

Guidelines for riparian owners

Good practice for watercourse maintenance

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Herefordshire Council

Working for Herefordshire

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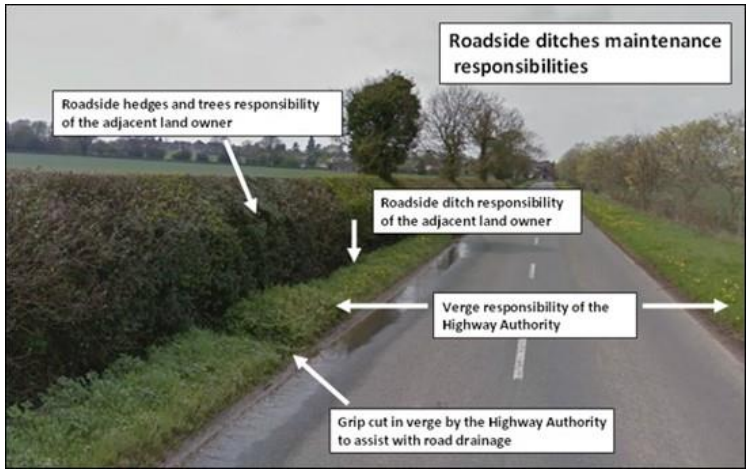
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Who is this guide for?

This is for property and landowners, and their agents, who are riparian owners, looking for guidance on **how best to maintain their ditches**. If working on main rivers, ordinary watercourses or looking to alter the route, shape or capacity of a water course consent may be required (pg 11).

You're a 'riparian owner' if you have a watercourse, ditch, stream, river or culvert running alongside or within your property boundary. This could be anyone from farmers to a house owner with a ditch running at the front of their property. Ditches that run within the limits of the highway don't usually form part of the highway - a ditch like this is the responsibility of the adjacent landowner or householder.



Landowner for both banks of a watercourse: If you own the land on both sides of a ditch, you're fully responsible for the maintenance of that watercourse.

Landowner on one bank of a watercourse, or nearest to the bank: If you're the closest landowner to the top bank of a ditch, you're usually responsible for the maintenance - to the central line of the watercourse. This is the case even if it doesn't fall within your property boundary set out by your title deeds.

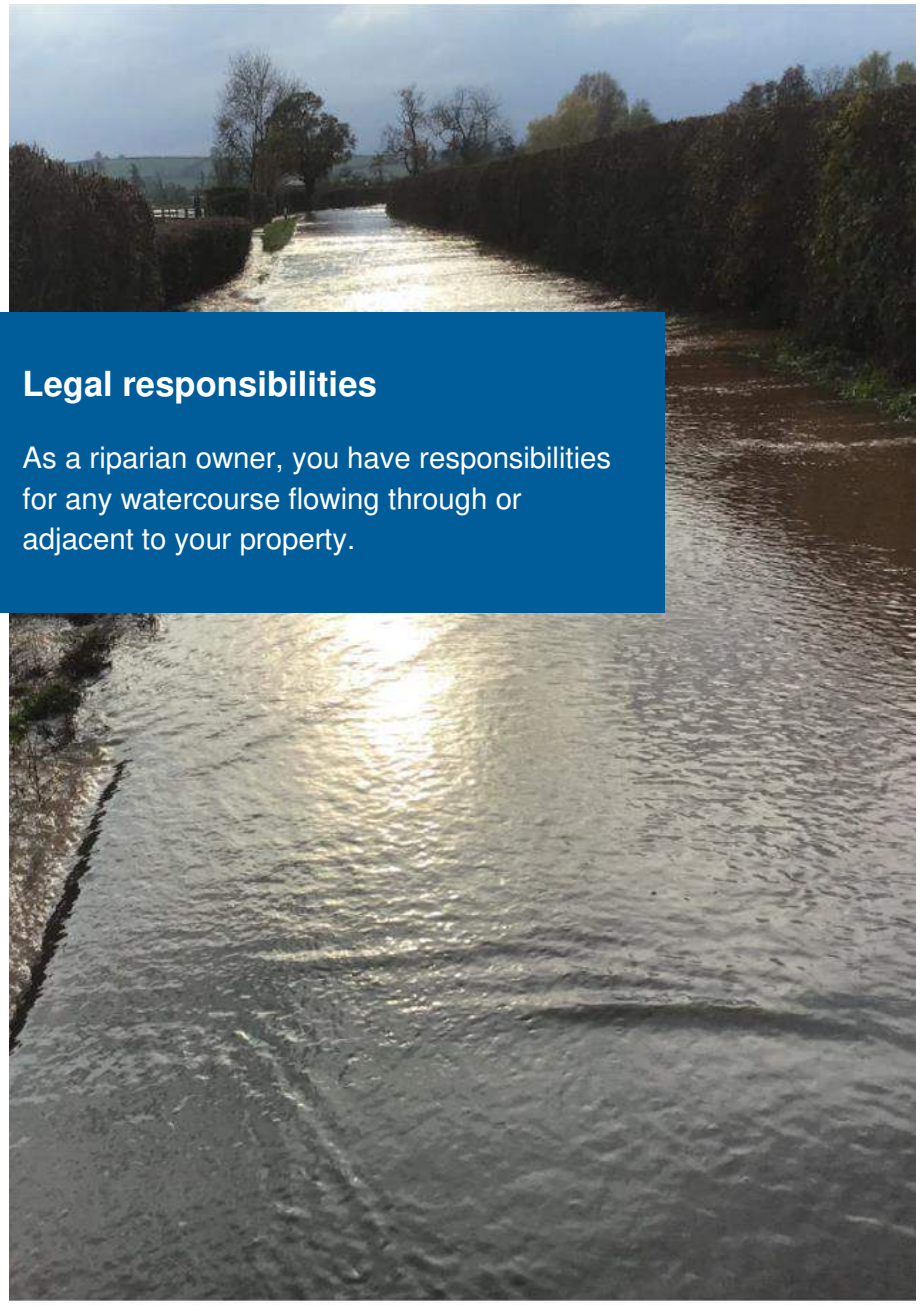
Landowner on one side of the bank, with highway on opposite bank: It's well established under common law that roadside ditches are the responsibility of the landowner - not Herefordshire Council, unless you have evidence to prove otherwise. This has always been the case even if Herefordshire Council as highway authority had previously exercised their right to also maintain the ditch the ultimate responsibility still lies with the landowner.

Watercourses underground

Culverted watercourses are watercourses that have been piped, usually under highways, driveways or housing developments. These are generally connected to an open watercourse at some point, but there might not be any visible signs above the ground. You're still responsible for the piped watercourse which passes through your land if you are the:

Landowner of the land through which the culvert runs: If you own the land on both sides of a culverted watercourse, you're fully responsible for the maintenance of that section of the watercourse in your land unless an easement agreement is in place.

Landowner of the land next to where the culvert runs: Many culverted watercourses follow the line of the old open ditch and may run along the boundary of properties. In that case, you're jointly responsible with your neighbour for the maintenance of that section of the piped or culverted watercourse next to your land.



Legal responsibilities

As a riparian owner, you have responsibilities for any watercourse flowing through or adjacent to your property.

What does this all mean?

Why am I responsible for watercourse maintenance?

If you have a watercourse of any description flowing through or adjacent to your property, you are a riparian owner. Your responsiblities for the watercourse are set out in law in the Public Health Act 1936, the Land Drainage Acts of 1991 & 1994, the Water Resources Act 1991 – as well as some local land drainage bylaws.

Why should I maintain the watercourse?

As a riparian owner, you should be maintaining the watercourse regularly as part of your regular responsibilities. And, it's especially important to keep an eye on the capacity of our county's land drainage system as we're seeing more regular changes throughout the county – such as new developments and heavier rainfall. There are a variety of reasons why it makes a difference:

- Keeping the land well drained
- Preventing flooding by allowing water to escape efficiently
- Preventing localised flooding
- Controlling surface water
- Maximising all the functions that the watercourse was designed for
- Enhancing the environment
- Reducing landowner liability
- Improving your community

The importance of well-maintained watercourses

Keeping your watercourse maintained and working well benefits the whole community. Constant flooding is an issue. It can restrict access to properties, make everyday living difficult, and cause considerable expense and inconvenience for anyone that's been flooded. Recent winter weather has highlighted how important it is to maintain watercourses, to keep our land drainage systems working properly.

We've included some helpful 'best practice' information in this guide to help you carry out maintenance along your watercourse. These simple measures, such as working from one bank and not using heavy machinery in the channel, will help you keep your watercourse working in a way that protects the environment and reduces the risks of flooding.

For flood risk

Watercourses such as ditches and culverts are designed to drain surface water away, before water levels increase to such an extent that puts property, roads, land, and infrastructure at risk of flooding. If the system of ditches and culverts are maintained well, any flooding is mainly likely to affect areas in the floodplain.

Not all watercourses transport water, some act purely for storage. But, maintaining the capacity of these storage features is still important as they prevent water flooding elsewhere.

For most watercourses you'll find the cost of maintaining is relatively minor compared to the costs of flood damage - not to mention the distress and inconvenience caused if your property floods. In fact, if a flood happens as a direct result of a landowner not carrying out their riparian responsibilities to properly maintain a watercourse, the landowner could be liable for compensation.

For wildlife

If a watercourse is carefully maintained, it can create an excellent habitat for wildlife. Careful planning, such as trimming alternate banks each year to remove obstructive vegetation, can help landowners fulfil their riparian responsibilities whilst enhancing the environment. This approach allows wildlife to migrate to opposite sides of the watercourse, rather than be forced to leave the watercourse totally.



Impact on wildlife

Did you know, in certain areas watercourses are home to water voles - a nationally protected species?

Removing silt and debris from the watercourse bed is also very important. Again, this can enhance the environment, as well as ensure the free flow of water.

Basic steps for maintaining your watercourse

It's useful to put together a programme that sets out how often and at what time of year you'll carry out maintenance on the watercourses you're responsible for. You'll find most ditches need some degree of maintenance every year. The best time of year to do major clearance works is from late September into October - once vegetation has already begun to die back naturally and ahead of increased water flow during the winter.

Things to consider for your maintenance programme

For open watercourses: Consider how much vegetation you plan to cut back to make sure the watercourse is able to flow freely. Set out when you'll remove silt from the watercourse bed to maintain the ditch capacity.

For structures along your watercourse - such as weed screens, grilles, or sluices:

You should include a routine for inspection and clearance of structures - especially including times of high flow.

For culverted watercourses: Inspect for blockages or signs of collapse.

Keep vegetation growth under control

- It's important to consider any impact on biodiversity. For example, you should minimise mowing of banks around ditches during the animal spawning season - from March to mid-July.
- We recommend you only cut up to just above the water level on one side of the watercourse, leaving the fringe of the bank uncut. This maintains some habitat whilst enabling a clear flow in the ditch.
- You should remove and dispose of any cuttings from clearance work you do, to keep the watercourse clear and avoid anything causing blockages downstream.
- Some trees may have tree protection orders (TPOs) - if in doubt check with Herefordshire Council.

Keep watercourses free of debris

- If you create any organic waste during maintenance of your ditches, you should leave it on top of the bank for a few days - to allow any organisms to find their way back into the watercourse. After this, you can remove the waste and spread any silt onto adjacent land.
- You should completely remove all non-organic waste and disposed of it safely and ensure any necessary waste permits or exemptions are in place.
- If you disturb any debris, make sure it doesn't flow downstream – it could cause problems for other landowners.
- For culverted (piped) watercourses, blockages within the pipe or at an inlet can cause flooding. You can reduce the risk of such blockages with regular inspections and removing debris.
- Culvert inlets often have protective grills to prevent debris entering the pipe and causing blockages. You should clear these regularly, especially following heavy rainfall when debris can accumulate quickly.

Remove excess silt

Silt naturally builds up in watercourses as vegetation dies back each year. As this happens, it can reduce the capacity of the watercourse or block pipes into and out of the watercourse. There are a few things you can do to counteract this:

- Remove silt along the length of the ditch to make sure it flows properly and in the right direction.
- Where there are pipes going into or out of the ditch, remove silt to the same level or below the bottom of the pipe.
- Try to maintain the original profile and cross section of the ditch, wherever possible. If you alter the gradient, it can change the flow pattern and increase flood risk. Banks with a gradient of 1 in 4 allow for easy maintenance, as well as being suitable for wildlife.
- As long as the silt isn't hazardous, you can put it on the bank of the watercourse. This allows organisms to move back into the ditch. But you need to make sure:
  - this material doesn't then block any other ditches or nearby roads, or stop water draining into the ditch if it would normally do so
  - you deposit the silt as close as possible to where it was dredged from. That is, either on the bank of the watercourse it was taken from or on land directly next to the watercourse
  - if you think the material may be hazardous – for instance if it contains oils – check guidance online for safe ways to dispose of it or contact the Environment Agency for advice.

Piped or culverted watercourses

Piped or 'culverted' watercourses are prone to blockage or collapse, and will degrade over time. Where they naturally silt up, they can be difficult to access and clean.

- Blockages at the entrance or inside the pipe can cause flooding. You can reduce such blockages with regular inspections and removing any debris or silt build up as soon as you find it.
- You can either carry out regular inspections yourself or you can use a qualified drainage company. There are many drainage companies that can inspect and clear culverts.
- Culvert entrances and exits often have protective grilles to stop debris getting into the pipe and causing blockages. You should inspect these grilles regularly and clear any debris away. This is especially important during winter or periods of heavy rain, when debris can build up quickly.
- You'll need to agree the design of grilles with Herefordshire Council or the Environment Agency and get permission before you install anything. Poorly designed grilles can cause an obstruction themselves.
- Health and Safety must be your top priority when carrying out culvert maintenance. You should never enter any large culvert without getting qualified advice first.

Piped or culverted watercourses

Cleaning the inside of a culvert is likely to cost more than maintenance of an open watercourse, due to the specialist equipment required to access it.

Staying safe when you work on your watercourse

When undertaking works within or adjacent to a watercourse, landowners must assess their works to ensure that they can be undertaken without putting themselves or others at any kind of risk. Due to the range of risks posed by both open and culverted watercourses, landowners should assess this on a case-by-case basis.

Personal safety

In particular, you'll need to consider risks related to:

- silt or mud
- slippery banks near water
- being in or near deep or fast flowing water
- being near the highway
- working with plant or machinery
- being around culverts and enclosed spaces
- cutting down or working near trees If in any doubt you should always seek advice.

Always seek medical attention if you start to feel unwell after working near water.

You should wear protective clothing, such as gloves, and cover any cuts or scratches with waterproof plasters to prevent infection. If you get any cuts or scratches whilst you're working near water, make sure you clean them carefully afterwards.



Public safety

When it is likely that watercourse maintenance will be in proximity to members of the public, on the highway or public rights of way for example, you need to carefully consider how to work safely.

Works on ditches or other features adjacent to the public highway should be carried out in such a way that no operative or item of plant encroaches onto the carriageway unless appropriate and advance signage is used.

- You should only use authorised signs, for example the 'men at work' sign. And, signs must be at least 750mm.
- Make sure signs are positioned to give maximum visibility and warning to other road users.
- Clean the road as necessary during the working day and always at the end of the working day.

If you're planning to do any works that will take place from the highway, you may need to get advance permission. You can contact our street works team via email on hereford.streetworks@bblivingplaces.com to check.

Looking after wildlife

Ditches can form very important habitats. They may support important species of flora and fauna that are protected. Or, they could have invasive species that are controlled under the Wildlife and Countryside Act 1981.

Protected species

Protected species can include native crayfish, water voles, great crested newts, nesting birds, and bats. The Environment Agency on 03708 506 506 can advise you on protected species and any consents required before undertaking maintenance work. If you think the area you want to clear may contain any protected species, you need to get advice before you go ahead. To find out if protected species have been recorded on or near your land, please contact the Herefordshire Biodiversity Record Centre on 01432 260500 or via hbrc@herefordshire.go.uk. Or, contact Herefordshire Wildlife Trust who may be able to support.

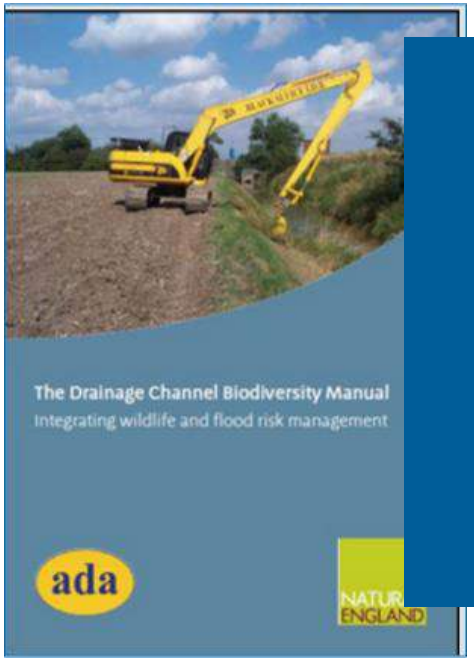
Reducing the impact of maintenance works

You should consider different methods of maintenance to reduce the impact on the environment – such as:

- using hand tools where possible to clear obstructions, rather than completely clearing a ditch of vegetation using machinery
- changing when you carry out any work to when vegetation has begun to die back - from late September into October. At this time, there should also be no wildlife nesting or breeding.
- check timings with the Environment Agency if working on a Salmonid watercourse
- planning work so that alternate stretches of a watercourse can be worked on each year, to make sure there's always a healthy vegetated area where wildlife disturbed by maintenance can move to. But, you still need to make sure there's always a clear free flow to water at all times.

Dealing with invasive species

Some vegetation and animal species are non-native and considered invasive. If you have invasive plants or injurious weeds on your property, you have a responsibility to prevent them spreading or causing a nuisance. You must not plant, or otherwise cause to grow in the wild, any plant listed on schedule 9 of the Wildlife and Countryside Act 1981.



You can get guidance from the Environment Agency

If you own a larger watercourse, maintain multiple watercourses or are likely to be using large machinery to clean the watercourse you may find the Drainage Channel Biodiversity Manual useful.

Invasive species frequently found alongside watercourses include Himalayan Balsam, Japanese Knotweed, and Giant Hogweed. You can find more information on how to identify invasive species and their management on the GB non-native species secretariat website.

Timing and tools for maintenance

It's good practice, for all watercourses, to develop a programme that sets out how often you'll carry out any maintenance.

What to consider

- Make sure you carry out the majority of your clearance works after vegetation has begun to die back, from late September into October. At this time of year, it's also less likely for wildlife to be nesting or breeding around your ditches. However check if working on a Salmonid watercourse.

Good to know

Most watercourses need some form of maintenance every year.

It's best to do most work in mid-Autumn - ahead of heavier water flow during the winter.

- You should try and carry out maintenance when the water level is at its lowest, when there hasn't been much rain.
- Plan your maintenance so there are stretches of habitat left intact, for example by trimming alternate banks each year. This means there's always a safe area wildlife can move to.
- If protected species have been recorded in your ditches you must make sure their habitats are not adversely affected.
- You'll need to check rubbish or weed screens and grilles regularly all year round - especially when high water flow is anticipated.
- You should remove any debris from ditches as soon as it starts to build up.
- You'll need to inspect culverted watercourses regularly for blockages or signs of collapse. If you can spot such problems before they become an obstruction to the watercourse, it reduces the likelihood of flooding. Many drainage companies will do jet cleaning or camera surveys, at a cost, or you can rod the culvert to check for blockages.

The right tools for the job

It's better to carry out minor works regularly, to clear obstructions to the water flow, rather than completely remove all vegetation and silt from a watercourse in one go. The tools you'll need will depend on the scale of your watercourse and the extent of work you're doing.

For smaller landowners, such as householders, you can generally carry out maintenance best using hand tools, such as saws and shovels - this is less destructive to habitats, vegetation, and the bed of the watercourse.

Machinery, such as mini-diggers or tractor mounted ditching attachments, can clear large stretches of open ditch quickly. If you're using machinery like this, you still need to consider the sensitivity of the watercourse and plan maintenance to make sure stretches of habitat are left intact. You must also keep in mind the safety of highway users.

For culverted watercourses, you may need specialist tools to clear blockages or to carry out inspections. For this type of work, you can appoint drainage companies or contractors – if you do, it's a good idea to get a range of quotes.

Staying legal

Whenever you carry out any maintenance to watercourses, you must make sure what you're doing is legal. General maintenance isn't likely to break the law, but if you want to alter the watercourse in any way, you're likely to need permission – Contact Herefordshire Council for advice if this is the case.

Protected species: You can contact Natural England to find out if you need permission to do any work on a watercourse that's on or near to a designated nature conservation site, protected site or contains protected species. Many farmers take part in wildlife stewardship schemes, which set clear rules for the maintenance of watercourses. Farmers should check compliance with agri-environment schemes.

Waste management: In some cases, ditch spoil or any invasive species you've removed can be categorised as hazardous waste. And, you might need Environment Agency licenses or exemptions - if in doubt check with your relevant Environment Agency office.

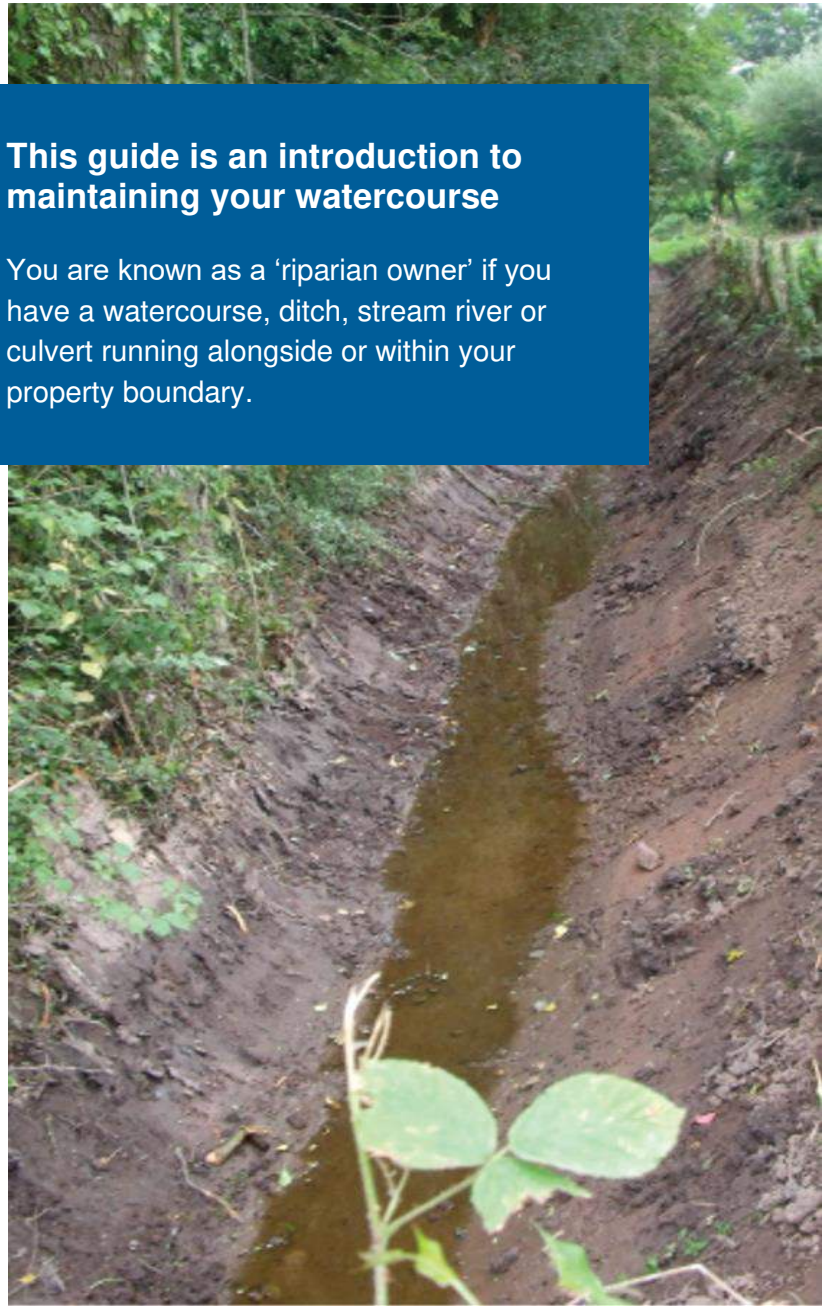
Tree protection: You must check with your local planning authority and make sure there are no tree preservation orders (TPOs) on any trees you're planning to work on.

Altering the watercourse: If you want to alter the route, shape or capacity of any watercourse - open or piped - so as to change the flow, or you wish to build near a watercourse, you're likely to need permission from the regulating body and the relevant landowners.

- **Main rivers:** If you want to carry out work on, over, under or near a main river or flood area, you must submit your plans to the Environment Agency and apply for Flood Defense Consent before you make any changes to a structure that helps control floods. You can find more information online: https://www.gov.uk/flood-defence-consent-england-wales.
- **Ordinary watercourse:** For works on, over, under or near non-main rivers, that is ordinary watercourses, you'll need to get consent from Herefordshire Council before you do anything.

Traffic management

If you think the work you're planning to do will mean the width of the carriageway will be restricted, it could mean you'll need traffic management to keep you and the public safe. If that's the case, you should contact our street works team via email: hereford.streetworks@bblivingplaces.com.



This guide is an introduction to maintaining your watercourse

You are known as a ‘riparian owner’ if you have a watercourse, ditch, stream river or culvert running alongside or within your property boundary.

More guidance for you

Environment Agency:

Owning a watercourse - GOV.UK (www.gov.uk)

For more information on wildlife: https://www.gov.uk/topic/environmental-management/wildlife-habitat-conservation

Guidance on managing land for wildlife: https://www.wildlifetrusts.org/wildlife/managing-land-wildlife

Herefordshire Council:

More information on responsibilities for ditches and drains:

- https://www.herefordshire.gov.uk/roads-1/flooding/6
- Or you can read the ditches and drains leaflet.

Others

More details on sewer responsibilities: https://www.dwrcymru.com/en/help-advice/wastewater-advice/sewer-responsibilities

Natural England - Natural England - GOV.UK (www.gov.uk)

Reporting:

You can report a highway defect by using the 'report a problem' page on the Herefordshire Council website or by calling our Customer Service team on 01432 261800.

You’ll be able to report defects on the highway, such as highway drainage issues, pothole, road deterioration and many more. And, so long as you give your contact details on the report you make, you’ll get automated updates at every stage of the process.