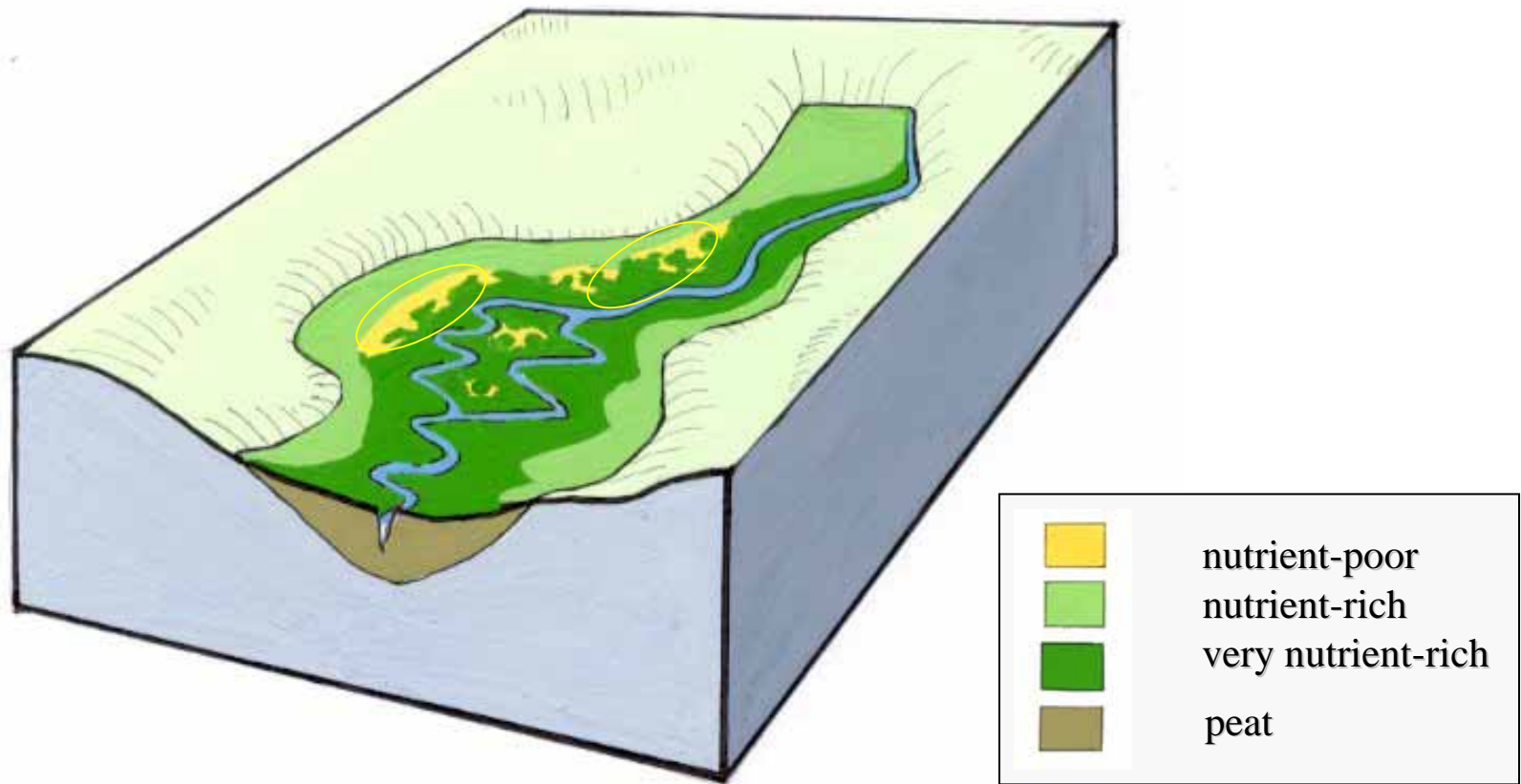


Rehabilitation of wetlands in the Kruger, try a restoration ecology approach



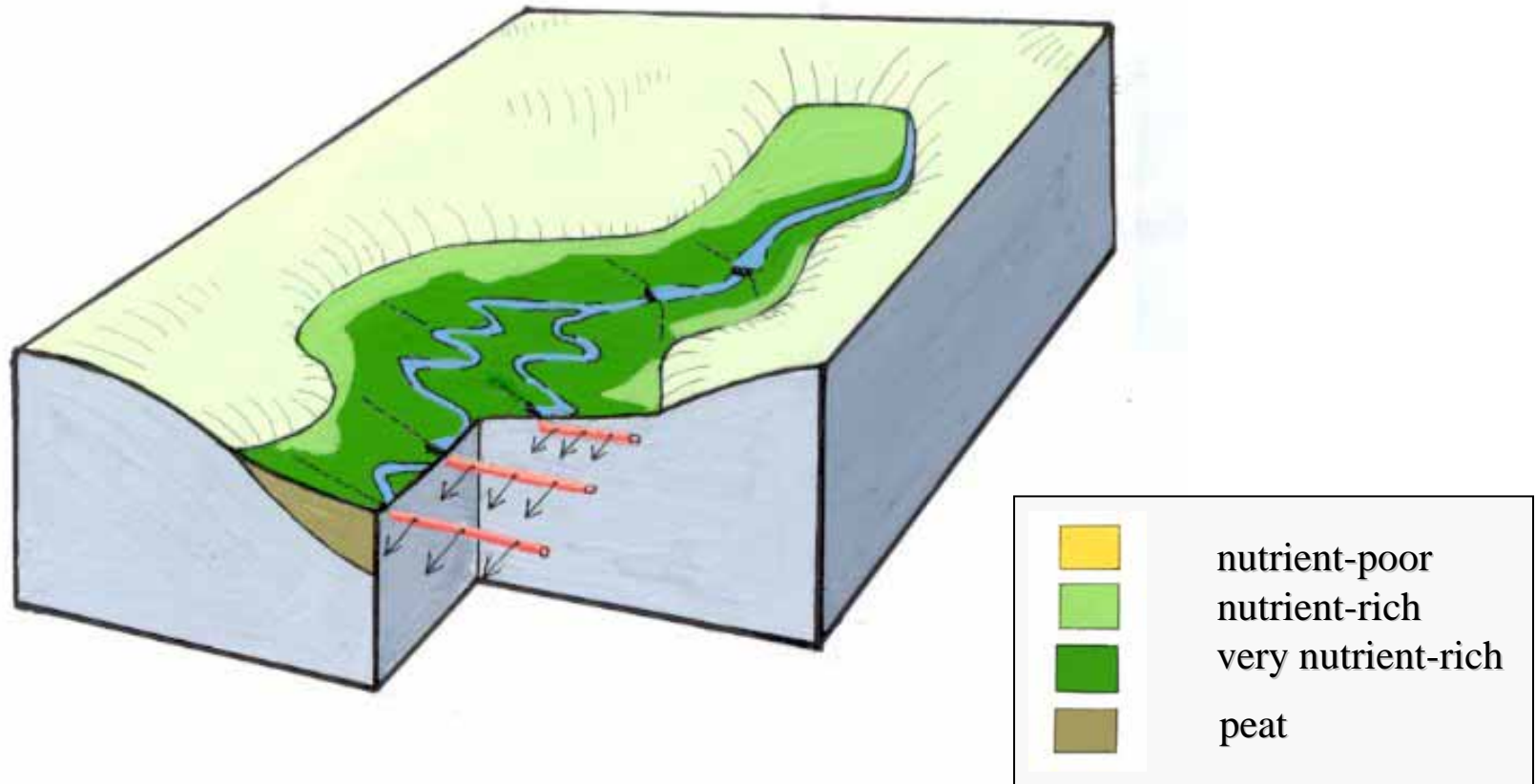
Ab Grootjans, University of Groningen, The Netherlands; A.P.Grootjans@rug.nl
Piet-Louis and Althea Grundling,
Jonathan Price, University of Waterloo, Canada

Slovakia: small river valley:
present situation



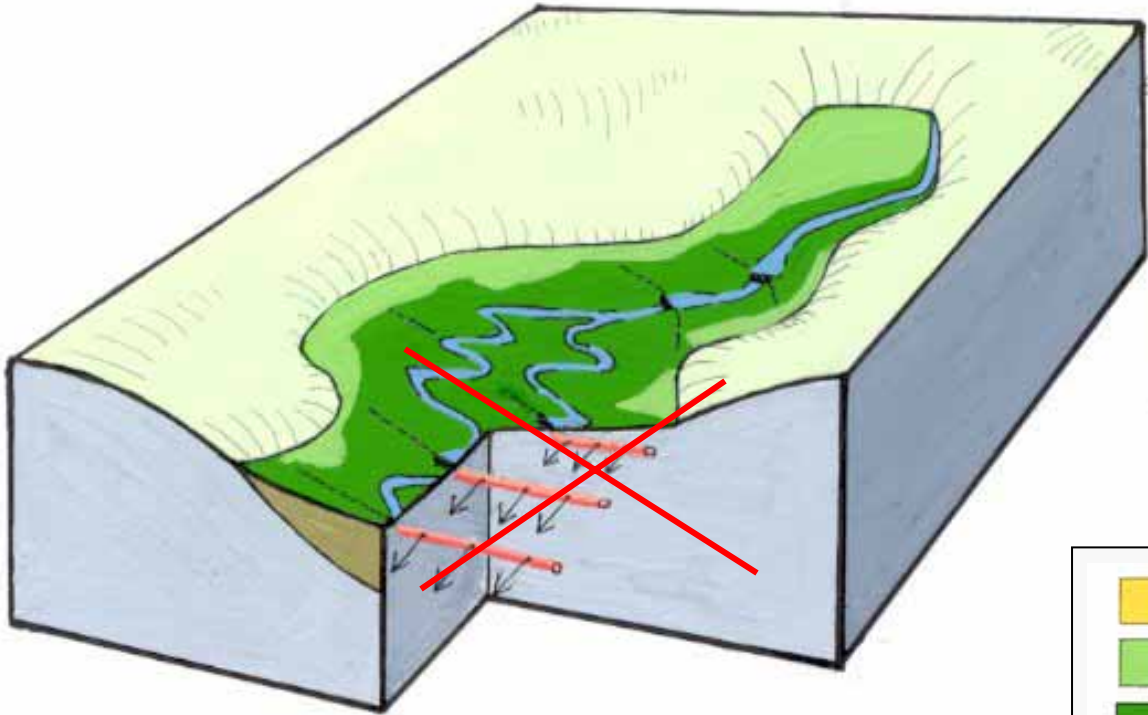
Problem: erosion, eutrophication and invasion of reeds





Proposed restoration plan



Rewetting and subsurface irrigation

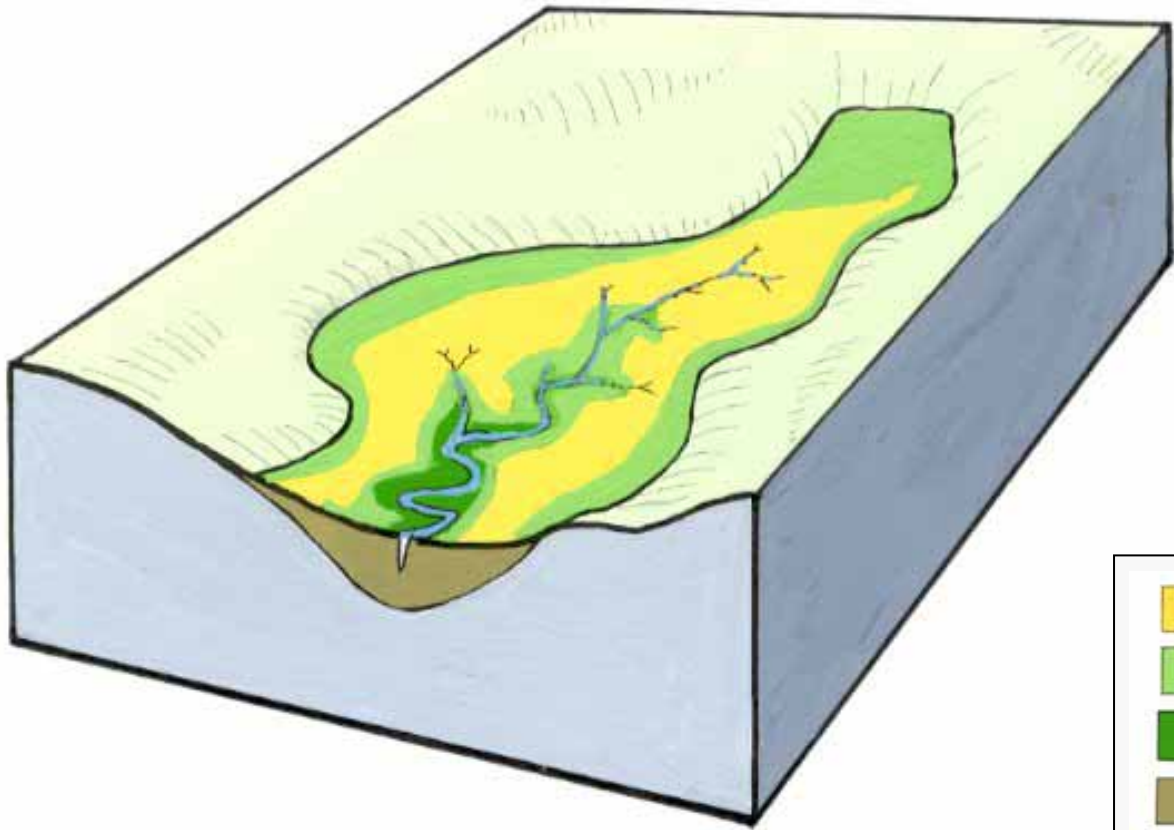
Proposed restoration plan







	nutrient-poor
	nutrient-rich
	very nutrient-rich
	peat

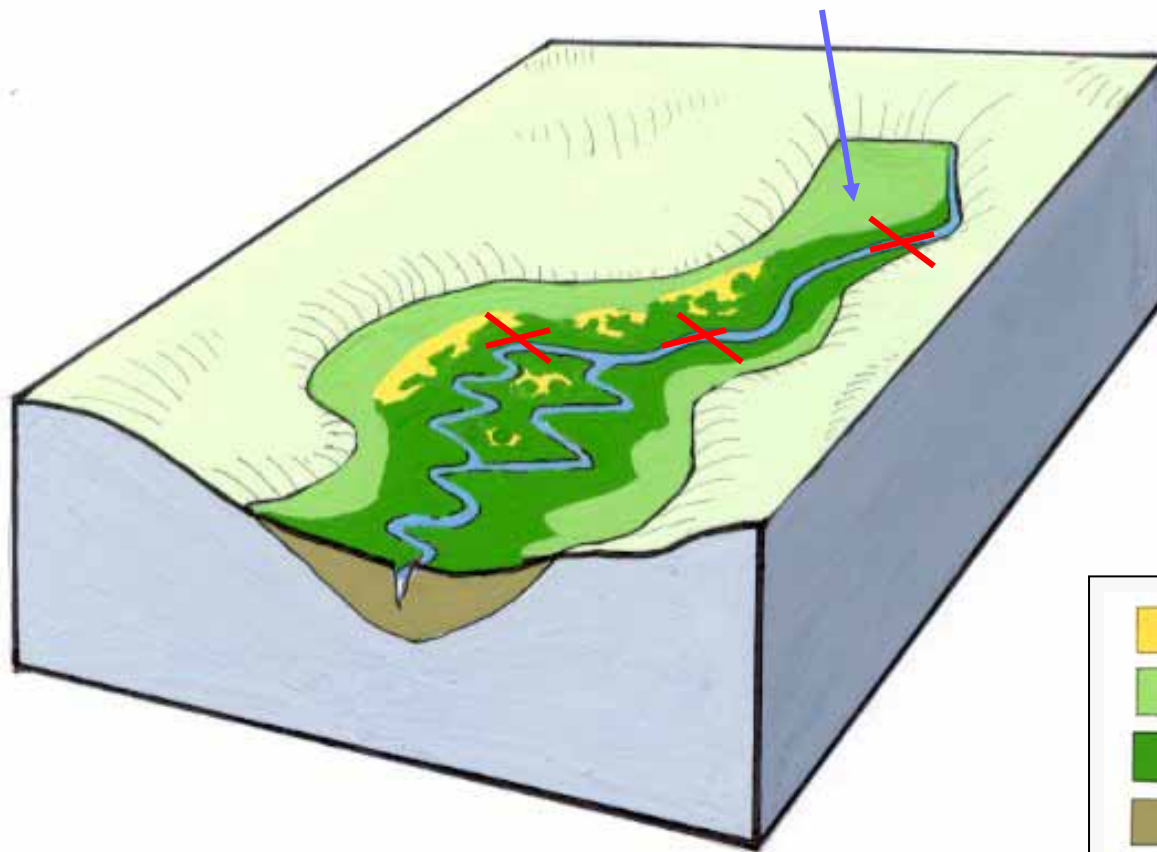
Which probably would increase the problem





Reconstruction of former situation



	nutrient-poor
	nutrient-rich
	very nutrient-rich
	peat

What to do ?



	nutrient-poor
	nutrient-rich
	very nutrient-rich
	peat

Eliminate all ditches in the source area

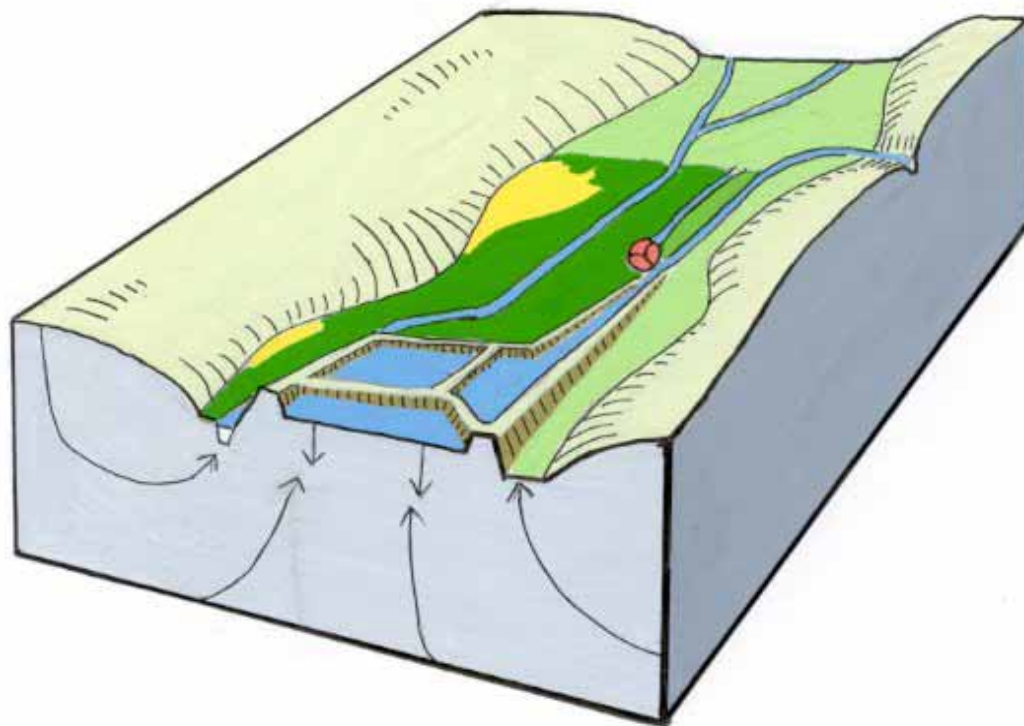
Poland: former bombing site of the Russian army



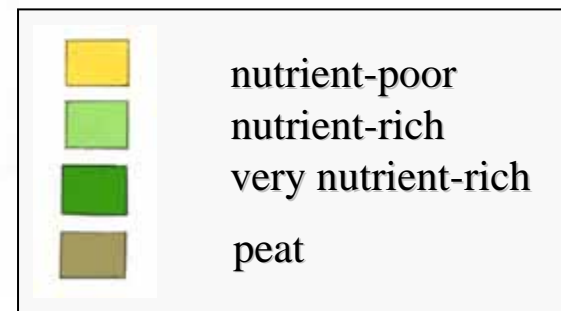
Case 2



Poland: Floodplain with peat:
present situation

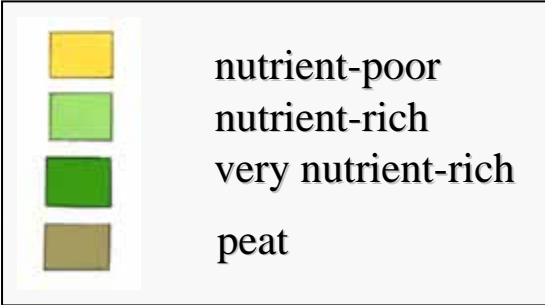
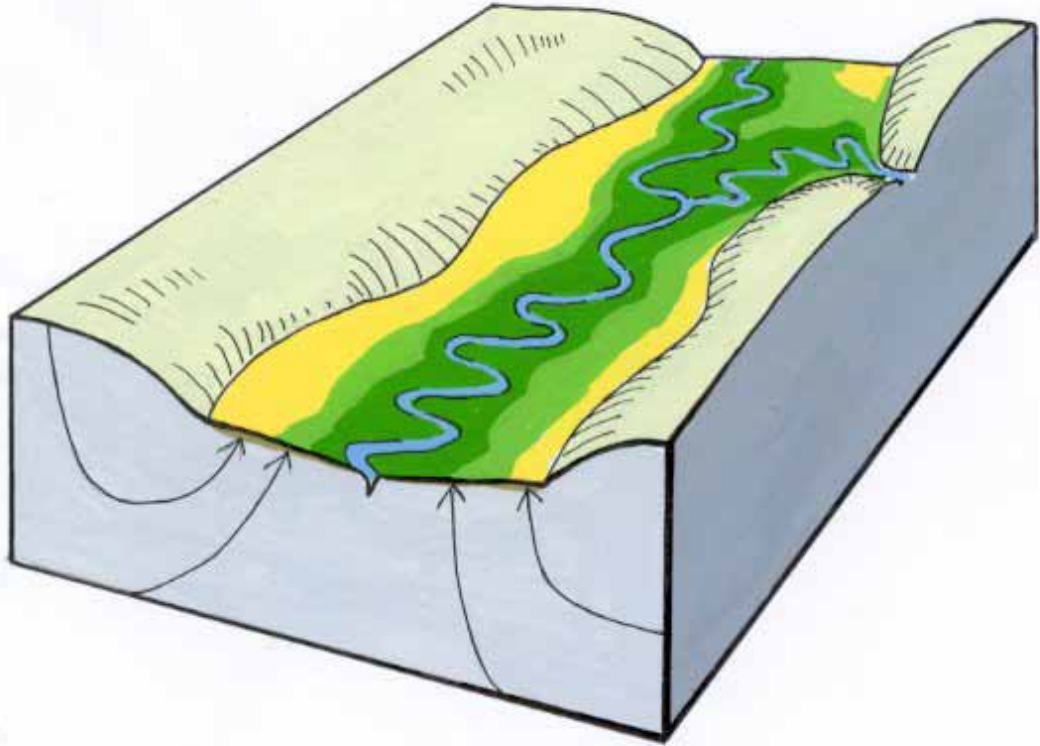


500 ha of fish ponds

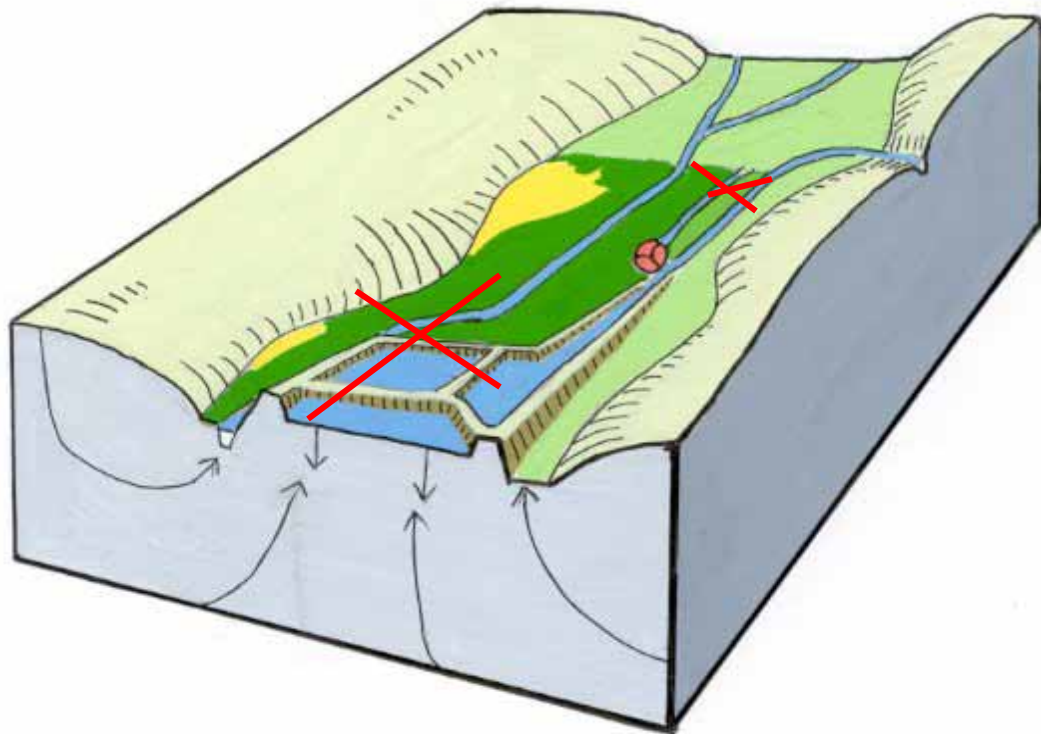






Problem: drying out of the peatland

Reconstruction of former situation



What to do ?



	nutrient-poor
	nutrient-rich
	very nutrient-rich
	peat

Eliminate the pump house.
Make up your mind about the fish ponds

Slovakia: spring mires affected by drainage



Parnassia palustris



Dactylorhiza incarnata



Pedicularis sceptrum carolinum

Case 3

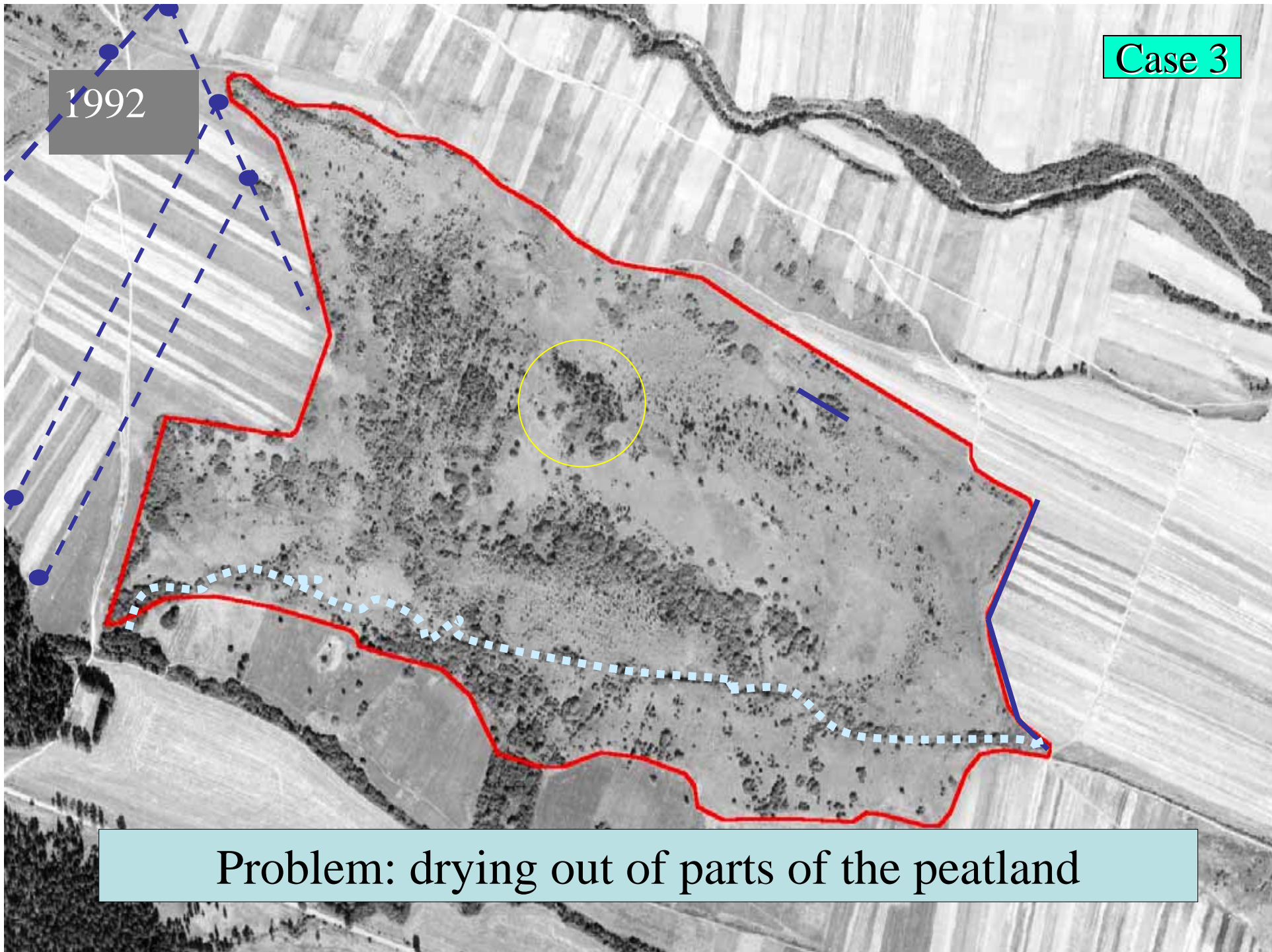
1949

100 ha



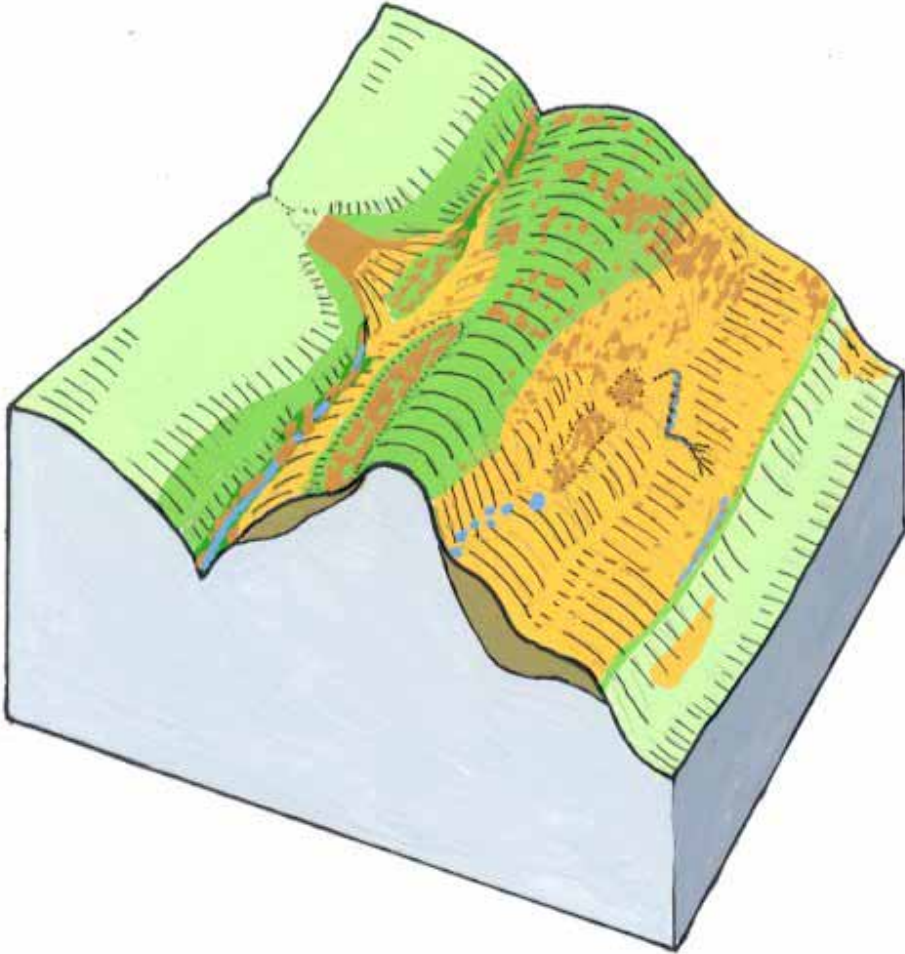
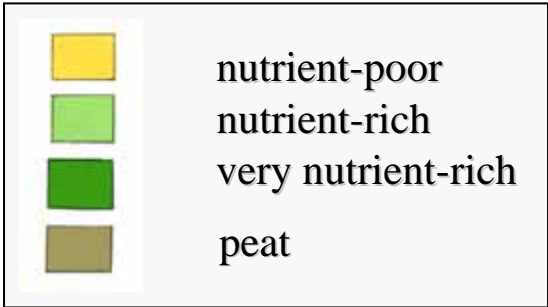
Case 3

1992

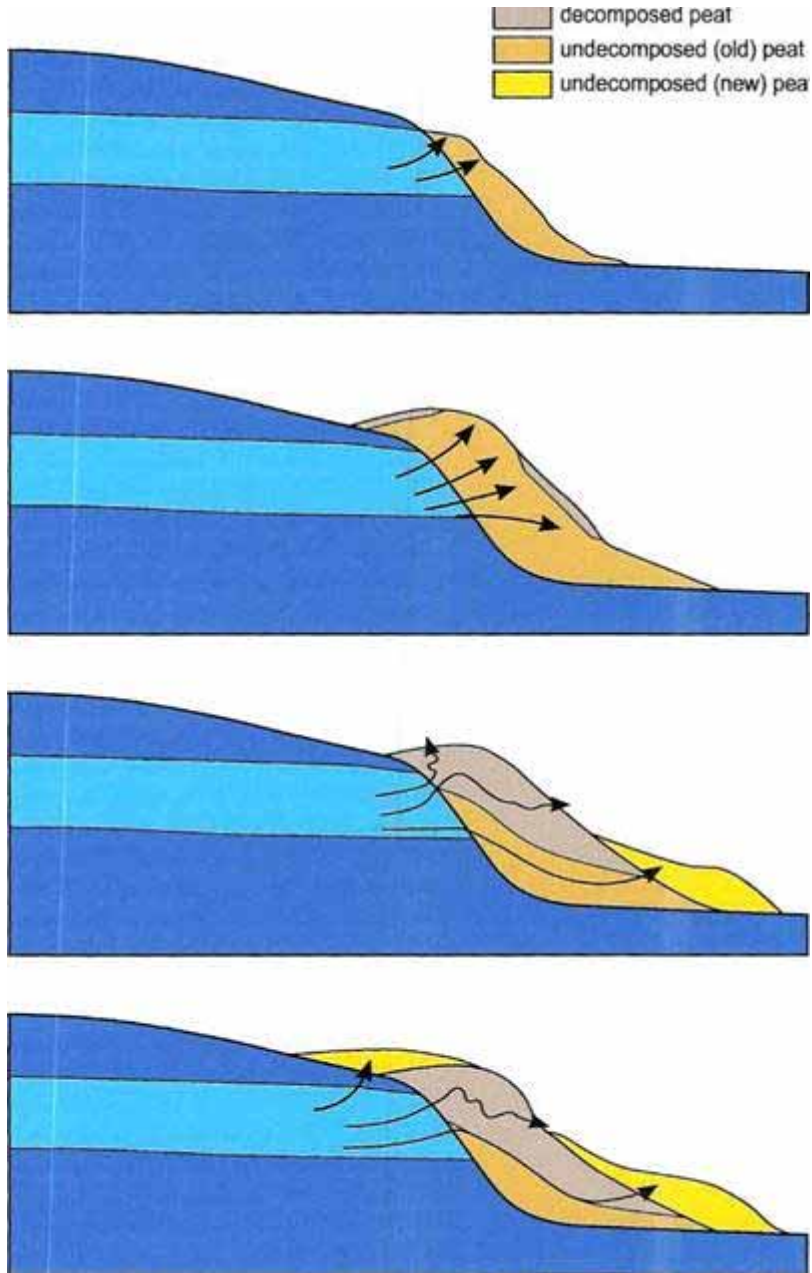


Problem: drying out of parts of the peatland

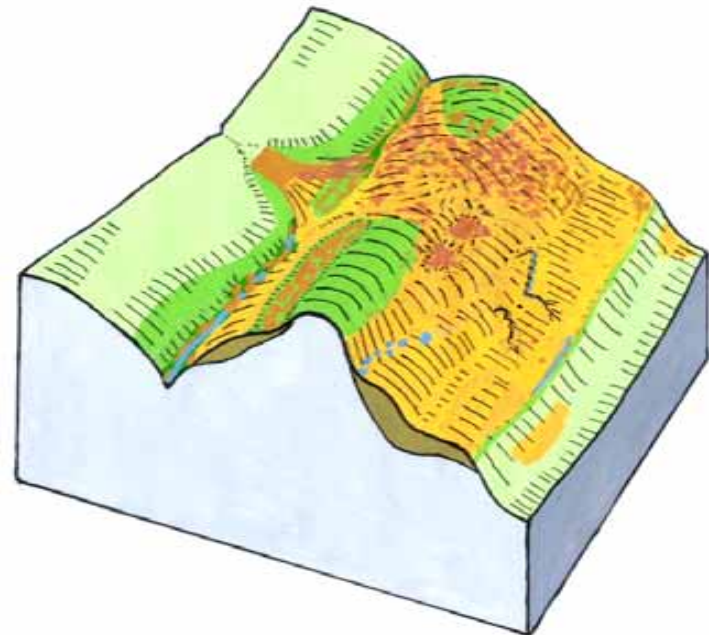
Slovakia: present situation



Case 3

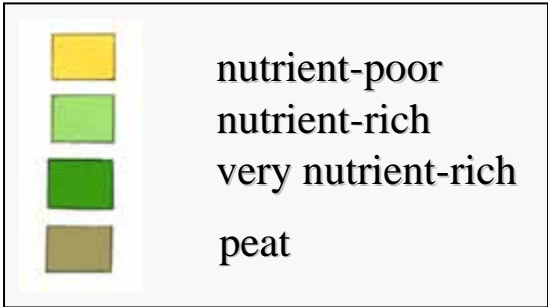


reconstruction of the
former situation

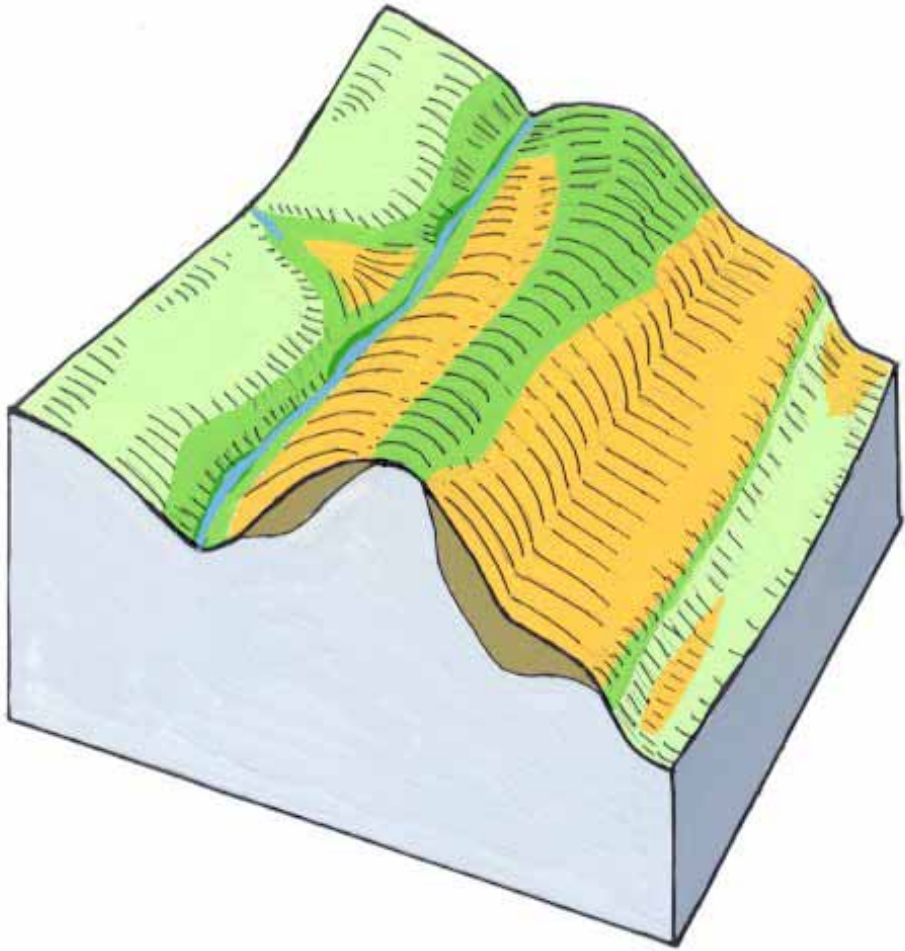


The mire had already
repaired itself

What to do?

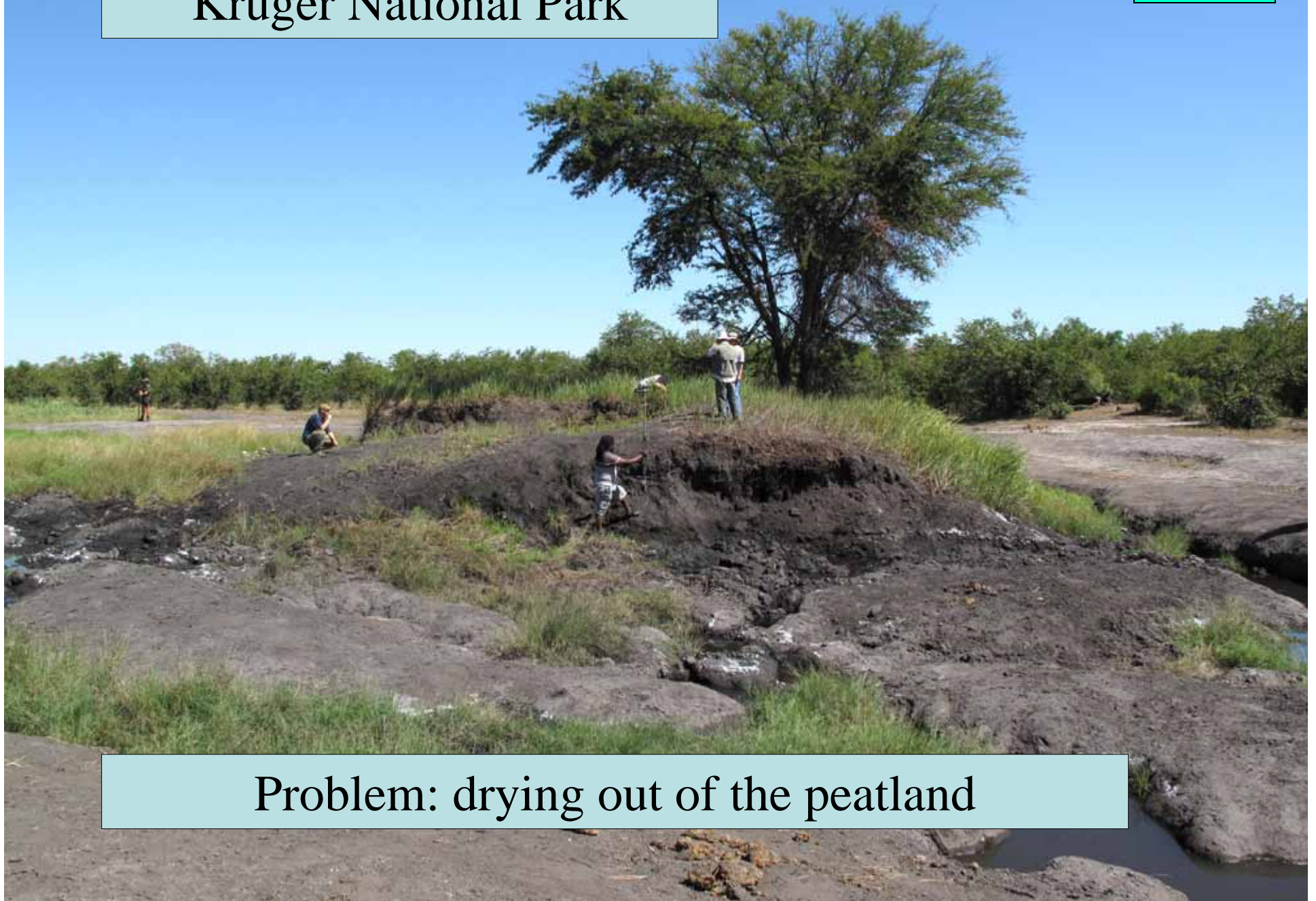


Resume traditional management: cut the trees and start mowing again, prevent further drainage in the surroundings



Kruger National Park

Case 4



Problem: drying out of the peatland

Kruger National Park

Case 4



A hot spring

Kruger National Park

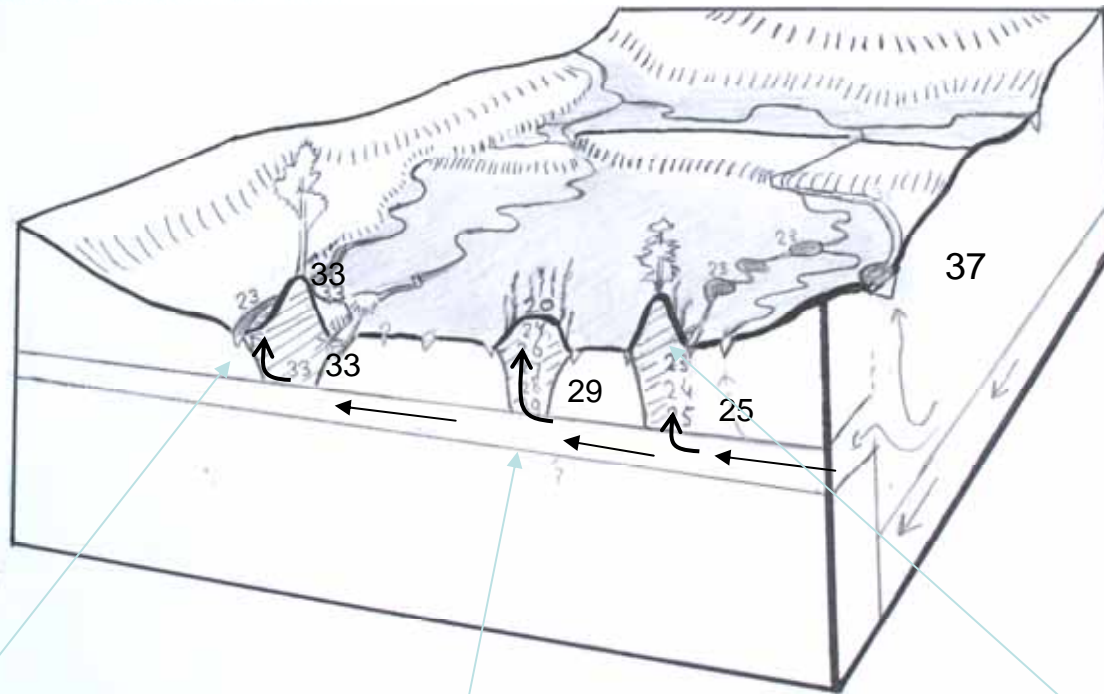
Case 4



Still growing peatland?

Temperature profiles

Case 4



Kruger National Park

Case 4



What to do?

Conclusion

When there is a problem
Analyse possible causes first.

If you do not understand the functioning of
the system

Do not jump to restoration.

Because you might add to the problem.

Conclusion



Take your time

Most wetlands are patient patients.