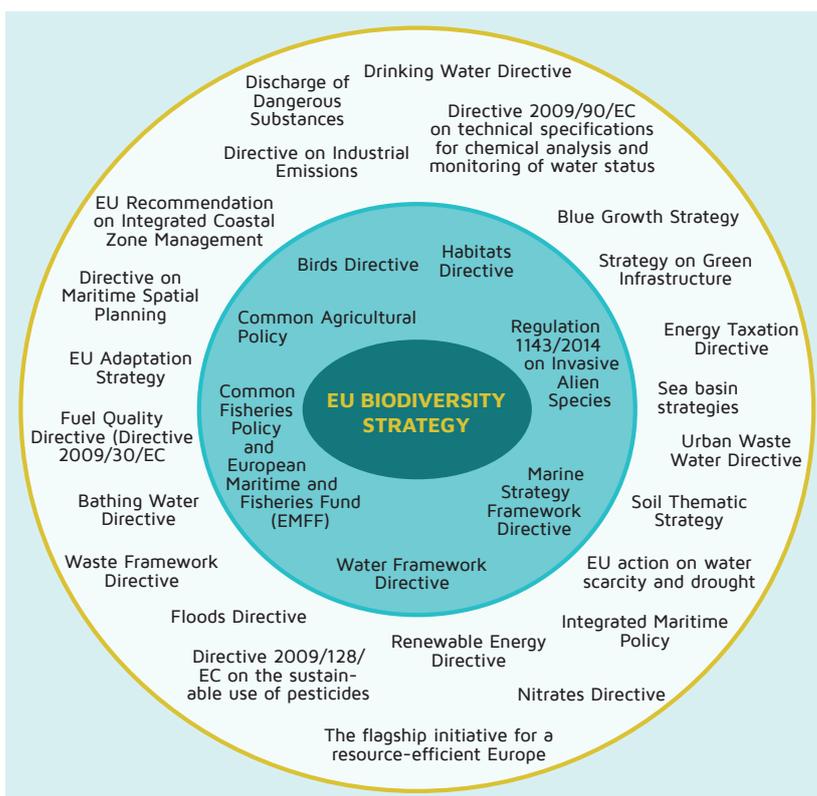


## What's the problem with current policies and management practices for aquatic biodiversity?

### EU POLICY RESPONSE

To address the challenges of biodiversity protection, the EU adopted the Biodiversity Strategy in 2011, with the aims to halt biodiversity and ecosystem services loss across Europe by 2020. However, the 2015 Mid-Term Review of the Strategy concluded that biodiversity protection is deficient and that, at current trends, the EU will fail to achieve its goal of halting the negative effects of anthropogenic activities on ecosystems by 2020. These negative trends are especially apparent for aquatic biodiversity in the EU's freshwater, coastal and marine realms, which have suffered as a result of economic activities over the last decades.



Inner and outer core of considered policies relevant for the achievement of the targets of EU Biodiversity Strategy to 2020.

The EU Biodiversity Strategy largely relies on other EU policies to achieve its objectives for aquatic ecosystems (see Figure above):

- The Birds and Habitats Directives (also called Nature Directives), the Water Framework Directive (WFD) and the Marine Strategy Framework Directive (MSFD) directly contribute to reducing pressures on aquatic ecosystems and on biodiversity;
- Many other (environmental and sectoral) policies also deliver positive synergies with the EU Biodiversity Strategy, while others are in competition with it and affect outcomes for the six main threats imposed on aquatic ecosystem in Europe (see table below).

## EU POLICIES RELEVANT TO THE IDENTIFIED KEY THREATS ON AQUATIC ECOSYSTEMS – 2 EXAMPLES

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**Nutrient Pollution:** The Urban Waste Water Treatment Directive and Nitrates Directive set target values for the eutrophic state of freshwater and coastal waters, and promote measures to reduce nitrogen emissions from the domestic and industrial sector, and the agricultural sector, respectively. Other relevant policies include the Drinking Water Directive, the Bathing Water Directive and the Groundwater Directive. The WFD integrates all these objectives in its status assessment and the establishment of River Basin Management Plans and Programmes of Measures, while the MSFD mostly relies on freshwater and land related policies, such as the WFD and the Common Agricultural Policy, to reduce nitrogen emissions. The nitrogen threat is also tackled through legislation on air quality protection, with the National Emission Ceilings Directive, the Directive on Industrial Emissions concerning Integrated Pollution Prevention and Control, and the Ambient Air Quality Directive.

There are also policies that may increase the threat of nutrient pollution in aquatic ecosystems. These include policies such as the Common Fisheries Policy that promotes aquaculture and others that promote the expansion of agriculture, such as the Common Agricultural Policy and the Directive on the promotion of the use of energy from renewable resources, which encourages the cultivation of crops to be used as biofuels.



**Species extraction:** In terms of species extraction, the Common Fisheries Policy mainly promotes measures to reduce pressures from fishing activities, for example by increasing selectivity and reducing unwanted catches. Furthermore, it should lead to the adoption of multi-species plans, as are in place for the Baltic, that contain conservation measures with quantifiable targets to restore and maintain fish stocks at levels capable of producing Maximum Sustainable Yield and to control the capacity of the fishing fleet. Some of these measures are financially supported by the Regulation on the European Maritime and Fisheries Fund and reinforced by the MSFD.

The majority of regulations and policies related to species extraction include commercial fishing as its main driver. Some also mention aquaculture, but for the most part regulations fail to consider blue biotechnology. Only the CBD Aichi Targets address the need to minimise genetic erosion and safeguard the genetic diversity of species. In addition to addressing drivers, policies consider the state of biodiversity through implementation of protected areas and strive towards good environmental status. While the policies in place aim to reduce species extraction, the socio-economic aspects of the threat are not addressed adequately yet and economic growth is even promoted in some. The Common Fisheries Policy promotes small-scale coastal fishing and sustainable aquaculture to contribute to food security and supplies, growth and unemployment, which could lead to an increase in activity. The same is true for the Blue Economy Strategy that promotes the growth of the aquaculture and marine biotechnology sector. Additionally, aquaculture is one of the pillars for the EU's Blue Growth Strategy, and its development can contribute to the Europe 2020 Strategy. For CFP in relation to biodiversity it is important to note that even if commercial fish species are exploited at maximum sustainable yield several sensitive non-target fish species (e.g. certain rays and sharks) are still potentially at risk.

## MAIN MESSAGES FROM POLICY ANALYSIS

- Many policy mechanisms, their articles and specific objectives exist for supporting synergies between the EU Biodiversity Strategy and all other environmental protection policies. In practice, however, the opportunities for policy coherence offered by the existing policy framework are not adequate and efforts for environmental improvement remain within existing silos;
- Although WFD and the MSFD are expected to support the achievement of the EU Biodiversity Strategy, their contributions to the EU Biodiversity Strategy are rarely made explicit, as both directives focus on assessments, measure selections or stakeholder processes to their specific (narrower) issues and objectives. As a result, opportunities for delivering the EU biodiversity objectives are unlikely to be fully captured;
- Sectoral policies, which primarily aim to support economic growth, directly or indirectly produce threats and put pressures on aquatic biodiversity. As long as these pressures are significantly supported through policy, the recovery of aquatic ecosystems is unlikely;
- The lack of success of EU environmental policy is the result of amongst other things, an insufficient coordination of EU policies and their fragmented implementation.

 <b>Go to Brief #1:</b> <b>Europe biodiversity trends/threat</b>	<a href="http://www.aquacross.eu/results">www.aquacross.eu/results</a>	<b>Go to Brief #3:</b> <b>Introducing EBM</b> 
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**Further information**

This is one of 38 short briefs summarising the key results of the AQUACROSS Project. For more detailed information on the topics covered in this brief, see the following:

- Rouillard et al. (2016) Synergies and Differences between Biodiversity, Nature, Water and Marine Environment EU Policies. Deliverable 2.1, European Union's Horizon 2020 Framework Programme for Research and Innovation grant agreement No. 642317. ([Deliverable](#) and [Executive Summary](#))
- Rouillard, J., Lago, M., Abhold, K. et al. (2017) Protecting aquatic biodiversity in Europe: How much do EU environmental policies support ecosystem-based management? *Ambio*. DOI: [10.1007/s13280-017-0928-4](https://doi.org/10.1007/s13280-017-0928-4)
- Rouillard, J., Lago, M., Abhold, K. et al. (2018) Protecting and Restoring Biodiversity across the Freshwater, Coastal and Marine Realms: Is the existing EU policy framework fit for purpose? *Environmental Policy and Governance* 28: 114-128. DOI: [10.1002/eet.1793](https://doi.org/10.1002/eet.1793)
- Röschel, L. (2018). AQUACROSS Final Conference [presentation](#): AQUACROSS Policy Review, Lessons learnt from top down and bottom up analysis.



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