ASSESSMENT OF NUTRIENT RUNOFF FROM AGRICULTURAL CATCHMENT OF LAKE MIEDWIE DURING AGRICULTURAL RESTRUCTURING

Key words: agriculture catchment, ammonium ion, loads, nitrate, phosphates, potassium, water quality

Summary

The results are presented of long term studies on water quality and nutrient loads delivered to Lake Miedwie. Lake Miedwie, one of the largest lakes in Western Pomerania, is since 1976 the main drinking water resource for Szczecin. Since that time many works have been done to improve water and sewage management, and to reduce negative effects of agriculture on water quality. Changes of nutrient concentrations and loads were estimated, particularly for the years 2000-2004 i.e. during the process of agriculture restructuring and land use changes. Nutrient loads delivered to Lake Miedwie were highly differentiated and depended mostly on rainfall and water flow in studied rivers. High loads delivered to Lake Miedwie, especially from small agricultural catchments, confirm the need of protective and technical operations to improve water quality in inflowing rivers.

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