Healthier lakes in Alingsås

By taking action on private sewage systems and establishing buffer zones around watercourses, the municipality of Alingsås has reduced inputs of phosphorus and nitrogen to lakes Anten and Mjörn. Lake Mjörn has now been declared healthy and the water quality is good.

The successful effort by Alingsås to reduce nutrient inputs to lakes Anten and Mjörn are two examples of how municipal cooperation (Alingsås, Lerum and Vårgårda) and relatively simple measures can reduce inputs of phosphorus and nitrogen into lakes and watercourses.

With support from the Local Investment Programme (LIP) in 1998–2002, action was taken on 400 private sewage systems and manure facilities in the catchment areas of lakes Anten and Mjörn. Buffer zones alongside watercourses were also established under the project. A wetland of 2 hectares has been created alongside Lake Anten.

POSITIVE ENVIRONMENTAL AND ECONOMIC IMPACTS

• Reduced phosphorus inputs (1.2 tonnes P/year).
• Reduced nitrogen inputs (0.9 tonnes N/year).
• 173 sewage systems have been dealt with.
• 32 manure facilities have been dealt with.
• 25 hectares of buffer zones have been established.
IMPLEMENTATION

The property owners received grants to deal with undersized sewage systems and manure facilities. Among other things, infiltration systems and sand filters were installed and action was taken on faulty sludge separators. In addition, buffer zones were established around the watercourses, land that is not cultivated with the aim of reducing surface runoff, erosion and leaching of nutrients. However, the level of grant was too low to attract interest in ecocycle-adapted wastewater solutions.

The Anten-Mjörn Committee, which has coordinated the work, consists of representatives of the municipality, the county administrative board and various stakeholder organisations. The Committee has continuously fed back results and informed the residents through a newsletter.

The possibility of oxygenating Lake Anten was studied, but this action could not be implemented for financial reasons. The input of phosphorus to Lake Anten is still too high, but the situation in the lake has stabilised.

POTENTIAL AND FUTURE BENEFIT

Creating sustainable and ecocycle-adapted water and wastewater systems is important both for the infrastructure of society and for the environment. Biological and technical system solutions can complement one another to create cost-effective solutions with good environmental effects. Created buffer zones and wetlands act as sewage treatment plants and reduce nutrient inputs to water.

WHY BEST PRACTICE

The Anten-Mjörn Committee has driven the project from the start. As a result of the Committee’s work a large proportion of the nutrient inputs have ceased and Lake Mjörn has now been declared healthy. The Anten-Mjörn Committee is continuing its work. Wastewater inventories are continuously being compiled with requirements for improvements. The follow-up of phosphorus and nitrogen levels takes place today through a checking programme at the Göta Ålv water protection association. The working practice has spread to other municipalities. Buffer zone grants are now standard in the agricultural support system.

FOR FURTHER INFORMATION

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The project on the Internet:
www.alingsas.se/start.htm
(search for Anten, click on AMK)

Further information on Best Practice
www.swedishepa.se/bestpractice
www.naturvardsverket.se/mir

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