



Sveriges lantbruksuniversitet
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Actions for assessment and mitigation of cumulative impact - from a reindeer husbandry perspective

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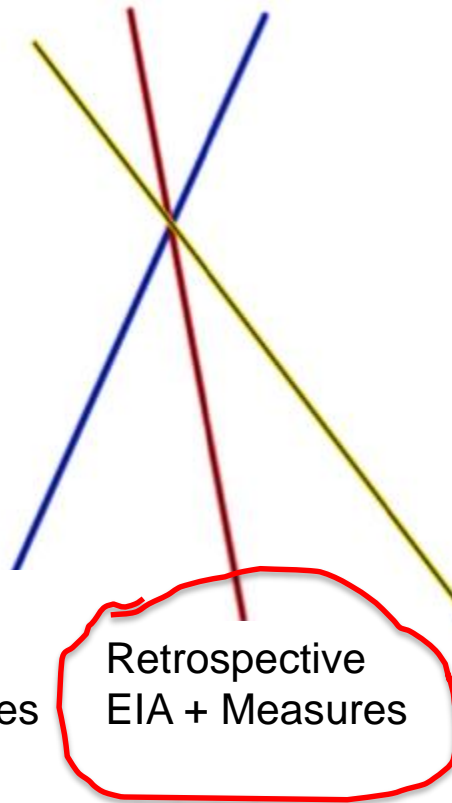
Contested landscapes: navigating competing claims and cumulative impacts in Northern Sweden (CO-LAND)

- The main research questions are:
- What are the most promising approaches to generate a landscape perspective and account for cumulative impacts?
- How can these approaches be embedded in the environmental planning and permit processes to aid civil servants and stakeholders reduce conflicts and build more trust for diverging forms of knowledge?

Project idea – three themes



Reindeer
herding
communities
vision



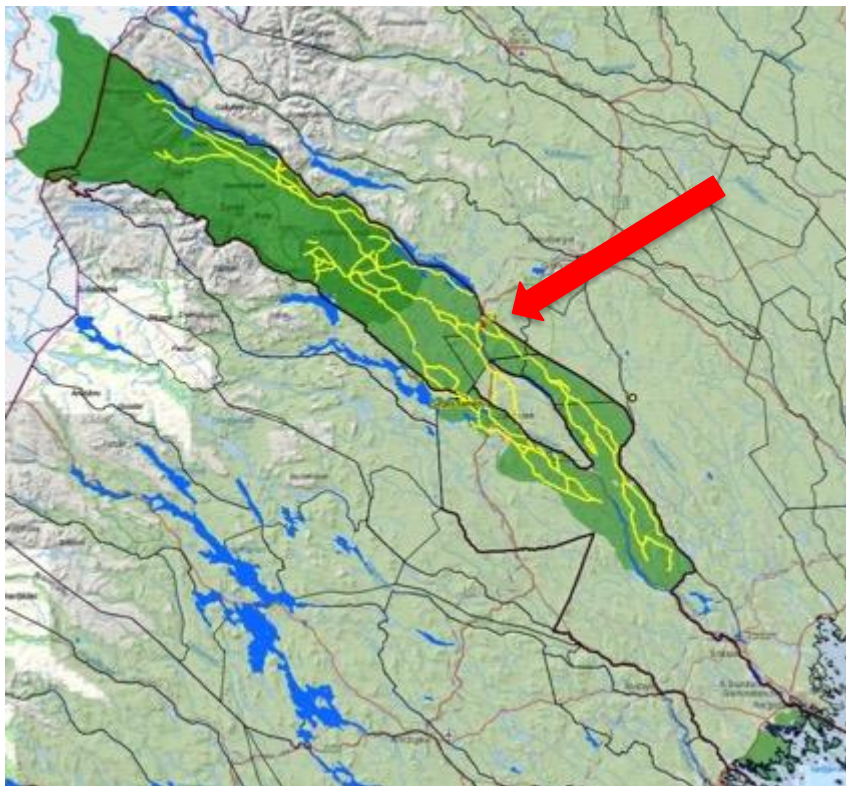
Communication -
authorities,
companies and
politicians

Retrospective impact assessment and (mitigating) measures

Cold case

- Retrospective environment impact assessment
- Develop suggestions for mitigating measures -> the **green infrastructure** for the reindeer
- Workshops/focus-groups discussions
- Individual interviews with elders about impact
- Historical data on land use
- Participatory GIS

Example from Sirges



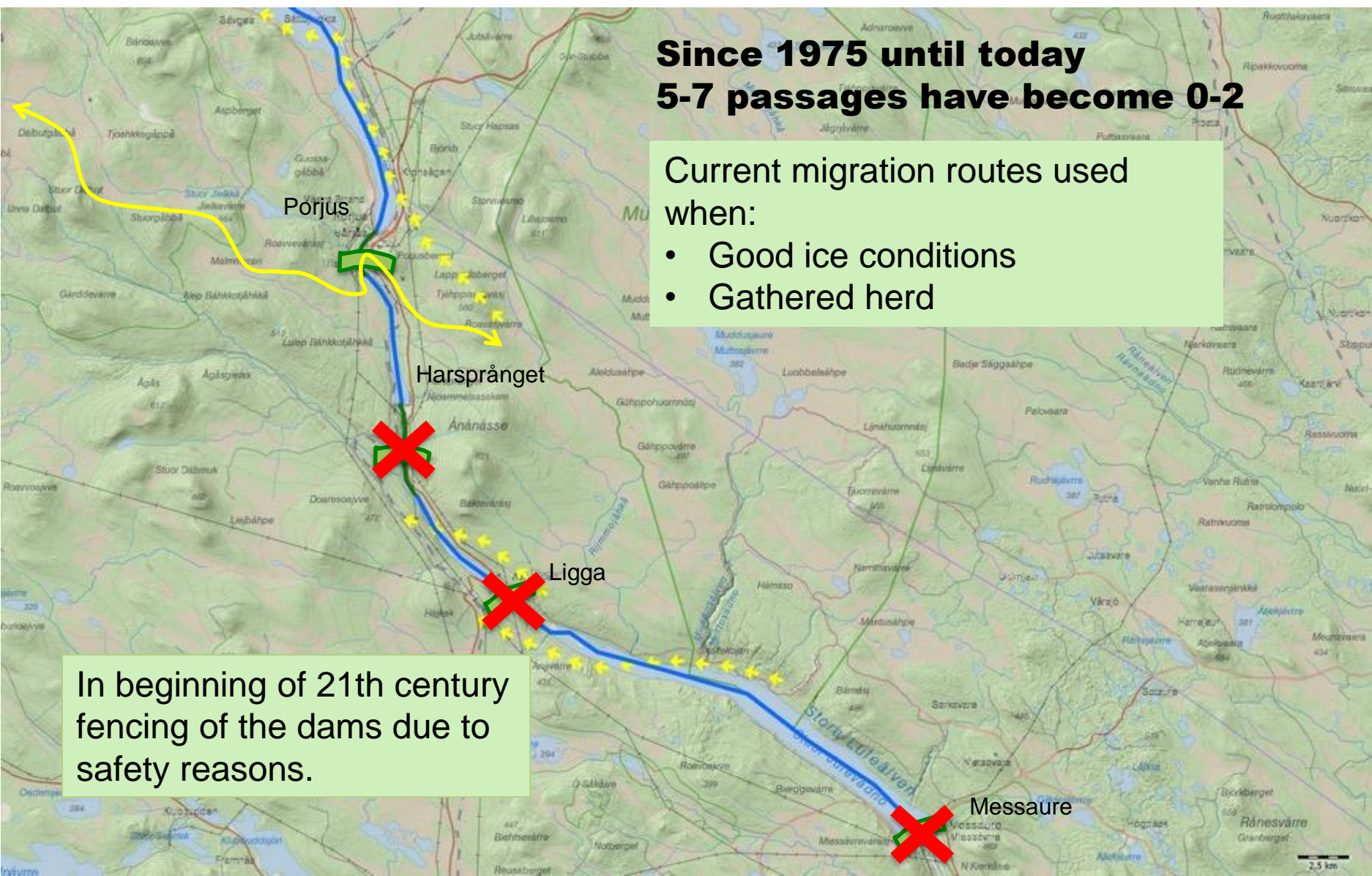
- Porjus focus area
- Hydro power development started in 1910.
- “No problem” expressed in documents from start 1910, ice still OK.
- With increased hydro power capacity ice conditions have become worse and worse.
- Compensation with new migration route in 1975
- Today this new route is available but difficult to use, other alternatives cut-off

**Since 1975 until today
5-7 passages have become 0-2**

Current migration routes used when:

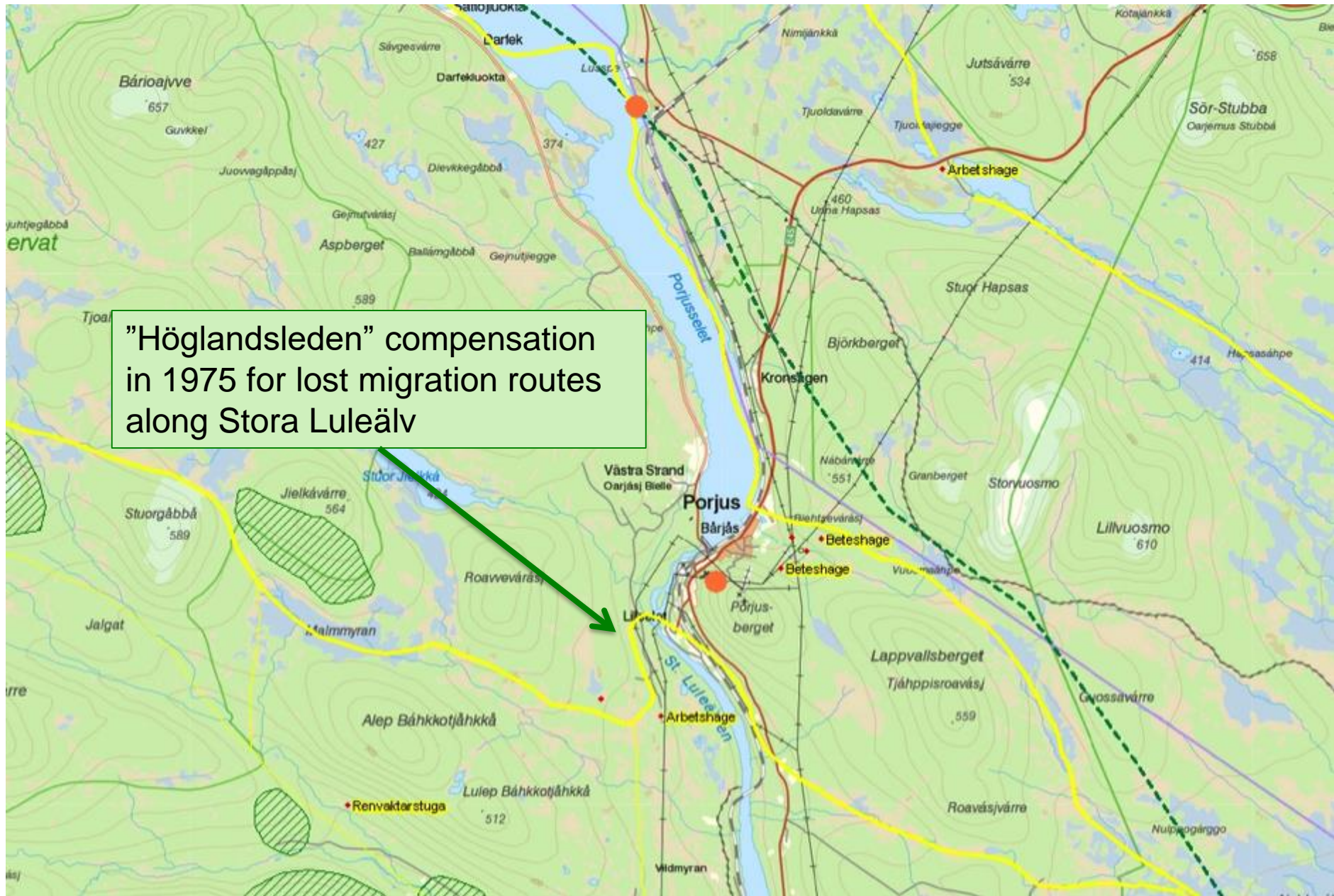
- Good ice conditions
- Gathered herd

In beginning of 21th century
fencing of the dams due to
safety reasons.



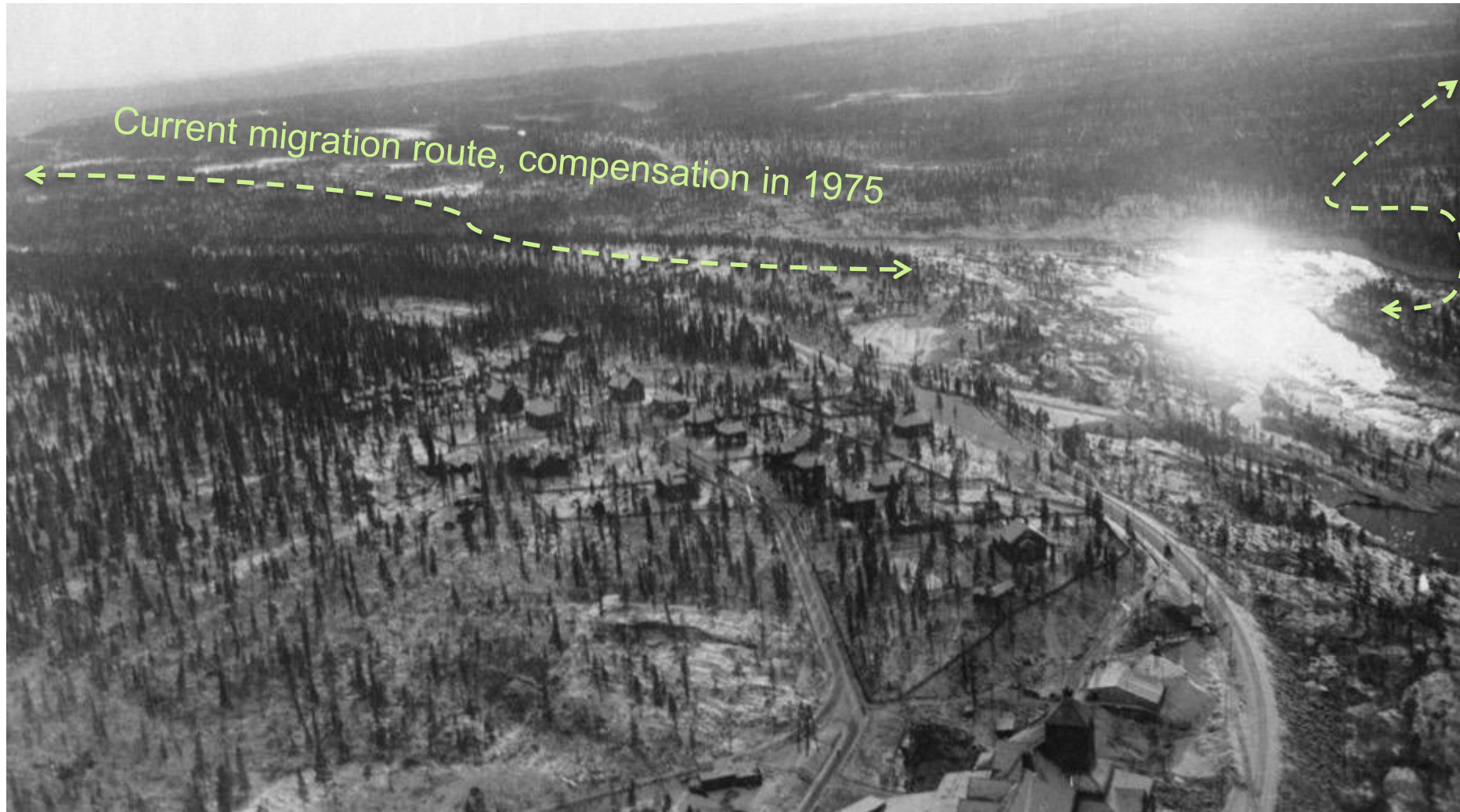
Hydro power dam (—) Dried out water way (—)

Passage alternatives over the hydro power dams during right ice condition (←)



"Höglandsleden" compensation
 in 1975 for lost migration routes
 along Stora Luleälven

Migration routes today (—), migration routes 1945 (---), stopover sites 1945 (●)



Porjus 1921. Due to hydro power development the waterways cannot be used. Instead this route is one of two alternatives. This route was never used before development started.



2018 Migration route today



Alternative migration route today over Porjusselet





Migration route