

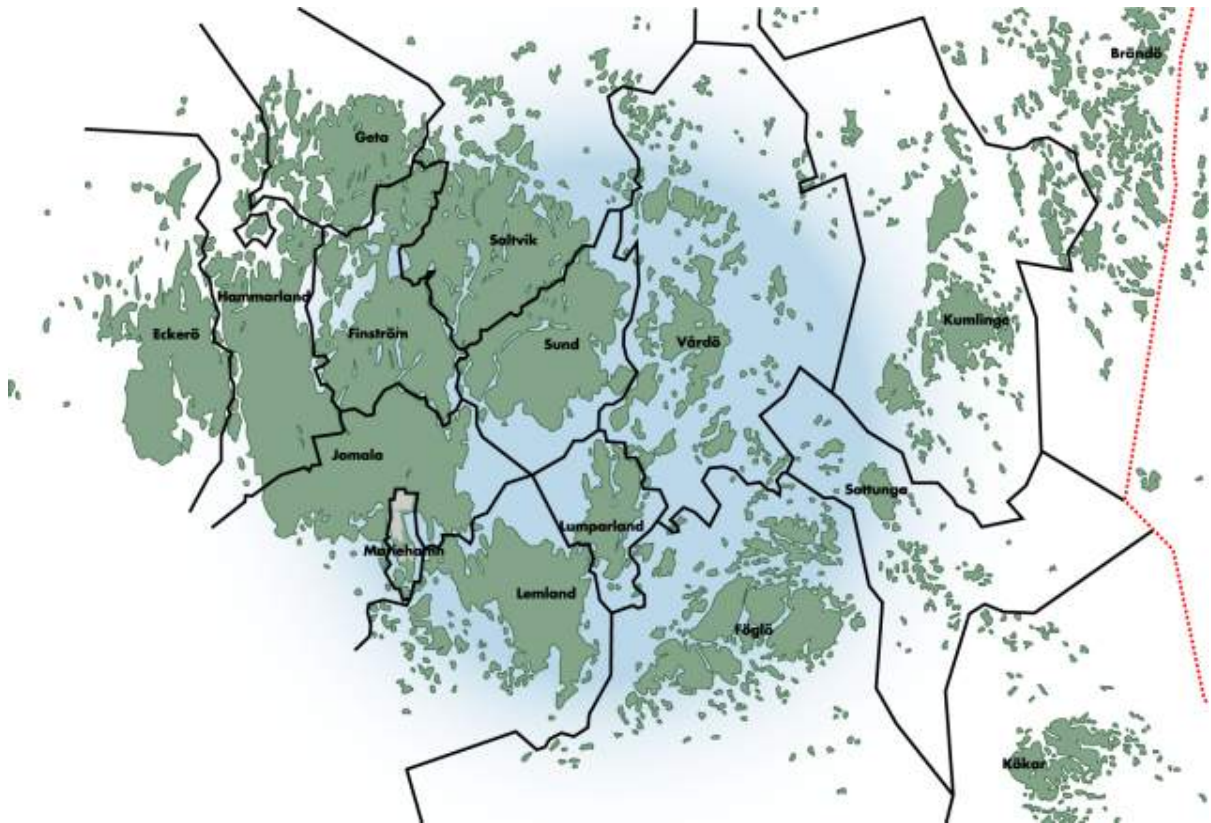
# Mussel farming as a complement to fish aquaculture in the BSR: case study Åland

Minister Carina Aaltonen, Åland Government

# The Åland Islands

- Swedish-speaking autonomy within Finland
- Own Government and Parliament
- Legislative competence
- The Minister of Environment responsible for the water legislation

Archipelago: 6,757 islands - of which  
60 are inhabited



# Aquaculture in the Åland islands

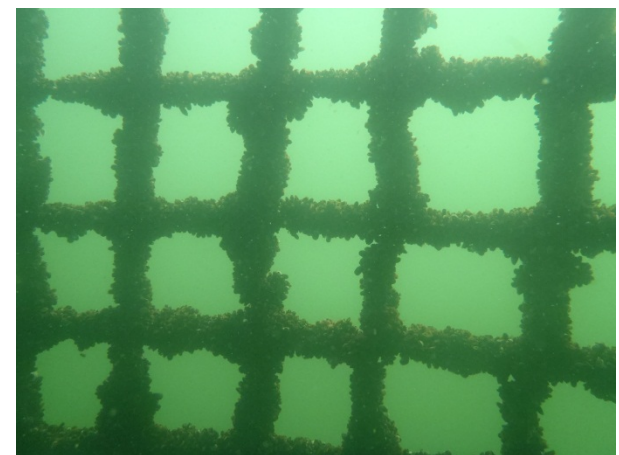
- Marine net cage farming since the 1970's
- Dominating species: rainbow trout
- Politically debated due to environmental impact
- New feature: mussel farming



# Pilot projects

- 2006-2008: small long-line units
- 2010-2014: larger scale, Smart Farm type
- Study of Åland physical and economical prerequisites

Financially supported by the  
Åland Government /the  
Fisheries Fund



## Pilot projects, contd.

- Aquabest – best aquaculture practices for the BSR 2012-2014:
  - Delivery of harvested mussels
  - Study of mussel farming technology in harsh winter conditions





# One commercial project

- Small-scale, long-line type including planned socking
- First commercial attempt, mussels settle summer 2013
- For human consumption: Åland delicacy mussels (local restaurants)
- Likely to receive support from the European Fisheries Fund



# Mussel farming in BSR: disadvantages

- Mussels very small with thin shells, due to low salt content → need for developing and adapting separate technologies
- Threat of pack ice in the winter
- Large investments for low yield → not economically feasible
- Long growing period: mussels need two growing seasons







## BSR Mussel farming: advantages

- Nutrient abatement
- Plenty of space with good water flow-through and enough shelter for farms
- Not harmful to the marine environment
- Integrated multi-trophic aquaculture with fish farms



# Financial possibilities

- The new EU maritime and fisheries fund
- Possibilities of nutrient trading in nutrient compensation schemes

→ Mussel farming, sometime in the future, would be profitable in itself.



## Use of Åland mussels

- Attempts at making "luxury garden compost"
- Main track: mussel meal, to be included in feed.
- If used in fish feed, it could close the nutrient loop within the Baltic Sea



## However...

- Research and development
- Large volumes needed



# The political perspective

- to contribute to a better water quality in the Åland area
- to fulfil to the requirements in the Water Framework Directive and the Marine Strategy Directive, and
- to contribute to the reduction targets of the HELCOM Baltic Sea Action Plan





## Conclusions for the BSR

- The first pilot attempts have been made
- Lessons have been learned
- Reduce nutrients and mussel meal to close the nutrient loop for fish feed
- South Baltic more suitable for mussel farming
- Åland happy to contribute to the development in the whole of the BSR

Thank you!

