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 Grant Agreement 282656  
 Duration: November 1, 2011 – October 31, 2015



# REFORM

## REstoring rivers FOR effective catchment Management

**REFORM**  
 REstoring rivers FOR effective catchment Management

### New knowledge and tools to support river restoration





**Restoring river ecosystems across Europe. REFORM will address the challenges in reaching the ecological objectives for rivers set forth in the EU Water Framework Directive. It is a four-year integrated research project (2011-2015).**

Many European rivers have been regulated to support flood protection, navigation, freshwater supply, and hydro-power production. Insufficient knowledge is available about the ecological impacts of these hydromorphological modifications including about whether they can be effectively reversed or mitigated.

**Understanding the causes and consequences of degradation and improving restoration**

1. REFORM will improve existing tools and develop new ones to make restoration and mitigation measures more successful and cost-effective.
2. It will improve and develop procedures to monitor the biological responses to hydromorphological changes with greater precision and sensitivity.
3. It will provide information through a restoration WIKI.
4. First results will be available early 2013 to support the formulation of the Programmes of Measures for the second round of RBMPs.




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 PU Public X  
 PP Restricted to other programme participants (including the Commission Services)  
 RE Restricted to a group specified by the consortium (including the Commission Services)  
 CO Confidential, only for members of the consortium (including the Commission Services)

## Summary

This document gives an overview of the REFORM newsletters and leaflets. All newsletters and leaflets are available online at the public website of REFORM (<http://www.reformrivers.eu>). For each item in the newsletter the teaser is given as well as the hyperlink to the full article.

## Acknowledgements

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## 1. Introduction

REFORM newsletters can cover results of the REFORM itself or relevant other issues. Standard items are the editorial by the REFORM coordinator, the interview with a key person and an item on one of the case study catchments that are under study in work package 4.

## 2. Newsletter 1 – June 2012

The first newsletter contains 7 items and an editorial

1. Welcome editorial by the REFORM Coordinator  
Tom Buijse (coordinator of REFORM) introduces REFORM and the contents of the 1<sup>st</sup> newsletter of the project.  
[Read more](#)
2. River restoration in need of priorities and a process-oriented approach - An Interview with Professor Klement Tockner  
Professor Klement Tockner (Director of the Leibniz-Institute of Freshwater Ecology and Inland Fisheries in Germany) shares his views on the current challenges in river restoration in Europe and the importance of research projects such as REFORM to improve the success of hydromorphological restoration measures.  
[Read more](#)
3. The WISER project – Key results  
WISER (Water bodies in Europe – Integrative Systems to assess Ecological Status and Recovery) was a large EU-funded research project, which ended in February 2012. This article presents the key findings of WISER and outlines its relevance for REFORM.  
[Read more](#)
4. REFORM Meta-analyses – What is it about?  
One of the aims of REFORM is to make the state-of-the-art knowledge on hydromorphology, the interaction with ecology and wider environmental aspects timely available to support river basin managers while preparing the next round of River Basin Management Plans. This article explains the compilation of existing knowledge in work package 1 of REFORM to support further research steps.  
[Read more](#)
5. Field training course in Silkeborg, Denmark  
REFORM scientists organized a field training course in May 2012 in Silkeborg, Denmark, to discuss field methods, which will be applied in the case study areas of REFORM.  
[Read more](#)
6. The River Narew (Poland) has it all being in part natural, regulated and restored  
The River Narew in Poland is one of the case studies of REFORM on river restoration. This article gives an insight on the history of human intervention and

restoration on the River Narew.

[Read more](#)

7. 11<sup>th</sup> Meeting of the Working Group F on Floods of the WFD Common Implementation Strategy (Bucharest, 19 April 2012)

The Working Group F on Floods met on 19 April 2012 to discuss the current status of the Floods Directive reporting and to plan the next steps to be adopted after the recent completion of the preliminary flood risk assessment. Dr. Stefano Mariani (ISPRA, IT) introduced REFORM to the delegates of this meeting.

[Read more](#)

8. CIS ECOSTAT workshop on Hydromorphology of the WFD Common Implementation Strategy (Brussels, 12-13 June 2012)

The CIS ECOSTAT workshop on Hydromorphology aimed to contribute to an understanding of the current state of play with respect to the assessment of hydromorphological impacts and the classification of ecological potential. The REFORM project was invited to present its aims and approach including a glimpse of one of the first draft results on hydromorphological assessment methods.

[Read more](#)

### 3. Newsletter 2 - December 2012

The second newsletter contains 7 items and an editorial

1. Welcome editorial by the REFORM Coordinator  
REFORM Coordinator Tom Buijse briefly introduces the contents of the second newsletter of the project.  
[Read more](#)
2. REFORM Stakeholder Workshop on River Restoration (Brussels 26-27 February 2013)  
On 26-27 February 2013, the REFORM project will hold a technical and interactive Stakeholder Workshop on River Restoration to Support Effective Catchment Management in Brussels.  
[Read more](#)
3. How to improve hydromorphological assessments of rivers and streams?  
This article details the results of a review of hydromorphological and ecological assessment methods carried out in the context of REFORM. This review compares existing methods, identifies gaps in their applicability, and recommends how to improve hydromorphological assessments.  
[Read more](#)
4. The Development of European River Restoration and the ECRR - An Interview with Bart Fokkens, Chairman of the European Centre for River Restoration (ECRR)  
Bart Fokkens, Chairman of the ECRR and associate expert at Wetlands International, shares his views on the progress of European river restoration in the past and going forward. Mr. Fokkens also introduces the goals of the upcoming European River Restoration Conference on 11-13 September 2013 in Vienna.  
[Read more](#)
5. RESTORE: Recipes for Success  
RESTORE is a project funded by the European LIFE+ programme aiming to encourage the restoration of European rivers towards a more natural state. Toni Scarr, project manager of RESTORE, describes the information-sharing network being developed as part of the project as well as the events that RESTORE has organised.  
[Read more](#)
6. Building with Nature  
This article discusses how engineering and nature restoration no longer need to be at odds. Eco-engineering principles can be used to develop water-related infrastructures that draw on the natural environment, are in line with the natural system, make use of this system's dynamics and to find novel ways to manage water resources.  
[Read more](#)
7. The River Regge (the Netherlands): from meandering river to canal and back  
This article gives an insight on the history of human intervention and restoration on the River Regge. The River Regge (and the measures taken to improve flood protection and ecological status) is one of the case studies of REFORM on river

restoration.

[Read more](#)

8. REFORM Participation at the Ecohydraulics Symposium

The 9th International Symposium on Ecohydraulics was organized at the University of Natural Resources and Life Sciences (BOKU), Vienna, and took place on 17-21 September 2012. At this year's symposium, REFORM participants played key roles, which are summarised in this article.

[Read more](#)

## 4. Newsletter 3 - June 2013

The third newsletter contains 8 items and an editorial

1. Welcome editorial by the REFORM Coordinator  
REFORM Coordinator Tom Buijse briefly introduces the contents of the third newsletter of the project.  
[Read more](#)
2. REFORM Stakeholder Workshop on River Restoration, Brussels  
On 26-27 February 2013, the REFORM project organised a technical and interactive Stakeholder Workshop on River Restoration in Brussels. The REFORM stakeholder workshop provided a very good model of early two-way communication between an EU research project and water managers.  
[Read more](#)
3. Multi-purpose river restoration, An interview with Huib J. de Vriend  
Prof. Huib de Vriend, director of the EcoShape Foundation, shares his views on multi-purpose river restoration, the re-establishment of the natural dynamics of river systems and the need of a large-scale perspective to river restoration.  
[Read more](#)
4. Eco-hydromorphological restoration in the first River Basin Management Plans  
This article details the results of a comparative analysis of the Member States' River Basin Management Plans, the Programmes of Measures and already implemented restoration projects. The analysis provides new insights on the types of the planned hydromorphological measures bearing in mind existing relevant knowledge, knowledge gaps, and potential ecological effects.  
[Read more](#)
5. Setting the stage for hydromorphological assessment: delineating spatial units  
This article addresses the work in REFORM on the development of a spatial hierarchical framework to assess hydromorphology in rivers. Emphasis is given here on the delineation of spatial units, using the example of lowland river in the UK.  
[Read more](#)
6. Measuring success of river restoration actions: the role of end-points and benchmarking  
Despite large economic investments in what has been called the "restoration economy", many practitioners do not follow a systematic approach for planning restoration projects. REFORM work package 5 strives to develop a protocol for benchmarking and setting specific and measurable targets for restoration and mitigation. This knowledge will help to identify restorations that are efficient and cost effective, supporting the overall success of these activities.  
[Read more](#)
7. REFORM wiki now online  
How can river managers find knowledge and know-how for the design and implementation of river restoration projects? Useful information is scattered over specialized scientific publications, often mono-disciplinary, as well as over a myriad of project reports. REFORM's answer is to structure the access to knowledge and



know-how by means of a wiki. The first version was launched at the REFORM Stakeholder Workshop (Brussels, 26-27 February 2013) and is now available online for the general public.

[Read more](#)

8. The River Drava changes...

The Austrian River Drava (Danube catchment) and the restoration measures taken to increase flood retention and promote the self-dynamic processes of the river is one of the flagship case studies of REFORM on river restoration.

[Read more](#)

9. Evaluating Ecosystem Services in Finland

In April 2013, researchers of REFORM conducted a field survey on the Finnish river Vääräjoki to compare the ecosystem services of restored and unrestored river stretches.

## 5. Newsletter 4 - January 2014

The fourth newsletter contains 6 items and an editorial

1. Welcome editorial by the REFORM Coordinator  
REFORM Coordinator Tom Buijse briefly introduces the contents of the fourth newsletter of the project.  
[Read more](#)
2. Finalised REFORM deliverables available online  
A substantial mid-term output of REFORM was planned and realized by the end of 2014 to be timely available to support drafting of the second round of river basin management plans for the EU Water Framework Directive. These finalized deliverables can be downloaded on the REFORM website. We would especially like to draw attention to the newer deliverables that have been published since June 2013.  
[Read more](#)
3. Sharing Global Lessons in River Restoration, An interview with Professor Gary Brierley  
Professor Gary Brierley from the University of Auckland School of the Environment shares some global lessons in river restoration. Professor Brierley is a geographer who specialises in the use of science to guide river management applications, especially rehabilitation and conservation activities.  
[Read more](#)
4. The WFD Common Implementation Strategy work programme 2013-2015  
In the Common Implementation Strategy (CIS), EU countries and stakeholders work together towards a consistent implementation of the WFD. Hydromorphology, environmental flows, and measure programmes are topics that are high on the agenda in the latest CIS work programme.  
[Read more](#)
5. First national REFORM stakeholder event  
On the 14<sup>th</sup> of November 2013 in Zutphen, The Netherlands, the first REFORM national stakeholder event was organised. Aims and early results of REFORM were presented and intensively discussed with Dutch water managers and their advisors. The event proved to be a very successful step in disseminating the results of REFORM to local water managers.  
[Read more](#)
6. The 5<sup>th</sup> European River Restoration Conference  
The European Centre for River Restoration ECRR, alongside the RESTORE partners and the International Commission for the Protection of the Danube River (ICPDR), organised the 5th European River Restoration Conference from 11-13 September, 2013, in Vienna, Austria. Over 300 participants from science, policy, and practice shared experiences and celebrated the awarding of the 1<sup>st</sup> annual European Riverprize to the International Rhine Commission. REFORM was featured in a side event.  
[Read more](#)
7. Restoring the channelized River Vääräjoki (Finland) towards good ecological status  
The River Vääräjoki in western Finland was channelized for flood protection and timber floating in the 19th and 20th centuries. Since late 1990s, the hydromorphological quality of the river has been extensively restored, and thus, Vääräjoki was chosen as a

case study for REFORM WP4. The restoration activities are well known among the local inhabitants, who value the river environment and often use it for recreation.

[Read more](#)

## 6. Newsletter 5 – September 2014

The fifth newsletter contains 8 items and an editorial

1. Welcome editorial by the REFORM Coordinator  
REFORM Coordinator Tom Buijse briefly introduces the contents of the fifth newsletter of the project.  
[Read more](#)
2. Learning from the past to improve river restoration in the future  
This article details the results of a comprehensive meta-analysis of existing studies on the effects of river restoration. The meta-analysis aimed at quantifying restoration success, identifying catchment, river reach, and project characteristics which influence the effect of restoration, and deriving recommendations for river management.  
[Read more](#)
3. REFORM Scientific Publications  
This newsletter item informs you on the present status of scientific publications within REFORM and how you can keep track when new publications become available.  
[Read more](#)
4. PhD research in REFORM - Vegetation changes and flow regulation in gravel bed rivers (upper Esla basin, NW Spain)  
Rivers in Spain are highly altered due to the existence of more than 1200 large dams. There are few detailed studies on the cumulative effect that this intense flow regulation has over time and space. Current knowledge indicates that flow regulation initiates riparian vegetation changes through flood reduction that could decrease successful recruitment of native riparian pioneer species. The PhD thesis by Vanesa Martínez-Fernández aims to analyse changes in riparian vegetation patterns in time and to verify if these changes could be associated with flow regulation.  
[Read more](#)
5. PhD research in REFORM - Distinct patterns of interactions between vegetation and river morphology  
Vegetation and hydro-morphodynamics interact dynamically in rivers and river floodplains. In her PhD thesis, Mijke van Oorschot has developed a model that contains dynamic vegetation processes with the objective of identifying the key processes that create patterns in vegetation and fluvial morphology. The model will be able to support river managers in the design and long term prediction of ecological restoration measures.  
[Read more](#)
6. National Stakeholder Workshop at Seville  
On 2 June 2014, a national stakeholder workshop was organised by REFORM in Seville, Spain. The general aim was to raise awareness and interest of water managers and stakeholders on the REFORM project and its results. In addition, Spanish experts shared their views and experiences on river restoration practices in the Spanish Mediterranean.  
[Read more](#)
7. State-of-play on hydromorphology in river basin management planning - An interview with Johan Kling, Senior Advisor, Swedish Agency for Marine

and Water Management

Johan Kling, senior advisor at the Swedish Agency for Marine and Water Management, shares his views on the state-of-play concerning the evaluation of hydromorphological changes, their impacts and the implementation of measures in the context of river basin management planning. He addresses these issues both from a European and a national perspective referring to progress made in his home-country, Sweden.

[Read more](#)

8. Re-meandering lowland rivers – the case study River Spree (Germany)

This article describes the history of human intervention on the River Spree, Germany, focusing on the effects of a management and restoration concept developed to improve the quality of a 35 km long river section, the Müggelspree. The River Spree is one of the case studies of REFORM on river restoration and provides insights on the practice of re-meandering of rivers and the factors that can affect its success.

[Read more](#)

9. 2014 European River Restoration Conference – SEE River project final event

The 6th edition of the European River Restoration Conference, integrated with the Final event of the SEE River project, will be held from 27 - 29 October 2014 in Vienna. This article outlines the context, goals and key challenges to be addressed in this event.

[Read more](#)

## 7. Newsletter 6 - March, 2015

The sixth newsletter contains 9 items and an editorial.

1. Welcome editorial by the REFORM Coordinator  
REFORM Coordinator Tom Buijse briefly introduces the contents of the sixth newsletter of the project.  
[Read more](#)
2. Effects of restoration on hydromorphological and biological response variables and factors influencing restoration outcomes  
Based on a unique dataset on 20 restoration projects, this article addresses the effects of restoration measures on a broad range of response variables. It also identifies factors which influence restoration effects and addresses the role of restoration extent for river restoration effects.  
[Read more](#)
3. Plants as physical ecosystem engineers  
A crucial aspect of hydromorphology that is too often neglected is the influence of vegetation on river channel form and dynamics. This article addresses a conceptual model of vegetation-hydromorphology interactions that was developed and tested in several catchments across Europe.  
[Read more](#)
4. Synergistic approaches to river restoration  
Current river restoration tends to encounter obstacles as a result of societal demands, particularly flood protection, hydropower, navigation and agriculture. This article proposes a 'synergistic and trade-off' approach to river restoration through the application of the DPSIR (Drivers, Pressures, States, Impacts, Responses) framework.  
[Read more](#)
5. PhD research in REFORM - The valorization of restored wetlands ecosystem services  
A valorization of ecosystem services of restored areas is important to assess the performance of restoration projects and improve their implementation. In her PhD thesis, Luiza Tylec aims at assessing restoration projects using the ecosystem services approach. Different alternative scenarios for restoration will be developed, aiming to support better decision-making in restoration planning. The case studies chosen for this research are wetland areas in national parks of Poland.  
[Read more](#)
6. PhD research in REFORM - Effects of river restoration on ecosystem functions: integrating functional aspects into river management  
Success or failure of river restoration projects is mainly assessed using variables of

structural nature, e.g. the composition of biological assemblages. Functional components are less commonly used for monitoring the effects of river restoration, although they might respond and reveal effects of river restoration in an earlier stage compared to biological assemblages. The general objective of this PhD thesis is to improve the knowledge about effects of river restoration on selected functional components, in particular, on (1) patterns in the food-web structure and (2) the self-purification potential.

[Read more](#)

7. International Conference on River Restoration (30 June – 2 July 2015, Wageningen, The Netherlands)

Registration is now open for the REFORM International Conference on Novel Approaches to Assess and Rehabilitate Modified Rivers in Wageningen, The Netherlands, on 30 June to 2 July 2015.

[Read more](#)

8. REFORM Workshop in Poland: Groundwater-river interaction as driver for ecology

On 15-17 September 2014, an expert workshop was organised by REFORM in Kuwasy (Biebrza Valley, Poland). The aim was to discuss the relevance of groundwater-surface water interactions in European actions oriented at sustainable water management.

[Read more](#)

9. Building partnerships and the way forward to gear up hydromorphological improvements: An interview with Peter Pollard, Scottish Environment Protection Agency

Peter Pollard, manager of the national water policy unit at the Scottish Environment Protection Agency, speaks about progress made since the 1<sup>st</sup> RBMPs in terms of awareness of hydromorphological issues and novel approaches to mitigate impacts. He also makes suggestions for more practice-oriented outputs of REFORM in its final year.

[Read more](#)

10. Rewidening and rewilding the Thur river (Switzerland)

The recent rehabilitation of the river Thur has been one of the prominent restoration programmes in Switzerland. A combined valuation of biological and morphological conditions indicates an overall positive effect of restoration on the ecological state of the river. Nevertheless, there is still a lot to do to sustain this improvement for the long term.

[Read more](#)

## 8. Newsletter 7 - August, 2015

The seventh newsletter contains 8 items and an editorial

1. Welcome editorial by the REFORM Coordinator  
REFORM Coordinator Tom Buijse briefly introduces the contents of the seventh newsletter of the project.  
[Read more](#)
2. Spotlight on river restoration at the REFORM final conference  
With great success, the final conference of REFORM on 'Novel Approaches to Assess and Rehabilitate Modified Rivers' took place from 30 June to 2 July 2015 in the Conference Center Hof van Wageningen, in the Netherlands. 170 participants from 26 countries represented the wide range of groups that make up the river restoration community. The three-day conference featured 15 key note lectures, 58 oral presentations and 38 posters that provided the ingredients and inspiration that persuaded participants to share their experiences, aspirations, challenges and new approaches to enhance the success of river restoration. The conference closed with a field excursion, attended by 100 people, to two 'Room for the river' projects.  
[Read more](#)
3. River restoration in US and Europe: Interviews with two of our conference keynote speakers  
In an interview for this edition of the REFORM Newsletter, Dr. Philip Roni (US National Oceanic and Atmospheric Administration) and Dr. Stan Gregory (*Oregon State University*) share their insights into similarities and differences of river restoration in the EU and the US. In particular, they shared their views on good elements of river restoration, the importance of monitoring and the contribution of REFORM to river restoration in science and practice.  
[Read more](#)
4. REFORM Summer School – Lectures available online  
The REFORM Summer School took place last June in Wageningen, the Netherlands. Students and early career researchers participated in the 3 day-event preceding REFORM's Final Conference. In addition to attending lectures in a range of disciplines such as hydrology, morphology and ecology and addressing key topics for cost-effective river rehabilitation planning, the participants visited two contrasting restoration projects. This gave them the chance to apply theory to practice and draft a restoration strategy based on the lessons learned during the lectures and field trips.  
[Read more](#)
5. Cost-effective restoration measures that promote wider ecosystem and societal benefits  
In response to the current lack of specific guidance and experience on the calculation of costs and benefits and social cost-benefit analysis of river restoration projects, REFORM has produced and published a guidance document on cost-effective restoration measures that promote wider ecosystem and societal benefits. The report provides an overview of existing guidelines, identifies and discusses key methodological issues in a CBA of river restoration, and develops an approach that can be used to assess benefits when it is not possible to carry out primary valuation research. A number of practical recommendations to practitioners are also provided. The report is available for download.



[Read more](#)

6. What's wrong with my river?

To address the possible complications faced by practitioners and other stakeholders in identifying degradation issues in rivers, REFORM has recently produced a guidance to detect impact of HyMo degradation on riparian ecosystems. The report contains guidance on how to identify and understand the impacts of hydromorphological degradation using a generic 5-step approach. It also includes lessons learned from several case study examples which illustrated and inspired the 5 step approach to understanding impact. In addition, many of the findings gathered in the document are directly relevant to assessing in-stream conditions. The report is available for download.

[Read more](#)

7. PhD research in REFORM – Interactions between aquatic macrophytes and hydromorphology in rivers

In this article Sabine Scheunig from IGB Berlin presents her PhD research which explores the responses of macrophytes to river restoration measures over time, an essential issue for the sustainable conduction of restoration projects. The fieldwork for this research, which took place in the lowlands of the river Spree in Germany, is supplemented by a review of 170 cases from around the world. Preliminary results emphasize the suitability of helophytes as indicators for effective river restoration. In particular, they reflect the connectivity between the river bed and its adjacent area.

[Read more](#)

8. PhD research in REFORM - The effect of stream restoration on metabolism, leaf breakdown rate and macroinvertebrate species composition

In this article Anette Baisner Alnoee from Aarhus University presents her PhD research which studies the effects of restoration on the functional parameters of rivers such as stream metabolism, organic matter breakdown rates or nutrient uptake rates by different stream organisms. To achieve this, the work compares functional parameters and macroinvertebrate species composition in three different stream types. Preliminary results show no difference in metabolism and breakdown rates across the different stream types while macroinvertebrate composition exhibit variations.

[Read more](#)

9. Restoration of longitudinal connectivity and salmonid habitat in River Mörrumsån (Sweden)

River Mörrumsån, located in southern Sweden, is regarded as the best known salmon-bearing river in Sweden. On the other hand, exploitation for hydropower production has affected the river's longitudinal connectivity. Since the early 1990's restoration measures started being discussed, and after years of planning and testing, the first actions were taken in 2003. Measures implemented up to date include e.g. grey measures such as fish-ways and soft measures as a water rights entitlement. The success of the restoration of Mörrumsån is known within Sweden as a good example for cooperation between private stakeholders and government agencies.

[Read more](#)

## 9. Newsletter 8 - December, 2015

The eighth and final newsletter contains 6 items and an editorial

1. Welcome editorial by the REFORM Coordinator  
REFORM Coordinator Tom Buijse briefly introduces the contents of the eighth and final newsletter of the project.  
[Read more](#)
2. Guidance and decision support for cost-effective river restoration  
In order to make the outcomes of REFORM available to practitioners the project team has developed a web-based information system (or wiki) along with a separate guidance document. This article briefly presents the contents of the wiki and the guidance which serves as a portal to the system.  
[Read more](#)
3. New methods and tools to assess the hydromorphology of rivers  
A new report produced by REFORM presents a set of methods and tools to practically assess and monitor hydromorphological conditions. In specific, the report outlines and provides guidance on the following three tools: the Morphological Quality Index (MQI), the Morphological Quality Index for monitoring (MQIm), and the Geomorphic Units survey and classification System (GUS).  
[Read more](#)
4. Factsheets on restoration for 11 river types  
The REFORM project produced factsheets for 11 different types of river in various ecoregions across Europe which cover prevailing pressures, on-going and promising restoration measures and monitoring requirements. This article presents key conclusions from the relevant literature meta-data analysis and discusses the river typology adopted for these factsheets.  
[Read more](#)
5. REFORM scientific publications - II  
During the four-year lifespan of REFORM the involved scientists have published more than 50 peer-reviewed publications. This article gives an overview of the most recent and upcoming scientific publications and presents several special issues which have been prepared or are under preparation (journals Aquatic Sciences, River Research and Applications and Hydrobiologia).  
[Read more](#)
6. Linking E-Flows to Sediment Dynamics: REFORM Stakeholder Workshop, Rome, September 2015  
The links of sediment dynamics to environmental flows (e-flows) were discussed by a panel of international experts during a REFORM workshop held in Rome on 9–10 September 2015. This thematic workshop was followed by a national stakeholder workshop on 10 September which aimed to inform the Italian stakeholders about the main outcomes of REFORM.  
[Read more](#)
7. ECOSTAT Workshop on Hydromorphology and WFD classification, Oslo, October 2015  
The outcome of the REFORM project was one of the main motivations for the working group ECOSTAT of the WFD Common Implementation Strategy to organise a workshop on Hydromorphology and WFD classification. This article presents the aims and highlights of the key conclusions of this workshop which

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took place on 12-13 October 2015 at the Norwegian Environment Agency in Oslo.  
[Read more](#)

## 10. Leaflets in multiple languages

Leaflets have been initially prepared in the following languages: English, German, French, Italian and Spanish. Following the external review over the 1<sup>st</sup> period the leaflet has been translated in 2014 into the following 6 additional languages: Czech, Danish, Finnish, Dutch, Polish, Swedish covering all case study countries. The leaflets are available online at the public website (<http://www.reformrivers.eu/results/deliverables>). The original text was prepared in English and subsequently translated into the other four languages.

The original text sounds

“Restoring river ecosystems across Europe”. REFORM will address the challenges in reaching the ecological objectives for rivers set forth in the EU Water Framework Directive. It is a four-year integrated research project (2011-2015).

Many European rivers have been regulated to support flood protection, navigation, freshwater supply, and hydropower production. Insufficient knowledge is available about the ecological impacts of these hydromorphological modifications including about whether they can be effectively reversed or mitigated.

Understanding the causes and consequences of degradation and improving restoration

1. REFORM will improve existing tools and develop new ones to make restoration and mitigation measures more successful and cost-effective.
2. It will improve and develop procedures to monitor the biological responses to hydromorphological changes with greater precision and sensitivity.
3. It will provide information through a restoration WIKI.
4. First results will be available early 2013 to support the formulation of the Programmes of Measures for the second round of RBMPs.

REFORM's communication objective is to increase awareness about the need for river restoration as well as an appreciation of its benefits and future potential.

REFORM connects knowledge and know-how regarding natural functioning, degradation and restoration of rivers to optimize river basin management.

Twenty-five partners from fourteen countries are contributing to REFORM's success.”