





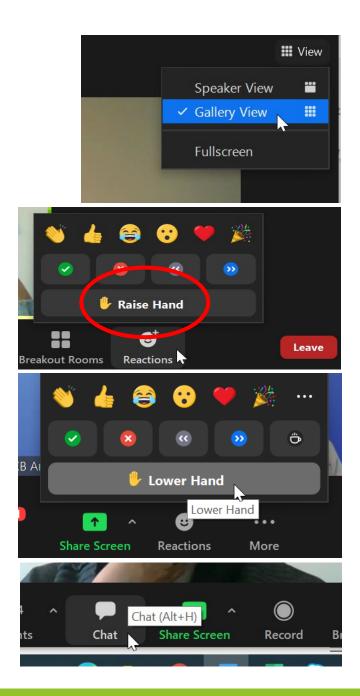






Technicalities in Zoom

- Keep your camera open
- Mute your microphone if not speaking
- Raise your hand if you have comments, questions etc.
- If you prefer you can also ask your question via chat





Agenda of the Session

- Presentation from HELCOM Lotta Ruokanen
- NutrinFlow project story (video)
- SEABASED and NUTRITRADE project results -Anna Saarentaus
- iWATER project results Nika Kotoviča
- Insure project story (video)
- Discussion



HELCOM Lotta Ruokanen



NutrinFlow story



Results from NutriTrade and SEABASED

Anna Saarentaus & Miina Mäki

Central Baltic Annual Event 23.9.2021

Photo: Timo Ketonen

We implement tangible Baltic Sea protection measures that bring results, and ensure that the stories of the sea are passed on to future generations.





Two Central Baltic -funded projects

NutriTrade

Piloted new ways to reduce eutrophication

- EU financing 1.6 MEUR
- 5 partners
- 2015-18

NutriTrade Nutrier Offsteting for the Baltic Saa





SEABASED

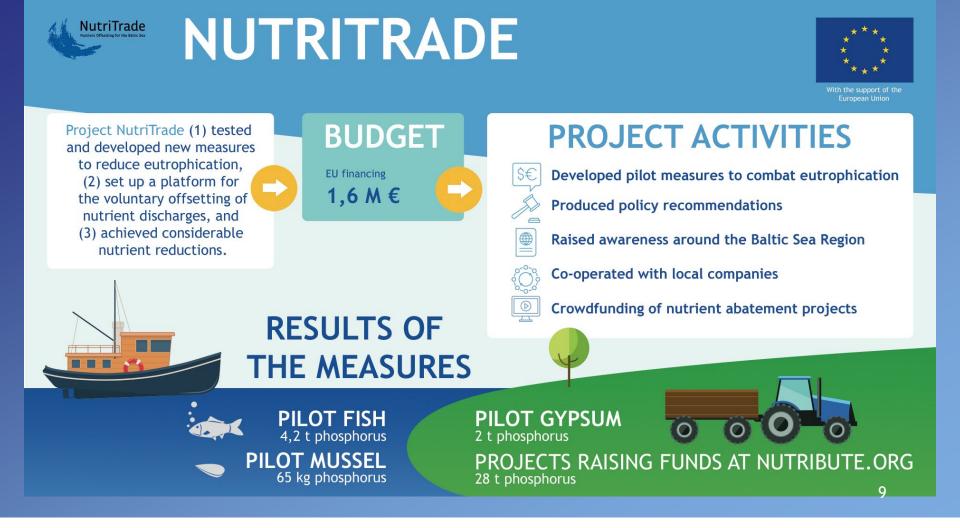
Evaluated methods to remove phosphorus from the sea

- EU financing 2.1 MEUR
- 6 partners
- 2018-21



Development Fund









During the project

- Pilots
 - resulted in concrete, measurable reductions in nutrient loading
 - provided valuable information on the cost-efficiency of nutrient abatement measures
- Nutribute platform was developed to raise funds for water protection measures

After the project

- The developed concepts for nutrient reduction have been at disposal for other actors
- Research and spin-off projects have been initiated in several countries
- The best concepts have been "standardised", i.e. included in
 - Water and marine management action plans
 - Funding programmes
 - HELCOM BSAP





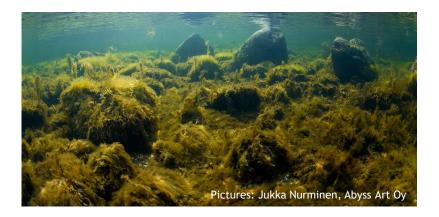
Why to focus on **SEABASED** measures?

The project seeked answers e.g. to following:

- Are there possibilities to reduce the internal nutrient load of the Baltic Sea with new sea-based measures?
- Which of the measures would be potential for removing especially phosphorus?
- Are these measures safe to use?
- What would be the cost-efficiency of sea-based measures compared to land-based load reductions?
- What is the technical feasibility of measures under development? Are the techniques mature enough?
- Is there existing regulation for using sea-based measures? What is required for permitting?

The conclusions are gathered in Practical Guidelines on sea-based measures, available at: <u>www.seabasedmeasures.eu</u>







Examples of piloted measures:



Harvesting stickleback

1kg P removed, P content in fish 0,7%

- Sustainable catch 25 500 tons/y
- Fishing and research cooperation is continued after project

For more information: Rosita Broström rosita.brostrom@fiskodlarna.ax





Nutrients from sea to field

- 3 pilot sites, water from eutrophied bays
- P to fields: 0,2-0,58 kg/ha (+salt ~1kg/m²)
- Potential especially during dry summers
- Attention should be paid to salt!

For more information: **Annika Brink** annica.brink@regeringen.ax







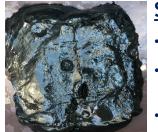
Binding P into sediment

- 2 pilot sites: 13 and 8 tons of activated limestone spread by helicopter
- P reduction potential 16,8g/kg sorbent
- Development of method continues

For more information: Eva Björkman eva@levande-hav.se







Sediment removal

- Incubation experiment in laboratory
- Removal of top sediment was found to not decrease oxygen demand in the bottom
- Nutrient removal potential: 150kg P, 1150kg N & 7700kg C / ha (in 10cm top sediment)*

For more information: Pekka Paavilainen pekka.paavilainen@ely-keskus.fi



Centre for Economic Development, Transport and the Environment

*result for Hålaxvik pilot site sediment





Key conclusions & added value

Focus should be kept in land-based nutrient load reductions, but they can be supported with sea-based measures at local scale.

Some of the sea-based measures can be potential and costefficient for small-scale local marine protection, but many of them need further development prior to full-scale application.

SEABASED brought together key target groups from BS countries and gathered both existing and new knowledge into Practical Guidelines for future use in Baltic Sea marine protection.

All results and materials available at:

www.seabasedmeasures.eu



For more information:

Miina Mäki / Project Manager

miina.maki@jnfoundation.fi



SEABASED playlist:

https://www.youtube.com/playlist?list=PLTU9Imu-Oulcy-f0KfuSQTBFWMhXMJyxA



Lessons learnt

Main successes

- Focusing on critical issues and problem solving
- Engaging relevant target groups from very early stages
- Communicating the results (to be continued after the project)
- Ensuring media attention by linking the project to topical environmental themes, making use of direct media contacts & providing opportunities to see "live action" (instead of just sending out press releases)
- Using social media effectively (e.g. Facebook advertisements)

Cross-border value added

- Developing solutions to common problems
- Utilising knowledge from other countries and organisations
- Increasing cooperation and providing learning opportunities
- Generating critical mass to induce change

Challenges

- It is important (and difficult) to know well the key partners
- Projects are prone to external conditions (e.g. weather, covid, political conflicts ->risk management and scheduling)

Good practices for partnerships

- LP is responsible for leadership (maintaining the spirit & momentum by doing things together, listening, solving problems at an early stage)
- Involve important target groups as partners, steering group members, advisors, workshop participants,...
- Utilise knowledge also from outside the region







iWater Nika Kotoviča





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Break (14:30-14:40)

- Let's leave the breakout room
- We will meet again in plenary session after the break