Länsstyrelsen Västerbotten

Wetland restoration and monitoring in Västerbotten

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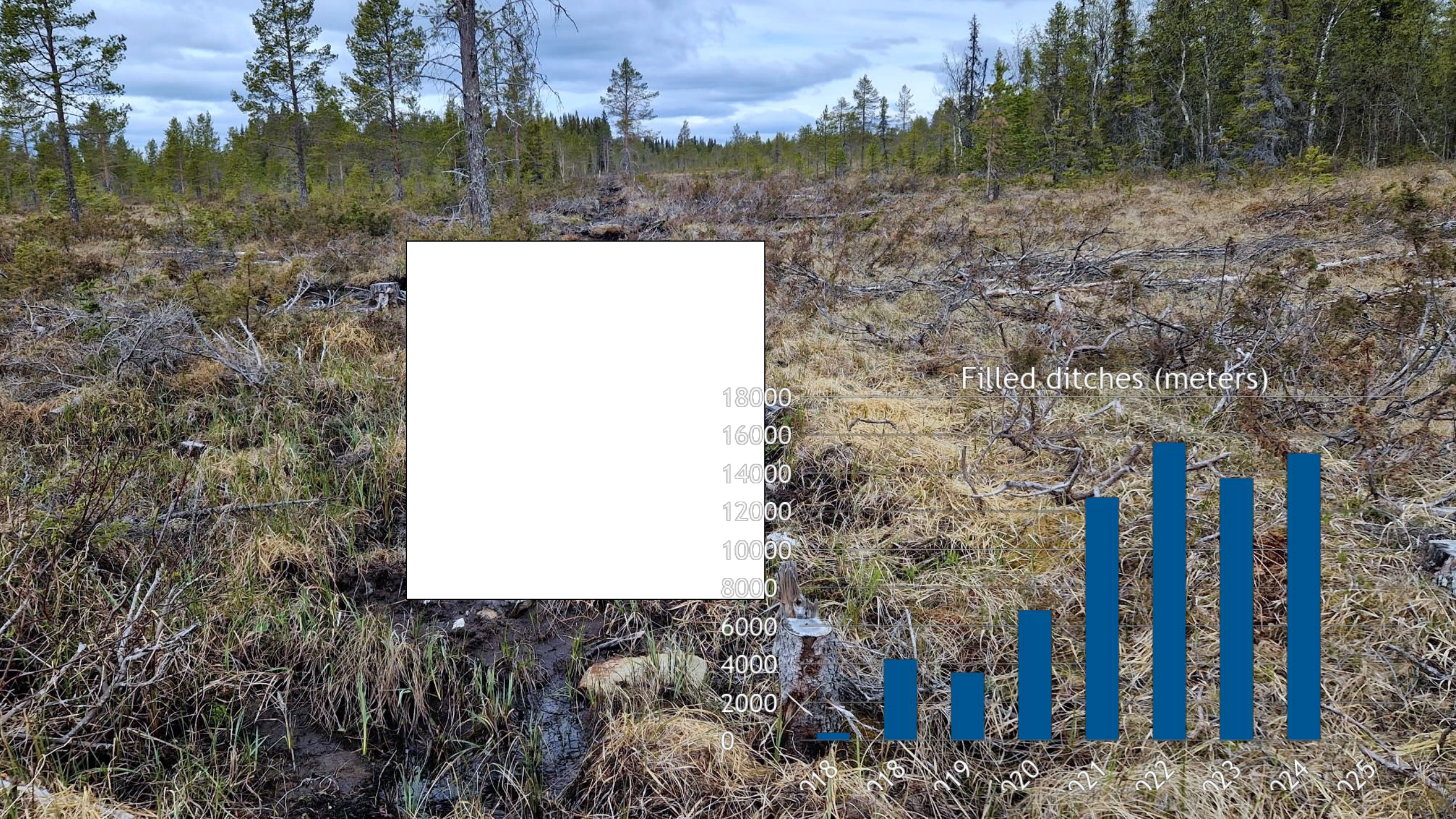
Conservation of wetlands in Sweden

- A long tradition of restoration, especially bird lakes and grazed meadows (since 1960s), rich fens (since 1970s) e g Lake Hornborgasjön

Since 2018 extra national funding for wetland restoration


Filled ditches (meters)
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
'18
'18
'19
'20
'21
'22
'23
'24
'25

Case 1: Restoration of grazed meadows

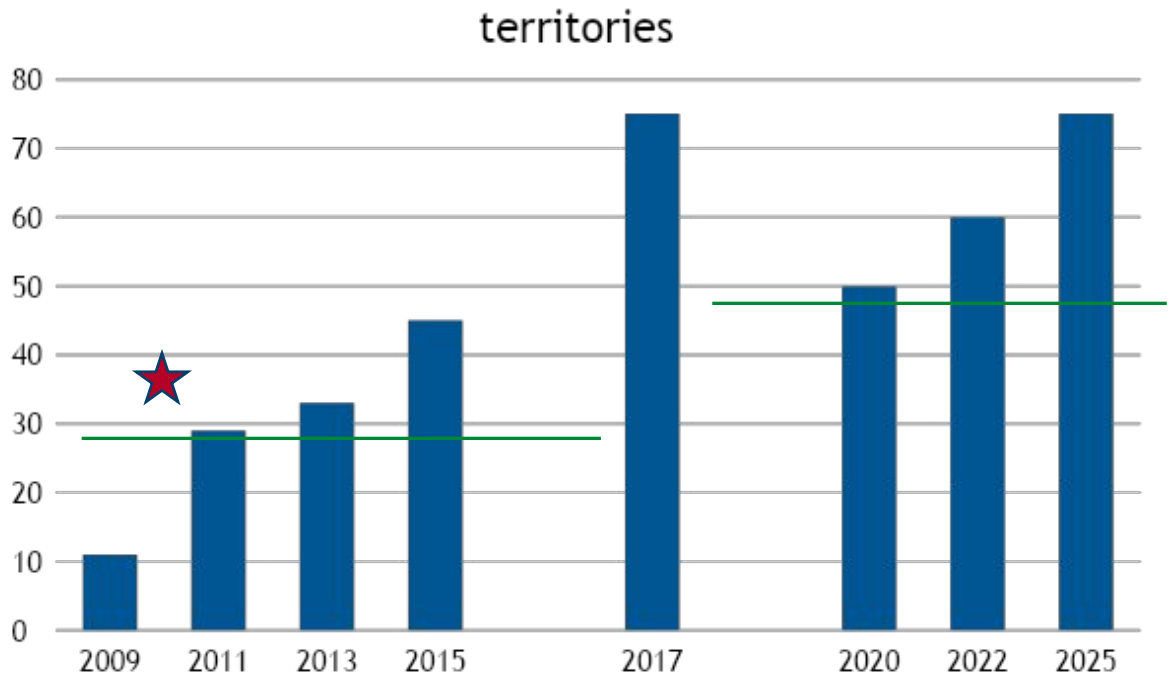
High need for monitoring, e.g.

- Breeding wetland birds
- Breeding productivity
- Staging wetland bird - spring and autumn
- Water levels and extent of flooding
- Grazing pressure
- Surrounding landscape

Brånsjön (SPA), Vännäs

Lapwing *Vanellus vanellus* (EN)

- Clear objectives are crucial
- Adjustments of target level
- Connection between objectives and management



Eurasian teal *Anas crecca* (VU)

Case 2: Restoration of rich fens (7230)

Medium need for monitoring

- Hydrological integrity – no run-off in ditches
- Apparent hydrological effect on site (rewetted area)
- Tree cover
- Typical species composition in transects
- Land snails

Results may look like

- Median number of typical bryophytes in sample squares are…
- Typical bryophyte *Scorpidium cossoni* occur in …% of samples
- Vertigo genesii occur

Case 3: Restoration of species-poor mires

Low need for monitoring

- Hydrological integrity – no run-off in ditches
- Apparent hydrological effect on site (rewetted area)

- Overall much wetter and important parts of mire is wetter
- No run-off in former ditch

Conclusions

- Monitoring should differ between sites
- Objectives are important when conservation values are high and management is intensive
- Objectives need to be re-evaluated during monitoring cycles
- Monitoring should focus on improving and promoting management
- Sometimes detailed objectives are difficult and not even necessary

Sphagnum warnstorfii,
Paludella squarrosa