Warwickshire County Council

Local Transport Plan

Habitat Regulations Appropriate Assessment

Screening Report

May 2010

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1. Introduction

1.1. This report presents the analysis and findings of the screening stage of an Appropriate Assessment for the Warwickshire County Council Local Transport Plan (LTP).

1.2. The Habitats Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna institutes a legislative framework for the protection of European important habitats and species through designation as Special Areas for Conservation (SAC), Special Protection Areas (SPA), Offshore Marine Sites[1] (OMS) and, within the UK, Ramsar sites. This network of sites is known collectively as Natura 2000.

1.3. The requirement for an Appropriate Assessment of strategic land use plans, policies and projects is outlined in article 6(3) and (4) of the Habitats Directive, and its stated purpose is to provide a critical examination of the likelihood of significant individual and in-combination impacts upon the nature conservation objectives of Natura 2000 sites arising from the land use plan.

1.4. It is important to identify potential adverse impacts at an early stage in the development of plans and policies in order that any alterations necessary to ameliorate or mitigate impacts can be made.

[1] It should be noted that at present there are no Offshore Marine Sites designated within the UK

2. Methodology

2.1 In undertaking the screening process best practise guidance produced by Scott Wilson *et al*[2] and Oxford Brookes University[3] were followed in conjunction with the Department for Communities and Local Government publication "Planning for the Protection of European Sites: Appropriate Assessment" plus Natural England Guidance on Local Transport Plans and the Natural Environment.

2.2 These guidance documents identify 4 discrete phases required to complete an Appropriate Assessment, with the outcome of each phase determining the need for progression to the subsequent phase.

2.3 This report is concerned with Phase 1, screening of Natura 2000 sites to identify and assess the likelihood and significance of impacts to these sites arising singularly from Challenges and Preferred Options within the emerging Overarching Local Transport Plan, and in combination with it subsidiary plans, strategies and policies. The process for screening involves the following 4 steps:

- **Site Identification** of Natura 2000 sites and an appraisal of their conservation objectives.
- **Analysis** of the project or plan being considered
- **Characteristics** of the Natura 2000 sites
- **Assessment** of likelihood and significance of impacts to Natura 2000 sites occurring as a result of the policy or plan

2.4 If significant impacts are considered likely, progression to Phase 2, Appropriate Assessment, is triggered.

[2] Scott Wilson, Levett-Therivel Sustainability Consultants, Treweek Environmental Consultants and Land Use Consultants (2006) "Appropriate Assessment of Plans"
[3] Oxford Brookes University (2001) "Assessment of plans and projects significantly affecting Natura 2000 sites: methodological guidance on the provisions of articl 6(3) and (4) of the Habitat Directive 92/43/EEC"

3. Screening

3.1. Site identification

3.1.1. Natura 2000 sites have been identified using information supplied by Joint Nature Conservation Council[4] and Natural England[5]. In order to identify all sites where impacts could reasonably considered possible, a mapping search was conducted at 15km from the Warwickshire County Council boundary to identify all SPA, SAC and Ramsar sites. This distance of 15km followed the advice for Natural England and provides a contextual framework for consideration of impacts. This search area will consider all reasonable potential direct and indirect individual and in-combination impacts to Natura 2000 sites.

3.1.2. No RAMSAR sites or Special Protection Areas were identified within the 15km and 5 Special Area of Conservation (SAC). These being illustrated on Map1: Special Area of Conservation Search 15km area from Warwickshire Council Boundary

- Ensor's Pool SAC within Nuneaton
- Bredon Hill SAC
- Cannock Extension Canal SAC
- Lyppard Grange Ponds SAC
- River Mease SAC

3.1.3. Initial consultation with Natural England has also recommended that Cannock Chase is considered within this assessment relating to whether any of the LTP policies are likely to lead to increased visitor pressure on the Cannock Chase SAC (pers. com, 03/06/2010).

[4] www.jncc.gov.uk
[5] www.naturalengland.org.uk

ENSOR'S POOL SAC

3.1.4. *Site History* - Ensor's Pool was formed from an abandoned clay pit around 50 years ago. It was notified as a SSSI in 1995, designated a Local Nature Reserve in 1997 and designated a Special Area of Conservation (SAC) in April 2005. It is located on the south-west fringe of Nuneaton's urban area (grid reference SP348903) and covers an area of approximately 3.8ha. It is an elongated (220m by 50m) isolated water body with an average depth of 8m. The Pool is lined by an impervious layer of clay and is therefore reliant on rainwater as the predominant main supply of water.

3.1.5. Ensor's Pool's was designated a European site as it provides the habitat to one of the largest populations of healthy white clawed Crayfish (Austropotamobius pallipes) in England. The white-clawed crayfish flourished in both Britain and Europe until the commercial introduction of the signal crayfish (Pacifastacus leniusculus) from America in the 1970s.

3.1.6. As well as preying on its smaller cousin, the signal crayfish carries a fungal disease to which the white-clawed crayfish has no immunity. Unfortunately, the signal crayfish have since escaped the confines of the fisheries and entered the river systems of Britain and Europe, causing the dramatic decline of white-clawed crayfish.

3.1.7. For this reason, the isolation of Ensor's Pool's from rivers creates a refuge for the white-clawed crayfish to flourish and that is why it is of both national and European importance. *Conservation Objectives for the European interest on the SSSI.* The conservation objective for Ensor's Pool is: **to maintain, in favourable condition, the habitat for the population of White-clawed crayfish (*Austropotamobius pallipes*).** Maintenance implies restoration if the feature is not currently in a favourable condition

3.1.8. Details of Ensor's Pool Favourable Condition Table can be found in Appendix 1.

BREDON HILL SAC

3.1.9. **Violet click beetle *Limoniscus violaceus*** was recorded at Bredon Hill in 1989, although there is a 1939 record from 'Tewkesbury', which may refer to Bredon Hill. It has been found in each of several years since. It is a very important site for fauna associated with decaying timber on ancient trees, including many Red Data Book and Nationally Scarce invertebrate species.

3.1.10. The **violet click beetle *Limoniscus violaceus*** is primarily associated with ancient trees, as it develops in undisturbed wood-mould at the base of central cavities in these trees. At Windsor Forest it seems to develop

exclusively in beech *Fagus sylvatica*, but at Bredon Hill and Dixton Wood ash *Fraxinus excelsior* appears to be the main species used. It is probable that a large population of ancient trees is necessary for a site to support this species.

CANNOCK CHASE EXTENSION CANAL SAC

3.1.9 Cannock Extension Canal in central England is an example of anthropogenic, lowland habitat supporting **floating water-plantain *Luronium natans*** at the eastern limit of the plant's natural distribution in England. A very large population of the species occurs in the Canal, which has a diverse aquatic flora and rich dragonfly fauna, indicative of good water quality. The low volume of boat traffic on this terminal branch of the Wyrley and Essington Canal has allowed open-water plants, including floating water-plantain, to flourish, while depressing the growth of emergents.

3.1.10 Floating water-plantain *Luronium natans* occurs in a range of freshwater situations, including nutrient-poor lakes in the uplands (mainly referable to **3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea***) and slowly-flowing lowland rivers, pools, ditches and canals that are moderately nutrient-rich. *Luronium natans* occurs as two forms: in shallow water with floating oval leaves, and in deep water with submerged rosettes of narrow leaves. The plant thrives best in open situations with a moderate degree of disturbance, where the growth of emergent vegetation is held in check. Populations fluctuate greatly in size, often increasing when water levels drop to expose the bottom of the water body. Populations fluctuate from year to year, and at many sites records of ***L. natans*** have been infrequent, suggesting that only small populations occur, in some cases possibly as transitory colonists of the habitat. Populations tend to be more stable at natural sites than artificial ones, but approximately half of recent (post-1980) records are from canals and similar artificial habitats. Its habitat in rivers has been greatly reduced by channel-straightening, dredging and pollution, especially in lowland situations.

LYPPARD GRANGE PONDS SAC

3.1.11 This site, on the outskirts of Worcester, is set amongst a recent housing development on former pastoral farmland. The ponds are associated with good-quality terrestrial habitats, and are a remnant of a formerly more widespread newt habitat when large numbers of ponds were maintained for agricultural purposes.

3.1.12 The **great crested newt *Triturus cristatus*** is the largest native British newt, reaching up to around 17 cm length. It has a granular skin texture (caused by glands which contain toxins making it unpalatable to predators), and in the terrestrial phase is dark grey, brown or black over most of the body, with a bright yellow/orange and black belly pattern. Adult males have jagged crests running along the body and tail. Newts require aquatic habitats for breeding. Eggs are laid singly on pond vegetation in spring, and larvae develop over summer to emerge in August – October,

normally taking 2–4 years to reach maturity. Juveniles spend most time on land, and all terrestrial phases may range a considerable distance from breeding sites.

3.1.13 Breeding sites are mainly medium-sized ponds, though ditches and other waterbody types may also be used less frequently. Ponds with ample aquatic vegetation (which is used for egg-laying) seem to be favoured. Great crested newts do not require very high water quality, but are normally found in ponds with a circum-neutral pH. Broad habitat type varies greatly, the most frequent being pastoral and arable farmland, woodland, scrub, and grassland. There are also populations in coastal dunes and shingle structures. Great crested newts can be found in rural, urban and post-industrial settings, with populations less able to thrive where there are high degrees of fragmentation. The connectivity of the landscape is important, since great crested newts often occur in metapopulations that encompass a cluster of several or many ponds. This helps ensure the survival of populations even if sub-populations are affected by, for example, pond desiccation or fish introductions. Climate may influence the range edge at the north of its distribution in Scotland, but other ecological or landscape factors such as pond density are probably more important in determining distribution across the main part of its British range.

RIVER MEASE SAC

3.1.14 The River Mease is a good example of a riverine population of **spined loach *Cobitis taenia***. It is a small tributary of the River Trent and has retained a reasonable degree of channel diversity compared to other similar rivers containing spined loach populations. It has extensive beds of submerged plants along much of its length which, together with its relatively sandy sediments (as opposed to cohesive mud) provides good habitat opportunities for the species.

3.1.15 The **spined loach *Cobitis taenia*** is a small bottom-living fish that has a restricted microhabitat associated with a specialised feeding mechanism. They use a complex branchial apparatus to filter-feed in fine but well-oxygenated sediments. Optimal habitat is patchy cover of submerged (and possibly emergent) macrophytes, which are important for spawning, and a sandy (also silty) substrate, into which juvenile fish tend to bury themselves.

3.1.16 The Mease is an example of **bullhead *Cottus gobio*** populations in the rivers of central England. Bed sediments are generally not as coarse as other sites selected for the species, reflecting the nature of many rivers in this geographical area, but are suitable in patches due to the river's retained sinuosity. The patchy cover from submerged macrophytes is also important for the species.

3.1.17 The **bullhead *Cottus gobio*** is a small bottom-living fish that inhabits a variety of rivers, streams and stony lakes. It appears to favour fast-flowing, clear shallow water with a hard substrate (gravel/cobble/pebble) and is frequently

found in the headwaters of upland streams. However, it also occurs in lowland situations on softer substrates so long as the water is well-oxygenated and there is sufficient cover. It is not found in badly polluted rivers.

CANNOCK CHASE SAC

3.1.18 The area of lowland heathland at Cannock Chase is the most extensive in the Midlands, although there have been losses due to fragmentation and scrub/woodland encroachment. The character of the vegetation is intermediate between the upland or northern heaths of England and Wales and those of southern counties. Dry heathland communities belong to NVC types H8 *Calluna vulgaris – Ulex gallii* and H9 *Calluna vulgaris – Deschampsia flexuosa* heaths. Within the heathland, species of northern latitudes occur, such as cowberry *Vaccinium vitis-idaea* and crowberry *Empetrum nigrum*. Cannock Chase has the main British population of the hybrid bilberry *Vaccinium intermedium*, a plant of restricted occurrence. There are important populations of butterflies and beetles, as well as European nightjar *Caprimulgus europaeus* and five species of bats.

3.1.19 Much of Cannock Chase falls within a popular and well-used Country Park. Visitor pressures include dog walking, horse riding, mountain biking and off-track activities such as orienteering, all of which cause disturbance and result in erosion, new track creation and vegetation damage.

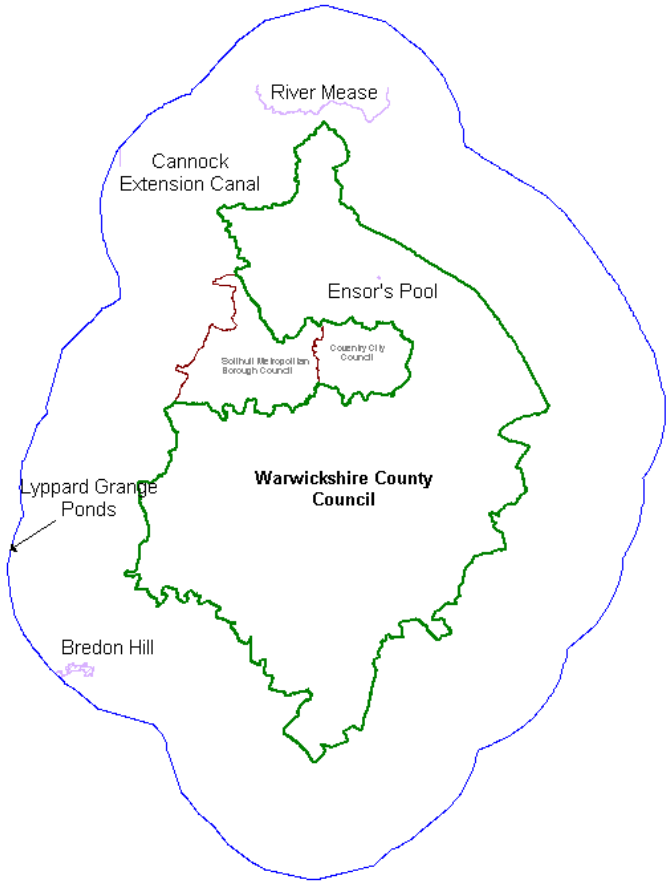
3.1.20 Bracken invasion is significant, but is being controlled. Birch and pine scrub, much of the latter from surrounding commercial plantations, is continually invading the site and has to be controlled. High visitor usage and the fact that a significant proportion of the site is Common Land, requiring Secretary of State approval before fencing can take place, means that the reintroduction of sustainable management in the form of livestock grazing has many problems.

3.1.21 Cannock Chase overlies coal measures which have been deep-mined. Mining fissures continue to appear across the site even though mining has ceased and this is thought to detrimentally affect site hydrology. Furthermore the underlying Sherwood Sandstone is a major aquifer with water abstracted for public and industrial uses and the effects of this on the wetland features of the Chase are not fully understood.

Map 1: Special Area of Conservation Search 15km area from Warwickshire Council Boundary

WARWICKSHIRE BIOLOGICAL RECORDS CENTRE

Special Area of Conservation Search 15 km area from Warwickshire County Boundary



Warwickshire 15km buffer

Special Area of Conservation

Warwickshire Biological Records Centre
Museum Field Services
The Butts
Warwick
CV34 4SS
Tel: (01926) 418060
Fax: (01926) 412975

3.2 Analysis of LTP Strategy policies

3.2.1 Natura 2000 sites support habitats and/or species that are considered to be of European importance. The variety of features that can qualify a site for designation will vary in their resilience and vulnerability to a range of impacts. Thus an important part of screening is to identify the qualifying features of interest at each Natura 2000 site, and to assess the type of impact that could impinge upon the maintenance of site integrity. An analysis of the designation features, conservation interests and specific vulnerabilities of each site is provided in 3.1 with Natura 2000 Data Forms found in Appendix A.

3.2.2 Two forms of impact have been identified:

- **Direct Impact** – Where an objective or project occurs within the boundary of the SAC site
- **Indirect Impact** – Where an objective or project will occur outside of a SAC site but has or could have a subsidiary or secondary impact on a site. These have been identified as:
  - **Air Pollution**
  - **Recreation impacts**
  - **Water Quality and Water Levels**
  - **Noise Pollution**

3.2.3 The critical part of the HRA screening process is determining whether the LTP is likely to have a significant effect on European Sites and, therefore, if it will require Appropriate Assessment. Judgements regarding significant should be made in relation to the interest features for which the site is of European importance and also its conservation objectives,. The Draft Annex to TAN 5 states: "*…likely 'means readily foreseeable not merely a fanciful possibility; significant means not trivial or consequential but an effect that is potentially relevant to the site's conservation objectives'*.

3.2.4 The challenges and preferred options identified to form a basis of the LTP have undergone an initial Sustainability Appraisal, and subsequent revision. The revised policy areas and attendant objectives have been analysed individually to isolate possible pathways for direct and indirect impacts to Natura 2000 sites (see table 2). This process has been informed by consultation with Natural England, the Environment Agency and Warwickshire County Council's Ecology Unit.

3.3 Screening

3.4 The LTP details policies to enable a strategic and responsive approach to transport delivery across the county together with site-specific projects. As the LTP is in development, this assessment will report the Overarching Strategy document as on 19th May 2010. A further addendum may be need to be prepared should the Core Strategy policies or site allocations be materially altered.

Table 2: Analysis and implications of broad policy area objectives of the Local Transport Plan

Transport and the Warwickshire Economy		
Challenges	Preferred options to deal with challenges	Potential effects of policy objectives on Natura 2000 sites
1.1 Improve the connectivity by public transport to enable business journeys to take place and to maximise accessibility of labour markets to jobs	Improvements to buses (including new buses and increased service frequency/QBCs)	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site.
	Improved passenger information before and during travel	
	Rail development / new rail stations	
	Improved public transport interchange	
	Flexible buses offering door to door transport for eligible groups	
	Extensive bus priority	
	Rapid transit / light rail *(not included in public consultation)*	
1.2 Reduce lost productive time including by maintaining or improving the reliability and predictability of journey times on key local routes for business, commuting and freight	Co-ordinate works and manage incidents on the highway to minimise disruption	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site. All projects are outside of Ensor's Pool SAC. Some options will reduce indirect impacts such as Air Pollution by reducing traffic movements.
	Minor junction / signal improvements at congestion hotspots	
	Improved signage and information for road users (UTMC)	
	Safer Routes to School	
	Rail development / new rail stations	
	Car sharing (including promotion of Carshare database to companies)	
	Develop cycle routes in and around our main towns	
	Cycle parking at key destinations	
	Engineering measures at collision hotspots	
	Better enforcement of parking restrictions	
	Promotional events & activities for cycling	
	School Travel Plans	
	Improving the movement of freight in the County	
	Workplace Travel Plans	
	Delivery and stopping restrictions in town centres and along key routes (inc. Red Routes)	
	Dedicated lanes for vehicles with two or more passengers (HoV lanes)	
	Charging for road use at the point of travel	
1.3 Support the delivery of planned housing and employment growth in ways whilst minimising congestion levels	Better integration of transport and land use planning to reduce the need to travel	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site. All housing and employment locations will undergo HR Assessments as part of their associated LDF
	Extension of existing bus network to accommodate new development *(not included in public consultation)*	
	Provision of new bus services *(not included in public consultation)*	
	Workplace Travel plans	
	Cycling and pedestrian links to key destinations	
	Implementation of dedicated infrastructure to link key growth areas with main destinations *(not included in public consultation)*	
	Parking restrictions *(not included in public consultation)*	
	Tailored travel information for local journeys (Personalised travel planning)	

	Charging for car parking at work places	documents.
	Pool cars for individual use in local communities (car clubs)	
1.4 Ensure the maintenance and work on the highway network and structures supports the efficient movement of traffic	Co-ordinate works and manage incidents on the highway to minimise disruption	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site.
	Maintaining the highway to a good standard	
	Maintain footways and cycleways to a high standard	

Transport and Carbon Emissions in Warwickshire		
Challenges	Preferred Options to deal with challenges	Potential effects of policy objectives on Natura 2000 sites
2.1 Accommodate new development in locations which reduce need to travel	Better integration of transport and land use planning to reduce the need to travel	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site. All housing and employment locations will undergo HR Assessments as part of their associated LDF documents.
	Extension of existing bus network to accommodate new development *(not included in public consultation)*	
	Provision of new bus services *(not included in public consultation)*	
	Cycling and pedestrian links to key destinations *(not included in public consultation)*	
	Implementation of dedicated infrastructure to link key growth areas with main destinations *(not included in public consultation)*	
	Work Place Travel plans	
	Tailored travel information for local journeys (Personalised travel planning)	
	Pool cars for individual use in local communities (car clubs)	
2.2 Encourage a shift to lower carbon forms of travel, including walking, cycling and public transport, for residents and businesses	Safer Routes to School	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site. All projects are outside of Ensor's Pool SAC. The options will reduce indirect impacts such as Air Pollution by reducing traffic movements.
	Better integration of transport and land use planning to reduce the need to travel	
	Improved passenger information before and during travel	
	Develop cycle routes in and around our main towns	
	Improvements to buses (including new buses and increased service frequency/QBCs)	
	Cycle parking at key destinations	
	Promotional events & activities for cycling	
	School Travel Plans	
	Pedestrian crossing facilities	
	Carsharing (including promotion of Carshare database to companies)	
	Improving the movement of freight in the County	
	Workplace Travel Plans	
	Cycle training for children & adults	
	Rail development / new rail stations	
	Increasing car parking charges in town centres	
	Charging for road use at the point of travel	
	Charging for car parking at work places	

	Tailored travel information for local journeys (Personalised Travel Planning)	
	Pool cars for individual use in local communities (Carclubs)	
	Extensive bus priority	
	Dedicated lanes for vehicles with two or more passengers (HoV lanes)	
	Introduce pool bicycles (Bike Hubs) for individual use within main towns	
	Rapid transit / light rail	
2.3 Where motorised transport is necessary, encourage the efficient use of vehicles (e.g. through car sharing) and improved driving techniques	Carsharing (including promotion of Carshare database to companies)	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site. All projects are outside of Ensor's Pool SAC. The options will reduce indirect impacts such as Air Pollution by reducing traffic movements.
	Speed reduction measures, including enforcement, education and engineering measures	

Safety, Security and Health in Warwickshire		
Challenges	Preferred Options to deal with challenges	Potential effects of policy objectives on Natura 2000 sites
3.1 Continue to reduce the risk of death or injury due to accidents on the transport network	Engineering measures at collision hotspots	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site. All projects are outside of Ensor's Pool SAC.
	Speed reduction measures, including enforcement, education and engineering measures	
	Education & promotional campaigns for road safety	
	Safer Routes to School	
	Maintaining the highway to a good standard	
	Maintain footways and cycleways to a high standard	
	Pedestrian crossing facilities	
	Village Traffic Calming	
	Develop cycle routes in and around our main towns	
	Cycle training for children & adults	
3.2 Reduce / minimise the number of areas declared as having poor air quality as a result of road transport emissions	Improvements to buses (including new buses and increased service frequency/QBCs)	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site. All projects are outside of Ensor's Pool SAC.
	Develop cycle routes in and around our main towns	
	Safer Routes to School	
	School Travel Plans	
	Dedicated lanes for vehicles with two or more passengers (HoV lanes)	
	Traffic restrictions / re-routing at times when air quality is poor	
	Introduce low emission zones in areas of poor air quality	
	Introduce pool bicycles (Bike Hubs) for individual use within main towns	

3.3 Encourage a shift towards more healthy forms of travel, including encouraging a more positive public perception of walking and cycling	Develop cycle routes in and around our main towns	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site. All projects are outside of Ensor's Pool SAC.
	Cycle parking at key destinations	
	Cycle training for children & adults	
	Promotional events & activities (including publishing town centre cycle guides)	
	Pedestrian crossing facilities	
	Better integration of transport and land use planning to reduce the need to travel	
	Safer Routes to School	
	School Travel Plans	
	Workplace Travel Plans to reduce car use for commuting	
	Reduce crime and fear of crime on key pedestrian routes	
	Pedestrianisation/pedestrian priority in town centres	
	Introduce pool bicycles (Bike Hubs) for individual use within main towns	
3.4 Reduce crime and fear of crime on public transport	CCTV at rail and bus stations and on buses *(not included in public consultation)*	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site.
	Reduce crime and fear of crime on key pedestrian routes	
	Work in partnership with police to address anti-social behaviour on transport networks *(not included in public consultation)*	

Equality of Opportunity in Warwickshire		
Challenges	Preferred Options to deal with challenges	Potential effects of policy objectives on Natura 2000 sites
4.1 Support the County's priority of 'narrowing the gaps' by enabling disadvantaged people to more easily connect with a wide range of services and facilities	Improvements to buses (including new buses and increased service frequency/QBCs)	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site.
	Concessionary fares schemes	
	Flexible buses offering door to door transport for eligible groups	
	Better integration of transport and land use planning to reduce the need to travel	
	Pedestrian crossing facilities	
	Reduce crime and fear of crime on key pedestrian routes	
	Improved passenger information before and during travel	
	Rail development / new rail stations	
	Car sharing (including promotion of Carsharing database to companies)	
	Develop cycle routes in and around our main towns	
	Tailored travel information for local journeys (Personalised Travel Planning)	
	Pool cars for individual use in local communities (car clubs)	
4.2 Support the ageing population and associated service needs, particularly in the south of the County	Improvements to buses (including new buses and increased service frequency/QBCs)	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site.
	Concessionary fares schemes	
	Flexible buses offering door to door transport for eligible groups	
	Improved passenger information before and during travel	
	Better integration of transport and land use planning to reduce the need to travel	
	Tailored travel information for local journeys (Personalised Travel Planning)	

4.3 Work with partner agencies to support the delivery of services in ways which improve access to services	Continue to work with key partners, including Job Centre Plus and Warwickshire PCT and to explore how services can be delivered so that they are more accessible *(not included in public consultation)*	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site.

Quality of Life in Warwickshire		
Challenges	Preferred Options to deal with challenges	Potential effects of policy objectives on Natura 2000 sites
5.1 Minimise the impacts of transport on the built and natural environment	Improving the movement of freight in the County e.g. transfer of freight from road to rail, routing of heavy goods vehicles by suitable roads	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site.
	Village Traffic Calming	
5.2 Managing transport related noise	Ensure noise levels are considered in planning applications and that appropriate mitigation measures are put in place *(not included in public consultation)*	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site. The options will reduce indirect impacts such as Noise Pollution by reducing traffic movements.
	Improving the movement of freight in the County e.g. transfer of freight from road to rail, routing of heavy goods vehicles by suitable roads	
	Ensure traffic calming measures do not increase noise levels by encouraging 'stop/go' vehicle movements *(not included in public consultation)*	
	Noise management schemes through engineering and maintenance, including working with Defra on implementation of noise action plans *(not included in public consultation)*	
	Maintaining the highway to a good standard, including quieter road surfaces where appropriate	
	Speed reduction measures to reduce noise levels *(not included in public consultation)*	
5.3 Improve the quality of transport integration into streetscapes and the urban environment	Work with local people to ensure transport improvements have public acceptability and are well integrated into the existing urban environment *(not included in public consultation)*	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site
	Pedestrianisation/pedestrian priority in town centres	
5.4 Improve the journey experience of transport users	Improved pedestrian environment, including provision of improved directional signage in towns *(not included in public consultation)*	This is a generic challenge where the options will have no likely significant direct or indirect impact on a Natura 2000 site
	Improved passenger information before and during travel	
	Improved public transport interchange	
	Improved signage and information for road users	
	Maintaining the highway to a good standard	
	Maintain footways and cycleways to a good standard	
5.5 Enhance well-being and sense of community by creating more opportunities for social contact and better access to leisure activities and the natural environment	Concessionary fares schemes	This is a generic challenge where the options **may** have a significant direct or indirect impact on a Natura 2000 site.
	Flexible buses offering door to door transport for eligible groups	
	Develop cycle routes in and around our main towns	

4. Next steps

4.1. As the Quality of Life in Warwickshire challenge 5.5 was deemed to have a potential significant impact on a SAC this impact needs further investigation to determine if it triggers a Phase 2 Appropriate Assessment. This investigation can be carried out within the scope of this report through a site by site appraisal. This investigation can be found in Table 3: Further investigation of Challenge 5.5 of the WCC Local Transport Plan

4.2. From this investigation it is considered that Challenge 5.5 "Enhance well-being and sense of community by creating more opportunities for social contact and better access to leisure activities and the natural environment" will have no significant indirect impact on this site.

Table 3: Further investigation of Challenge 5.5 of the WCC Local Transport Plan

Quality of Life in Warwickshire		
Challenges 5.5 Enhance well-being and sense of community by creating more opportunities for social contact and better access to leisure activities and the natural environment	Preferred Options to deal with challenges: Concessionary fares schemes Flexible buses offering door to door transport for eligible groups Develop cycle routes in and around our main towns	Potential effects of policy objectives on Natura 2000 sites: This is a generic challenge where the options **may** have a significant direct or indirect impact on a Natura 2000 site.
Natura 2000 Site	**Importance Criteria Assessment**	**Revised potential effect on Natura 2000 site**
Ensors Pool SAC	**SAC importance**: White-clawed Crayfish (*Austropotamobius pallipes*) **SAC Objective**: to maintain, in favourable condition, the habitat for the population of White-clawed crayfish	As this species is primarily waterborne any increase in public use to Ensor's Pool will have no significant direct or indirect impact on this site.
Bredon Hill SAC	**SAC importance**: Violet click beetle(*Limoniscus violaceus*) **SAC Objective**: Bredon Hill is an area of pasture woodland and ancient parkland. The main threats are the lack of a replacement generation of trees for the current ancient trees over much of the hill, as many of the younger trees have been removed to increase stock grazing areas; the overall number of ancient trees suitable for Limoniscus violaceus is relatively small. Management agreements are being used to preserve existing tree stocks and to provide replacement planting.	As the violet click beetle is associated to ancient trees any increase in public use to Bredon Hill SAC will have no significant direct or indirect impact on this site.

Cannock Extension Canal	**SAC importance**: floating water-plantain (*Luronium natans*) **SAC Objective**: The plant thrives best in open situations with a moderate degree of disturbance, where the growth of emergent vegetation is held in check. Populations fluctuate greatly in size, often increasing when water levels drop to expose the bottom of the water body	As the floating water-plantain is associated to the canal any increase in public use to Cannock Extension Canal SAC will have no significant direct or indirect impact on this site.
Lyppard Grange Ponds SAC	**SAC importance**: great crested newt (*Triturus cristatus*) **SAC Objective**: The site is vulnerable to the effects of recreational pressure from the public and in particular the introduction of fish, which affect the suitability of ponds as breeding habitats for great crested newts. One of the ponds is currently overrun with sticklebacks which are affecting the long-term survival of the newt population at the current level. A series of measures, including the notification of the site as an SSSI, development of a Management Plan, the implementation of an action plan to remove stickleback and construction of hibernacula and refugia and water management systems, are being undertaken to secure the conservation of the newt population.	As the species' habitat is vulnerable to recreational pressure there remains a potential that this LTP challenge will have an impact on this site. However, it is considered that this site will not be one that will attract a significant number of visitors from Warwickshire as great crested newt can be observed at more local publicly accessible sites. Therefore, on consideration this challenge will have no significant direct or indirect impact on this site.
River Mease SAC	**SAC importance**: spined loach (*Cobitis taenia*) and bullhead (*Cottus gobio*) **SAC Objective**: Both species are a small bottom-living fish that has a restricted microhabitat associated with a specialised feeding mechanism.	As the spined loach and the bullhead are waterborne species any increase in public use to the River Mease SAC will have no significant direct or indirect impact on this site.
Cannock Chase SAC	**SAC importance**: Dry heathland communities, There are important populations of butterflies and beetles, as well as European nightjar Caprimulgus europaeus and five species of bats. **SAC Objective**: Much of Cannock Chase falls within a popular and well-used Country Park. Visitor pressures include dog walking, horse riding, mountain biking and off-track activities such as orienteering, all of which cause disturbance and result in erosion, new track creation and vegetation damage. Bracken invasion is significant, but is being controlled. Birch and pine scrub, much of the latter from surrounding commercial plantations, is continually invading the site and has to be controlled. High visitor usage and the fact that a significant proportion of the site is Common Land, requiring Secretary of State approval before fencing can take place, means that the reintroduction of sustainable management in the form of livestock grazing has many problems. Cannock Chase overlies coal measures which have been deep-mined. Mining fissures continue to appear across the site even though mining has ceased and this is thought to detrimentally affect site hydrology. Furthermore the underlying Sherwood Sandstone is a major aquifer with water abstracted for public and industrial uses and the effects of this on the wetland features of the Chase are not fully understood.	As the habitat and associated species are vulnerable to recreational pressure there remains a potential that this LTP challenge will have an impact on this site. However, it is considered that this site will not be one that will attract a significant number of visitors from Warwickshire that it will have no significant direct or indirect impact on this site. However, should there be a proven link that Warwickshire residents are having a significant contributory affect on Cannock Chase as a recreational resource then the Council will work in partnership with Local Authorities and other organisation associated with the safeguarding of SAC to alleviate any impact.

5. Summary/Recommendations

5.1. There are five Natura 2000 sites within a 15Km area of the Warwickshire County boundary and one additional site identified through preliminary consultations. The majority of the Local Transport Plan policies will have no likely significant impact on SAC sites. One challenge may have had a significant impact on SAC sites through increased recreational pressure (Challenge 5.5). However, a further assessment of this impact resulted in no significant direct or indirect impact on SAC sites.

5.2. If Warwickshire County Council adheres to the accompanying polices identified in Chapter 5 below plus follows Planning Policy Guidance, best practice guidelines and seeks advice and guidance from Natural England, other specialists and authorities in relation to air pollution impact modelling, then the Local Transport Plan should have no likely significant direct or indirect impacts on SACs. In specific reference to Cannock Chase SAC should there be a proven link that Warwickshire residents are having a significant contributory impact on Cannock Chase SAC as a recreational resource then the Council will work in partnership with Local Authorities and other organisation associated with the safeguarding of the SAC to alleviate any impact.

5.3. To further ensure that the LTP will not impact on a European Sites, Warwickshire County Council will work in partnership with its immediate neighbours and Natural England as is expected within the Biodiversity Duty (NERC Act, 2006).

5.4. This assessment therefore concludes that there are no significant impacts considered likely to trigger a progression to Phase 2, Appropriate Assessment.

Appendix 1

JNCC Natura 2000 Data Forms

NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type B

1.2 Site code UK0012646

1.3 Compilation date 199601

1.4 Update 200101

1.5 Relationship with other Natura 2000 sites

1.6 Respondent(s) International Designations, JNCC, Peterborough

1.7 Site name **Ensor's Pool**

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	199601
date confirmed as SCI	
date site classified as SPA	
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	**latitude**
01 29 11 W	52 20 33 N

2.2 Site area (ha) 3.8

2.3 Site length (km)

2.5 Administrative region

NUTS code	Region name	% cover
UK712	Warwickshire	100.0%

2.6 Biogeographic region

Alpine	Atlantic	Boreal	Continental	Macaronesia	Mediterranean
	√				

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment

3.2 Annex II species

	Population				Site assessment			
	Resident	Migratory						
Species name		**Breed**	**Winter**	**Stage**	**Population**	**Conservation**	**Isolation**	**Global**
Austropotamobius pallipes	50000	-	-	-	C	A	C	**A**

4. Site description

4.1 General site character

Habitat classes	**% cover**
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	
Salt marshes. Salt pastures. Salt steppes	
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	
Inland water bodies (standing water, running water)	70.0
Bogs. Marshes. Water fringed vegetation. Fens	
Heath. Scrub. Maquis and garrigue. Phygrana	
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	30.0
Alpine and sub-alpine grassland	
Improved grassland	
Other arable land	
Broad-leaved deciduous woodland	
Coniferous woodland	
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Screes. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	
Total habitat cover	**100%**

4.1 Other site characteristics

Soil & geology:

Clay, Neutral, Sandstone, Sedimentary

Geomorphology & landscape:

Lowland

4.2 Quality and importance

Austropotamobius pallipes

- for which this is considered to be one of the best areas in the United Kingdom.

4.3 Vulnerability

The crayfish population has developed in a flooded brick-pit that has been abandoned for fifty years. The area was unmanaged and was used as *de facto* public open space. The crayfish would be vulnerable to pollution and introduction of non-native crayfish, through uncontrolled access. To address this, since 1995 the area has been leased by Nuneaton and Bedworth Borough Council and is managed as a Local Nature Reserve.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK04 (SSSI/ASSI)	100.0

NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type B

1.2 Site code UK0012587

1.3 Compilation date 199506

1.4 Update 200101

1.5 Relationship with other Natura 2000 sites

1.6 Respondent(s) International Designations, JNCC, Peterborough

1.7 Site name **Bredon Hill**

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	199506
date confirmed as SCI	
date site classified as SPA	
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	**latitude**
02 03 02 W	52 03 49 N

2.2 Site area (ha) 359.86

2.3 Site length (km)

2.5 Administrative region

NUTS code	Region name	% cover
UK711	Hereford and Worcester	100.0%

2.6 Biogeographic region

Alpine	Atlantic	Boreal	Continental	Macaronesia	Mediterranean
	√				

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment
Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)	2	D			

3.2 Annex II species

	Population				Site assessment			
	Resident	Migratory						
Species name		**Breed**	**Winter**	**Stage**	**Population**	**Conservation**	**Isolation**	**Global**
Limoniscus violaceus	Present	-	-	-	A	A	A	**A**

4. Site description

4.1 General site character

Habitat classes	**% cover**
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	
Salt marshes. Salt pastures. Salt steppes	
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	
Inland water bodies (standing water, running water)	
Bogs. Marshes. Water fringed vegetation. Fens	
Heath. Scrub. Maquis and garrigue. Phygrana	10.0
Dry grassland. Steppes	10.0
Humid grassland. Mesophile grassland	
Alpine and sub-alpine grassland	
Improved grassland	
Other arable land	
Broad-leaved deciduous woodland	
Coniferous woodland	
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	80.0
Inland rocks. Screes. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	
Total habitat cover	**100%**

4.1 Other site characteristics

Soil & geology:

Basic, Clay, Limestone, Neutral

Geomorphology & landscape:

Hilly, Lowland, Slope

4.2 Quality and importance

Limoniscus violaceus

- for which this is one of only three known outstanding localities in the United Kingdom.
- which is known from 15 or fewer 10 x 10 km squares in the United Kingdom.

4.3 Vulnerability

Bredon Hill is an area of pasture woodland and ancient parkland providing habitat for *Limoniscus violaceus*. The main threats are the lack of a replacement generation of trees for the current ancient trees over much of the hill, as many of the younger trees have been removed to increase stock grazing areas; the overall number of ancient trees suitable for *Limoniscus violaceus* is relatively small. Management agreements are being used to preserve existing tree stocks and to provide replacement planting.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK01 (NNR)	9.0
UK04 (SSSI/ASSI)	100.0

NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type B

1.2 Site code UK0012672

1.3 Compilation date 199506

1.4 Update 200101

1.5 Relationship with other Natura 2000 sites

1.6 Respondent(s) International Designations, JNCC, Peterborough

1.7 Site name **Cannock Extension Canal**

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	199506
date confirmed as SCI	
date site classified as SPA	
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	**latitude**
01 58 14 W	52 38 59 N

2.2 Site area (ha) 5.47

2.3 Site length (km)

2.5 Administrative region

NUTS code	Region name	% cover
UK73	West Midlands (County)	13.0%
UK722	Staffordshire	87.0%

2.6 Biogeographic region

Alpine	Atlantic	Boreal	Continental	Macaronesia	Mediterranean
	√				

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment

3.2 Annex II species

	Population				Site assessment			
	Resident	Migratory						
Species name		**Breed**	**Winter**	**Stage**	**Population**	**Conservation**	**Isolation**	**Global**
Luronium natans	Common	-	-	-	C	B	B	**B**

4. Site description

4.1 General site character

Habitat classes	**% cover**
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	
Salt marshes. Salt pastures. Salt steppes	
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	
Inland water bodies (standing water, running water)	75.0
Bogs. Marshes. Water fringed vegetation. Fens	
Heath. Scrub. Maquis and garrigue. Phygrana	
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	10.0
Alpine and sub-alpine grassland	
Improved grassland	
Other arable land	
Broad-leaved deciduous woodland	4.9
Coniferous woodland	
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Screes. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	10.1
Total habitat cover	**100%**

4.1 Other site characteristics

Soil & geology:

Geomorphology & landscape:

Lowland

4.2 Quality and importance

Luronium natans

- for which this is considered to be one of the best areas in the United Kingdom.

4.3 Vulnerability

The population of *Luronium natans* in this cul-de-sac canal is dependent upon a balanced level of boat traffic. If the canal is not used, the abundant growth of other aquatic macrophytes may shade-out the *Luronium natans* unless routinely controlled by cutting. An increase in recreational activity would be to the detriment of *Luronium natans*. Existing discharges of surface water run-off, principally from roads, cause some reduction in water quality.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK04 (SSSI/ASSI)	100.0

NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type B

1.2 Site code UK0030198

1.3 Compilation date 200103

1.4 Update

1.5 Relationship with other Natura 2000 sites

1.6 Respondent(s) International Designations, JNCC, Peterborough

1.7 Site name **Lyppard Grange Ponds**

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	200103
date confirmed as SCI	
date site classified as SPA	
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	**latitude**
02 10 37 W	52 11 53 N

2.2 Site area (ha) 1.09

2.3 Site length (km)

2.5 Administrative region

NUTS code	Region name	% cover
UK711	Hereford and Worcester	100.0%

2.6 Biogeographic region

Alpine	Atlantic	Boreal	Continental	Macaronesia	Mediterranean
	√				

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment

3.2 Annex II species

	Population				Site assessment			
	Resident	Migratory						
Species name		**Breed**	**Winter**	**Stage**	**Population**	**Conservation**	**Isolation**	**Global**
Triturus cristatus	101-250	-	-	-	C	C	B	**B**

4. Site description

4.1 General site character

Habitat classes	**% cover**
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	
Salt marshes. Salt pastures. Salt steppes	
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	
Inland water bodies (standing water, running water)	8.0
Bogs. Marshes. Water fringed vegetation. Fens	
Heath. Scrub. Maquis and garrigue. Phygrana	22.0
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	
Alpine and sub-alpine grassland	
Improved grassland	70.0
Other arable land	
Broad-leaved deciduous woodland	
Coniferous woodland	
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Screes. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	
Total habitat cover	**100%**

4.1 Other site characteristics

Soil & geology:

Clay, Neutral

Geomorphology & landscape:

Lowland

4.2 Quality and importance

Triturus cristatus

- for which this is considered to be one of the best areas in the United Kingdom.

4.3 Vulnerability

The site is composed of two ponds in an area of public open space surrounded by residential development. The site is vulnerable to the effects of recreational pressure from the public and in particular the introduction of fish, which affect the suitability of ponds as breeding habitats for great crested newts. One of the ponds is currently overrun with sticklebacks which is affecting the long-term survival of the newt population at the current level.
A series of measures, including the notification of the site as an SSSI, development of a Management Plan, the implementation of an action plan to remove stickleback and construction of hibernacula and refugia and water management systems, are being undertaken to secure the conservation of the newt population.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK04 (SSSI/ASSI)	100.0

NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type B

1.2 Site code UK0030258

1.3 Compilation date 200105

1.4 Update

1.5 Relationship with other Natura 2000 sites

1.6 Respondent(s) International Designations, JNCC, Peterborough

1.7 Site name **River Mease**

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	200105
date confirmed as SCI	
date site classified as SPA	
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	**latitude**
01 36 56 W	52 41 59 N

2.2 Site area (ha) 21.86

2.3 Site length (km)

2.5 Administrative region

NUTS code	Region name	% cover
UK722	Staffordshire	47.3%
UK311	Derbyshire	36.3%
UK321	Leicestershire	16.3%

2.6 Biogeographic region

Alpine	Atlantic	Boreal	Continental	Macaronesia	Mediterranean
	√				

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment
Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation	30	C	C	B	**C**

3.2 Annex II species

		Population			Site assessment			
	Resident	Migratory						
Species name		Breed	Winter	Stage	Population	Conservation	Isolation	Global
Austropotamobius pallipes	Common	-	-	-	C	B	C	**C**
Cobitis taenia	Common	-	-	-	C	B	B	**B**
Cottus gobio	Common	-	-	-	C	B	C	**B**
Lutra lutra	Common	-	-	-	C	C	C	**C**

4. Site description

4.1 General site character

Habitat classes	% cover
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	
Salt marshes. Salt pastures. Salt steppes	
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	
Inland water bodies (standing water, running water)	100.0
Bogs. Marshes. Water fringed vegetation. Fens	
Heath. Scrub. Maquis and garrigue. Phygrana	
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	
Alpine and sub-alpine grassland	
Improved grassland	
Other arable land	
Broad-leaved deciduous woodland	
Coniferous woodland	
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	
Inland rocks. Screes. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	
Total habitat cover	**100%**

4.1 Other site characteristics

Soil & geology:

Alluvium, Clay, Sandstone, Sedimentary

Geomorphology & landscape:

Floodplain, Lowland

4.2 Quality and importance

Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation

- for which the area is considered to support a significant presence.

Austropotamobius pallipes

- for which the area is considered to support a significant presence.

Cobitis taenia

- for which this is one of only four known outstanding localities in the United Kingdom.

Cottus gobio

- for which this is considered to be one of the best areas in the United Kingdom.

Lutra lutra

- for which the area is considered to support a significant presence.

4.3 Vulnerability

The River Mease is an unusually semi-natural system in a largely rural landscape, dominated by intensive agriculture. Water quality and quantity are vital to the European interests, whilst competition for water resources is high. Diffuse pollution and excessive sedimentation are catchment-wide issues which have the potential to affect the site.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK04 (SSSI/ASSI)	100.0

NATURA 2000

STANDARD DATA FORM

FOR SPECIAL PROTECTION AREAS (SPA)
FOR SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE (SCI)
AND
FOR SPECIAL AREAS OF CONSERVATION (SAC)

1. Site identification:

1.1 Type B

1.2 Site code UK0030107

1.3 Compilation date 200103

1.4 Update

1.5 Relationship with other Natura 2000 sites

1.6 Respondent(s) International Designations, JNCC, Peterborough

1.7 Site name **Cannock Chase**

1.8 Site indication and designation classification dates

date site proposed as eligible as SCI	200103
date confirmed as SCI	
date site classified as SPA	
date site designated as SAC	

2. Site location:

2.1 Site centre location

longitude	**latitude**
02 01 36 W	52 45 59 N

2.2 Site area (ha) 1236.93

2.3 Site length (km)

2.5 Administrative region

NUTS code	Region name	% cover
UK722	Staffordshire	100.0%

2.6 Biogeographic region

Alpine	Atlantic	Boreal	Continental	Macaronesia	Mediterranean
	√				

3. Ecological information:

3.1 Annex I habitats

Habitat types present on the site and the site assessment for them:

Annex I habitat	% cover	Representativity	Relative surface	Conservation status	Global assessment
Northern Atlantic wet heaths with *Erica tetralix*	1.3	C	C	B	**C**
European dry heaths	75	B	C	B	**B**

3.2 Annex II species

	Population				Site assessment			
	Resident	Migratory						
Species name		**Breed**	**Winter**	**Stage**	**Population**	**Conservation**	**Isolation**	**Global**
Austropotamobius pallipes	Present	-	-	-	D			
Triturus cristatus	11-50	-	-	-	D			

4. Site description

4.1 General site character

Habitat classes	**% cover**
Marine areas. Sea inlets	
Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins)	
Salt marshes. Salt pastures. Salt steppes	
Coastal sand dunes. Sand beaches. Machair	
Shingle. Sea cliffs. Islets	
Inland water bodies (standing water, running water)	0.5
Bogs. Marshes. Water fringed vegetation. Fens	
Heath. Scrub. Maquis and garrigue. Phygrana	76.3
Dry grassland. Steppes	
Humid grassland. Mesophile grassland	
Alpine and sub-alpine grassland	
Improved grassland	
Other arable land	
Broad-leaved deciduous woodland	
Coniferous woodland	12.0
Mixed woodland	
Non-forest areas cultivated with woody plants (including orchards, groves, vineyards, dehesas)	10.5
Inland rocks. Screes. Sands. Permanent snow and ice	
Other land (including towns, villages, roads, waste places, mines, industrial sites)	0.7
Total habitat cover	**100%**

4.1 Other site characteristics

Soil & geology:

Acidic, Nutrient-poor, Peat, Sandstone

Geomorphology & landscape:

Lowland

4.2 Quality and importance

Northern Atlantic wet heaths with *Erica tetralix*

- for which the area is considered to support a significant presence.

European dry heaths

- for which this is considered to be one of the best areas in the United Kingdom.

4.3 Vulnerability

Much of Cannock Chase falls within a popular and well-used Country Park. Visitor pressures include dog walking, horse riding, mountain biking and off-track activities such as orienteering, all of which cause disturbance and result in erosion, new track creation and vegetation damage.

Bracken invasion is significant, but is being controlled. Birch and pine scrub, much of the latter from surrounding commercial plantations, is continually invading the site and has to be controlled. High visitor usage and the fact that a significant proportion of the site is Common Land, requiring Secretary of State approval before fencing can take place, means that the reintroduction of sustainable management in the form of livestock grazing has many problems.

Cannock Chase overlies coal measures which have been deep-mined. Mining fissures continue to appear across the site even though mining has ceased and this is thought to detrimentally affect site hydrology. Furthermore the underlying Sherwood Sandstone is a major aquifer with water abstracted for public and industrial uses and the effects of this on the wetland features of the Chase are not fully understood.

5. Site protection status and relation with CORINE biotopes:

5.1 Designation types at national and regional level

Code	% cover
UK04 (SSSI/ASSI)	100.0