Gulf of Finland Year 2014

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The vision of the Gulf of Finland Year – solutions for sustainable use of the sea

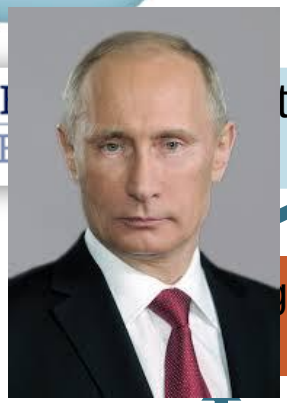
Gulf of Finland Year 2014

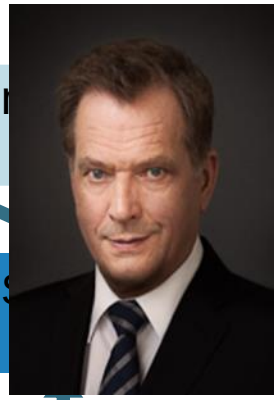
- An opportunity, to analyze the ecological status of the Gulf of Finland in detail by joint efforts of the three countries
- Active collaboration among scientists, decision-makers and the society
- Produces up-to-date research information to support ecosystem based decision making
- Various events and courses increasing public awareness

Gulf of Finland Year 2014 project organisation

Gulf of Finland Year 2014

SYKE





COUNCIL OF THE BALTIC SEA STATES

Public Council

RUS

EST

FIN

Network

HELCOM

OF THE BALTIC CITIES

GoF Year 2014 – additional practical value

- Collection of new scientific information
- Deepening of international co-operation
- Intensifies co-operation with cities
- Strenghtening of educational co-operation
- Increases the co-operative work with private sector
- Up-to-date information to decision making
- Intensified co-operation among administration
- Professional services available to all
- Media visibility

Activities during the Gulf of Finland Year 2014

Gulf of Finland Year 2014

- Active research - joint monitoring and research projects
- Scientific Forums in all three countries
- International events
- Events in cities
- Public events
- Working and interacting with the interest groups
- Courses and summer schools for pupils and students
- Tailored seminars to politicians, decision makers, reference groups and media
- **The Gulf of Finland Declaration**

The Gulf of Finland Declaration

Gulf of Finland Year 2014

- Concrete suggestions how to protect the Gulf of Finland and to implement its sustainable use

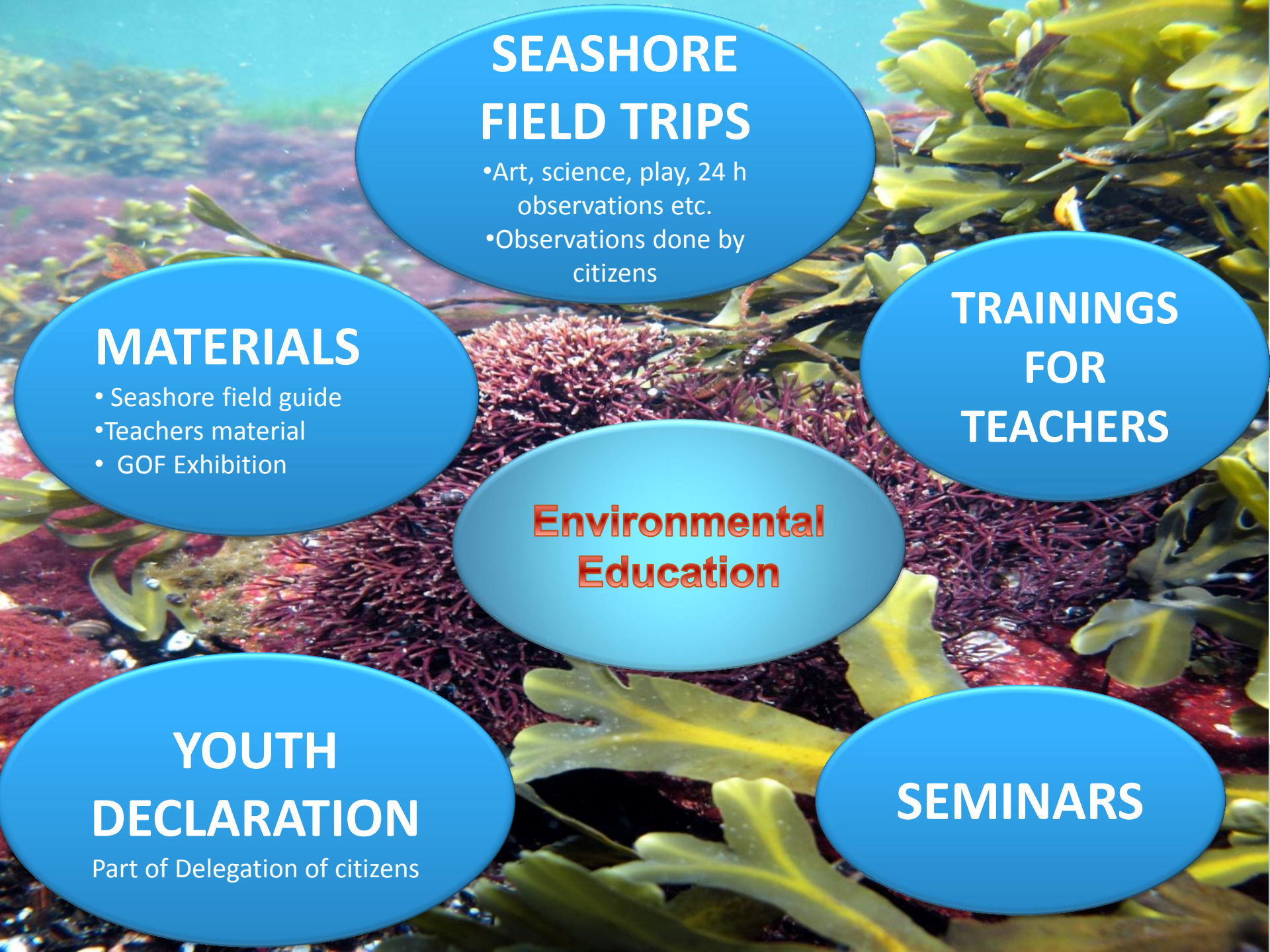
- Commit the three countries in a political level

- More co-operation in environmental policy in the region
- Youth declaration

Activity in 2015 relating to the Thematical Year:

Gulf of Finland Year 2014

- Seminars and public events: ”What can I do to protect the Gulf of Finland?”
- Seminars about the scientific information collected during the year
- Reports and recommendations to decision makers
- Scientific and popular publications
- Assessment of the state of the gulf


SEASHORE FIELD TRIPS
•Art, science, play, 24 h observations etc.
•Observations done by citizens
MATERIALS
• Seashore field guide
•Teachers material
• GOF Exhibition
TRAININGS FOR TEACHERS
Environmental Education
YOUTH DECLARATION
Part of Delegation of citizens
SEMINARS

Co-operation with the coastal cities

Gulf of Finland
Year 2014

Turku-Hanko-Helsinki-Kotka-Sankt-Petersburg-Tallinn

- Scientific and educational activities
- Tourism
- History (marine museums)
- Cultural events
- Regattas
- Ports
- Themed events
- Cruises,
  visiting research vessels

Events of the Gulf of Finland Year

Gulf of Finland Year 2014

- Opening Forum in Helsinki 21.1.2014
- The 5th International Forum Ecology in St Petersburg, 27.-28.2.2014
- Baltic Sea Day in St. Petersburg, 19-21.3.2014
- Council of the Baltic Sea States summit, Turku 1.-5.6.2014
- SuomiAreena, Pori, 17.7.2014
- Kotka Maritime Festival 24-27.7.2014
- Hamina Tattoo 29.7.-2.8.

Research

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- International co-operation, including HELCOM and scientists from all Baltic Sea countries
- Collation of existing data
- Data exchange among partners
- New co-operation possibilities
- New projects
- Information dissemination to experts, decision makers and general public

Research themes of the Thematical Year

Gulf of Finland Year 2014

Fish and fishery

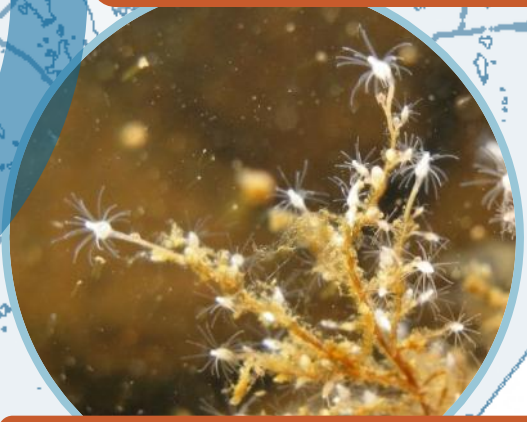
Climate change

MONITORING

Maritime Spatial Planning

Pollution and Ecosystem Health

Marine traffic safety



Bio- and geodiversity

Monitoring the state of the GoF

Gulf of Finland Year 2014

- An assessment of the current state of the GoF
  - Existing and new joint data on high resolution
  - Compatibility to previous HELCOM assessments
- Inter-calibration August 2013
  - FIN-RUS-EST cooperation
  - Water column parameters
- Production of new data 2014
- Recommendations on how to improve the state of the GoF

Biological and Geological Diversity

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- Environmental parameters influencing biota
- Distribution of key species, fish, birds and seals
- Invasive alien species
- New methods for data collection and analyses
- Map tool for the recognition of environmentally most valuable areas in the GoF

→ Background data for all other themes

Fish and fisheries

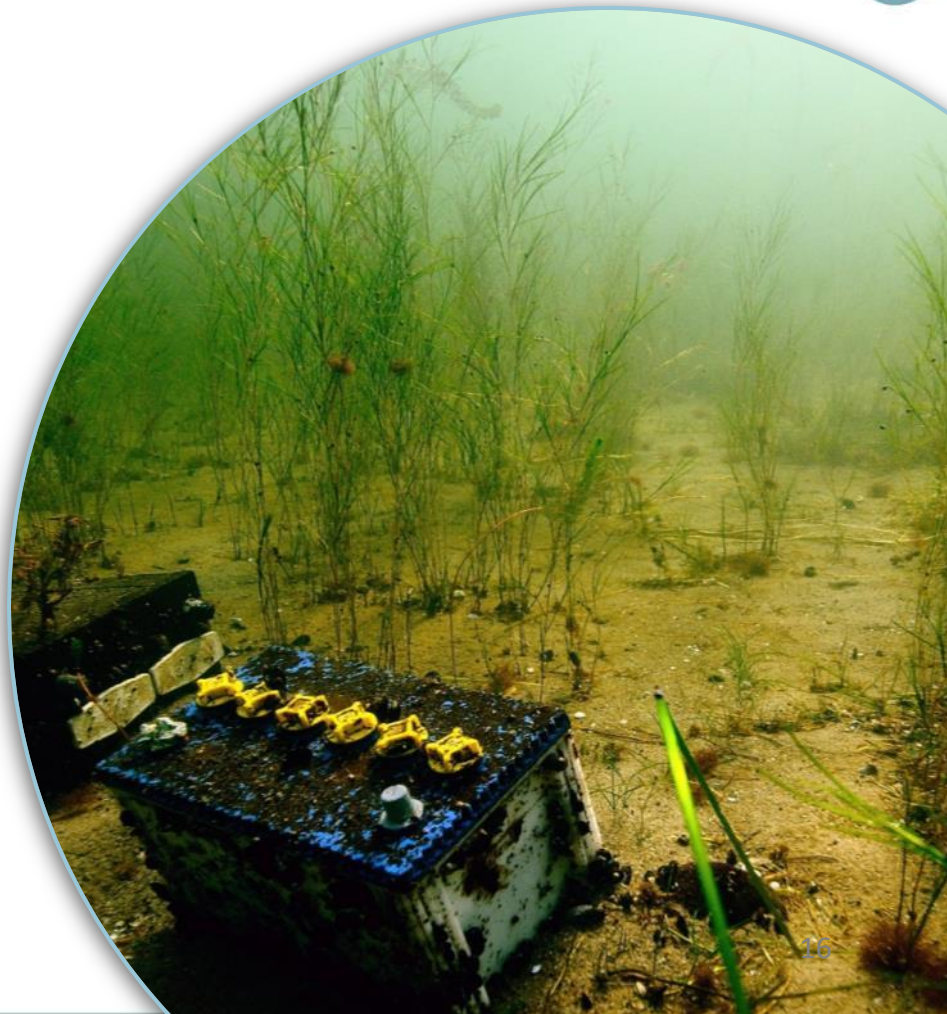
Gulf of Finland Year 2014

- Fish community changes and their causes
  - Long-term changes in community structure and species abundance
  - Changes in distribution patterns (especially on Baltic herring and sprat)
  - Acoustic surveys of Baltic herring, sprat and freshwaters fishes
  - New methods for assessing the state of the fish stocks (Bayesian models, SAM)
- Anthropogenic forcing
  - Environmental disturbance on fish populations
  - Assessment of coastal and commercial fish contamination with hazardous substances indicators)
  - Local physical disturbance, e.g., dredging and dumping of the dredged material
- Sustainable use of fish resources
  - Long-term changes and management of commercial stocks based on fish-catch statistics
  - Fishery research in the estuaries of the rivers running into the Gulf of Finland (mainly salmonds)
  - Development of indicators to describe the status of fish stocks and the status of the marine environment

Pollution and ecosystem health

Gulf of Finland Year 2014

- Distribution of hazardous substances
- Effects of hazardous substances on ecosystem health
- Development of indicators
- New research and monitoring methods



Maritime safety with a special focus on winter conditions

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- Development of next generation winter time traffic system
- Monitoring maritime activities and development of new practises to increase safety
- Winter maritime system description
- Navigational interactions among vessels
- Harmonization of ports
- Establishment of oil response and testing centre
- Development of training in ice condition operations
- Smart use of currents to minimize the consequences caused by marine

Maritime spatial planning

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- Pilot MSP for the whole GoF
- Geographical hotspots
- Unification of the background datasets
- Legislative and administrative differences/similarities in MSP
- Modeling existing/evolving conflicts in human activities in the GoF

Overarching themes

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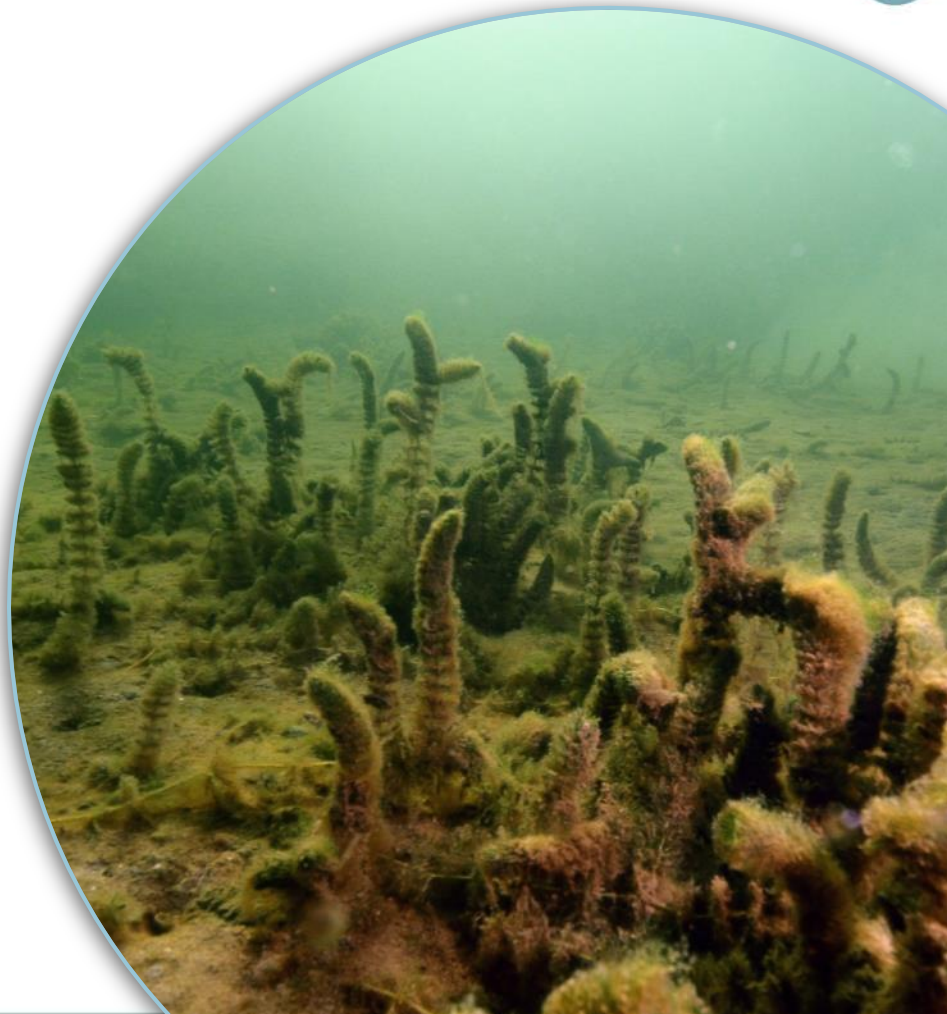
Eutrophication

- Main part of the status assessment
- Cooperation among IL RAS - HELCOM BASE – BSAG – Vodokanal in Russia
- Current eutrophication status of the GoF
- Identification of the most harmful human activities in the GoF catchment area
- Identification of the most important activities to prevent and remidiate the effects of eutrophication
- Effects of eutrophication in shallow coastal areas
- Modelling the long-term effects of nutrient load reductions

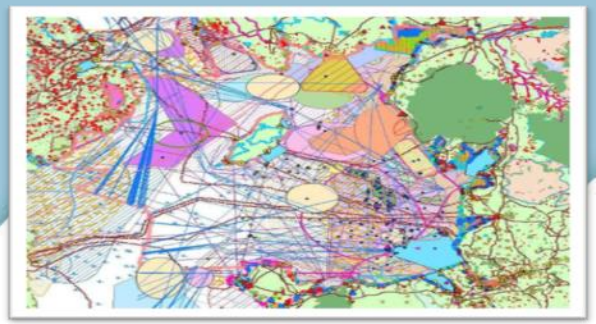
Climate change

Gulf of Finland Year 2014

- Effects of CC on the physical environment
- Effects of CC on biota
- Effects of CC on human activities in coastal and watershed areas



Results



Gulf of Finland Year 2014

- Assessment of the status of the GoF
- Policy briefs on selected topics
- A modeling exercise combining the environmental and socio-economic values ‘GoF Human Impact Index’
- Reports
- Scientific publications
- GoF Declaration

Updated scientific information of the status of the GoF ecosystem enables us to make the most cost-effective and well-targeted actions to stop the deterioration of the GOF and get support to these actions due to high political commitment to the work

As a results of this the GoF ecosystem is expected to be "clean ahead of time"

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