



Let's Stop Sinking

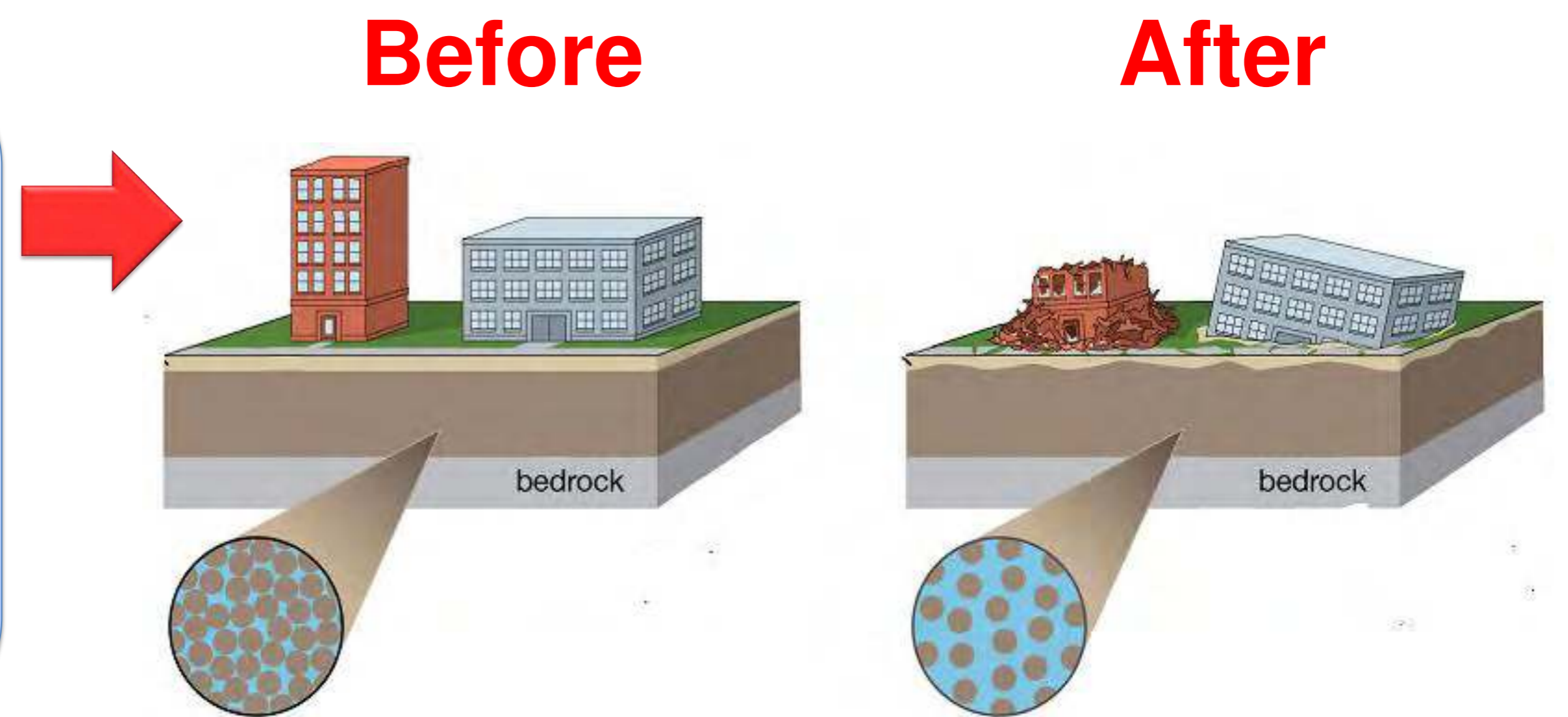
Effective Management of Peatlands & Gaining Trust



Allyn Zackarias, Almutamed Alsawafi, Arsenio Mate and Aslihan Ural

Challenge:

Land subsidence → becoming a significant issue in the Netherlands. The drainage of peatlands leads to peat oxidation and thus CO₂ emissions



Goals:

- Implementing and managing pressure drains efficiently at large scales
- Finding alternative methods to reduce land subsidence

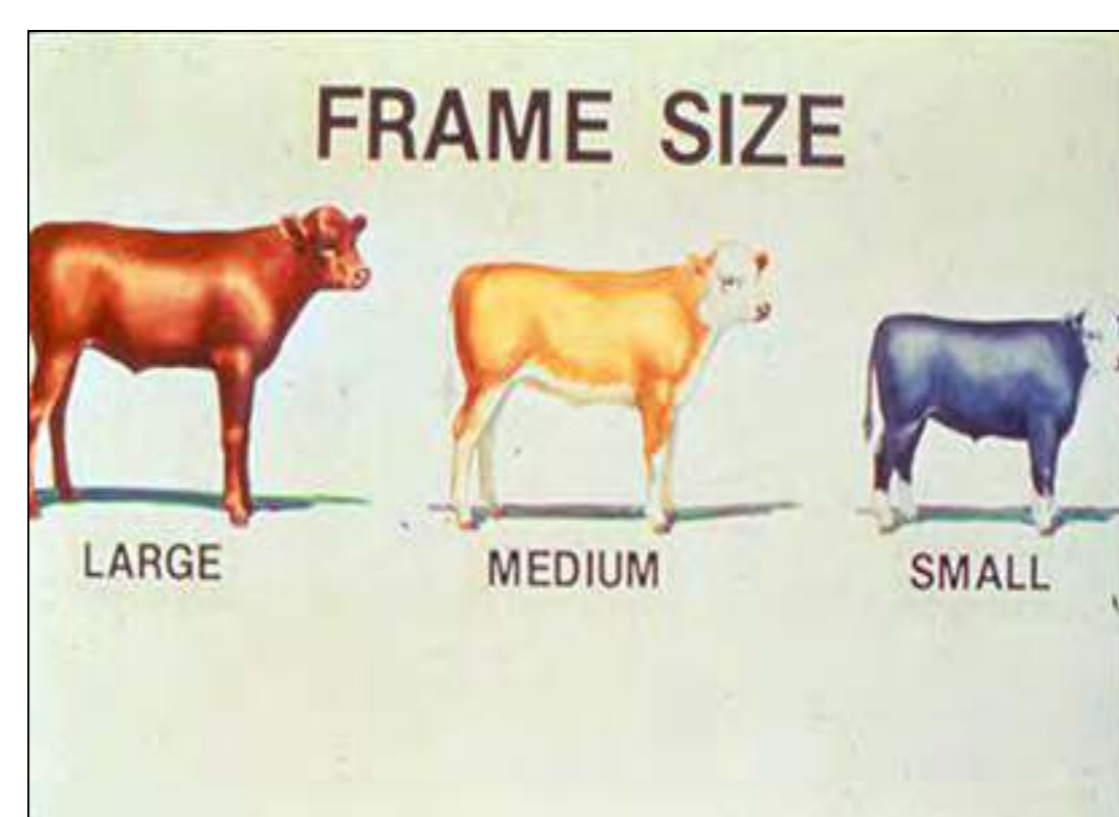


Solution: Peat Monitoring and Control System (PMCS)

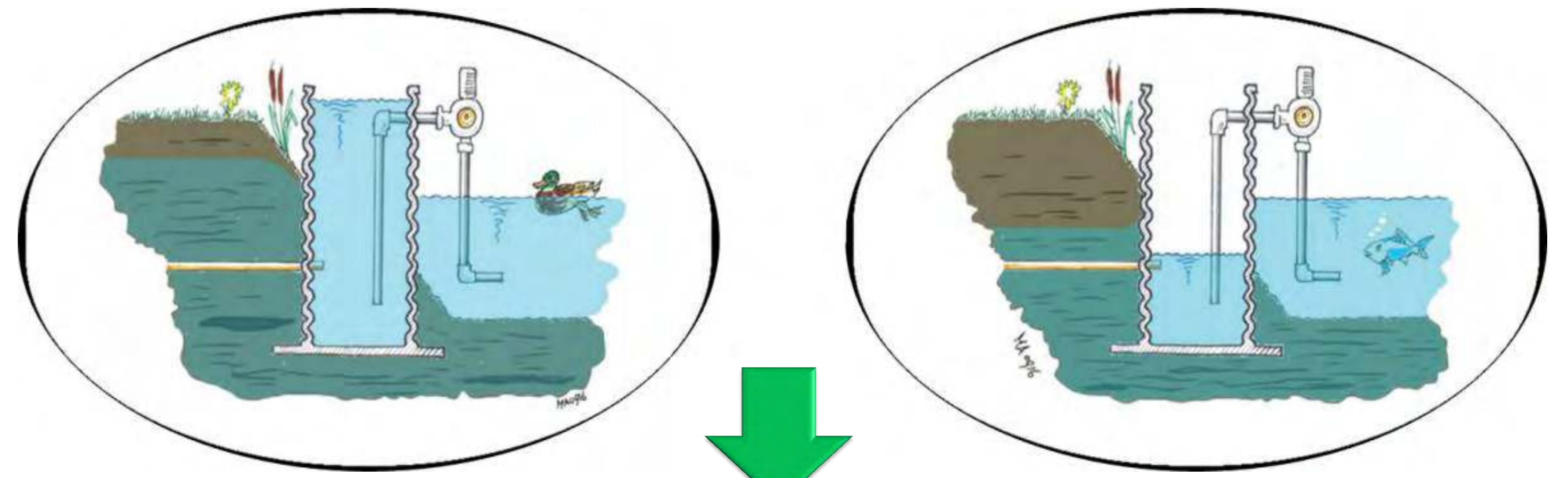
Paludiculture



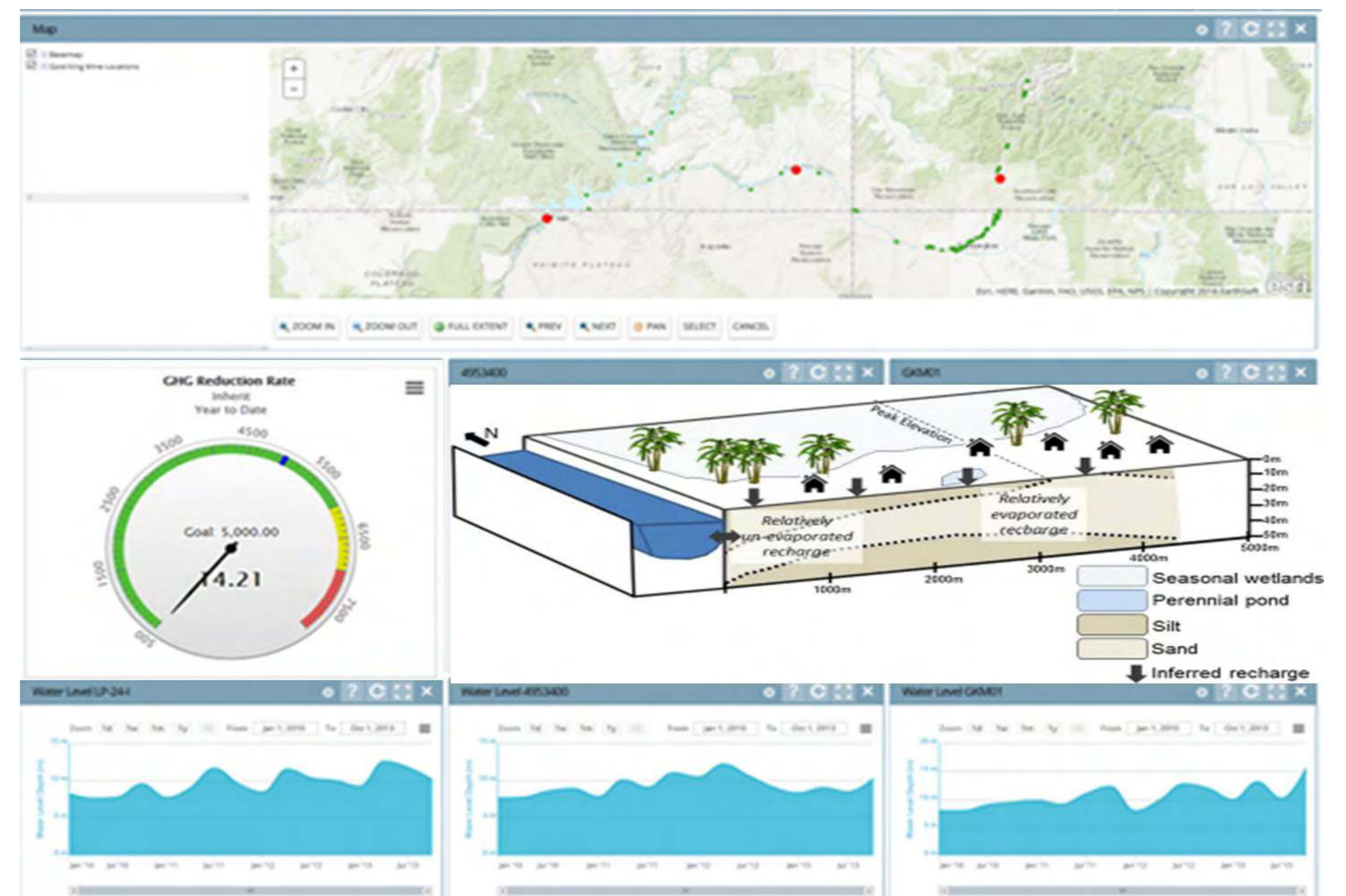
Lighter Livestock



Pressure Drains



PMCS Program Dashboard



Benefits of PMCS Program:

- Remote control of groundwater levels
- Data collection and storage to discover the trends
- Reducing the peatland subsidence rate and CO₂ emissions
- A future income source

Boersma, C., 2015. *Land subsidence in peat areas*, The Hague: Deltares.

Erkens, G., Meulen, M. J. v. d. & Middelkoop, H., 2016. Double trouble: subsidence and CO₂ respiration due to 1,000 years. *Hydrogeology J*, Volume 24, p. 551-568.