



## Trans-European Swimways Programme

Migratory freshwater fishes have suffered a decline of 93% in Europe since 1970, according to the Living Planet Index report. This is the highest rate of loss for migratory fish globally compared to other regions. Based on IUCN Red List data, 28% of migratory fish species in Europe are Threatened or Near Threatened. Of the migratory freshwater fish species in Europe, almost a third (32%) are listed in the annexes of the EU Habitats Directive with the majority under unfavourable conservation status.

The Trans-European Swimways Programme aims to support the recovery of migratory freshwater fishes in Europe through improving scientific knowledge and guidance to strengthen policies, capacity building, and field actions at critical locations.



Trans-European  
Swimways Network



Wetlands  
INTERNATIONAL

# Threats to migratory freshwater fishes

## Invasive alien species

Non-native and invasive alien species increase competition, predation, and diseases to native fish.



## Migration barriers

Dams and other barriers cause river fragmentation, leading to habitat changes, and increase direct mortality of fish.

**Embankments** restrict connection between the river and their floodplains, often where fish spawn.

**Longitudinal barriers** restrict fish migration upstream and downstream.

## Ineffective fish passes

There is little evidence of their effectiveness for all species and adverse impacts accumulate over river stretches.

## Pollution

Industrial and agriculture effluents, as well as domestic and urban wastewater, flow into rivers and can cause behavioural changes, illness, and mortality to fishes.

## Climate change

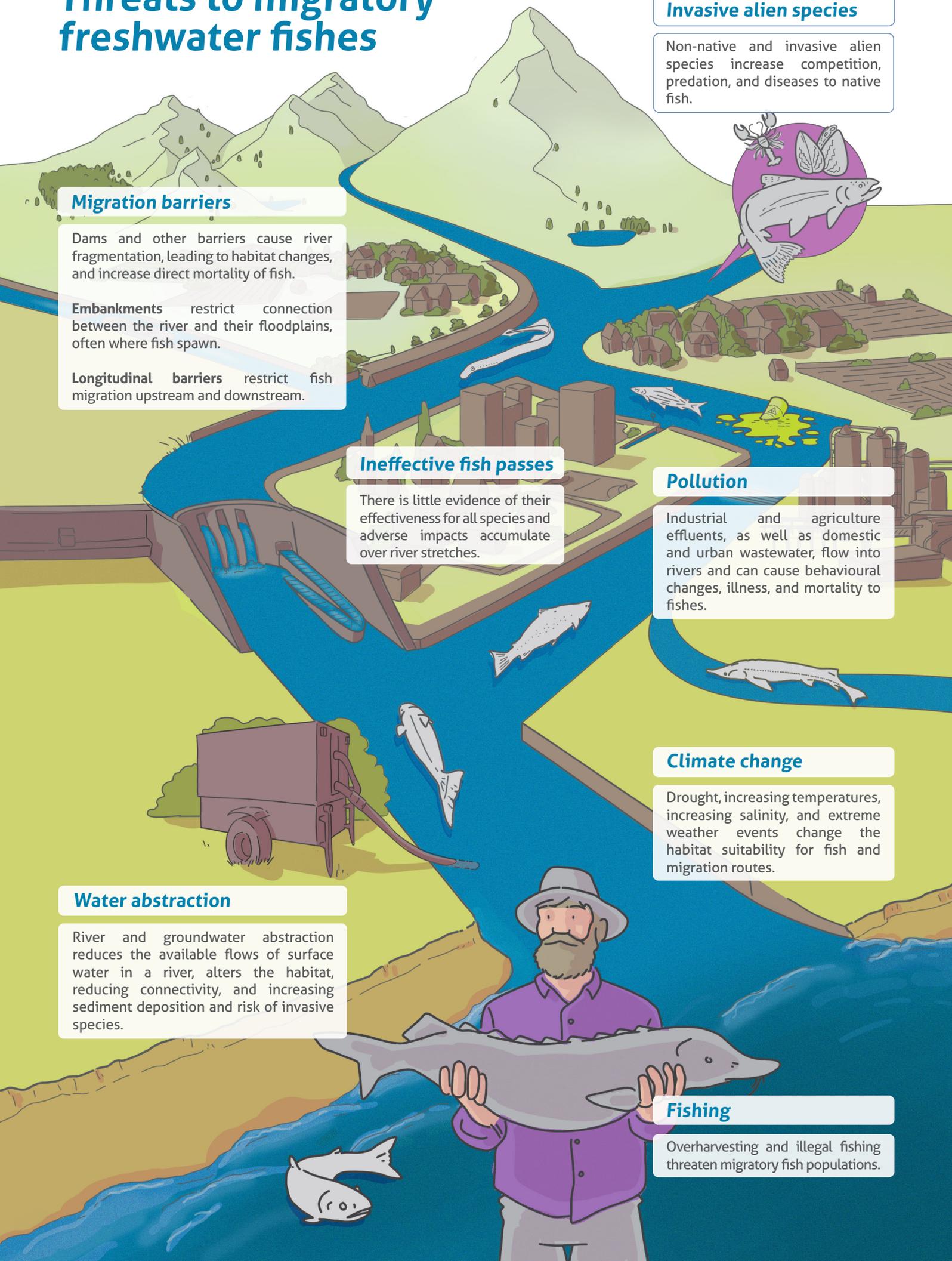
Drought, increasing temperatures, increasing salinity, and extreme weather events change the habitat suitability for fish and migration routes.

## Water abstraction

River and groundwater abstraction reduces the available flows of surface water in a river, alters the habitat, reducing connectivity, and increasing sediment deposition and risk of invasive species.

## Fishing

Overharvesting and illegal fishing threaten migratory fish populations.



# Vision and actions

## Reduce invasive alien species

Alien species are no longer introduced through inland fisheries or transport.

## Swimways of European Importance (SEI)

Key river stretches for migratory freshwater fish are mapped out. Their protection is promoted and treated as no-go areas for new barriers.

## Connected rivers

It is essential to restore the lateral and longitudinal connectivity of rivers important for migratory fishes ensuring that they can migrate with limited losses between their breeding and feeding areas.

**Removal of barriers:** Critical barriers impeding fish migration or reducing spawning are identified and their removal is promoted.

**Effective fish passes:** Not all barriers can be removed in the short-term. Therefore, fish passes are improved and suitable for various species with better monitoring and maintenance.

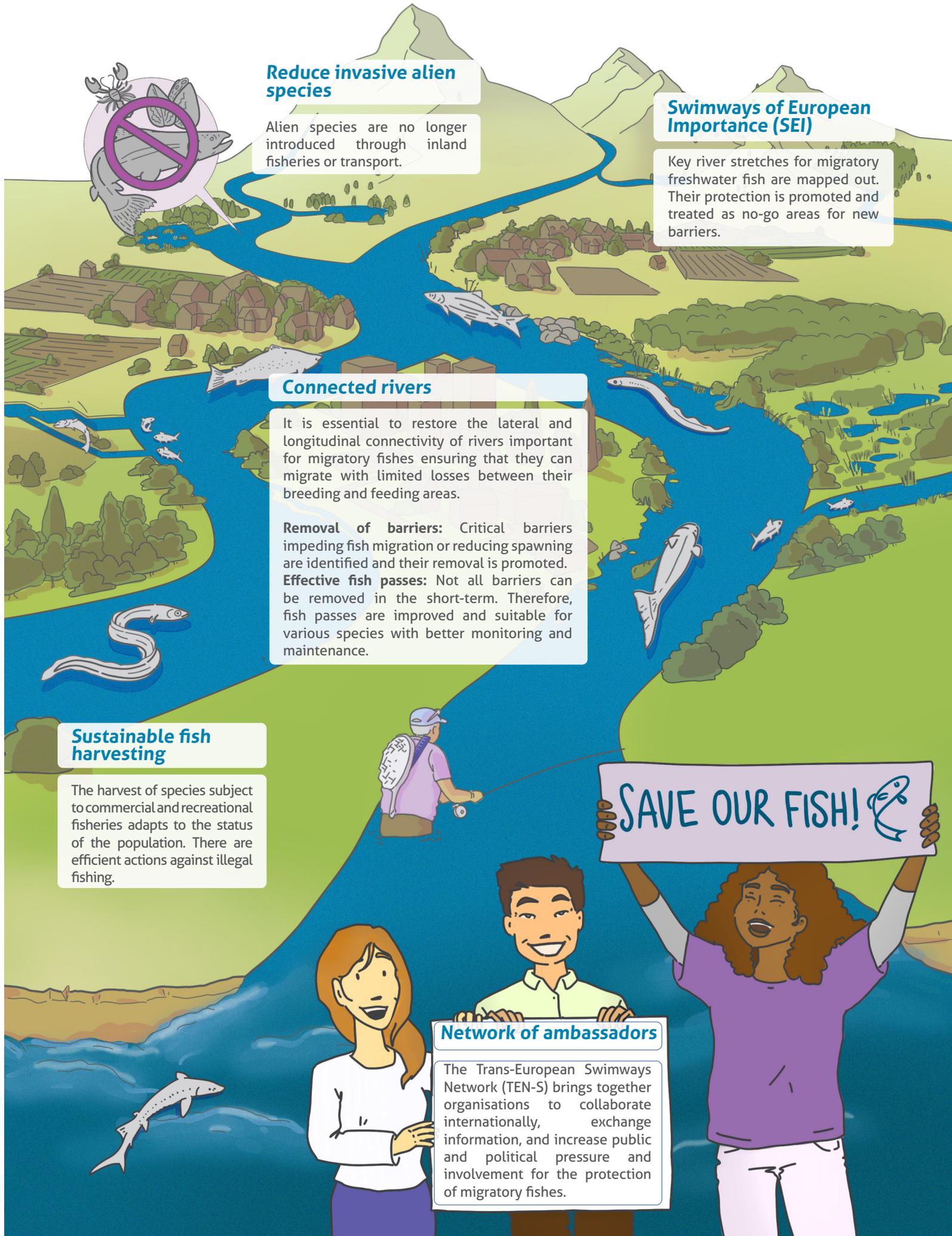
## Sustainable fish harvesting

The harvest of species subject to commercial and recreational fisheries adapts to the status of the population. There are efficient actions against illegal fishing.

## Network of ambassadors

The Trans-European Swimways Network (TEN-S) brings together organisations to collaborate internationally, exchange information, and increase public and political pressure and involvement for the protection of migratory fishes.

SAVE OUR FISH!





# Join the Trans-European Swimways Network (TEN-S)!

Our short-term goal is to reduce the rate of decline and contribute to the recovery of migratory freshwater fishes through restoring their habitats across Europe. Existing and upcoming EU legislation offers opportunities for the conservation of migratory freshwater fishes through the swimways approach. Since migratory fish travel throughout their life, we refer to their habitats as swimways; rivers and their associated ecosystems that support the entire migration routes of freshwater fishes.

The Trans-European Swimways Network (TEN-S) will work together to carry out the actions of the Programme. We welcome any organisations or individuals with an interest in migratory freshwater fish conservation in Europe to join us, and help protect these species and their swimways.

For more information:

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Wetlands International Europe is the single network organization in Europe united by the vision of a world where wetlands are treasured and nurtured for their beauty, the life they support and the resources they provide.

**In collaboration with:**



**WORLD FISH MIGRATION  
FOUNDATION**



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