



Environment
Agency

A guide to successfully maintaining rivers to reduce flood risk

This document has been produced by the Environment Agency in Wessex Area to help riparian owners and organisations such as parish councils, navigate the process of planning and delivering maintenance works in rivers, where they want to do so to reduce flood risk.

Many of our local communities are looking at doing maintenance on rivers themselves, especially in Somerset since the Somerset Rivers Authority created the [Community Flood Action Fund](#).

There are certain legal requirements that must be met when maintaining rivers, regardless of which organisation or person does the work. We recognise that everyone will want to do maintenance in the most environmentally-friendly way possible and this guide contains useful information on both legal requirements and good practice.

This document is intended for information only and it should be used in conjunction with relevant legislation that has been highlighted. It remains the responsibility of those planning and undertaking the works to ensure their work is delivered in accordance with this legislation.

Types of Rivers

- **Main Rivers** – overseen by the Environment Agency (EA).
- **Viewed Rhynes** – overseen by the Internal Drainage Boards (IDB).
- **Ordinary Watercourses** – overseen by the Lead Local Flood Authority (LLFA), or IDB in an IDB area.

You can check if the river on your land is a Main River by following this link: [Statutory Main River Map](#).

You can check if the river on your land is a Viewed Rhyne by following this link: [Viewed Rhyne Map](#).

You can get information on how to apply for Land Drainage Consent on Ordinary Watercourses [by following this link](#).

Types of maintenance

- **Vegetation management** - cutting all types of vegetation from the side or bottom of the channel. This work does not require a permit from the Environment Agency. If the work is within or next to a Site of Special Scientific Interest (SSSI), it may require consent from Natural England.
- **Desilting** - the removal of deposits of silt that have accumulated on the bed of a river. This work will require a permit from Environment Agency.
- **Dredging**- removing a range of materials or making a channel larger by removing the bed and channel side material. This work will require a permit from Environment Agency.

If you are considering works on any watercourses not designated as ‘main river’ you may need Land Drainage Consent from the Local Authority for Ordinary Watercourses, or from the Internal Drainage Board for Viewed Rhynes.

Riparian ownership

A *Riparian Owner* is an owner of land adjacent to a watercourse, usually owning up to the channel centre.

The responsibility to ensure the watercourse and its banks are maintained and kept free of blockages that could affect the natural flow of water or increase the risk of flooding, falls to the riparian landowner(s).

More information about riparian landownership can be found on the government website at: [Owning a watercourse - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/owning-a-watercourse).

The recently updated *Your Watercourse: Rights and Roles* guide providing more detail can be downloaded here: [Your watercourse: rights and roles | Engage Environment Agency \(engagementhq.com\)](https://www.engagementhq.com/your-watercourse-rights-and-roles).

The above guide aims to provide information to riparian landowners planning to undertake maintenance activities along a watercourse designated as a statutory main river, including in areas where the Environment Agency has previously undertaken work using its permissive powers.

Permits and exemptions

Maintenance of a watercourse is the responsibility of riparian owners. Under the Environment Permitting Regulations (EPR) 2016, this type of work may require a Flood Risk Activity Permit (FRAP) on main river watercourses. However, the works may fall within an exemption so that a FRAP application is not required.

Flood Risk Activity Exemption

First, check if the works meet the requirements of an exempt or excluded flood risk activity: [Exempt flood risk activities: environmental permits - GOV.UK](https://www.gov.uk/guidance/exempt-flood-risk-activities-environmental-permits). If your activity meets the criteria and conditions for an exemption, you must register an exemption prior to commencing work. You can register an exemption here: [Register a flood risk activity exemption - GOV.UK](https://www.gov.uk/guidance/register-a-flood-risk-activity-exemption). [Bespoke Permit](#)

If the works do not meet the requirements for an Exemption or an Exclusion, you will need to submit an application for a Bespoke Permit. Details on how to apply are on this link: [Flood risk activities: environmental permits - GOV.UK](https://www.gov.uk/guidance/flood-risk-activities-environmental-permits).

Applications for a Bespoke permit must be submitted to our National Permitting team via flood.permitting@environment-agency.gov.uk.

You will need to send in:

- Form A, form F3 and Form B10 plus
- A detailed ecological assessment of the potential impact on the environment, along with appropriate mitigation measures to be put in place.
- A Water Framework Directive (WFD) assessment to show that the works will not result in waterbody quality deterioration. Guidance can be found [here](#).
- Cross section drawings of the length of the channel to be undertaken and
- A method statement on how the work will be done

Waste Permits and Exemptions

There are a number of permit options for depositing waste dredged from inland waterways onto land. These include a:

- Registered exemption
- Waste recovery activity permit

- Waste disposal activity permit

More information can be found on the government website: [Depositing dredged waste on land - GOV.UK](#).

[Schedule 3 of the Environmental Permitting Regulations 2016](#) provides several exemptions from needing a permit to deposit dredged waste on land. These are:

- [D1 waste exemption: depositing waste from dredging inland waters - GOV.UK](#)
- [U1 waste exemption: use of waste in construction](#)
- [U10 waste exemption: spreading waste to benefit agricultural land](#)
- [U11 waste exemption: spreading waste on non-agricultural land](#)

You must register the exemption before you use it. You can register for a waste exemption here: [Waste Exemptions](#).

Pre-application advice can be requested from the area team – (Wessex - bridgwater.frap@environment-agency.gov.uk).

Environmental Regulations and Considerations

Protected Species. Altering the banks risks harming legally protected species such as water voles which are widespread throughout Somerset. You should take reasonable steps to avoid harm to water voles, their habitat and other protected species, otherwise you could be breaking the law e.g Wildlife and Countryside Act 1981.

Aquatic Species. Return any visible fish, invertebrates or molluscs captured during works to the river. We recommend the banksman/machine operator watch for them during works and performs a final walkover at the end to check for anything that may have risen to the surface.

Invasive Species Control. To ensure biosecurity, specific Invasive Non-Native Species control procedures should be implemented prior to works commencing including [Check-Clean-Dry procedures](#) as a minimum. Under [Section 14](#) of the Wildlife and Countryside Act 1981, it is an offence to release or allow escape of species listed under Schedule 9.

Consent for Designated Sites. If working within a designated site (i.e. Site of Special Scientific Interest (SSSI), Special Protection Area (SPA), Special Area of Conservation (SAC) or Ramsar, you must contact Natural England to seek consent prior to commencing works. Email protectedsites@naturalengland.org.uk. You can check if your location is part of a designated site [by following this link](#).

Timing of Works. Works should either be carried out outside of nesting bird season (1st March – 31st August inclusive) or a suitably qualified ecologist will need to complete nesting bird surveys prior to works commencing, with sufficient mitigation such as exclusion zones implemented. Greater care is required during summer or hot/dry weather as warmer water holds less oxygen, increasing the likelihood of fish kills. In-channel works should be avoided between 15th March and 15th June where coarse fish are present and between 1st October and 31st May where salmonids are present.

Fish in Distress. If fish are gasping at the surface, please cease works immediately and contact the Environment Agency. Environment incident hotline 0800 80 70 60 (24-hour service).

More information on maintenance types

Vegetation removal

You do **not** need any permits or consents from the Environment Agency to undertake vegetation management work along the banks of the river and within the river channel.

- It is your responsibility to comply with the relevant environmental legislation.
- In-channel weed must be cut with a mowing or reciprocating bucket, and the sides and bank top may be cut with a suitable attachment.
- All cut vegetation must be removed from the river and placed away from the bank edge. Give time to allow wildlife to return to the river.
- Leave a fringe of vegetation at the edge of the water and at the very foot of the bank.
- Do not expose toe or bank side soils by excessive cutting and avoid disturbance of bed material.

Diagrams showing typical Environment Agency vegetation management in a river (before and after).

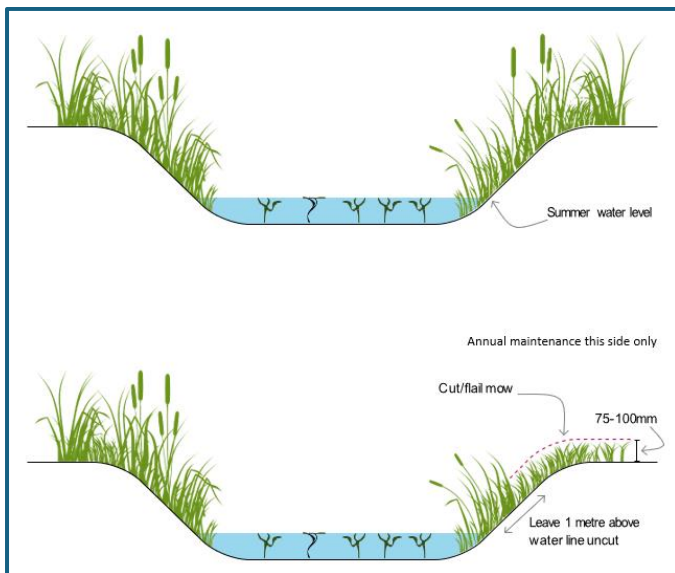


Figure 1: Example EA grass cut specification.

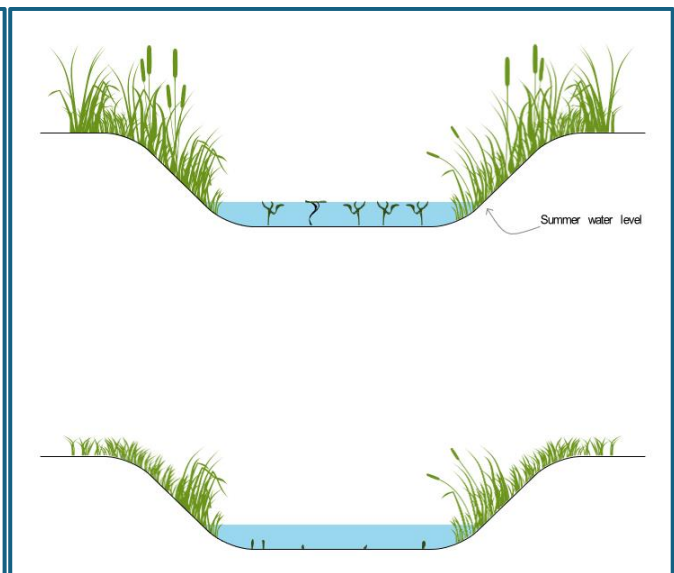


Figure 2: Example EA weed cut specification.

Figure 1 – Only one bank is cut including the margin down to the water line. In-channel weed is not cut. The other bank is not cut at all to maintain habitat and food source.

Figure 2 – Both banks are cut but leaving a fringe on both sides at the waterline. In-channel weed is also cut.

Dredging and Desilting

Dredging and desilting are methods used to remove accumulated silt from rivers to temporarily increase the flow. Silt may include very fine gravels or soils that have been washed into rivers from surrounding land in the catchment, or sediment brought in on the tide.

In the UK, dredging and desilting have historically been carried out for a broad range of reasons: to drain land, maintain flows to mills, abstract sand or gravel for construction or to improve navigation, in addition to preventing flooding. Dredging and desilting can be effective in some situations, but the risks of unintended ecological consequences and increased flood risk downstream should be managed. Desilting may be subject to timing restrictions due to fisheries spawning seasons. This will be confirmed by our permitting team when you submit your application.

For further Information please see: [Floods and dredging: explaining the Environment Agency's approach – Creating a better place.](#)

When undertaking dredging or desilting you **must** follow this Environment Agency guidance:

[Dredging as a flood risk activity under the Environmental Permitting Regulations - GOV.UK.](#)

This includes not leaving the riverbanks exposed and bare as demonstrated within the guidance.

If you have any questions or queries, please contact the Environment Agency National Customer Contact Centre by phoning 03708 506 506 or emailing enquiries@environment-agency.gov.uk (Wessex - wessexenquiries@environment-agency.gov.uk).