

# fact sheet

## **RIVER ITCHEN SAC**

This document summarises the key issues and findings of the Habitats Directive Review of Consents for the River Itchen Special Area of Conservation (SAC).

### **About this site**

The River Itchen is a classic chalk river, rising from the chalk aquifer of the Hampshire Downs. It flows through the historic city of Winchester, to join the Solent at Southampton.

It hosts a number of habitats for a number of nationally and internationally important plants and animals. These require certain water levels with little variation over the course of a year, and fast flow rates.

The community of plants that grow in the river is particularly important. Species such as Water crow-foot support a numerous and diverse community of invertebrates.

These provide food for brown trout and salmon. Eels, lamprey and bullhead are also key species of the diverse and important fish fauna. Otters roam the catchment.



#### **Review of consents**

The river's ecology depends on maintaining a uniform, fast flow of water. A variety of wetland habitats, such as ditches and water meadows, are also vitally important for supporting associated rich and valuable wildlife interests. Changes to the supply of water in the river, and across the flood plain, represent a threat to these features of nature conservation importance.

**Abstraction of water** from the system has been investigated, because it has the potential to reduce river flows, particularly in dry summer months when demand for water is high. There is a need to maintain minimum flows in the river to ensure that populations of the designated species are maintained, for example to ensure salmon migration.

# Southern damselfly

The Southern Damselfly is found by the River Itchen.



The quality of the river water is also important to maintaining the diversity of the river ecology. Impacts such as nutrient enrichment and sedimentation have been explored. These pollutants enter the river via consented discharges, such as sewage treatment farms and fish farms, and also from diffuse sources such as agricultural run-off from the surrounding land.

The river has been found to have elevated levels of the nutrient phosphorus, which can lead to excessive growth of filamentous algae, reducing diversity.

The effects on water quality from consented and diffuse sources can be compounded by abstraction from the river, as the capacity for dilution is reduced. We have therefore looked at how these impacts act in combination.

## **Conclusions**

- We assessed 210 permissions in Stage Three. We will affirm 179 of these, following our Stage Four assessment.
- We will not revoke any permissions as a result of Stage Four assessment of the River Itchen SAC.
- We propose to modify 22 discharge consents to improve water quality in the River Itchen to national standards. This will improve conditions for the salmon population and plants.
- 9 abstraction licences will be modified, including Public Water Supply licences and 2 licences owned and operated by the Environment Agency. This will ensure sufficient water in the river to support the plants and animals in very dry summers.
- Unfortunately, these measures alone will not restore the SAC to favourable condition due to unregulated impacts. Therefore, we have identified a number of further actions. These include the need to reduce sediment levels in the river which are largely caused by run-off from agricultural land; this requires improved land management practices.

For more details about this process, contact Jo Simmons

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Further information can be found at:

www.environment-agency.gov.uk
under Southern>Habitats Directive
or visit www.naturalengland.org.uk
for contacts within Natural England
For guidance e-mail: enquiries@environment-agency.gov.uk