

DAM REMOVAL PROGRESS 2020



WORLD FISH MIGRATION
FOUNDATION



Photo: Removal of the Presa Elgorriaga dam (Navarra Government, Spain, 2020).

2020 has been a rough and challenging year. But even in such unprecedented times, progress has been made to free up European rivers by removing old and obsolete barriers. Have you ever wondered how many of these barriers clog European streams? And how many have been removed to free the rivers? Or which countries are leading the way? Read on to find out!

The European Biodiversity Strategy released last year aims to restore 25,000 kilometres of free-flowing EU rivers by 2030⁽¹⁾. Experts agree that this target can only be achieved by removing thousands of barriers, of which most no longer fulfil their original purpose or are even completely abandoned. And there is ample choice to pick from: According to the recently concluded EU-funded AMBER project no fewer than 1.2 million barriers are still blocking Europe's rivers⁽²⁾. And of all those obstacles, a staggering number of almost 200,000 (around 17%) are considered obsolete. Amongst these redundant barriers are the so-called "low-hanging fruits" – and here is where Dam Removal Europe comes in. The mission of the World Fish Migration Foundation and its Dam Removal Europe partners is to scale up dam removal as a river restoration tool for river managers, water authorities, practitioners, and other stakeholders. We are supporting assessment, prioritization and ultimately removal of these barriers and as such facilitate restoration of rivers and streams. One of our activities is the creation and maintenance of a dam removal database for all European countries.

The information collected for 2020 is used to follow the impact of new dam removal policies and European-wide enabling actions by the Dam Removal Europe (DRE) coalition and river practitioners throughout Europe.

DAM REMOVAL EUROPE

Dam Removal Europe is a partnership and close cooperation among seven organizations: the World Wildlife Fund, The Rivers Trust, The Nature Conservancy, European Rivers Network, Rewilding Europe, Wetlands International, and the World Fish Migration Foundation. DRE supports local practitioners with sharing tools and best practices. The partnership is open to others that could bring their expertise to make dam removal a mainstream river restoration method. Water managers, environmental organisations, energy companies, local communities, and relevant parties active in dam removal are all invited to join the initiative and to be part of this exciting movement.

RIVER PRACTITIONERS DELIVER CRUCIAL INFORMATION AND INTERESTING STORIES

In April 2021, we launched a questionnaire asking the DRE network to provide information on barriers removed in 2020. If a barrier is already dismantled to at least 50% it qualifies as “removed” in our data base. Technical fishways and bypasses are not considered in this report. The number of amazing and powerful stories that came back to us was astonishing! We received a total of 97 individual responses from 11 countries, ranging from organizations such as NGOs, municipalities, water authorities, river trusts and angling associations from all around Europe. We also received locations and dimensions of the barrier, along with pictures of the removals. The response was remarkable and even though we could not include all responses in our dataset (e.g. because some did not qualify as a dam removal), we are grateful for such an engaged community.

With the information we had already collected in our database and the results of the ongoing survey on the DRE website, we can now conclude the total number of barriers removed in Europe in 2020 is at least 101! This is an impressive result, and we know of course that this figure will grow even larger as we continue to receive responses to our survey (the numbers stated here include details from June 3rd latest). We also know that we still need to find more offices and people to respond to the survey, because many more removals might have taken place unbeknownst to us. One of our objectives is therefore the establishment of a comprehensive database with up-to-date information about removal status and other important metrics.

ENCOURAGING SHOWCASES

So far, Sweden is the leading country in Europe in terms of number of barriers removed, but the highest European dam removed in 2020 was an old hydropower dam at Vezins (36 meters high) in France. Samlesbury weir was the largest weir (4 meters high) removal in the UK and Molló hydropower dam – CH Ritort (7 meters high) was the largest one in Spain. There was also a special moment with the first ever removal of a barrier in Lithuania fully financed by crowdfunding, whilst in Norway dam removal also got underway.

But there is more: we know that river practitioners in Denmark, for example, only use dam removal as a tool to restore river connectivity and fish stocks. They don’t install technical fishways anymore, since this measure does not restore the flow of the river and fishways are not a universal passage option for all species anyway. The dam removal data from Denmark is in progress and hopefully included in the next evaluation.

The outcomes of this study also give a sense of which countries did not consider or execute any dam removals. For the World Fish Migration Foundation and it’s DRE partners these outcomes will give ideas for focus and priorities of future enabling and replication activities in countries with low commitment on removing dams.

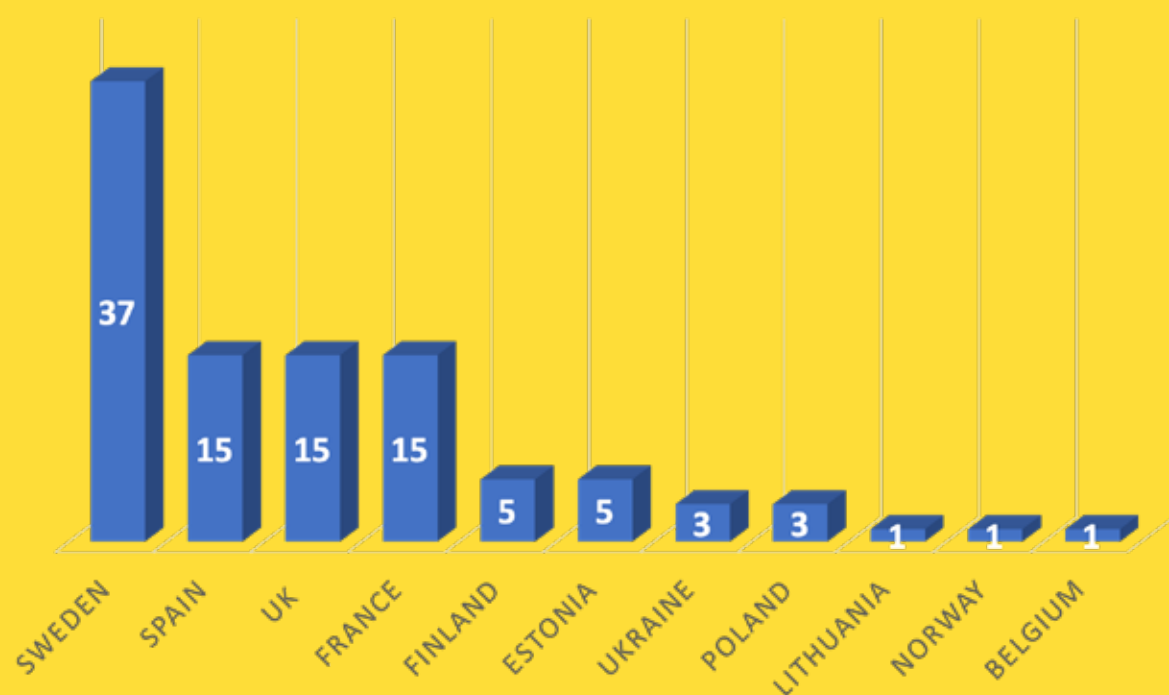


Figure 1. Removed barriers in 2020 per country.

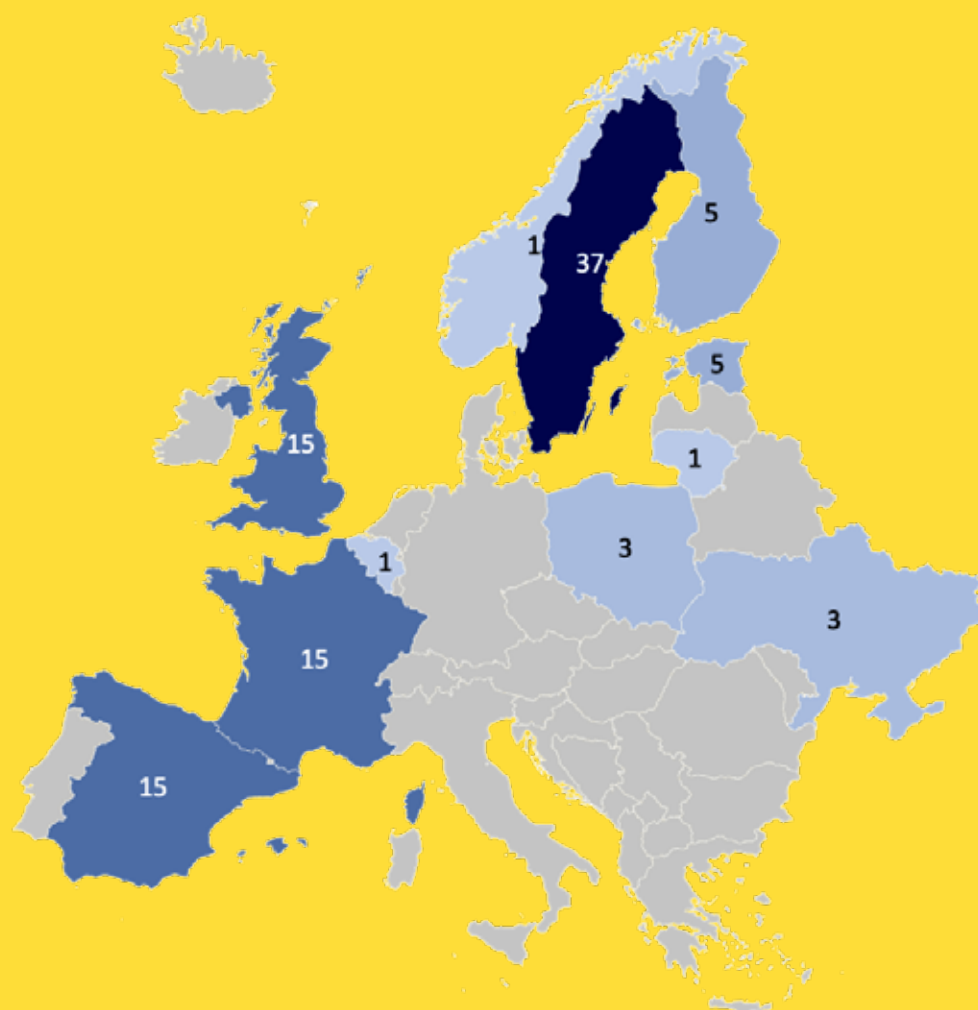


Figure 2. Map of removed barriers in 2020 per country.

BEFORE AND AFTER REMOVAL



BÖNTRÄSKDAMMEN - RIVER VASTERAN - SWEDEN
© Gällivare municipality



KARTANONHAKE - RIVER MATAJOKI FINLAND
© Hanke (Virho), WWF Finland & City of Helsinki



SAMLESBURY WEIR - RIBBLE CATCHMENT UK
© The Ribble Trust



BRAZUOLE DAM - NERES RIVER LITHUANIA
© Karolina Gurjazkaitė



ELGORRIAGA - EZKURRA - SPAIN © Navarra Government-Gobierno Navarra



MOULIN DU LIEUTENANT – RIVER LEFF – FRANCE © Jordane Clermont



What's next?

The results from the survey are impressive, and the figures will grow even larger as some responses are still being processed. At the same time we realise that this is just the start, given the extremely high number of obsolete barriers in Europe.

Due to the enthusiastic responses we also started an inquiry for 2021. So far, at least 12 dams have been removed in the Netherlands, UK, Finland, Sweden, and Spain. And thanks to our contacts with river practitioners we can confirm that more removals are in preparation in other European countries, too. We are confident that during the coming years dam removal will be firmly established as a legitimate, cost-efficient, and highly desirable tool for river restoration that will be a part of any discussion on river restoration. And Dam Removal Europe will continue to support practitioners in countries where dam removal is still seen as a controversial measure, for example Poland, Austria, Italy, and Portugal.

Will dam removals in 2021 beat the 2020 record? How many kilometres of rivers will have been restored to free-flowing conditions? We sure will keep you informed. And please feel free to send in your own reports, too, if you haven't done so yet.

To conclude, we would like to thank all the amazing people that responded to our call and everyone else who cooperated to make this possible.

Follow our website (www.damremoval.eu) and subscribe to the newsletter for updates about the total number of removed dams in 2020 and other inspiring stories and showcases.

Photo: Before (above) and after (below) the largest dam removal in Europe: the Vezin dam (Andr  Berne, France) and the free-flowing S lune river at the same location after the removal (Laura Soissons INRAE, France, 2021).



References

- (1) European Commission, Biodiversity strategy 2030
(https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_de)
- (2) AMBER Barrier Atlas
(<https://amber.international/european-barrier-atlas/>)

Photo: Removal phases (before, during and after) at Mollo dam in Catalonia (Agència Catalana de l'Aigua, Spain, 2020).



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Resources and tools

For more information about dam removal showcases, events, tools and resources visit:
www.damremoval.eu

World Fish Migration Foundation

World Fish Migration Foundation is coordinator of the Dam Removal Europe Coalition, working together with other international NGOs to restore rivers in Europe that have high natural or cultural importance by removing obsolete barriers and ensure healthy free-flowing rivers.
www.damremoval.eu

Dutch Postcode Lottery

World Fish Migration Foundation is proudly supported by the Dutch Postcode Lottery to enable and scale up dam removal as a viable tool for river managers in Europe. Interested in becoming a donor too and help to restore free-flowing rivers in Europe? Send an email to:
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