

Phosphorus direct precipitation

Phosphorus direct precipitation is a method in which a dispenser unit dozes chemical reacting with dissolved phosphorus thus making it unavailable for plants and algae.

Similar terms: chemical phosphorus precipitation

A dispenser unit is placed above running water and it dozes chemical e.g ferric sulphate to the water according to the water volume.

The precipitation chemical reacts with dissolved phosphorus and changes it into unavailable form for the plants and algae.

Application

Cost efficiency is gained when the concentration of dissolved phosphorus is high and the catchment area is small.

Winter conditions may cause problems to the dosing unit due to ice formation and accumulation into the dosing cone.

Maintenance

- Weekly monitoring of the system is needed
- Precipitation chemical need to be added according to the consumption

Economics

- 20-400 € / 1 kg of precipitated P²



Further information:

[MTT - Active wetlands](#)

Sources: 1) MTT, Active Wetlands – the use of chemical amendments to intercept phosphate runoffs in agricultural catchments, 2013. ([Link](#))

2) Conversion of dissolved phosphorus in runoff by ferric sulfate to a form less available to algae: Field performance and cost Assessment, 2015. ([Link](#))