## Nitrogen and phosphorus in SK agricultural drainage ditches: vegetation and soil pools and potential loss to inundating snowmelt or rainfall water

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- Vegetation management in ditches could reduce nutrient export to snowmelt and rainfall runoff
- Release of nutrients occurred within hours to days of contact with water
- Although vegetation pools of nitrogen and phosphorus were smaller than soil pools they had a larger impact on nutrients in overlying water
- Nutrients were stratified in the soil of most ditches, although nutrient concentrations varied along ditches and patterns of nutrient pools and stratification varied by nutrient form