

## **Restoring River for Effective Catchment Management (REFORM)**

### **Project**

### **Research Program**

[FP 7](#)

### **Duration**

Nov 2011 - Nov 2015

### [REFORM Website](#)

Europe is characterized by a dense network of rivers that provide essential ecosystem services. Over time, use of rivers by humans has led to severe degradation of water quality and ecosystem functions. REFORM will improve existing tools and develop new ones to increase the success and cost-effectiveness of restoration measures to monitor the biological responses to hydromorphological changes.

### **Main objectives**

The overall aims of REFORM are (1) to provide a framework for improving the success of hydromorphological restoration measures and (2) to assess more effectively the state of rivers, floodplains, and connected groundwater systems.

The specific objectives of REFORM are:

- To select WFD-compliant hydromorphological and biological indicators for cost-effective monitoring that characterize the consequences of physical degradation and restoration in rivers and their services.
- To evaluate and improve practical tools and guidelines for the design of cost-effective hydromorphological restoration and mitigation measures for practitioners and end users.
- To review existing data and information on hydromorphological river degradation and restoration, underlying physical and ecological processes, their interactions and ecosystem services.
- To develop a process-based, multi-scaled hydromorphological framework on European rivers and floodplains and connected groundwaters that is relevant to river ecology and suitable for hydromorphological monitoring.
- To understand how hydromorphological pressures interact with other pressures that may constrain successful restoration.

- To assess the significance of scaling effects on the effectiveness of different adaptation, mitigation and restoration measures to improve ecological status or potential of rivers, floodplains and connected groundwaters.
- To develop instruments to analyse risk and assess benefits of successful river restoration, including resilience to climate change and relations to other socioeconomic activities.
- To increase awareness and appreciation for the need, potential, and benefits of river restoration through active involvement of and dissemination of project outputs to policy-makers, practitioners and stakeholders.

## Ecologic Institute in REFORM

Ecologic Institute is involved in Work Packages 1 and 5 in REFORM. In Work Package 1, the team from Ecologic Institute is performing a meta-analysis of the costs and benefits of river restoration measures from throughout Europe as part of an investigation of the socio-economic drivers of river degradation and restoration. Insights from this task will feed into the institute's task in Work Package 5 that involves a comparative cost-benefit analysis of restoration measures.

Ecologic Institute is also leading Work Package 7: Knowledge Dissemination and Stakeholder Participation. Within REFORM, communication will play an important role in achieving its overall goal. REFORM's communication objective is to increase awareness and appreciation for the need, potential and benefits of river restoration through active involvement of and dissemination of project outputs to policy-makers, practitioners and stakeholders.

## Funding

European Commission, [Directorate-General Research & Innovation](#) (DG Research & Innovation), International

## Partner

[Deltares](#), Netherlands

Wageningen University & Research Centre, [Alterra](#) (Alterra), Netherlands

[Aarhus University](#) (AU), Denmark

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The University of Hull, [Hull International Fisheries Institute](#) (HIFI), United Kingdom

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[Warsaw University of Life Sciences](#) (WULS-SGGW), Poland

[Centro de Estudios y Experimentacion de Obras Publicas](#) (CEDEX), Spain

Ministry of Agriculture, Nature and Food Quality, [Government Service for Land and Water](#)

[Management](#) (DLG), Netherlands  
[Environment Agency](#) (EA), United Kingdom  
[Institute for Environmental Protection and Research](#) (ISPRA), Italy

## Team

[Dr. Eleftheria Kampa](#)  
[Dr. Manuel Lago](#)  
[Holger Gerdes](#)  
Christian Bruhn  
Andrew Ayres  
Brandon Goeller  
Isabelle Turcotte  
[Evelyn Lukat](#)  
Sarah Beyer

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