

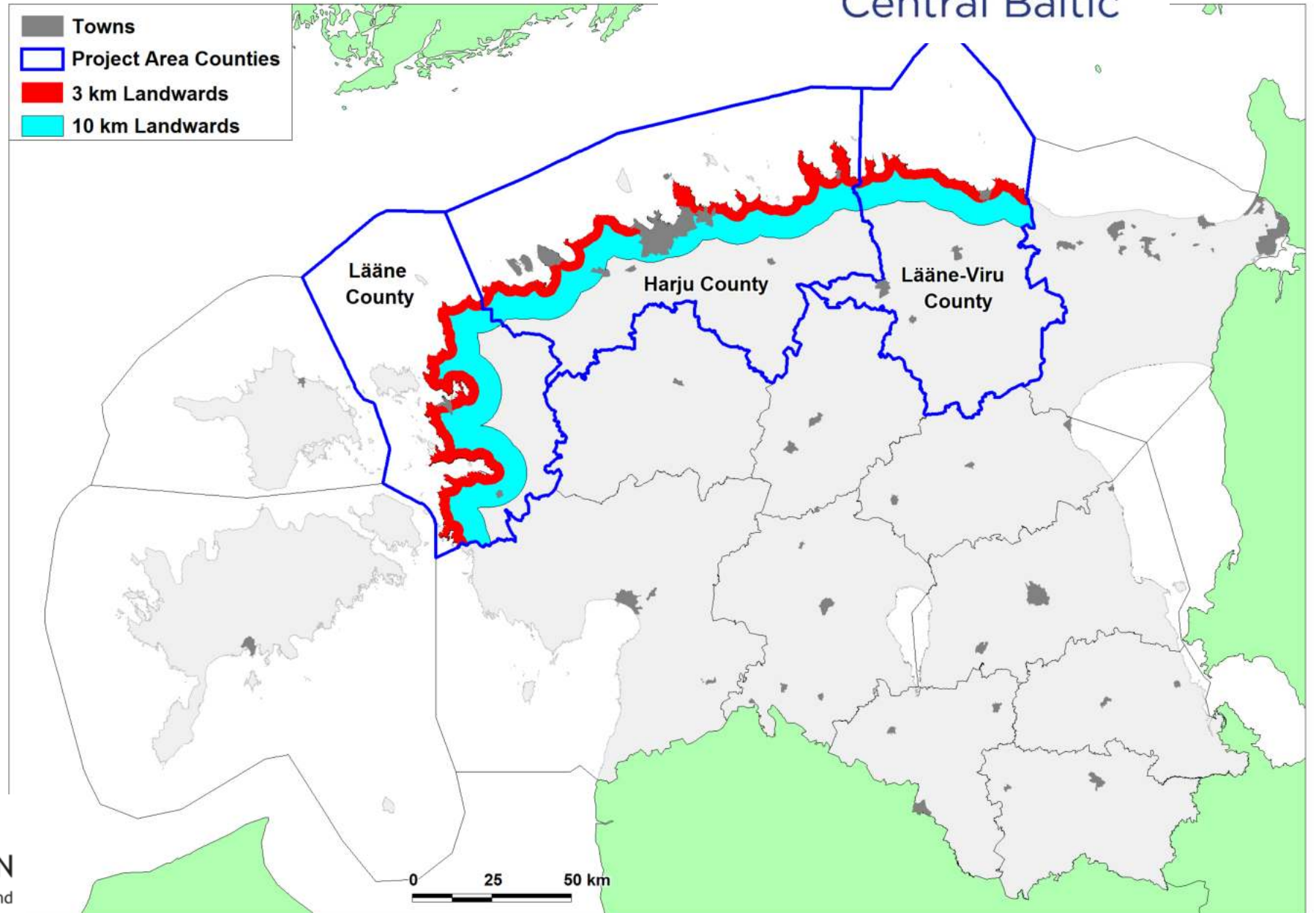
High Nature and Cultural Heritage Values with the Challenge of Marginalisation

Siiri Külm, Janar Raet, Anne Kull, Kalev Sepp, Pille Tomson,
Maaria Semm, Anu Printsman, Tarmo Pikner

Estonian University of Life Sciences, Tallinn University



Estonian
project area
with possible
buffers towards
inland



4 sets of thematic maps were produced for project area (3 counties) containing cartographic information from several available sources:

- High value nature areas
- Land/Sea use
- Marginalization and sparsely populated areas
- Cultural Heritage




















Several layers were
incorporated, mainly
originating from
Environmental
Register

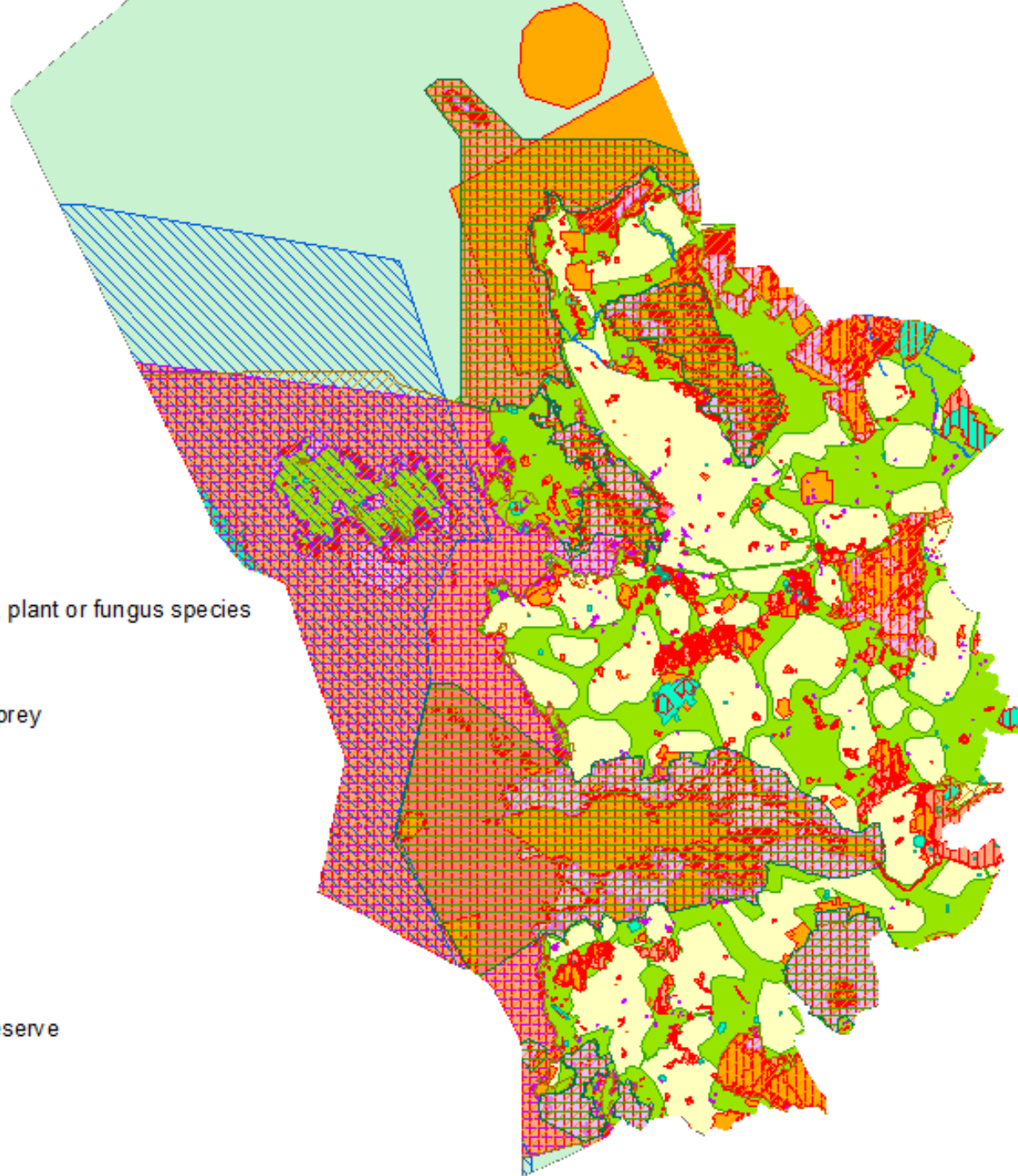
The natural habitat of a protected animal, plant or fungus species
Woodland key habitat
Species' protection site
The spawning site of salmon or river lamprey
Strict nature reserve
Protected area
Conservation zone
Limited management zone
Limited-conservation area
Karst area
Nitrate sensitive area
Green network
West Estonian Archipelago Biosphere Reserve
Natura nature and bird area
Important Bird and Biodiversity area
Helcom area
Ramsar area



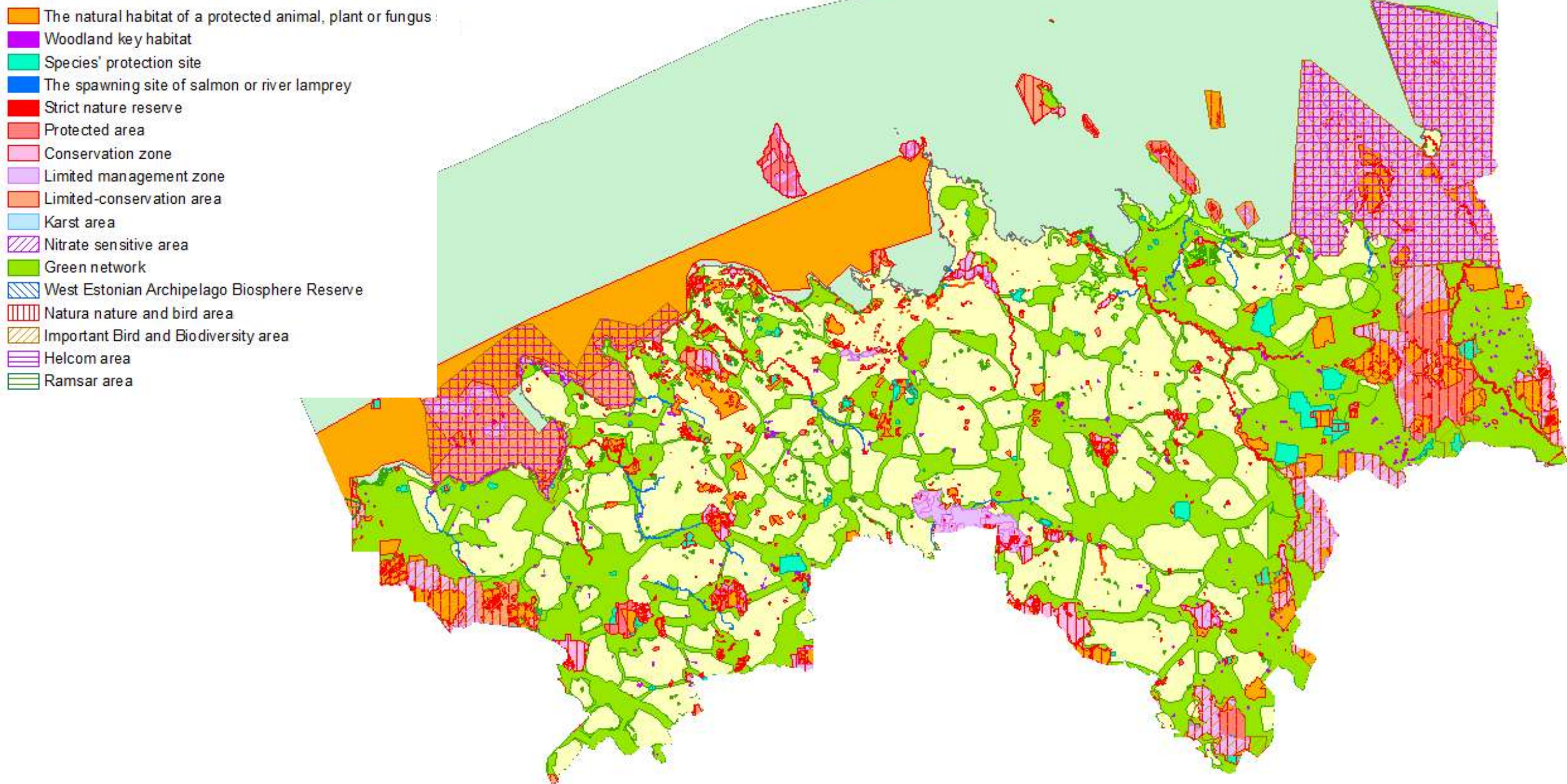
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High value nature areas Lääne County

-  The natural habitat of a protected animal, plant or fungus species
-  Woodland key habitat
-  Species' protection site
-  The spawning site of salmon or river lamprey
-  Strict nature reserve
-  Protected area
-  Conservation zone
-  Limited management zone
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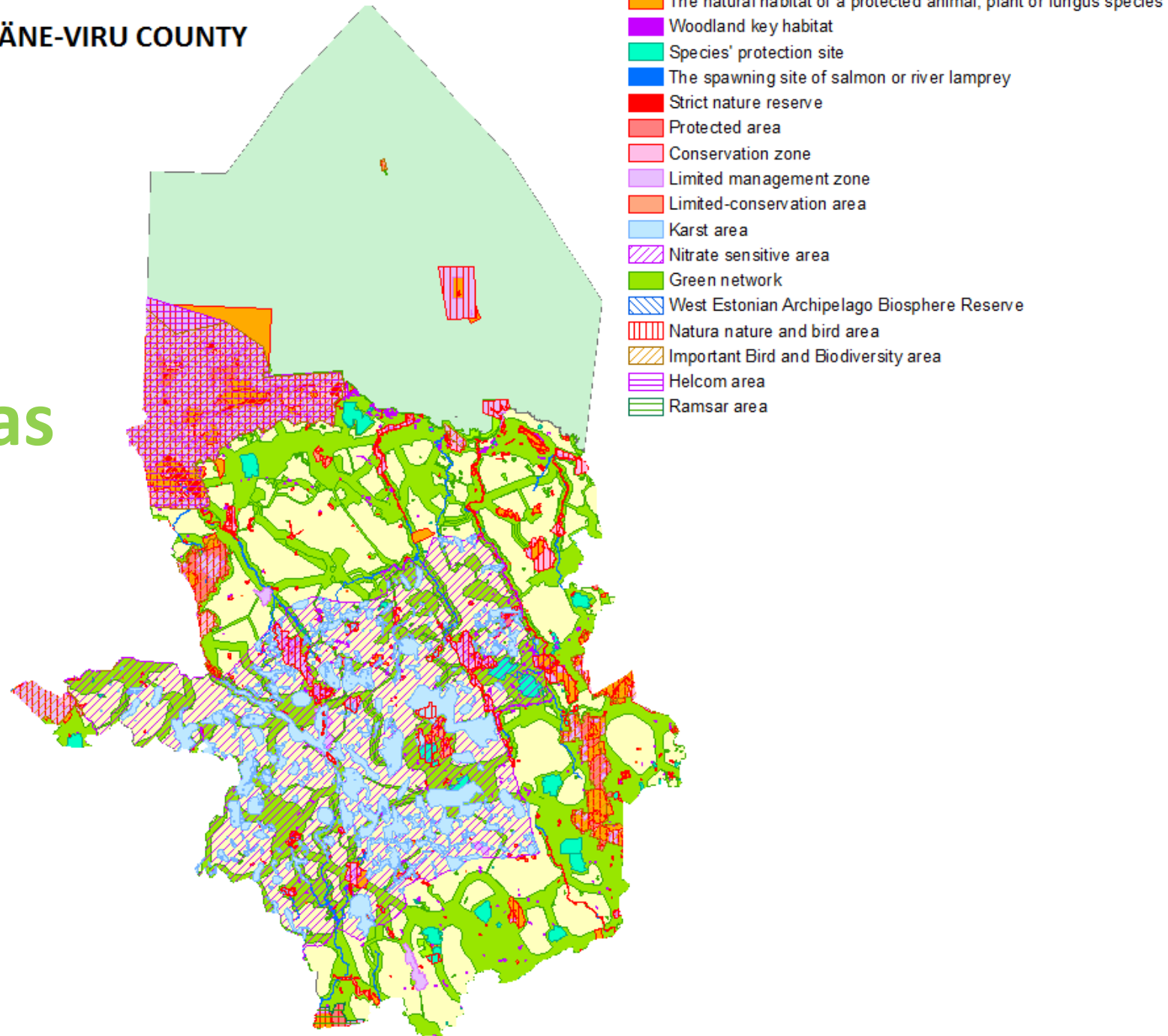


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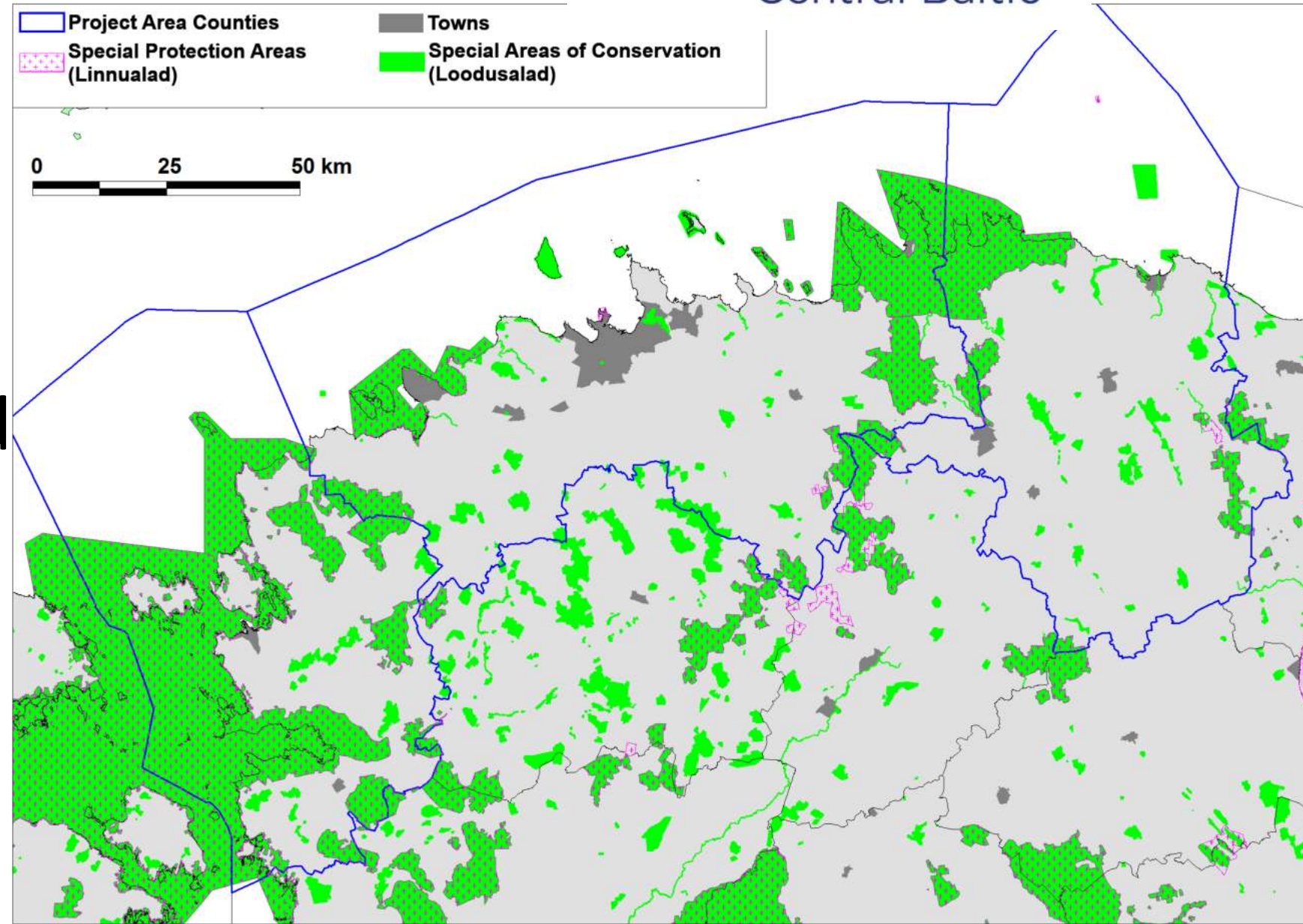


High value nature areas, Harju County

High value nature areas Lääne-Viru County



More than 50%
of Lääne County's
sea area is covered
by Natura 2000
SPAs & SACs





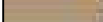







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Land/Sea use



Several layers were incorporated, mainly originating Estonian Basic Map and Mineral Resources Map (Estonian Landboard), Nautical charts (Maritime Administration)

	Forest	CAUTION AREAS AT SEA:	
	Agricultural land		
	Valuable agricultural land		
	Grassland		
	Wetland		Restrictions for navigation (Nature protection)
	Peat mining area		Military sea area
	Waterbody		Dumping ground
	Yard	MINERAL RESOURCES:	
	Town		
	Road		
	Railway		
	Sea cable		
	Wreck		Limestone
	Diveable wreck		Sand and gravel
	Recreational facility/trail		Peat
	Beach		Phosphorite
	Harbour		Oil shale
	Wind turbine		



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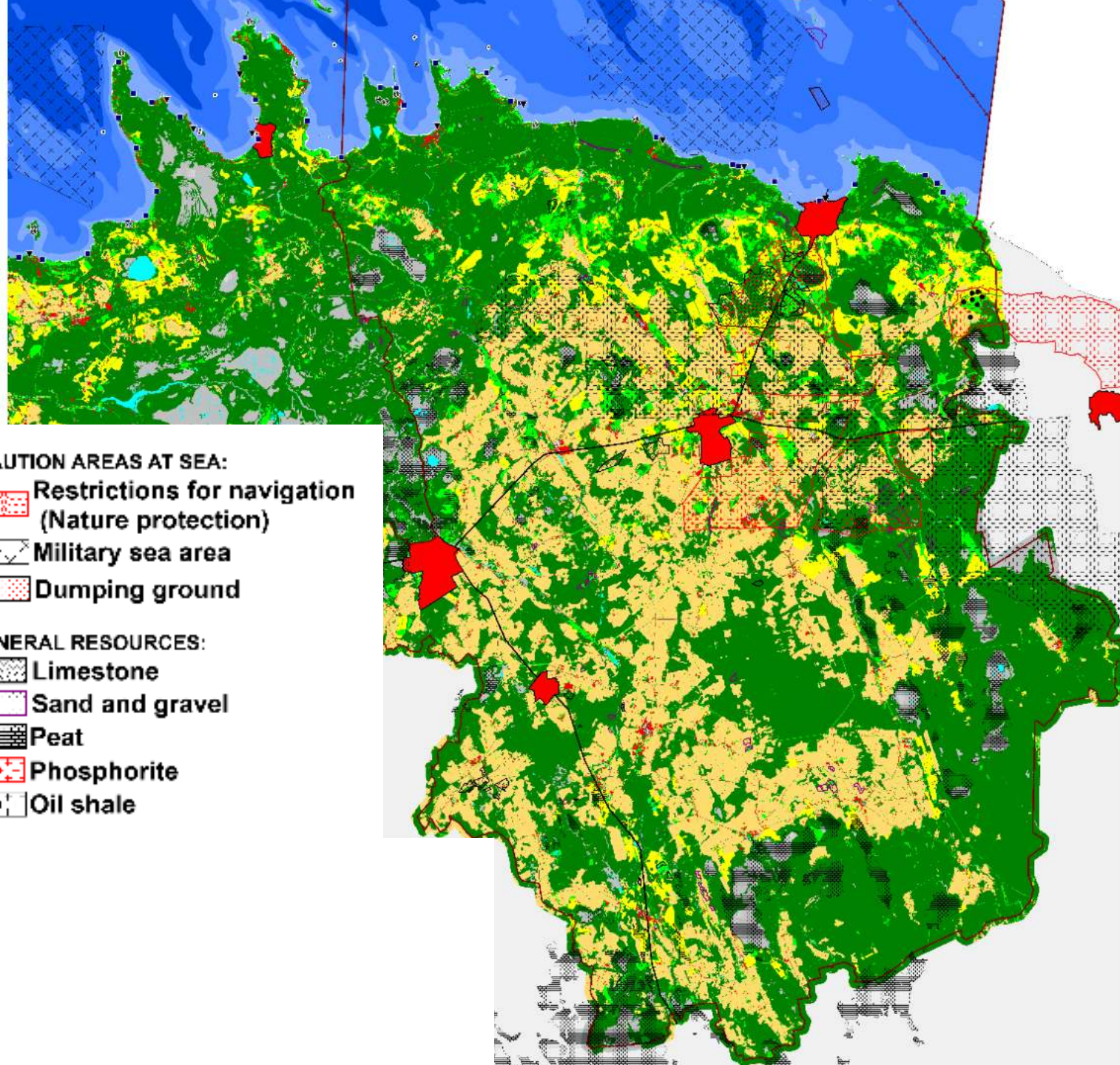
- Forest
- Agricultural land
- Valuable agricultural land
- Grassland
- Wetland
- Peat mining area
- Waterbody
- Yard
- Town
- Road
- Railway
- Sea cable
- Wreck
- Diveable wreck
- Recreational facility/trail
- Beach
- Harbour
- Wind turbine

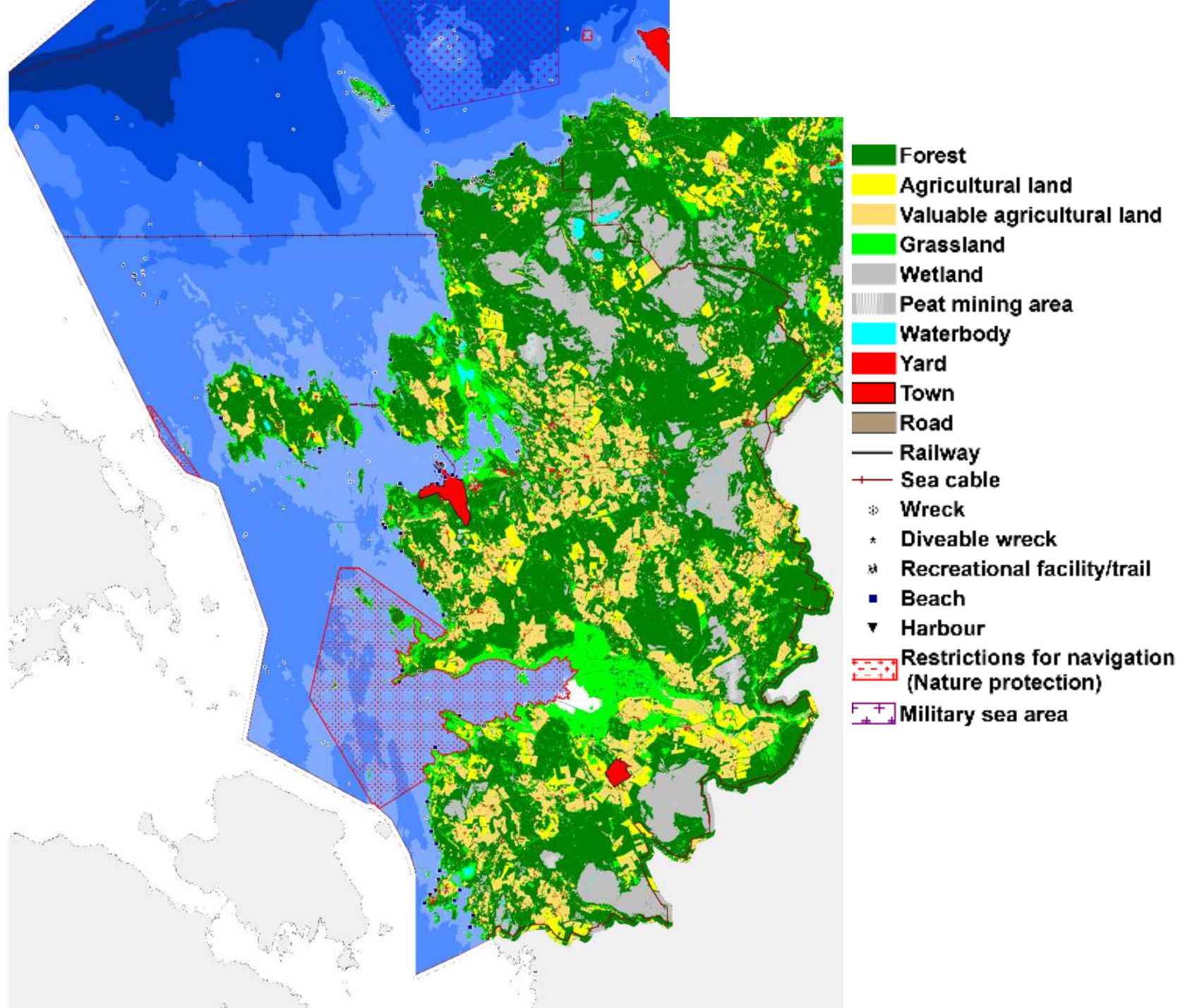
CAUTION AREAS AT SEA:

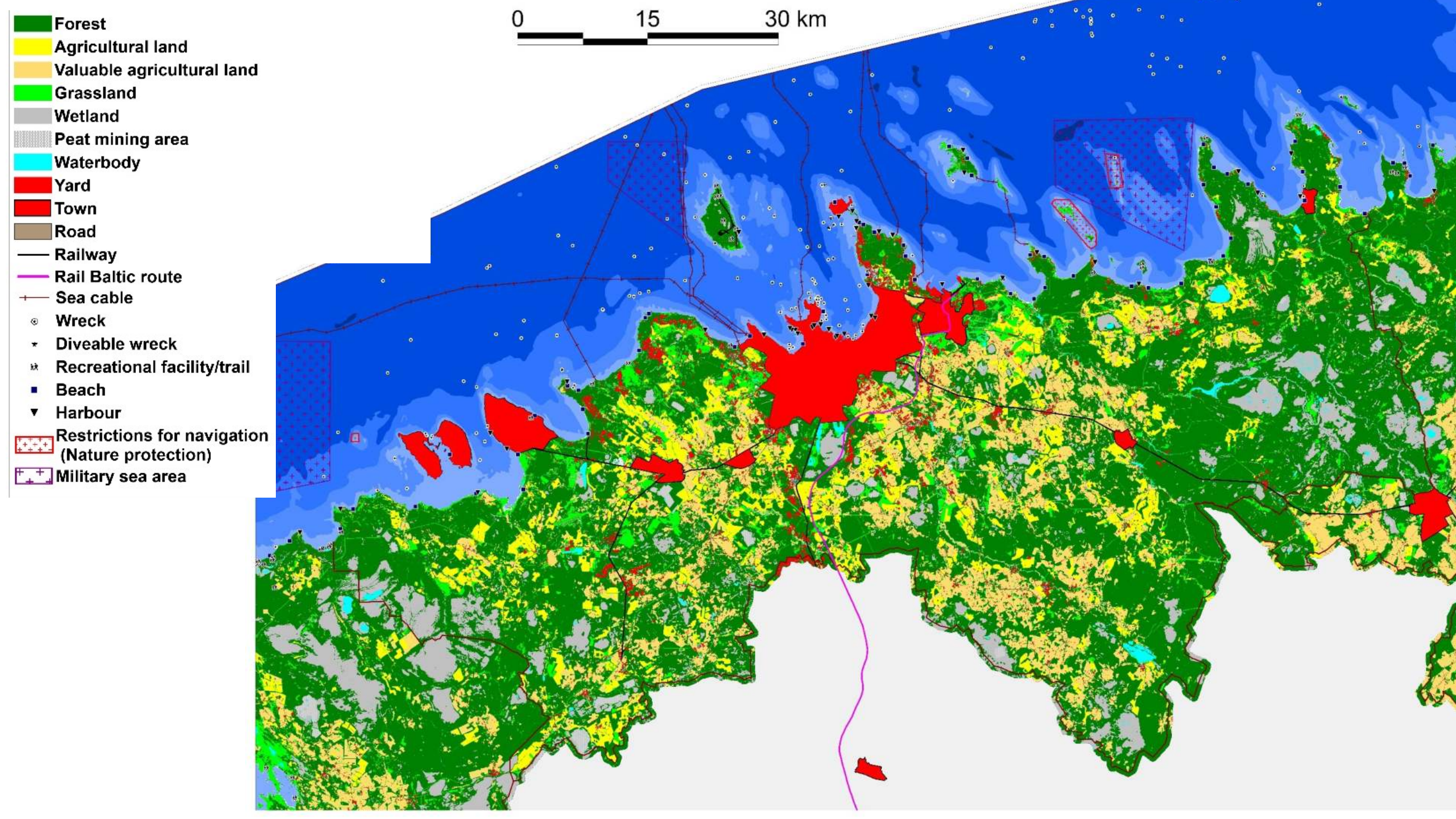
- Restrictions for navigation (Nature protection)
- Military sea area
- Dumping ground

MINERAL RESOURCES:

- Limestone
- Sand and gravel
- Peat
- Phosphorite
- Oil shale







- Integrated data from different sources
(RMK, National Heritage Board of Estonia,
Ministry of Finance, County plans)



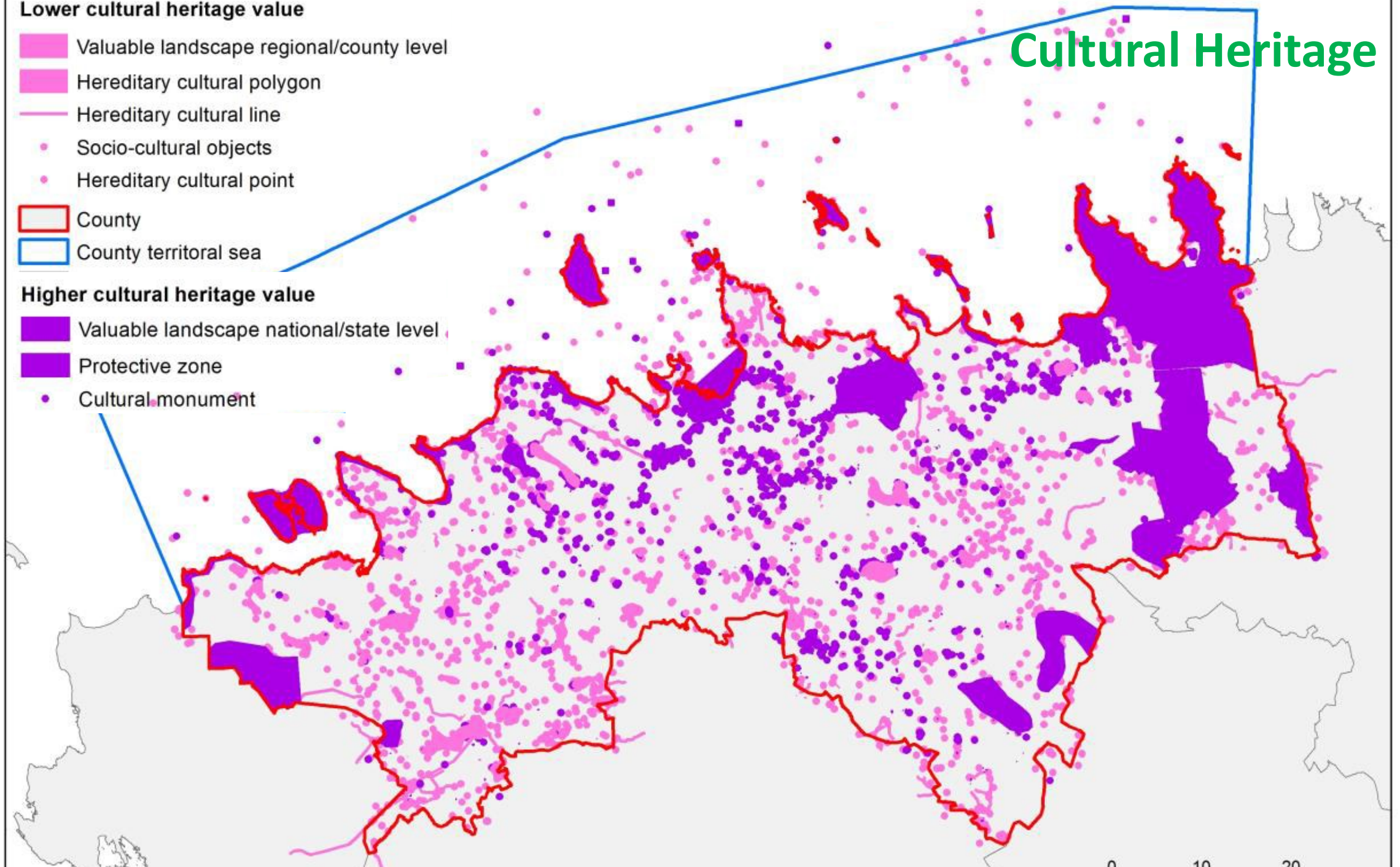
Cultural Heritage

Lower cultural heritage value

- Valuable landscape regional/county level
- Hereditary cultural polygon
- Hereditary cultural line
- Socio-cultural objects
- Hereditary cultural point
- County
- County territorial sea

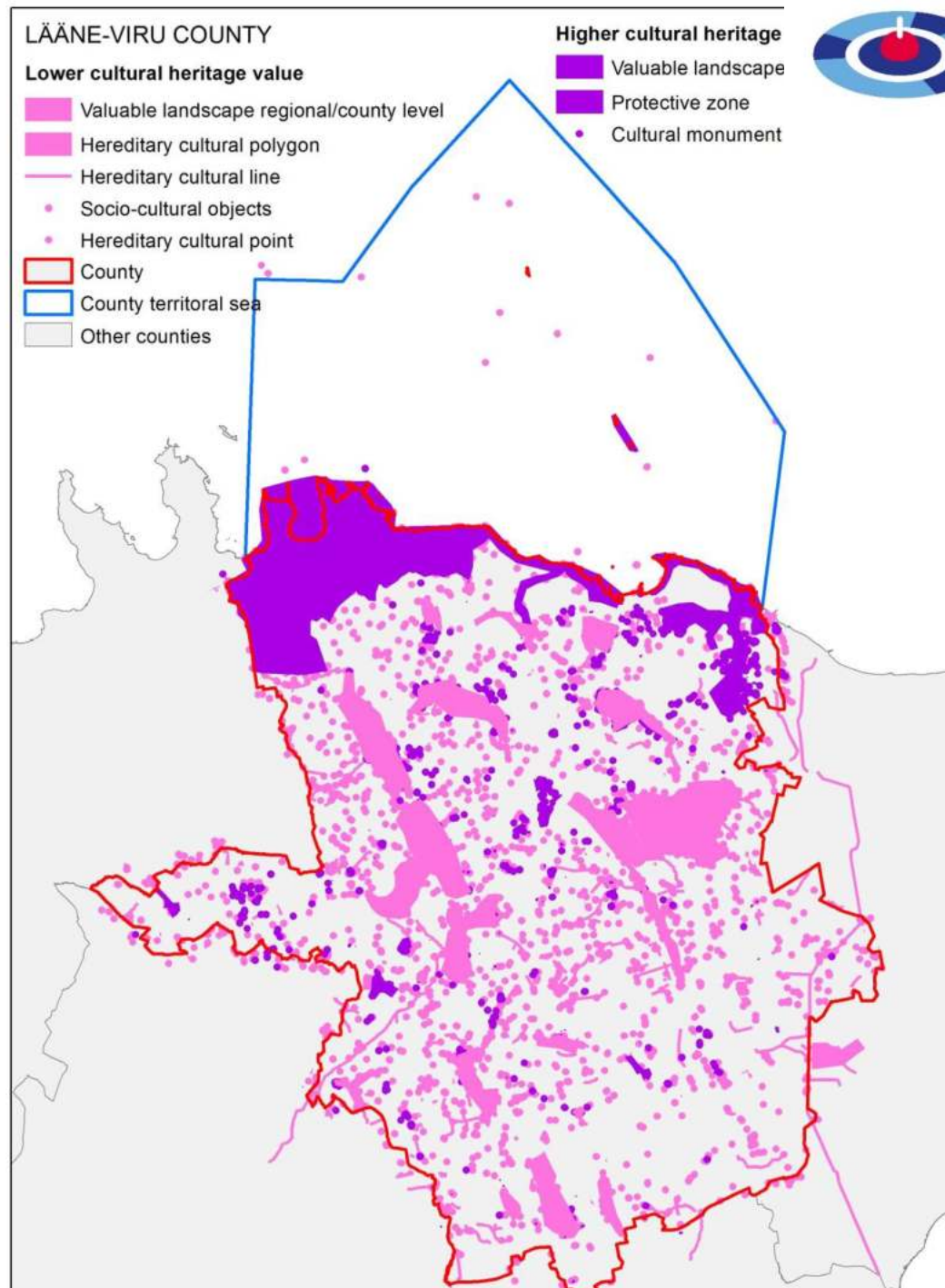
Higher cultural heritage value

- Valuable landscape national/state level
- Protective zone
- Cultural monument



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Lääne-Viru County



Interreg
Central Baltic

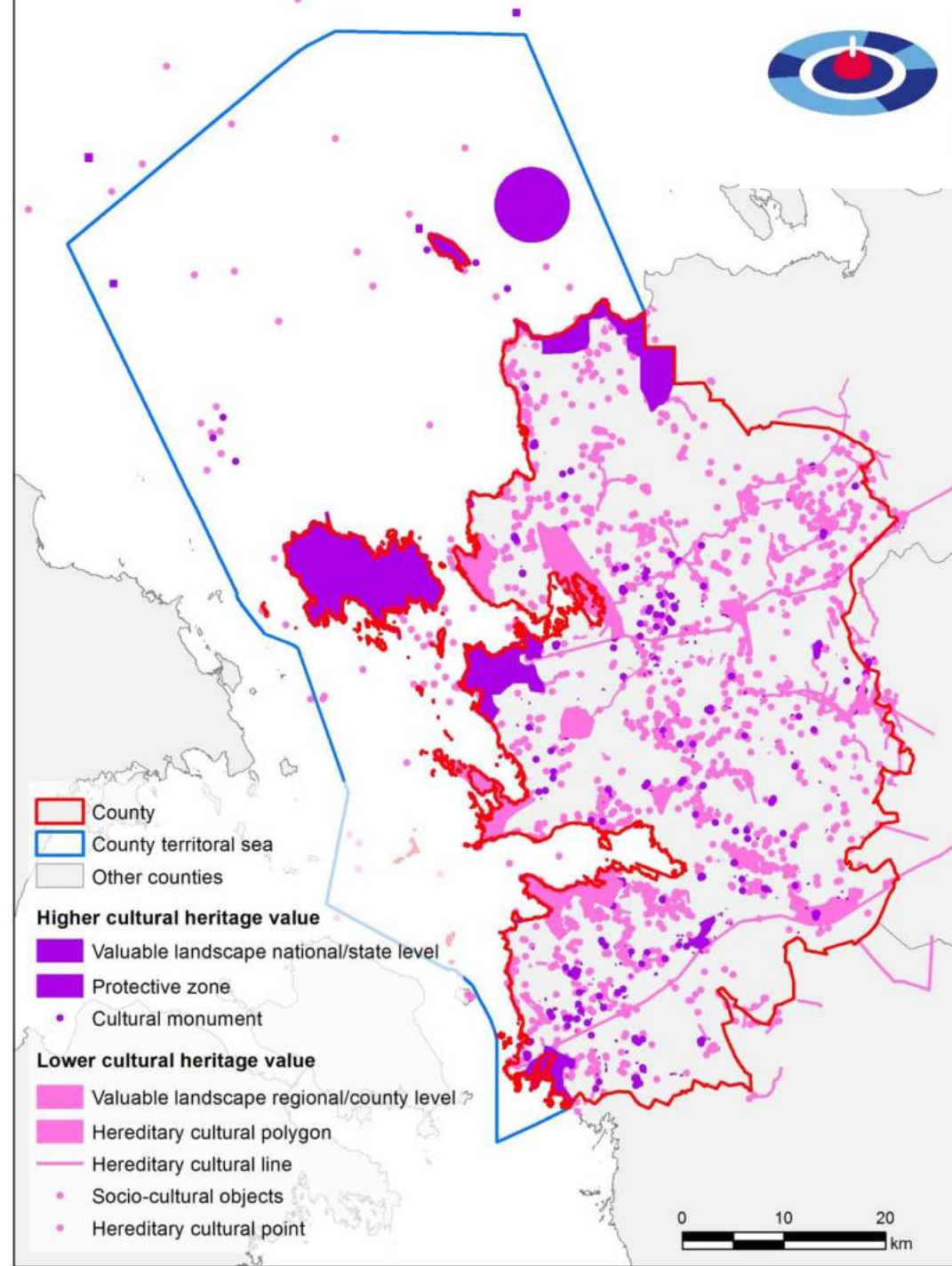


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Cultural Heritage

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Lääne County



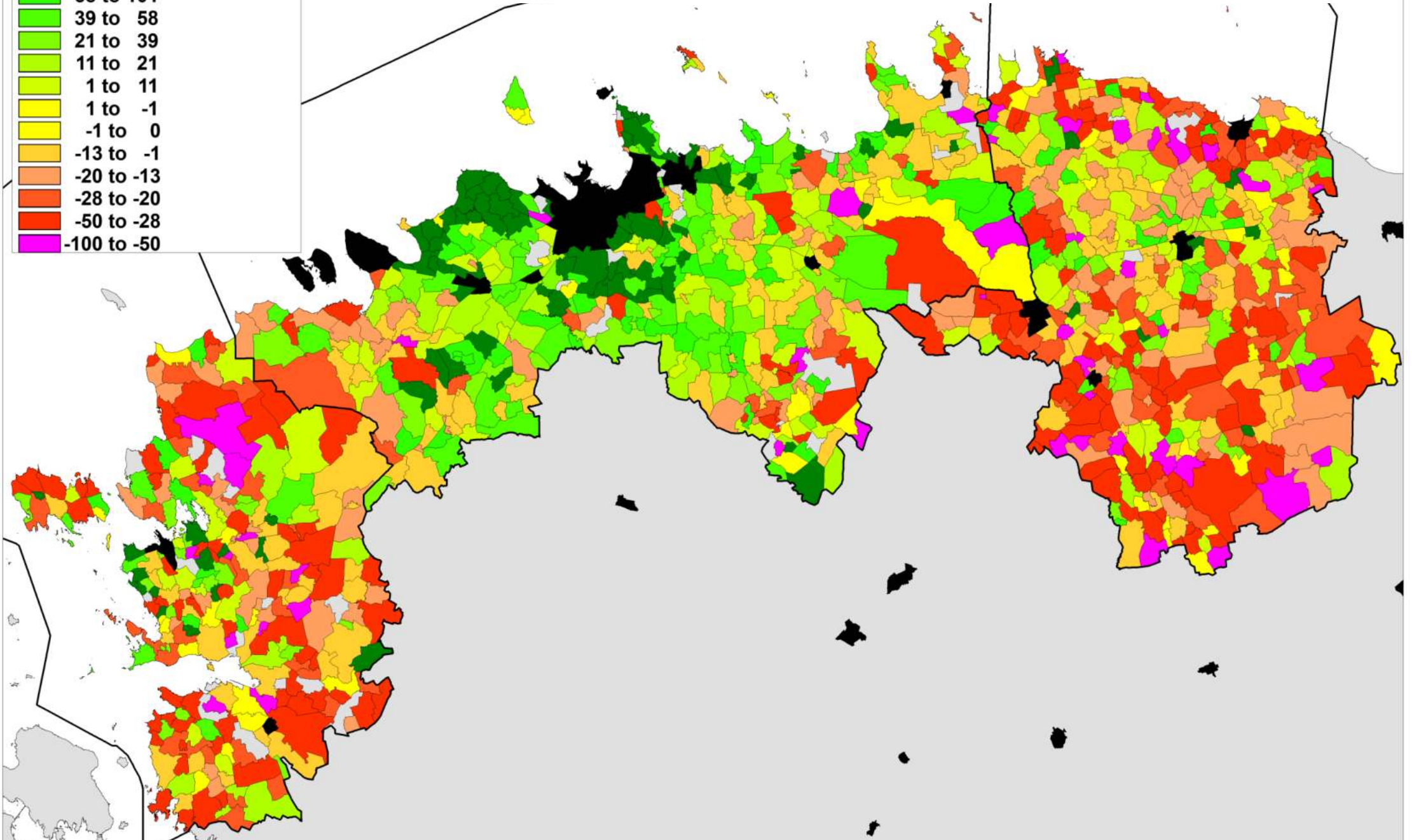
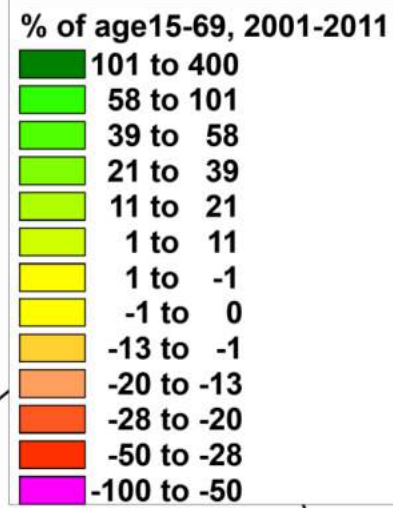
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Cultural Heritage

- Datasets derived from Estonian Statistics
Censuses data from 2001 and 2011
containing demographic information



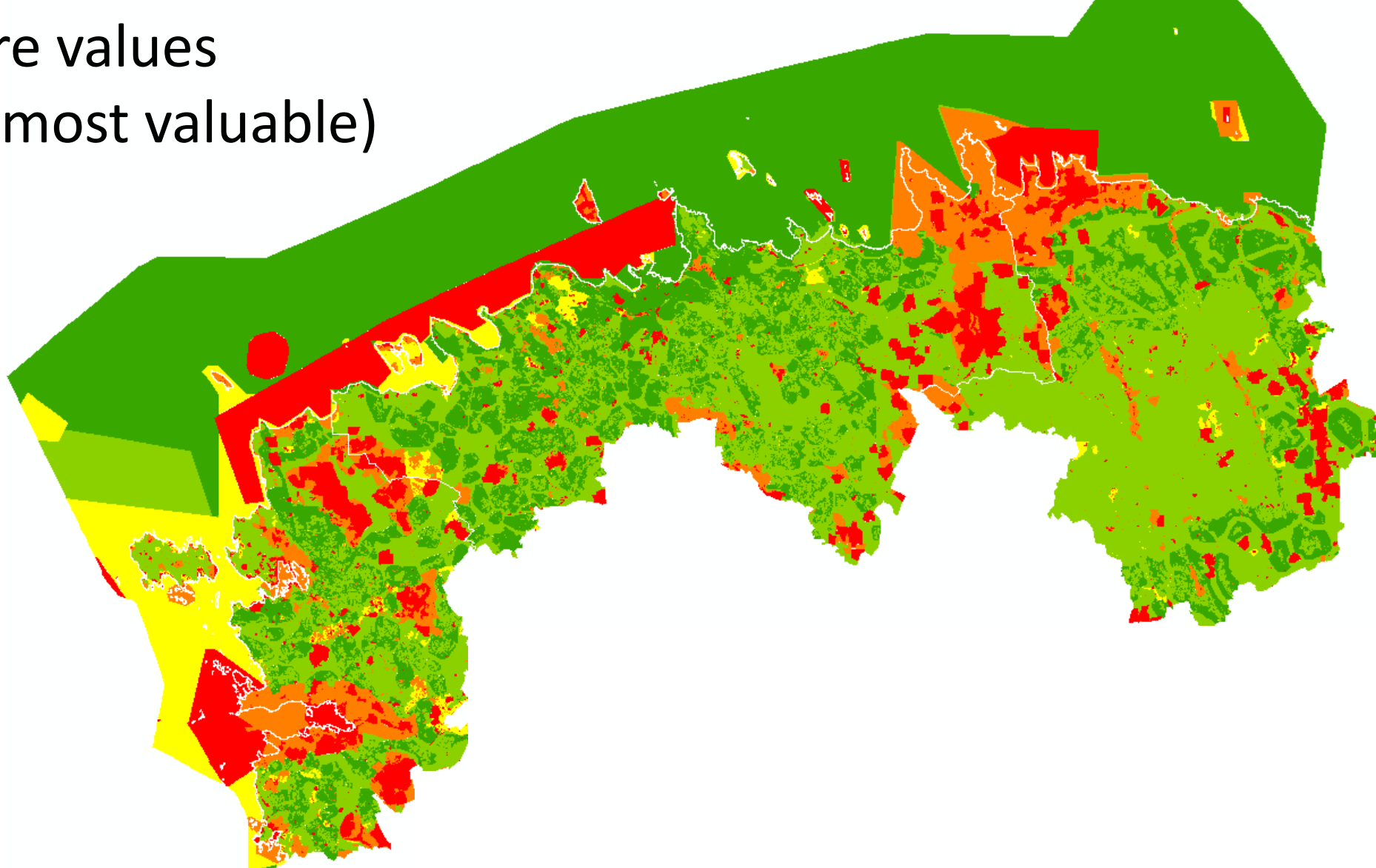
Age group 15-69years dynamics 2001 to 2011



- To generate basis for test areas selection 4 input maps were generated with classes
- As output is map of areal features, several impact areas bufferzones were generated for point and line elements in this process

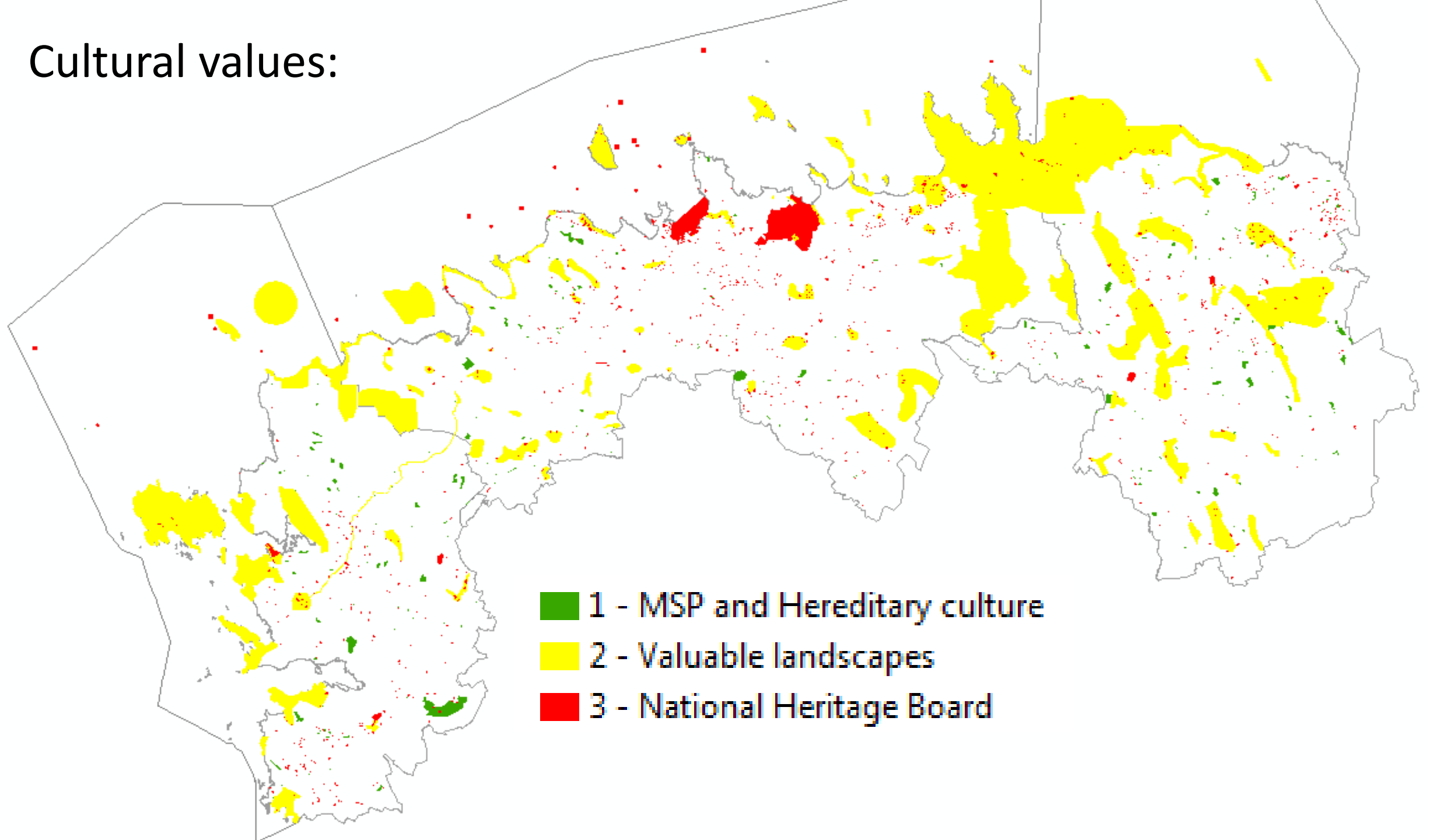


Nature values (red=most valuable)



- 1 - Other landuse
- 2 - Green network, nitrate sensitive area, karst area, valueable arable land, international protected areas (Natura habitats, bird and nature areas, biosphere reserve, IBA, Helcom, Ramsar)
- 3 - Limited-conservation area, spawning area, planned protection area or protection zone
- 4 - Limited management zone, managed conservation zone, woodland key habitat, protection zone for animal, plant and fungus species in the protected category III
- 5 - Strict nature reserve, wilderness conservation zone, species' protection site, protection zone for animal, plant and fungus species in the protected categories I and II

Cultural values:



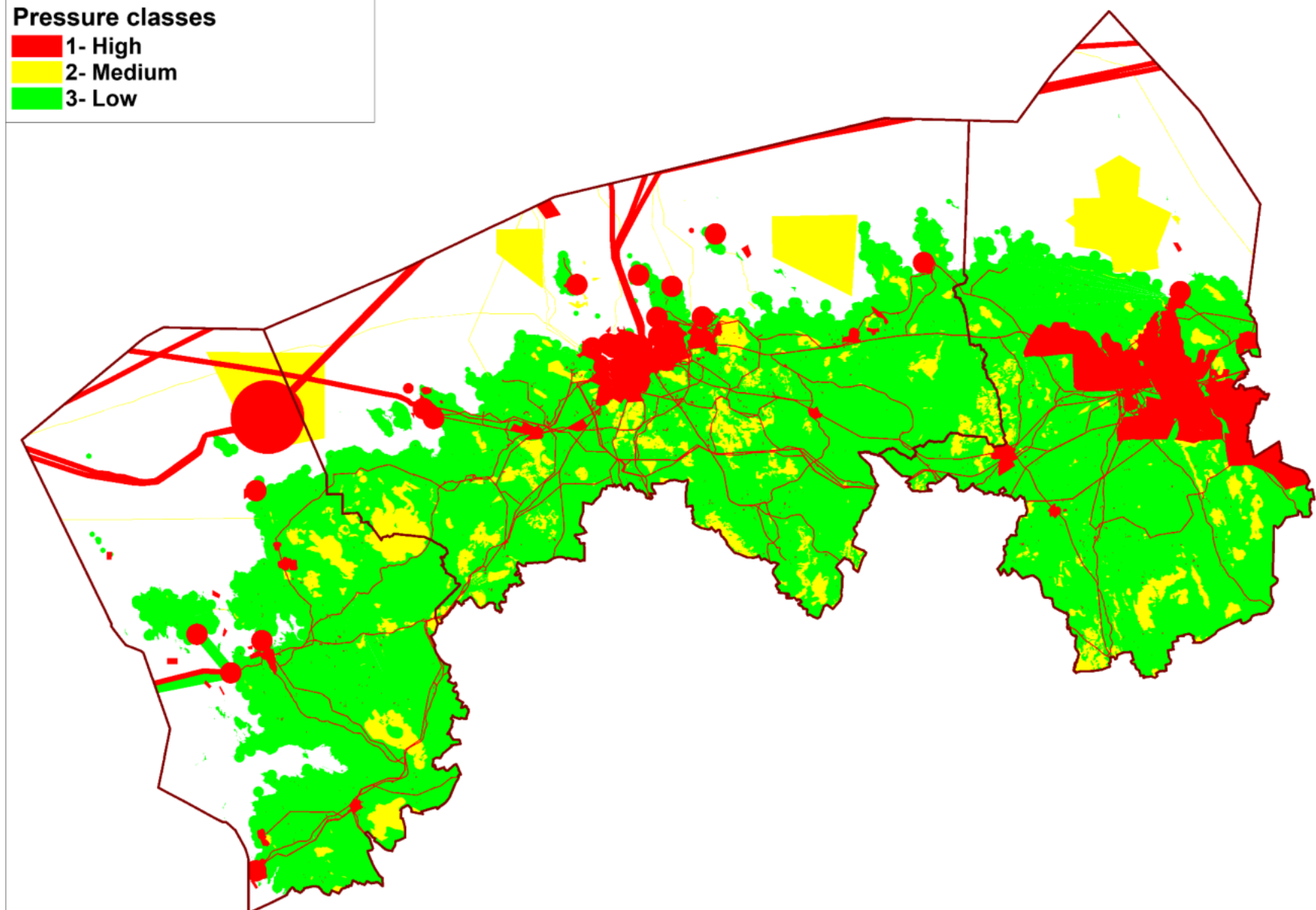
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Pressure factors:

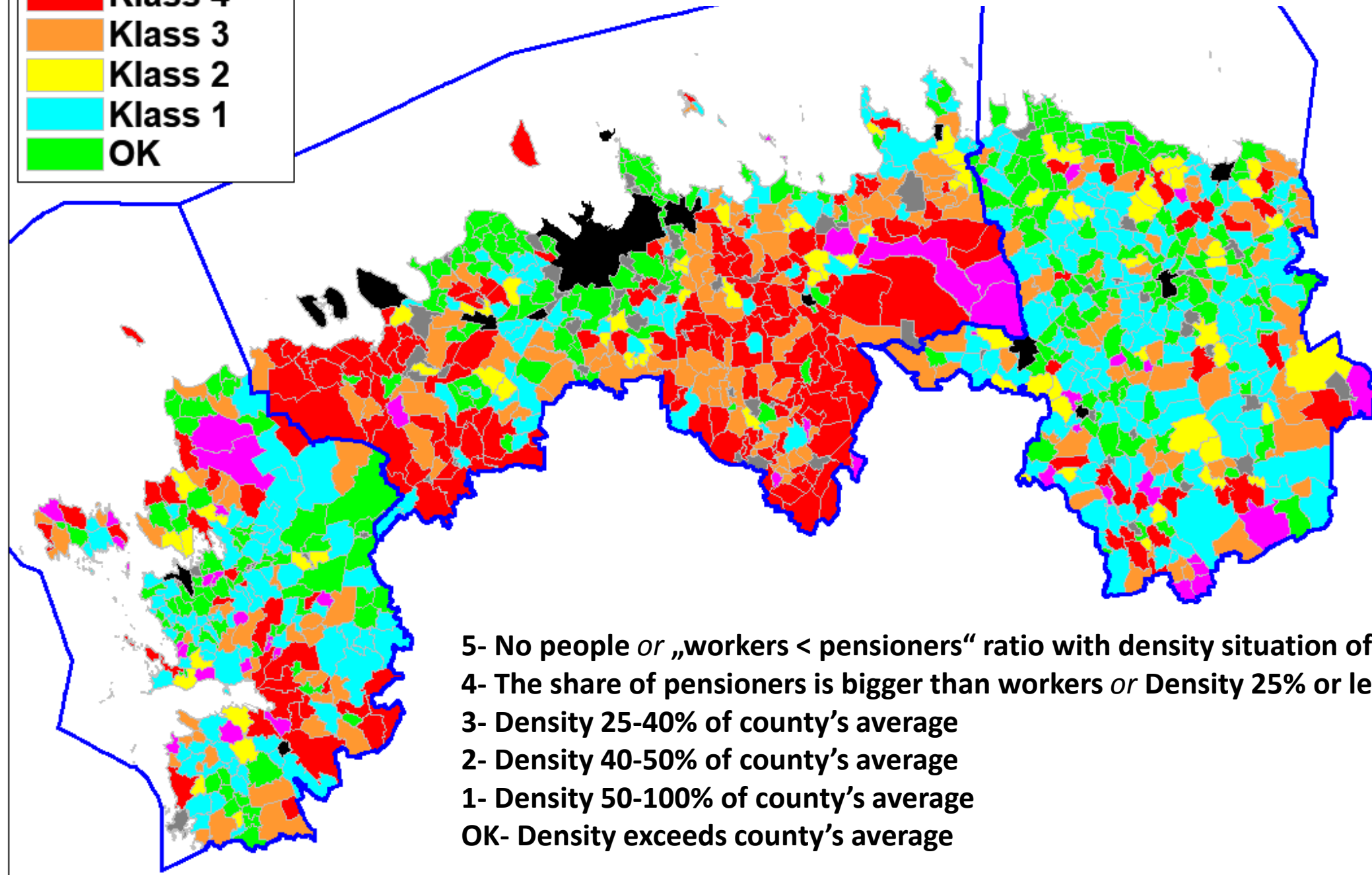
Class 1- Towns, industrial areas, Powerlines (110kV+), big harbours, „Hard“ minerals, wind turbiines, big road

Class 2- „Mild“ minerals, pipelines and cables, military areas at sea

Class 3- Villages, forest, wetland, field, grassland, recreational sites, iceroad, small harbours, waterbody



Marginalization (Rural settlements, County based marks)



- 5- No people *or* „workers < pensioners“ ratio with density situation of classes 1-4
- 4- The share of pensioners is bigger than workers *or* Density 25% or less of county's average
- 3- Density 25-40% of county's average
- 2- Density 40-50% of county's average
- 1- Density 50-100% of county's average
- OK- Density exceeds county's average

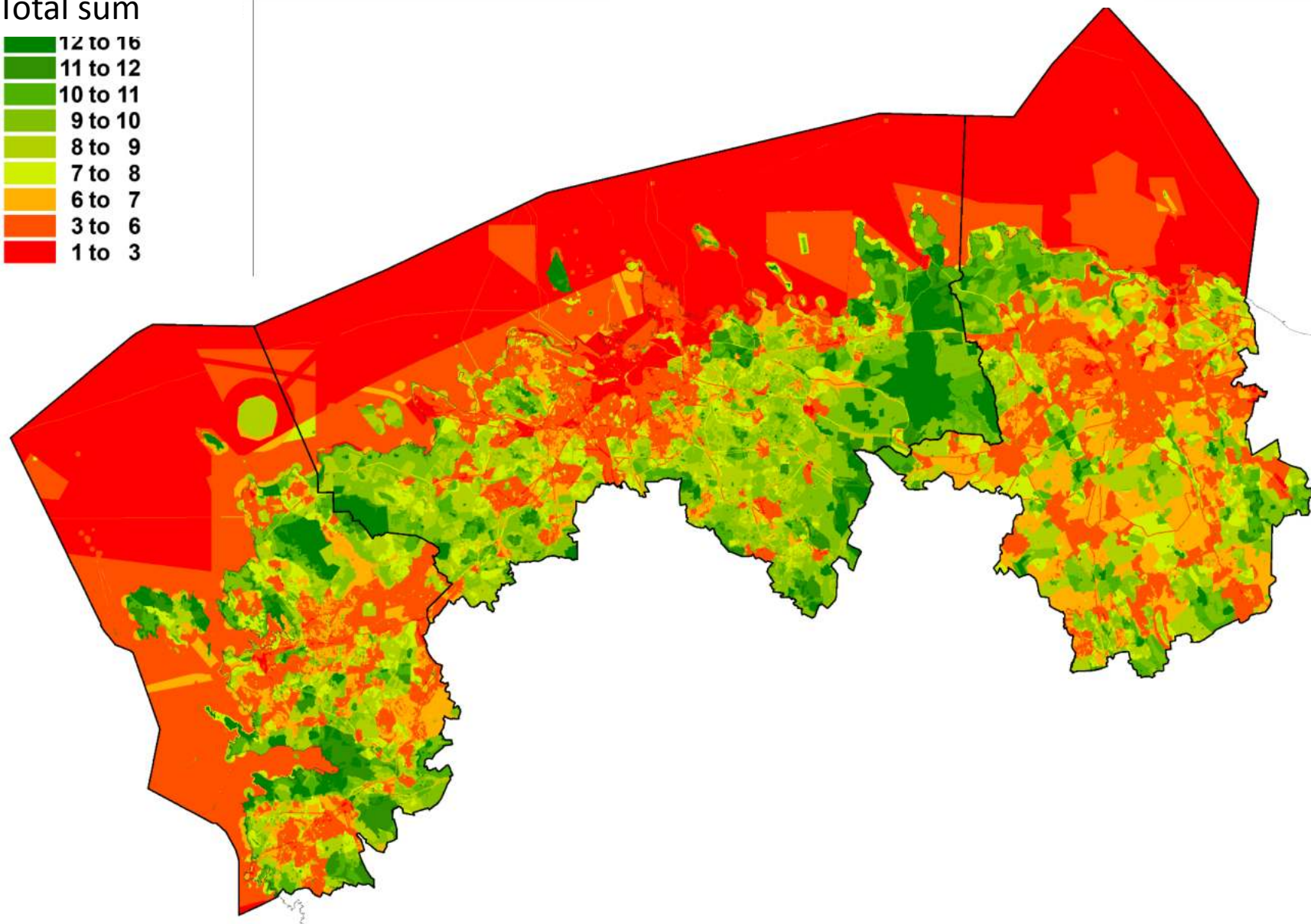
Compiled suitability map

Green= more suitable

- What we were looking for?

Areas with high nature value, demographic problems, cultural values and lower economical pressure (more traditional)

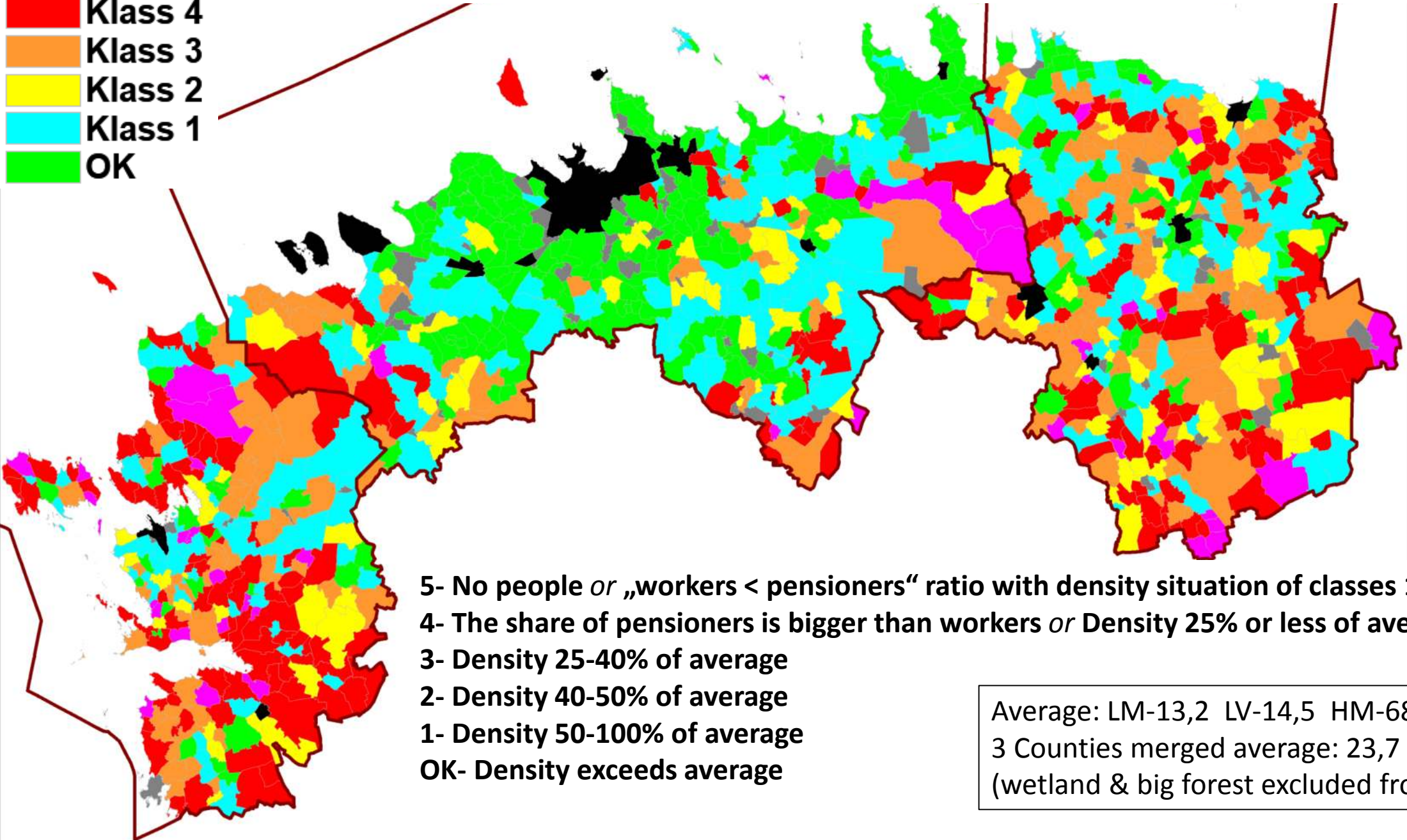
Total sum



- Estonian partners of the project are supposed to select two testareas for ICZM zonation
- As Harjumaa is not typical Estonian county testareas should be located in Lääne-Virumaa and Läänemaa (2/3 (60625 of 88215) of the Project area village's population is located in Harjumaa)



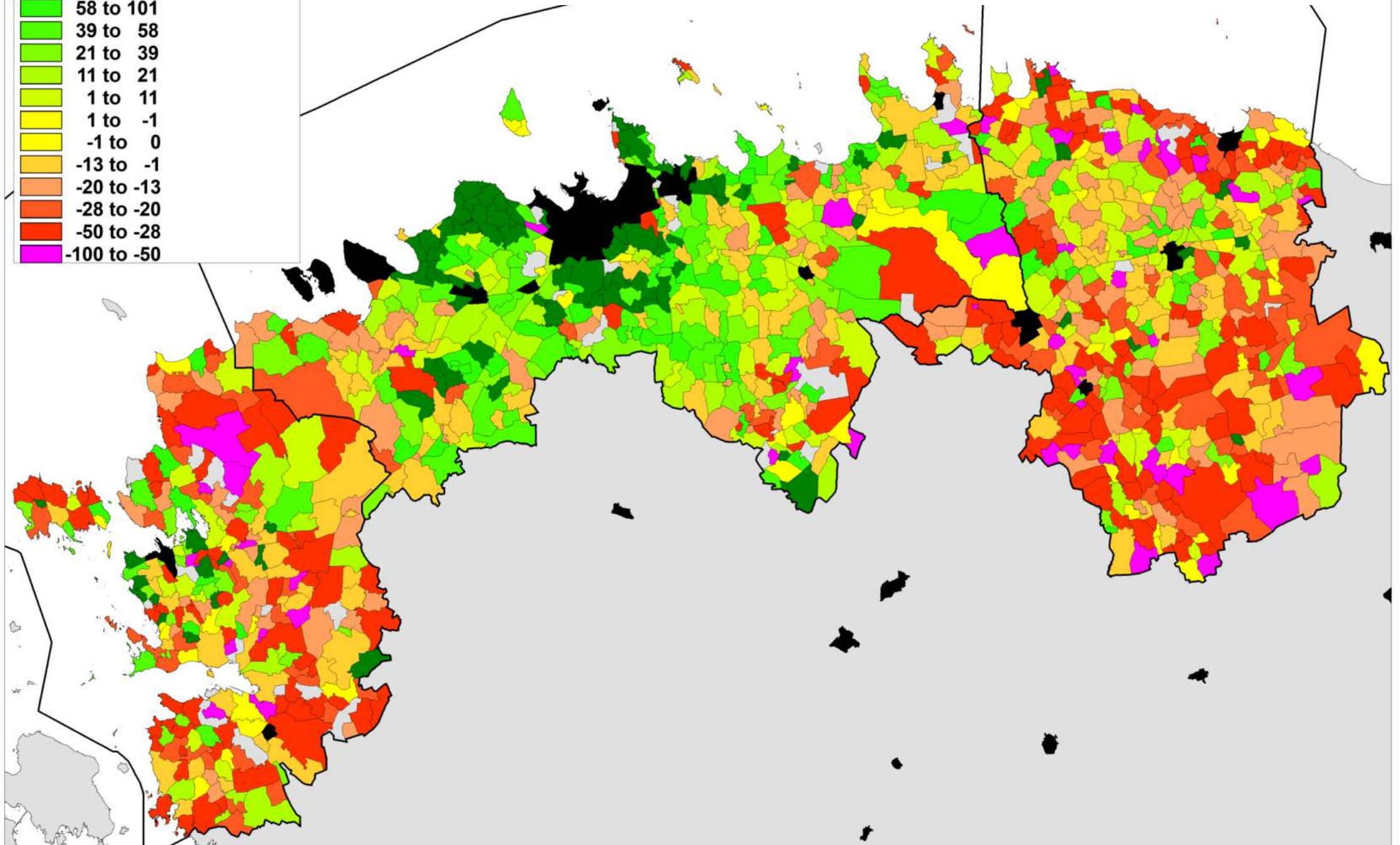
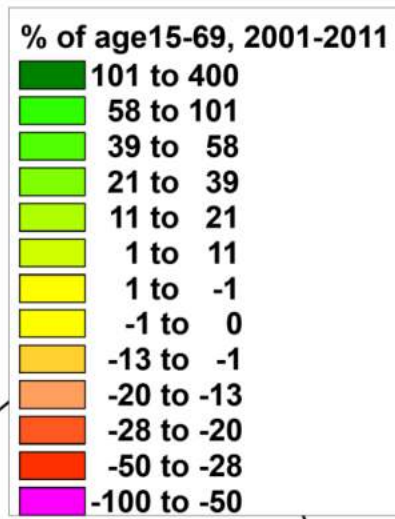
Marginalization (Rural settlements, 3 Counties merged marks)



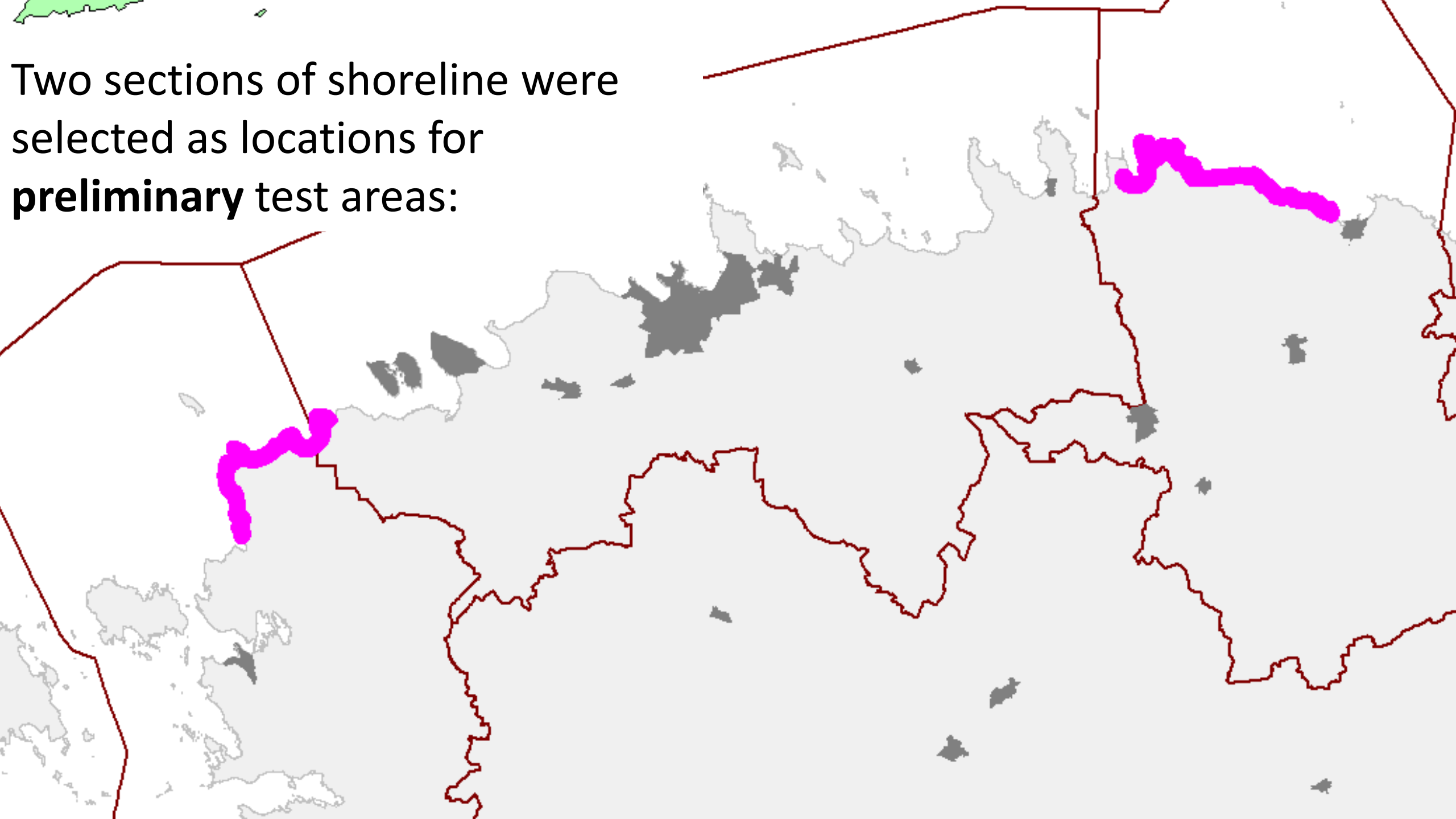
- 5- No people *or* „workers < pensioners“ ratio with density situation of classes 1-4
- 4- The share of pensioners is bigger than workers *or* Density 25% or less of average
- 3- Density 25-40% of average
- 2- Density 40-50% of average
- 1- Density 50-100% of average
- OK- Density exceeds average

Average: LM-13,2 LV-14,5 HM-68,3
3 Counties merged average: 23,7
(wetland & big forest excluded from area)

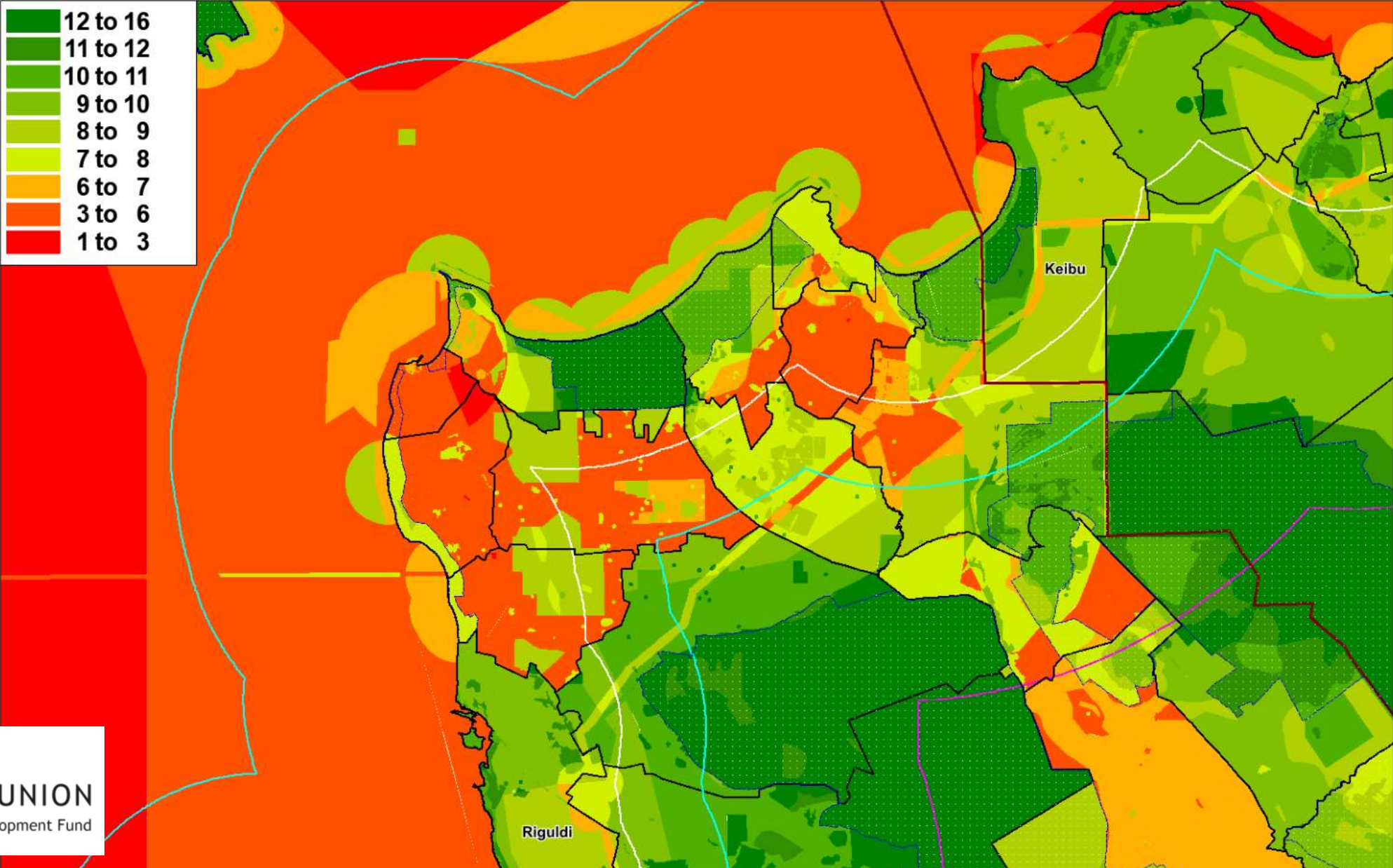
Age group 15-69years dynamics 2001 to 2011



Two sections of shoreline were
selected as locations for
preliminary test areas:



Läänemaa:
from Riguldi
to Keibu



Läänemaa test area:

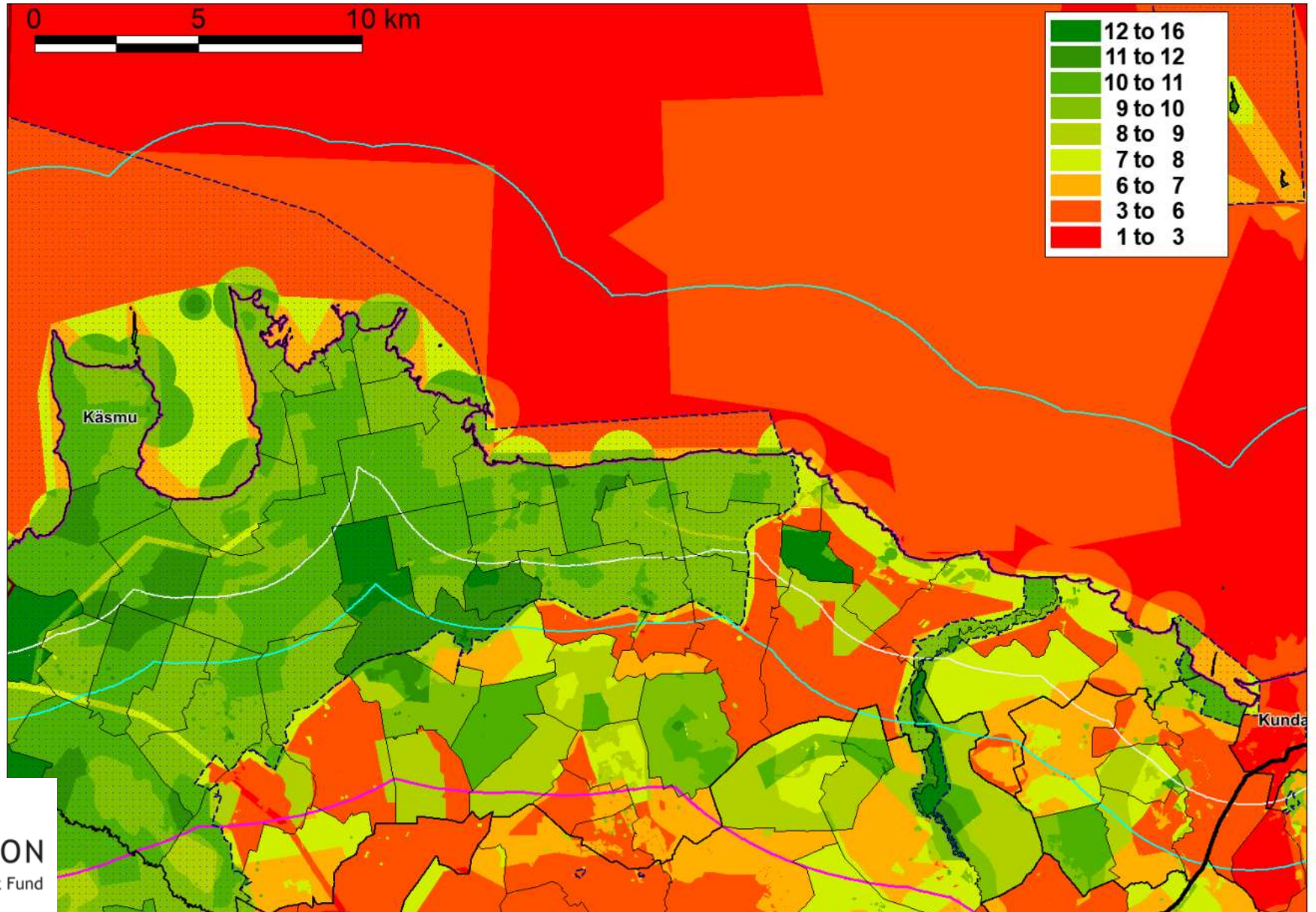
- Protected area *versus* tourism as neighbour
- Crossborder situation and administrative difference (Keibu is from Harjumaa)

Possible problems?

- Intensive residential-house building
- Crowded beach areas, bad accessibility (Nõva)
- Neugrundi shallow: Military *versus* Nature protection



Lääne-Virumaa: from Käsmu to Kunda



Lääne-Virumaa test area:

- Nature protection area with traditional settlements *versus* no restrictions area next to it

Possible problems?

- Extension of harbours (Võsu, Käsmu, Kunda, Karepa)
- Intensive residential-house building
- Crowded beach areas, bad accessibility
- Industrial pressure from Kunda



What next?

- Defining test areas concrete borders and focus
- ICZM zoning for 2 test areas

Near Future Timetable:

- June-September 2017
 - mapping possible problems and conflicts on test areas
 - gathering testarea specific information
 - fieldworks
 - communications about gathered information
- October-December 2017 – First drafts of ICZM plans

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Thank You!



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