

## Hydropower Guidance Note: HGN 5 Cumulative and In-Combination Effects

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 cumulative and in-combination effects. Its contents may be updated periodically and applicants should ensure they read the most recent version, which is available on the NRW website.

### Introduction

Proposals for hydropower schemes cannot be looked at in isolation. We have to take account of the cumulative effect of multiple impacts caused by the same scheme on a particular site or water body. This Guidance Note:

- explains why we take account of other activities and stressors;
- gives examples of these activities and stressors;
- explains the difference between cumulative and in-combination effects;
- refers to the key legislation that requires this wider perspective; and
- explains what developers have to do.

This note must be read in combination with other guidance notes from this series.

### Effects of other activities and stresses

In this context we discuss changes to the environment that are caused by a proposal acting in combination with other past, present and future developments as well as

cumulative effects of the same development. These changes could bring benefits to the environment, or harm it, or do both.

## Cumulative effects

Cumulative effects are multiple effects on the same habitat or site that arise from the development proposed together with those from all developments that have been built and are operational.

## In-combination effects<sup>1</sup>

In combination effects are those effects that may arise from the development proposed in combination with other plans and projects proposed/consented but not yet built and operational (i.e. those developments that are separate from the baseline).

Other guidance notes describe environmental standards that need to be met for individual schemes. However, achieving these standards (on an individual scheme) does not necessarily prevent unacceptable environmental impacts, nor ensure a scheme will be licensed. For example, if there are multiple schemes developed on the same river system or if the effects of hydropower combined with other activities, such as land use and physical modification, adverse impacts may result despite small individual effects.

## Cumulative and in-combination effects

When assessing a proposal for a hydropower scheme we will consider the combined, or cumulative, effects of the scheme with other activities that can reasonably be expected to interact, either in an additive or synergistic way, to adversely affect the environment. This includes activities:

- of a similar and/or different type;
- authorised by others authorities;
- that may not have a significant effect when considered alone;
- for which permission is currently being sort;
- proposed or authorised, but not yet fully implemented or operational;

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<sup>1</sup> The term 'in combination' has a specific meaning in the context of the EU Habitats Directive, as described in Article 6(3): "Any plan or project not directly connected with or necessary for the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implication for the site in view of the site's conservation objectives." Although this definition only applies directly to European designated sites, we use it more broadly for convenience.

- that are regularly exercised and have continuing effects.

## Why do we assess cumulative and in-combination effects?

There is legislation requiring us to look at the cumulative effects of hydropower schemes. These include the Water Framework Directive and the Conservation of Habitats and Species Regulations 2010. Additional information is available in the Designated Sites and Water Framework Directive Guidance Notes.

## What do you need to do?

NRW is a competent authority, in relation to European sites or Ramsar sites. Developers should note that it is a legal requirement under Regulation 61(2) of the Conservation of Habitats and Species Regulations 2010 (as amended) for them to provide sufficient information to NRW to inform a Habitats Regulations Assessment (HRA). We will need to assess your proposal, working together to complete the HRA for the scheme. Only those schemes which will not have an adverse effect on the integrity of a European site will be permitted. You may not have all the evidence or information that we need to consider cumulative or in-combination effects. However, you will need to contribute to our assessment, which will consider:

- the number, scale and impact of existing hydropower schemes in a catchment;
- the number, scale and likely impact of consented (but not yet operational) hydropower schemes in a catchment and those under consideration in the consenting system;
- the environmental objectives for the catchment and if the catchment is currently meeting them;
- whether the proposed scheme, in combination with other activities, could impact on water body status under the Water Framework Directive (namely cause deterioration or prevent the achievement of good ecological status or good ecological potential);
- whether the proposed scheme, alone or in combination with other plans or projects, is likely to have a significant effect on a European site or Ramsar site or maintaining the integrity of such sites, the conservation objectives of the site(s) concerned, its condition status and any trends in that respect;
- whether the proposed scheme is likely to have a significant effect on the features for which a SSSI is notified and their long-term maintenance in favourable condition;
- whether the proposed scheme is compatible with, and will not compromise, the objectives to further the conservation of habitats and species listed under S.42 of the NERC Act.

Developers are strongly encouraged to engage with NRW at an early stage in the design of their scheme to establish whether cumulative and in-combination assessments may be required.

Where relevant information is available from NRW, other agencies or other sources (for example from other developments or environmental groups), this information should be used. Information to consider should include:

Plans, projects, activities and stressors:

- Water abstraction (eg drinking water supply reservoirs, abstractions for industry or agriculture);
- Land use within the water body (eg forestry, mining, agriculture);
- River dredging, flood defence works, transport links;
- Information on designated sites likely to be affected, including names of sites; reasons for designation, conservation objectives, condition status and any trends in condition;
- Information on habitats and species listed under s.42 of the NERC Act likely to be affected;
- Impact assessment for the above;
- Information detailing the potential measures that will be put in place to address (as appropriate) the likely impacts of the scheme on the considerations listed above.