



Nordic WFD

Workshop

Hurdalssjøen Hotel

Program 29.—30September 2011

4th Nordic WFD workshop

Harmonisation and realisation of the WFD in the Nordic countries

This fourth workshop will include parallel sessions on different topics. In this way we will sort out where each country stands in the process and to define where we can benefit from a cooperative work, in definitions, in processes, by sharing tools and approaches to best fulfill the requirement in the WFD. This year we start with an open Nordic WFD conference, where we also have invited speakers from selected non-Nordic countries, and the following days we continue with two days of workshops.

This is the fourth WFD workshop, started at Brekstad (mid-Norway) in 2008. The discussion should be based on the summary of the [3rd Nordic WFD Workshop in Sigtuna](#) (2010). For each working group:

- Short status in each country, available national guidance, remaining challenges and new case studies
- Focus on further need for collaboration within working group topic

Working group leader is responsible for:

- Setting up workgroup session, with introduction talks etc
- Chair the session
- Prepare working group questions, and circulate this beforehand

Rapporteurs:

- Wrap up key messages from each presentation, discussion and whole session.
- Identify similarities, further need for harmonisation and remaining challenges.
- Circulate the minutes after the workshop and finalise this after comments from other participants.
- Make contribution to Nordic report on WFD implementation

All presentations together with minutes and key conclusions will be made available at the [Nordic WFD website](#)

In this document you find:

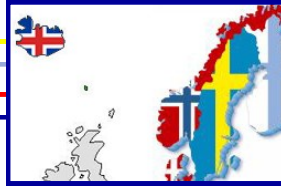
- A more detailed program for the working groups are given below.
- List of participants
- Practical information regarding Hurdalsjø and transport etc.



Harmonisation and realization of the WFD in the Nordic countries

Workshop overview. Details for each working group (WG) and session are given in the following pages.

Thursday 29. september			
Time	Plenary room + D	Room E	Room B and C
	WG 1. HMWB and hydro-power (J. Kling)		WG 2. Pressures (M. Larsson)
09:00	Session 1.1		Session 2.1
10:30	Coffee break		
10:50	Session 1.2		Session 2.2
12:00	12:00-13:00 Lunch		
13:00	Session 1.3 in subgroups		Session 2.3
14:30	Coffee break	Room E	Room G
15:00		WG 5. Monitoring (S. Sandøy)	WG 6. Modelling, GIS and ICT solutions (N. Holmgren)
	Session 1.4	Session 5.4	Session 6.4
16:00	Plenary – compiling results WG1 and WG 2		
16:40	16:40-17:00 Break		
	17:00-18:00 Afternoon session WG 4 and WG 6		
17:00	WG 4. Implementation of measures - general (L. Sorby)		
	Session 4.5		Session 6.5
18:00	18:00 End of workshop day 1		
18:30	Social program		
19:30	Dinner		
Friday 30. september			
	WG 7. Priority substances (B. Nordbø)	WG 5. Monitoring and classification (A. Pilke)	WG 6. Modelling, GIS and ICT solutions (N. Holmgren)
08:30	Session 7.6	Session 5.6	Session 6.6
10:00	Coffee break		
10:20	Session 7.7	Session 5.7	Session 6.7
11:30	Short break		
11:45	Session 8 - Summary of each session in plenary		
12:30	12:30 End of workshop and Lunch		
13:30	Bus transport to Oslo Airport Gardermoen		



Detailed program for working groups

WG 1 HMWB and hydropower- from 09:00 – 17:00

Moderator Johan Kling

Rapporteur: Inger Staubo, Kristinn Einarsson

Each presentation should be max 15 min. The WG aiming at discussing the Questions attached below.

Session 1.1 (09 – 10:30)

1. HMWB and hydropower in the Nordic countries – an overview by/Johan Kling.
2. National project on Hydropower and water management in Sweden by/Johan Kling, Vattenmyndigheterna

3 and 4. New tools and approaches to fullfill WFD requirements in HP affected waterbodies

- Austria by Karl Schwaiger, Austria
- Scotland by M. Wann, Scotland

Session 1.2 (10:50 – 12:00)

5. Any need for adjustments of HMWB guidances in Finland? By/A. Keto
6. Experiences from applying Multi-Criteria Decision Analysis (MCDA) in the evaluation of restoration alternatives in constructed and regulated water courses in Finland. Mika Marttunen, SYKE
7. Mitigation, compensation and restoration of habitats in rivers affected by HP - nature-like by-pass channels Auri Sarvilinna, SYKE
6. Status on handling HMWBs and HP Master planning on Iceland. By Kristinn Einarsson
7. Enhanced effort on implementing mitigation measure for improved water status in Norwegian regulated rivers by/ Roy Langåker, DN
8. CEDREN - R&D on ecodesign of hydropower and relevant results for WFD implementation by/Tor Haakon Bakken, SINTEF

Session 1.3 (13:00 – 16:00)

After lunch – split into two subgroups – case studies will be briefly presented and discussed

WG 1.2– WP 1+ 3. Designation and thresholds for HP – HMWBs. + HYMO alteration and ecological effects

Case studies

Moderator Johan Kling

WG 1.3 – WP 2+ 3. Relevant mitigation measures in Nordic WBs affected by HP + HYMO alteration and ecological effects

Case study

Moderator Jo H. Halleraker

16:00 – 16:4 Compiling summary from WG1—preparing for plenary

WG 1 - Questions for discussion on HMWBs

Question for group discussion on selected case studies on regulated rivers/lakes and relevant measures

Substantially changed in character

- How should we define significant hydromorphological impact in the specific case?
- What is needed to define irreversible impact in this case?
- How do we define the link between hydromorphological alteration and ecological status in the specific case?
- Who do we deal with cases when other pressures are superimposed on the hydropower impact (e.i. hydrological alteration)
- Who do we deal with accumulative pressures?

Identifying mitigations measures

- Who do we define significant impact on water use?
- Should the "water use" be defined on a specific case (e.g. a single hydro power station) or on this specific catchment or even on a national level?
- Which type of mitigation measures is relevant in the specific case? Measures in the plant itself, downstream and in the impoundment.
- How do we prioritise environmental measures in a catchment

Impact on water use

- How do we deal with accumulative effect on water use?
- Are there mitigation measures which could be carried out without impacting the water use?
- Are there possibilities to have different levels of GEP in a catchment depending of restoration potential, cost effectiveness of measures
- How do we deal with plants operated in a regulating system?

Impact on wider environment

- Are there possibilities to produce electricity on another location with less impact? What is needed to do this analysis?
- What happens if we decrease the production due to mitigation measures?
- Are there possibilities to increase in one plants in a water body in order to do mitigation measures in another water body with greater ecological potential?
- How do we define the threshold for impacting the wider environment?

Plant not in HMWB

- What is the level of impact on water use in hydro power in water bodies suggested to reach GES?
- Is removal of plants a possible option?
- Is there a lower limit for environmental improvement in hydro power plants in water bodies reaching GES? example: should have fish ladders or bypass channels, should have environmental flow etc.

WG 2 – Other significant pressures (other than HP or priority substances)

Moderator: Martin H. Larsson

Rapporteurs: Lennart Sorby, Vincent Westerberg,

Session 2.1 – 2.3 (09:00 – 14:30)

Each country present max 15 min on

- Status on Characterisation, classification of pressures, monitoring, measures - eutrophication, acidification ("all except hmo or priority substances")
- Short status in each country, available national guidance, remaining challenges and new case studies.
- Implementation of relevant measures to above pressures

Presentations by:

Markku Maunula, Finland

Heidrun Gudmundsdottir, Iceland

Hege Sangolt, Norway

Martin Larsson, Sweden

Subgroups until 16:00

Questions to group discussions WG 2:

WG2.2 Group 1 Monitoring as a measure for diffuse pollution

- a. How to estimate pollution from diffuse sources (agriculture and forest)? What tools do we have, operator self-monitoring (is it required, who is responsible for inspection, is inspection efficient,) recipient control, local monitoring (pollution control).
- b. Measures in PoM related to the enforcement system (e.g. self-control, inspection and permits). Current status and ways for improvement

Group 2 Significant pressure

What is significant pressure? How has it been defined and reported?

Would it be possible and desirable to get a common definition of significant pressures between the Nordic countries?

Point sources (IPPC, others)

Diffuse sources (agriculture, sewage from rural households, storm water...)

The relation between significant pressures and suggest measures in the PoM. Is it relevant to address specific measures to those appointed as significant pressures?

Group 3 Missing data, knowledge or methods

a.) What knowledge, data or methods are missing to describe the pressure so that:

stakeholders can be convinced to implement measures (e.g. doubts on reference criteria for nutrients?)

suggest the most cost-efficient measures

have as a basis for revision of permits, (i.e. legally reliable)

Pinpoint three important areas for development and where Nordic cooperation could be beneficial.

b.) How does the “polluter” know what and how much he should do to comply with the Water Framework Directive? What does he need to know? If not, who should inform her/him and how, (i.e. who is responsible for implementation of the Directive to reach GES)?

Plenary WG2 16:15-16:45

WG 5. 1 Monitoring – Thursday 29.09 at 15:00

Moderator: Steinar Sandøy

Rapporteur: Esa Koskenniemi, ELY-center

Selected persons from each country is invited to discussing the possibility of specific cooperation projects between the Nordic countries with the aim of improving the monitoring activities.

On the earlier meetings we have discussed the possibilities of a common Nordic (or Fenno-scandian) reference network. This is still of great interest, but we should be more specific on the future cooperation. Other relevant issues:

Monitoring/sampling methods .

Quality control of (biological) consultants and labs (ring tests, compulsory courses, common requirements in a Nordic consultant market).

Monitoring of international river basins.

WG6 – Day 1 (29.09 at 15:00) Modelling, GIS and ICT solutions

Moderator: Niklas Holmgren

Rapporteur: Hege Sangolt,

15.00 – 18.00: STATUS IN EACH COUNTRY INCLUDING LESSONS LEARNED FROM FIRST CYCLE

15.00 Norway - Vann-Nett, pre-processing of monitoring data, WFD Statistics

Hege Sangolt (NVE/Norwegian Directorate for Nature Management)

15.45 Finland – Hydro morphological models

Water level analysis tool for assessing the impacts of lake regulation

Experience with the DHRAM tool in Finland,

Teemi Ulvi, SYKE/

16.30 Iceland – IPA grant application IPA WFD/Flood directive

Jórunn Harðardóttir

17.00 Sweden - IT development and future plans – open user interfaces, models in use, standardisation

Niklas Holmgren (CA Södra Östersjön RBD)

Hydrological and nutrient modelling – S-HYPE including visualisation of results

Niclas Hjerdt and Fredrik Holmberg (SMHI)

17.45 Discussion

18.00 End of session – WG 6.2 continue on Friday morning

WG 4. Implementation of measures 17:00 – 18:00 - plenary

Moderator: Lennart Sorby

Rapporteur:

Each country gives a brief overview on

- Status for national status for implementation of measures for different significant pressures/sector.
- Summary of implementations of measures as discussed in WG 1 and 2 (by rapporteurs)

Overview of measure implementation in Finland by Teemu Ulvi, SYKE

Friday 30. September - Day 2 of the Nordic WFD Workshop

WG 5.2 Monitoring and ecological classification 08:30 – 11:30

Moderator: Petri Lijaniemi, Lapland ELY-center

Rapporteur: Esa Koskenniemi, ELY-center

08:30 – 10:00

15 min for each country on

Short summary of status of national classification systems in each of the Nordic countries.

What is in place (and intercalibrated)

What is in place (but not intercalibrated)

Plans for revision/updating or development of new methods

Norway: Hege Sangolt

Iceland: Sigurdur Gudjonsson

Finland: ?

Sweden: ?

10:00 Break

10:20-11:20 Classification of fish

Ola Hegge, County Governor of Oppland, Norway: A proposed approach to classification of inland fish in Norway.

Teppo Vehanen, RKTL, Finland: Short report from the intercalibration work on fish

Discussion

10:00-10:20 Coffee break

11:20-11:45 The Interreg project Enningdalselven. Report from a Swedish- Norwegian joint project. Bjørn Walseng, NINA, Norway.

11.30 End of session

11:45-12:30 Summary of work shop in plenary session

WG 6.2 – Day 2 Modelling, GIS and ICT solutions

Moderator: Niklas Holmgren

Rapporteur:

8.30 – 11.30: THEMATIC DISCUSSIONS – PROPOSALS OF NORDIC COOPERATION

8.30 Hydro morphological models

Experience with the DHRAM tool in Finland, + lakes...

Kat Manni/

Measures database, monitoring of implementation of programme of measures

Vincent Westberg

10.00 Break

10.20 Databases of measures – is a common Nordic database for measures feasible?

Ongoing work on a Norwegian measure database

Kristin Magnussen (SWECO)

The relevance of measures included in iwaterwiki.net

Inger Staubo (NVE)

11.00 Conclusions from WG6

11.30 End of session – summary in plenary

WG 7. Priority substances – Friday 08:30 – 11:30

Moderator Bård Nordbø

Rapporteur:

Status in each country (presentation from each country) <ul style="list-style-type: none">• Implementation EQS directive (2008/105/EC)/(2009/90EC)• National challenges in working with priority substances• Mixing zones• Measures for priority substances
River basin specific substances Included in national legislation? Which substances are prioritized? Criteria for prioritizing river basin specific substances.
Setting EQSes <ul style="list-style-type: none">• Setting national EQSes for sediment and biota• Experiences with the guidance on setting EQS• Need for Nordic cooperation on setting EQSes for sediment and biota
Monitoring sediment and biota vs. water monitoring of biota interpretation of “prey tissue”
Status on Commission proposal for new directive (review of P.S list)
Conclusions from WG7 - proposals, further need for cooperation? AOB
11.30 End of session

WG 8 – main conclusions and proposals from WGs – final plenary session

