



LIFE IP CleanEST project practices of migration barriers in North-East Estonia

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LIFE IP CleanEST



- Integrated water management project (2019-2028): improving the status of water bodies of North-East Estonia
- Lot of topics: removal of residual pollution (>28 000 m³ soil – oil products; PAH-s, phenoles, etc.), agricultural pollution, restoring mining areas, assessing ecosystem services etc.
- Environment Agency's (KAUR) activities: migration barriers, restoration of spawning areas, monitoring, assessing effectiveness of fish passes

Eesti vesikonnad ja alamvesikonnad

Vesikonnad

- Lääne-Eesti vesikond
- Ida-Eesti vesikond
- Koiva vesikond

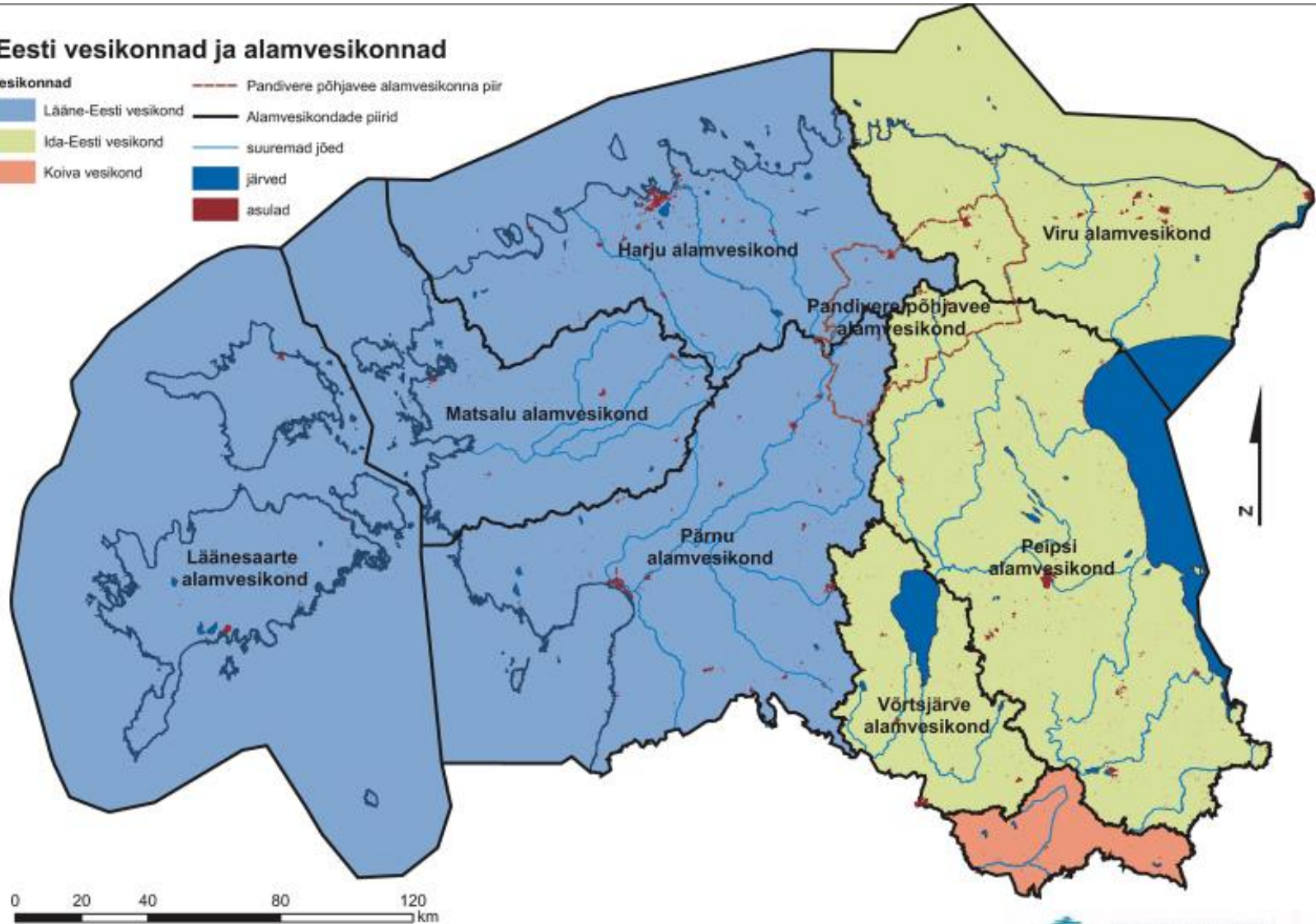
Pandivere põhjavee alamvesikonna piir

Alamvesikondade piirid

suuremad jõed

järved

asulad

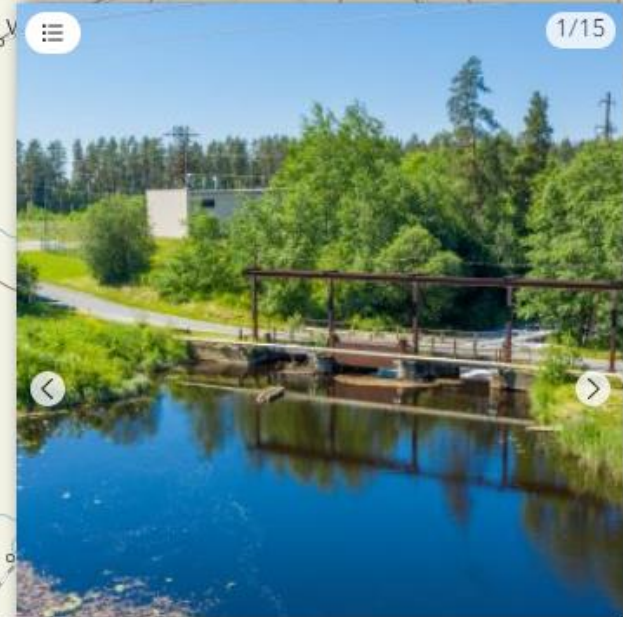
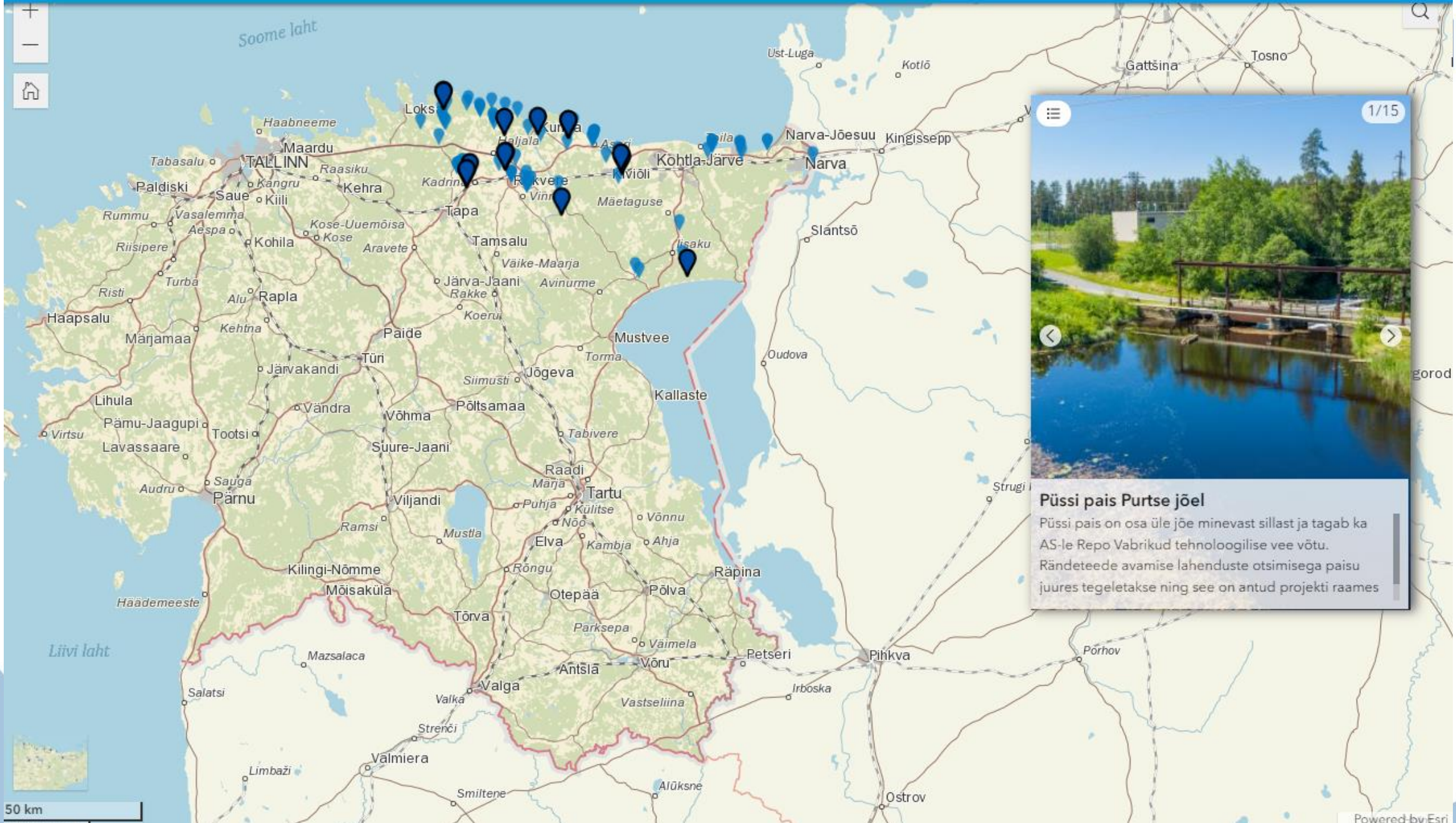


C.11 opening migration barriers and ensuring river connectivity



- Solutions for ≥ 6 migration barriers
- Inspection of Viru sub-basin objects (93 objects, 29 rivers): priority list of 14 objects
- Selection of objects based on different factors (fish population potential, technical feasibility, cost etc)
- **Püssi dam:** close-to-nature rapid fish pass

- 4 dams demolished from preliminary list (without detailed work projects, only technical assessments or similar) + 2 smaller obstacles
- 3+Püssi ongoing (preliminary projects made, demolition in next years)
- Reprioritizing objects: the need to be flexible, „reserve list“



1/15

Püssi pais Purtse jõel
 Püssi pais on osa üle jõe minevast sillast ja tagab ka AS-le Repo Vabrikud tehnoloogilise vee võtu. Rändeteede avamise lahenduste otsimisega paisu juures tegeletakse ning see on antud projekti raames

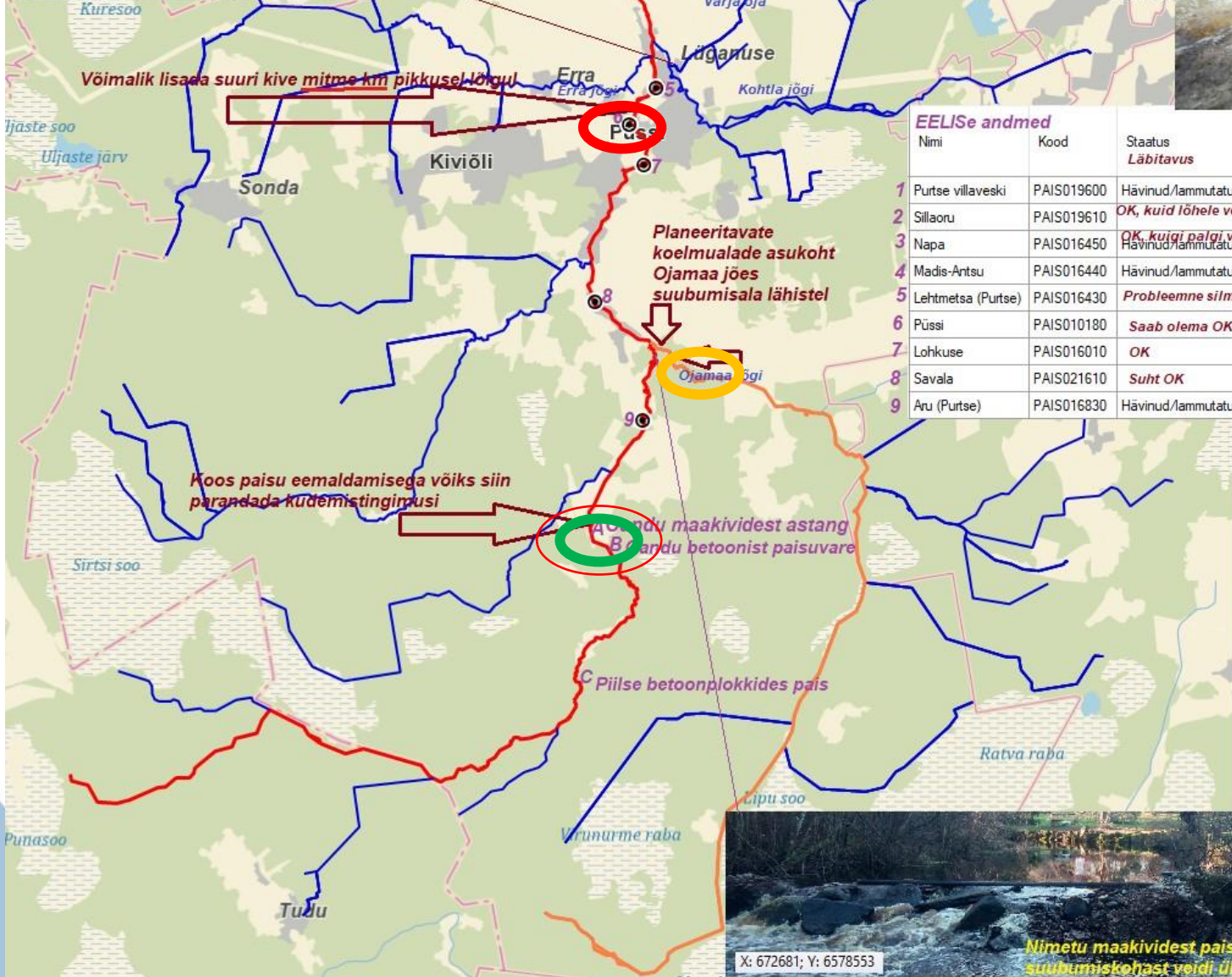
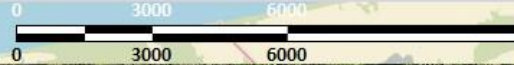


Purtse river system

- One of the most rapids-rich rivers in Estonia, historically 2nd best salmon river
- Synergy of different activities: significant effect
- Removal of residual pollution from tributaries: Kohtla, Erra
- Removal of Püssi dam
- Removal of smaller obstacles, habitat restoration

X:6585870.5, Y:673148.9

Varja oja suudmes olev paisu jäänuks, kus võiks veel rauda (ja betooni) eemaldada



EELISE andmed						
Nimi	Kood	Staatuse Lähitavus	Vooluveeko!	Geomeetria keskpunkti x-koordinaat (m)!	Geomeetria keskpunkti y-koordinaat (m)!	
1 Purkse villaveski	PAISO19600	Hävinud/lammutatud	Purtse jõgi...	671262	6589096	
2 Sillaoru	PAISO19610	OK, kuid lõhele veidi probleeme	Purtse jõgi...	671076	6588661	
3 Napa	PAISO16450	OK, kuigi palgi võiks ka eemaldada	Purtse jõgi...	671417	6588312	
4 Madis-Antsu	PAISO16440	Hävinud/lammutatud	Purtse jõgi...	671802	6588134	
5 Lehtmetsa (Purtse)	PAISO16430	Probleemne silmalt	Purtse jõgi...	672822	6585285	
6 Püssi	PAISO10180	Saab olema OK	Purtse jõgi...	672115	6584302	
7 Lohkuse	PAISO16010	OK	Purtse jõgi...	672495	6583263	
8 Savala	PAISO21610	Suht OK	Purtse jõgi...	671201	6579664	
9 Aru (Purtse)	PAISO16830	Hävinud/lammutatud	Purtse jõgi...	672449	6576572	

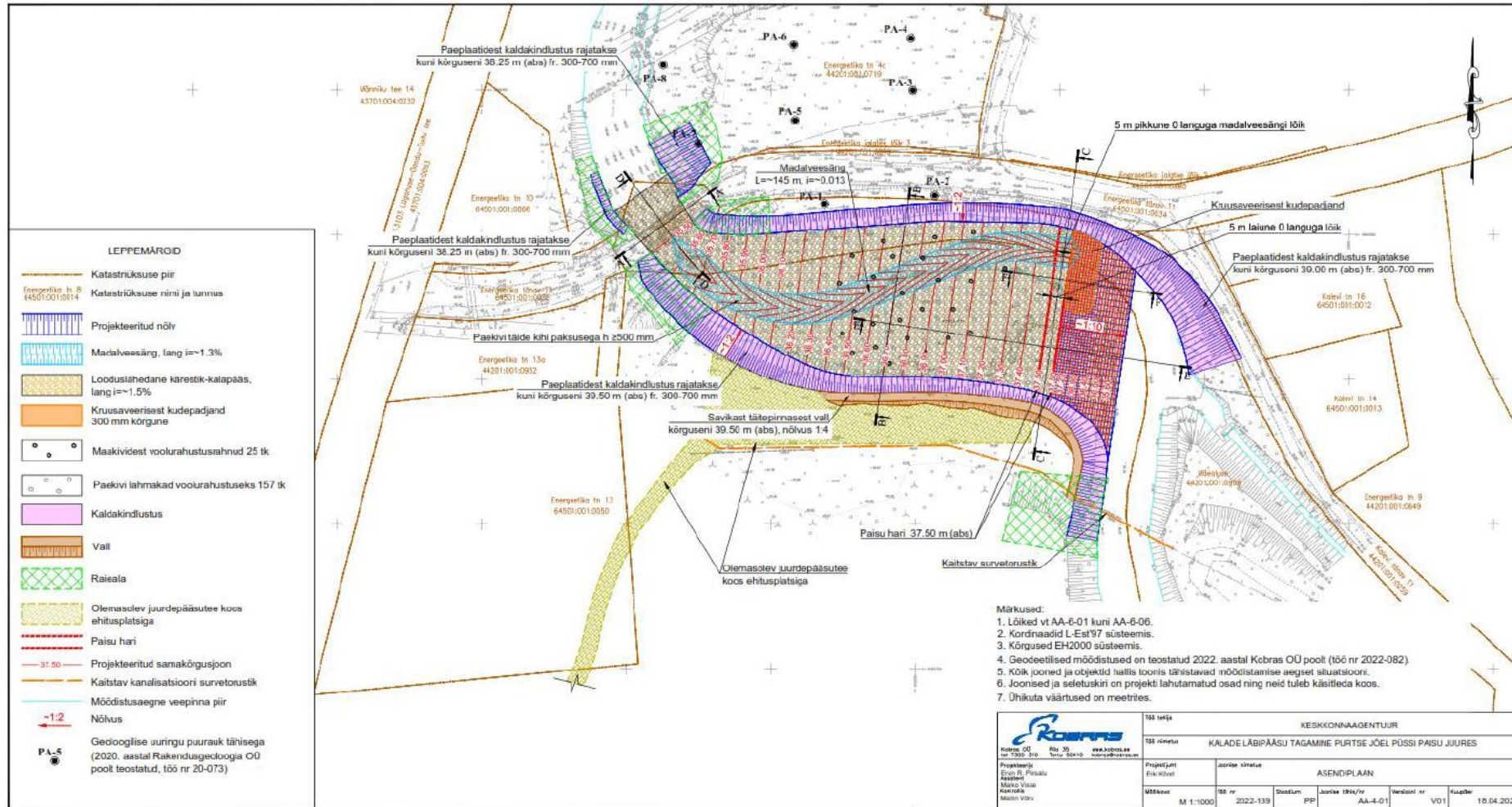




Purtse River: Püssi dam

- 11,6 km from sea
- Cooling water and firewater for producing plywood (Repo Vabrikud AS)
- Work project, EIA
- Repairing the bridge

Purtse river: Püssi dam, close-to-nature rapid fish pass



Joonis 3. Karestik-kalanäsu asendiplaan. Kalade läbipääsu tagamine Purtse jõel Püssi paisu juures (Kobras OÜ töö nr 2022-139).



Püssi pais
Püssi paisjärv

PÜSSI

Purtse jõgi

Irviläta

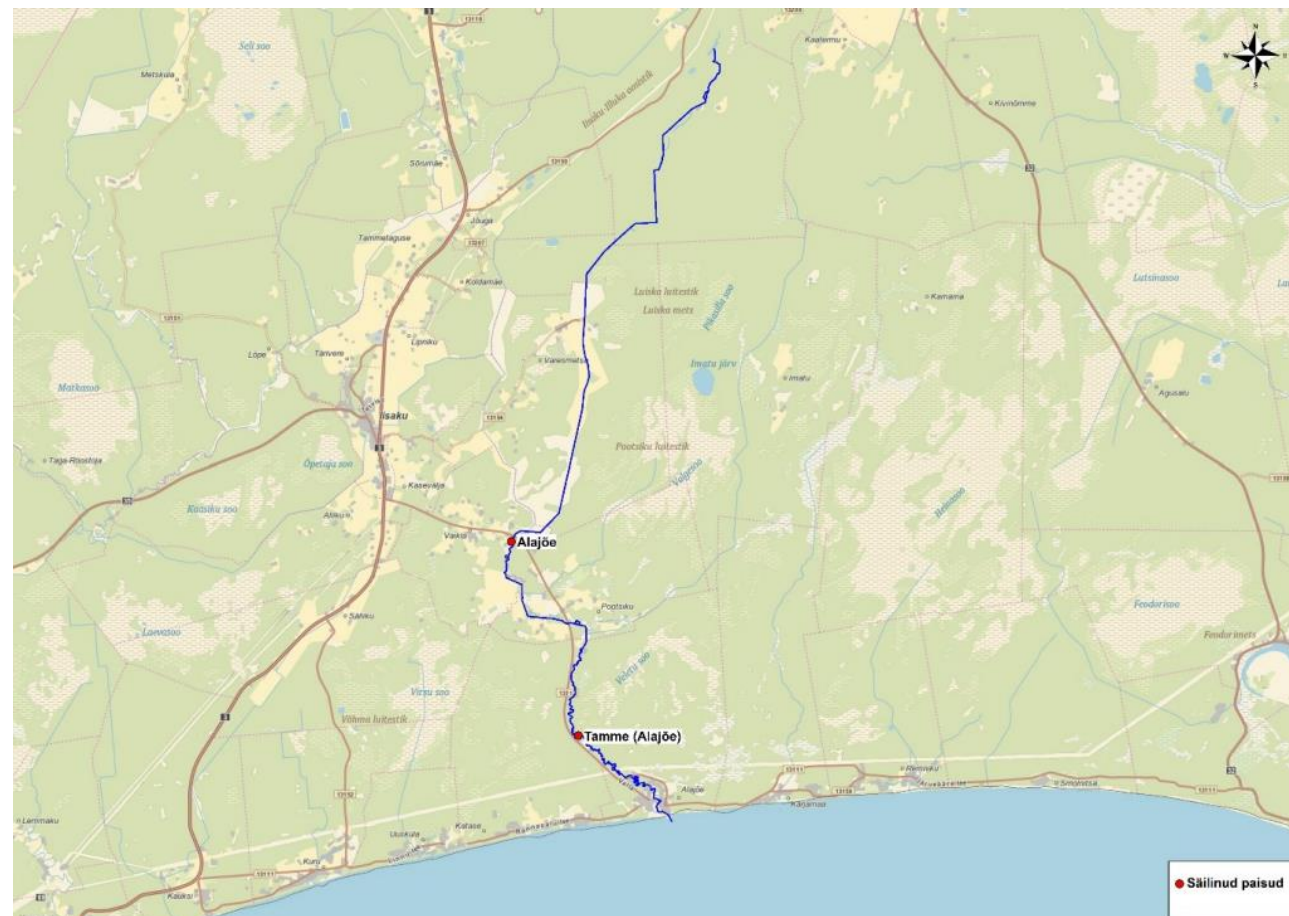
Purtse river: small barriers upstream (2023)



Alajõgi



- Flows into lake Peipus
- Tamme dam from priority list
- Riverbed straightened in middle-course
- Beavers
- Reopening old rivers



Alajõgi River: Tamme Dam, 2023

cleanest 





Alajõe beaver dams





Pada river

- Salmonid river, Natura 2000 protected area
- 2 barriers in project: Unukse dam and Unukse-Mahu culvert
- Protected river lamprey habitats
- Creation of spawning areas



Pada river



Unukse dam removal 2020



Spring 2020

First removal in CleanEST



Autumn 2020



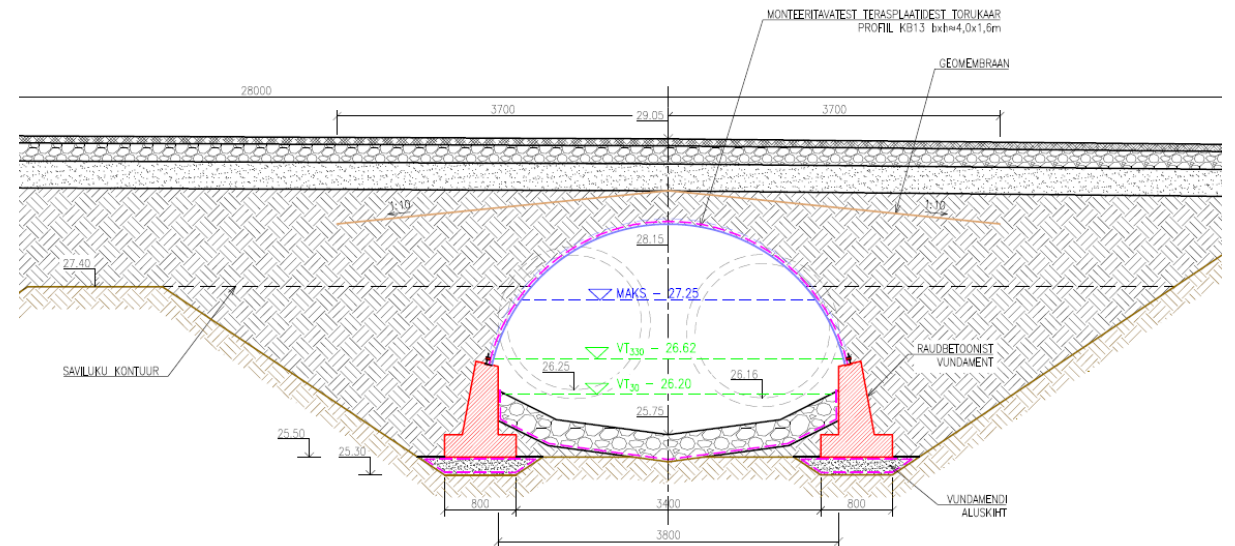
Unukse-Mahu culvert replacement (exp.2025)



- Cooperation with Transport Administration
- At present diameter 1,5 m – after width 3,8 m
- Natural riverbed: enriching river as a habitat



EKTEERITUD TRUUBI RISTL



Pada Veski beaver-dam before-after 09.2021



before



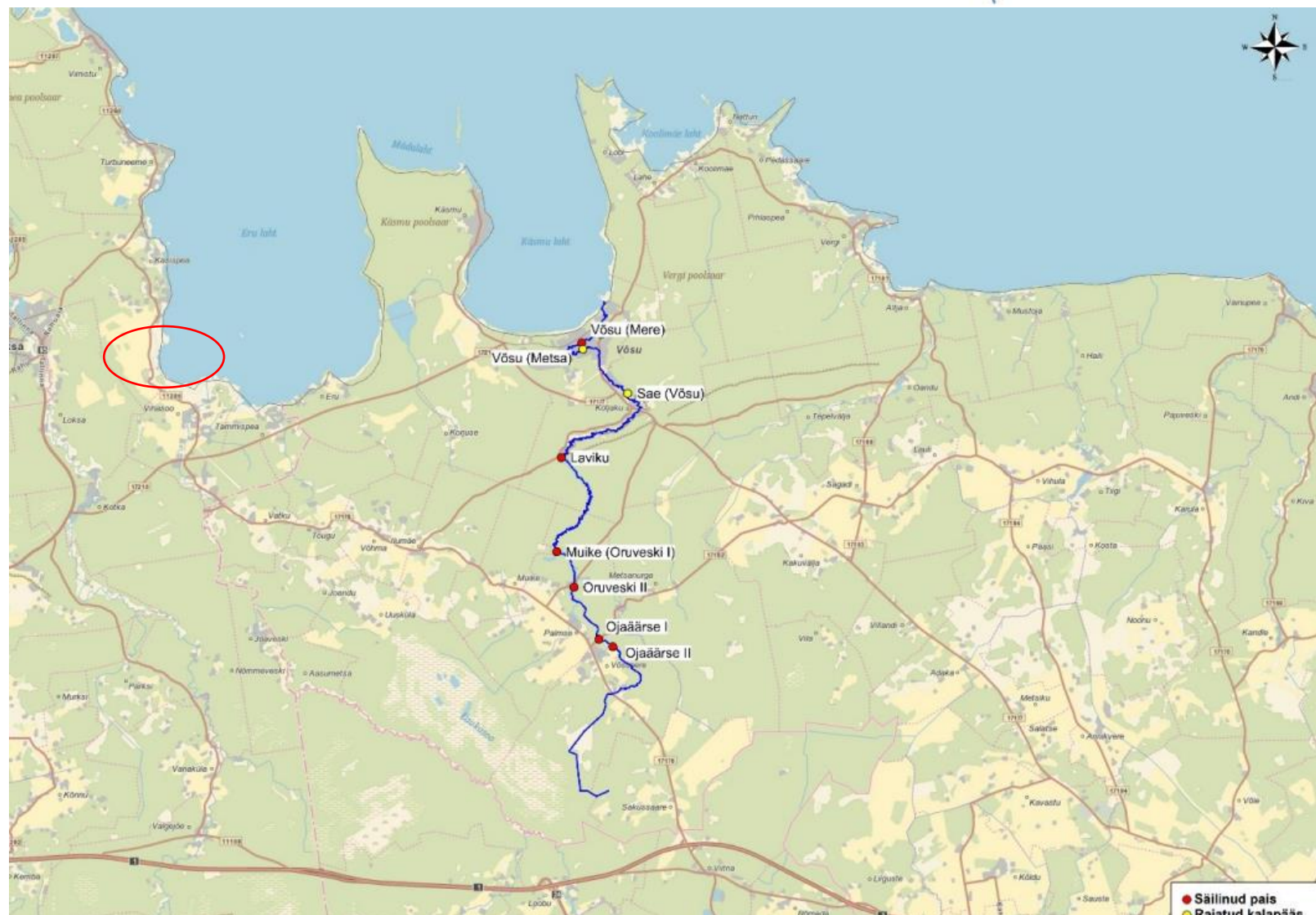
after



Võsu river



- Natura 2000 area
- Salmonid river, value as a spawning area for sea trout and river lamprey



Võsu river: Metsa and Mere



- Dams serve no purpose, height 60 cm
- Long negotiations with owner (+10 years ago)
- Construction is challenging
- Removal in 2024/25



Former hydro power plant





Udriku 2 dams (tributary to Loobu)



before



after



before



after





Virumaa veed puhtaks!

Let's clean the waters of Virumaa!

LIFE IP CleanEST project international conference



“The Interplay of Water and Politics: Understanding the Influence of Water Management on Decision-making”.

- The main objective of the conference is to promote water management efficiency, share valuable knowledge, and raise awareness of issues related to water management, green transition in water management, available funding opportunities
- presentations, panel discussions, practical workshops, and interactive activities
- Workshop themes: coordinating water management plans, problematic dam removals, environmental awareness, nature-based solutions in water management
- International presentations
- Field trips to Aidu quarry and Põlula fishery (resettlement of fish)

Narva, Estonia 25-26th October