



AQUACROSS Policy Review

Lessons learnt from top down and bottom up analysis

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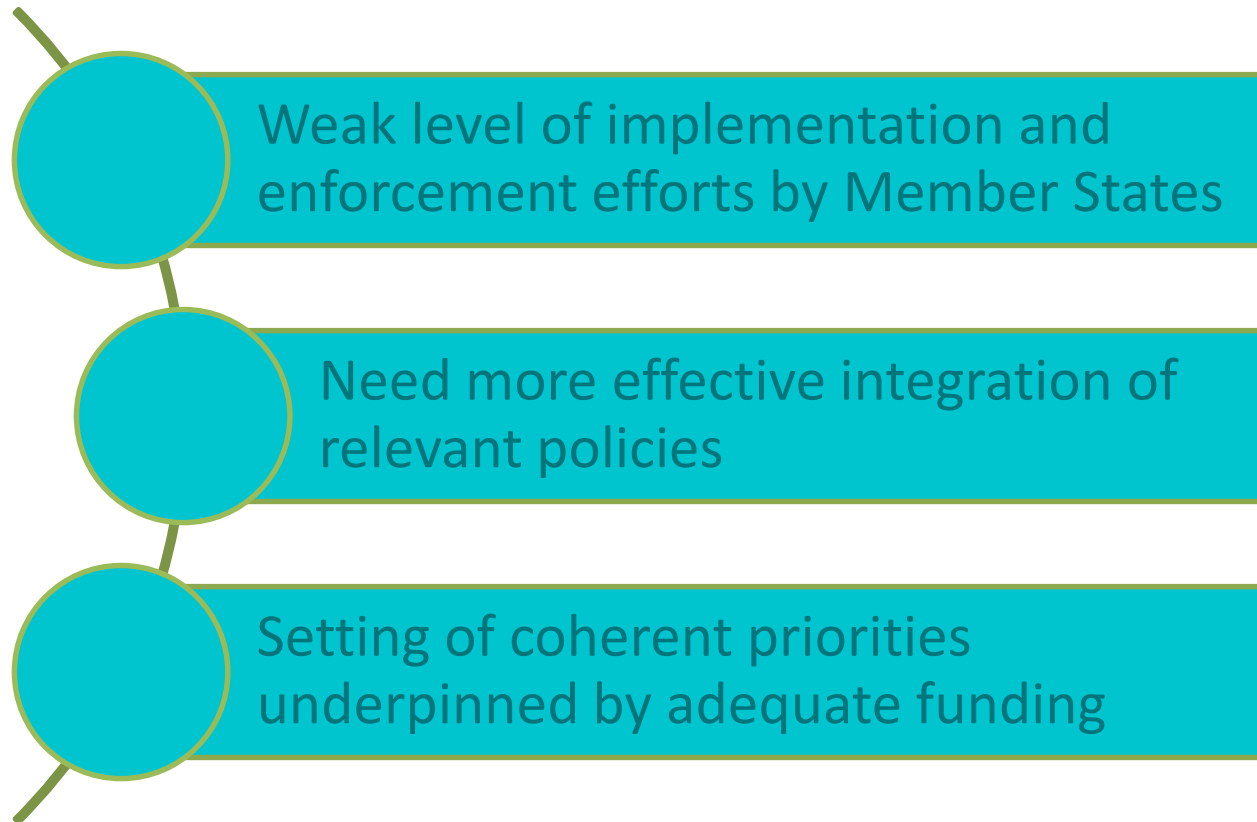
10/10/18

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1. Mid-term Review of EU Biodiversity Strategy

“At the current rate of implementation, biodiversity loss and the degradation of ecosystem services will continue throughout the EU.”



2. Policy Orientation in AQUACROSS



- ≈ How do policies and laws **support and/or hinder** EU and international biodiversity targets?
- ≈ Are environmental protection policies affecting the management of aquatic ecosystems **coherent**?
- ≈ What are the main **challenges and opportunities** in reaching the EU Biodiversity Strategy to 2020?
- ≈ EU and case study level

3. Initial Policy Review



Inner core: EU policies directly mentioned in the EU Biodiversity Strategy

Outer core: additional policies identified by initial review

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

4. Integrative Policy Analysis

Drivers–Pressures–State–Impact–Response (DPSIR) framework



- ≡ Policy responses were mapped against drivers, pressures and state, highlighting positive and negative interaction with biodiversity protection of aquatic ecosystems along the causal links

5. Threats and Drivers of Aquatic Biodiversity

		Main threats to aquatic biodiversity						Sectoral Trends
		Nitrogen Pollution	Extraction of Species	Water Abstraction	Invasive Alien Species	Morphological Alterations	Plastic Waste	
Main drivers of threats to aquatic biodiversity	Agriculture	X		X		X		↗
	Urban areas	X		X		X	X	↗
	Water utilities	X		X		X		↗
	Commercial fishing		X				X	→
	Aquaculture	X	X		X	X	X	↗
	Energy	X		X		X		↗
	Transport	X			X	X	X	↗
	Industry	X	X	X		X	X	→
	Waste sector	X					X	↗
	Tourism	X		X	X	X	X	↗

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	Energy	X		X		X		↗
	Transport	X			X	X	X	↗
	Industry	X	X	X		X	X	→
	Waste sector	X					X	↗
	Tourism	X		X	X	X	X	↗

6. European policy mechanisms that directly or indirectly support threats to aquatic biodiversity

Sectoral Policies	Promoted Drivers										Identified Key Threats						
	Agriculture	Urban Areas	Water Utility	Fishing	Aquaculture	Energy	Transport	Industry	Waste sector	Tourism	Nitrogen Pollution	Species Extraction	Water Abstraction	Invasive Alien Species	Alterations Morphology	Plastic Waste	
Regulation on the European Maritime and Fisheries Fund											X	X		X	X	X	
Regulation on the Common Fisheries Policy											X	X		X	X	X	
Communication Innovation in the Blue Economy											X	X					
Regulation establishing rules for direct payments to farmers under support schemes											X		X		X		
Regulation for European Agricultural Fund for Rural Development											X		X		X		
Regulation on Cohesion Fund											X			X	X	X	
Regulation on Regional Development Funds											X		X		X	X	
Directive on the promotion of the use of energy from renewable resources											X		X		X		
Communication Towards an Industrial Renaissance													X			X	
Communication Europe, the world's No. 1 tourist destination													X			X	
Communication on Short Sea Shipping											X			X	X		
White paper Roadmap to a Single European Transport Area														X		X	
Floods Directive															X		
Fuel Quality Directive											X						
Regulation on organic aquaculture animal and seaweed production												X		X			



Dark teal = Direct support (funding) that increase threats to aquatic biodiversity



Yellow = Promotion of the threat through new practices by changing the regulatory landscape

Light teal = Encouraging a change of sectoral practices that leads to increase the threat

White = Not applicable

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Regulation on the Common Fisheries Policy											X	X		X	X	X	
Communication Innovation in the Blue Economy											X	X					
Regulation establishing rules for direct payments to farmers under support schemes											X		X		X		
Regulation for European Agricultural Fund for Rural Development											X		X		X		
Regulation on Cohesion Fund											X			X	X	X	
Regulation on Regional Development Funds											X		X		X	X	
Directive on the promotion of the use of energy from renewable resources											X		X		X		
Communication Towards an Industrial Renaissance													X			X	
Communication Europe, the world's No. 1 tourist destination													X			X	
Communication on Short Sea Shipping											X			X	X		
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7. Bottom-up policy review in the case studies

Case Studies	Driver				Pressure				EU Biodiversity Strategy to 2020						
	Agriculture	Fisheries / aquaculture	Energy	Tourism	Nutrient pollution	Extraction of Species	Water Abstraction	Invasive Alien Species	Alteration Morphology	Target 1: Fully implement the Birds and Habitats Directives	Target 2: Maintain and restore ecosystems and their services	Target 3: Achieve more sustainable agriculture and forestry	Target 4: Ensure the sustainable use of fisheries resources	Target 5: Combat invasive alien species	Target 6: Help avert global biodiversity loss.
North Sea		X	X			X			X	X	X		X		
IBRM	X			X			X		X	X	X	X	X		X
Danube River	X		X	X	X		X		X	X	X	X			
Lough Erne	X			X	X			X		X	X			X	
Aveiro River		X		X		X			X	X	X	X		X	
Sweden	X				X						X	X			
Swiss Plateau	X		X		X				X	X	X	X			
Faial-Pico Channel		X		X		X				X	X		X		X

- Local stakeholders identified key pressures for each case study, of which one major pressure was selected for further policy analysis
- Four cross-cutting drivers, prioritised by local stakeholders, were selected for further analysis: agriculture, fisheries, renewable energy and tourism

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IBRM	X			X			X		X	X	X	X	X		X
Danube River	X		X	X	X		X		X	X	X	X			
Lough Erne	X			X	X			X		X	X			X	
Aveiro River		X		X		X			X	X	X	X		X	
Sweden	X				X						X	X			
Swiss Plateau	X		X		X				X	X	X	X			
Faial-Pico Channel		X		X		X				X	X		X		X

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8. Key Conclusions – Challenges

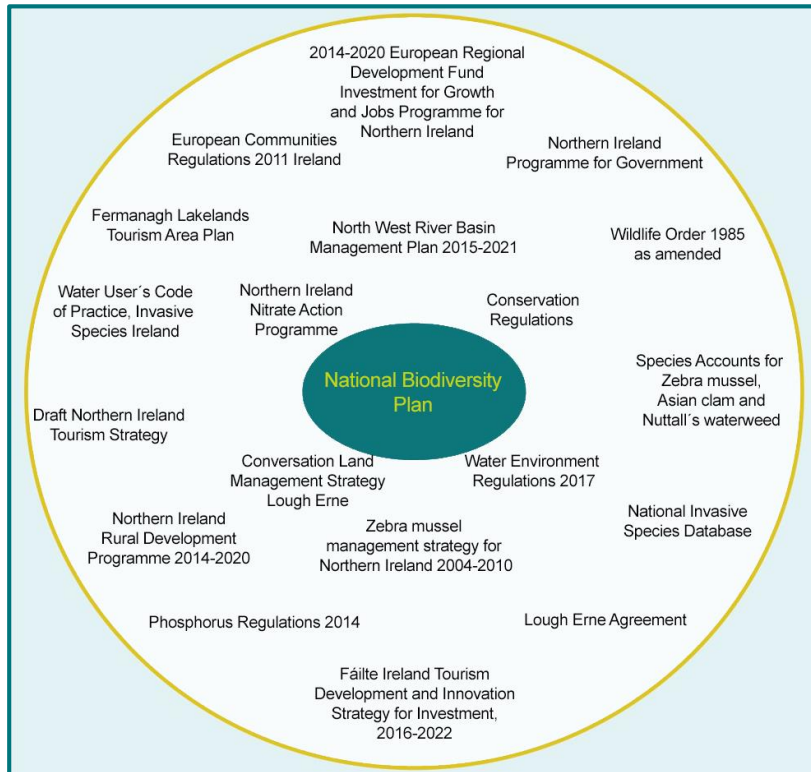


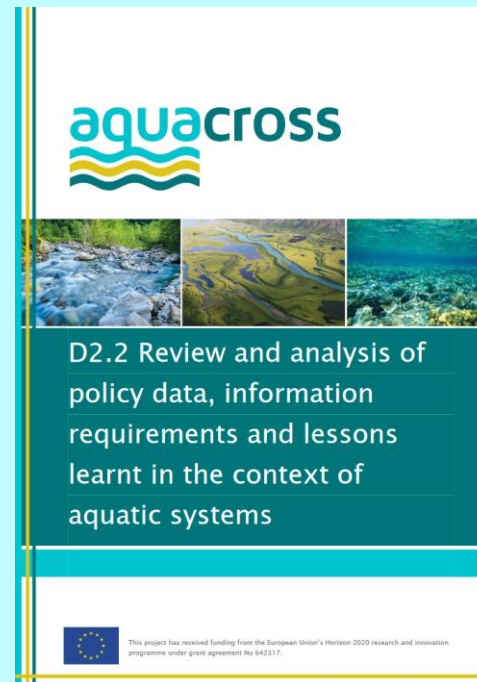
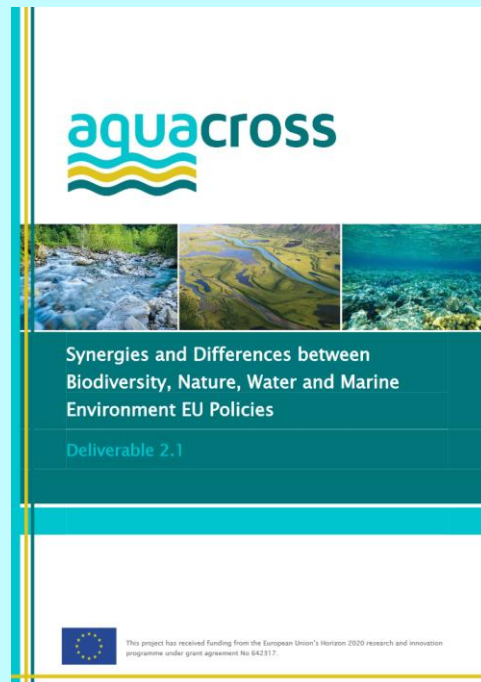
Figure: Lough Erne policy framework characterisation

- Complexity of EU and case study policy frameworks, with multiple legislation, institutions and stakeholders involved
- Need for greater coherence between environmental and sectoral policies
- Difficulties in achieving full compliance with existing regulatory requirements (e.g. ambition for cross-compliance requirements)

10. Key Conclusions – Opportunities

- ≈ Stepping up environmental mainstreaming into sectoral policies
 - Establishing standards
 - Certification schemes to promote best practice
 - Decoupling subsidies
 - Introducing environmental safeguards
- ≈ Optimising use of available funding (e.g. targeting)
- ≈ Promoting multi-beneficial measures and strengthening the legislative requirement on policy integration

Thank you! Further reading...



Available at:
www.aquacross.eu/outputs

- Roulliard et al. 2018. Protecting aquatic biodiversity in Europe: How much do EU environmental policies support ecosystem-based management? *Ambio* 47(1): 15-24.
- Roulliard et al. 2017. Protecting and restoring biodiversity across freshwater, coastal and marine realms: Is the existing EU policy framework fit for purpose? *Environmental Policy and Governance* 28(2): 114-128.
- ... coming up: Final report on bottom-up policy review!