



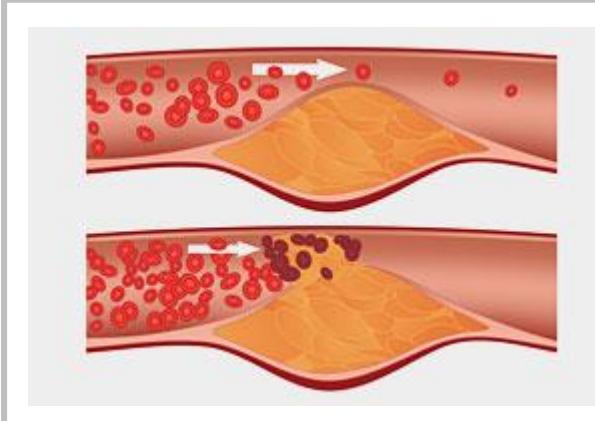
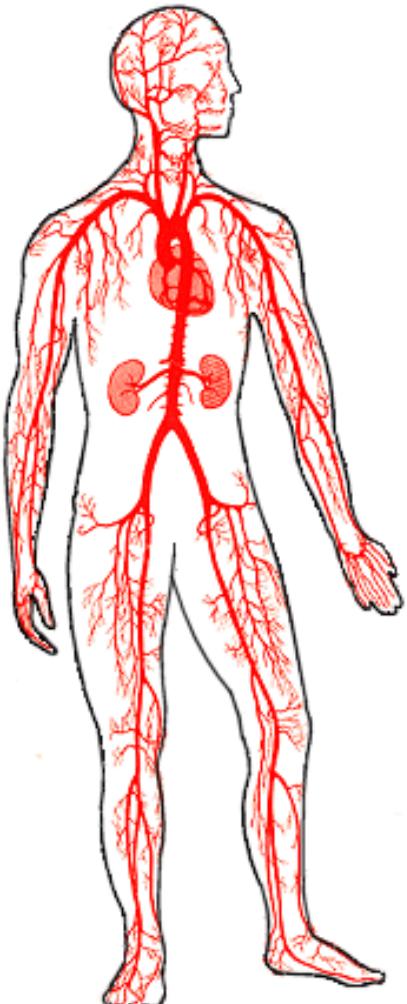
WATER AND CLIMATE

MEETING OF THE GREAT RIVERS OF THE WORLD

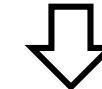
INTERNATIONAL SUMMIT

Rome, 23-25 October 2017





THROMBOSIS



CARDIOVASCULAR DISEASES

- HEART ATTACK
- STROKE
- EMBOLISM

4.000.000 of Europeans

die each year from cardiovascular diseases
(leading cause of death in Europe and worldwide)

4.000.000 of Europeans

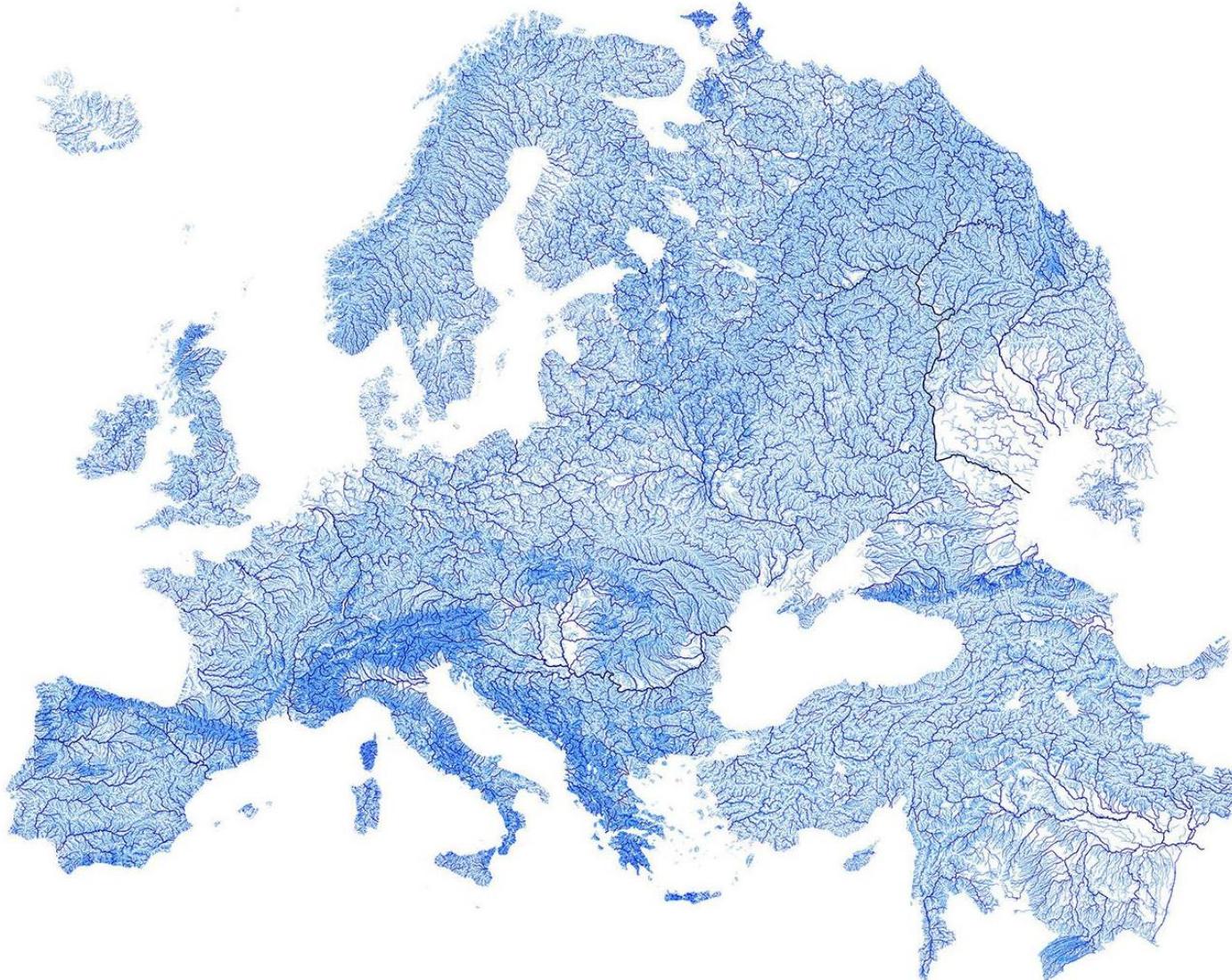
are incapacitated because of cardiovascular diseases

196.000.000.000 euro (1.3% of EU GDP)

is the European spending for cardiovascular disease

Source: EHN 2012

HUMAN CARDIOVASCULAR SYSTEM



CREDITS
Robert Szucs

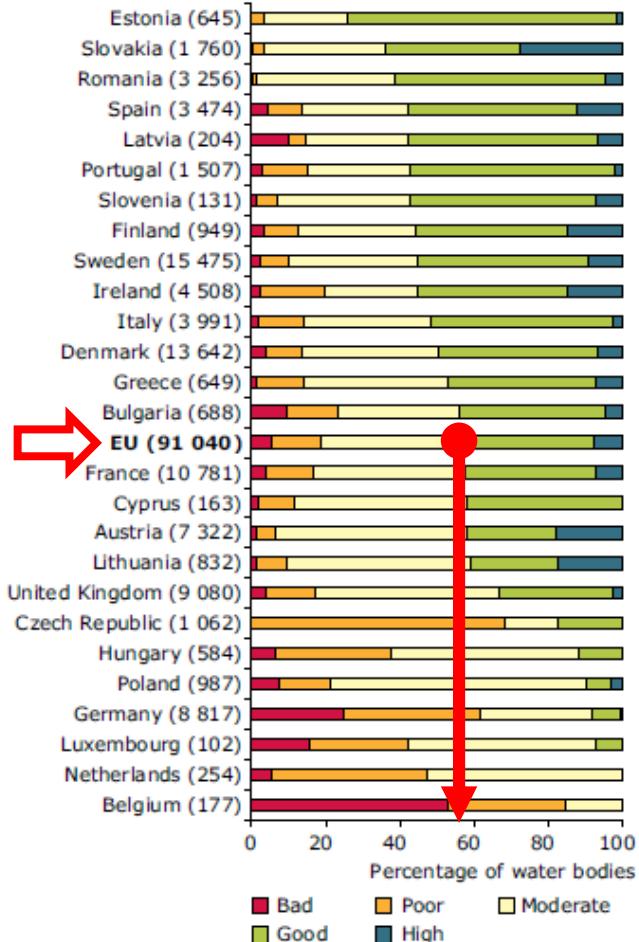
LOSS OF FLOODPLAIN AREA ALONGSIDE GREATEST EU RIVERS

River section	Loss of floodplain area (%)
Upper Danube (Austria, Germany) ^(a,b)	95
Central Danube (Croatia, Hungary, Serbia, Slovakia) ^(a)	75
Lower Danube (Bulgaria, Republic of Moldova, Romania, Serbia) ^(a)	73
Danube Delta (Romania, Ukraine) ^(a)	30
Tisza (Hungary, Romania, Ukraine) ^(c)	95
Upper Rhine (France, Germany) ^(d)	93
River Rhine (Austria, Switzerland, France, Germany, Netherlands) ^(d)	85
River Rhine (Germany) ^(b)	80
Rhine and Meuse (Netherlands) ^(e)	90-100
Seine (France) ^(f)	99
Oder (Germany, Poland) ^(g)	73
Oder (only Germany) ^(b)	90
Middle Ebro River (Spain) ^(h)	58

Sources: ^(a) Schneider et al. (2009); ^(b) Brunotte et al. (2009); ^(c) Haraszthy (2001); ^(d) Schmid-Breton (2015); ^(e) Rijkswaterstaat Waterdienst (2008); ^(f) Tockner et al. (2009); ^(g) WWF Germany (2000); ^(h) Ollero (2010).

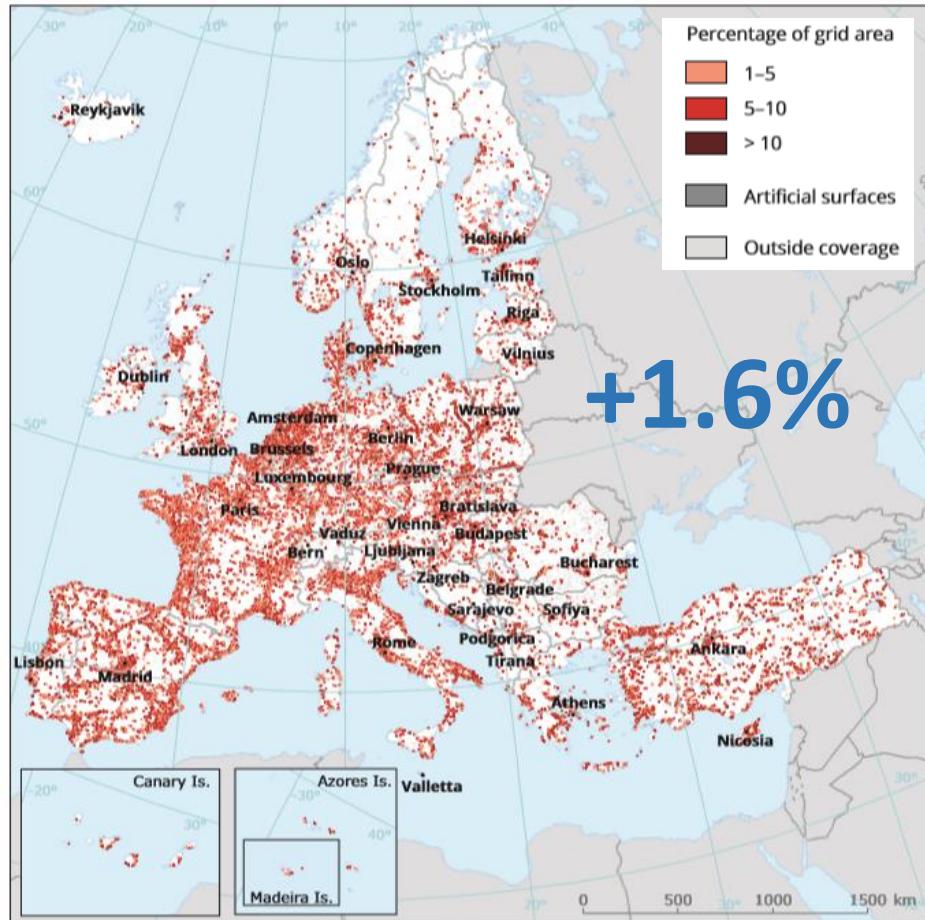
Source: EEA Report No 1/2016

ECOLOGICAL STATUS OF EU RIVERS



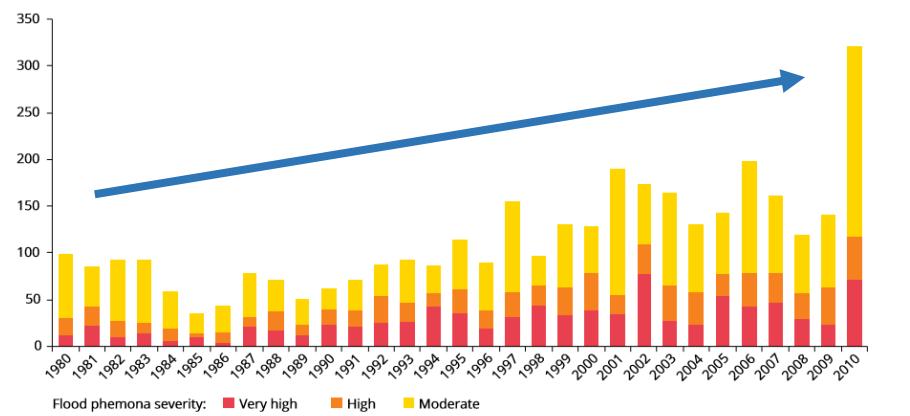
Source: EEA Report No 8/2012

EXPANSION OF ARTIFICIAL SURFACES AT EU SCALE (2006-2012)



Source: EEA Report No 10/2017

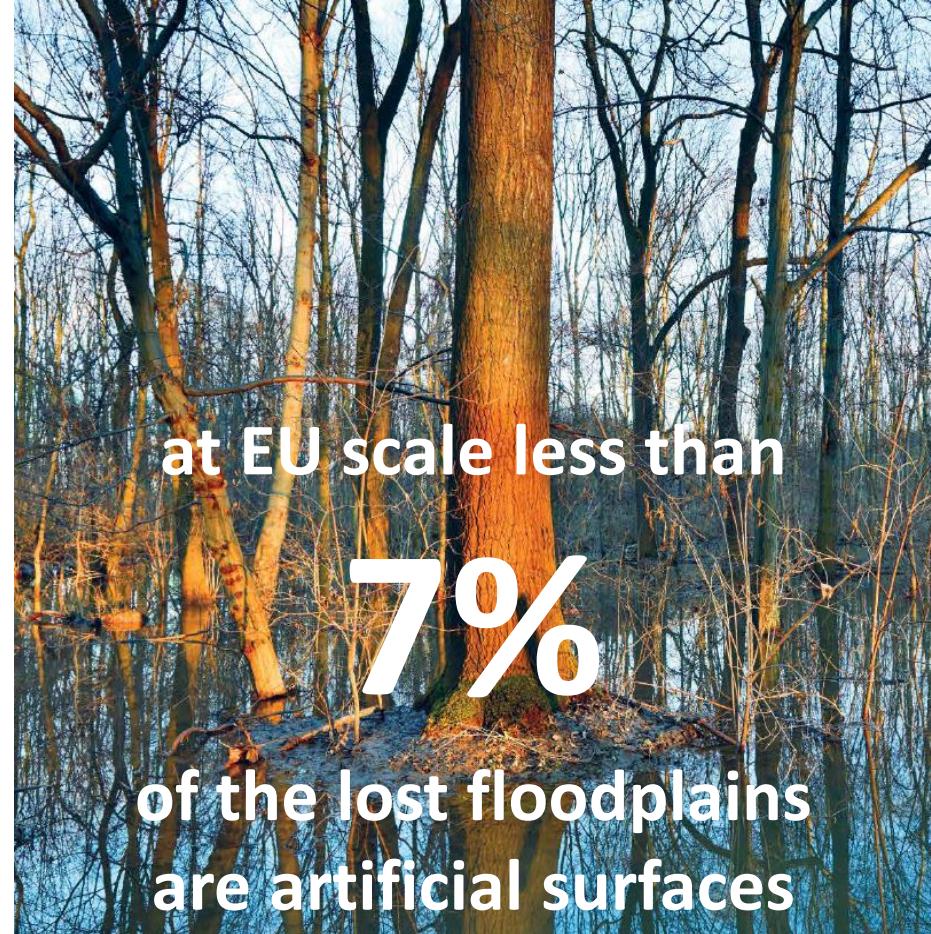
REPORTED FLOOD PHENOMENA AT EU SCALE (1980-2010)



Note: Flood severity is an assessment of flood phenomena magnitude. It considers the reported values on frequency, reported total damage (in Euros and descriptive classes), number of flood events within one flood phenomena unit and severity classes as reported in the Dartmouth Flood Observatory database (ETC/ICM, 2015b). All phenomena with fatalities are in the 'very high' severity class.



Source: EEA Report No 1/2016



WHERE DO WE PREFER RIVER TO FLOOD?

MAKE ROOM FOR THE RIVER



BEFORE



AFTER

FACTS AND FIGURES FOR THE Q100 (*)

hydraulic benefits of **2,74€ per 1€ invested** with a payback time of **18 years**

(*) Without accounting the environmental and social benefits for restoring a river in an urban context



Courtesy of

Yzeron River, Lyon (France)

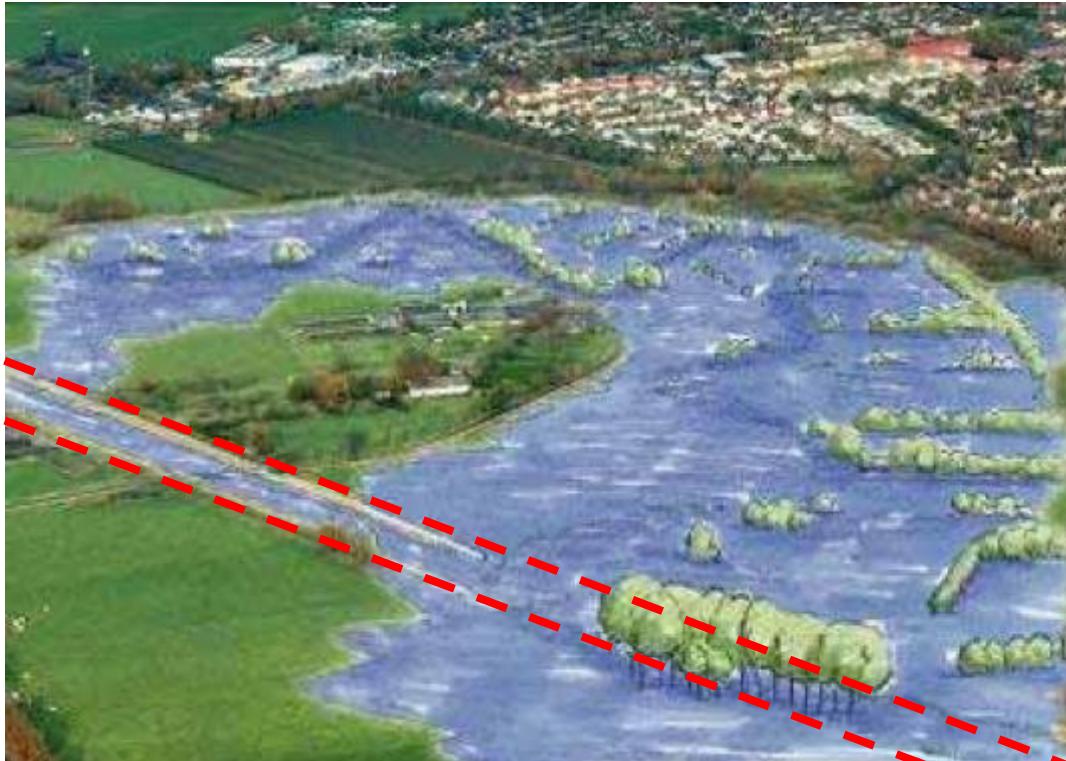
MAKE ROOM FOR THE RIVER



Courtesy of  Regione Emilia-Romagna

Montone River, Forlì (Italy)

MAKE ROOM FOR THE RIVER



FACTS AND FIGURES FOR THE Q10

1,5 kilometers river reach
and 15 hectares area have
been restored

500.000 m³ water storing
capacity has been gained
for flood management

peak discharge (Q10) has
been reduced by 12,5%

Courtesy of
 nofdp

Aa River, The Netherlands

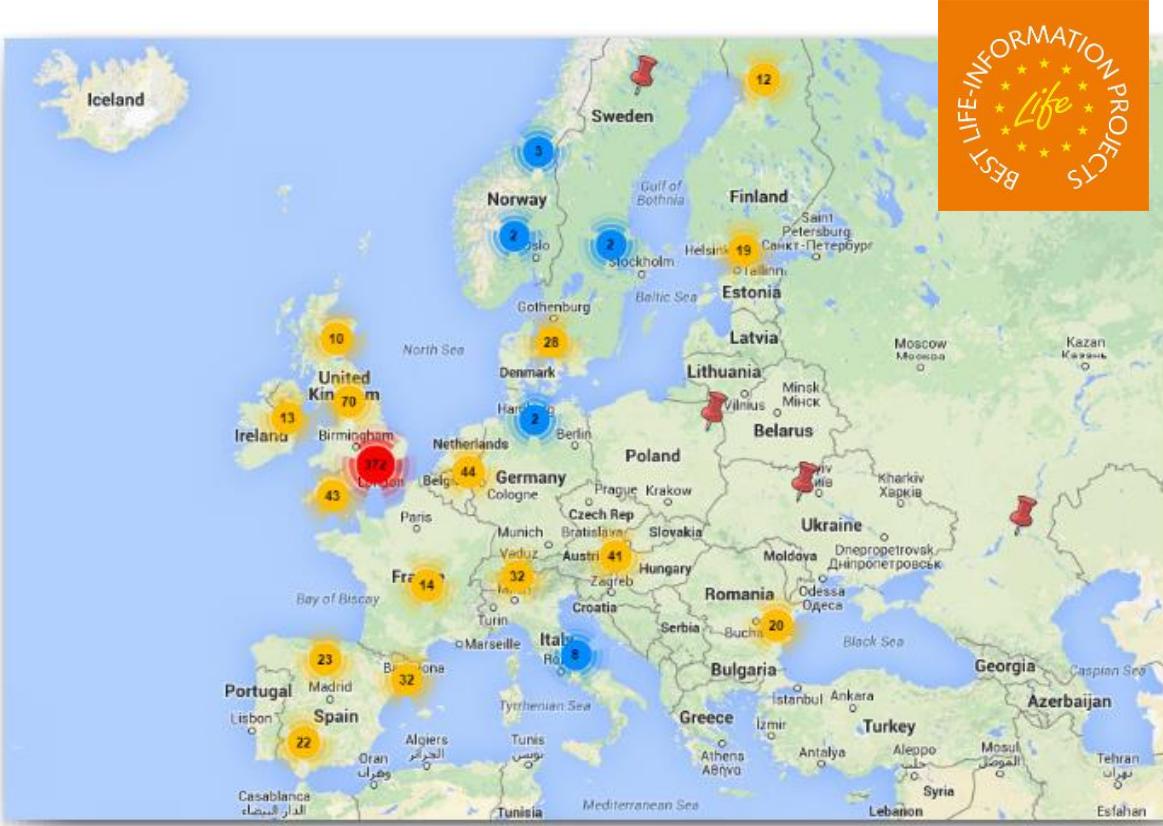


Courtesy of



Pagana stream, Venice (Italy)

RIVERWIKI



SHARE YOUR SUCCESS !

Project location

Project status

River name

Project contact/organization

Country

Themes / Drivers

Project started date

Project completed date

Project summary

Reasons for river restoration

Measures / Techniques used

Project Picture

www.restorerivers.eu

1022 river restoration case studies

31 countries

3 guidance factsheets

2 guidance videos



CREDITS: LIFE RESTORE PROJECT



 Environment Agency



 Wetlands
INTERNATIONAL



 CIFR



**RESILIENCE IS GOOD
... BUT DO NOT MAKE IT A FASHION !**

