The AMBER Barrier Tracker App



What is the AMBER Project?

As we enter an era where our freshwater ecosystems are constantly under threat, understanding barrier density and location within rivers can help to provide some insight as to how better to manage the river to obtain a 'good' ecological status. Currently, only 40% of our freshwater is classified as such! Because in the long run, barriers can affect our fish, birds, plants, water quality, and the availability of clean, usable water.

The Adaptive Management of Barriers in European Rivers (AMBER) project was initiated in 2016 to guide river management decisions along river basins within Europe. The project are creating an Atlas that shows where barriers (dams, weirs, culverts, etc.) are within the 33 EU Member Countries. The Atlas is created by combining national and regional data to get a sense of the number of barriers and their locations. However, there are gaps in this data, and we need to validate and enhance the Atlas with the help of citizen science.



What type of citizen science data?

To help obtain this missing data, we have created The Barrier Tracker app. It allows users to take a picture of a barrier within a river, record some details about the barrier (type, size, working conditions, presence of a fish pass, etc.) and its location. This data is then uploaded to our database and placed as a layer on our Atlas. To be able to make educated and well-informed river management decisions for the future health of our rivers, it is important for us to have the full picture. And this is why the citizen science data is so important to our work.

What if I don't have internet to use the app while I hike?

Everything works exactly the same except for the location. Therefore, you simply store your record without submitting it (google maps won't work) and once you get a connection again you locate it manually with google maps and submit it.



The barriers that you record with the Barrier Tracker app can be viewed on the AMBER website. All of the records you submit will be checked and verified before they're used to help complete the first ever European Barrier Atlas. The Atlas data will be made accessible and reusable to all.

Where do my records go?

Who can use this app?

Any member of the public, institutions, schools, water authorities, and river managers alike may use this app, not only to download and keep their own records of river barriers, but also to help the international team of the AMBER Project create the bigger European picture and help mold future management decisions. By using this app, you have the opportunity to make a difference for the status of our freshwater ecosystems, and to guide authorities to make more informed decisions about barrier removal, management, adaptation or placement

Why should you use this app?

The data will help inform the Barrier Atlas, which will be a key tool for policy makers, water managers and conservationists, enabling them to maximise environmental benefits when decisions are made about which barriers should be removed or mitigated for. The Atlas will also play a key role in reducing environmental impacts in planning the construction of new barriers by providing data across entire river networks.

So, please help us in tracking these barriers. Our Atlas needs this information, our environmental managers need this information and our rivers rely on us to keep them healthy! Spread the word, go on an adventurous hike and record those barriers!

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