



# Nutrient Management Measures and Calculation

Workshop for Municipalities in  
the Baltic Sea Region

Kati Berninger April 26th 2022





# **Nutrient recycling in municipalities**





# Introduction to Workshop Session





## **Introduce yourself**

- Name, organization and position briefly
- How is your work connected to nutrient management?



# Objectives of the Workshop

- 1) Identifying challenges and opportunities related to
  - choosing, planning and executing measures to control eutrophication in municipalities
  - calculating nutrient leakage (P&N) and the effect of each measure to reduce it
- 2) Exchanging knowledge and experiences on measures related to eutrophication



## After the Workshop we should have

- deeper knowledge on the needs of the municipalities on
  - measures to control eutrophication
  - calculating nutrient leakage





# Groups



# Group 1. Agricultural measures including wetlands and ditches

Notes: Rosemari Herrero

1. Renate Foks, Kalmar
2. Linda Aldebert, Katrineholm
3. Ylva Wallin, Blekinge Arkipelag
4. Mari Joensuu, Helsinki
5. Daniel Hedström , Värmdö





# **Group 2. Stormwater management and treatment**

Notes: Kamil Jagodzinski

1. Kristina Lūžaitė, Klaipeda
2. Rūta Taučikienė, Panevezys
3. Anna Halonen, Helsinki
4. Jenni Brink Bylund, Värmdö
5. Tove Holm, Turku
6. Mattias Muller, Simrishamn



# Group 3. Sewage and wastewater treatment

Notes: Helene Isander

1. Asta Puodziuniene, Panevezys
2. Rasa Grubliauskyte, Klaipeda
3. Jenny Herbertsson, Katrineholm
4. Emma Mattsson, Vaxholm
5. Katariina Serenius, Helsinki
6. Anders Fröberg, Västervik





# Workshop Tasks



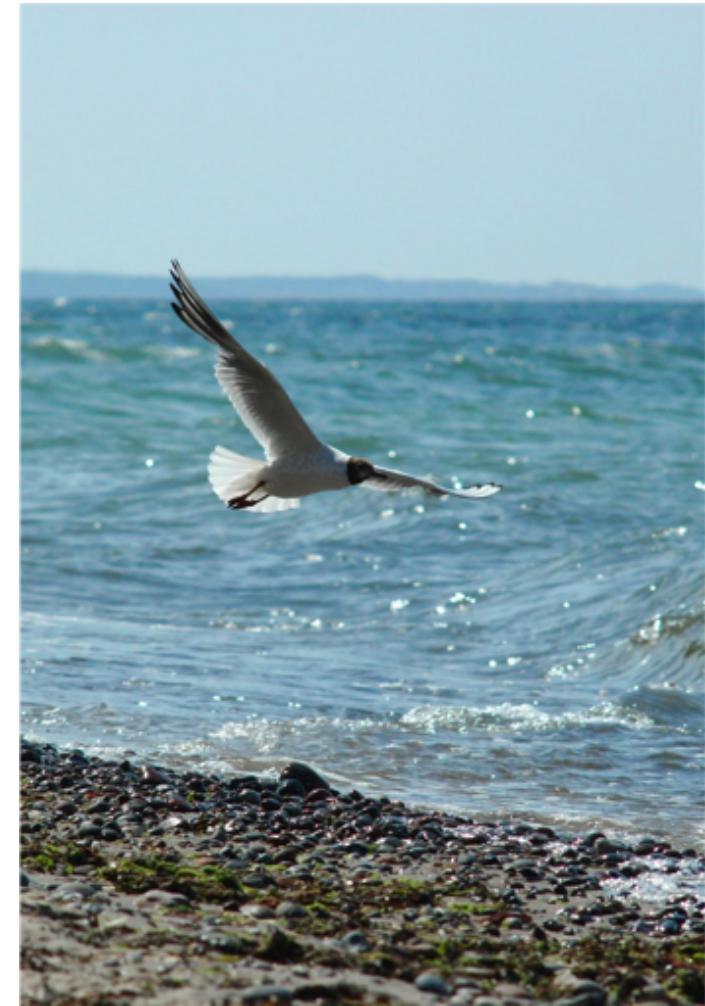
# Individual work: Challenges and opportunities

- Think by yourself about selecting, planning and using measures in your topical group
  - What are the challenges related to them?
  - What about opportunities?
- Write each thought on a separate post-it
- You have 5 minutes



# Group work: Challenges and opportunities

- Discuss in your group the challenges identified
  - Can you group them into categories?
  - Where would you need help?
- Discuss the opportunities related to the measures
  - Do you have good practices to share?
- Write the main points on flipboard
- Be prepared to present
- You have 25 minutes



# Group Work: Calculating nutrient leakage and the effect of each measure to reduce it

- Discuss in your group
  - Have you calculated nutrient leakage?
  - Have you estimated the effect of different measures?
  - Can you share experiences?
  - What are the challenges in the calculation?
  - What kind of help would you need?
- Write the main points on flipboard
- Be prepared to present
- You have 25 minutes





# Thank you!

**Kati Berninger**

**kati.berninger@tyrskyconsulting.fi**

tyrskyconsulting.fi

Twitter: @tyrskyconsult



## RECAP DAY 1

✓REFLECTIONS  
✓INSPIRE  
✓SHARED  
LEARNINGS



Topics for tomorrow:

- SDG 14
- Biogas and gypsum treatment – solutions for reducing nutrients
- Treatments in agriculture - the arable lands, application of structural lime, gypsum, and wood fiber for reduction of nutrient load

We start at 9:00 here tomorrow – Now let's go to the restaurant.

Great work today!



