AQUATAP-ES TAP Workshop

Part 2

"Developing Approaches for Assessing and Optimising the Value of Ecosystem Services"

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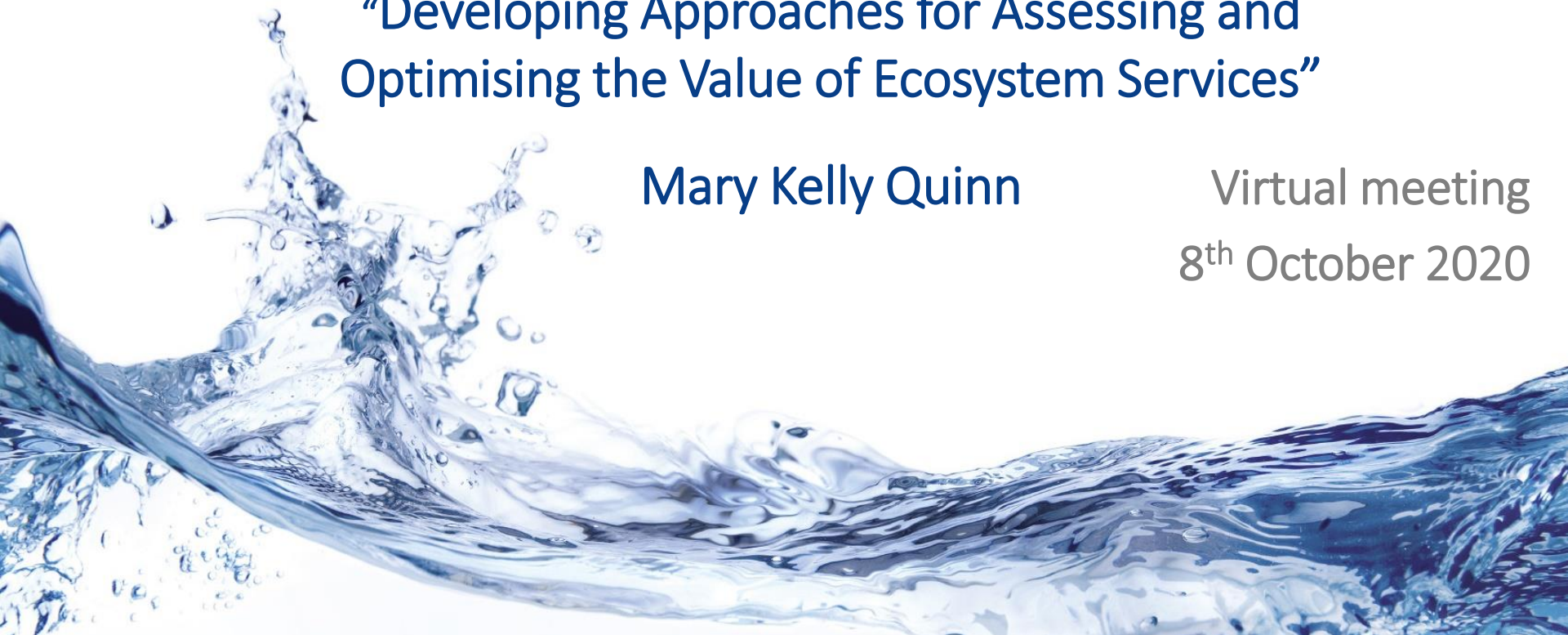
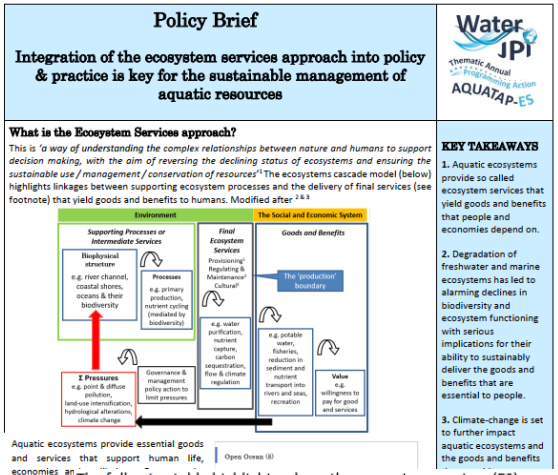
Virtual meeting

8th October 2020



Policy Brief

- Revised taking on board stakeholder comments
- Added Ecosystem Services Cascade diagram
- Table to highlight policy where the ES approach could be integrated .
- Six steps to integrate the ecosystem services approach into the assessment and management of aquatic systems.
- Take home messages



Policy Brief

Integration of the ecosystem services approach into policy & practice is key for the sustainable management of aquatic resources

What is the Ecosystem Services approach?

This is *'a way of understanding the complex relationships between nature and humans to support decision making, with the aim of reversing the declining status of ecosystems and ensuring the sustainable use / management / conservation of resources'*[1] The ecosystems cascade model (below) highlights linkages between supporting ecosystem processes and the delivery of final services (see footnote) that yield goods and benefits to humans. Modified after [2 & 3]

Aquatic ecosystems provide essential goods and services that support human life, economies an 'goods' such industrial use and 'services' regulation of purification,

annual econor key services r almost $15,00

The Intergover has expanded embodies both benefits to pec

Ecosystem Serv or moderates t

Open Ocean (8)

KEY TAKEAWAYS

1. Aquatic ecosystems provide so called ecosystem services that yield goods and benefits that people and economies depend on.

2. Degradation of freshwater and marine ecosystems has led to alarming declines in biodiversity and ecosystem functioning with serious implications for their ability to sustainably deliver the goods and benefits that are essential to people.

3. Climate-change is set to further impact aquatic ecosystems and the goods and benefits

The following table highlights where the ecosystem services (ES) approach could be integrated.

Instrument	Target	ES Addressed (Y/N)	Possible Integration
Wa rk e	At least good ecological status or potential.	No	Assessment (combined ecological and ecosystem services status assessment) and management including identification of POMs*.
Marine Strategy Framework	Good environmental status	Refers to an ecosystem-based approach	Assessment (combined ecological and ecosystem services status assessment) and management including identification of POMs.
Floods Directive	Reduction of the adverse consequences for health, etc. associated with floods.	No	Recognise the services provided by ecosystems to mitigate flood risk, e.g. nature-based solutions.
CBD Biodiversity	Ensure the conser tion, se marin the benefits of biological divers		
Birds & Habitats Directives**	Conservation o species and habitat		
EU Biodiversity Strategy to 2030***	Restore deg ecosystems and biodiversity loss		

POMs* - Programmes of measu
Development Goals *** A

Six steps to integrate the ecosystem services approach into the assessment and management of aquatic systems.

Despite its heavily anthropocentric rationale and the often-misdirected attempt to put price tags on each and every service, the ecosystem services approach is considered the best opportunity for convincing society of our dependence on nature. To effect the changes necessary to support water protection efforts and ensure sustainable delivery of essential ecosystem services, aquatic ecosystem management should integrate the following steps:

1. Make explicit the wide range of ecosystem services and benefits to people. Therefore, an inventory of provisioning, regulating/maintenance and cultural services should complement the biophysical monitoring of aquatic ecosystems. This will require identification of key attributes of the ecosystem services for data collection, and new data collection initiatives in many countries.

2. Expand the assessment of 'ecological status' of surface waters by an assessment of 'ecosystem services status'. The latter will be more easily acknowledged by the general public than the former.

3. Integrate both 'ecological status' and 'ecosystem services status', to inform the public of the importance of protecting the ecosystems' health (incl. biodiversity, where appropriate) as a prerequisite for ecosystem services at desired service rates. This should include the often neglected, but important benefits of regulating services (such as water purification, nutrient and water retention) and cultural services (such as recreation and inspiration).

4. Fully integrate nature's contributions to people into monetary assessments of ecosystem services. If a full integration is not feasible, for example, due to a lack of sound methodology, any services not included should be clearly communicated and be considered in alternative assessments. This is of particular importance, if the benefits of ecosystem protection and management are to be justified against the expenditures on the required management measures.

5. Identify synergies, disservices and trade-offs that can inform more beneficial, win-win solutions for aquatic ecosystems and water resources management. Synergies may be provided by nature-based solutions to water-related challenges, such as water retention measures in headwaters to reduce flood risk, wetlands for pollutant capture.

6. Better link the integrated 'ecological status-ecosystem services status' assessment with i) the Aichi and global biodiversity targets of the Convention on Biological Diversity, ii) the EU Biodiversity Strategy and iii) the UN Sustainable Development Goals.

What next?

Do we need professional typesetting/layout?

Distribution – When & How?