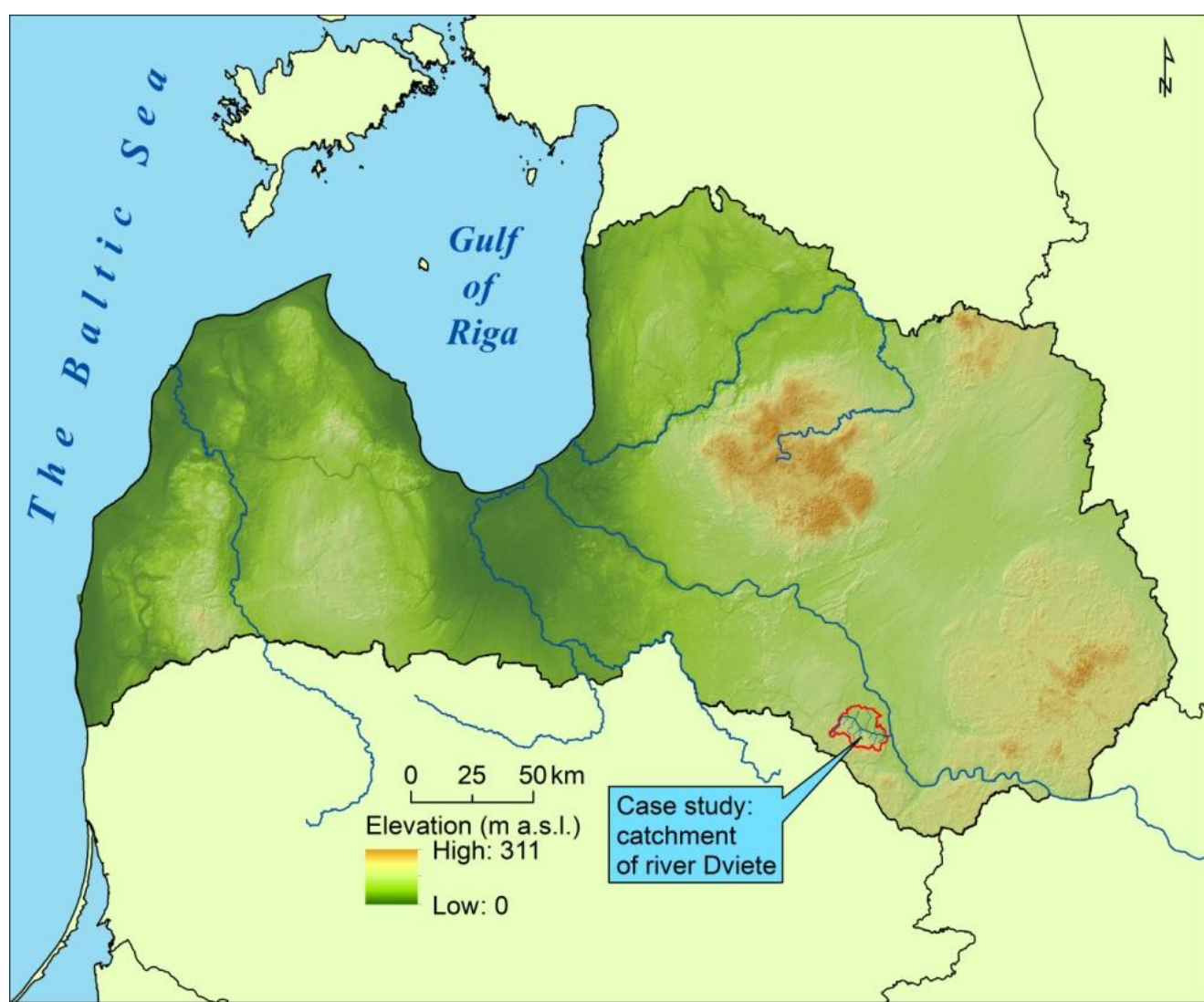




DU Study Site: Dviete river basin (LATVIA)

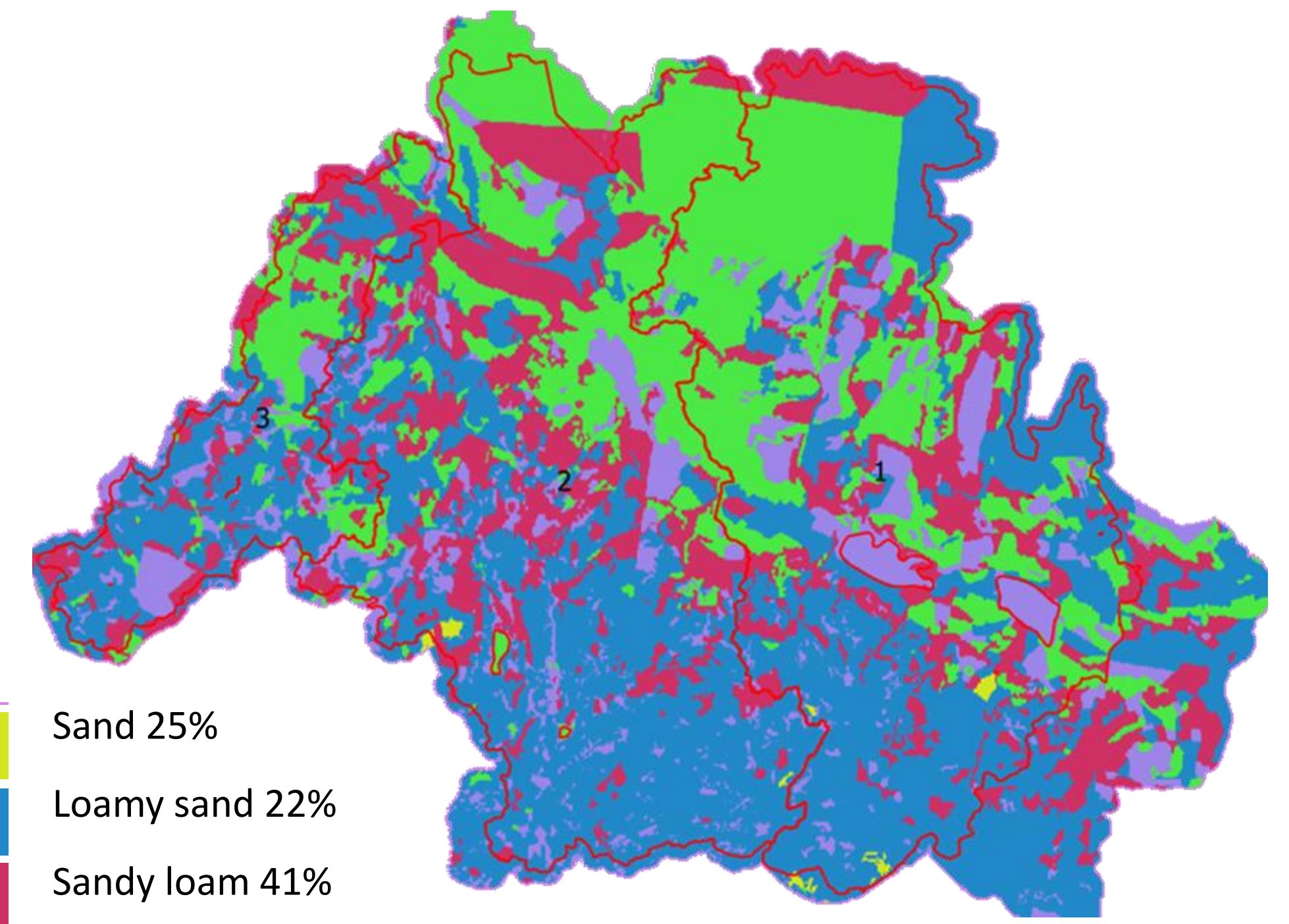
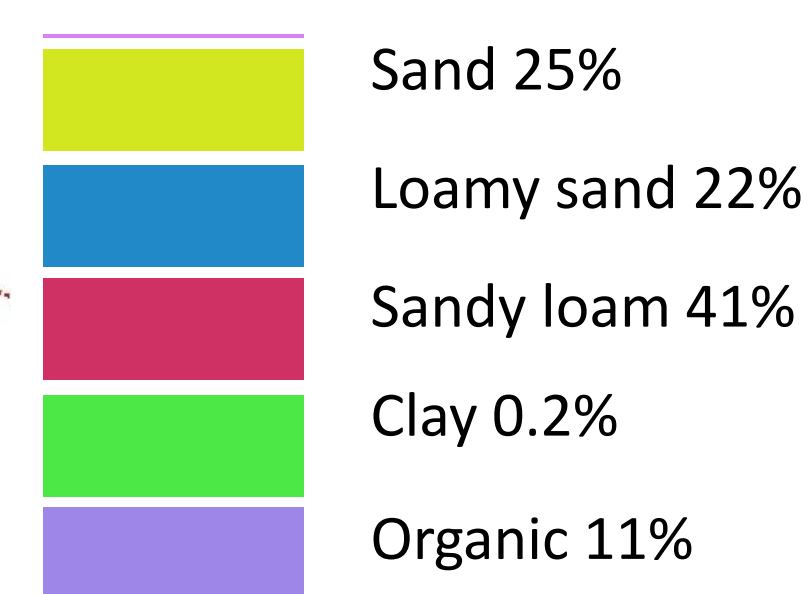
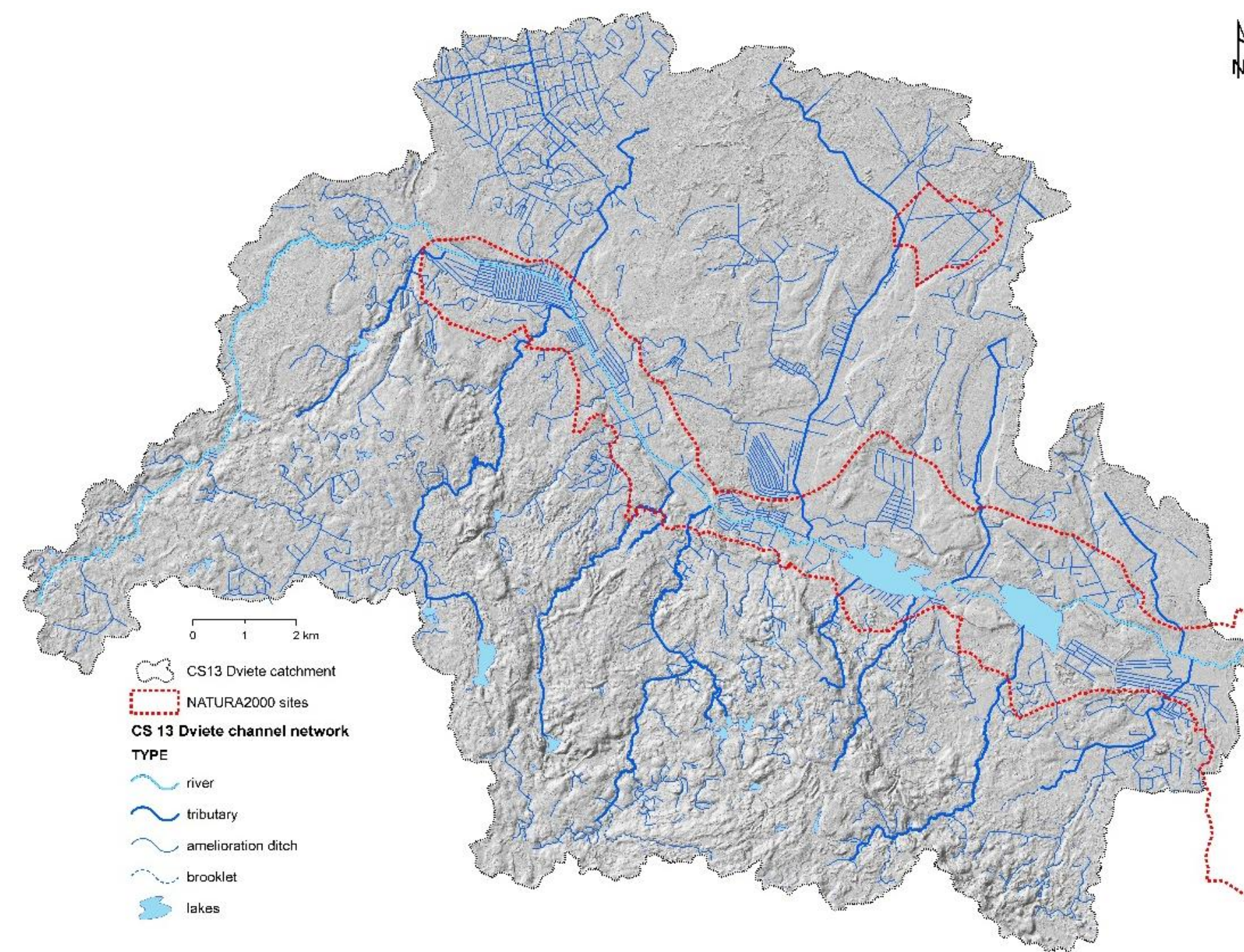
Arturs Skute, Raimonds Ernsteins, Arturs Veinbergs, Ieva Siksnane, Davis Gruberts, Juris Soms

CS13 Dviete catchment: in brief



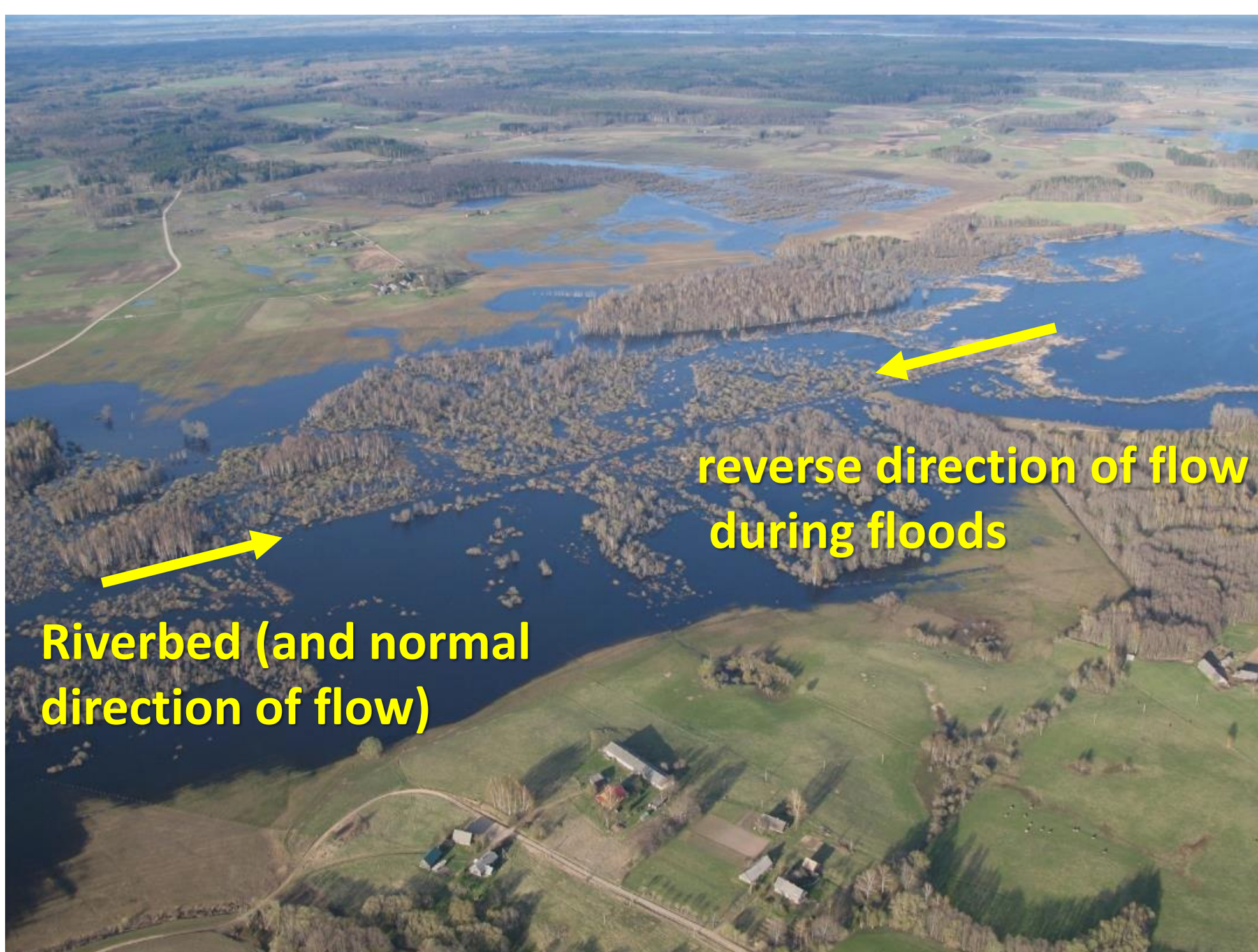
Hydrology:

Catchment area: 253 km²;
Annual runoff: 0,057 km³;
Length: 37 km



Dominant soil texture

CS13 Dviete retention issues

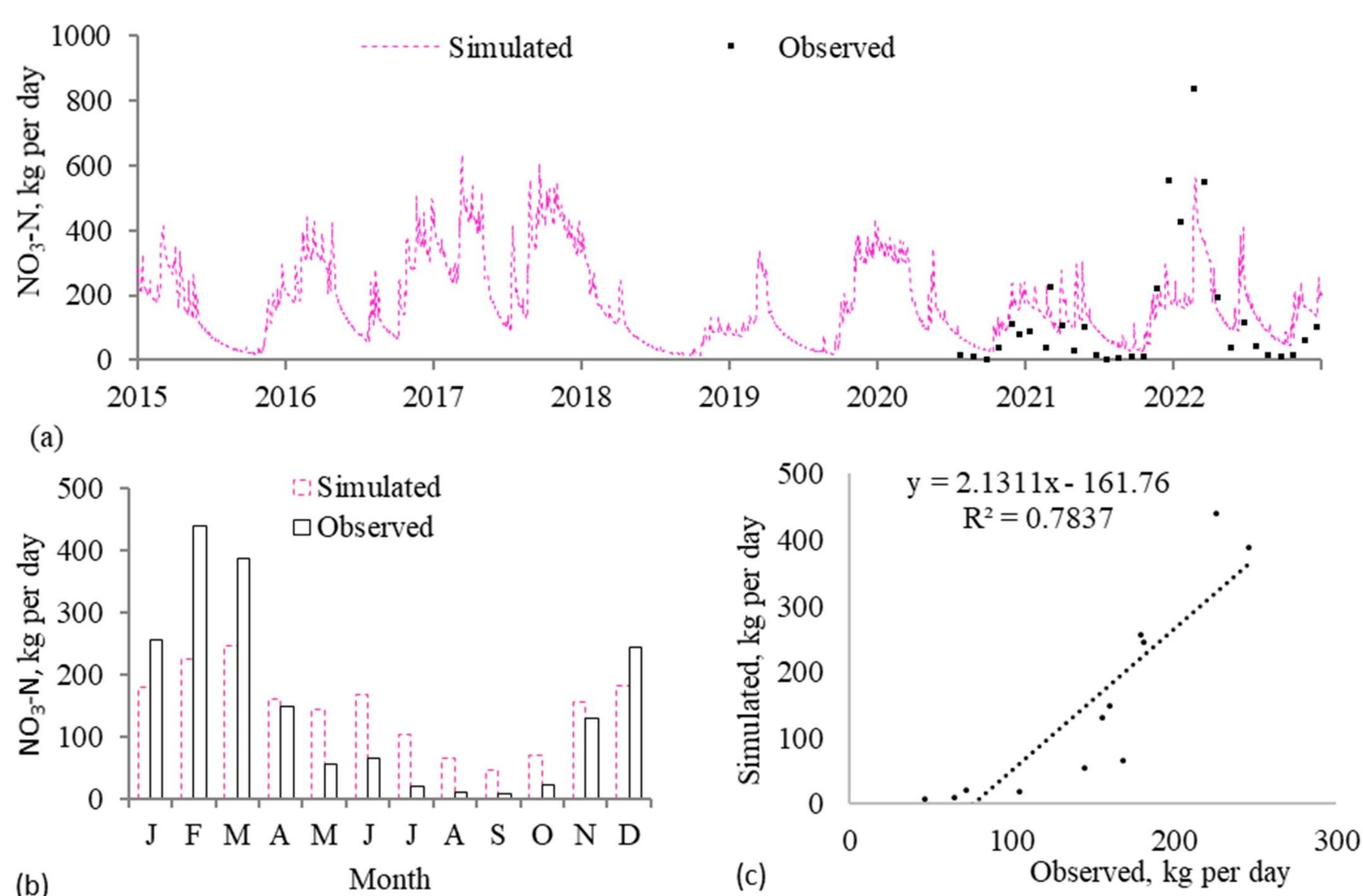


Gallinago media & at least 28 species listed in Annex I of the EU Birds Directive

- ✓ flood having a recurrence interval of 10 years (10%) inundates 23.04 km² or 9.07% of catchment
- ✓ flood having a recurrence interval of 100 years (1%) inundates 52.38 km² or 20.62% of catchment



Results: Modelling



Model performance for NO₃-N load simulation: (a) daily time series, (b) average monthly loads, and (c) relationship between observed and simulated monthly loads

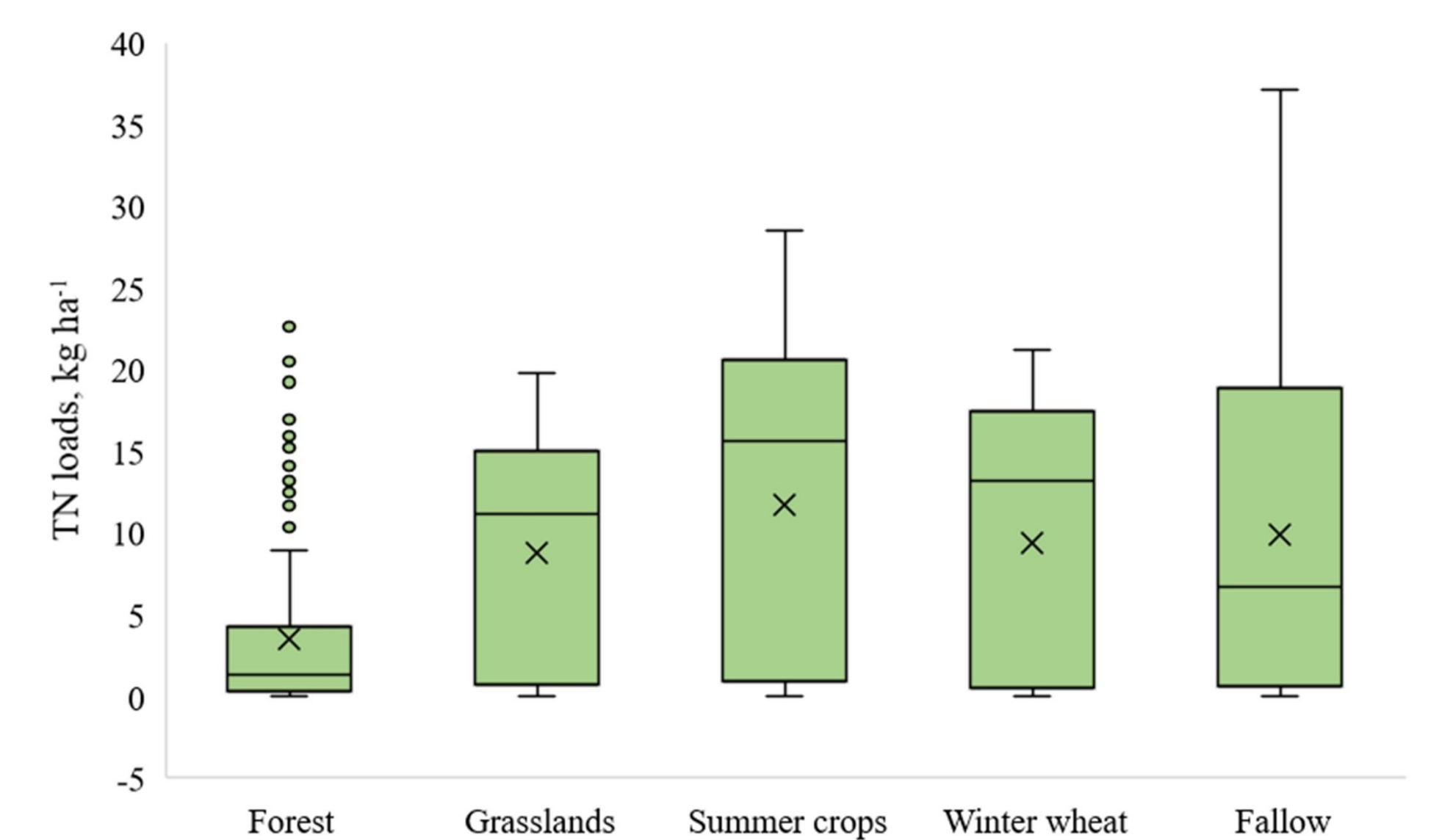
WOCAT status - submitted

Submitted: Water Level Adjustment Threshold [Latvia]

Submitted: N03 Floodplain restoration and management [Latvia]

Submitted: Buffer strips and hedges [Latvia]

- ✓ In undrained areas, the amount of total nitrogen leached, or leaching, is significantly affected by the slope of the land surface - the amount leached increases with the slope of the land surface
- ✓ while in drained areas, slope has no significant effect. In drained areas, leaching is mainly affected by the grain size composition of the soil (peat, loam, clay, sand)



Total nitrogen (TN) loads across land use types



MARG meetings

