



WORLD FISH MIGRATION
FOUNDATION



Removing river barriers to recover rivers and fish around the world

Pao Fernández Garrido & Herman Wanningen (World Fish Migration Foundation, Netherlands)

RIVERS4RECOVERY 10th December 2020



WORLD FISH MIGRATION
FOUNDATION

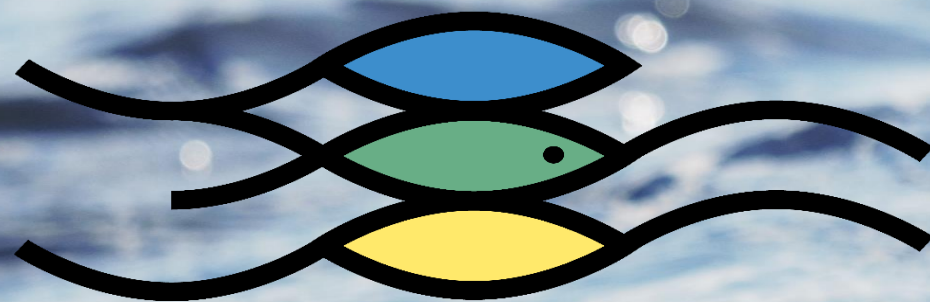
SAVE MIGRATORY FISH IN RIVERS

© Jeremy Shelton

RIVERS FULL OF FISH

A photograph showing a close-up view of a fish farm. In the foreground, a large, dark metal grate barrier runs vertically, partially obscuring the view. Behind the barrier, several fish are visible swimming in the water. The water is dark, and the fish appear to be of a similar species, possibly salmon. The background shows a concrete structure, likely part of the farm's infrastructure. The overall scene suggests a controlled environment for fish farming.

**ALL FISH IN EUROPE
ARE STUCK**



AMBER

Adaptive Management of Barriers in European Rivers

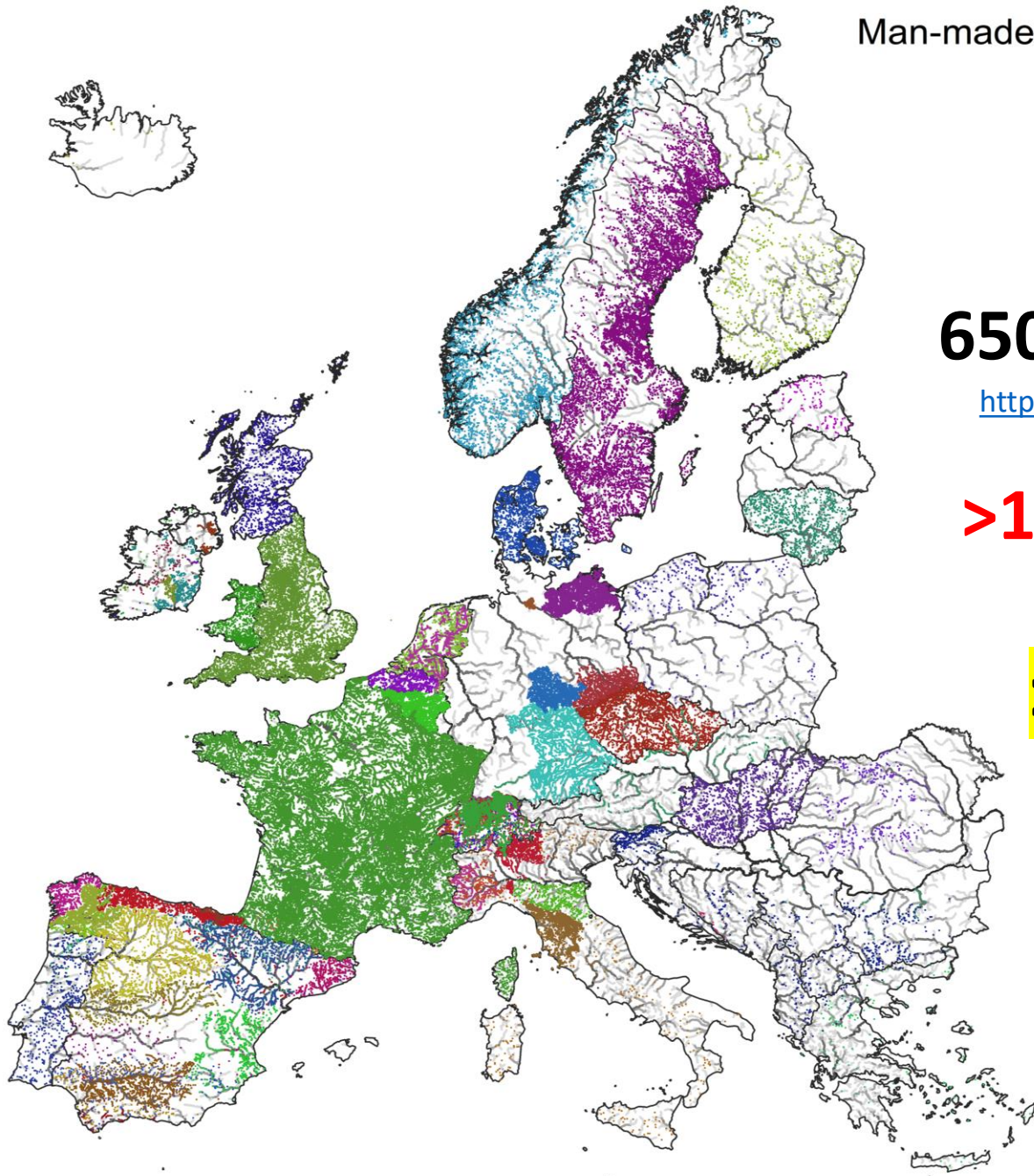
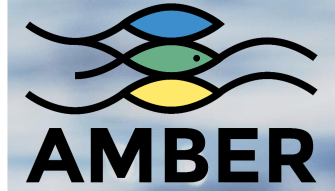
A COLLABORATIVE PROJECT FOR GUIDANCE ON BARRIER
LOCATION, REMOVAL AND MITIGATION IN EUROPE

www.amber.international



Horizon 2020

Man-made river barriers included in the AMBER Atlas
(November 2018)



650,000 collected barriers

<https://amber.international/european-barrier-atlas/>

>1.2 MILLIONS BARRIERS

>100,000 OBSOLETE

0 205 410 820 km

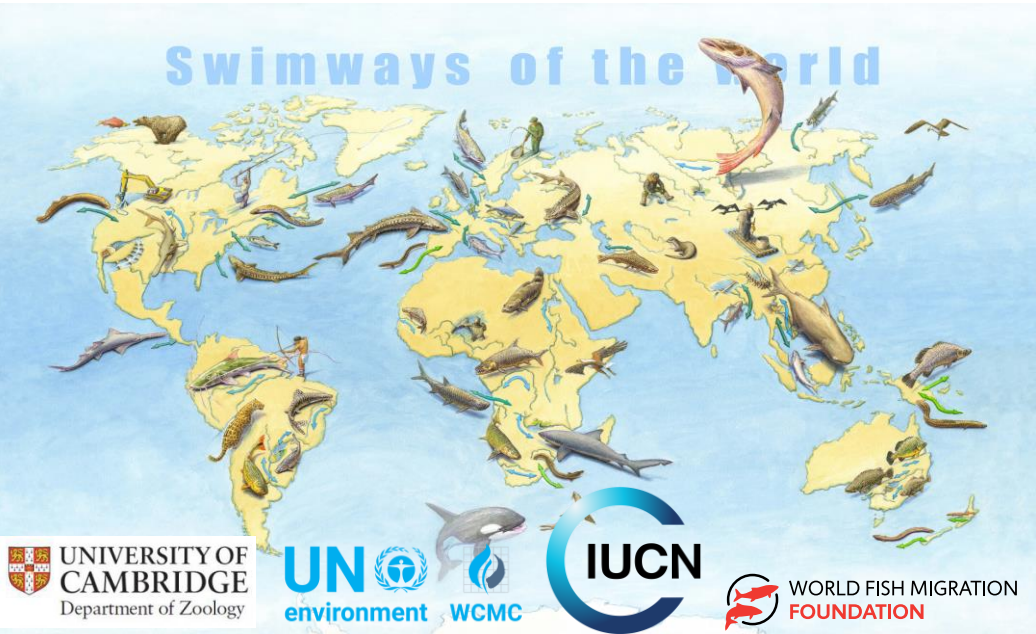




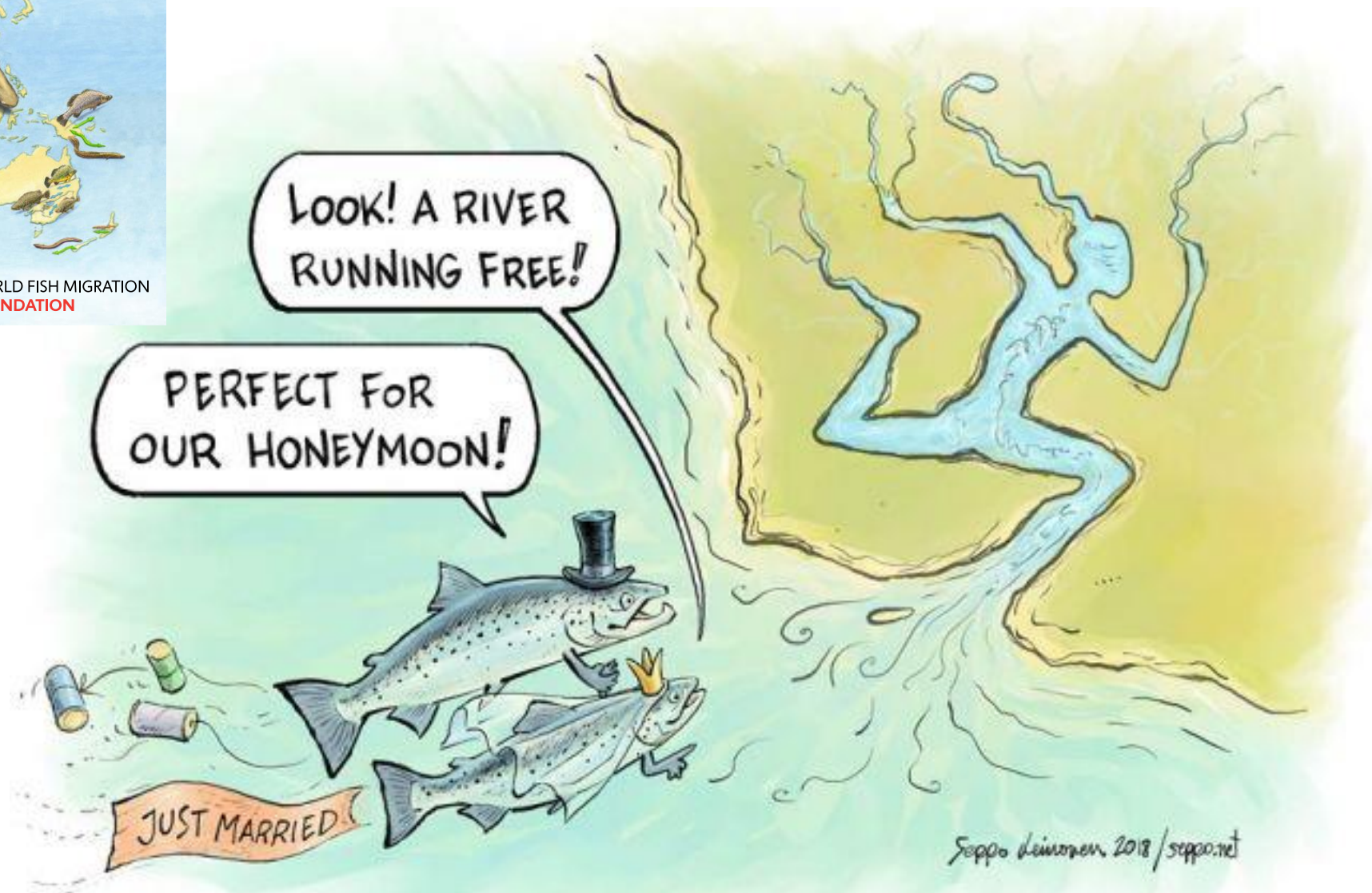
Europeans have forgotten how productive and rich our rivers were a century ago

regain prosperity and economic development.

Swimways of the World



Global Swimways

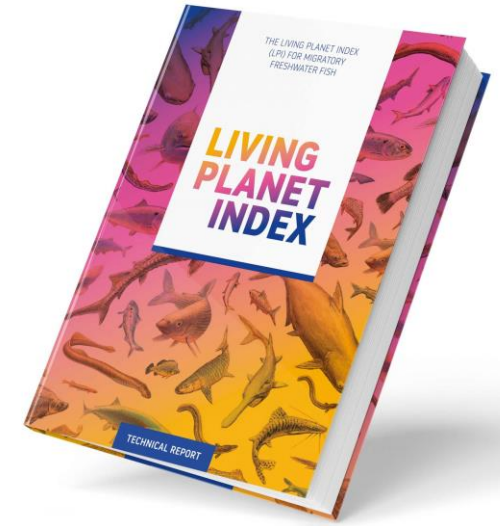


We need to map last free-flowing rivers left and protect them

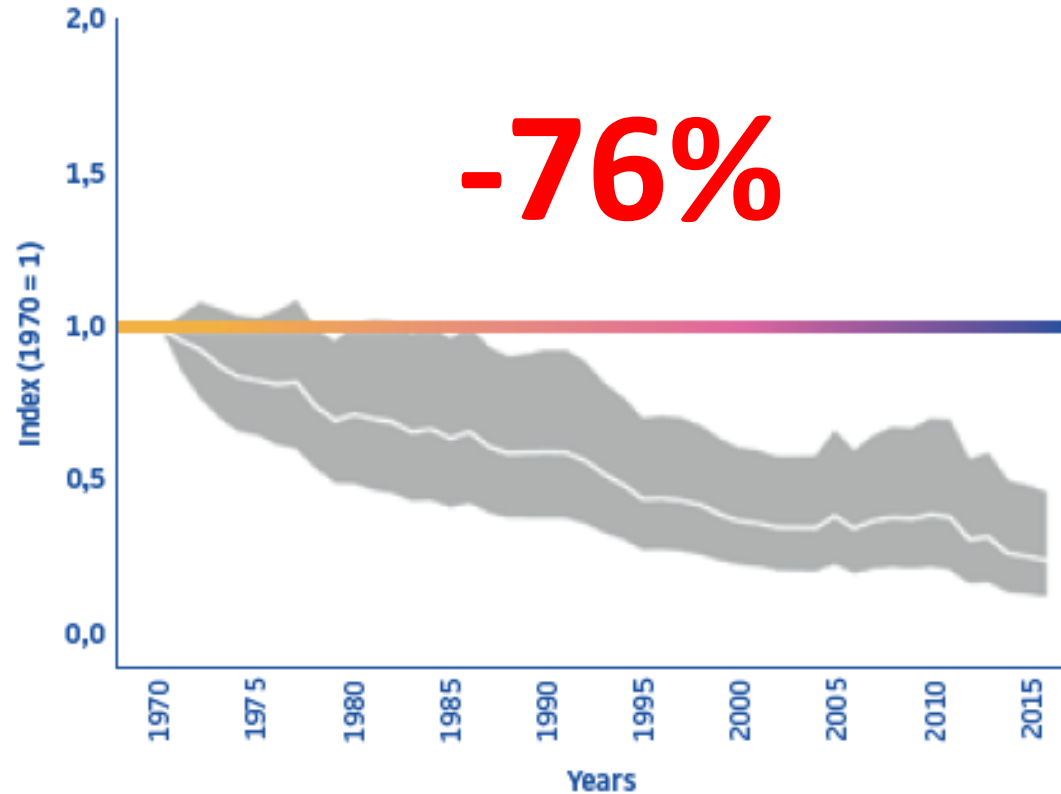


ZSL
INSTITUTE OF
ZOOLOGY

LIVING PLANET INDEX FRESHWATER MIGRATORY FISH



Cambridge
Conservation
Initiative



Download:

worldfishmigrationfoundation.com/living-planet-index-2020/



South Korea: 4 Major River Project

Disaster of the Four Rivers Project

- "Green Algae Latte"



Disaster of the Four Rivers Project

- "Green Algae Latte"

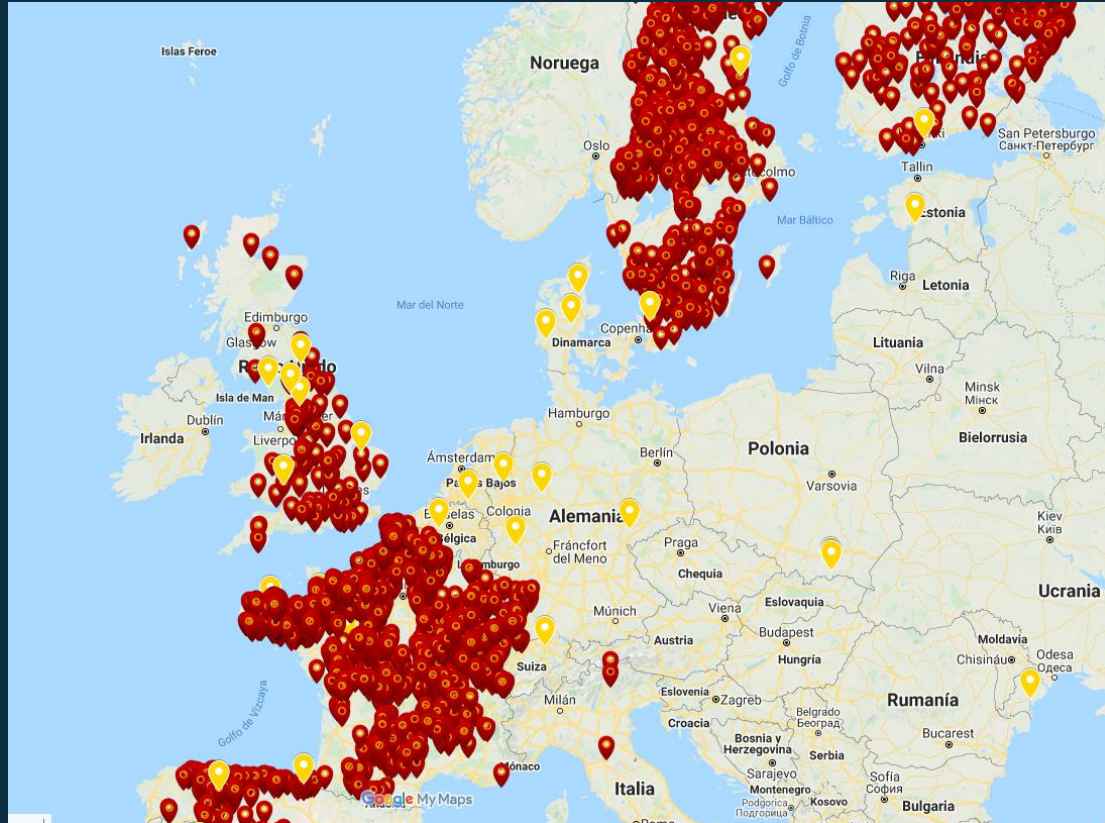


Let's not keep doing the same mistakes, LET'S DO THINGS MUCH BETTER!

Source: [Jenny Shin \(Korean Federation from Environment Movement\)](#)



<https://damremoval.eu/>



Source: Dam Removal Europe Map

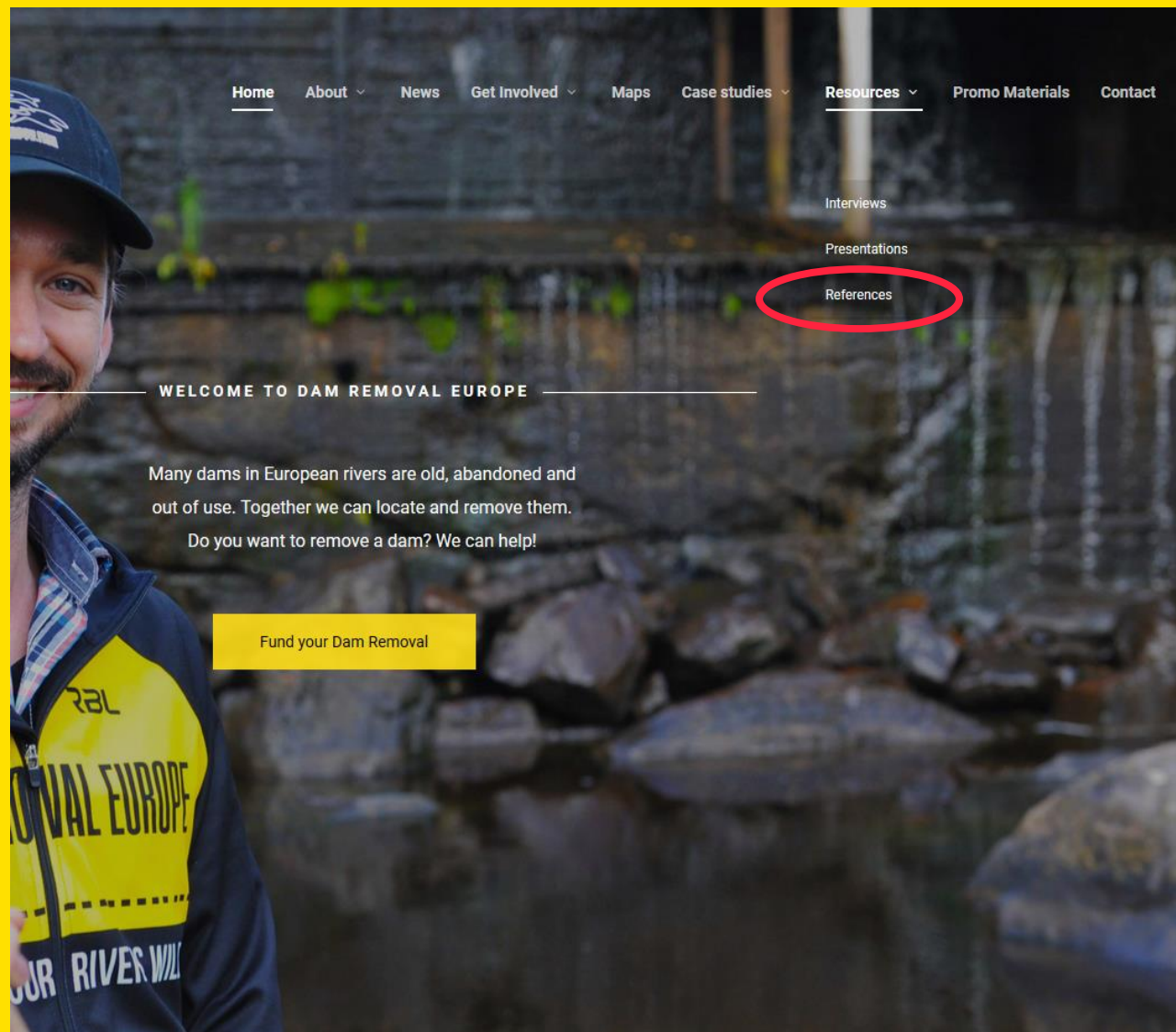
* Collapsed + man removed

FRANCE	>2.400*
SWEDEN	>1.600*
FINLAND	>500
SPAIN	>300
UK	>200
NETHERLANDS	>50
ESTONIA	>5
ITALY	3
SWITZERLAND	1
GERMANY	hundreds (no inventories)
DENMARK	hundreds (no inventories)



www.damremoval.eu

Dam Removal Policy Report



Dam Removal Europe

EU Biodiversity Strategy 2030

“Restoring at least 25,000 km of rivers to be free-flowing”



The screenshot shows the official website for the EU Biodiversity Strategy for 2030. At the top, there is the European Commission logo and the word 'ENVIRONMENT'. A navigation menu on the left lists various topics related to nature and biodiversity. The main content area features the title 'EU Biodiversity Strategy for 2030' and a summary of the strategy's goals and key elements.

ENVIRONMENT New ENV website >

European Commission > Environment > Nature and biodiversity

Nature and biodiversity

- Biodiversity Strategy
- Nature and biodiversity law
- Species protection
- Natura 2000
- Green infrastructure
- Knowledge and data

EU Biodiversity Strategy for 2030

The European Commission has adopted the new [EU Biodiversity Strategy for 2030 and an associated Action Plan \(annex\)](#) - a comprehensive, ambitious, long-term plan for protecting nature and reversing the degradation of ecosystems.

It aims to put Europe's biodiversity on a path to recovery by 2030 with benefits for people, the climate and the planet. It is also the proposal for the EU contribution to the upcoming international negotiations on the global post-2020 biodiversity framework.

In the post-COVID context, the Biodiversity Strategy aims to build our societies' resilience to future threats such as climate **change** impacts, forest fires, food insecurity or disease outbreaks, including by **protecting** wildlife and **fighting** illegal wildlife trade.

A core part of the [European Green Deal](#), the Biodiversity Strategy will also support a green recovery following the pandemic.

Main elements of the Strategy for 2030

The Strategy contains specific commitments and actions to be delivered by 2030, including:

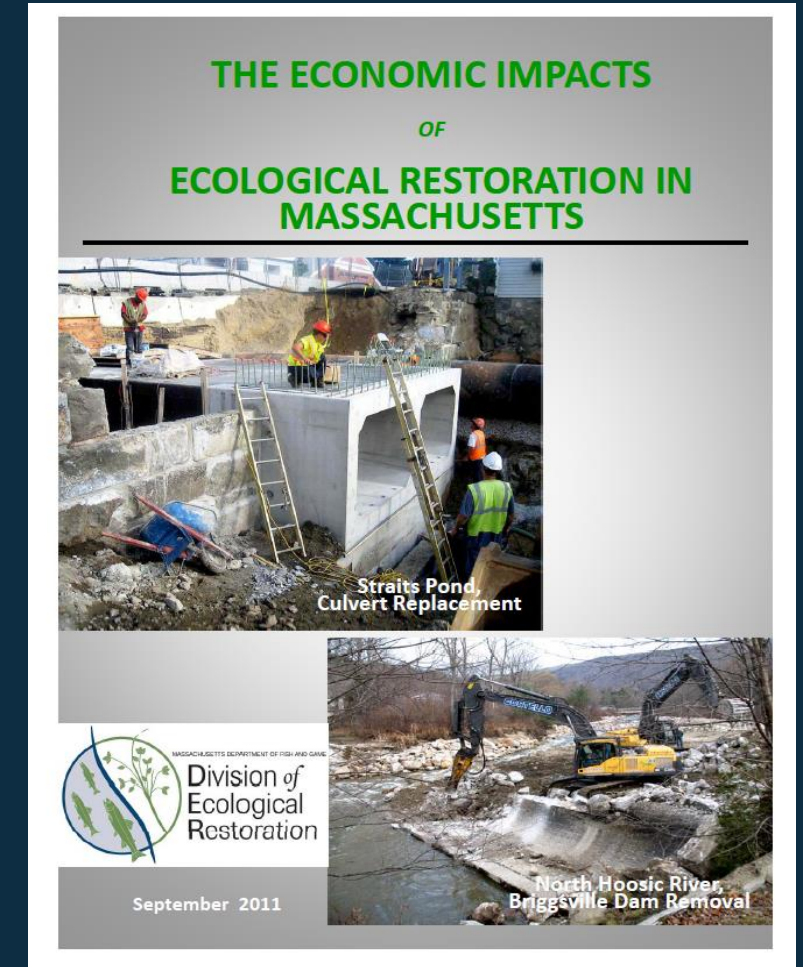
- Establishing a larger **EU-wide network of protected areas on land and at sea**, building upon existing Natura 2000 areas, with strict protection for areas of very high biodiversity and climate value.
- An **EU Nature Restoration Plan** - a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss.
- A set of measures to **enable the necessary transformative change**: setting in motion a new, strengthened governance framework to ensure better implementation and track progress, improving knowledge, financing and investments and better respecting nature in public and business decision-making.



Economic benefits during and after dam removal works

“Restoration economy”

Restoration projects generate equal to or greater economic benefits than other types of projects such as road and bridge construction”.



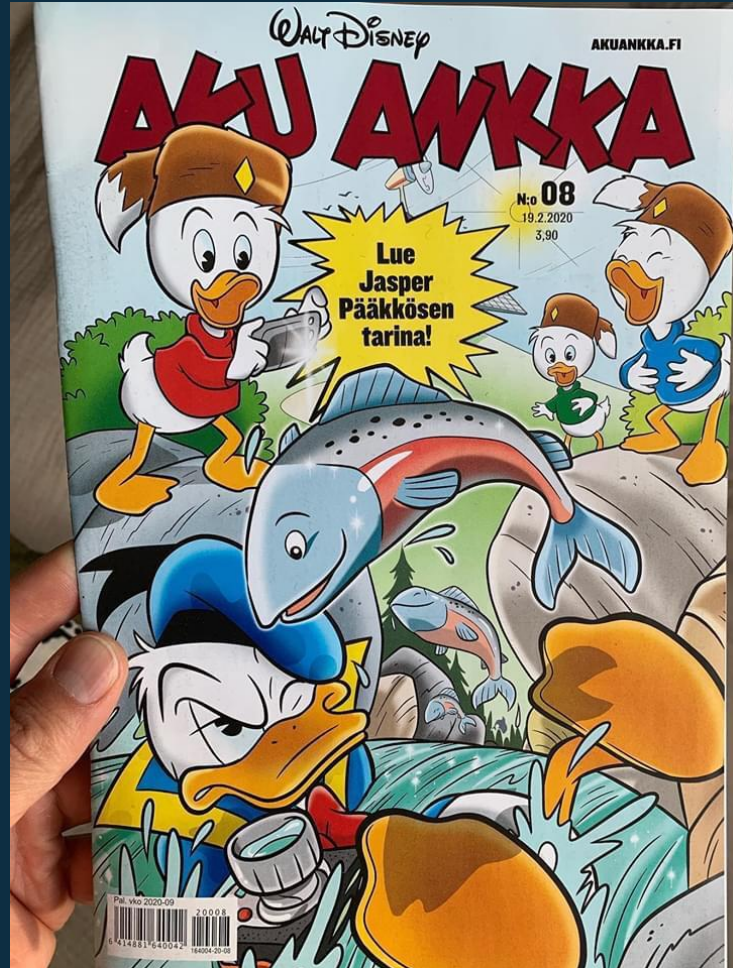
dam removal in political agenda



Screen-shot from LoveFlows documentary

Government has planned to use 18 Million Euros to restore their rivers

Well informed citizens



Disney Finland Comic





Fantastic awareness campaign

Finland

Tikkurila Weir, Vantaa City



<https://damremoval.eu/portfolio/tikkurila-dam-vantaa-finland/>



BBC RADIO 4 Costing the Earth On Now: Desert Island Discs
LISTEN Gillian Reynolds

[Home](#) [Episodes](#) [Clips](#) [Galleries](#) [Podcast](#) [Contact Us](#)



Last on
BBC RADIO 4 Wed 25 Apr 2018
21:00
BBC RADIO 4

More episodes

PREVIOUS
Undiscovered Colombia 

NEXT
Antarctic Assault 

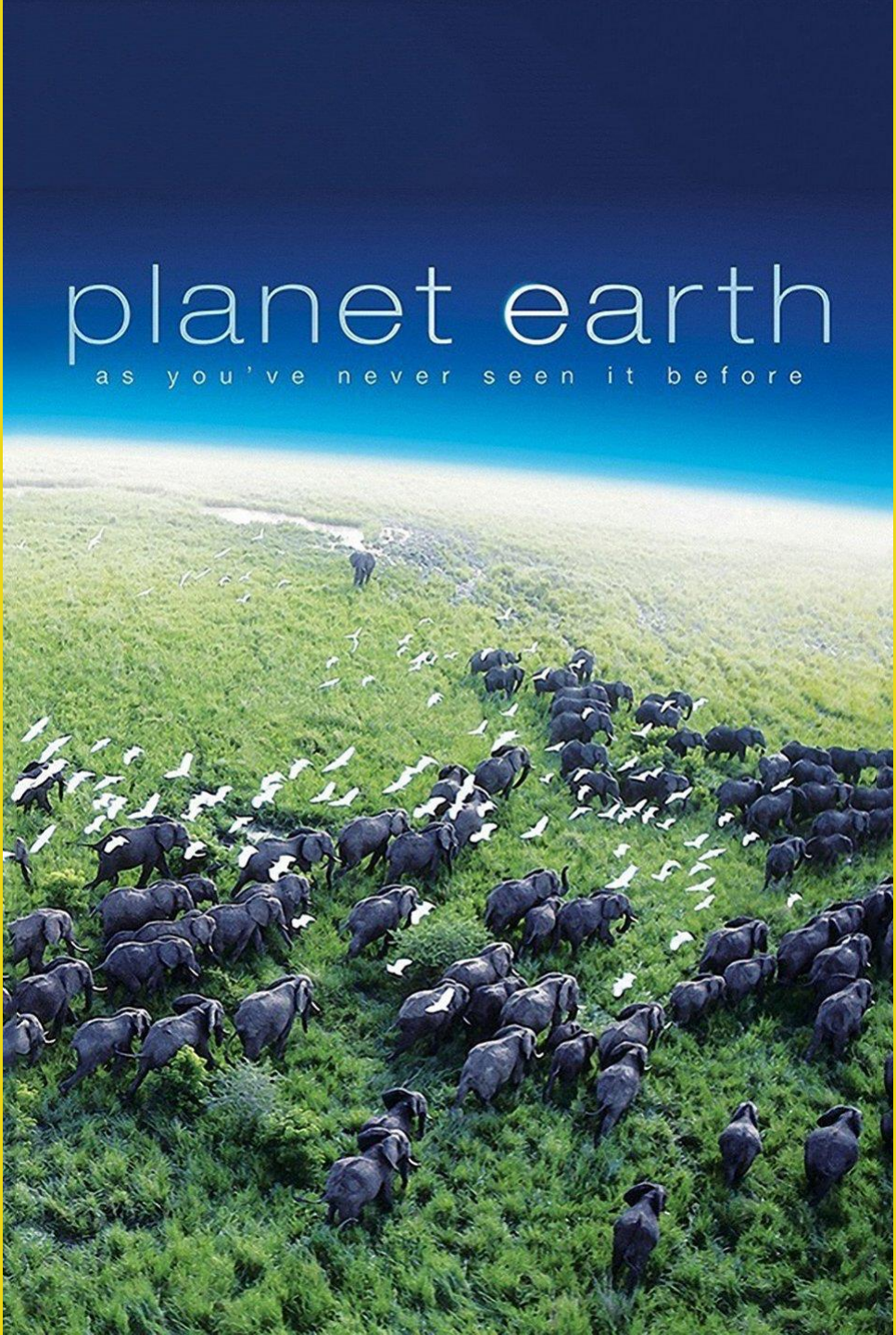
[See all episodes from Costing the Earth](#)

Demolishing Dams
Large hydro-electric dams continue to be planned and built in Africa, Asia and South America. In Western Europe and the US they're tearing them down. Peter Gibbs wants to know why. Available now  30 minutes

These wonders of engineering...

[Show more](#)

  [Download](#)





7,200 BARRIERS

Tracked Barrier Map

>1,600 USERS

Click on pins to see details of the barriers gathered with the AMBER Barrier Tracker app and filter by top contributors per country.

Streets Satellite Hybrid App data

Most active users

Global

- Santiago Delgado**
181 submitted records
- Martynas Mancas**
94 submitted records
- Rik bomer**
73 submitted records
- Maja Kevic**
69 submitted records
- AEMS RÍOS CON VIDA**
61 submitted records
- Julia Pascal**
57 submitted records

Barrier records

Recent

- Dam ✓
- Weir ✓
- Culvert ✓
- Ford ✓
- Sluice ✓
- Ramp ✓
- Other ✓

© Mapbox © OpenStreetMap Improve this map

<https://www.worldfishmigrationday.com/downloads/>

Yuru y Ara

Una historia en el Mamoré

Eva Lucía Bayarri y Juvitina Galán



Free-download
children's book in
13 different
languages



—¿Sólo tû has nota
los mensajes llegaron, p
—Claro, ahora que
Debe haber algún obstá
que ha hecho que los pe
—Eso no pude ser l
sabe
ácha
or, p

We need to teach children THE HUGE IMPORTANCE OF FREE-FLOWING RIVERS



DAM BUSTERS

DAMBUSTERS

Biggest dam removal in Europe (May 2019, France)



¡¡Muchas gracias!!

Muito Obrigado!!

Merci beaucoup!!

Thank you very much!!



Pao Fernández Garrido
World Fish Migration Foundation
pao@fishmigration.org