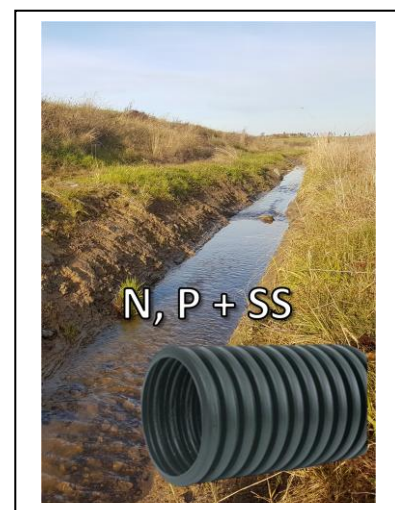


The role of agricultural drainage in controlling the effectiveness of two-stage ditches in Sweden

Credits: 30 credits
Level: Master
Subject: Environmental Science
Start: Anytime

Background

Two-stage ditches are mitigation measures aiming to convert traditional agricultural ditches into streams with ability to increase water, nutrient and sediment retention. As such they are measures to reduce eutrophication but a lot of factors can control their effectiveness. This project focuses on **understanding the role of agricultural drainage** in controlling water quality in two-stage ditches in Sweden.



Objectives

To identify drainage pipes and tributaries draining into selected two-stage ditches. To estimate the effect of drainage water on water retention and nutrient export ($\text{NO}_3\text{-N}$, $\text{NH}_4\text{-N}$, TP, $\text{PO}_4\text{-P}$, SS, and DOC) in two-stage ditches. To conduct water grab sampling and flow measurements of drainage water during spring/summer/autumn months.

Performance

The work involves:

- Field and laboratory measurements,
- Statistical analysis of a large water quality dataset,
- Literature review and report writing.

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