



EUROPE

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Taking stock of the EU Eel Regulation ahead of its 20th anniversary

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Summary

As the 20th anniversary of the EU Eel Regulation (Council Regulation (EC) No 1100/2007) approaches, it provides an opportunity to assess its implementation and effectiveness. The European eel (*Anguilla anguilla*) remains Critically Endangered, with recruitment having declined by over 90% since the 1980s. Despite having its own Regulation dedicated to its recovery, the European eel population remains in a critical state. This highlights the need to move beyond reliance on measures whose contribution to recovery is not sufficiently demonstrated, such as restocking, and strengthen the implementation and enforcement of existing legislation, while we accelerate evidence-based actions to restore aquatic habitats and river connectivity.

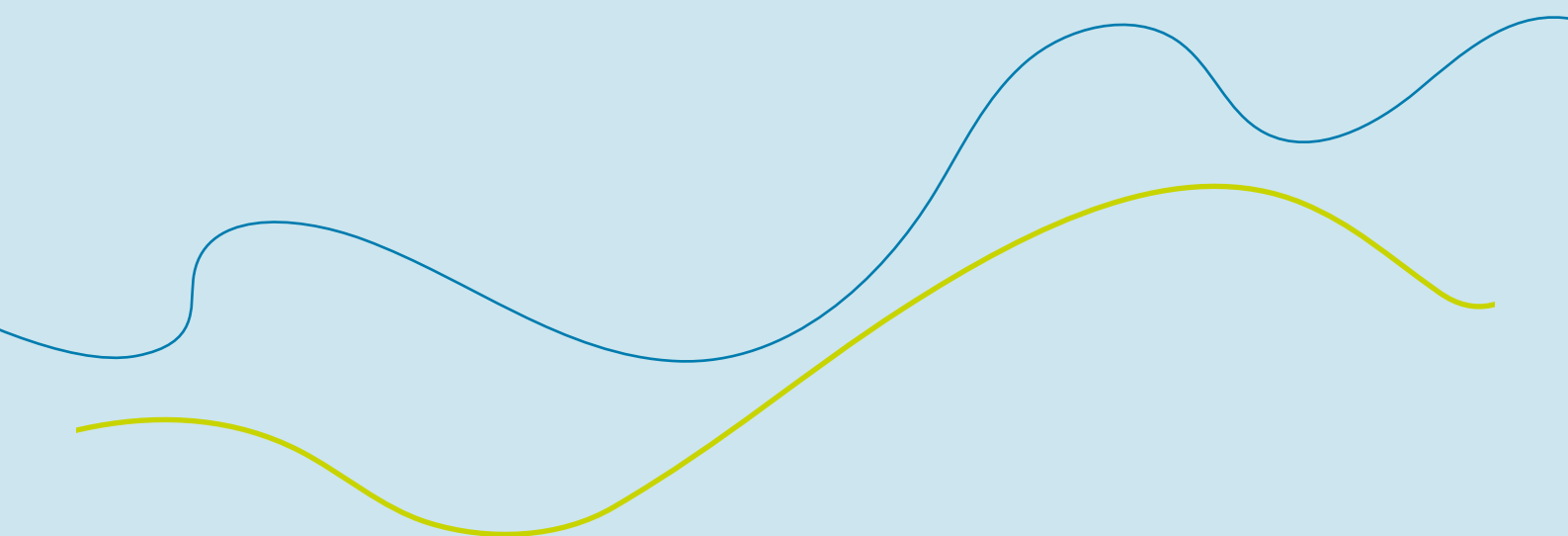
Eel recovery requires **better implementation and alignment of the EU Eel Regulation with complementary EU legislation, particularly the Nature Restoration Regulation (NRR) and the Water Framework Directive (WFD)**. Member States should integrate eel conservation objectives into National Restoration Plans (NRPs) and River Basin Management Plans (RBMPs), prioritising measures with impact on eel recovery, such as barrier removal, habitat restoration and the restoration of river connectivity throughout the eel's life cycle.

This policy brief identifies opportunities to improve coordination across these frameworks and proposes evidence-based recommendations to accelerate implementation. Key priorities include strengthening Eel Management Plans (EMPs) in line with the latest scientific advice, improving standardised, year-round monitoring, reassessing the effectiveness of restocking, and reinforcing enforcement and funding for restoration measures. Coordinated EU action and effective national implementation are essential to translate existing legal commitments into tangible progress towards European eel recovery.

Management measures for European eel have largely focused on restocking and fisheries-related interventions. However, evidence of the effectiveness of restocking in supporting population recovery remains uncertain, while habitat fragmentation continues to hinder eel migration and access to essential habitats throughout its life cycle. Greater attention must therefore be given to restoring river connectivity as a key component of eel conservation. For this reason, **this policy brief examines how Member States can use existing EU environmental legislation to address habitat fragmentation, improve river connectivity and support the recovery of European eel populations.**

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To prevent the extinction of the European eel we recommend that,

The European Commission:

- **Mandates urgent evaluation and active feedback on the Eel Management Plans progress reports submitted during triennial reporting cycles.** The Commission should actively issue country-specific recommendations, modeled on the assessment processes used for RBMPs and NRPs, to require necessary plan updates, hold Member States accountable, and extract EU-wide best practices for broader implementation,
- **Promotes policy alignment between the EU Eel Regulation, the Water Framework Directive and the Nature Restoration Regulation** by clarifying how these frameworks can complement one another in addressing habitat fragmentation and restoring the ecological connectivity required throughout the European eel's life cycle,
- **Uses its assessment of draft NRPs to check that eel migration corridors,** obsolete barriers and eel habitat restoration are adequately addressed, and that NRPs are coherent with EMPs and RBMPs,
- **Secures dedicated funding for European eel habitat restoration** by introducing mandatory ring-fenced funds for eel habitat restoration for the Common Fisheries Policy under National and Regional Partnership Plans. There should be an allocated minimum budget for fish population management beyond simply fisheries measures, including the restoration of river connectivity and the removal of obsolete barriers to migration,
- **Phases out funding for restocking based on the capture of glass eels,** in line with ICES advice, and redirects these funds towards improving natural recruitment and survival through habitat restoration and river connectivity,
- **Establishes binding deadlines and compliance mechanisms under the EU Eel Regulation,** defining clear implementation timelines for national recovery targets and introducing regulatory consequences for Member States that fail to meet them,
- **Establishes an International Eel Monitoring System** that is year-round and independent, to reliably track Eel Management Plans, population trends and evaluate recovery measures.

To prevent the extinction of the European eel we recommend that,

Member States:

- **Submit their Eel Management Plans without further delay**, where they have not yet done so, so that the Commission can assess them,
- **Strengthen the effectiveness of Eel Management Plans** by prioritising measures that restore river connectivity and improve eel habitats, enforcing fishing restrictions, and reassessing the role of restocking, all in light of the best available scientific advice. Member States should regularly monitor and evaluate the outcomes of these measures to ensure they contribute effectively to European eel recovery,
- **Prioritise the restoration of river connectivity** by identifying and addressing obsolete artificial barriers that obstruct eel migration, in line with the requirements of the Nature Restoration Regulation, taking into account their location, passability, ecological impact and potential benefits for eel recovery and wider ecosystem restoration,
- **Integrate European eel conservation objectives into River Basin Management Plans and National Restoration Plans**, taking into account the simultaneous development of NRPs and River Basin Management Plans during 2026 and 2027, Member States should align restoration priorities across the Water Framework Directive and National Restoration Plans by specifically addressing migration routes, obsolete artificial barriers, and habitat continuity to support freshwater ecosystem and eel recovery,
- **Actively involve NGOs, citizens, river restoration organisations and other stakeholders in Significant Water Management Issues** consultations and NRP development, supporting them with accessible information and evidence so that they can help identify local restoration priorities that would benefit eel populations.

For more details on these policy recommendations, please see Section 1.4.

1.1 The EU Eel Regulation; functioning and impact

As the 20th anniversary of Council Regulation (EC) No 1100/2007 of 18 September 2007 establishing measures for the recovery of the stock of European eel approaches, a comprehensive review of this legal framework and its effectiveness is particularly timely.

The European eel (*Anguilla anguilla*) is an indigenous European species of major economic, gastronomic, and cultural significance ([European Commission, 2020](#); [Svanberg & Locker, 2020](#)). Its enormous cultural value coupled with its declining population status makes it the only species with a dedicated EU Regulation ([Council Regulation \(EC\) No 1100/2007](#)). Despite these conservation efforts, the species has been classified as Critically Endangered on the IUCN Red List since 2008 ([Pike et al., 2020](#)). It has undergone a catastrophic recruitment decline since the 1980s with more than 90% reaching a historical low level ([European Commission, 2020](#); [ICES, 2025](#)) and prompting the International Council for the Exploration of the Sea (ICES) to recommend zero catches, reflecting the severity of its conservation status ([ICES, 2025](#)).

The species possesses a unique catadromous lifecycle, migrating between coastal estuaries, and inland freshwater habitats and the Sargasso Sea, where reproduction takes place ([European Parliamentary Research Service, 2024](#)). This multi-habitat strategy is marked by radical metamorphoses and distinct life stages: Leptocephalus larvae born in the Sargasso Sea drift across the Atlantic Ocean until they reach the continental shelf, where they metamorphose into glass eels (transparent young eels) and aggregate in river estuaries before moving upstream. Then, they enter continental waters where they grow and become pigmented yellow eels, spending between 4 and over 20 years feeding and maturing in freshwater and coastal habitats until they become silver eels, the final adult stage marked by the migration back to the sea to spawn. *A. anguilla* is a semelparous fish species, reproducing only once during its life cycle.

The European eel is present in many European Swimways of importance ([Wetlands International Europe, n.d](#)) and faces multiple pressures, including climate-driven changes in oceanic conditions, overfishing, parasites, predation, pollution and **habitat loss caused by fragmentation from artificial barriers**.

The EU Eel Regulation requires Member States with natural eel habitats to establish national or river-basin Eel Management Plans (EMPs) (Article 2), structured around Eel Management Units (EMUs), which define the geographical areas within which eel management measures are planned and assessed. These plans aim to reduce anthropogenic mortalities and to permit at least 40% of silver eels to return to the sea, compared to those that would have returned without human impact.

This is a binding, effort-based obligation, meaning that Member States choose the measures, such as cutting commercial and recreational fishing, restocking, or making rivers passable and improving habitats, transporting silver eels to the sea, controlling predators, or temporarily switching off hydropower turbines, but can be held accountable for not succeeding.

Where river basins are shared, they should jointly prepare transboundary plans or endeavor to develop cooperation with third countries. Member States that allow fishing of eels under 12 cm must reserve 60% of the catch for restocking (Article 7). They must also report regularly to the Commission on how their plans are progressing (Article 9), record commercial and recreational catches, and enforce controls on eel trade. All of this applies without prejudice to the Habitats Directive and the WFD.

So far, the European Commission has approved EMPs from 18 EU countries (BE, CZ, DK, EE, FI, FR, DE, EL, IE, IT, LV, LT, LU, NL, PL, PT, ES, SE), as well as a joint plan for the Minho River in Spain and Portugal ([European Commission, n.d](#)). The approved EMPs cover almost 90 EMUs and include approximately 1,880 management actions ([European Commission, 2020](#)).

The European Commission's 2018 evaluation of the Eel Regulation found that the complex biology of the European eel and its long life-cycle makes it difficult to observe significant signs of recovery of the eel when focusing on the past ten years of implementation. It also found that the 2018 Member State progress reports were incomplete and that only two Member States achieved their escapement targets (EE, IE), three met them partially (DE, ES, UK), while the remaining 14 either reported failing to meet the target or lacked sufficient data to assess progress ([European Commission, 2020](#)).

The implementation of the EU Eel Regulation has suffered significant delays, Member States submitted their EMPs between several months and almost two years late, while prolonged technical assessments and the need to revise and resubmit plans for Commission approval further postponed the implementation of conservation measures ([European Commission, 2020](#)).

Certain Member States (Austria, Hungary, Romania, Slovakia, Cyprus, and Malta) are formally exempted because their river systems do not constitute significant natural eel habitats (Article 3). In the Danube basin, natural recruitment is considered negligible due to geographical distance and insurmountable migration barriers such as the Iron Gate dams ([FishSec, 2023](#)). The only Member States that have not submitted their EMP's to date are Slovenia and Bulgaria, subjecting them to default fishing effort reductions under Article 4(2). Croatia, which joined the EU in 2013, was not a Member State at the time of the 2008 submission deadline and has yet to develop its EMP. A Member State without an approved plan must cut eel fishing effort or catches by at least 50% (Article 4).

However, despite this Regulation being in force for almost 20 years, the European eel remains in a critical state, and the 40% escapement target has not been achieved in many management units ([FishSec, 2023](#)). Although the EU Eel Regulation established a unique framework for eel conservation and requires measures to reduce anthropogenic mortality, it has not yet delivered the expected recovery of European eel populations. **This persistent decline highlights the need to reassess the Regulation's implementation and effectiveness and to strengthen its coordination with complementary EU environmental legislation, particularly to address habitat degradation and fragmentation and accelerate river connectivity restoration.**

Assessing progress is challenging because eel populations span diverse habitats and jurisdictions, while biomass estimates and monitoring methods vary considerably between countries and regions. Scientific uncertainties further complicate recovery efforts. Knowledge gaps remain regarding eel spawning ecology, effective population size and whether current escapement levels are sufficient to sustain reproduction ([Righton et al., 2025](#)). Although some catchments have reported encouraging progress, there is no clear evidence of widespread population recovery. ¹

In 2024, the International Council for the Exploration of the Sea (ICES) advised **Member States to implement additional conservation measures to improve population production and resilience such as restoring river connectivity and improving eel habitats and their physical conditions** ([ICES, 2025](#)). It

¹ Estonia's Narva Eel Management Unit reported silver eel escapement equivalent to 74.4% of estimated pristine biomass (ICES, 2022). However, the European Commission's evaluation cautioned that Estonia's reported estimate was likely an overestimate, highlighting the uncertainty surrounding escapement assessments (European Commission, 2020; ICES, 2022)

issued this recommendation noting the uncertainty of the effectiveness of popular measures such as restocking and insufficient evaluation of measures addressing river connectivity and mortality caused by hydropower turbines.

Management measures for the eel have focused on restocking and fishery-based measures, ignoring that **one of the major pressures the species faces is habitat fragmentation** ([European Commission, 2020](#)). Longitudinal barriers, such as dams and weirs, obstruct upstream and downstream migration, while lateral barriers disconnect rivers from their floodplains and adjacent wetlands. These disruptions restrict access to essential habitats throughout the eel's life cycle, impairing migration, growth and reproduction ([ICES, 2024](#)), and thus serving as a major block towards the 40% escapement goal of the Eel Regulation. **This policy brief therefore examines how Member States can better make use of existing EU environmental policy to improve river connectivity** and, in doing so, support the recovery of the European eel.

As regards river connectivity, the binding objective set in Article 2(4) to secure at least 40% escapement to the sea, coupled with the requirement in Article 2(7) to “include measures” to achieve that objective might in principle not include measures to restore river connectivity at first glance. Restoring river connectivity might seem to fall outside the Regulation, since barriers are not, in themselves, a direct cause of mortality. However, downstream, weirs, sluices and pumping stations injure and delay migrating silver eels, exposing them to more predation, and barriers force eels through hydropower turbines - both are a direct contributor to anthropogenic mortality. Upstream, glass eels and elvers accumulate below barriers, which also increases density-dependent mortality and predation.

Restoring connectivity therefore reduces mortality and reopens lost habitat, increasing escapement and contributing directly to the 40% target. **River connectivity restoration has been greatly overlooked as a measure for eel recovery, and Member States should make far greater use of it. It is a proven, cost-effective measure with substantial co-benefits** ([Wetlands International Europe, 2025](#)). It also helps Member States meet other EU obligations: achieving good ecological status under Article 4 of the Water Framework Directive, where river continuity is a quality element; restoring freshwater ecosystems and the natural connectivity of rivers and floodplains under Articles 4 and 9 of the Nature Restoration Regulation; and reducing flood risk through natural water retention under the flood risk management plans required by Article 7 of the Floods Directive.

These challenges highlight the need to strengthen the implementation of the EU Eel Regulation in conjunction with complementary EU environmental legislation that contributes to its objectives, discussed in the following section. EU policy offers opportunities to improve river connectivity and restore aquatic habitats, complementing existing eel conservation measures. However, despite the existence of several EU legislative frameworks that contribute directly or indirectly to European eel conservation, recovery remains elusive, and restoration measures are progressing too slowly. While the Eel Regulation provides an essential framework for conservation, it has not succeeded in addressing habitat fragmentation. Urgent action is therefore needed to accelerate its implementation and strengthen coordination across policy frameworks.

This policy brief explores how these frameworks can be better aligned to improve river connectivity, restore aquatic habitats and reinforce eel management measures. It identifies opportunities for coordinated action and proposes evidence-based recommendations to translate existing legal commitments into effective restoration measures and support the recovery of the European eel.

1.2 Policy frameworks for restoring river connectivity

Apart from the aforementioned EU Eel Regulation, there are several policies that are directly relevant for the European Eel in the EU and global contexts. The following section examines their potential to improve river continuity, reduce habitat fragmentation and restore the connectivity needed for eels to complete their life cycle.

1.2.1 European policy relevant to the European eel

Water Framework Directive ([Directive 2000/60/EC](#))

The legal backbone of freshwater protection in the EU is the Water Framework Directive (WFD). It requires all Member States to achieve good status for all water bodies by 2027 and to draft and implement River Basin Management Plans (RBMPs) every 6 years. The fourth cycle of RBMPs is set to start in December of 2027.

One of the requirements for a water body to achieve good status is that hydromorphological conditions of freshwater bodies “*ensure the best approximation to ecological continuum in particular with respect to immigration of fauna (...)*” (Annex V). This requirement highlights the importance of river continuity, allowing migratory fish species such as the European eel to move freely upstream and downstream without being obstructed by barriers such as dams, weirs, locks and culverts. Furthermore, the WFD establishes a framework for identifying and protecting areas designated for the protection of economically significant aquatic species under Article 6. The Directive also recognises fish fauna as a key biological quality element in assessing ecological status. Under Annex V, the composition, abundance and age structure of fish fauna are among the indicators used to evaluate the ecological health of rivers and other relevant water bodies.

RBMPs also provide an important opportunity to coordinate the implementation of the WFD with the EU Eel Regulation. EMPs are organised around EMUs, which often correspond to, or overlap with, River Basin Districts defined under the WFD. Some Member States have developed multiple EMPs to cover individual EMUs, resulting in more than 60 plans across the EU ([European Commission, 2020](#)).

The fourth cycle of RBMPs (as well as the first cycle of NRPs – see below) are currently being developed at a Member State level. **This provides an opportunity for aligning EMPs with RBMPs that would help Member States integrate eel conservation objectives into broader freshwater management measures, particularly those addressing barriers to migration, habitat restoration and river connectivity.** This coordination could strengthen the contribution of both frameworks to the recovery of European eel populations.

Nature Restoration Regulation ([Regulation \(EU\) 2024/1991](#))

The Nature Restoration Regulation (NRR) establishes legally binding targets across Member States to restore degraded ecosystems, reverse biodiversity loss, and strengthen climate resilience. It provides strong legal mechanisms that complement the objectives of the EU Eel Regulation. Each Member State is

required to produce a comprehensive National Restoration Plan (NRP) by September 2027 based on the latest scientific evidence. The NRPs must be in alignment with the WFD, Birds and Habitats Directives and the Marine Strategy Framework Directive. These plans must quantify the precise geographical areas needing restoration under Articles 4 to 13 and establish specific measures, timelines, and monitoring protocols. By requiring Member States to map and quantify restoration priorities for migratory species, NRPs create a mandatory mechanism to align RBMPs and national EMPs. This ensures that dam removals, habitat restoration, and migratory corridor protections are prioritised specifically within designated eel river basins.

Given the catadromous lifecycle of *A. anguilla* which requires unhindered migration between marine, estuarine, and freshwater environments, several articles within the NRL directly intersect with eel recovery:

- Article 4 mandates that Member States put in place restoration measures necessary to bring degraded habitat types listed in Annex I into good ecological condition. This includes freshwater ecosystems such as rivers, lakes, alluvial forests, oxbows, and inland marshes. This provision directly targets the primary growth habitats of the European eel. Restoring water quality, macrophyte coverage, and natural bank substrates in Annex I habitats expands available feeding grounds, increases lipid accumulation, and improves eel survival prior to commencing the migration to the Sargasso Sea.
- Article 5 obliges Member States to implement restoration measures to bring degraded marine and coastal habitat types listed in Annex II into good ecological condition. This includes estuarine systems, coastal lagoons, intertidal mudflats, and seagrass beds. This Article is of relevance to the European eel since coastal and transitional waters are fundamental for the foraging and migration of *A. anguilla*. For glass eels estuaries and coastal lagoons are essential to acclimate to fresh water after their oceanic crossing and for silver eels the restoration of estuarine and lagoon ecosystems improves recruitment success and escapement to the ocean.
- Article 9 mandates that Member States inventory and systematically remove obsolete artificial barriers to surface water connectivity, contributing to the EU-wide target of restoring at least 25,000 km of rivers into free-flowing rivers by 2030. When removing barriers, Member States are required to prioritise obsolete structures that are no longer needed for navigation, energy generation, water supply, or flood protection. Since silver eels must migrate downstream to the ocean to grow and glass and yellow eels must swim upstream to grow, longitudinal river connectivity is the single most critical hydromorphological factor for eel survival. Physical obstacles (dams, weirs, sluices, and culverts) act as severe migration blockades. Removing obsolete artificial barriers directly aligns with the non-fisheries mortality mitigation requirements under Article 2(8) of the EU Eel Regulation, significantly boosting silver eel escapement.

NRPs are currently being developed at a Member State level, **this provides an opportunity to align these, not only with EMPs but with the aforementioned RBMPs so that the ecological requirements of the eel are taken into account through the pertinent habitat restoration measures, and thus deliver on the 40% eel escapement target** simultaneously with other restoration and water quality targets.

Habitats and Birds Directive

The Habitats Directive ([92/43/EEC](#)) and Birds Directive ([2009/147/EC](#)) intersect with the EU Eel Regulation through habitat protection. Despite not being mentioned in the annexes as a protected species, the Natura 2000 network (Article 3 of the Habitats Directive; Article 4 of the Birds Directive) created under these directives safeguards essential estuarine, wetland, and riverine habitats that serve as vital nursery and growth zones for eels.

Several Annex I habitat types are eel habitat, including estuaries (1130), coastal lagoons (1150) and water courses (3260). Under Article 6(1) and 6(2) of the Habitats Directive, Member States must take the necessary conservation measures in these sites and avoid their deterioration. Under Article 6(3) and 6(4), any plan or project likely to have a significant effect on a site, such as new hydropower plants, weirs or flood defenses, must undergo an appropriate assessment. **Article 10 of the Habitats Directive is especially relevant to connectivity: it encourages Member States to manage landscape features such as rivers and their banks, which are essential for the migration and dispersal of wild species.** Similarly, Article 4(2) of the Birds Directive requires particular attention to wetlands of international importance, many of which also support eels. Finally, measures to improve passage for Annex II migratory fish, such as salmon, shads and lampreys, also benefit eels directly.

The Marine Strategy Framework Directive ([Directive 2008/56/EC, 2008](#))

The Marine Strategy Framework Directive (MSFD) legally requires Member States to achieve and maintain Good Environmental Status (GES) across European seas. Under Article 3, GES mandates that marine species and habitats are protected, human-induced biodiversity decline is prevented, and ecosystem hydro-morphological, physical, and chemical properties function in balance without adverse anthropogenic inputs. This framework supports the catadromous lifecycle of *A. anguilla* during its critical transitional and marine phases, namely, glass eel recruitment into estuaries and adult silver eel egress to the open ocean by protecting biodiversity and the marine ecosystem.

Furthermore, Annex I explicitly requires that populations of all commercially exploited fish remain within safe biological limits, displaying a healthy age and size distribution. **Aligning MSFD marine strategies with national Eel Management Plans ensures that ocean migration corridors are protected from chemical pollution, physical degradation, and overexploitation, directly reinforcing the 40% silver eel escapement target set by the EU Eel Regulation.** In addition, achieving GES under the MSFD should be aligned with achieving good ecological status under the WFD, ensuring a coherent assessment of environmental conditions and pressures across connected freshwater, transitional and marine ecosystems.

The EU Marine Action Plan

The EU Marine Action Plan reinforces the EU Eel Regulation by setting an explicit mandate for Member States to update and strengthen their EMPs in light of the latest scientific advice and European Commission implementation evaluations ([European Commission, 2023](#)). Recognising that *A. anguilla* recovery cannot be achieved through fisheries controls alone, **the Action Plan obliges Member States to adopt a holistic cross-policy approach.** Updated EMPs must simultaneously address commercial and recreational fishing mortality across all life stages while enforcing key environmental directives, specifically the WFD, Habitats Directive, and MSFD, to mitigate non-fisheries threats. Crucially, **the plan prioritises large-scale habitat restoration, river continuity, migratory barrier removal, and transboundary catchment coordination to secure safe passage** and healthy growing environments throughout the species' range.

Water Resilience Strategy

In its European Water Resilience Strategy, adopted in June 2025, the European Commission announced a Green and Blue Corridors initiative, planned for launch in 2027, to restore rivers, wetlands and coastal ecosystems through a source-to-sea approach ([European Commission, 2025](#)). This approach could benefit

European eel by treating rivers as continuous corridors from source to sea, linking channels, floodplains, wetlands and coasts, rather than treating them as isolated water bodies.

The initiative could help **coordinate barrier removal and habitat restoration across entire river systems, including transboundary catchments, while unlocking water-resilience funding by highlighting the contribution of these measures to flood and drought protection alongside biodiversity conservation.**

1.2.2 Global policy relevant to the European eel

The European eel is covered by several international conventions and regional frameworks that complement EU legislation by addressing habitat protection, exploitation and the need for cross-border cooperation. The [Ramsar Convention on Wetlands](#) supports the conservation and wise use of wetlands that provide important eel habitats, including estuaries, coastal lagoons and river deltas. The [Convention on the Conservation of Migratory Species of Wild Animals](#) (CMS) provides a framework for international cooperation on migratory species, while the [Barcelona Convention's SPA/BD Protocol](#) supports the protection of Mediterranean biodiversity and habitats relevant to eel conservation. In addition, [CITES](#) Appendix II regulates international trade in European eel, and the [General Fisheries Commission for the Mediterranean](#) (GFCM) provides a regional framework for coordinating fisheries management.

Together, these instruments **address pressures that extend beyond EU borders and highlight the importance of integrating habitat restoration and river connectivity with measures to regulate exploitation and trade.** However, their effectiveness depends on coordinated implementation by the relevant contracting parties and alignment with EU measures, including the EU Eel Regulation, the WFD, and the NRR.

1.3 Scientific evidence and policy guidance for European eel conservation

The International Council for the Exploration of the Sea (ICES), in its technical evaluation of progress reports on EMPs, stated that most interventions Member States have implemented are not expected to have a direct or quantifiable impact on increasing biomass and escapement, and/or reducing mortality ([Altmayer, 2024](#)). Thus, it reiterates that all anthropogenic sources of mortality should be reduced to zero at every life stage of the European eel and advises against fishing for restocking purposes. Also, the **quantity and quality of eel habitats should be restored; this includes restoring connectivity and the physical, chemical, and biological properties of the habitats.**

Scientific projects and expert advice provide valuable guidance for strengthening European eel conservation and improving the implementation of recovery measures. The [Interreg POCTEFA AnguillaMed project](#) assesses the health of European eel populations in rivers and ponds across the western Mediterranean using innovative, non-invasive methods. It aims to link eel health to anthropogenic pressures on aquatic habitats and propose targeted restoration measures for the species and its habitats. Another project funded through the EU's Interreg SUDOE programme, developed common tools and assessment methods to support eel conservation across southwestern Europe, particularly southern France and the Iberian Peninsula. Building on this work, [Mateo et al. \(2026\)](#), present a standardised database ([VISUANG](#)) compiling information on river networks, eel abundance and

distribution, aquatic habitats, and human pressures, including more than 106,000 obstacles. This resource supports the assessment of eel habitats and the identification of pressures affecting their migration and survival.

Together, these scientific resources provide an evidence base for assessing eel populations, identifying conservation priorities, and informing the implementation of effective recovery measures.

1.4 Policy recommendations

1. Ensure all member states develop and submit Eel Management Plans (EMPs).

As of October 2026, only 18 Member States have submitted their plans. The remaining Member States should submit their plans without further delay to enable the European Commission to assess them.

2. Align EMPs with the National Restoration Plans (NRPs) and the River Basin Management Plans (RBMPs) under the WFD.

Member States should have submitted their initial NRP draft in September 2026. From now until March 2027 the Commission will assess the drafts and return formal observations and recommendations to each Member State. Then the Member States will address the Commission's observations, finalise their plans and formally adopt their NRPs into law by September 1st 2027. There is also the preparation for the 4th Cycle of the RBMPs underway under Article 14 of the WFD and now there is a legally required 6-month public consultation phase focused on identifying the Significant Water Management Issues (SWMI). Before writing the actual draft plan, water authorities across EU Member States must present the key pressures threatening their water bodies to the public, industries, NGOs, and local authorities to agree on what must be fixed.

The coming months are therefore particularly important for advocating aligned restoration targets and measures across NRPs and RBMPs. This coordination is particularly important given that insufficient cooperation between authorities at Member State level has been identified as a key obstacle to achieving the EU Eel Regulation's objectives ([European Commission, 2020](#)). Engaging in SWMI consultations and contributing to the refinement of draft NRPs could help ensure that eel migration corridors, obsolete barrier removal and habitat restoration are recognised as mutually reinforcing priorities across both planning frameworks. *A. anguilla* is an economically significant aquatic species and is therefore relevant to the protected-area framework established under Article 6 and Annex IV(2)(ii) of the WFD, which includes areas designated for the protection of economically significant aquatic species. RBMPs and NRPs should therefore take into account the objectives and measures established under EMPs and ensure coherence between all planning frameworks. In addition, key eel migration corridors must be prioritised for barrier removal projects under Article 9 of the NRR, including rivers where obsolete barriers currently prevent or restrict eel migration. This requires identifying priority rivers and obsolete barriers and assessing whether the proposed restoration measures adequately address them.

At the same time, stakeholders should be empowered to participate in national and river-basin public consultations. **Local and national NGOs, citizens, river-restoration organisations and other relevant stakeholders can play an important role in identifying obsolete barriers affecting**

their local rivers and advocating for their removal. Supporting these stakeholders with accessible information, evidence and recommendations would help ensure that local ecological priorities are reflected in SWMI consultations and the development of RBMPs.

3. Establish binding deadlines, transparent compliance mechanisms, and clear governance structures under the EU Eel Regulation.

To tackle the widespread lack of implementation by Member States, the European Commission should incorporate strict, legally binding implementation timelines for achieving national silver eel escapement and recruitment targets. This framework should define mandatory milestone deadlines for Member States updating and executing their EMPs, accompanied by automatic regulatory consequences, formal infringement procedures, and required corrective action plans for jurisdictions that fail to meet their conservation obligations or report adequate progress.

4. Eel migration corridors should be prioritised for the removal of obsolete or high impact barriers.

Article 9 of the NRR is particularly relevant to the restoration and protection of *A. anguilla*, as artificial barriers such as dams can disrupt the species' migratory life cycle. European eels migrate between freshwater and the Atlantic Ocean, with adults migrating downstream to the sea to reproduce and juvenile eels subsequently migrating back into European rivers, where they grow and mature ([European Commission, n.d](#)). Article 9 requires Member States to inventory and remove obsolete artificial barriers to the connectivity of surface waters, contributing to the restoration of free-flowing rivers. Prioritising the removal of obsolete barriers that impede eel migration could therefore simultaneously support the implementation of Article 9 and the recovery of the European eel.

5. Recognise eel migration as a key indicator for monitoring the Nature Restoration Regulation.

The European eel requires connected river systems to complete its catadromous life cycle, making eel migration a useful biological indicator of longitudinal connectivity. The EU Eel Regulation ([Regulation \(EC\) No 1100/2007](#)) already establishes monitoring and reporting requirements, including escapement estimates. These existing monitoring mechanisms could be better integrated with NRPs monitoring to provide biological evidence of improvements in river connectivity alongside structural indicators, such as the removal of obsolete barriers and increases in free-flowing river length. However, monitoring methods based solely on fishing catches or environmental DNA sampling may not reliably demonstrate improved connectivity, particularly where restocking can mask the effects of barriers on natural eel migration. Monitoring should therefore include methods that directly assess eel movements and passage, such as eel ladders, fyke nets at pumping stations, and telemetry. This would strengthen the assessment of whether restoration measures are delivering ecological outcomes, rather than measuring progress solely through the number of barriers removed.

6. Establish a standardised international scientific monitoring system and address knowledge gaps.

Two of the key causes for the failure of meeting the EU Eel Regulation target are the lack of reliable data to inform management and monitor progress, and uncertainty about whether

management actions actually influence spawning and, ultimately, stock status; more fish in the water does not necessarily mean more spawning ([European Commission, 2020](#)). To address this, the European Commission and ICES should establish an internationally coordinated, fishery-independent monitoring program for incoming glass eels and outgoing silver eels. Moving away from reliance on commercial fishery data, which is constrained by quotas and seasonal closures. Member States should implement year-round, standardised monitoring techniques to provide accurate long-term population trends and enable robust evaluation of European eel recovery measures. This monitoring system must be designed to close critical scientific knowledge gaps regarding European eel ecology, effective population size and whether current silver escapement levels are sufficient.

7. Reform the restocking framework and secure dedicated funding for European eel habitat restoration.

Restocking is included among the measures available under EMPs and aims to increase eel survival in receiving rivers. However, according to ICES ([ICES, 2025](#)), restocking relies on the capture of glass eels, which is inconsistent with current advice due to it constituting an anthropogenic pressure on an already depleted stock and due to lacking evidence on restocking producing a net benefit at the scale of the whole European stock. **Funds should be instead redirected toward improving natural recruitment and survival through habitat restoration and river connectivity, rather than relying on restocking as a substitute for addressing barriers and other anthropogenic pressures.**

Achieving these objectives requires dedicated EU funding for European eel habitat restoration, alongside stronger integration of eel conservation into fisheries and broader environmental policies. The proposed [integration of the European Maritime, Fisheries and Aquaculture Fund \(EMFAF\) into broader National and Regional Partnership Plans \(NRPPs\)](#) under the 2028–2034 Multiannual Financial Framework (MFF) raises concerns that funding for fisheries management, aquatic biodiversity and eel recovery could become less visible among competing national priorities ([European Commission, 2026](#)). EU institutions and Member States should therefore ensure that the future funding framework explicitly recognises European eel recovery, including habitat restoration, river connectivity and barrier removal, and provides sufficient, accessible funding to implement these measures through EMPs and related restoration plans like NRPs and RBMPs.

Existing EU funding instruments such as the LIFE program should not be discontinued under the NRPPs as they can support integrated restoration projects that deliver benefits for eel recovery, biodiversity, river connectivity and the implementation of the NRR and WFD. For example, [LIFE CONNECTS](#) demonstrates how restoring river connectivity, hydrological dynamics and habitat heterogeneity can improve ecosystem conditions and benefit migratory species, including the European eel. Such projects can provide models for scaling up restoration approaches that contribute to multiple EU policy objectives.

The European Commission and Member States should improve coordination between existing and future funding instruments and explicitly incorporate eel recovery and river connectivity into relevant funding priorities, enabling complementary investment across fisheries, agriculture, biodiversity and regional development policies.

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