Hydrological functioning

Improvement Programme for England's Natura 2000 Sites Theme Workshop Note

Introduction

Hydrological change is the most frequently reported pressure to European habitats in England. Unfavourable hydrology is constraining the Favourable Conservation Status of many water dependent habitats. Mechanisms are available and actions are programmed or underway, but full resolution often involves complex and costly measures. Progress can be slow and it may be difficult to achieve full hydrological restoration for some sites.

A technical workshop was held in Peterborough on 22 August 2013 on hydrological function and Natura 2000 in England. This workshop aimed to discuss the delivery mechanisms for hydrological restoration of Natura 2000 wetlands (such as Water level Management Plans, Restoring Sustainable Abstraction, establishing buffer zones, etc), and to identify barriers to implementation of solutions on the ground and how these can be resolved. The workshop targeted non-open water habitats such as grassland, bogs, mires, peat, woodland and heaths that are relevant to Natura 2000 Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). The workshop did not discuss the hydrological functioning of rivers or lakes, as these are tackled in separate workshops, although the hydrological functioning of floodplains was discussed.

The Improvement Programme for England's Natura 2000 Sites (IPENS) has hosted a series of workshops with key stakeholders in order to gather views and ideas on how to resolve some of the issues affecting Natura 2000 sites. The views in this note are those of the workshop participants and do not necessarily represent those of Natural England or the Environment Agency.

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Key messages from the workshop

- Many Natura 2000 sites experience unfavourable hydrological functioning. Although this is a well known issue, the hydrological aspects of some terrestrial wetland habitats (eg wet heaths, wet woodland) sometimes tend to get overlooked.

- Mechanisms are available to tackle hydrological issues for these sites, but delivery is often difficult and progress seems slow. Particular highlighted gaps at the workshop were:

    - Gaps in knowledge on the hydrological functioning of sites. The mechanisms (eg Restoring Sustainable Abstraction, Water Level Management Plans) can only be effective once there is certainty over the problem, and measures are known.
    - A tendency to focus measures on preventing further damage, rather than restoring a fully natural hydrological functioning.
    - Dependency on short term voluntary measures for off-site hydrological protection.

- Strategic approaches to better address this issue include:

    - A programme of investigations into hydrological functioning, building on (better use of) existing data and short term monitoring to identify where more detailed analysis is needed.
    - Synchronisation of investigations with the timeframes for periodically updating programmes of measures (e.g. Asset Management Plan (AMP) schemes).
    - Having a long term vision for sites, this also gives clarity on what is to be achieved where.
    - Large scale hydrological restoration at some sites. Acknowledging that some Natura 2000 sites have a bigger potential than others. Fully natural hydrological functioning may only be achievable at a limited number of sites, where it delivers the largest benefits.
    - Designation of hydrological protection zones, supported with mechanisms for long term management of these zones.

Envisaged next steps

- Building on the input from the workshop, develop a Theme Plan on restoration of hydrological functioning in Natura 2000 sites

Workshop participants

The following organisations and Natural England staff participated in the workshop:

Senior Adviser, IPENS	Natural England
Senior Specialist, Freshwater and wetlands	Natural England
Senior Specialist, Freshwater programes	Natural England
Team Leader, External Funding	Natural England
Senior Specialist, Wetlands	Natural England
Senior Adviser, IPENS	Natural England
	Environment Agency
	Forest Research
	Humber management scheme
	Lindsey Marsh Drainage Board
	Middle Level Commissioners
	University of Sheffield
	University of Sheffield

Image: Ouse Washes Special Area of Conservation (SAC)

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