



## River Restoration Centre Position Statement Reintroduction of Beaver (*Castor fiber*) in the UK

The RRC is an independent, UK-wide, not-for-profit company that champions the natural and societal benefits of restoring river systems. We support river restoration by collating project information and evidence, developing best practice and sharing this knowledge throughout the river and catchment management community.

Physical modification is a key pressure in the UK and the main reason why rivers are failing to achieve good ecological status in England and Wales. We actively promote the re-establishment of natural processes, features and biodiversity in river systems, and support the need for 'space for water' to allow reconnection of river channels with their floodplains and wetlands.

Eurasian beavers (*Castor fiber*) are large herbivorous, semi-aquatic rodents. Once native across much of Europe, they were hunted to extinction in UK in the 16<sup>th</sup> century. Known as a 'keystone species' because of their unique ability to adapt and create the habitat around them, they construct dams on smaller slow-flowing rivers to provide a refuge and store food, thereby creating wetlands. Wetlands are a key component of our natural capital and are vital to the overall health of the water environment, but more than 95% have been drained in the last 100 years. The distribution of beavers is extending in Scotland and England, and the importance of their activities is increasing as a result of climate and land use change. These activities can rapidly and effectively slow the flow of water and reduce the amount of suspended solids, with significant benefits for flood risk management, water quality and biodiversity. Beavers are now a legally protected species in England and Scotland but there is currently little UK experience of undertaking river restoration in catchments with beaver populations.

In the 400 years since beavers were eradicated, most river valleys have been significantly modified for farming, housing and infrastructure such as roads and railways. Thus, while beaver activity contributes to the overall slowing and filtering of river flow, damming streams can cause localized flooding, and their feeding activity can also damage trees and crops close to the river. The natural services gained by society may therefore be at a cost to those whose land or property is affected. Beaver dams may be modified or removed within 2 weeks, or later by licensed personnel, but management measures need to be put in place and funded.

### **Our position:**

- *We consider that the reintroduction of beavers can contribute significantly to the rapid and cost-effective achievement of our vision of 'Naturally functioning river systems benefiting people and wildlife'. Any beaver reintroduction project should fully engage with stakeholders and follow IUCN guidelines.*
- *We will work with the Beaver Trust and seek to be represented on beaver stakeholder groups, such as the Natural England beaver management group.*
- *We recognize the need to develop beaver management schemes, which should operate at the catchment scale. We will contribute our knowledge of river restoration best practice to further this approach.*
- *We will engage with scientific research, and share information on beavers and the impacts of their activities with those who restore and manage river systems in the UK through our newsletters, training courses, web site and conferences.*



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- We will collate data from river restoration projects where beaver are recorded in our databases (RiverWIKI and the National River Restoration Inventory), in order to update guidance on best practice. This could include:
  - Checking for beaver presence with Natural England, NatureScot or Natural Resources Wales before undertaking new projects on the UK mainland.
  - Estimating the likelihood of future beaver population change and impact through tools such as the Beaver Forage Index and Beaver Dam Capacity model.
  - Re-assessing priorities in strategic restoration and catchment management plans. Where beavers can undertake some of the work, human effort may be focused on hard engineering issues, and stretches that are unattractive to or unsuitable for beavers.
  - Developing new monitoring methods for large-scale nature-based solutions jointly with academic institutions and statutory agencies, including beaver reintroduction and full floodplain reconnection ('Stage Zero').





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