



**BIOR**

INSTITUTE OF FOOD SAFETY, ANIMAL HEALTH  
AND ENVIRONMENT

# PRIORITIZATION OF SITES FOR REMOVAL OF OBSTACLES TO FISH MIGRATION IN LATVIA

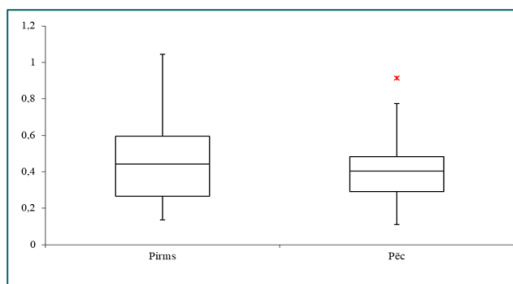
KASPARS ABERSONS

ANDRIS AVOTIŅŠ, AMANDA VASULE, JĀNIS BAJINSKIS, JOLANTA JĒKABSONE,  
RIČARDS KAUPUŽS, TOMS ZALĀNS, ULDIS KEZIKS AND DIDZIS USTUPS

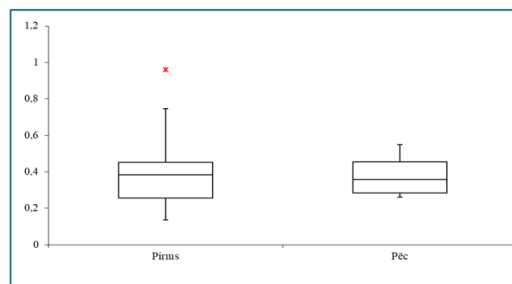
# IMPULSE

## IZMAIŅAS – ZIVJU INDEKSS

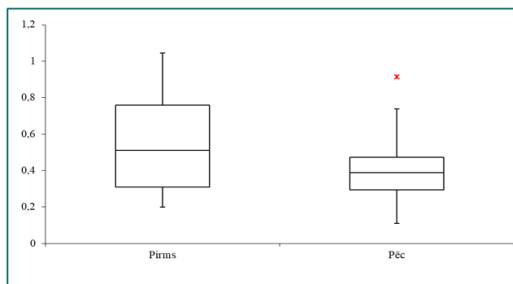
Visi projekti



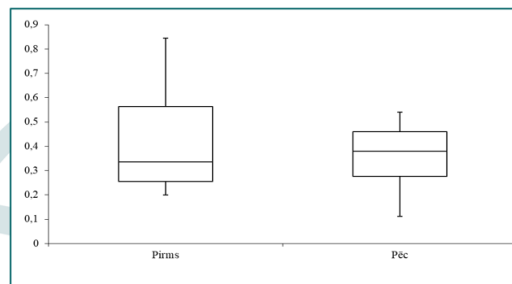
Grunts piebēršana



Koku izvākšana



Būvju izvākšana



17.12.2019.

Sugu un biotopu aizsardzības jomas ekspertu seminārs, Salaspils

5

December 17, 2019, ~15:00

Salaspils, seminar for experts of species and biotopes

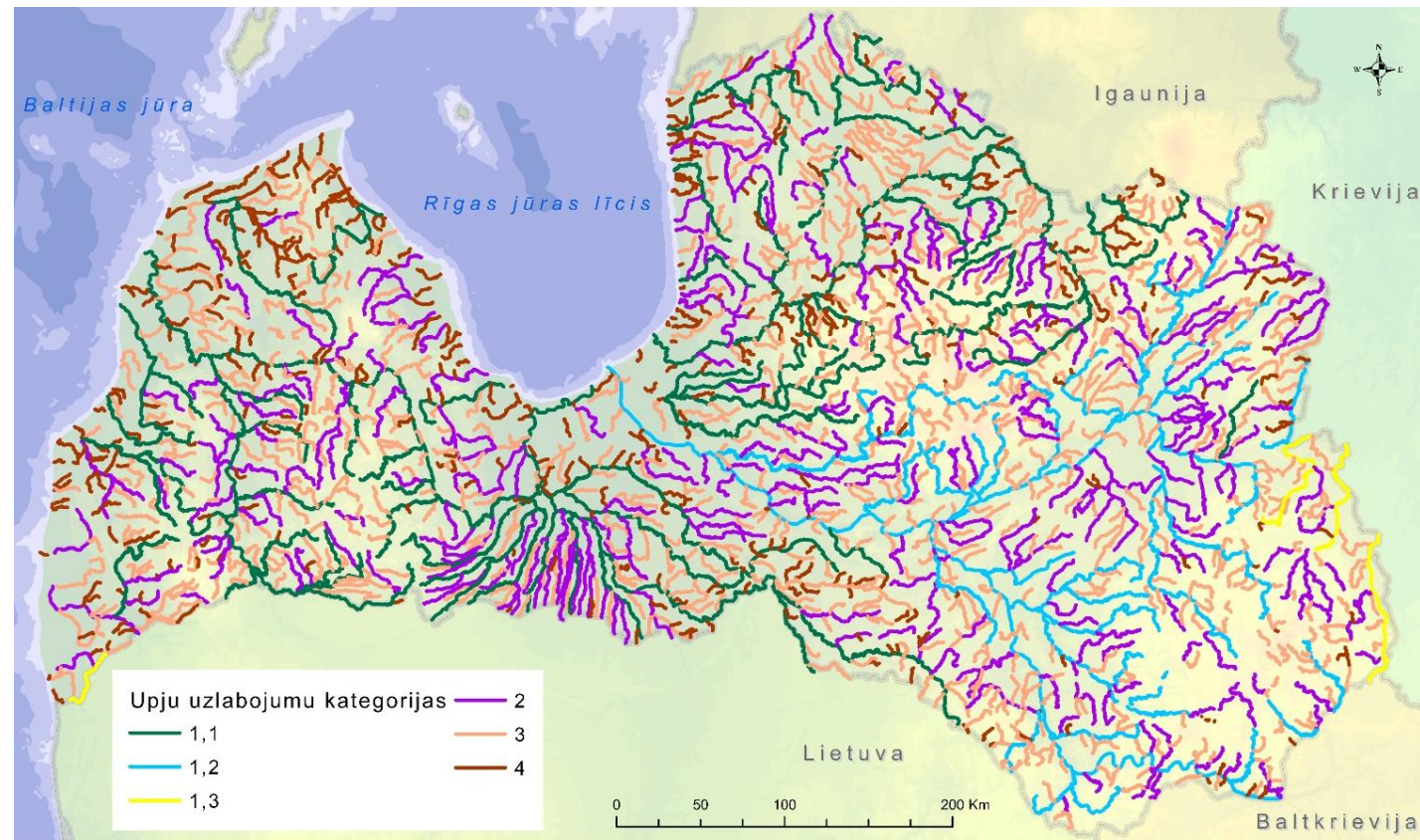
Question from the audience:

- “Do you expect anyone to be able to evaluate the potential of the river?”

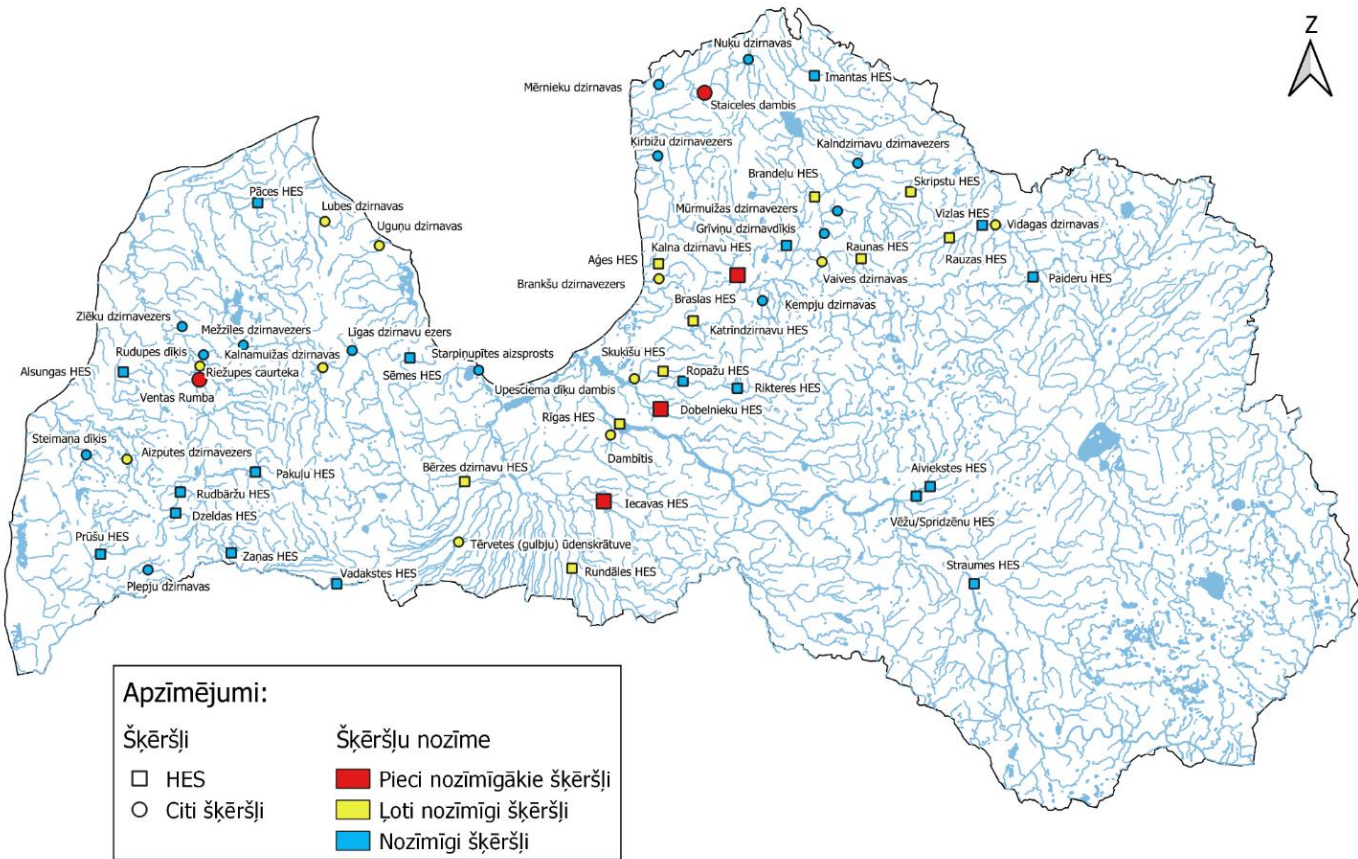
# UNANTICIPATED PREPARATION

“River listing” project and (later) determination of conservation objectives for protected fish species:

- Creation and improvement of database
- Elaboration of the approach
- Creation and improvement of models
- Identification of most important barriers



# NEXT STEP



Another question from the audience:

- “How the map of TOP50 barriers can be used?”

In the end we applied for another project



0 25 50 km



# TOP70 BARRIERS PROJECT

## Aim:

- Feasibility study for 60 fish migration barriers

## Result – database containing:

- List of applicable measures for each barrier
- Expected cost for each measure
- Benefit for migratory species for each measure

**Backed by European Maritime, Fisheries and Aquaculture Fund!**





# STEP 1 - WHICH BARRIERS SHALL BE INCLUDED?

Initially – protolist of 100 barriers

- Most important barriers from previous project
- Barriers in cascade with previous



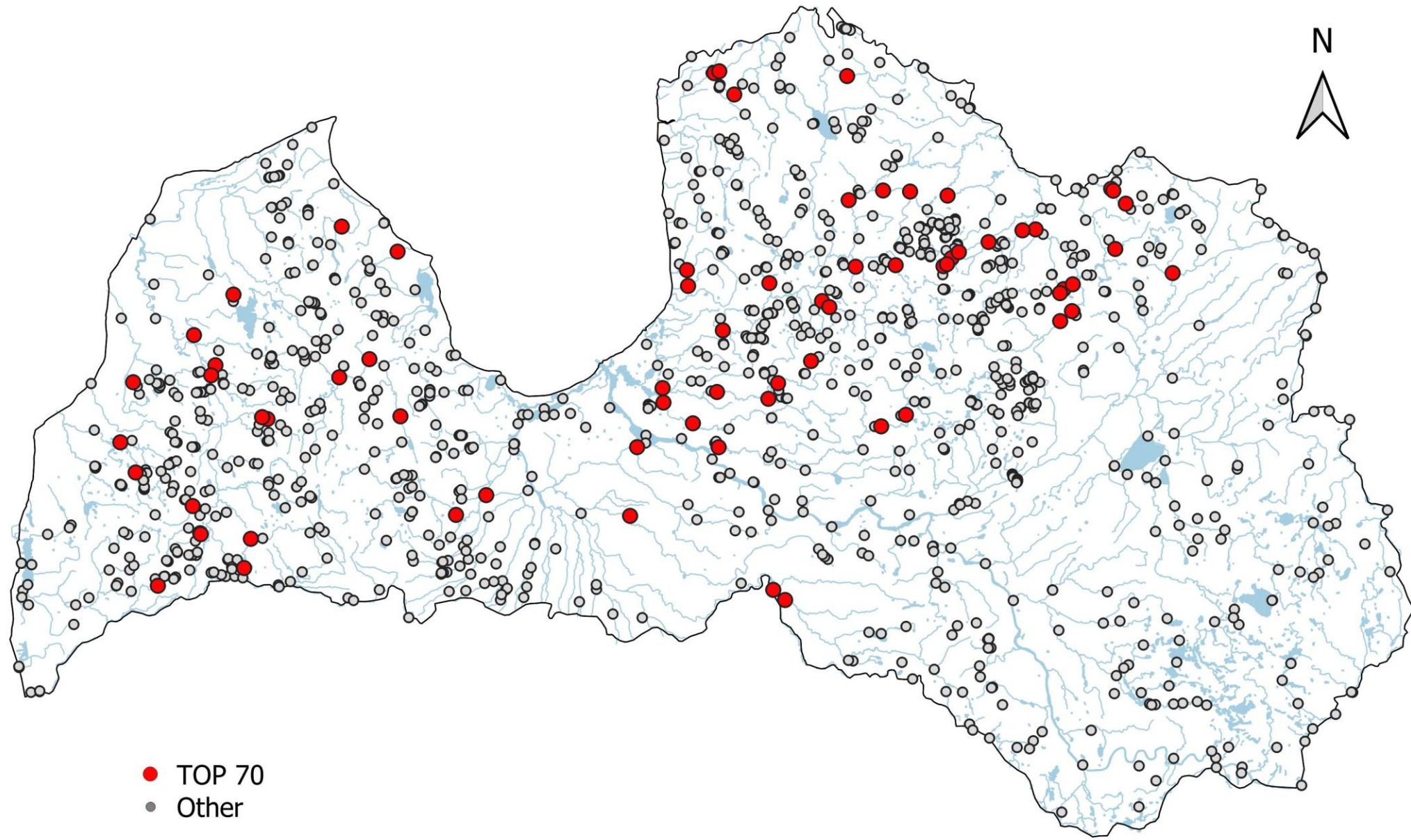
Protolist discussed with experts and organisations:

- Initially increased to 128
- Later reduced to 70

Some unexpected changes during implementation:

- But still 70 😊



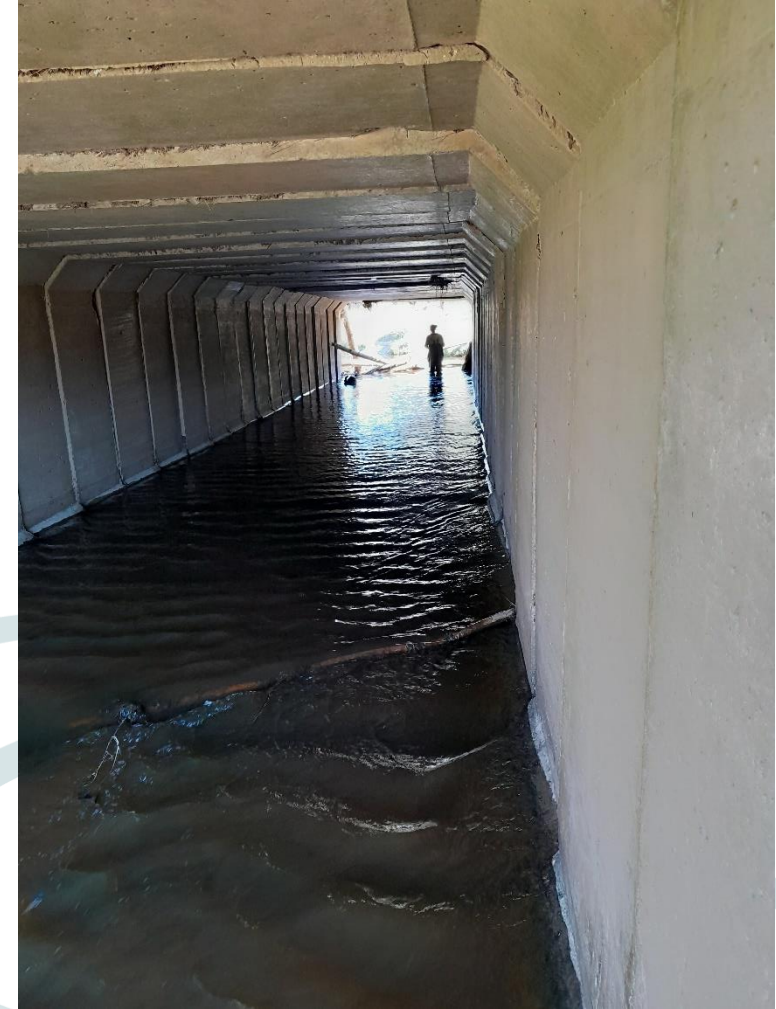


- TOP 70
- Other

0 25 50 km



## STEP 2 – VISITING BARRIERS





# STEP 2 –SOLUTIONS

## List to choose from:

- Complete removal (and reconstruction of bridge)
- Partial removal (and reconstruction of bridge)
- Lowering of the head of barrier + artificial rapid
- Lowering of water level + artificial rapid
- Natural fish pass
- Technical fish pass





## STEP 3

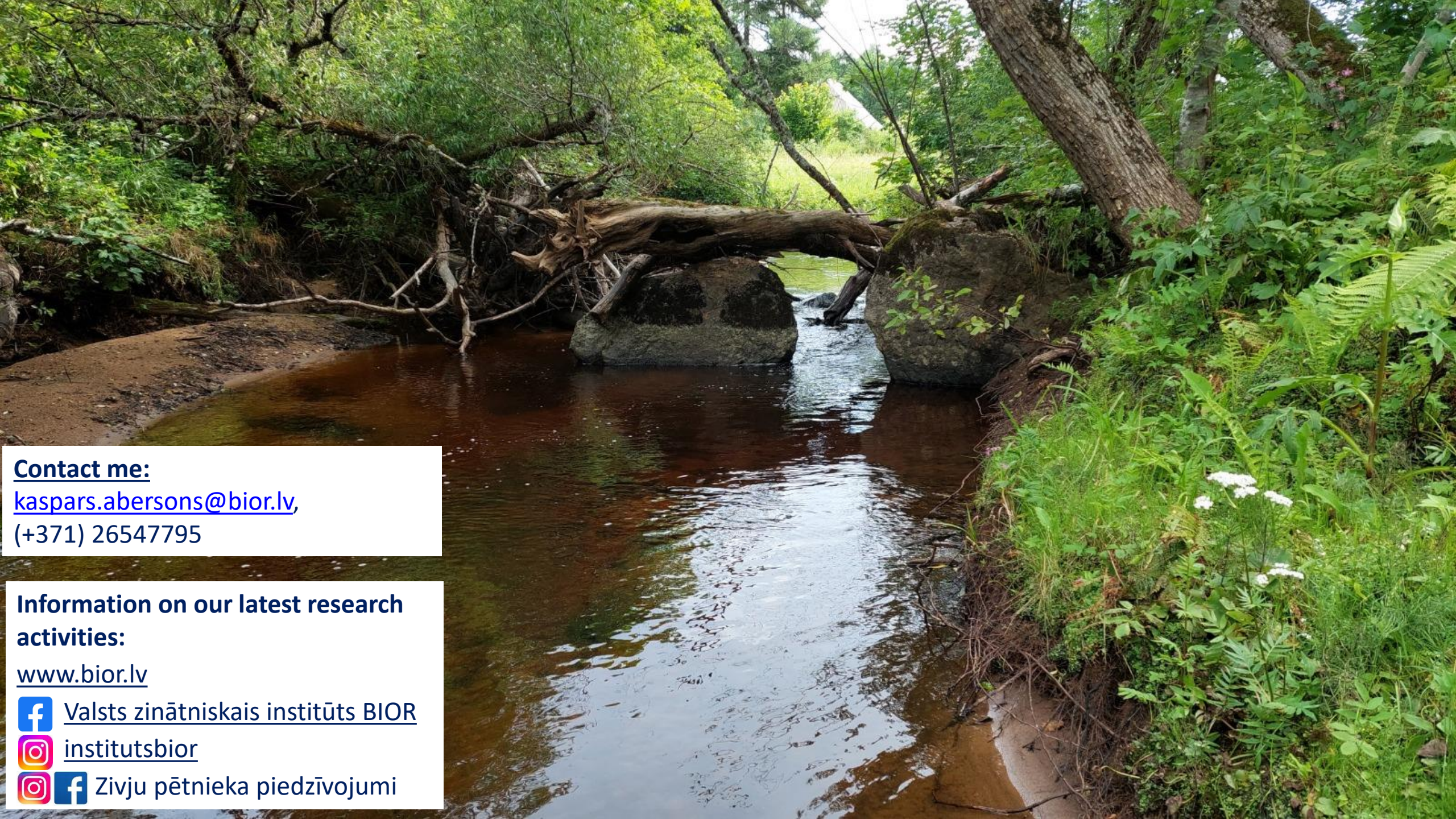
Lots of calculations and try and error experiences

## STEP 4

Putting results into a database and running a final seminar







**Contact me:**

[kaspars.abersons@bior.lv](mailto:kaspars.abersons@bior.lv),  
(+371) 26547795

**Information on our latest research activities:**

[www.bior.lv](http://www.bior.lv)

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