

A methodological framework to map and assess lake ecosystem services: a multi-temporal analysis study in Lithuania



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Background

Methodologies to quantitatively map and assess aquatic ecosystem services are lacking. Especially, methodologies that can be applied at a national scale, and integrate a multi-temporal perspective. This study develops a methodological approach for multi-temporal national scale assessment of lake ecosystem services.

Study Area

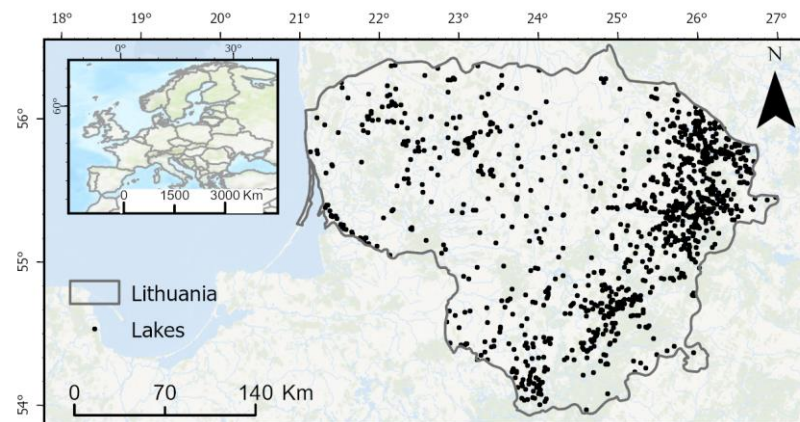


Fig. 1 – Study area.

Methodology & Results

The methodological framework (Fig. 2) was developed following a quantitative approach, integrating several data sources (e.g., remote sensing), and addressing multiple ecosystem services dimensions (e.g., flow) (detailed information see Inácio et al. 2023).

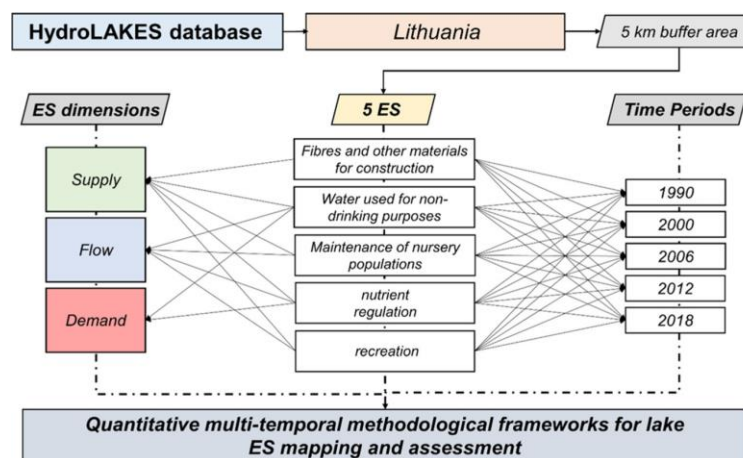


Fig. 2 – Methodological approach (adopted from Inácio et al. 2023)

Inácio, et al. 2023. Frameworks for mapping lake ecosystem services. An example from Lithuania. *MethodsX*, 10:102015

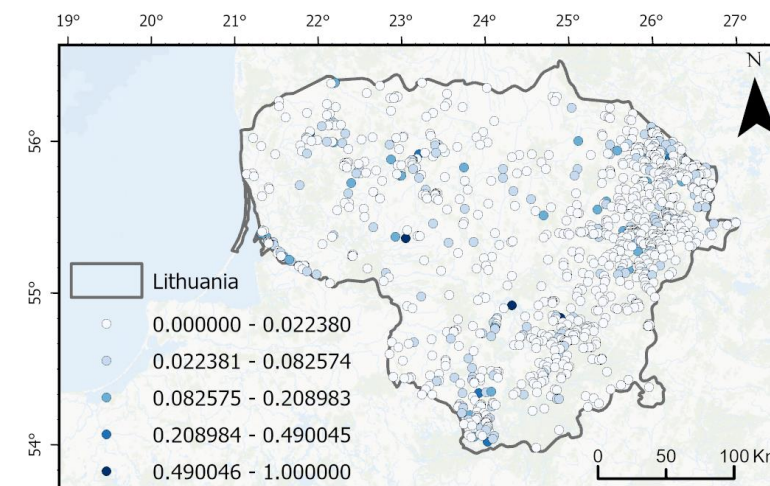


Fig. 3 – Water for non-drinking purposes ecosystem service flow (normalized values)



Fig. 4 – Lake in Lithuania