

BlueAdapt

Scientific Session I: From source to sea - ecological boundaries and potential of blue growth

9:40-10:30 Theme I: Improving models to increase the understanding of coastal and lake ecosystems (chair Niina Kotamäki)

- The role of coupled models and scenarios in adaptive water management and policy (Niina Kotamäki)
- Circulation and transport dynamics in the Archipelago Sea (Elina Miettunen)
- Large-scale patterns in community composition and functioning of coastal plankton systems (Veera Norros)
- Impacts of rapid environmental changes on coastal fishery resources (Heikki Peltonen)
- Macrosystem community change in lake phytoplankton and its implications for diversity and function (Benjamin Weigel)

10:30 - 10:40 Break

10:40 – 12:00 Theme II: Linking environment and blue economy (chair Kari Hyytiäinen)

- Introduction to integrated models for protection and management of water resources (Kari Hyytiäinen)
- National-scale nutrient loading under climate change and agricultural mitigation measure scenarios (Markus Huttunen)
- Towards good ecological status at Archipelago Sea coastal modelling perspective (Janne Ropponen)
- Nutrient load compensation as a means of maintaining the good ecological status of surface waters (Sanna Lötjönen)
- Commentary speech: Turo Hjerppe (YM)
- Open discussion



The role of coupled models and scenarios in adaptive water management and policy

Niina Kotamäki, Syke

BlueAdapt final seminar 5.10.2023





Understanding socio-ecological links



HUMAN NEEDS

Food Energy



ACTIONS

Agriculture, forestry
Fishfarming
Hydro-/ windpower



PRESSURES

Nutrient loading Dams

• +climate change



STATE OF WATERS

Water quality&quantity
Ecosystem
structure&function



WELLBEING

Societal Economic

RESPONSE

RESPONSE











Improved knowledge base supports decision-making

DECISION Water use and management

KNOWLEDGE

Pressures&Impacts on coastal and lake ecosystems

INFORMATION

Statistical & process-based models, uncertainty&risks



DATA

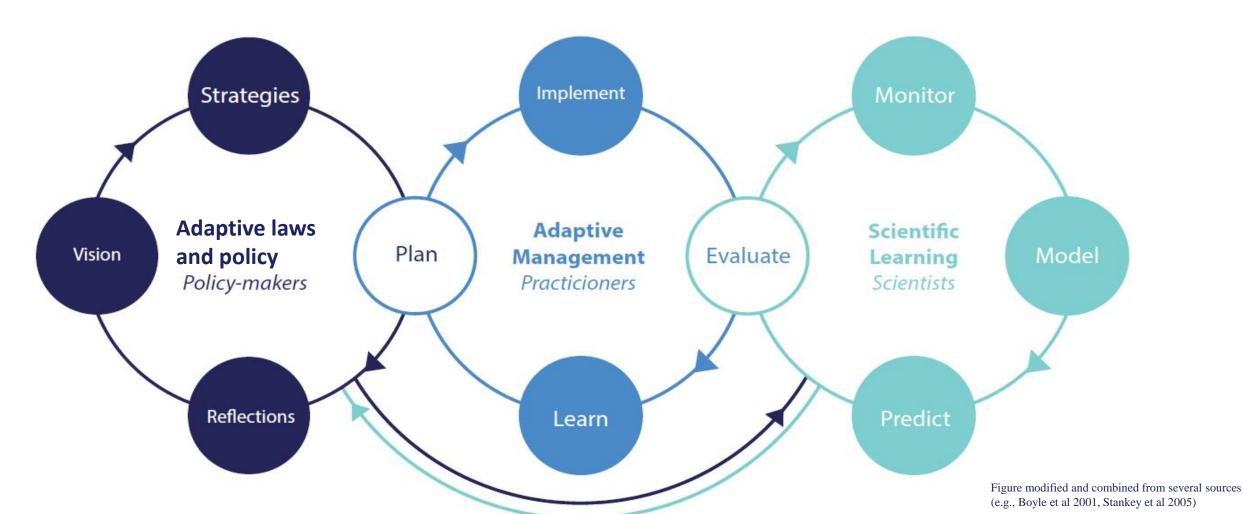
Broad spatial and temporal scale



Modified data-Information-knowledgewisdom pyramid orig. by R.L. Ackoff



Adaptive science-policy linkages support the blue transition





Thank you! niina.kotamaki@syke.fi

Scientific articles about changing aquatic ecosystems: https://blueadapt.fi/julkaisut/













