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BiodivRestore Knowledge Hub

Webinar – Getting Restoration Right Together

15.10.2026

Getting restoration right together

Practical guidance on planning, implementing and monitoring restoration under the EU Nature Restoration Regulation

Recording

● REC

- **This webinar is being recorded**
- **Recording & slides:** will be posted on Biodiversa+ website after the event

BIODIVRESTORE KNOWLEDGE HUB WEBINAR · Thursday 15 October 2026 · 13:00–14:00 CEST

Getting restoration right together

PROGRAMME

13:00–13:05

Welcome & the BiodivRestore Knowledge Hub

Who we are and how we support Member States in implementing the NRR

13:05–13:30

Presenting the digest

“Getting restoration right together: A foundational digest on the Nature Restoration Regulation”

13:30–14:00

Questions & answers

Put your questions in the Zoom Q&A box at any time

SPEAKERS · Knowledge Hub experts

RK

Rachel Kristensen

Environmental lawyer & ecologist, Municipal Councillor, City of Nedlands

FW

Dr Franziska Wenskus

Aquatic ecologist, University of Duisburg-Essen
Floodplain restoration & monitoring

BIODIVRESTORE KNOWLEDGE HUB

Who we are – and why now

OUR GOAL

Support Member States in implementing the **Nature Restoration Regulation** and feed the research & innovation agenda on restoration.

Experts from BiodivRestore-funded projects, Horizon Europe projects and EU initiatives & networks, supported by a Secretariat.

50
experts

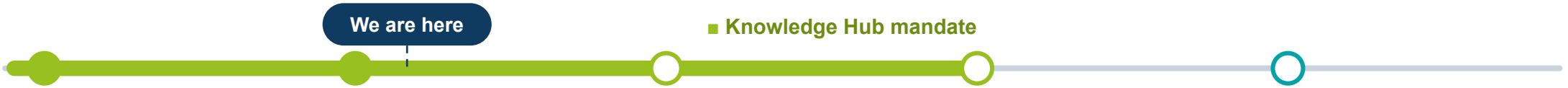
4
co-chairs

2024–27
mandate · May 2024 – Sep 2027

INTERDISCIPLINARY EXPERTISE

- Terrestrial ecology
- Freshwater ecology
- Marine ecology
- Environmental law
- Political sciences
- Land management
- Urban planning

NATURE RESTORATION REGULATION – KEY MILESTONES



Aug 2024
Adoption of the NRR

Sep 2026
Member States submit draft National Restoration Plans (to 2050)

Mar 2027
Commission assesses the draft plans with each Member State

Sep 2027
Final plans published, within 6 months of the Commission's observations

Jun 2028
Member States report on progress – then every 3 years

Getting Restoration Right together: a foundational digest on the NRR

📘 What's inside?

- NRR essentials and key requirements
- Practical implementation decision tree and guidance
- Restoration do's and don'ts
- Ecosystem-specific guidance
- Examples, tools and further resources

Acknowledgements:

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Nature Restoration Regulation: Key challenges remain

How to get the NRR right: a digest is needed

The BiodivRestore Knowledge Hub has played a key role in multiple engagement events throughout Europe and beyond, identifying the need for additional guidance on how to implement restoration under the NRR

- LIFE PRIMED 2024, Greece: Dialogue and workshops were first framed by the Hub as implementation challenges and opportunities. This helped identify areas where the Hub could support implementation and reduce risks.
- EIONET 2025, Denmark: The Hub identified the need for an index-style reference document linking NRR Articles with the scientific elements underpinning restoration best practice and success. This event facilitated the alignment of Hub outputs to compliment EEA supporting materials.
- Biodiversa+ Dialogue 2025, Paris: Discussions highlighted the need for a user-friendly digest providing a common understanding of the NRR and accessible scientific DOs and DON'Ts for interdisciplinary audiences.
- EC NRR Expert Group meetings: Member State discussions provided insight into specific implementation challenges, coordination needs and practical pain points, complemented by the knowledge and expertise of Knowledge Hub members.

Identifying key implementation challenges



- NRR implementation brings together different sectors, disciplines, levels of governance and areas of expertise, each with different terminology, perspectives and responsibilities.
- There is a **need for a common language and shared understanding** of the key elements of the NRR, restoration and scientific best practice.
- Effective implementation requires **crossing the bridge between policy, science and practice, connecting national planning with regional and local implementation.**

Without this connection, knowledge and expertise can remain fragmented across the implementation chain, limiting opportunities to learn from each other and optimise restoration outcomes.

The digest was developed through an **iterative process of engagement.**

The Knowledge Hub used conferences, Member State dialogue, NRR Expert Group engagement and the expertise of its interdisciplinary members to identify implementation challenges, knowledge gaps and user needs.

These insights were progressively brought together into a common, accessible reference document which links the NRR with restoration science, practical experience and best practice.

A foundational digest: How the Knowledge Hub can help

Addressing key implementation challenges

How *Getting Restoration Right Together* responds:

- ✔ Provides a **common reference and shared starting point** for understanding the NRR, restoration principles and scientific best practice.
- ✔ Brings together legal requirements, scientific knowledge and practical restoration experience in one accessible resource.
- ✔ **Uses ecosystem-specific guidance and DOs & DON'Ts** to connect scientific evidence with practical restoration decisions.
- ✔ Supports an interdisciplinary approach, helping policy makers, scientists, practitioners and stakeholders understand how their respective knowledge and roles contribute to implementation.
- ✔ **Connects the different levels of the implementation chain,** from NRR requirements and national planning through to regional and local restoration action, monitoring and adaptive management.

Who is it for?



Designed for interdisciplinary audiences, it is a common starting point for understanding both the NRR and the principles of good restoration.

Primary users

- **Restoration practitioners and land managers:** planning, implementing and managing restoration.
- **Regional and local authorities:** translating NRR and NRP objectives into restoration action.
- **Stakeholders and organisations involved in restoration**: including NGOs, landowners, farmers, foresters, fishers and other relevant sectors.

Should also be considered by

- **National policymakers** and **National Restoration Plans teams**
- **European Commission / Member State representatives**

A user-friendly digest, bringing together key NRR objectives, obligations and targets with restoration DOs and DON'Ts, ecosystem-specific guidance and practical decision support for developing and reviewing National Restoration Plans and for planning, implementing, monitoring and managing restoration under the NRR at national, regional and local levels.

Where does it help?

The *Getting Restoration Right Together* digest is developed as a **WHOLE** NRR implementation support tool, supporting the transition from *"What does the NRR require?"* → *"What does this mean for restoration?"* → *"How do we implement it using scientific best practice?"*

How it can support each stage:

- **Drafting**: Understand NRR objectives, obligations, targets and definitions; identify restoration needs and applicable targets.
- **Assessment**: Consider ecosystem condition, baselines, restoration needs, reference conditions and pressures.
- **Planning**: Select and design restoration measures; consider scale, connectivity, stakeholders, policy synergies and financing.
- **Implementation**: Apply ecosystem-specific DOs & DON'Ts and restoration principles to reduce implementation risks.
- **Monitoring**: Establish objectives, indicators and monitoring approaches linked to restoration outcomes.
- **Management / revision**: Use adaptive management to learn from implementation and adjust actions where needed.

Key messages

What problems does the digest help solve?

1. **NRR complexity:** The digest provides a clear, accessible entry point to the NRR.
2. **From legal requirements to restoration action:** The digest links NRR requirements with restoration principles, science and practical experience.
3. **Risk of ineffective restoration and environmental harm:** The DOs & DON'Ts and ecosystem guidance highlight practices that can help reduce these risks.
4. **Fragmented knowledge and practice:** The digest brings this knowledge together in one practical reference.
5. **Different users, different levels:** The digest provides a common reference point across disciplines and levels of implementation.
6. **From planning to implementation:** The digest provides practical support across the restoration process, rather than only at the planning stage.

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Getting restoration right together: A digital walk-through

Digital walk-through

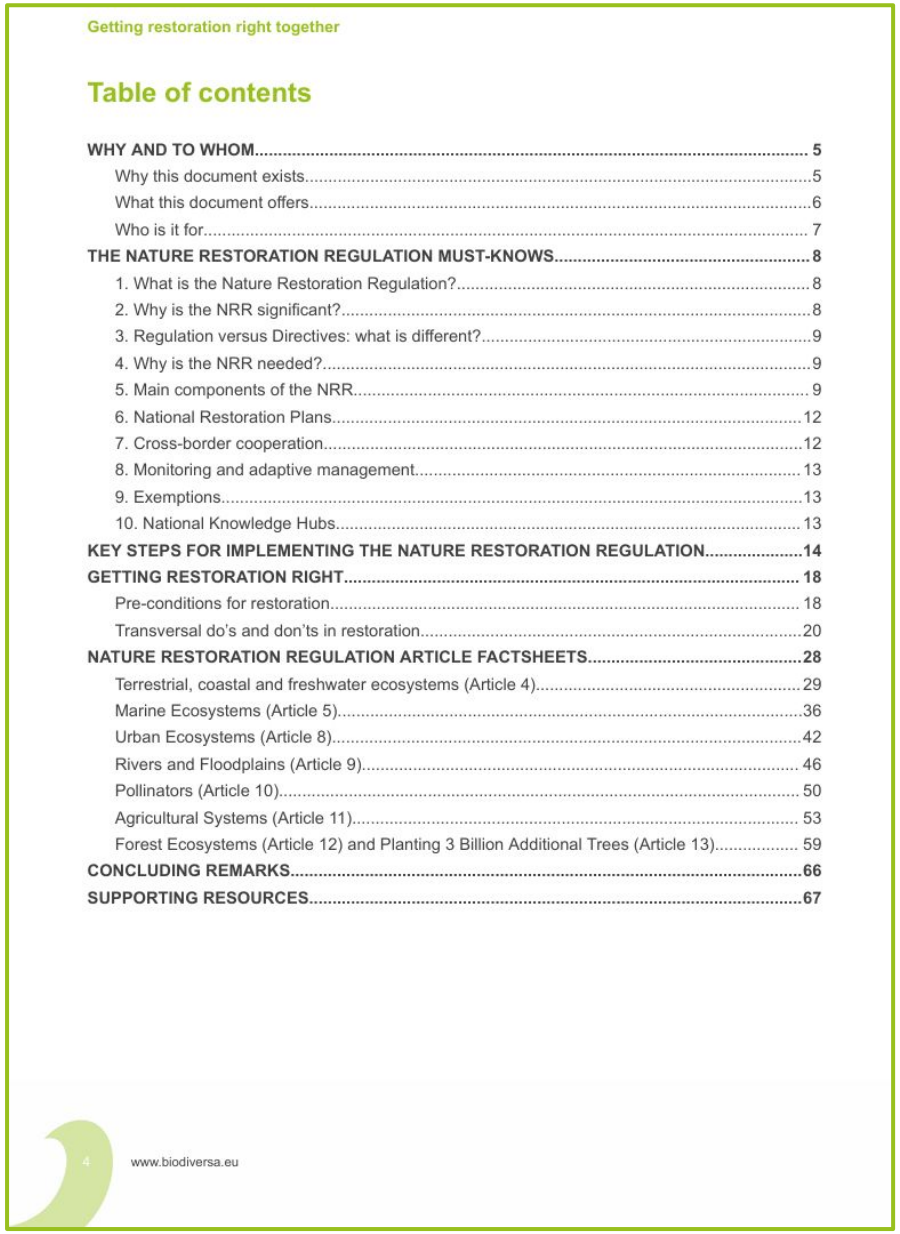
- NRR essentials and key requirements
- Practical implementation decision tree and guidance
- Restoration do's and don'ts
- Ecosystem-specific guidance

"The document takes the reader on a journey from the fundamentals of the NRR, through a practical decision tool for planning, implementing, monitoring and managing restoration, to the key restoration DO's and DON'Ts and factsheets on relevant NRR articles."

SCAN TO ACCESS



Getting Restoration Right together: a foundational digest on the NRR



Getting restoration right together

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NRR essentials and key requirements



This section provides a structured, practical overview of the EU Nature Restoration Regulation. It is intended to support readers in understanding the NRR's basic objectives, obligations, timelines, and implementation requirements, including the preparation/ review of National Restoration Plans (NRPs).

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Key steps for implementing the nature restoration regulating – decision tree

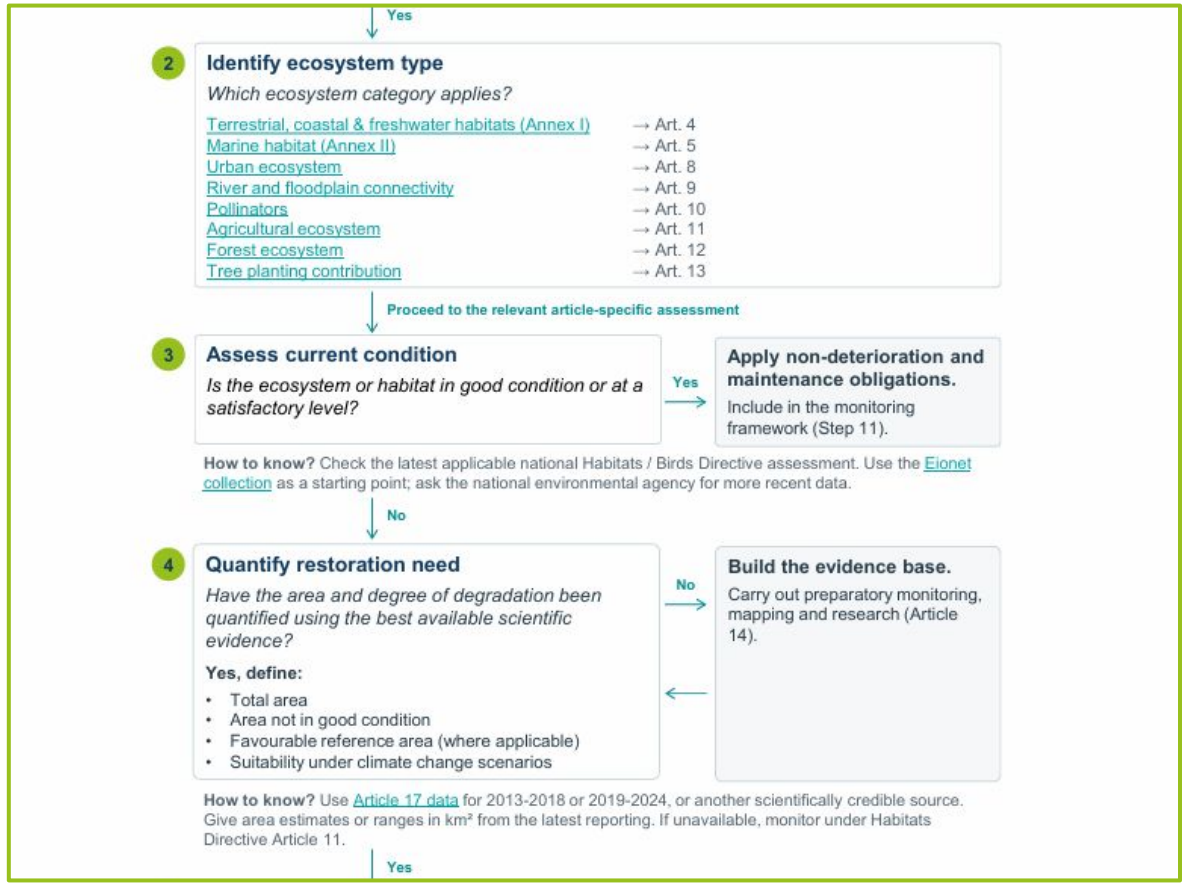


The decision tree outlines the key steps when implementing the NRR and preparing/ reviewing the National Restoration Plans (NRPs). It is intended as a practical, sequential guide supporting compliance, strategic planning, education and adaptive management.

KEY STEPS FOR IMPLEMENTING THE NATURE RESTORATION REGULATION.....14

Key steps for implementing the nature restoration regulating – decision tree





Key steps for implementing the nature restoration regulating – decision tree

KEY STEPS FOR IMPLEMENTING THE NATURE RESTORATION REGULATION.....14

Restoration DO's and DON'Ts



For restoration to be effective, proper planning, ongoing evaluation and adaptability are just as important as the implementation of a restoration measure itself. However, there are many pitfalls along this way, where restoration, though started with good intentions, can have no or even adverse effects.

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Restoration DO's and DON'Ts

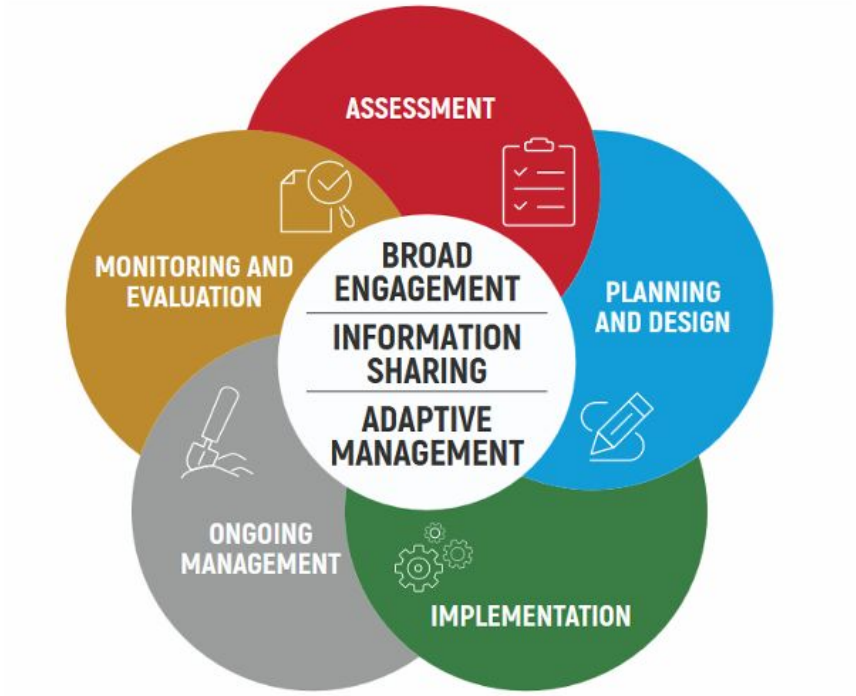


Figure 1: The restoration process consists of five core components, complemented by cross-cutting subcomponents that apply throughout. (Source: Nelson et al., 2024)[2]

Transversal do's and don'ts in restoration

Assessment

DON'T start a restoration process without baseline data present.

Assessing restoration outcomes is about comparing it to pre-restoration conditions. If only diffuse knowledge about the extent and nature of the degradation to be tackled exist, no targeted restoration plan, monitoring scheme or measure selection can take place.

Make a proper assessment of baseline conditions and context in which restoration is to take place.

The baseline assessment does not necessarily need to be performed in line with the monitoring plan. It needs to generate enough data to allow for the planning of specific measures and target values to be monitored. Baseline assessment does not only regard ecological data but also information about the socio-economic and stakeholder context in which the restoration is planned.

Planning & design

DON'T start any works before all subsequent steps are planned.

Not planning ahead may result in decisions having adverse effects later on but no chance to change the course of actions at such a later stage.

Set up a restoration and monitoring plan spanning the entire process cycle.

Even though presented in an order here, the five phases don't happen strictly subsequently of each other, but overlap or need to be planned from the very start.

Make yourself aware of each step along the way, including evaluation and adaptive management iterations, before you start any restoration action.

Restoration DO’s and DON’Ts

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Ecosystem-specific guidance



This section provides factsheets for all articles of the NRR targeting ecological restoration action. It summarises goals and target values and gives example measures on how to achieve targets. Congruent with the transversal DO's and DON'Ts of restoration, ecosystem specific important considerations and pitfalls to avoid are presented.

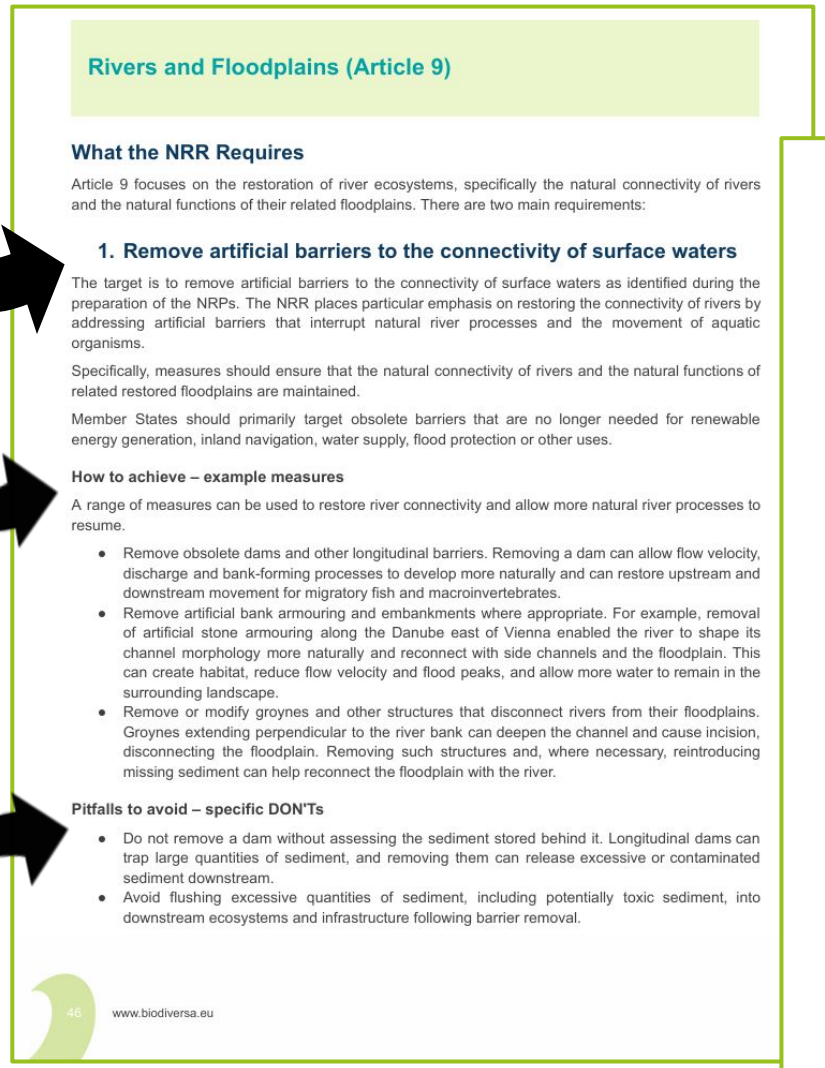
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Ecosystem-specific guidance

Restoration goals and targets under the NRR

Example measures for restoration

Ecosystem-specific DON‘Ts



Rivers and Floodplains (Article 9)

What the NRR Requires

Article 9 focuses on the restoration of river ecosystems, specifically the natural connectivity of rivers and the natural functions of their related floodplains. There are two main requirements:

1. Remove artificial barriers to the connectivity of surface waters

The target is to remove artificial barriers to the connectivity of surface waters as identified during the preparation of the NRPs. The NRR places particular emphasis on restoring the connectivity of rivers by addressing artificial barriers that interrupt natural river processes and the movement of aquatic organisms.

Specifically, measures should ensure that the natural connectivity of rivers and the natural functions of related restored floodplains are maintained.

Member States should primarily target obsolete barriers that are no longer needed for renewable energy generation, inland navigation, water supply, flood protection or other uses.

How to achieve – example measures

A range of measures can be used to restore river connectivity and allow more natural river processes to resume.

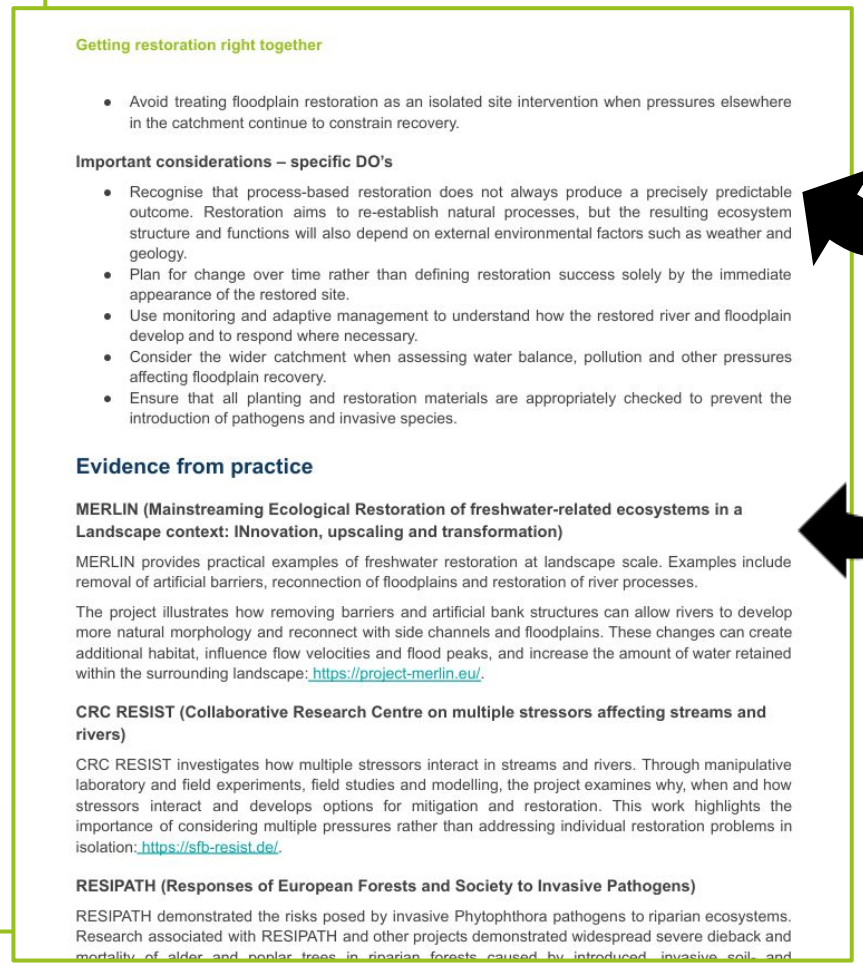
- Remove obsolete dams and other longitudinal barriers. Removing a dam can allow flow velocity, discharge and bank-forming processes to develop more naturally and can restore upstream and downstream movement for migratory fish and macroinvertebrates.
- Remove artificial bank armouring and embankments where appropriate. For example, removal of artificial stone armouring along the Danube east of Vienna enabled the river to shape its channel morphology more naturally and reconnect with side channels and the floodplain. This can create habitat, reduce flow velocity and flood peaks, and allow more water to remain in the surrounding landscape.
- Remove or modify groynes and other structures that disconnect rivers from their floodplains. Groynes extending perpendicular to the river bank can deepen the channel and cause incision, disconnecting the floodplain. Removing such structures and, where necessary, reintroducing missing sediment can help reconnect the floodplain with the river.

Pitfalls to avoid – specific DON'Ts

- Do not remove a dam without assessing the sediment stored behind it. Longitudinal dams can trap large quantities of sediment, and removing them can release excessive or contaminated sediment downstream.
- Avoid flushing excessive quantities of sediment, including potentially toxic sediment, into downstream ecosystems and infrastructure following barrier removal.

Ecosystem-specific DOs

Research projects demonstrating best-practice and the latest scientific knowledge



Getting restoration right together

- Avoid treating floodplain restoration as an isolated site intervention when pressures elsewhere in the catchment continue to constrain recovery.

Important considerations – specific DO's

- Recognise that process-based restoration does not always produce a precisely predictable outcome. Restoration aims to re-establish natural processes, but the resulting ecosystem structure and functions will also depend on external environmental factors such as weather and geology.
- Plan for change over time rather than defining restoration success solely by the immediate appearance of the restored site.
- Use monitoring and adaptive management to understand how the restored river and floodplain develop and to respond where necessary.
- Consider the wider catchment when assessing water balance, pollution and other pressures affecting floodplain recovery.
- Ensure that all planting and restoration materials are appropriately checked to prevent the introduction of pathogens and invasive species.

Evidence from practice

MERLIN (Mainstreaming Ecological Restoration of freshwater-related ecosystems in a Landscape context: INnovation, upscaling and transformation)

MERLIN provides practical examples of freshwater restoration at landscape scale. Examples include removal of artificial barriers, reconnection of floodplains and restoration of river processes.

The project illustrates how removing barriers and artificial bank structures can allow rivers to develop more natural morphology and reconnect with side channels and floodplains. These changes can create additional habitat, influence flow velocities and flood peaks, and increase the amount of water retained within the surrounding landscape: https://project-merlin.eu/.

CRC RESIST (Collaborative Research Centre on multiple stressors affecting streams and rivers)

CRC RESIST investigates how multiple stressors interact in streams and rivers. Through manipulative laboratory and field experiments, field studies and modelling, the project examines why, when and how stressors interact and develops options for mitigation and restoration. This work highlights the importance of considering multiple pressures rather than addressing individual restoration problems in isolation: https://sfb-resist.de/.

RESIPATH (Responses of European Forests and Society to Invasive Pathogens)

RESIPATH demonstrated the risks posed by invasive Phytophthora pathogens to riparian ecosystems. Research associated with RESIPATH and other projects demonstrated widespread severe dieback and mortality of alder and poplar trees in riparian forests caused by introduced, invasive soil- and

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Getting restoration right together: From guidance to action

How to operationalise the digest

When	How to use
Now – NRP drafting and preparation	Use as a **quick-reference guide** to understand the NRR Articles, obligations and targets; identify restoration needs; and inform the design and review of restoration measures in the draft NRP.
NRP assessment and review – 2026–27	Use to **review proposed approaches against restoration best practice**: Are the right pressures being addressed? Are baselines and objectives clear? Are measures appropriate to the ecosystem and scale? Are stakeholders and connectivity considered?
Final NRP development – 2027	Use alongside the developing NRP to **identify gaps, risks and opportunities for improvement** before measures are finalised.
Implementation – from 2027 onwards	Use as a **practical reference for translating NRP commitments into restoration action** at national, regional and local levels.
Monitoring and adaptive management	Return to the relevant principles, DOs & DON'Ts and ecosystem guidance when **assessing progress, identifying unexpected problems and adjusting restoration approaches**.
Ongoing learning	Use as a **shared reference for knowledge exchange**, helping practitioners compare experience, identify good practice and support future restoration decisions.



Use it first to **understand and plan**; then to **review and improve**; and finally as a **practical reference** throughout implementation, monitoring and adaptive management.



Getting Restoration Right Together

Plan. Restore. Monitor. Adapt.

Science-Informed Restoration for Lasting Recovery and Successful NRR Implementation

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Thank you!

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Getting restoration right together: a foundational digest on the Nature Restoration Regulation

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