

## **T4.2: Impacts on Vistula Lagoon (1-33) (ABIORAS)**

**Objective:** To assess the impact of climate change on the ecosystem in a coastal lagoon and on the socioeconomic local development

### ***Description of work:***

- Hydrological and biogeochemical cycles in present and future climates will be investigated. Especially, the transformation of land originated nutrient loads and the impact of offshore lateral boundary conditions on the biogeochemical cycles in the lagoon will be studied.

**We shall use MIKE21 for hydrological/hydrodynamic analysis**

**Problem with water quality – our license is gone**

- An indicator analysis of sustainable development of coastal municipalities and a socioeconomic impact assessment will be performed, with Vistula Lagoon as an example on the sub-regional level and with selected coastal municipalities in the Kaliningrad Oblast as local examples. **Will be done without problems**

### ***Deliverables:***

- model data sets of hydrography (**OK**) and water quality (**???**) indicators in Vistula Lagoon (June 2011**?**), uncertainty estimates (33 – September 2011**?**) – **SMHI support is needed**, socioeconomic impact assessment (33 – September 2011**?**) - **OK**

***Milestones and expected results:*** Short- and long-term integrated coastal zone and watershed management strategies for sustainable use and conservation in the lagoon environment (**OK**)