## **Groundwaters**

I Measures
II Ecosystems

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Janne Juvonen
Finnish Environment Institute
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### **Groundwater measures 1/3**

- There were different groups planning the measures for the second cycle
- One group was Groundwaters and contaminated soils
- We came up with a total of 36 groundwater related measures for the second cycle
  - 4 basic measures, 12 other basic measures and 20 supplementary measures
- The reason for large amount of basic and other basic measures is because in our view the measures that prevent contamination in advance are basic or other basic measures (WFD Art. 11(3)(d, j)
- The measures are divided under 13 different categories (sectors)



### **Groundwater measures 1/3**

- 1. Groundwater Protection plans
  - Drawing or updating the protection plan for GWBs
- 2. Monitoring and research
  - Joint monitoring in the GWB, expanding the monitoring, structure and flow modelling
- 3. Agriculture
  - Starting or expanding the monitoring of impacts, basic and supplementary measures to protect groundwater from agriculture impacts
- 4. Fur production
  - Assessment of groundwater impacts, restoration of soil and groundwater



#### **Groundwater measures 2/3**

### 5. Forestry

Preventing harmful impacts on groundwater from ditching

#### 6. Communities

Control of the state of sewer systems in GWB areas

#### 7. Traffic

 Constructing cover structures on trafic areas, deminishing de-icing or using optional de-icing substances, monitoring

### 8. Industry and other livelihoods

 Starting or expanding the monitoring of impacts, increase of supervision, permit consideration and updating the permits



#### **Groundwater measures 3/3**

#### 9. Peat production

 Preventing infiltration from peat production areas, starting or expanding monitoring

#### 10. Contaminated soils

Study of the degree of contamination, restoration measures

#### 11. Gravel extraction

 Restoration of old extraction sites, developing supervision, municipal planning of gravel extraction, monitoring, research projects

#### 12. Water abstraction

 Clarification of abstraction impacts, protection zones, more efficient raw water monitoring

#### 13. Climate change

 Preparation to extreme climate conditions in ground water protection and water works







## **Groundwater dependent ecosystems**

- Working Group C questionnaire:
   How has your country assessed if the GWDTE's were damaged and what criteria did you use to determine the magnitude of the damage; for example did /your country use a standard method of surveying GWDTE ecological quality?
- This has not been fully assessed. 85 GWB's are linked to Natura 2000 areas, of which 14 GWB's are at risk of failing to meet the objectives but GWDTE's were not found damaged. The status of the GWDTE's in these 14 GWB's has been more or less estimated by looking at the quantitative status of the GWB. Other criteria to evaluate the magnitude of the possible damage is lacking. The impacts to GWDTE's have to be assessed on the permit process (concerning mainly abstraction) before the permit can be granted.



# **Ecosystems in the next cycles**

- For the second cycle no new criteria is available for assessing the impacts from pressures to ground water dependent ecosystems
- How ever, there is a proposal to amend the legislation in a way, that the national classification of GWBs would take groundwater dependent ecosystems into account in the classification
  - The new classification should be implemented by 2019 and it would mean better knowledge of groundwater dependent ecosystems (and hopefully also their status) in the third cycle
  - The development of the guidance on the implementation will start this year
  - During this process it would be valuable to be in contact with other Nordic countries

