

Archipelago Sea Hot Spot Road Map Project

Removing the agricultural loading to the Archipelago Sea catchment area from the Baltic Marine Environment Protection Commission's (Helsinki Commission – HELCOM) hot spot list

Abstract:

The Archipelago Sea Hot Spot Road Map Project investigates the possibilities to bring down the nitrogen and phosphorus emissions into waterways caused by agriculture and to remove the loading to the Archipelago Sea catchment area caused by agriculture from HELCOM's list of major polluters. HELCOM listed the largest polluters of the Baltic Sea in 1992 and the Archipelago Sea is the last hot spot in Finland. Since 1990, no significant changes have been observed in the nutrient loading to the Archipelago Sea catchment area. This report explains how the current measures meet the criteria for eliminating the hot spot.

HELCOM has defined criteria for the elimination of the hot spot, which include requirements for a water protection and management plan, correct storage of manure and ensuring an adequate spreading area for manure as well as special consideration of sensitive areas. In addition, the requirements of Appendix III to HELCOM's Convention on the Protection of the Marine Environment in the Baltic Sea Area must be fulfilled. There is no single integrated management plan for agricultural water protection and management in the Archipelago Sea catchment area, which would be fully in line with the HELCOM criteria, but the legislation, water and maritime management plans and the parts of CAP promoting water protection together form a management plan. The monitoring requirement for water protection measures included in the management plan will be fulfilled by monitoring the compliance with the Environmental Protection Act and agricultural subsidies. Financing of agricultural measures is mainly based on the CAP strategy and the allocation of funding is guided by an environmental compensation scheme. In addition, financing will be channelled through the water protection enhancement programme and project funding. Requirements on the structure and location of animal shelters and manure pits have been included, for example, in the Nitrates Decree. However, the strong concentration of stock farming in Vakka-Suomi poses challenges for manure spreading, which means that manure processing and transportation opportunities should be developed. Consideration of sensitive areas in the protection of agricultural water protection is implemented through the requirements included in the Environmental Protection Act and the Nitrates Decree for the consideration of NATURA 2000 areas. The Nitrates Decree also takes into account the requirements of the Nitrates Directive for nitrate-sensitive areas.

The requirements of Appendix III to the HELCOM Convention include, for example, requirements relating to nutrient use and binding land, winter vegetation cover, ammonia emissions, plant protection products, environmental permits and monitoring of water status. The use of nutrient fertilisers in fields is limited by the Nitrates Decree restrictions on the use of nitrogen fertilisers, and a provision concerning the limit values for the use of phosphorus will enter into force in 2023. Nutrient retention areas, such as buffer zones, and water protection structures in the Archipelago Sea catchment area are numerous, but so far they have not been specifically targeted at areas with the highest water protection benefits. The criteria for environmental permits, ammonia emissions and plant protection products are well met in the Archipelago Sea catchment area. The Centre for Economic Development, Transport and the Environment (ELY Centre) and the Finnish Environment Institute (SYKE) monitor the state of surface waters and model nutrient loading targeted at them.