

Guidance for run-of-river hydropower

December 2013

Flood risk

This document is part of our set of advice notes to help you design your hydropower scheme. You should read our [Guidance for run-of-river hydropower development](#) first, which contains an overview of our guidance and a glossary of technical terms.

Flood risk assessment

A hydropower scheme may increase flood risk or affect what would happen during flooding.

It's likely that you will need to carry out a Flood Risk Assessment. This assessment will form part of your planning application to your local planning authority (LPA). Ask your Account Manager to explain what you need to do and when. We recommend contacting your LPA as early as possible.

Flood defence and Ordinary Watercourse consent

You must apply for a flood defence consent from us when your scheme is sited on, or within a specified distance of, a main river. This distance is set by local byelaws and generally ranges between 8m to 20m.

A main river is a watercourse that is shown on a main river map and includes any structure or appliance for controlling or regulating the flow of water into, within or out of the channel. Refer to our [flood map](#) to find out if a watercourse is a main river.

Watercourses that are not designated as main rivers are called ordinary watercourses. You may require an ordinary watercourse consent from either the Lead Local Flood Authority, usually the county council or unitary authority, or the Internal Drainage Board. Table 1 gives details of the responsible authorities for different types of watercourse.

Examples of work that may need consent are:

- works to strengthen the river banks
- works associated with the intake and outfall structures, for example a weir, sluice gate or fish pass
- building other structures such as a penstock pipe or powerhouse
- maintenance not covered by riparian responsibilities
- dredging the watercourse and removing materials
- culverting a watercourse
- temporary works, including scaffolding and cofferdams (watertight enclosures) across a watercourse, or temporary diversions of water while work is carried out

Table 1 Responsibilities for main rivers and ordinary watercourses

	Who to apply to	What to apply for
Main river	Environment Agency	Flood Defence Consent
Ordinary watercourse	Lead Local Flood Authority	Ordinary Watercourse Consent
Ordinary watercourse within an Internal Drainage Board area	Internal Drainage Board	Ordinary Watercourse Consent

What you need to do

Read our general guidance for carrying out flood risk assessments:

- [Flood Risk Assessment \(FRA\) Guidance Note 3](#) for development in Flood Zones 2 and 3.
- Further information about development and flood risk is also available from the [National Planning Policy Framework](#) and practice guidance. A Flood Risk Assessment for this type of activity may not be that onerous and we advise you to contact your Account Manager to discuss the scope of the assessment.
- [Pollution Prevention Guidance 5: Works and maintenance in or near water](#) provides advice on how to avoid pollution to the water environment, how to manage waste and how to respond to an incident when planning works near water.

Apply for separate flood defence or ordinary watercourse consents

You need separate flood defence or ordinary watercourse consents for individual structures/elements of work.

For permanent works, the environmental report you prepare for your scheme will form part of your application for flood defence consent or ordinary watercourse consent. For most schemes you will need to include a Flood Risk Assessment.

For temporary works, you will need to provide a method statement for the works explaining how and when they will be carried out. Include any specific measures you plan to take while the work is being carried out to:

- keep disruption to a minimum
- minimise obstruction to river flows
- reduce any unwanted effects such as siltation
- prevent pollution
- prevent the spread of invasive species and enforce biosecurity

Your application should include plans to show the location of the proposed works to an appropriate scale, including a location plan; a site plan and detailed drawings.

Include details of the calculations on which your assessment is based.

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