PR reference
Glomma - No

Date: 15-17th March 2016

Report

RCA	**Glomma river Basin district** **Østfold County Authority, Norway**
RCA counterpart responsible for the PR	**Ms. Helene Gabestad** **E-mail: helenega@ostfoldfk.no** **Phone: +47 92 81 27 23**
Reviewing experts	**Vincent Westberg (fi)** **E-mail: vincent.westberg@ely-keskus.fi** **Phone: +358 295 027956** **Niklas Holmgren (swe)** **E-mail: Niklas.holmgren@lansstyrelsen.se** **Phone: +46 10 223 8473**

1. BACKGROUND INFORMATION and PR OVERALL OBJECTIVES

Glomma river Basin district requests an evaluation of the Programme of measures, see "expected results" for details. The Programme of measures are meant to be work tools for the local authorities and other relevant actors who are responsible for implementing the physical measures. The programme are also a means of communication with other relevant parties in the RBD. The programme are not subject to approval from the central authorities.

The overall objective of the peer review is to get feedback and advice on how to improve our work with the implementation of measures. We would also like to investigate the possibilities for further cooperation with other member states similar to the Glomma river Basin district, for instance through EU programmes, EEA Grants, or Norway Grants.

Glomma is the largest river in Norway. This Basin district includes half the counties and more than 100 municipalities, ranging from sparsely populated mountain regions, several national parks and important agricultural districts, to the capitol city of Oslo and surrounding densely populated area.

2. EXPECTED RESULTS

Expected results
What are the strength and weaknesses of the Programme of measures? How can it be improved?
Are the priorities clearly defined in the Programme of measures?
Are the Programme of measures and the water information system Vann-Nett well correlated?
How well do we implement WFD policies into physical measures?

3. NECESSARY DOCUMENTS FOR THE REVIEW

List of relevant documentation or sources to be delivered by the RCA (language)

Name	Description / Notice
▪ River Basin Management Plan	Available in Norwegian and English
▪ Programme of measures	Available in Norwegian and English
▪ Local appraisal of measures	Available in Norwegian

Websites		
Name	**Description/ Notice**	**Adress**
Vannportalen	All relevant documents are available here (in Norwegian)	www.vannportalen.no/Glomma
Vann-Nett	Water information system. Contains data on each waterbody.	www.vann-nett.no

4. DETAILED MISSIONS SCHEDULE

Date/ Hour	***Activities***	***Persons involved***	***Venue***	***Comments***
15.3 a.m.	Organising of the RBD Glomma. The process to RBD Plan and PoM	13	Sarpsborg	
15.3 p.m.	Regulated waters and hydropower	11	Oslo	
16.3 a.m.	Sewage and scattered dwellings, storm water, land use and harmful substances	16	Sarpsborg	
16.3 p.m.	State authorities, guidance and the planning process	10	Sarpsborg	
17.3 a.m.	Agriculture, measure planning and implementation, stakeholder involvement	13	Trögstad	
17.3 p.m.	Measures in practice, agriculture and restoration measures	13	Trögstad with surroundings	

5. OTHER INFORMATION FROM THE RCA

An overview over the local and regional experts who took part in the review process, was provided at every session.

The necessary translation of key documents was provided beforehand to the reviewing experts.

6. CONTACTS DETAILS

Principal local contacts met at the mission

Name	Occupation	E-mail
Tyra Risnes	Head of section	tyrris@ostfoldfk.no
Helene Gabestad	Advicer	helenegab@ostfoldfk.no
Maria Bislingen	Head of subdistrict Glomma Sør	Maria.Bislingen@rakkestad.kommune.no
Finn Grimsrud	Projectleader, subdistrict Haldenvassdraget	Finn.Helge.Grimsrud@ahk.no
Kristian Moseby	Projectleader, subdistrict Øyeren	Kristian.Moseby@nes-ak.kommune.no
Anita Borge	Projectleader, subdistrict PURA	Anita.Borge@as.kommune.no

7. PEER REVIEW REPORT

Public peer review reports are available on the project website www.aquacoope.org/peer.review/

1 - Conclusions and recommendations regarding the reviewed documentation;

2 - List of persons met during the mission & short summary of meeting content/results ;

3 – Proposal of follow up activities to be done by RCA as well as potential time schedule;

4 - List & upload of documents that could be usefully put on the project's website;

5 - Summary in 15 lines of the report to be included in the overall Peer Review project report

6- General recommendations derived from the exchange. These recommendations will be shared by the secretariat with the whole peer review community for a wider dissemination of the lessons learned of the peer review experience.

Annexes
- Documents prepared during and/or for the mission;
- Presentation(s) used during the mission;
- Useful web-links.

Expected results
What are the strength and weaknesses of the Programme of measures? How can it be improved?
Are the priorities clearly defined in the Programme of measures?
Are the Programme of measures and the water information system Vann-Nett well correlated?
How well do we implement WFD policies into physical measures?

1 - Conclusions and recommendations regarding the reviewed documentation in relation to the expected results provided by RCA

General remarks on the water management planning process in RBD Glomma and Norway

Findings:

Norway have, based on its general way of organizing the public sector, made an organization within WFD based on a bottom up approach aiming that the local competence and involvement is the key to reach good water status and fulfilling the other aims of the WFD. However, this can be challenging since the WFD is generally organized in the other direction with quite strict recommendations and rules of implementation. The confrontation area of these demands are the group of agencies (11) and ministries (8) that have strict rules to follow according to the legal demands of ESA and a broad range of demands from the local area where the practical implementation takes place.

The local level is organized on a sub-unit level (river basin sub district, vannområde - 110) and generally lead by project leaders. This level is very dependent on having the support of the local organizations with a political support from the municipalities, stakeholders and NGO:s. In Glomma, according to our findings, this works well.

The regional level based on the states mandate (county governor, fylkesmann) are mainly responsible for the characterization of the waterbodies (i.e. typologisation, classification) in the information system called Vann-Net but they also take part in coordination groups in different thematic areas (water power and regulation, agriculture and so on). This regional level (county governor, fylkesmann) was previously responsible for water management planning in the pilot phase at district level. The change of roles in 2010 gave the new RBD-managers a new structure that might need time to settle for a successful overall planning.

The regional level based on the county council (fylkeskommunen er vannregionmyndighet) have the main role of coordinating and aggregating information from vannområdene and maintaining the information channel from the national level.

The measures concerning surface waters are generally covering all polluting sectors identified in Glomma river basin district. However, the presentation is somewhat unclear and the measure groups (in the plan itself and in Vann-Net) are partly overlapping which makes it difficult to get a broad perspective of the measures planned. Ground water characterization and measures for ground water are scarce but that depends mainly on that only 15% of the drinking water in Norway is from groundwater. However, there might still be a need to emphasize this on a regional level in the coming cycle and to develop the risk assessment of the ground water reserves in the district.

Strengths in the planning process and the program of measures (PoM)
The planning process behind the PoM in Glomma (and in Norway in general) is based on a strong bottom up approach underlining the local and regional competence and involvement. In our findings this is one of the main strengths of the planning structure. There is generally a strong commitment on local scale to fulfill the aims of the WFD and this is visible in the PoM in several ways of which the most prominent is the approach with 12 sub districts.

+ Clearly written and easy to comprehend
+ A political commitment to work with the measures from local and regional level
+ The process of prioritization of heavily modified water bodies for water power have been very successful
+ Measures regarding sewage treatment in rural areas (scattered dwellings) seem to be a result from good and stable planning processes from which other countries can learn
+ The measures planned have a great support from the local level

Recommendations for the planning cycle 2022-2027:

The yearly follow up/recording of the measure implementation is conducted in a way where several of the River Basin District (RBD) authorities (vannregionmyndighet) asks all responsible sector authorities to report progress in measure implementation back to them in different ways (both by content and by format). We suggest a process organized through either RBD (vannregionmyndighet) or Ministry (miljödirektoratet) to streamline the follow up process both in content and format.
At the moment the local appraisal of measures (local tiltaksanalys) is not well correlated with the content in Vann-Nett. This is a problem since not all of sub unit plans are easily available on Vannportalen.
Since the recording of the implementation of the measures are different in-between the sub districts (vannområde) it is difficult to get an overall picture of the implementation on sub district (vannområde) or RBD scale. Our recommendations regarding these are:

- Vann-Nett should be more operational on the local level for the politicians and officers. Exports and interfaces containing the measures proposed should be easily found and understood by the sector authorities both for single measures and aggregated on different geographical scales.
- Measures in Vann-Nett (as well as PoM:s and RBDMP:s) should be aggregated and grouped in a logical way so that they can be analyzed on their impact on i) ecological status and ii) sector (i.e. i) measures by impact: measures on eutrophication, measures on harmful substances, measures on ecological flow ii) measures by sector: agriculture, scattered dwellings, point sources…). This way of using a strict measure library supports an easy and streamlined planning process and recording of measures linked to key type measures (KTM).
- The national level needs to prioritize to produce planning guidelines regarding cost benefit, cost efficiency and exemptions. When preparing the guidelines the involvement of the sector authorities is a benefit, especially regarding guidelines on measures. The local/regional level are in a key position in implementing the guidelines why the involvement of some of these are important. A pre requisite for the guides are that they follow the guidelines from ESA to be able to follow the European commonly agreed structure.

- Remember to document and use measures already being conducted for better water quality in the water management plans such as liming activities, agriculture funding's (RMP), funds for water issues (SMIL), contaminated soils and sediments, agricultural advice and more.

National guidelines are delivered late and sometimes after the work have been done on RBD level. This is and has been a common problem in other countries as well, especially during the first planning period, and the solutions to this can be:

- Order a report which analyzes the process of some finished guidelines and why they are delayed or not.
- Analyze the experiences from the pilot phase of the implementation to fill the demands and timing of national guidelines.
- Make a long time plan regarding deadlines for national guidelines and do a prioritization on which ones are most crucial for different key processes. Make sure that the interests of the regional and local level are met.
- Include the RBD-level in the writing/updating process of the national guidance and do so well in advance before they are needed.

The involvement of multiple sectors and planning levels in planning and executing measures is a common challenge in WFD implementing countries. The lack of commitment to the process can severely harm the implementation of important measures. We find that solutions to this can be to:

- Involve the Programme of measures on all other plans at local, regional and national levels. Consider if some parts should be used in the Master plans (Hovedplaner)
- To increase the ownership of the water issues, try to explain ecological and chemical status in terms of value for other sources of water use and interests such as bathing, boating, fishing, natural landscape and scenery, biodiversity and touristic value. To be able to reach economic support this have to be converted into monetary value to be able to compete with other demands within the public and private sector.
- A strong coordination between the RBD:s supports an overall common implementation in Norway. In our opinion this coordination should be on a horizontal level between the water districts. Enough timely resources should be reserved for common discussions and analyses.
- Divide the measures into basic measures and supplementary measures and present them in this way to public and sector authorities. We think that by emphasizing the need for supplementary measures on top of the basic measures stated in the plan, the support for water management measures can be clearly increased among stakeholders and sector authorities. This supports also the process of estimating the costs of reaching good ecological status by legally binding measures and supplementing voluntary measures

For implementing measures stepwise to reach environmental objectives you need to prioritize the measures on the basis of importance and feasibility. The PoM handles the priority of measures internally within some of the sectors. In our opinion the priority of measures in the PoM is not fully developed to function as a basis for choosing what measures to implement and in what order between sectors. We find that the solutions to this could be the following:

- A feasibility study of the measures could be made based on supplementary measures (or at least "extra" measures needed after measures bound by Norwegian law are implemented) in order to make it possible to elaborate a priority between sectors.

- A grouping of multi sectoral measures on the basis of geographical area, or type of pressure to combat, could help to gain momentum in measure implementation and priority.
- Build and analyze measure scenarios for reaching the environmental objectives as an aid for priority and commitment to measure implementation i.e.: H0; Business as usual (only basic measures implemented), H1; All possible measures (including decrease of agricultural production and hydropower), H2; Feasible measures (economically and politically).
- Analyze the costs of the gap between need of measures and ecological status and address this information to decision makers together with a possible scenario presentation (point above)

The methods for characterization of water bodies and analyses of measure impact and exemptions are not thoroughly described in the PoM. However during the mission we could briefly acquaint us with the procedures. Some statements and results from these processes are in a key position in water management planning and to smoothen up the process we find the following:

- Delineations of waterbodies have resulted in a more detailed levels of water bodies than in Sweden and Finland. In the coming cycle more guidelines on grouping of water bodies would be helpful especially aiming at making it easier to manage measures.
- Fish is not used widely as a quality element in ecological classification in fresh water. In Sweden and Finland fish is commonly used and considered as a pretty correct indicator taking into account noncommercial species. Consider making guidelines for classifications of fish in fresh water and use the knowledge available in the Scandinavian countries.
- The data used for ecological classification is not covered by detail in the PoM, however it is stated as a measure to develop the monitoring for future classification processes. One way of indicating the used data for classification of water bodies is to present a map of classification levels (different colors/attributes for different level: no classification, simulated class, water quality data, partly ecological data, full ecological data)
- Drainage area boundaries should be assessed/calculated for all water bodies since that is basic information regarding pressures and measures.
- Cost benefit analysis of measures and cross sectors is missing but can be useful to be able to see the cheapest ways to not only implement measures but to reach good ecological status. Agricultural measures can be many times more cost effective than measures in other sectors. This can of course change with the level of funding from the state/government and should be taken into account.
- The process to identify Heavily Modified water bodies regarding water power and regulation have been successful and it might be useful to adopt the approach used within other sector areas. A remark is that the municipalities where not very active in this process but in all cases it might not be needed if the beneficiaries and sufferers are involved
- The use of national modelling in support of the work done at regional and local level could be supported further instead of scarce and different model approaches. A national approach is not only cheaper, it also streamlines the processes better whether the issue is classification or measure planning/evaluation.
- In the PoM there seems to be missing links in the chain of water management (ecological status – human impact/pressure analysis – risk assessment – environmental objectives – nutrient load reduction need – measures – exemptions). Whereas the ecological status, pressures, objectives, measures and exemptions are described in the PoM, less attention is pointed to risk assessment (partly) and nutrient

load reduction needs. To be able to designate measures to waters to maintain their good ecological status it would be to advantage to assess the risk of deterioration of waters and use this assessment as a lever for measure implementation. A proper assessment of the nutrient reduction need seems also to be missing from the PoM (might be included in the background material). However, this information is available in the local appraisal of measures (tiltaksanalysene) an aggregation of this is expected to be found in the regional PoM.

- The use of exemptions seems at this brief analyze a bit vague and the process of naming the water bodies with exemptions does not seem to be supported by a clear logical structure. Our opinion is that exemptions using lowered environmental goals is not the best way of utilizing the possibilities but that extended time limits should be used. Also then it must be quite well substantiated with explanations on water body level. The exemptions must be supported by pressure analysis, analysis on measures proposed versus measures needed to reach good ecological status. We indeed support the use of the schematic explanations for exemptions proposed in the CIS guidance.
- Regarding the pressure analysis and ecological/chemical classification there is a need to take a general approach regarding toxic substances in water. Especially the diffuse outlets from households and storm water could be assessed.
- A rigid measure library set up sector by sector with unit costs on investments and maintenance and with indicative environmental impacts is laborious to build and requires stakeholder and sector authority involvement on multiple levels. However after setting up a measure library like this it is possibility to calculate the cost, benefits and feasibility of single measures, sector groups and measure scenarios. We highly support the planning process to be driven to this direction in Norway.

Proposals

- Rename the project leaders at the Sub-Unit level (sub district, vannområde) to coordinators since there work is a long time obligation.
- Make a standardized water type for clay watercourses (leirvassdrag) and avoid using this partly natural feature as a reason for exemptions for environmental objectives.
- When setting the structure of the RBMP and PoM, try to use the structure proposed in the EU Guidelines and avoid repeating the same information in the documents.
- Consider making a shorter version of the PoM which appeals more to the general public and attracts readers to the topic.
- Replace the word sector authority (sektorsmyndighet) with authority responsible for measures (tiltaksansvarlig) to highlight their responsibility
- A hierarchical measures library is central for the planning of measures and other processes – consider having an organization/structure with ownership for the library based on all involved sectors. Consider structuring the library by polluting sectors and by pressure on water.
- The structure and assessments of Key Types of Measures with indicators and pressure indicators at corresponding time scales can be used at national, district and local level to follow the implementation process for all involved.
- The need for measures for forestry seems to be underestimated and forestry measures should be identified and designated to waters under pressure.
- Consider dividing the measures into basic and supplementary measures to fulfill EU-reporting guidelines and to easier justify measure needs for measure responsible authorities
- Vann-Nett doesn't have functionality for keeping track of versions of classifications. Users have discovered that the classifications have been over written by other users

which causes frustration. Investigate a way of handling history of classifications (and other actions) in Vann-Nett.

2 - List of persons met during the mission & short summary of meeting content/results;

List of persons :

Østfold county counsil (River Basin District Authority) : Johan Edvard Grimstad, Tyra Risnes, Helene Gabestad
Oppland county counsil : Morten Aas
County Governor Østfold : Håvard Hornnæs, Svein Skøyen
County Governor Oppland : Ola Hegge
County Governor Oslo og Akershus : Simon Haraldsen

Sub distrist Øyeren : Project leader Kristian Moseby
Sub distrist Haldenvassdraget : Project leader Finn Grimsrud
Sub distrist PURA : Project leader Anita Borge
Sub distrist Glomma Sør : Head of sub district Maria Bislingen
Sub distrist Mjøsa : Project leader Odd Henning Stuen

Norwegian Water Recourses and Energy Directorate : Ingrid Haug
Norwegian Environment Agency : Anders Iversen, Helga Gunnarsdottir
Norwegian Water Recourses and Energy Directorate : Lars Stalsberg
Norwegian Public Roads Administration : Ola Rosing Eide

Spydeberg municipality : Synne Lømo
Trøgstad municipality : Marit Haakaas
Trøgstad municipality : Johannes Martin Eriksen
Marker municipality : Karl Martin Møgedal
Nesodden municipality : Wenche Dørum
Oppegård municipality : Stig Bell
Nes municipality : Leiv Knutson
Sørum municipality : Torunn Hoel

Driftsassistansen Østfold : Tor Gunnar Jantsch
Norway Hunters and Anglers : Ole Håkon Heier
Østfold Farmers Association : Ole Magnus Lillestrand
Forum for natur- og friluftsliv : Ole Morten Fossli
SABIMA: Åsa Renman
Glommen og Lågen Brukseierforening : Torbjørn Østdal

Norwegian Institute for Water Research : Frode Sundnes, Line Barkved

3 – Proposal of follow up activities to be done by RCA as well as potential time schedule;

See recommendations in point 7.1. This peer review process is aimed to develop the planning process by the RCA in the incoming water management cycle.

4 - List & upload of documents that could be usefully put on the project's website;

Links to Vannportalen and Vann-Nett.

5 - Summary in 15 lines of the report to be included in the overall Peer Review project report

According to the expected results from the RCA the review focused on the Programme of measures: how it can be improved generally, if the priorities are clearly defined in the Programme and if the information in the Programmes are well coordinated with the water information system Vann-Nett. Furthermore the review focused on how well the WFD policies are implemented into physical measures. Additionally to this the reviewing experts briefly assessed the water management planning system of the RCA and in Norway in general.

For all issues general findings were noted including strengths of the current issue and recommendations on further development, as well as general proposals for the upcoming planning period.

The review was conducted in an open atmosphere with lively discussions thanks to the broad participation from the RCA. The review discussions were found fruitful for the reviewing experts and several topics for joint projects or assessments were identified for the Nordic countries especially.

The review mission took place during three working days, including a half day for a field excursion. For the reviewing group the mission also included preparation, travelling, webinars and back reporting. In summary it took roughly 20 man days to fulfil the peer review for the reviewing experts.

6- General recommendations derived from the exchange. These recommendations will be shared by the secretariat with the whole peer review community for a wider dissemination of the lessons learned of the peer review experience.

The Peer Review process is an excellent way for self-evaluation concerning WFD-planning throughout Europe. The strengths in the process lies in the fact that the reviews are made by RBD-planners and managers reviewing each other. This gives the RCA and the reviewing experts a good opportunity for networking for further needs as the learning process goes both ways. In our opinion this horizontal approach has only benefits.

In our opinion the mission itself was successful and the information gained beforehand from the RCA was excellent and in good time. The process from applying for review and the actual review was however quite long and some elements of the process seems a bit too formal and fixed. Little information is also available about the other Peer Review processes going on at the same time across Europe that could function as reference or inspiration. The future use of all the information gathered is also a bit vague. We support the informal use of the gathered information to improve the water management processes across Europe.

7- Other aspects: what can Finland and Sweden learn from this process

- Cooperation with Norway on Sub-Unit level (sub district, vannområde) on how the local process and round table discussions leads to physical measures
- The process for prioritization of Heavily modified water bodies in-between stakeholders, NGO:s and public sector.

- The organisation of sub districts (vannområde) to reach the local participation.
- The process of designating heavily modified water bodies in coastal waters
- The strong commitment on local scale (municipalities)

Annexes

- The programme for the days including participants.