



Interactive session: Lubāna lake demo area challenges and synergies in balancing nature conservation, water management and other policy objectives

Baltic-Nordic region thematic workshop/ summary from LV group
Lubāns, 29-30 September 2021

EU LIFE Programme integrated project
“Implementation of River Basin Management Plans of Latvia towards good surface water status”



Lubāns area: trade-offs and synergies (Example I)

Building of dams and polders; flood control



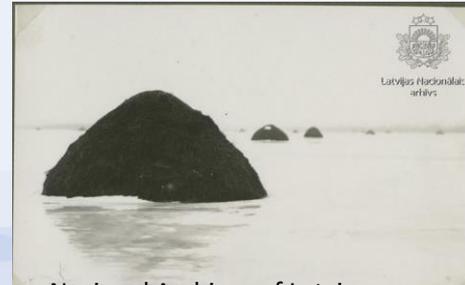
- more areas for
agriculture,
farmsteads, forestry



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- decrease in areas of
flood-dependent
habitats, e.g.
Floodplain grasslands



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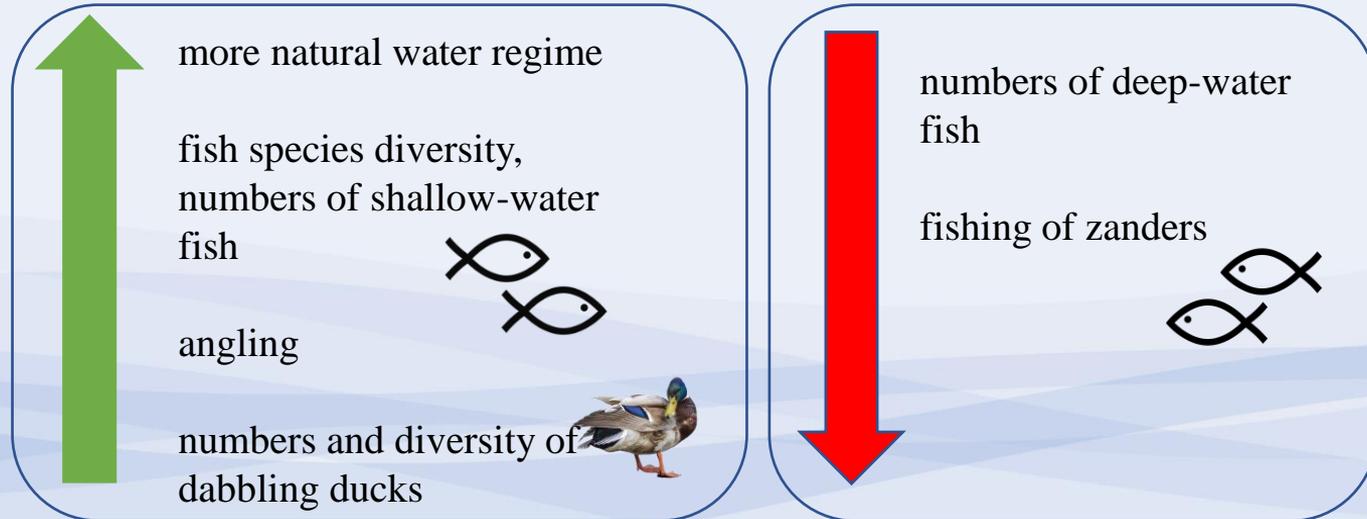
Lubāns area: trade-offs and synergies (Example II)

Water level of the lake

Current level (determined by regulations): 92,0–93,0 m

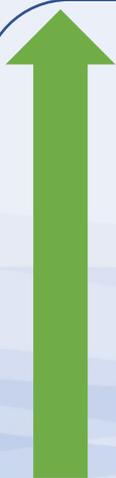
A study (Madona municipality, 2006) suggested construction of a obstruction with overflow of 91,7 m high

Potential benefits and losses:



Lubāns area: trade-offs and synergies (Example III)

Migratory birds vs. agriculture and fish farming



feeding and resting sites for
migrating birds

potential of birdwatching
tourism



losses for agriculture

losses for fish farming

expenditures of state
budget for
compensations

Summary of discussion: possible scenarios for management of the Lubāna lake area

Construction of obstruction with overflow which slightly lowers the water level and allows fish migration from Aiviekste river to the lake Lubāns:

(+) expected increase in diversity and abundance of fish and dabbling ducks

(-) expected decrease in number of deep-water fish, e.g. pikeperch

(-) lowering of water level could promote overgrowing of lake by reeds

(+/-) a business opportunity of construction materials from reed could be promoted (it could be profitable thanks to vast reed resources); however, to sustain the business, the appropriate reed cutting method shall be selected (e.g. cutting in winter) in order not to eliminate the reed stands

(+/-) in order to improve water exchange and thereby reducing the level of eutrophication and overgrowing of the lake, an option of restoring inflow from some of rivers, currently channelled around the lake, could be considered

Summary of discussion: possible scenarios for management of the Lubāna lake area

Floodplain restoration by partial removal of dams/regulation of water level

- (+) opportunity for large scale restoration of habitats of community importance and improving conditions for birds (e.g. great snipe *Gallinago media*) – significant contribution to objectives of the EU Biodiversity Strategy 2030
- (-) expected significant increase of flood risks and related losses to agriculture, damage to settlements (important emotional factor (!) for local inhabitants, considering long history in fighting with floods)
- (+) appropriate water level management can support both – nature conservation objectives and suitable conditions for extensive agriculture/pastures (example of the Nemunas delta in Lithuania)
- (+) shift from crop production (on organic soils) to permanent grasslands/pastures would support climate change mitigation objectives
- (+) restoration of the lake and surrounding floodplains could facilitate boosting of nature tourism and recreation, creating new income opportunities for local entrepreneurs

Summary of discussion: recommendations

- In order to decide on the most suitable management options, the precise nature conservation objectives for the Lubāna wetland complex shall be defined (such objectives are foreseen in the management plan currently in preparation).
- However, depending on the management scenario different nature as well as socio-economic benefits and trade-offs can be expected, which could lead to formulation of different targets.
- Therefore, an open discussion on possible scenarios shall be started involving local people, municipality representatives, entrepreneurs, nature conservationists, researchers and other stakeholders.
- Scenario building can be supported by modeling of impacts of different scenarios/management solutions and assessing the costs and benefits to nature and society.
- Such interactive scenario building and analysis as well as forming of discussion and relationship with local communities (necessary for building of trust and understanding) is a long term process, therefore solutions will not be ready for the currently developed nature management plan.
- Nevertheless, the management plan can set the basis for investigations and needs to support further work on optimum solutions. Scenario building can be facilitated by LIFE GoodWater IP.

Thank you!



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