



Hydropower Guidance Note: HGN 4 Designated Sites

This guidance note is not intended as a statement of law. It should be read in combination with, and in the context of, the relevant enactments and EU obligations. Nothing in this guidance is intended to give Natural Resources Wales (NRW) power to do anything that it would not otherwise have power to do, or exercise any of its functions in a manner contrary to the provisions of any enactment or any EU obligation. In the event of any conflict between this guidance and enactments or EU obligations the latter takes precedence.

This Guidance Note has been prepared by Natural Resources Wales (NRW) to provide applicants for impoundment and abstraction licences for the purpose of hydropower with information in relation to Designated Sites. Its contents may be updated periodically and applicants should ensure they read the most recent version, which is available on the NRW website.

What are the issues?

If a proposed impoundment or abstraction is likely to affect a designated conservation site, then a detailed evaluation of its environmental impacts, particularly its impacts on the designated features and their conservation status, will be necessary. Designated sites include Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPAs), Special Areas of Conservation (SACs), candidate Special Areas of Conservation, potential Special Protection Areas, possible Special Areas of Conservation, wetland sites designated under the International Convention for the Conservation of Wetlands (Ramsar sites) and Marine Conservation Zones (MCZs).

Impoundment and abstraction licences are one of many permissions required to enable hydro power developments to be built and operated. This document deals with matters for consideration in respect of impounding and abstracting water. Other matters will be considered as part of the planning permission process lead by the local planning authority. NRW is a consultee in the planning process and will often seek environmental safeguards in connection to the development itself, which are additional to the abstracting and impounding licensing requirements.

It is strongly recommended that applicants contact NRW as early as possible during the planning of their scheme so that the full range of potential issues regarding designated sites can be identified and discussed. If required, the applicant will be responsible for providing specific surveys to inform a detailed evaluation of the likely impacts of a scheme. Applicants are likely to find it helpful to identify any such requirements at an early stage. NRW may be able to provide site specific information including monitoring information, which may assist with the assessment of conservation objectives.

Hydropower schemes can impact designated sites during both the construction and operational stages of the development. Impacts can occur even if the scheme itself is not within the designated site, and includes but is not limited to:

- Construction effects - impacts on footprint ecology, damage and disturbance to vegetation, sensitive species and drainage caused by pipeline construction, ancillary construction damage to site (e.g. sediment release);
- Operational effects - building or using impounding structures that interfere with the movement of sediment and organisms, low flows in depleted reaches affecting available habitat and interfering with movement, particularly migration, and changes in humidity which can lead to the desiccation of mosses, liverworts and lichens.

Approach to dealing with impoundments and abstractions affecting designated sites

The standards of flow protection for designated sites are more protective than for non-designated sites, because they support habitats or species that are the most valuable in the country, in a national and international context.

For this reason, design requirements are more restrictive and flow requirements for depleted reaches more protective than for non-designated sites.

Sites of Special Scientific Interest (SSSI)

Sites of Special Scientific Interest are sites notified for their nationally important habitats, species and/or geological/geomorphological features.

Proposals likely to affect Sites of Special Scientific Interest (SSSI) will need to specify:

- the notified features of the site(s) likely to be affected;
- the nature and scale of likely impacts;

- the measures that will be implemented to avoid, cancel or reduce damage to the notified features;
- the measures that will be implemented to compensate for any damage that cannot be mitigated.

Proposals must take account of the need to protect SSSIs. If an abstraction or impoundment licence would damage a SSSI, NRW must wait 28 days to consider whether to grant the licence, and whether conditions should be attached to the licence to protect the SSSI. If NRW grants a licence for a scheme that would damage a SSSI, it must set out how it has taken account of the SSSI status in its decision. It must also advise the local planning authority on whether planning permission should be granted (under S.28I of the Wildlife and Countryside Act 1981(as amended)).

Note that schemes in SSSIs that contain flow sensitive ecology, for example in SSSIs designated for certain oceanic bryophytes or native crayfish, may receive less water than schemes in sites designated for less flow sensitive ecology, for example, bats or woodland birds. NRW will take account of the sensitivity of the designated species and habitats and the scheme design in determining how much water is available for schemes.

European Sites (SAC, SPA, cSAC, pSPA) and Ramsar sites

Hydropower schemes likely to affect a European site or Ramsar site are subject to special scrutiny under Regulation 61 of the Conservation of Habitats and Species Regulations 2010 (as amended) (hereafter referred to as the Habitats Regulations). This detailed scrutiny is termed a Habitats Regulations Assessment and will consider impacts of the scheme both alone and in combination with other plans or projects. This assessment will need to be conducted for the purposes of impoundment and abstraction licenses and planning consent.

An applicant will need to demonstrate that the proposed activity will not adversely affect the integrity of the site/s concerned. Proposals must be submitted with full details of all the measures that will be put in place to protect the designated features of the site/s concerned, taking account of the site's(s') conservation objectives, favourable condition status and any trends in that respect. It is a legal requirement of the Habitats Regulations that developers must provide all the information necessary to allow a Habitats Regulations Assessment to be undertaken.

Applicants should be aware that habitats beyond the boundaries of European sites, can support mobile designated features of European sites where there are no barriers to movement at the site boundary. For example, several rivers in Wales are designated for

salmon (*Salmo salar*) and this species can often be found further upstream than the SAC boundaries. In such cases, the Habitats Regulations will apply to any hydropower schemes that potentially impact on water courses in a way that would affect the integrity of habitats that support SAC features. These supporting habitats are defined as those that support the qualifying features of the designated sites for all or part of their life cycle, or provide food or shelter for such species.

Applicants can find more information about the Habitats Regulations and the Habitats Regulations Assessment process in the documents below:

Technical Advice Note (TAN) 5 on Nature Conservation and Planning can be found on the Welsh Government Website.

Tyldesley, D (September 2011) *Assessing Projects Under the Habitats Directive – Guidance for Competent Authorities*.

(Tyldesley, D. & Chapman, C. (2013) *The Habitats Regulations Assessment Handbook (England and Wales): Practical guidance on the assessment of effects of plans and projects on Special Areas of Conservation, Special Protection Areas and Ramsar sites*.

SAC management plans, which outline the conservation objectives for each of the sites, are currently available on the legacy Countryside Council for Wales website and will be on the Natural Resources Wales Website in due course.

We will seek protective design and flow standards in impoundment and abstraction licences, as well as in any planning consent.

‘In combination’ tests

We are required to carry out a specific test of ‘in-combination’ in relation to assessing effects on SACs, SPAs and Ramsar sites. This involves the evaluation of any new permission, plan or project (PPP) in combination with other PPPs – as set out in the table below.

In effect, this is a specific test of known future cumulative impacts, within which all other cumulative effects should be evaluated. The in-combination assessment will be carried out by the competent authority but it is important for applicants to understand that it is not only the impacts of their own scheme that will determine the outcome of assessments where

protected sites are concerned. In relation to hydropower, habitat loss may relate to the effects of impoundment or flow depletion.

Summary of our approach to ‘In Combination’ tests

<p>In combination effects from other PPPs</p>	<p>A permission, plan or project (PPP) must be assessed for likely impacts in combination with other PPPs likely to affect a site. We only include those PPPs that can reasonably be expected to affect the features identified as being at risk from the proposal. These include PPPs that are:</p> <ul style="list-style-type: none"> of a similar and/or different type authorised by another competent authority that may not be likely to have a significant effect on a European site when considered alone for which permission is currently being sought that are actually proposed or authorised but have not been fully implemented or completed that are regularly exercised and have continuing effects – for example: water discharge permits and abstraction licences. <p>Where a PPP is at such an early stage that its effect cannot be sufficiently certain it will not be included in an ‘in combination’ assessment.</p>
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<p>How we check for in combination effects</p>	<p>We break our assessment down into sections, dealing with each of the site’s designated features. We focus on the impact mechanisms acting upon attributes of the same feature.</p> <p>We identify, as far as possible, the extent of the effects (mechanisms) of the new application with respect to other PPPs and any overlaps.</p> <p>We consider the spatial distribution of the features and habitats, using maps where available. If features are currently degraded, we consider the potential distribution of the degraded interest features.</p> <p>We create a matrix of potential impacts of the new PPP in combination with other impacts, together with a clearly defined scope for what constitutes ‘the sum of all the influences’.</p> <p>We assess the magnitude of the likely impact from both overlapping and discrete effects. Our assessment should take account of both the duration of interaction between the effects and sensitive features and the total area of the feature(s) affected.</p>
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What do you need to do?

We strongly advise that developers engage with NRW at an early stage in the design of their schemes. This will help them:

- to understand the features of the designated sites,
- identify any potential survey and assessment requirements,
- highlight any information that NRW may hold that may inform any surveys or assessments undertaken by the developer.

Applicants may need to engage the services of a suitably qualified and experienced ecologist and aquatic specialists to undertake surveys and assessments on their behalf. Whilst NRW cannot make any recommendations in this respect, we would suggest consulting the Chartered Institute for Ecology and Environmental Management website for a list of professional consultants who may be able to help.