

DAM REMOVAL

A VIABLE TOOL TO CONTRIBUTE TO THE EU BIODIVERSITY TARGETS

Herman Wanningen, World Fish Migration Foundation

SEPTEMBER 2023



1.100 AMAZING SPECIES



**...TRAVELLING THROUGH THE
SWIMWAYS OF THE WORLD.**

CONNECTING FISH RIVERS & PEOPLE

 WORLD FISH MIGRATION
FOUNDATION
FOUNDED IN 2014





FREE
FLOW

THE FREE FLOW EDITION

CELEBRATED FROM

LOCAL TO GLOBAL

MAY 25, 2024



WORLD FISH
MIGRATION DAY

www.worldfishmigrationday.com

BARRIERS IN RIVERS

DAMS

WEIRS

CULVERTS

SLUICES

RAMPS

OBSOLETE BARRIERS



European Commission's [Guidance on Barrier Removal](#) as:
'barriers that no longer fulfil their original purpose or that are no longer needed'.

DAMS CAN FAIL TOO!





**93%
DECREASE IN
EUROPEAN
MIGRATORY
FISH STOCKS**

THE PROBLEMS

1.100

**FRESHWATER MIGRATORY FISH SPECIES
GLOBALLY ARE BLOCKED BY BARRIERS**

>1,2 MILLION*

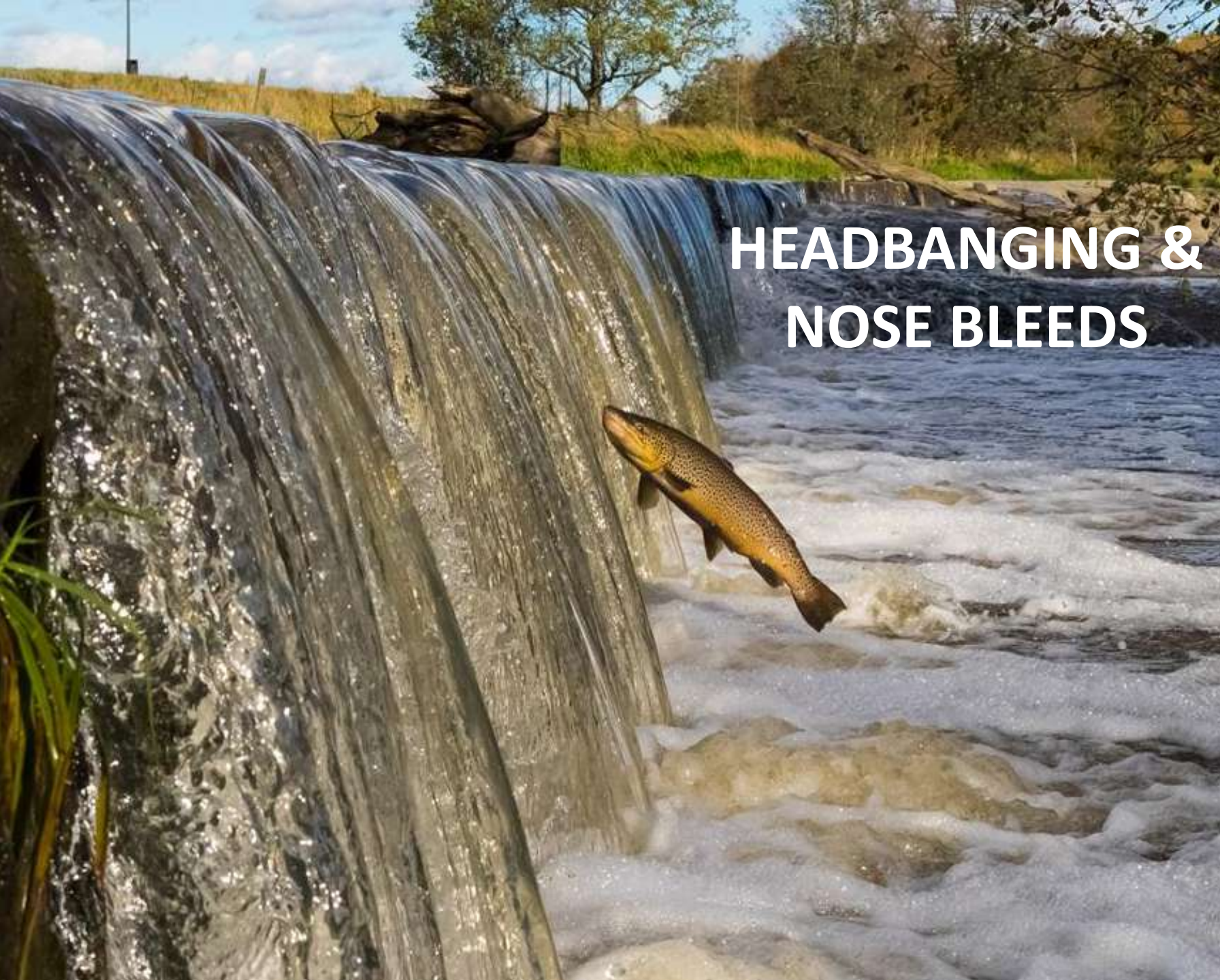
**BARRIERS FRAGMENT EUROPEAN
RIVERS**

>150.000*

**BARRIERS IN EUROPE LISTED AS
OBSOLETE**

****(HORIZON 2020 AMBER
EU COMMISSION FUNDED RESEARCH)***

HEADBANGING & NOSE BLEEDS



OTHER PROBLEMS

SEDIMENT PROCESSES ALTERED

ACCUMULATION UPSTREAM

LACK OF SAND & GRAVEL DOWNSTREAM

TRAPPED ORGANIC MATERIAL & NUTRIENTS

WATER QUALITY ISSUES

ALGAE BLOOMS

CHANGE IN WATER VELOCITY

FLOOD RISKS

TEMPERATURE CHANGE

EU POLICIES

NATURA2000 & WFD

BIODIVERSITY STRATEGY 2030

EU NATURE RESTORATION LAW

RESTORING 25.000KM FREE FLOWING RIVERS



THE SOLUTION DAM REMOVAL

STARTING WITH >150.000
OBSOLETE & OLD BARRIERS
IN EUROPE



CREATING OPPORTUNITIES IN EUROPE TOGETHER



30.000 HYDROPOWER SITES

>150.000 OLD & OBSOLETE BARRIERS

An aerial photograph of a river meandering through a landscape. The left side of the image shows large, golden-brown harvested fields with visible tire tracks. The right side shows a dense, green forest. The river flows from the top center towards the bottom right, curving through the fields and then into the forest.

DAM REMOVAL CONTRIBUTES TO

**REDUCED FLOOD PROTECTION &
SAFETY ISSUES**

IMPROVED WATER QUALITY

**IMPROVED SEDIMENT &
NUTRIENT TRANSPORT**

ENHANCED BIODIVERSITY



**DAM REMOVAL
CONTRIBUTES TO**

RECREATIONAL ECONOMIES

CREATING JOBS

MARINE/INLAND FISHERIES

**PREVENTING MAINTENANCE
COST**



A wide-angle landscape photograph of a river valley. A large, light-colored sandbar dominates the middle of the river, which is filled with clear, turquoise water. The river flows through a lush green valley with scattered trees and fields. In the background, a large, rugged mountain peak rises against a blue sky with a few white clouds. The overall scene is bright and clear, suggesting a sunny day.

OUR MISSION

MAINSTREAM DAM REMOVAL AS THE TOOL TO RESTORE RIVERS



DAM REMOVAL EUROPE

MOVEMENT OF ORGANISATIONS AND
CITIZENS MAINSTREAMING
DAM REMOVAL AS
A RIVER RESTORATION TOOL.

COORDINATED BY WFMF





OUR STRATEGY

**BUILDING A MOVEMENT OF
PROUD RIVER PRACTITIONERS
& ENABLE THEM TO REMOVE
DAMS**

*"I really value your amazing events
and work, and the fantastic
community you have
established for knowledge sharing
and support".*

Tania White, Environment Agency (UK)

DAM REMOVAL EUROPE

STRATEGY
 **DAM
REMOVAL
EUROPE**
2020
2030

SCALING UP!

**WORKING TOGETHER & SHARING
RESOURCES TO RESTORE RIVERS**

>25.000 km FREE FLOWING RIVERS

WWW.DAMREMOVAL.EU

OUR VALUES

Passion

Committed

Positive

Inclusive

Connecting



GROWING MOVEMENT

MAINSTREAMING

SCALING UP

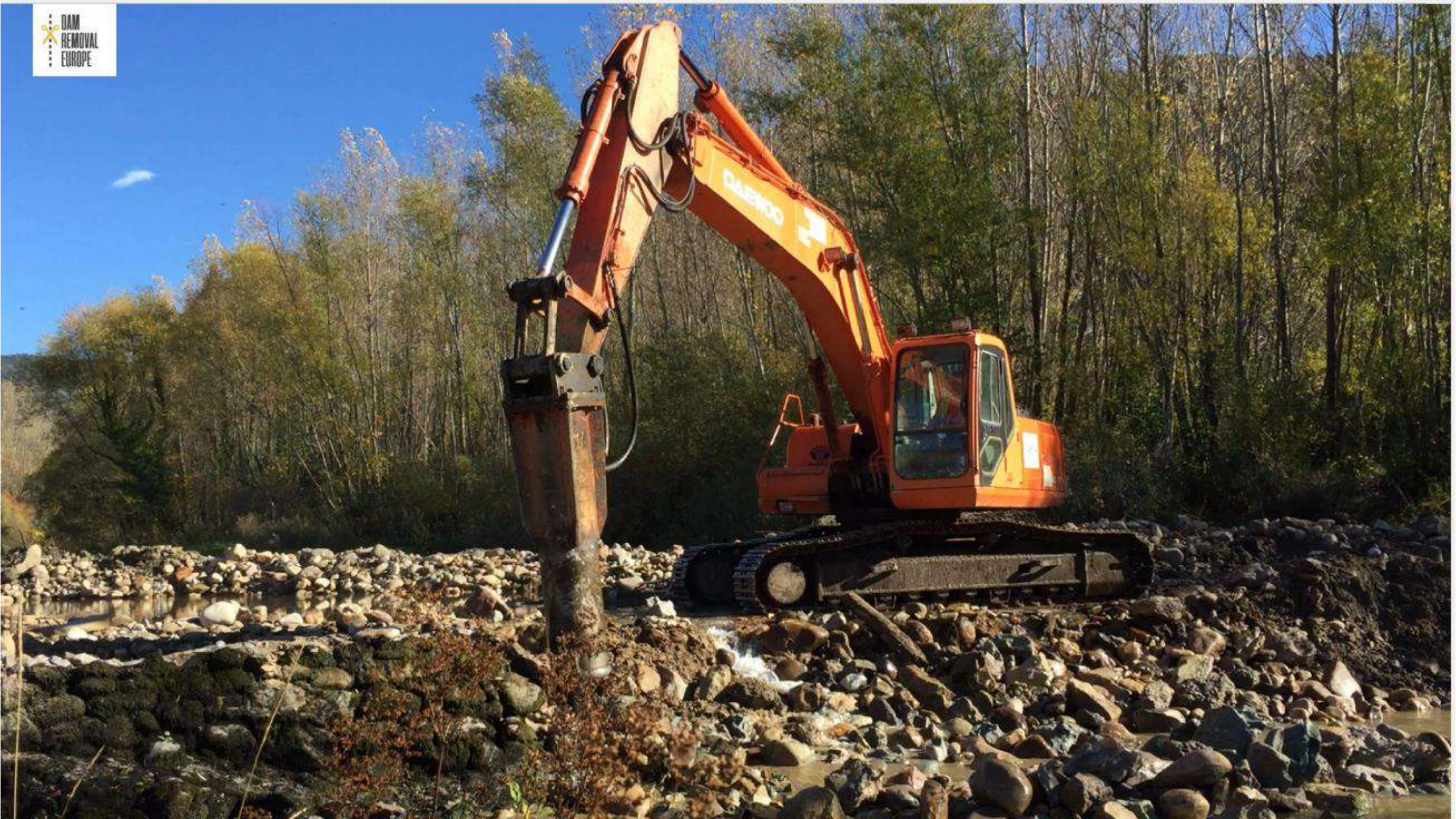
THINK BIG, ACT LOCAL

CREATING THE BIG SHIFT

IT IS JUST BEATIFUL AND FUN!

BEAUTIFUL MACHINERY (SLOVAKIA)





GROWING MOVEMENT OF FUNDERS

FINANCIALLY SUPPORTED BY



HELPDESK

SHARE RESOURCES & TEMPLATE PROCEDURES

WEBINARS/SEMINARS/WORKSHOPS

BROAD CASTING LIVE REMOVALS

DAM REMOVAL AWARD

TAILOR MADE COURSES

ANNUAL STATUS REPORT

FREE-FLOW CONFERENCE (2024)



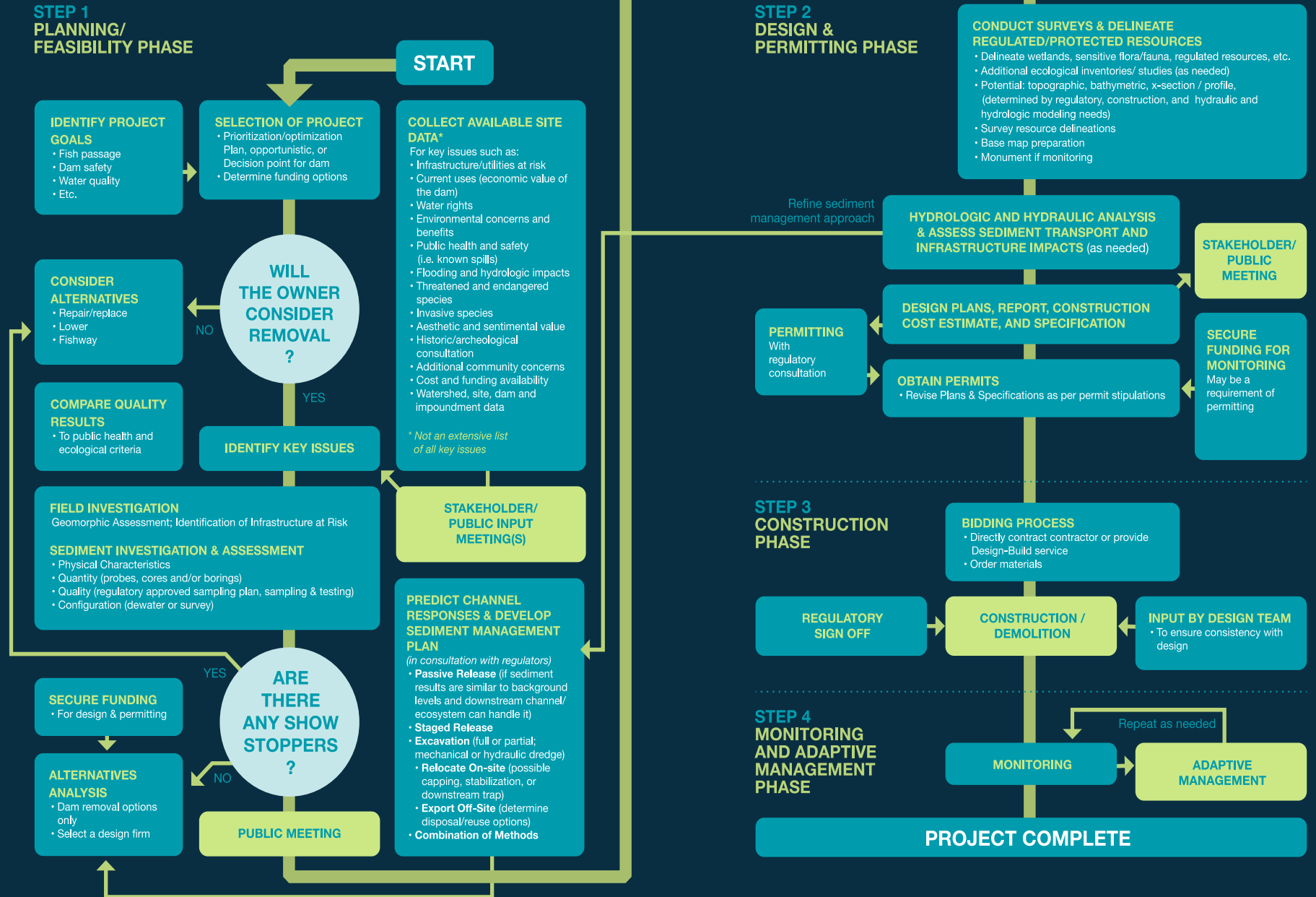
PROVIDING GUIDANCE

STEP BY STEP

by Laura Wildman



From planning to design, execution and management.



SHARING EUROPEAN SHOWCASES



ESTONIA, PARNU RIVER: 3000KM RESTORED BY EU DEVELOPMENT FUNDING

SELUNE RIVER, FRANCE

80 km opened up – the biggest dam removal in Europe!

LA ROCHE QUI BOIT

SELUNE RIVER

FRANCE

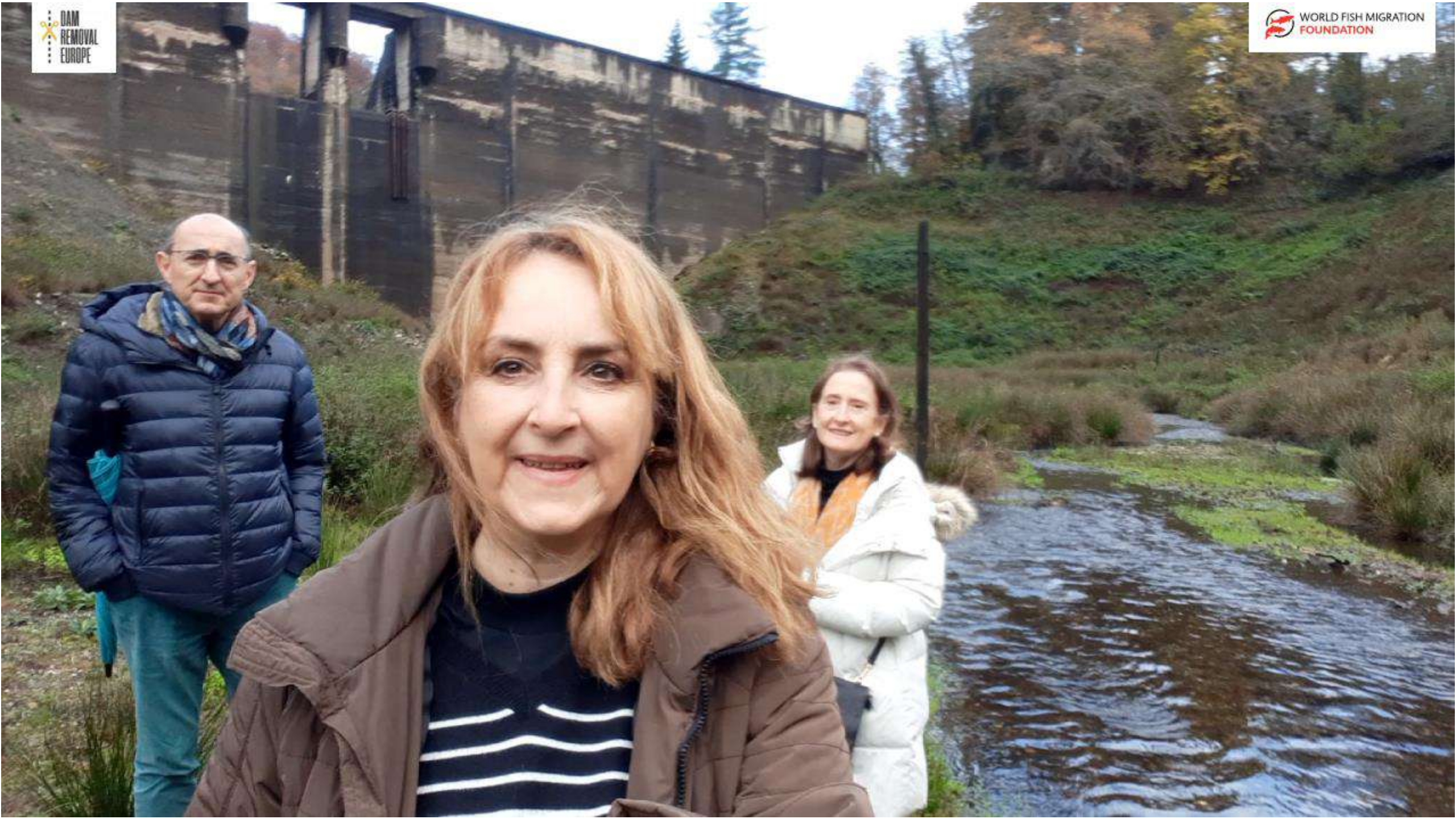


© Robert Epple, ERN

SHOWCASE SPAIN

NATIONAL LAW TO TAKE OLD DAMS OUT





DENMARK

REMEANDERING: YES

DAM REMOVAL: YES

FISHWAYS: NO

COMMUNICATION: NOT MUCH

SWEDEN

LEADING COUNTRY

NEW HYDROPOWER STRATEGY

1 BILLION FUND TO RESTRUCTURE

HUNDRED OF REMOVALS (SMALL DAMS)



FINLAND

NATIONAL POLICY IN PLACE

HIITOLANJOKI RIVER
3 OLD HYDROPOWER DAMS
2021-2023

AND MORE TO COME...



DEVELOP OPPORTUNITIES

STAICELE PAPER FACTORY, LATVIA

LITHUANIA

DEVELOPING DAM
REMOVAL POLICY

IN 3 YEARS

EVERY COUNTRY
NEEDS A
SUCCESS STORY

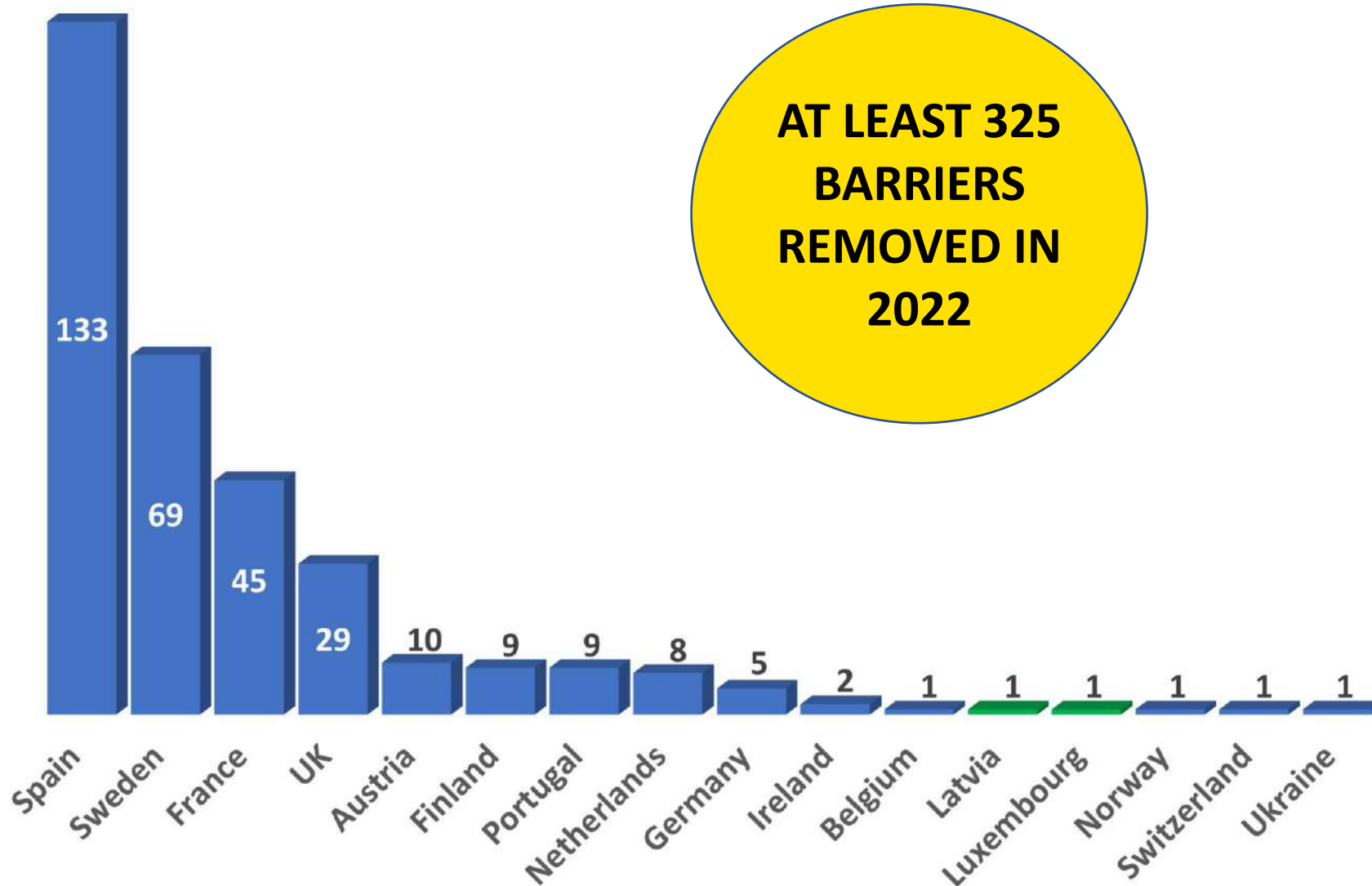




BUILDING PIPELINE DATABASE

UNTIL 2022 MORE THAN >13.000 BARRIERS TRACKED DOWN BY CITIZENS
15% OLD & READY FOR REMOVAL

EVALUATE PROGRESS



**AT LEAST 325
BARRIERS
REMOVED IN
2022**

**>150.000
OBSOLETE
BARRIERS
TO GO**

**12
BILLION
EURO
VALUE**

BEFORE & AFTER



Dam fine work! Record number of barrier removals helps restore rivers across Europe

More than 300 barriers were taken down last year, boosting the health of waterways and the wildlife they support, say experts.



Weir today, gone tomorrow:
work starts to free
Cumbrian river



DAM REMOVAL AWARD 2022

Nominate your project
for a chance to win 10.000 €.

More information:
www.damremoval.eu/events



MAINSTREAMING

DONALD DUCK LOVES TO TAKE DAMS OUT TOO

Inspired by a story from Finland

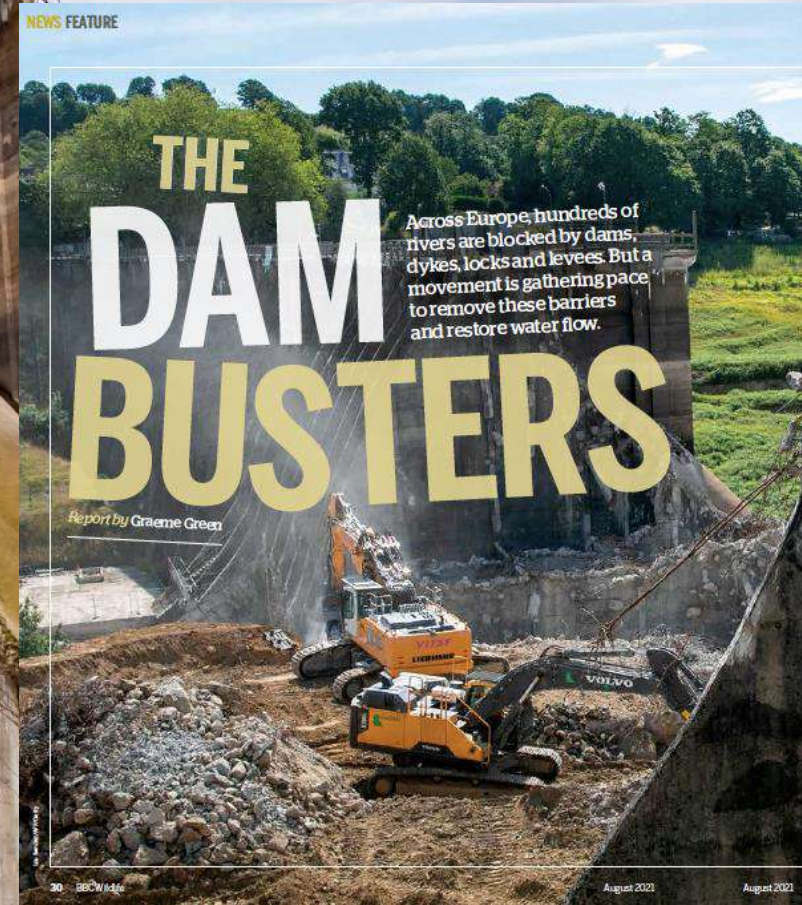
WORK WITH NATIONAL &
INTERNATIONAL AMBASSADORS!





INITIATE INTERNATIONAL PRESS ATTENTION

YOU ALL HAVE UNIQUE STORIES TO TELL



BBC WILDLIFE MAGAZINE

Norway blows up hydro dam to restore river health and fish stocks

January, 2022

Meet
Tore Solbakken







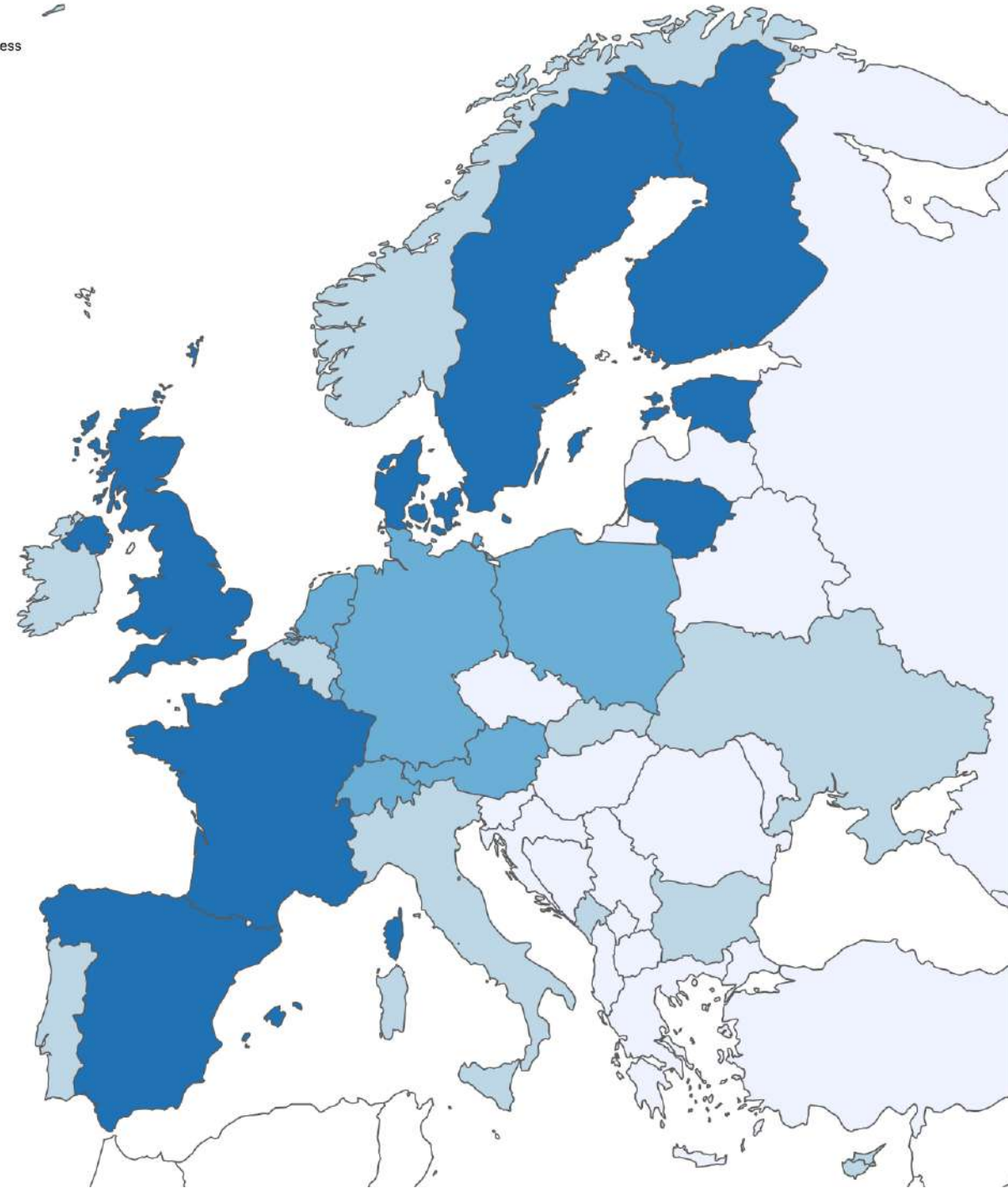


STATUS IMPLEMENTATION DAM REMOVAL

7 COUNTRIES

**IMPLEMENTED DAM REMOVAL AS A RIVER
RESTORATION TOOL**

**WE AIM TO IMPLEMENT IT IN
ALL EUROPEAN COUNTRIES**



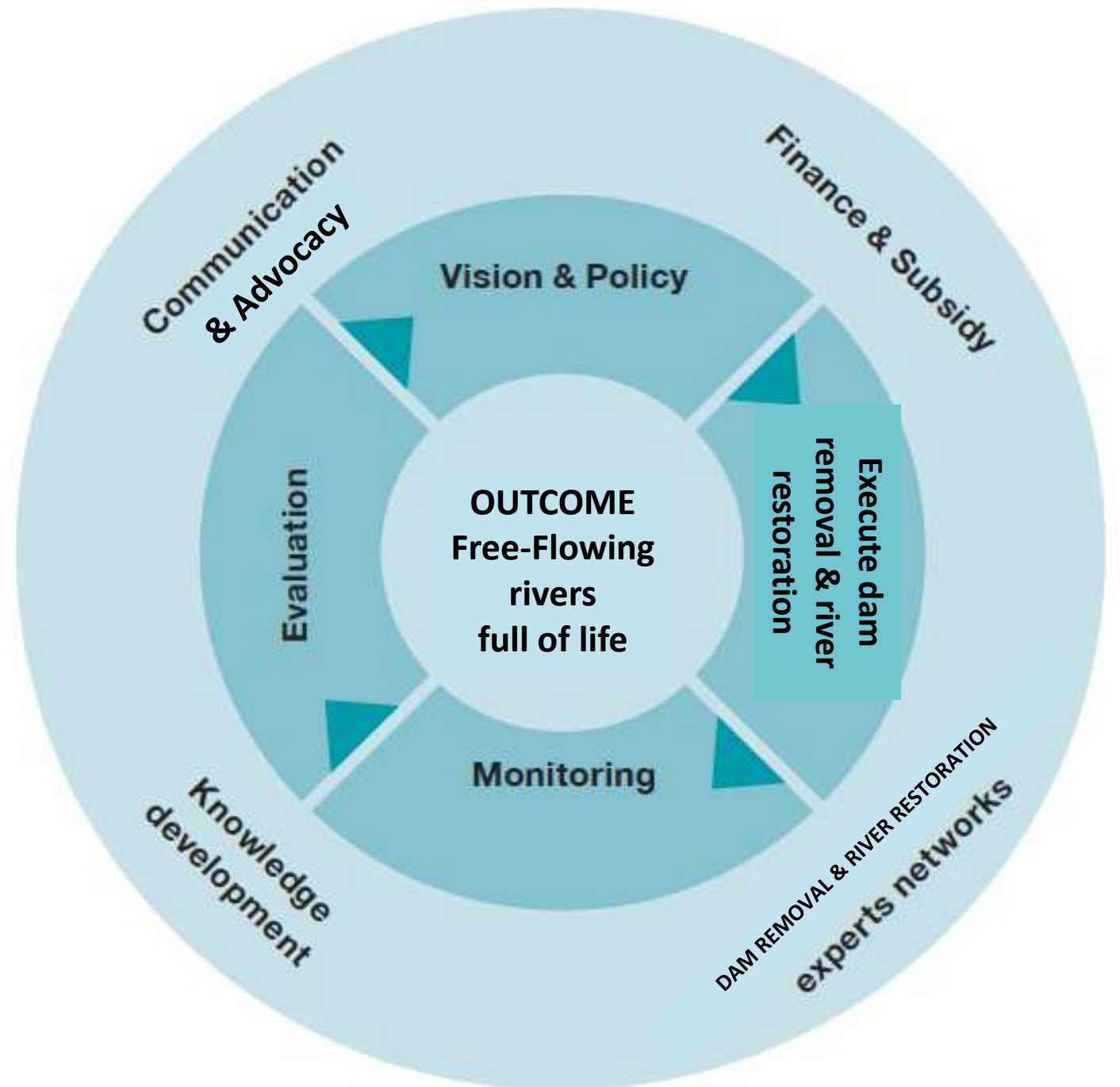
UPSCALING COUNTRY BY COUNTRY

1. IDENTIFY POTENTIAL CHANGEMAKERS
→ Initiate network, select the frontrunners to take action,
2. (INTER)NATIONAL SEMINAR/WORKSHOPS
→ Knowledge impulse, excitement, need for dam removal, roadmap
3. SET UP PILOT PROJECTS
→ Select quick wins, support prioritization, funding & policy process
4. REMOVE DAMS BY PRACTITIONERS
→ Proof that it works, proud practitioners, international showcases
5. CELEBRATE TOGETHER
→ Highlight projects, proud people, recognition/movement

UNDERSTANDING THE POLICY CYCLE

THE KEY TO
SUCCESSFULLY
SCALING UP
DAM REMOVAL

FROM LOCAL TO
INTERNATIONAL



FUNDING FROM EUROPEAN SOURCES



Estonia – Latvia



Central Baltic Programme





International conference on protecting and restoring free-flowing rivers in Europe

April 15-17, 2024 | Oosterpoort, Groningen, The Netherlands

Freeflowconference.eu

Organized by



Inspiring keynote

speakers:

Zeb Hogan

Pao Fernández Garrido

Jeffrey Duda

Gabriel Singer



Moderated by
Eila McSweeney



Various field trip
options

JOIN AND SHARE YOUR KNOWLEDGE!

APRIL 15-17, 2024

Supported by



Ministerie van Infrastructuur
en Waterstaat



Ministerie van Landbouw,
Natuur en Voedselwalleit



Rijkswaterstaat
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I'M DONE HERE!
I RETIRE!

FREE
AT LAST!

DAMSTERDAM

DAM

 DAM
REMOVAL
EUROPE

Seppo Leimonen 2021
seppo.net

