



ON THE RIVER EDGE

'Riparian zones' are natural landscapes along rivers occurring where land meets the watercourse.

The key ingredients for a healthy riparian zone include wide buffers of leafy ground plants, borders of trees and overhanging vegetation.

Allowing the river to self-sustain enables flow regulation, increased water storage capacity and appropriate nutrient availability. It also builds resilience to extreme weather events.

Buffers deliver numerous benefits for us, our waterways, native wildlife, and the climate, too!

- ✓ Improved water quality - helps mitigate pollution risks to us & wildlife
- ✓ Increased water storage - riparian soil and plants can hold more water
- ✓ Reduced erosion - banks are stabilised, so less risk of land losses
- ✓ Enhanced habitats and connectivity - important for wildlife to thrive
- ✓ Reduced water temperature - riparian trees are essential for dappled shade

YOUR RESPONSIBILITIES AND PERMITS

River habitats are sensitive, which is why if you own a watercourse, you will bear responsibilities as a riparian landowner. It's essential to **always** seek consent and appropriate permits before undertaking work along a watercourse or floodplain. For Main Rivers, contact the Environment Agency; for other watercourses, such as streams, ditches and culverts (even if seasonally dry), reach out to your Local Authority or Internal Drainage Board.

HOW CAN YOU HELP YOUR LOCAL RIVER?



River Ecosystems are sensitive and under threat. Can low-maintenance, low-cost riverside gardens really be a game-changer?

GO WITH THE FLOW TO RESCUE RIVERS

How you manage land along a river, including banks and floodplains, can have significant and far-reaching consequences for both the watercourse itself and the diverse life it supports.

Embracing nature-based river management not only helps with legal compliance but also presents a unique opportunity for watercourse owners to actively contribute to river and habitat enhancement.

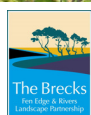
"Less is more" really is a win-win approach for us and nature.



ENVIRONMENT AGENCY INCIDENT HOTLINE

0800 80 70 60

It is important to report any pollution incidents, dead or unwell fish, and management concerns (including blockages) to the Environment Agency.



RIVERSIDE GARDENING FOR YOUR LOCAL WILDLIFE AND WATER

Sensitive gardening tips for thriving riverside gardens

Produced by [Norfolk Rivers Trust](http://www.norfolkriverstrust.org), in partnership with [The Brecks Fen Edge & Rivers Landscape Partnership Scheme \(BFER\)](http://www.brecks.org/bfer), with funding from the [National Lottery Heritage Fund](http://www.norfolkriverstrust.org).

www.norfolkriverstrust.org

www.brecks.org/bfer

RIPARIAN ZONE

Left to nature, riparian zones are wide, wild fringes of long grasses, reeds, and trees along rivers. They clean water and are essential wildlife corridors.

These habitats are sensitive and under threat - small changes in your riverside garden can make a huge difference... at little cost to us.

Practical steps to boost biodiversity and better your blooms:

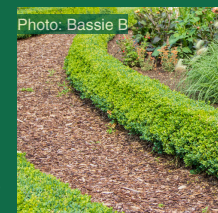
- ✓ Designate at least 3 meters of river edge to be left undisturbed; allow to thrive naturally
- ✓ Keep an eye out for invasive species and report sightings promptly
- ✓ Promote habitat with native planting
- ✓ Avoid using any chemical applications
- ✓ Do not remove vegetation or debris from banks or beds without consent
- ✓ Limit access of pets to watercourses and banks
- ✓ Landscape delicately - use natural and permeable materials
- ✓ Avoid revetments along a river



RAIN STORE

Turning on the tap takes water from rivers and aquifers. Installing water butts to collect rainwater is a simple way to conserve water and save money. Plus, it's preferred by plants.

Using permeable materials allows rainwater to filter into the ground. For example, using bark chips instead of paving or stones for pathways.



SOAK IT UP



STAYING ALIVE

Insects are essential for river health, and are a food source for other aquatic animals. Yet, they can be wiped out by the products we use at home and on our pets (i.e. flea shampoos).

Compost heaps and grass cuttings can all pollute rivers if located too close. Liquid seeping from these can deoxygenate water and lead to algal blooms. Make sure to compost correctly, away from watercourses.

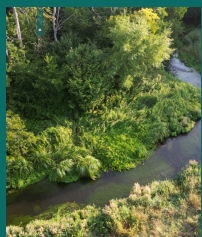


COMPOST WITH CARE



DEEP-ROOTED

Well-established roots allow soil to work as a sponge when it rains. Plants absorb excess nutrients from the soil, which improves plant and soil health, as well as water quality.



KEEPING RIVERS COOL

Riverside trees create dappled shade, which keeps river water cool while allowing for some light to reach ground-dwelling plants. This balance protects species from associated risks.



NO HOSE, NOR 'ROSE'

Directly watering plants at their base saves water and promotes growth. Choose a watering can with a plain spout (no 'rose') for optimal use. Avoid using grey water in riverside gardens.



Water voles are one of many species protected by law, making it illegal to harm or destroy their habitat. They need at least 3m of bankside left undisturbed. It is important not to mow, dig, or modify the banks. Protect habitat by leaving debris in and along the river, and reporting invasive species.

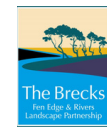


KEEP THE FRINGE

Remember: Seek permissions and appropriate permits for any work on or near a watercourse / floodplain - e.g. 8m of a main river / 16m of its floodplain

For more information and practical tips on water-sensitive gardening, visit: **Water's Worth Saving** www.watersworthsavings.org.uk/top-tips/gardening

Riverside Gardeners / Riparian Owners - Useful Links



This Riverside Gardening Guide is from a Riparian Management series, produced by Norfolk Rivers Trust for educational purposes.

If you are interested in finding out more information, please explore the links below:

Water-side Gardening Resources:

- [The Brecks Fen Edge & Rivers HLF Landscape Partnership Scheme](https://brecks.org/bfer/) - <https://brecks.org/bfer/>
For more Riparian Management and guides, and River Garden Webinar, see [1.6 Managing the Margins](#)
- [Wessex Rivers Trust](http://www.wessexrt.org.uk/rivermanagementtechniques.html) - a more in-depth look at practical **Riverside Gardening** and Management, with photos:
www.wessexrt.org.uk/rivermanagementtechniques.html
- [Owning a Watercourse](http://www.gov.uk/guidance/owning-a-watercourse) - find out what you need permissions for, and how to apply -
www.gov.uk/guidance/owning-a-watercourse
- [Designated Main Rivers](http://www.gov.uk/government/collections/main-river-map-for-england-proposed-changes-and-decisions) - find out which watercourses are 'main rivers' -
www.gov.uk/government/collections/main-river-map-for-england-proposed-changes-and-decisions

General Water-sensitive Gardening Resources:

- [Water's Worth Saving](http://www.watersworthsavings.org.uk/top-tips/gardening/) - for more information and practical tips on water-sensitive gardening at home:
www.watersworthsavings.org.uk/top-tips/gardening/
- [Watercress and Winterbournes](http://www.hiwwt.org.uk/watercress-and-winterbournes/projects), Hampshire & Isle of White Wildlife Trust -
www.hiwwt.org.uk/watercress-and-winterbournes/projects
[YouTube videos](#) - spotlighting topics in this guide, including talks by RHS experts Rosy Hardy and Janet Manning
www.youtube.com/playlist?list=PLOyIhgnXlRQ4X3CFZuOkYMn1gbRQHVB9
- [Gardening without Harmful Invasive plants](http://www.nonnativespecies.org/assets/Apha_garden_booklet_AW_proof1.pdf) - a UK planting guide by [Non Native Species.org](http://www.nonnativespecies.org) -
www.nonnativespecies.org/assets/Apha_garden_booklet_AW_proof1.pdf

Find out more about...

- [Invasive species](http://www.nonnativespecies.org) - including 'Be Plant Wise' resources and ID tips: www.nonnativespecies.org
- [Compost with care](http://www.nonnativespecies.org/what-can-i-do/be-plant-wise/invasive-plants-in-your-garden/#Composting) - www.nonnativespecies.org/what-can-i-do/be-plant-wise/invasive-plants-in-your-garden/#Composting
- [Pest control](http://www.youtube.com/watch?v=gAgTSLaao8k) - blasting non-winged insects off with water, and other tips from Rosy Hardy, RHS -
www.youtube.com/watch?v=gAgTSLaao8k
- [Blue-Green Algae](http://www.canalrivertrust.org.uk/support-us/our-campaigns/safety-on-our-waterways/blue-green-algae-what-you-need-to-know) - www.canalrivertrust.org.uk/support-us/our-campaigns/safety-on-our-waterways/blue-green-algae-what-you-need-to-know
- [Freshwater Rivers and their History](https://www.wildlifetrusts.org/habitats/freshwater) - <https://www.wildlifetrusts.org/habitats/freshwater>
- [Nesting season for Birds](https://community.rspb.org.uk/ourwork/b/rspb-england/posts/nesting-birds-and-the-law) - <https://community.rspb.org.uk/ourwork/b/rspb-england/posts/nesting-birds-and-the-law>
- [Spawning Season for Fish](https://environmentagency.blog.gov.uk/2024/03/15/protecting-our-freshwater-fish-species-why-the-close-season-is-so-important/) - <https://environmentagency.blog.gov.uk/2024/03/15/protecting-our-freshwater-fish-species-why-the-close-season-is-so-important/>

SPOTLIGHT ON INVASIVE SPECIES

Find out more about [invasive species ID and reporting](#):

www.nonnativespecies.org/what-can-i-do/recording/

Record non-native species on [iRecord](#):

www.irecord.org.uk/enter-non-native-records

For **emergency incidents**, such as pollution events, flooding concerns, and bank collapse:

ENVIRONMENT AGENCY INCIDENT HOTLINE



0800 80 70 60

www.gov.uk/report-an-environmental-incident

PERMISSIONS FOR RIVER MANAGEMENT

Modifying channel / adjoining land requires permits

For **main rivers**: contact [Environment Agency](#)

www.gov.uk/guidance/owning-a-watercourse

For **Ordinary Watercourses**:

Contact **Lead Local Flood Authority**

www.gov.uk/find-local-council
or **Internal Drainage Board (IDB)**

www.ada.org.uk

For more information on permits:

www.gov.uk/guidance/check-if-you-need-an-environmental-permit

www.norfolkriverstrust.org