



IMPLEMENTATION OF THE EUROPEAN WATER FRAMEWORK DIRECTIVE

COMPARISON OF THREE RIVER BASINS IN LITHUANIA, POLAND AND SWEDEN

The primary aim of this study was to compare measures introduced as a result of the European Water Framework Directive (2000/60/EC). Furthermore, the intention was to provide a picture of the work on environmental protection of waters in Lithuania, Poland and Sweden, in order to increase understanding and exchange between project partners. Three pilot project areas of the MOMENT project were studied: Akmena-Dane in Lituania, Bauda in Poland and Bräkneån river in Sweden. The comparison addresses conditions in the water management plans and programmes of measures for years 2009-2015.

The basic requirement by the Water Frame Directive is to achieve good ecological and chemical status by year 2015. The ecological status of water bodies is assessed to one of five classes; high, good, moderate, poor and bad status. The chemical status (concerning hazardous substances) is assessed to one of two classes; good or bad status.

Many ecological variables are used to determine ecological status. In this study we studied limits for nutrient content. For rivers, Sweden has status limits only for the parameter total phosphorus (P_{tot}) while Lithuania and Poland have status limits for several additional parameters (N_{tot} , NH_4 -N, NO_3 -N, O_2 , BOD), although

the Swedish monitoring programmes include these parameters.

The programmes of measures are established to reach good status in water bodies by 2015. All three countries planned a set of general measures, such as developing legal acts, enforcement of legislation, studies to improve knowledge on water status and human impact. In addition to this, Lithuania and Poland planned a set of specific measures identifying individual water bodies or individual pollution plants/activities. The formulation of the specific measures needed to achieve good status is a very important step to make the planned measures come through.

use limits based on differing setup of monitoring data; 3-year averages, annual averages, or annual maximum concentration or the 90-percentile. There are significant differences between limits for good status in the three counties, and a deeper investigation is required to determine whether observed differences are explained by differing natural background levels or the setup of monitoring data. The assessment of chemical status is similar in the three countries and limits for good status are identical.

Comparisons are difficult since the countries

The Water management plans include a risk assessment for not reaching good status by year 2015. The comparison shows that the three countries have developed risk assessment criteria based on completely different assumptions. It is clear that the number of water bodies at risk for not reaching good status 2015 can not be compared between countries.

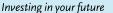
Significant differences were observed in several aspects. The water frame directive stretches over a vast field and conditions in various respects of water management are inter-correlated. There is a large variability in the national systems employed in response to the Water Framework Directive. This makes it difficult to perform comparisons of separate segments of the water management system.



Corine land use Akmena-Dane Pilot Area

In cooperation between seven regions in four countries around the South Baltic Sea area the project MOMENT aims at reducing the outflow of nutrients and hazardous substances by modern water management. This includes the establishment of Water User Partnerships allowing a "bottom up" approach starting at a local level and working within river basins letting the water set its own independent boarders. The project is co-financed by the South Baltic cross-border programme 2007-2013 and runs from September 2009 until August 2012.









Authors Valdas Langas, Cecilia Näslund and Kinga Skuza on field trip in Bräkneån river basin, April 2011.

QUOTES FROM THE AUTHORS

Is the actual implementation not more important than a difference in implementation?

CECILIA NÄSLUND: All EU-countries are obliged to follow the directive, and I think it is very interesting to see how the directive is implemented in various countries. Many people I meet are somewhat sceptical towards EU-directives, and a common opinion is that the implementation is more rigorous in Sweden in comparison to in other countries. The results from this study do not support that opinion.

How do the differences in criteria for risk assessment of not reaching a good status influences the implementation of actual measures and thus the improvement of the status by 2015? What countries do you think benefit the most in the long term with their methodology for risk assessment?

VALDAS LANGAS: Despite the differences in criteria for risk assessment and the programs of measures, the overall effect in reduction of pollution and improvement of the quality of water bodies will be positive. The formulation of the specific measures needed to achieve good status is an important step the planned measures to be implemented. However, the required financial resources should be also ensured for that purpose. Funding source for the supplementary measures is not yet clear in Lithuania.

UPCOMING EVENTS IN THE PROJECT

- 21st of May: Steering Committee meeting
- 22nd-23rd of May: Dissemination seminair in Kaliningrad
- 24th of May: ERB Water Core Group meeting in Kaliningrad
- 1st of June: Water conference in pilot area of Torsås, info www.torsas.se/vattensamling2012

TIPS AND LINKS

 Do you need inspiration on solving combined environmental and legislative problems with innovative and positive solutions, we recommend you to watch this video:

http://www.ted.com/talks/rob_ harmon_how_the_market_can_ keep_streams_flowing.html

 Interesting data on discharge, nitrogen and phosphorous in large scale basin level:

http://balt-hypeweb.smhi.se/

 More information and inspiration about current hot issues, meetings and workshops held at the European level:

http://circa.europa.eu/Public/ irc/env/wfd/library?l=/framework_directive/implementation_ conventio&vm=detailed&sb=Title