an 'ordinary watercourse'. Footbridges, tree planting, fences, bank repairs and restoration all therefore need consent. The Kennet throughout West Berkshire is 'main river' and the Lambourn is 'main river' from Lambourn to where it meets the Kennet. A number of the side-channels associated with both rivers are also designated 'main river'. The Agency also has other powers and responsibilities relating to the regulation of discharges and abstractions which may also be very relevant to development proposals.

English Nature
Is the government agency with particular responsibility for the wildlife and geology of England. English Nature designates SSSI 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. Like the Environment Agency, English Nature is a statutory consultee for planning applications which may affect SSSI and can recommend to the local authority the refusal of planning permission or the granting subject to certain obligations or conditions. Consent from English Nature is also needed where owners of SSSI wish to undertake certain activities about which they have been notified.

West Berkshire Council
Is the local planning authority, responsible for development control. In addition, it has responsibilities to maintain and promote biodiversity. The Council has particular responsibilities in relation to Environmental Assessment and it takes the advice of English Nature and the Environment Agency.

Aims of the leaflet

Since the designation of the Rivers Kennet and Lambourn as SSSI in 1995, the experience of West Berkshire Council, English Nature and the Environment Agency in dealing with planning applications shows us that similar safeguards are often necessary to protect the rivers and their wildlife. These safeguards are frequently included as 'obligations' or 'conditions' if planning permission is granted. We believe that if applicants were aware of these measures before submitting a planning application, and were to build them into their planning and budgeting, there could be savings in time and cost of gaining planning approval.

We believe that certain development can occur within the river valleys without detriment to the SSSIs. It is important for all development to be environmentally sustainable so that we, and future generations can continue to enjoy our natural environment.

This guidance is aimed at applicants and consultants who may wish to undertake developments which could affect the River SSSIs. We have provided explanation as to why such measures are required so as to help your understanding. These measures are not exhaustive, but should be seen as basic good practice. Development in relation to scale and location may need special measures.

We would welcome any feedback you have on this leaflet and our contact addresses are given on the last page.

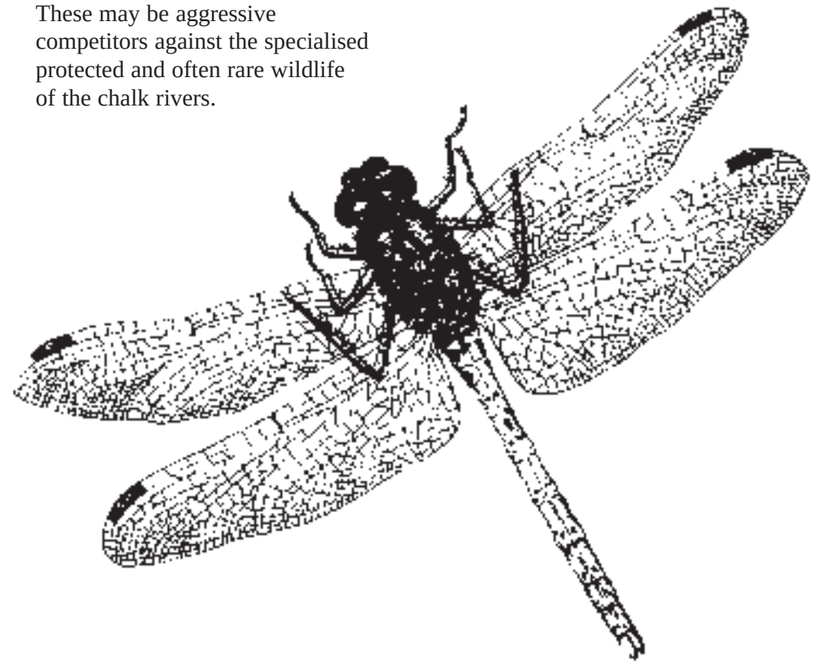
Why are the rivers important?

The Rivers Kennet and Lambourn are nationally important chalk rivers, fed by spring water. Above Newbury, both rivers are characterised by clean, chalky water flowing over a gravel river bed. Where conditions are right water crowfoot, with its characteristic white flowers in June and July, can be seen covering large stretches. The gravely bed provides an excellent habitat for a range of fish including internationally important species; bullhead and brook lamprey. These habitats are particularly well developed in the River Lambourn SSSI and because of this it is recommended as being a site of international importance. Through and below Newbury, the rich flora of the rivers changes in character. Here, the River Kennet becomes wider and generally more sluggish in character. The water is still chalky, but river flows may be slower and the river bed more silty in composition.

What are they sensitive to?

The area of the SSSIs includes their banks as well as the river beds. Disturbance and direct damage to the banks and the beds are clearly problematic. At the very worst this may result in the loss of habitat for plants and fish. At the least, the habitat could be made less than ideal, allowing more common and widespread plants and fish to move in. These may be aggressive competitors against the specialised protected and often rare wildlife of the chalk rivers.

The rivers should be seen in their wider context, particularly as part of the floodplain. The land use of the floodplain is vital for the health of the rivers. It is important to realise that activities which happen some distance from the rivers may damage their ecology and wildlife. For example in-wash of silt can lead to smothering of gravels, enrichment and even pollution. These changes will have consequences for wildlife; gravels smothered in silt will reduce areas available for fish to lay eggs, whilst enriched water will allow algae to proliferate and smother the development of aquatic plants, furthermore pollution may be toxic to fish and plants. The sources of these impacts may be from discrete points such as discharges from sewage works or wider diffuse sources, such as general development and agricultural land use. The Environment Agency regulates trade and sewage discharges but diffuse sources from development and land use are more difficult to control. This leaflet is aimed at trying to alleviate problems arising from land development.



Potential impacts and ways of mitigation

Consequences of development	Potential impact on the river	Avoiding and mitigating impacts
Works on river banks leading to disturbance of the bank and bankside vegetation.	• Direct impact on SSSI. • Possible damage to vegetation on the bank and plants emerging at the water's edge. • Disturbance / damage to water vole habitat and other species of special interest.	• This is likely to be very problematic, therefore look for alternatives to avoid damage. There is a presumption against the hard surfacing of currently "soft" banks. We would wish to see where possible the replacement of hard banks by soft (i.e. removal of concrete, wood supports). • Minimise extent of impact. • It will almost certainly be necessary to provide a method statement and undertake a survey of the habitats and species. This can only be done with accuracy at certain times of the year. • Habitat enhancement or re-creation.
Works and works traffic close to river banks where machinery may track close to the river banks or close to channels draining into the river. Storage of plant / stores close to the river or channels leading to the river.	• Direct impact on SSSI. • Other impacts as above. • Inwash of silt / soils. • Accidental pollution from leaking machinery or canisters.	• Avoid impacts by temporarily fencing off a zone adjacent to the river bank and any channels. Width of zone should be determined by the slope of land, i.e. the more steeply sloping to the river the wider the zone. • Use geotextiles and low ground pressure vehicles to spread weight and prevent any breaking up of the ground surface. • No parking of vehicles close to the river. • Use of drip trays. • No storage of fuel / lubricants / paints / treated timbers etc where leakage or leachate could lead to fluids entering the rivers. Bunding may be needed. Seek advice from Environment Agency on pollution prevention measures.
Laying of pipes across the river bed.	• Direct impact on the SSSI by disturbing the river bed. • Generation of silt. • Damage to fish habitat.	• Look for alternatives to avoid damage. • Consider directional drilling under the bed. • It will almost certainly be necessary to provide a method statement and undertake a survey of the habitats and species. This can only be done with accuracy at certain times of the year. • Restoration works may be needed to make good damage at the very least. • Careful selection of entry and exit points.
Repairing or erecting bridges over the river.	• The need to work in the river may generate silt, damage bankside vegetation at entry and exit points. • Supports may damage banks. • Supports in the river will disrupt flows & be seen as flood hazard. • Accidents when dismantling bridges may lead to materials entering the rivers.	• Method statements will almost certainly be required and some cases may require an environmental impact assessment. • Timing of works in relation to flows may be important with low flow periods being most suitable. • Careful selection of entry and exit points. • Protection of banks using soft bank protection techniques and or geotextiles. • Bridge supports should be set back from the bank. • No bridge supports in the river channel. • Habitat enhancement or re-creation. • Use of geotextiles / straw bales laid in the river to catch silt etc and then removed.
Exposing bare ground during construction in locations from where soil may be eroded and transported into the rivers.	• Indirect impact on SSSI. • Silting of gravels. • Enrichment of water.	• Avoid exposing bare ground in areas susceptible to erosion. • Temporary use of geotextiles to cover exposed area. • Construction of silt traps.
Creation of hard standings such as car parks.	• Impervious surfaces will generate big pulses of water which could drain to the river and contribute to flooding. •. The water may be rich in hydrocarbons from tars, fuels and oils which may be polluting.	• Hard standings may be made pervious allowing water to filter into the ground. • Installation of oil and petrol traps which are monitored and regularly maintained. • Large and medium scale developments should incorporate the principles of sustainable drainage systems including flow balancing features such as ponds.
Large impervious areas - roofs.	Impervious surfaces will generate big pulses of water which could drain to the river and contribute to flooding.	Recycling of water (information available from the Environment Agency)
Discharge of waste water from a local waste water treatment plant.	Enrichment of water.	Use a reedbed filtration system where possible prior to discharge to river
Creation of river side paths for public use.	• Hard standings adjacent to the river bank will remove vegetation + habitat suitable for water voles. • Disturbance to bank-side vegetation and the fringing emergent plants during construction and from increased public pressure. • Increased likelihood of disposal of rubbish in the river.	• A method statement will almost certainly be required and in some cases an environmental impact assessment may be needed. • Look for sustainable locations.

What type of development could impact on the rivers & their wildlife?

Type and scale

This guidance is primarily concerned about development requiring planning permission, however principles covered here could be applied to other works which may just require building regulations, or Environment Agency approval.

The size of development can therefore vary from the small scale, such as conservatories, through to the large scale, such as housing developments.

Location

West Berkshire Council consults English Nature about all planning applications which may affect the River SSSIs. For pragmatic reasons English Nature has consultation zones for the River Kennet and Lambourn SSSIs which cover a band of 2km either side of the banks. Clearly, many of these developments will have no impact whatsoever, whilst others may do so directly and indirectly. For example, a barn conversion to housing or offices some distance from the river with a local waste water treatment system may discharge water relatively rich in phosphates directly into the river via a ditch. This development may have greater potential impact on water quality than a small housing development located closer to the river where foul and surface water disposal is to existing sewers and ultimately a treatment plant which has adequate capacity and will remove phosphates.

West Berkshire Council also consults the Environment Agency about any application that can affect the water environment. This includes any application within or adjacent to a watercourse (including the floodplain), or which includes a discharge to a watercourse.

Distance of new developments from the rivers

Areas abutting the river which are managed in an appropriate way can have value for wildlife in their own right as a corridor along which wildlife can move but can also be of benefit to the wider river environment. These zones can act as a sponge for rainfall, allowing water to enter the river gradually, and as a filter for nutrients, taking out those which may result in an undesirable change in the wildlife of the rivers.

The Environment Agency's Land Drainage Byelaws state that consent is required for any development within 8m of any main river. Normally this would be considered to be the minimum to provide a buffer zone for ecological purposes and a greater protected width may be requested.

Consent within 8m will only be considered where access for flood defence maintenance is not required and where the ecological impacts are acceptable or can be adequately mitigated. English Nature and the Environment Agency will try to ensure that all developments associated with the River SSSIs can demonstrate that the ecology of the rivers are safeguarded and that a net improvement is achieved where possible.

Early discussions

Applicants often incur costs because of negotiations and the need to implement unanticipated conditions or obligations which are attached to the planning permission. Costs may be reduced if the applicant can anticipate these delays and likely obligations and takes them into account in the submission of their application.

Early awareness could be gained from discussions with the local authority, English Nature and the Environment Agency before

proposals are finalised. A phone call and a quick site visit could make a great deal of difference.

Environmental Impact Assessment

Applications to undertake certain types of development legally require an environmental impact assessment. This type of assessment is needed if the proposed development is likely to result in a significant effect on the environment, either on its own or, in the case of the internationally important River Lambourn, in combination with other plans. This does not mean to say that such an assessment will always be required and we are not able to provide hard and fast rules. Once again, early discussion may help the potential applicant to understand whether an environmental assessment is likely to be needed to address nature conservation concerns.

Combined impacts of development

A number of developments on their own may not be considered damaging, but in combination may be an area of concern to West Berkshire Council, English Nature and the Environment Agency. This aggregation of impact has been legally recognised as an important factor to consider when examining proposed developments which might have a significant effect on sites of international importance such as the River Lambourn. Therefore, in certain circumstances the assessment of a particular development which may have a significant effect on the River Lambourn will require the local authority to consider the consequences of this impact in combination with others. In order to do so, the local authority may need quite detailed information from the developer. Once again, early discussion might reveal how likely this would be and therefore allow budgeting for the time and costs needed.

Potential impacts and ways of mitigation

The previous table on pages 4 & 5 is an attempt to provide guidance for avoiding or mitigating the potentially damaging effects of common consequences of development. We recommend that this guidance is incorporated into method statements (showing how potential impacts are to be avoided, mitigated) which would accompany planning applications. It is not an exhaustive list and other aspects may be peculiar to any particular development.

Repairing damage & habitat enhancements

The aim is always to avoid any damage to the river and its banks. To achieve this the developer may need to look for alternative methods. In these situations an environmental assessment will nearly always be needed in order to take into account all factors. We will always require any damage to SSSI's to be made good. This may mean habitat repair in situ or, if not possible, then enhancement in the nearest appropriate location.

In some circumstances such as large developments close to the river, but outside the flood plain, we would wish to see the developer contributing to the wildlife value of the river corridor. The developer has the opportunity to consider a range of habitat improvements within their development plans. This may include management plans for wildlife for undeveloped parts of the development footprint. These should be accompanied by the ability to undertake their management over a period of time.

Summary

- Be aware of your environment.
- Allow for early discussions with West Berkshire Council, English Nature and the Environment Agency.
- Plan to avoid impacts.
- Provide method statements with the planning application addressing the conservation needs of the SSSI
- Allow for costs and time in undertaking the above.

Further information

West Berkshire District Council
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