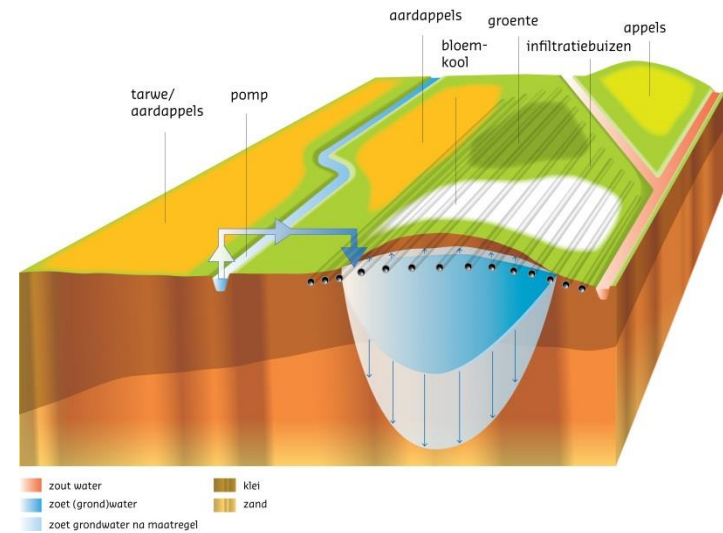




# Kreekrug Infiltratie Systeem



# Aanleiding: De Waterhouderij Walcheren

- Eerste metingen verricht in 2010

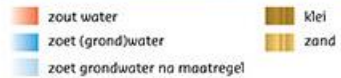
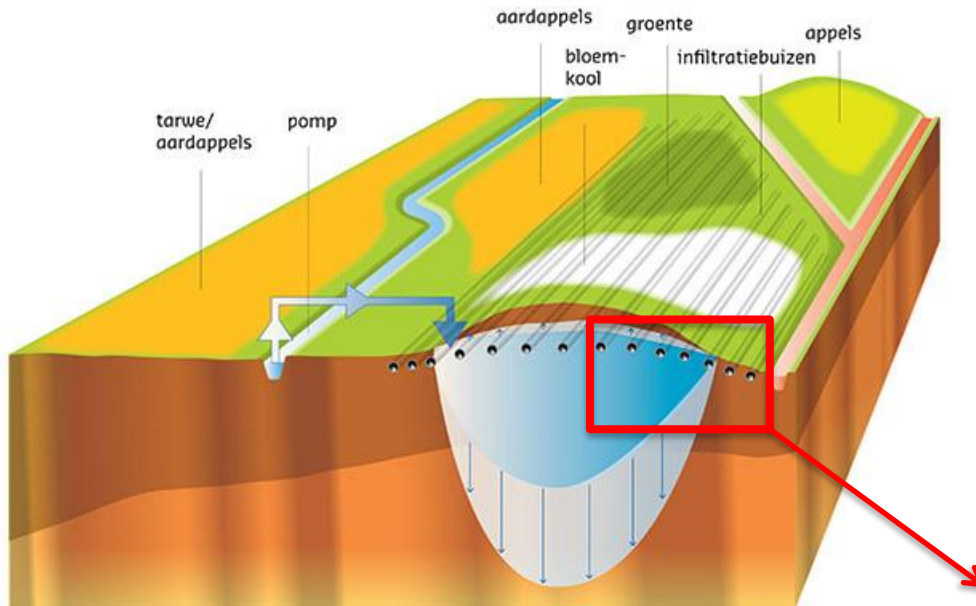


# GO-FRESH (Fase 1)

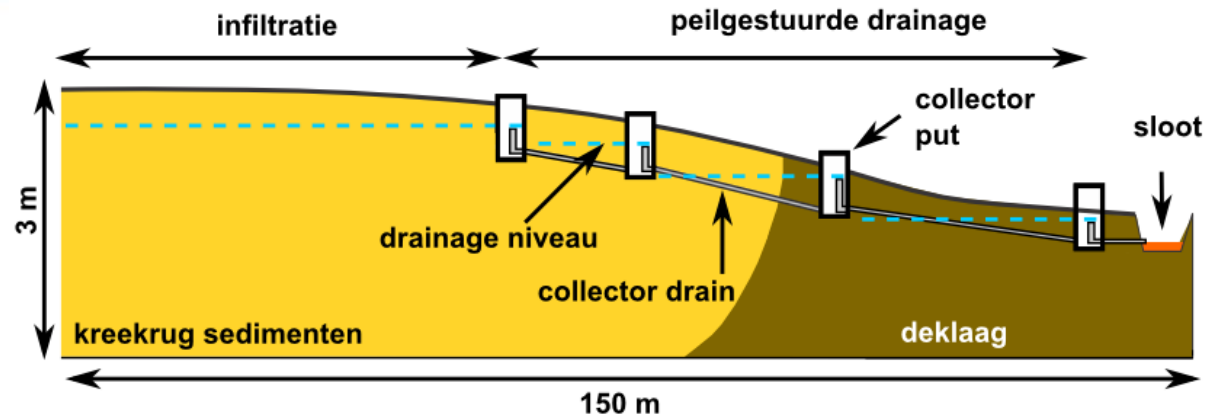
- Kunnen we via peilgestuurde drainage de grondwaterstand omhoog brengen en daarmee de zoetwaterbel onder de kreekrug vergroten?
- Testlocatie: Werner Louwerse en Johan Sanderse

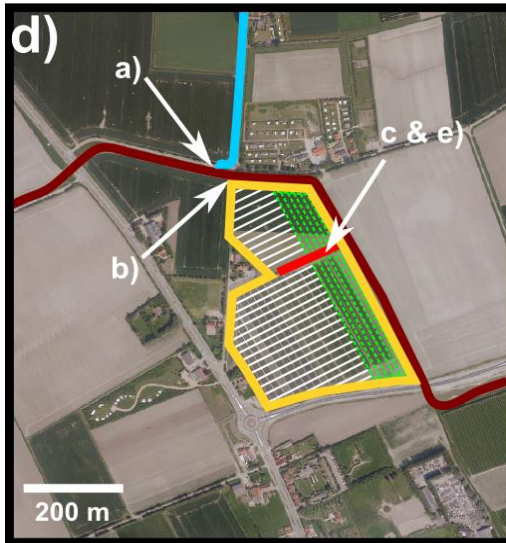
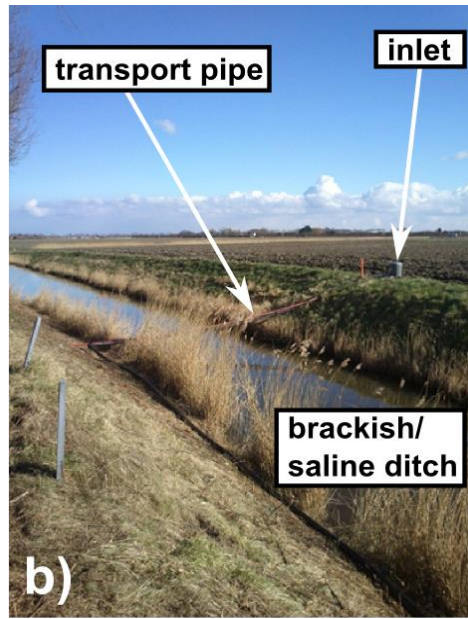
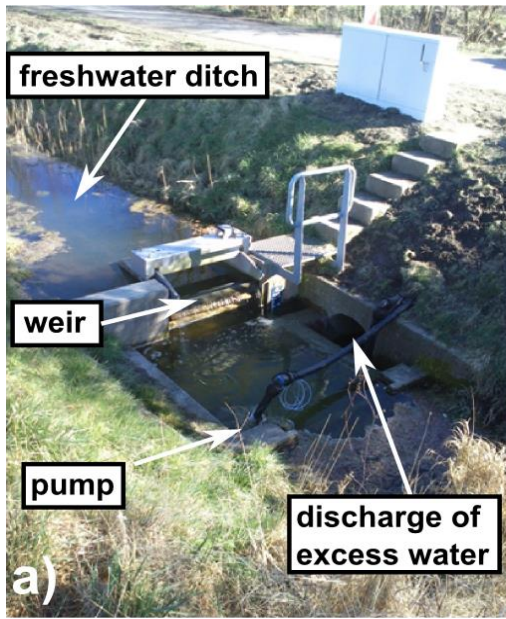


# Aanpassen van de drainage



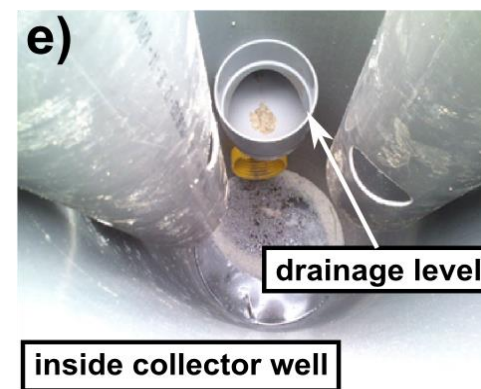
- 1) Verhogen drainagepeil
- 2) Infiltratie zoet oppervlaktewater





### legend

- extent CARD system
- separating ditch & collector wells
- freshwater ditch
- brackish/saline water ditch
- artificial recharge
- controlled drainage



# Aanleg drainage

- Eerste deel dec. 2012 (Sanderse), tweede deel ~maart 2013 (Louwerse).

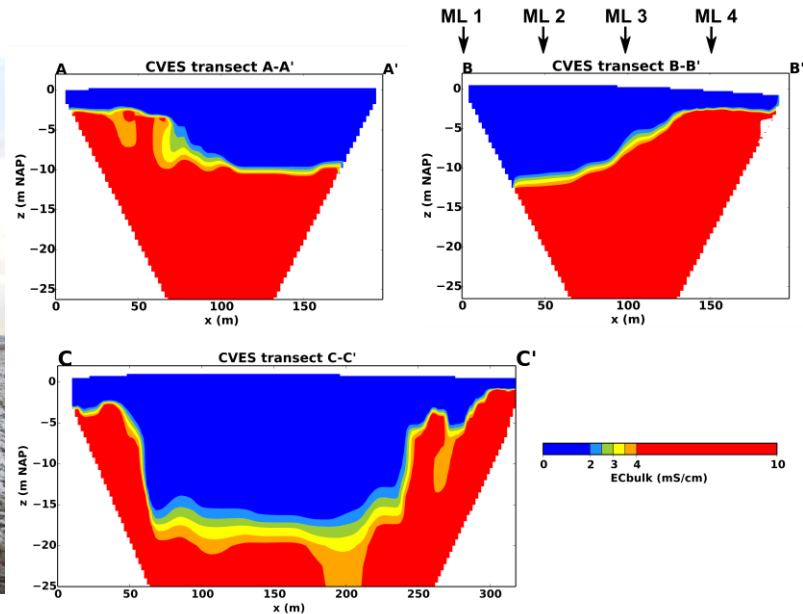


# Afronding installatie april 2013, start infiltratie mei 2013



# monitoringsnetwerk

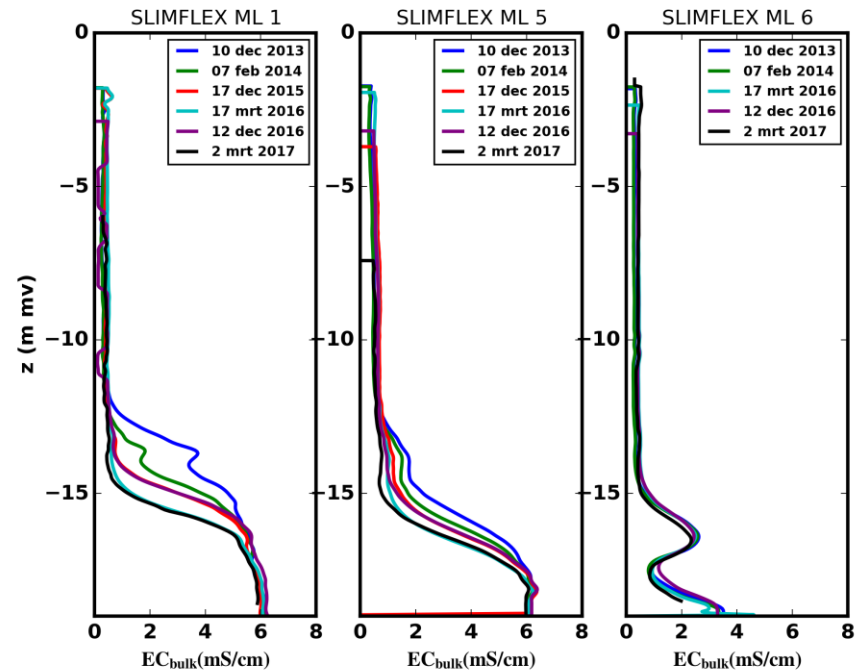
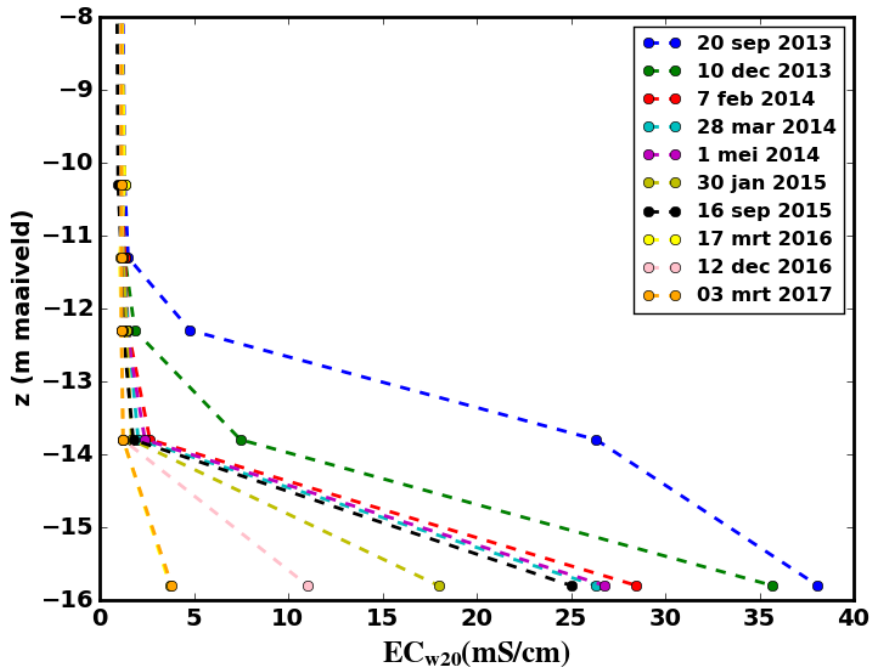
- Om de ontwikkeling van de zoetwaterbel te monitoren





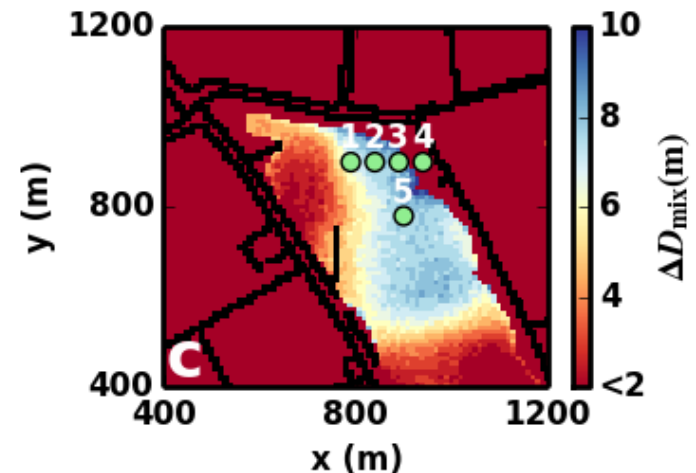
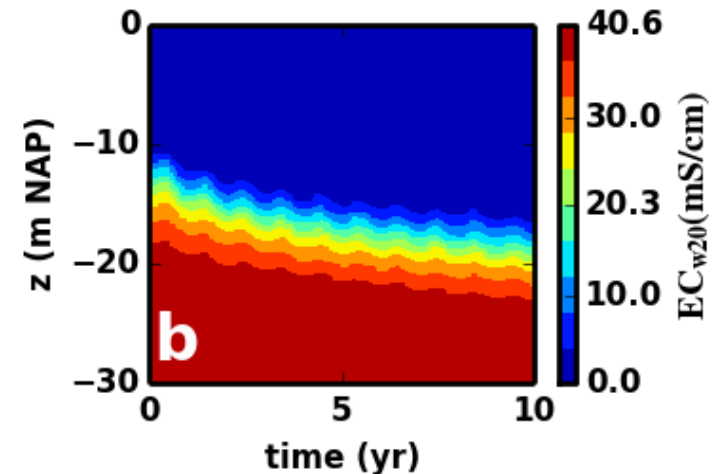
# Resultaten 2017

- Vergroting zoetwaterbel  $\sim 3$  meter



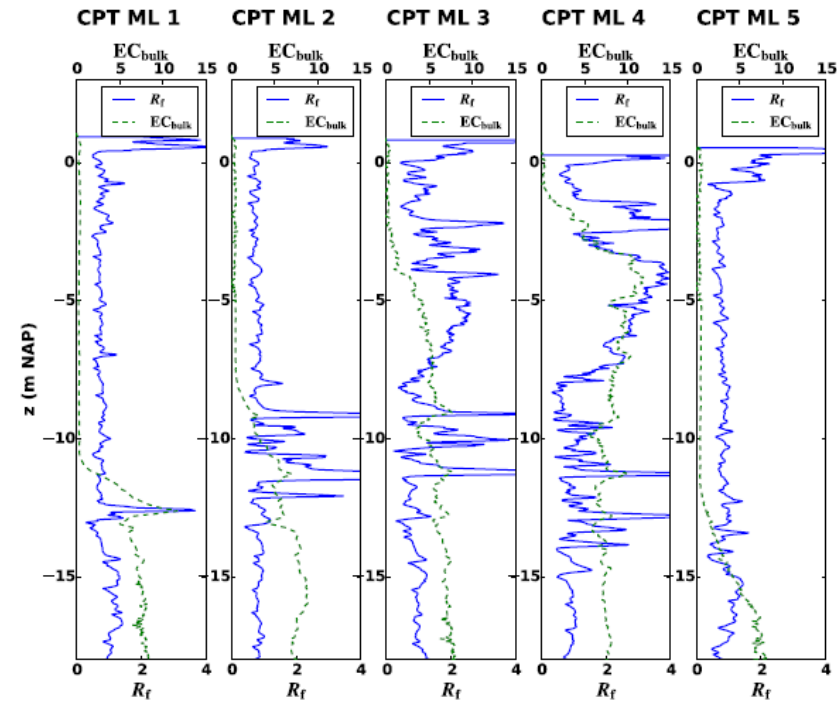
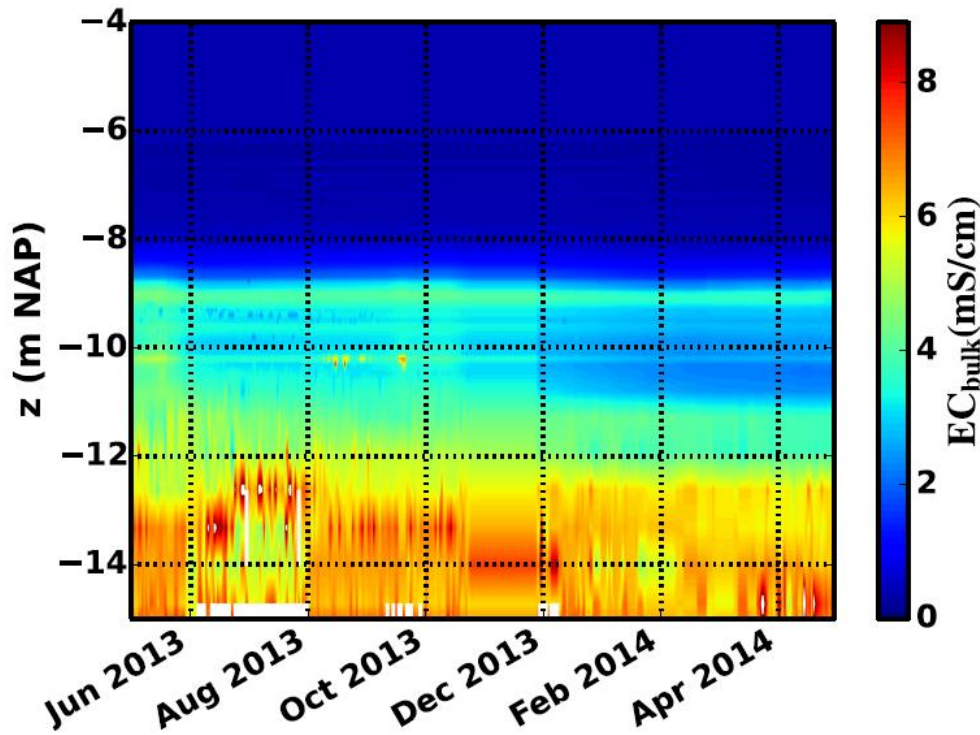
# zoet-zout verdeling

- Totale volume infiltratie:  $\sim 30000 \text{ m}^3$  per jaar =  $\sim 250 \text{ mm}$
- Uitbreiding loopt achter op modelvoorspelling



# Oorzaak achterblijven uitbreiding lens

- Aanwezigheid van kleilagen
- Verstopping van drains?



# Conclusies mbt onderzoek

- Peilgestuurd drainagesysteem potentiële maatregel (hydrologisch)
- Invloed gelaagdheid kreekrug op verzoeting
- Uit dikkere bel kan (veel) meer water worden onttrokken
- Hoeveel? → (lopend) vervolgonderzoek