

Groundwater impacts on eutrophication pressures in remediated agricultural streams

Credits: 30 credits
Level: Master
Subject: Environmental Science
Start: Anytime, however the sampling will be conducted March-September

Background

Evaluation of effectiveness of remediated streams typically includes periodic measurements of surface water flow and quality. However, groundwater impacts are rarely measured, which can lead to inaccurate estimation of water and nutrient balances and thus false conclusions on the effectiveness of remediation. This project aims to measure groundwater impact on water quality in selected remediated streams in Sweden.



Objectives

To install piezometers along selected streams in order to monitor hydraulic head and collect samples for water quality analyses. To carry out simple tracer experiments. To link observed patterns in groundwater-surface water interactions with existing datasets on stream and catchment characteristics.

Performance

The work involves:

- Field and laboratory measurements,
- Statistical analysis of a large chemical dataset and GIS analysis of spatial data,
- Literature review and report writing.

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