THE NORRSTRÖM BASIN

The river basin covers an area of 22.600 km², which corresponds to about 5% of the area of Sweden. The basin includes two of Sweden's largest lakes; Mälaren with an area of 1120 km2, and Hjälmaren which is about 480 km². The number of people living in the area is approximately 1,2 million. Forests and mires dominate the area and cover about 70%. There are also large agriculture areas, covering approximately 20%, while lakes cover around 10 % of the area (Wallin et al., 2000). Mälaren and Hjälmaren are connected through river Eskilstunaån. The outlet of L Mälaren to the Baltic Sea is situated in central Stockholm. Major problems are related to eutrophication of the two large lakes and the coastal area close to the outlet. Additionally, local problems with metals and pharmaceutical pollutants occur.

Mälaren used to be a part of the Baltic Sea and became a lake during the 12th and 13th centuries, when the post-glacial uplift of the land caused the ridges at Norrström to rise. Mälaren has for a long time been controlled, and today it is controlled by eight dams and the outlet. The water level is allowed to vary 0,7 m (Wallin et al., 2000).

Mälaren provides 1,5 million people with drinking water and is also the recipient from surrounding cities and industries. Satisfying sewage treatment and continuous monitoring of water quality is thus of utmost importance.

According to the division of Sweden into main catchment areas made by the Swedish Meterological and Hydrological Institute (SMHI) there are 10 main tributaries of L Mälaren: Arbogaån, Kolbäcksån, Hedströmmen, Köpingsån, Svartån, Sagån, Örsundaån, Fyrisån, Råckstaån and Eskilstunaån. These tributaries contribute with approximately 80% of the total inflow to L Mälaren (Wallin et al 2000). The tributaries are presented in detail in the section Hydrology. In cases when information concerning other tributaries is available this is also presented.

TWINLATIN PROJECT

The Latin American and Caribbean region is highly heterogeneous in terms of climate zones, hydro-ecology, socio-political systems etc. Numerous problems in relation to water quality and water availability arise. Flooding occurs frequently and erosion and pollution pressures have also become major problems. Management strategies, legal framework and stakeholder involvement needs to be improved. Activities and research tasks will be conducted within several fields of IWRM; hydrology, modelling of pollution flow, impact assessment, socio-economic impacts, climate change effects, scenario analysis and action efficiency.

The project addresses the goals of the EU Water for Life, and builds on the methods and guidelines developed for the EU WFD.

No further research work were carried out for the Thames in the TwinLatin project. Instead, the lesson learnt and methods developed are used to assist decision makers in the other case study basins to move towards better IWRM.

(ADDITIONAL INFO ON HTTP://TWINLATIN.IVL.SE/INDEX.HTML)

ABOUT TWIN2GO

Twin2Go reviews, consolidates, and synthesises research on adaptive and integrated water resources management in basins around the world. The aim is to draw insights relevant to policy and research on issues around adaptive water governance in the context of climate change, and to make them transferable to other basins. Twin2Go further promotes sharing of research results with practitioners and high level decision makers through effective dialogue.

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