

Implementation of the Water Framework Directive in Denmark – a status.

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The water planning process is in general delayed in Denmark. A public consultation was finalized in April 2011 with more than 4000 comments, proposals etc. At this moment the Danish water authorities are dealing with this huge number of protests etc. and making the necessary adjustments of the River Basin Management Plans (RBMP).

The necessary reduction in nutrient load and improvement in e.g. physical status of rivers was decided in a political agreement I 2009 – “Green Growth”. One of the aims of this agreement was to ensure the fulfillment of the requirements in the WFD. The main environmental objectives of the this political agreement were

A reduction in the nitrogen load from agriculture to coastal areas of 19.000 ton N (app. 30 % of the actual total load and a bit more based on the actual load from agriculture).

A reduction of the phosphorus load from agriculture with 210 ton P

Improved physical status of 7.300 km. river (app. 25 % of the rivers included in the planning)

Nitrogen.

The calculated reduction in N-load is mainly based on one biological indicator – the depth limit of eelgrass (a marine flower plant).

The reduction in nitrogen load should be obtained in two ways (nearly equal in size) 1) by specific measures and 2) by a fixing of quotas and a free market for buying/selling of nitrogen. In a later political process, the question of how to implement a reduction via quotas was placed in a commission, which is still working!

So the first generation of draft RBMP only contains specific measures with an effect of app. 9.000 ton N.

The reduction of N from agriculture in the draft RBMPs were based on a fixed set of measures (a catalogue of measures) divided in general (i.e. valid for all farmers irrespective of the need for reduction in the coastal area) like

Buffer zones

Catch crops instead of winter crops

No soil preparation in the autumn

and targeted measures (only implemented in catchments where a need for reduction is documented) like

Wet lands

Targeted use of catch crops

General measures accounts for app. 2/3 of the total N-reduction – targeted measures for the remaining 1/3.

A calculated effect (in kgN/ha) of the particular general measure (and the cost) in the surface water (nearest river/lake) is presented in the catalogue of measures, so the same resulting effect in surface water is used in all 23 sub basin plans.

Phosphorus.

Only two measures are available for the water authorities to reduce the P-load from agriculture, buffer zones (general) and temporarily flooded riparian areas (targeted).

Public discussion of the draft RBMPs:

Many of the issues in the draft RBMPs has been subject to public (and to some degree among politicians) discussion like

The political decided reduction of 19.000 ton N (the impact on Danish/regional agriculture of a nearly 30 % reduction of the load = use of nutrients)

Use of ellgrass as an indicator – has not yet responded significantly on a 50 % reduction in N-load from 1990-2010.

Stop or change in river maintenance – risk of increased ground water level or even flooded valleys (especially triggered by a very rainy summer 2011)

Use of the term Heavily Modified Water Body for rivers – and the difference in number compared to the northern Germany.

The quality of the monitoring data used for calculation of load, status assessment etc. – especially the use of older data from e.g. 2005-06 to represent the situation in 2010-11.

The discussions have mainly been concentrated on the surface water area and not so much on ground water.

As the agricultural sector is in focus as a “source”, they have been very active in the debate during the last year.

Denmark had an election for the Parliament some weeks ago and a shift in political regime. What the impact from this change will be on the coming planning process (both in time and content) is not possible to assess at the time, when this abstract was produced.