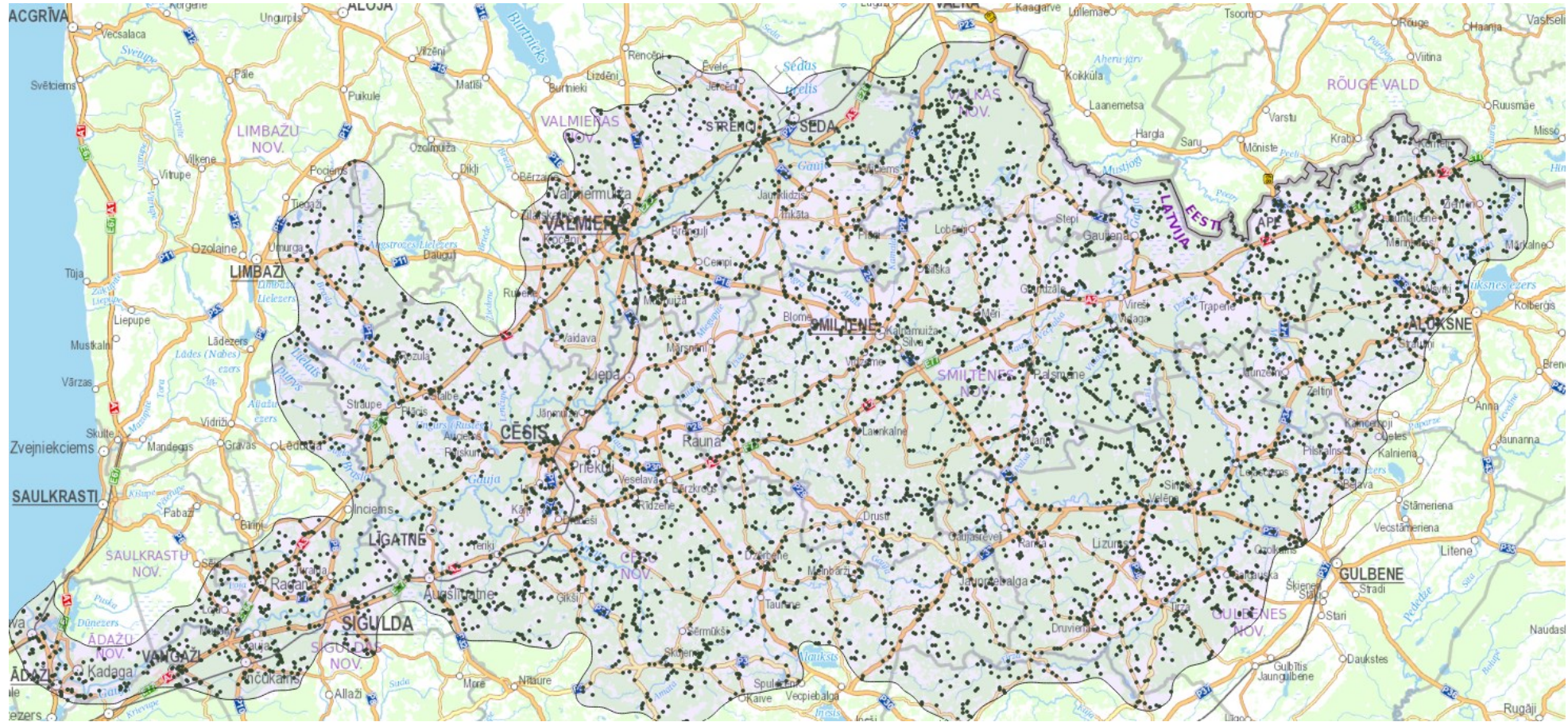


Mapping impassable culverts in River Gauja basin, Latvia

The problem



The problem



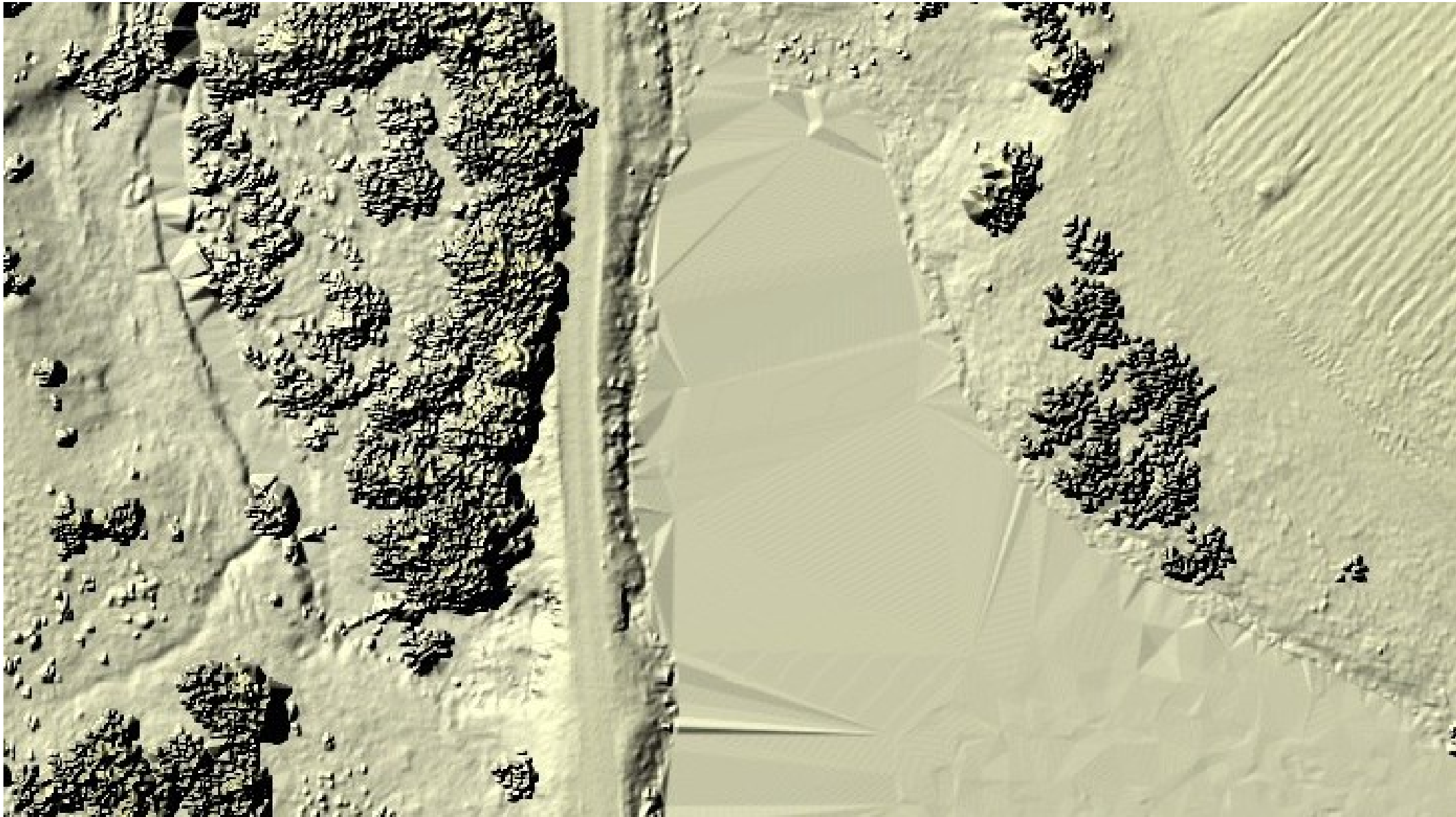
Our approach in theory

- Use open source GIS and LIDAR data
 - Identify road crossings/culverts
 - Assume that height differences between the river above and below the culvert point towards impassability
 - Identify 100 potentially impassable road crossings
- Visit the 100 culverts
 - Is there actually a problem?
- Use the available datasets/tools to identify the culverts to be remodelled

Our approach in reality



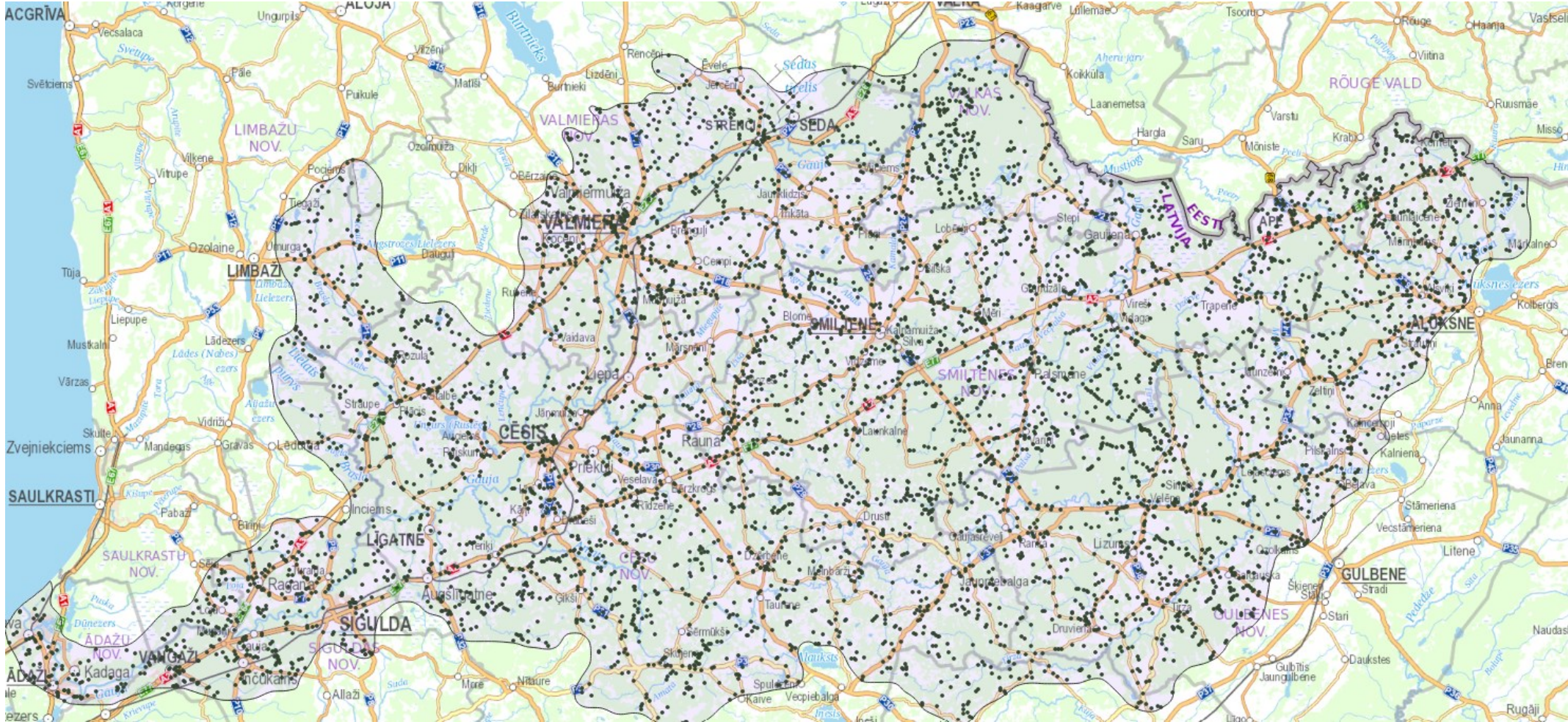
Our approach in reality



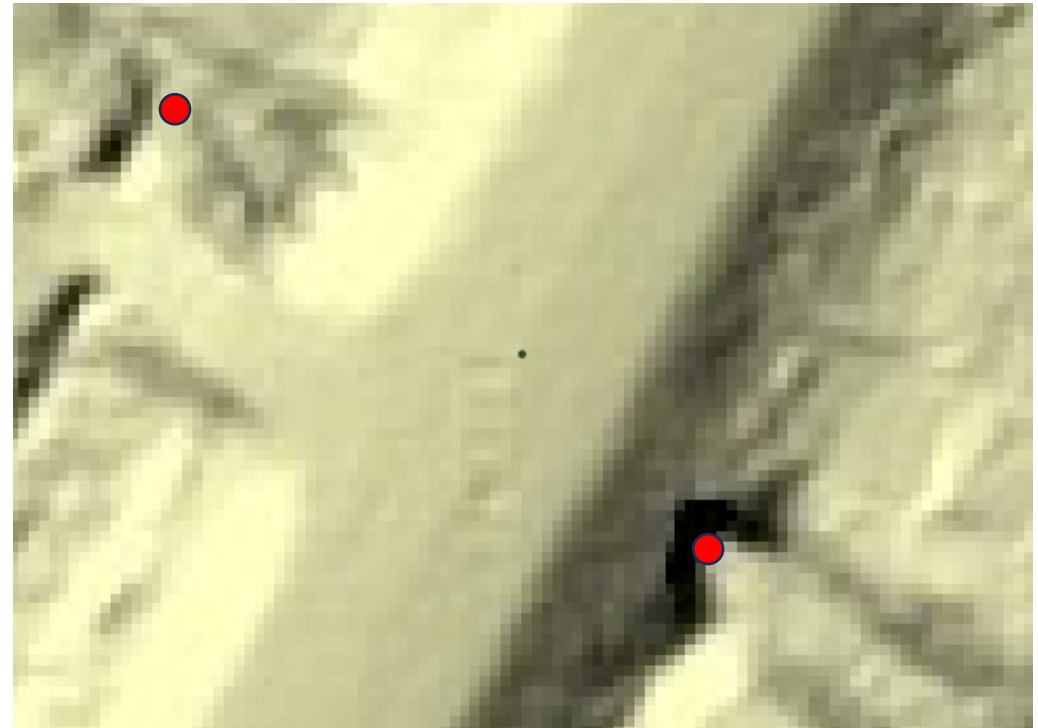
Our approach in reality



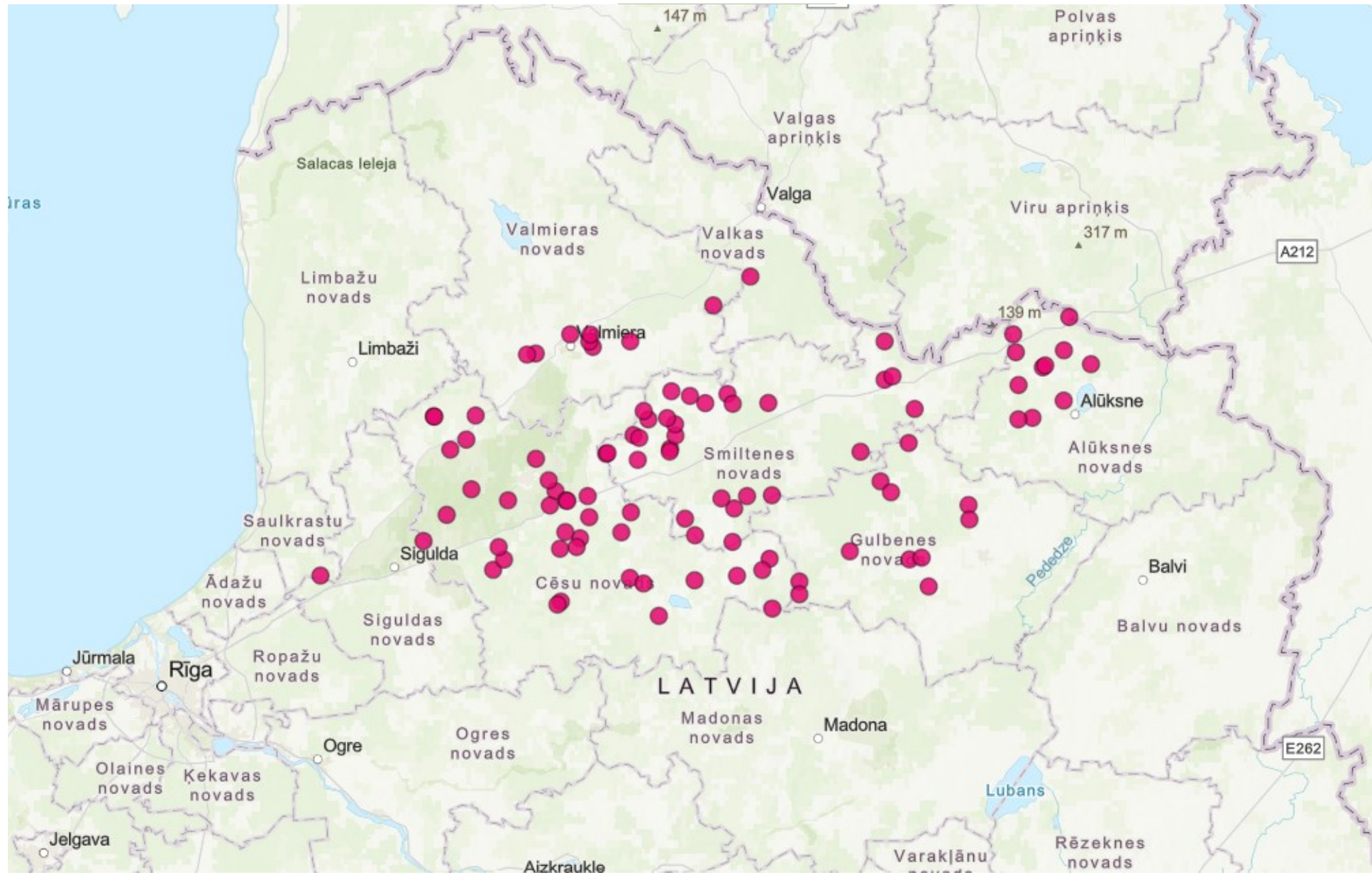
Our approach in reality



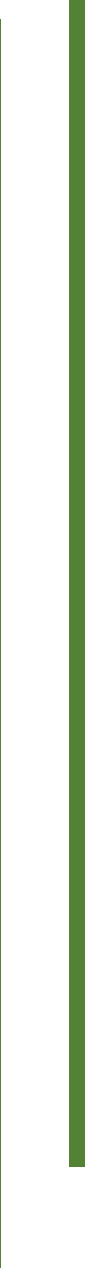
Our approach in reality



Our approach in reality



Our approach in reality



Our approach in reality

Prioritising

Criteria:

- the obstacle is/is not a culvert
- obstacle to fish migration
- data on ecological importance available

- how much river remaining above the obstacle?
- obstacles below

Hitlist

The hitlist

98 obstacles

72 rivers

36 problematic culverts

16 (21) to
be removed



Nr.	Nosaukums
1	Pilupe
2	Vildoga 1
3	Vildoga 2
4	Nurmižupīte 1
5	Nurmižupīte 2
6	Ilgupīte 1
7	Ilgupīte 2
8	Ilgupīte 3
9	Raunis
10	Vaive
11	Ludze 1
12	Ludze 2
13	Vilkate 1
14	Vilkate 2
15	Dadžupe
16	Mutulīte
17	Bēteru strauts
18	Mellupe
19	Vija
20	Kamalda
21	Tilgaļu strauts

