Transboundary pollution to the Baltic Sea

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Kaj Forsius
Professional Secretary
HELCOM
HELCOM

• Helsinki Commission (HELCOM)
  – Governing body of the Convention on the Protection of the Marine Environment of the Baltic Sea Area
  – Major body of the international environmental cooperation in the Baltic region

• Main task: to protect the marine environment of the Baltic Sea from all sources of pollution

• 10 Contracting Parties (9 Baltic Sea Coastal States and the European Community)

• Ukraine and Belarus as Observes States

• International co-operation since 1974 (new Convention signed in 1992)
HELCOM

• Expert level
  • Groups MONAS, HABITAT, LAND, MARITIME, RESPONSE regularly 1-2 times a year
  • Projects specific tasks, limited lifetime
  • Expert working groups specific tasks, limited lifetime

• Political level
  • Heads of Delegation 2-3 meetings a year
  • Helsinki Commission once a year
  • Ministerial Meetings every 3-4 years
HELCOM's role in the Baltic

- HELCOM is the environmental focal point for the Baltic Sea
- HELCOM regularly produces targeted, timely and scientifically sound assessments

Based on this:
- HELCOM acts as the environmental policy maker developing common objectives and actions
Key areas of concern

- Eutrophication
- Hazardous substances
- Destruction of habitats and biodiversity
- Maritime activities
Cooperation with non-Contracting Parties

• Enhanced cooperation important
• Baltic Sea Action Plan
• Joint Comprehensive Action Programme 1992
  – 132 most polluting objects/sites identified in the Baltic Sea catchment
  – Programme duration - 20 years
• 3 hot spots in Belarus
• 1 Ukraine (Lviv, municipal waste water)
• 3 Czech Republic
• Workshop in Lviv 2002
Pollution load compilations

Annual reports
Comprehensive reports every 5 years

- Phosphorus
- Nitrogen

- Agriculture – polluter No 1
- Transboundary pollution significant
Phosphorus

Denmark: 1490 t
Germany: 1200 t
Sweden: 6550 t
Finland: 6790 t
Poland: 18730 t
Russia: 2540 t
Estonia: 1370 t
Latvia: 1470 t
Lithuania: 780 t
Airborne nitrogen loads

- Germany 20%
- Denmark 8%
- Poland 13%
- Sweden 6%
- Russia 3%
- Ships 6%
- Finland 3%
- Estonia 1%
- Latvia 1%
- Lithuania 1%
- Distant sources 38%
Progress in cutting nutrient loads

- Good progress in industries and municipalities will continue
- Less progress in agriculture
- Long time lag before reduction measures can be seen in losses
- Losses expected to increase after EU enlargement
### Load from upstream countries in tonnes/year at the border

<table>
<thead>
<tr>
<th></th>
<th>BY</th>
<th>UKR</th>
<th>Czech Republic</th>
<th>Total load from upstream</th>
<th>Total to the Baltic Sea</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>40153</td>
<td>5307</td>
<td>9063</td>
<td>54523</td>
<td>744867</td>
<td>7 %</td>
</tr>
<tr>
<td>P</td>
<td>1895</td>
<td>311</td>
<td>509</td>
<td>2715</td>
<td>34489</td>
<td>8 %</td>
</tr>
<tr>
<td>Cd</td>
<td>0,74</td>
<td>3,8</td>
<td>3</td>
<td>7,5</td>
<td>53</td>
<td>14 %</td>
</tr>
<tr>
<td>Hg</td>
<td>0</td>
<td>0,4</td>
<td>2</td>
<td>2,4</td>
<td>46</td>
<td>5 %</td>
</tr>
<tr>
<td>Pb</td>
<td>14</td>
<td>32</td>
<td>16</td>
<td>62</td>
<td>477</td>
<td>13 %</td>
</tr>
<tr>
<td>Zn</td>
<td>192</td>
<td>42</td>
<td>80</td>
<td>314</td>
<td>3059</td>
<td>10 %</td>
</tr>
<tr>
<td>Cu</td>
<td>68</td>
<td>26</td>
<td>17</td>
<td>111</td>
<td>1068</td>
<td>10 %</td>
</tr>
</tbody>
</table>
**Sub-catchments**

The significance of the transboundary pollution for the individual sub-catchments is naturally higher.

The share of the load from upstream country compared to the load at the river mouth:

<table>
<thead>
<tr>
<th>Sub- catchment</th>
<th>N</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nemunas</td>
<td>31%</td>
<td>56%</td>
</tr>
<tr>
<td>Daugava</td>
<td>63%</td>
<td>60%</td>
</tr>
<tr>
<td>Vistula</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Oder</td>
<td>16%</td>
<td>14%</td>
</tr>
</tbody>
</table>
Ukraine

- 11170 km² in the Baltic Sea catchment
- 6 % of Vistula sub-catchment

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Load compared to Polish load</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-tot</td>
<td>3 %</td>
</tr>
<tr>
<td>P-tot</td>
<td>2 %</td>
</tr>
<tr>
<td>Zinc</td>
<td>6 %</td>
</tr>
<tr>
<td>Cadmium</td>
<td>56 %</td>
</tr>
<tr>
<td>Copper</td>
<td>28 %</td>
</tr>
<tr>
<td>Nickel</td>
<td>31 %</td>
</tr>
<tr>
<td>Lead</td>
<td>69 %</td>
</tr>
<tr>
<td>Mercury</td>
<td>1 %</td>
</tr>
</tbody>
</table>
Belarus

- In 3 sub-catchments
  - Vistula (the Bug river) flowing into Poland,
  - Daugava flowing into Latvia
  - Nemunas flowing into Lithuania.

- About 5% of the total catchment
- Share of the Vistula catchment area is 6.5%
- Share of the Nemunas catchment area is 46%
- Share of the Daugava catchment area is 38%
Airborne nitrogen

• The Czech Republic 11th biggest contributor, more than Finland/Russia
• Ukraine and Belarus are 15 and 16 on the list, more than Estonia, Latvia or Lithuania
• Ukraine is foreseen to be 9th biggest in 2010
Data needs

- Data is still lacking
- Does not allow for evaluating solutions for further actions
- Aim: HELCOM PLCs including data on input from background, diffuse and point sources in the whole catchment
- Important for Baltic Sea Action Plan to identify sources and to arrange funding also in non-Contracting Parties
Transboundary loads

• Transboundary pollution significant
• 7-8 % of total nutrient load comes from non-Contracting Parties
• Heavy metal load even more significant (5-15%)
• Airborne deposition also significant
Thank you

For more information please contact:

Helsinki Commission (HELCOM)
Katajanokanlaituri 6 B
FI-00160 Helsinki
Finland
www.helcom.fi