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MINISTRY OF AGRICULTURE,  
FORESTRY AND FOOD

# Challenges related to landscape features in the Slovenian CAP Strategic plan

1st meeting of the ENRD TG on Landscape Features & Biodiversity

13. October 2022

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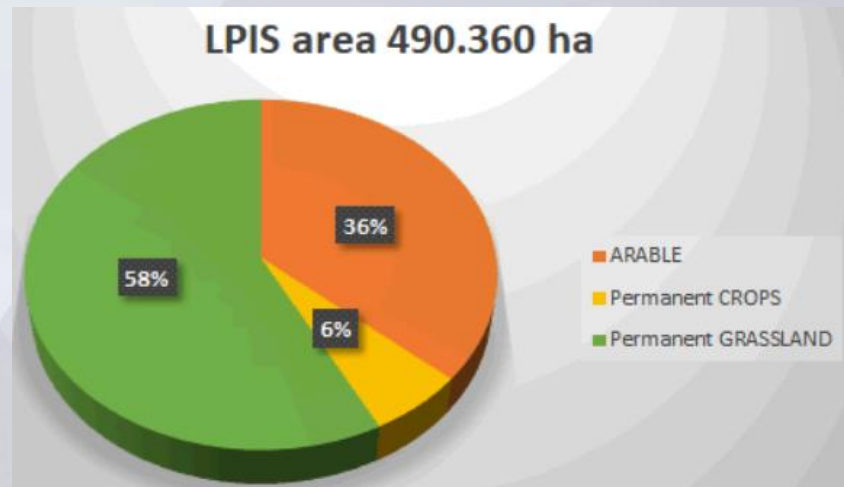
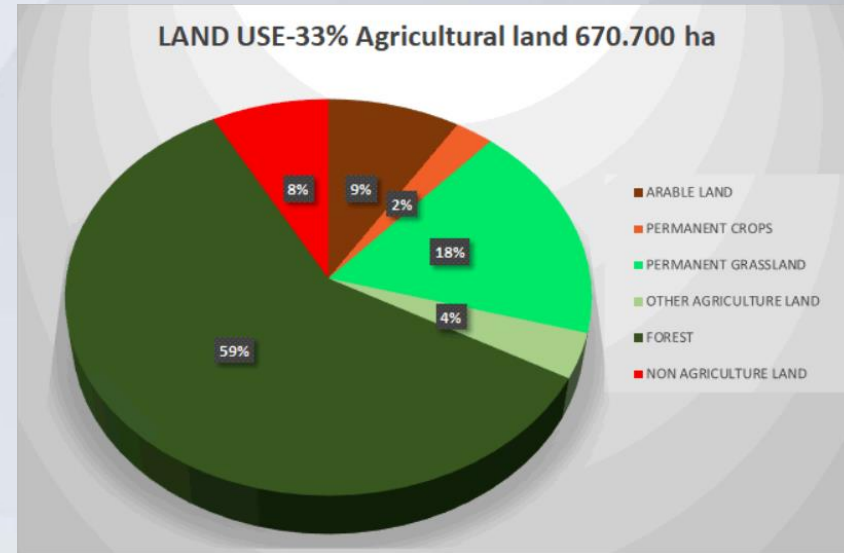
Ministry of Agriculture, Forestry and Food  
Directorate for Agriculture

# Current state of LF in Slovenia



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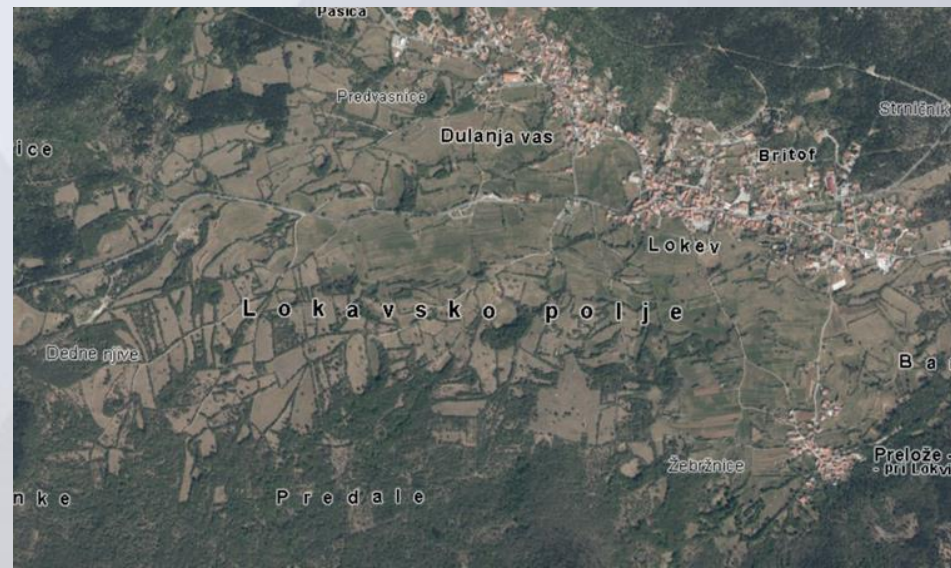
- Biodiversity in Slovenia is characterized by its richness reflected in above the average size of Natura 2000 network (cca 38%) and high nature value farming as well as important landscape diversity.
- Land structure is very fragmented.
- Almost 60% of the area covered by forest.
- Only about 33% agricultural land (cca 60% grasslands) - about 880.000 reference parcels in our LPIS.
- Slovenia has a huge variety of landscape features, mostly on grassland, and most of the grassland is close to the forest boundary.
- Slovenia activated a majority of possible landscape features in the context of cross-compliance GAEC rules, but did not activate any landscape features for the purpose of EFA obligation under greening.



Agricultural land use %	No. of rectangles	% of SI territory
0 -10	613	20,32
10-20	553	18,34
20-30	556	18,44
30-40	416	13,79
40-50	326	10,81
50-60	239	7,92
60-70	173	5,74
70-80	95	3,15
80-90	40	1,33
90-100	5	0,17

Table 1: percentage of agricultural use within 6,75 km2 rectangles

# Current state of LF in Slovenia



# Small Woody Features Copernicus Land Monitoring Service project for 2018 and The Land Use Database



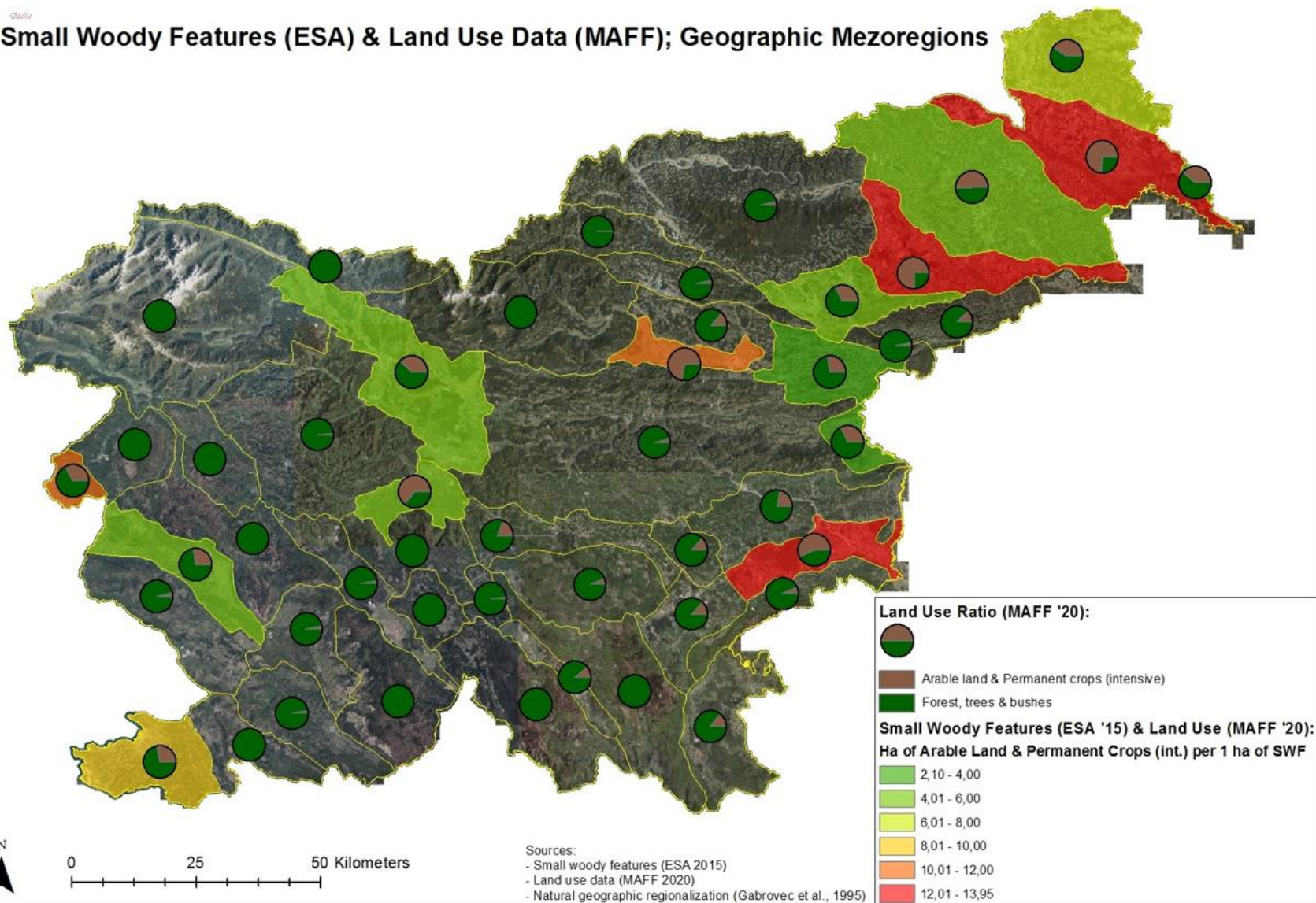
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- 'Additional woody features' --> 23.600 ha
- 'Linear structures of trees, hedges, bushes and scrub' --> 25 659 ha
- 'Patchy structures of trees, hedges, bushes and scrub' --> 1 600 ha
- HRL 2018 look & feel verification report for Small Woody Features - The verification report for the Small Woody Features project **shows the incompleteness of this data coverage**, but also that a large number of small woody features are present in Slovenia.

class_name	code	ha
Linear structures of trees, hedges, bushes and scrub	<a href="#">1100 – Arable land</a>	1.461
Linear structures of trees, hedges, bushes and scrub	<a href="#">1160 – Hop field</a>	6
Linear structures of trees, hedges, bushes and scrub	<a href="#">1180 – Other permanent crop on arable land</a>	10
Linear structures of trees, hedges, bushes and scrub	<a href="#">1190 – Greenhouse</a>	0
Linear structures of trees, hedges, bushes and scrub	<a href="#">1211 – Vineyard</a>	243
Linear structures of trees, hedges, bushes and scrub	<a href="#">1212 – Nursery</a>	0
Linear structures of trees, hedges, bushes and scrub	<a href="#">1221 – Intensive orchard</a>	73
Linear structures of trees, hedges, bushes and scrub	<a href="#">1222 – Extensive orchard</a>	2.571
Linear structures of trees, hedges, bushes and scrub	<a href="#">1230 – Olive grove</a>	50
Linear structures of trees, hedges, bushes and scrub	<a href="#">1240 – Other permanent crops</a>	16
Linear structures of trees, hedges, bushes and scrub	<a href="#">1300 – Permanent grassland</a>	7.399
Linear structures of trees, hedges, bushes and scrub	<a href="#">1321 – Swampy grassland</a>	154
Linear structures of trees, hedges, bushes and scrub	<a href="#">1410 – Overgrown agricultural area</a>	1.780
Linear structures of trees, hedges, bushes and scrub	<a href="#">1420 – Forest plantation</a>	12
Linear structures of trees, hedges, bushes and scrub	<a href="#">1500 – Trees and shrubs</a>	5.119
Linear structures of trees, hedges, bushes and scrub	<a href="#">1600 – Uncultivated agricultural area</a>	310
Linear structures of trees, hedges, bushes and scrub	<a href="#">1800 – Forest trees on agricultural land</a>	340
Linear structures of trees, hedges, bushes and scrub	<a href="#">2000 – Forest</a>	3.815
Linear structures of trees, hedges, bushes and scrub	<a href="#">3000 – Built-up area and related surface</a>	1.630
Linear structures of trees, hedges, bushes and scrub	<a href="#">4100 – Swamp</a>	1
Linear structures of trees, hedges, bushes and scrub	<a href="#">4210 – Reed</a>	3
Linear structures of trees, hedges, bushes and scrub	<a href="#">4220 – Other marshy area</a>	92
Linear structures of trees, hedges, bushes and scrub	<a href="#">5000 – Dried open area with special vegetation</a>	104
Linear structures of trees, hedges, bushes and scrub	<a href="#">6000 – Area with little or no vegetation</a>	10
Linear structures of trees, hedges, bushes and scrub	<a href="#">7000 – Water</a>	460
SUM		25.659

# Current state of LF in Slovenia

Small Woody Features (ESA) & Land Use Data (MAFF); Geographic Mezoregions

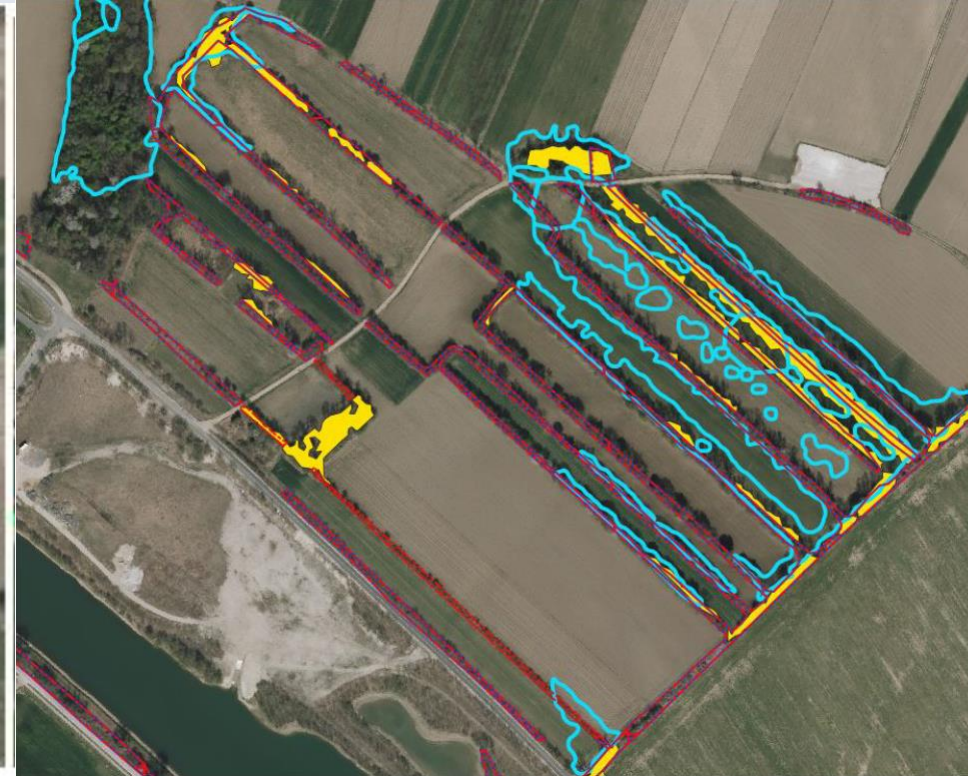


# Results of the project „Inventorization of LF with remote sensing“



- Inventorization of hedgerows; solitaire trees and bushes; group of trees and bushes; woody riparian buffer strips and overgrowth
- The resulting layer not „perfect“

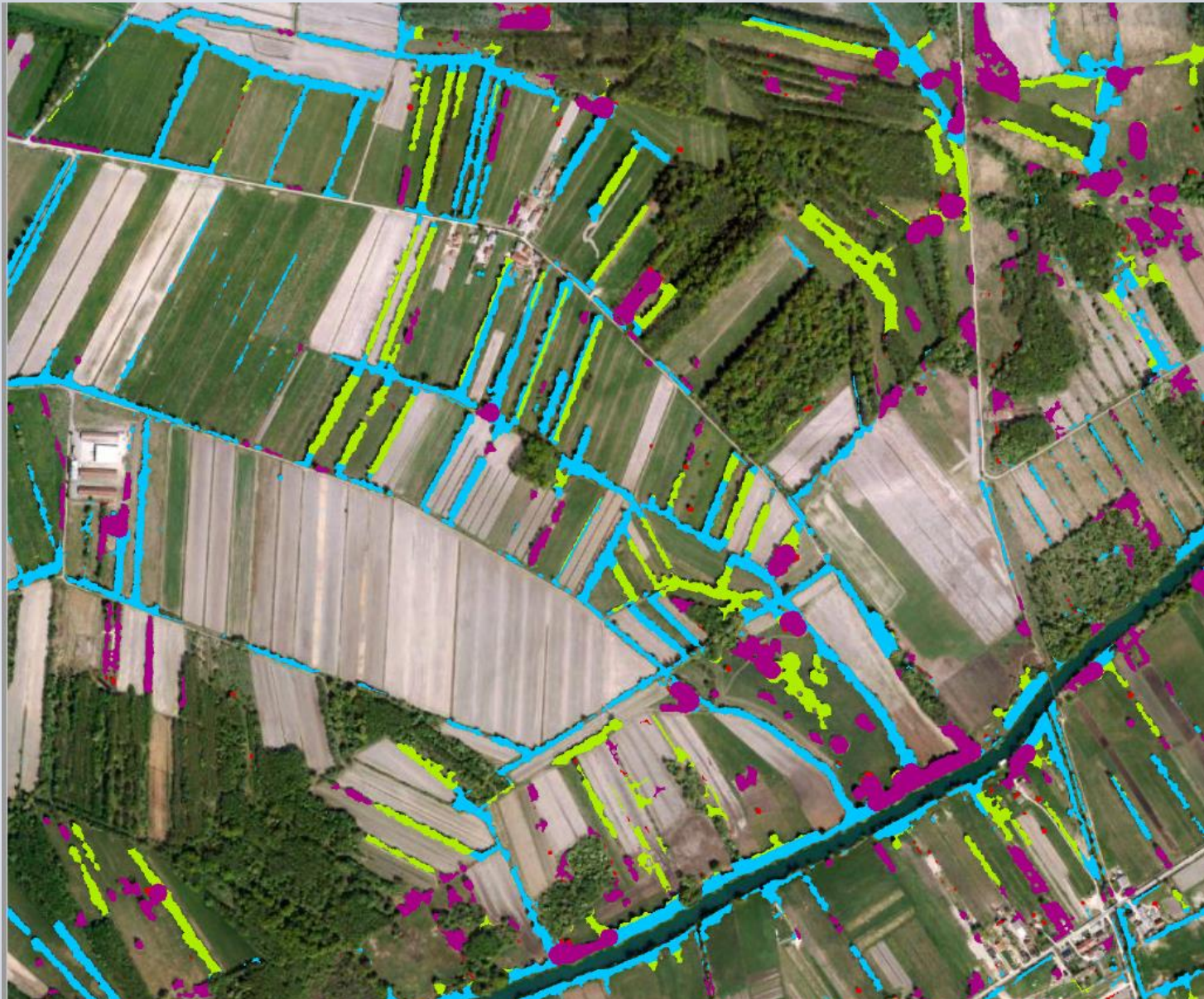
Landscape feature	Area (hectares)
solitaire trees and bushes	4.647
hedgerows	22.976
group of trees and bushes	11.545
woody riparian buffer strips	5.258
overgrowth	9.939
	54.365



# Results of the project „Inventorization of LF with remote sensing“



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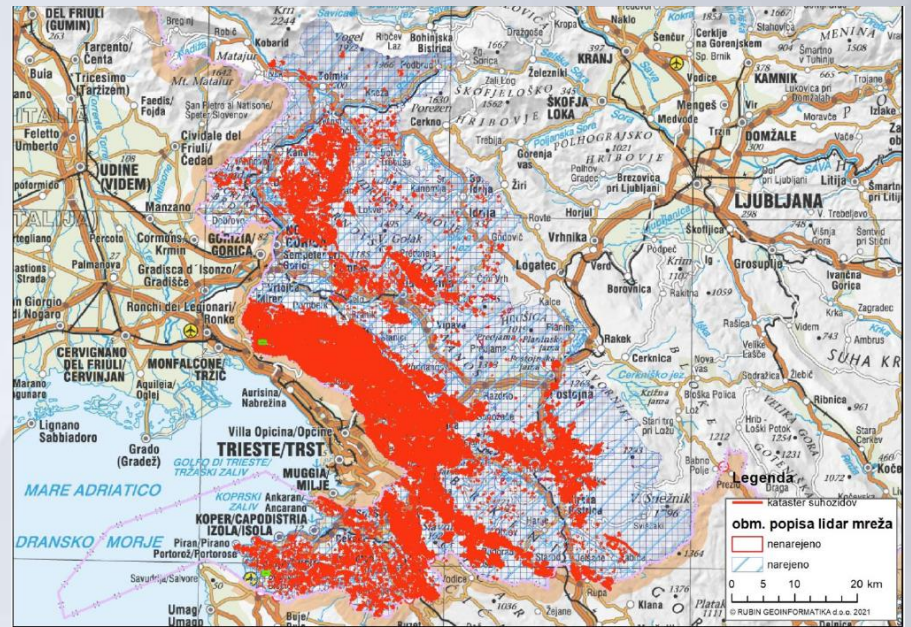


# Inventorization of dry stone walls

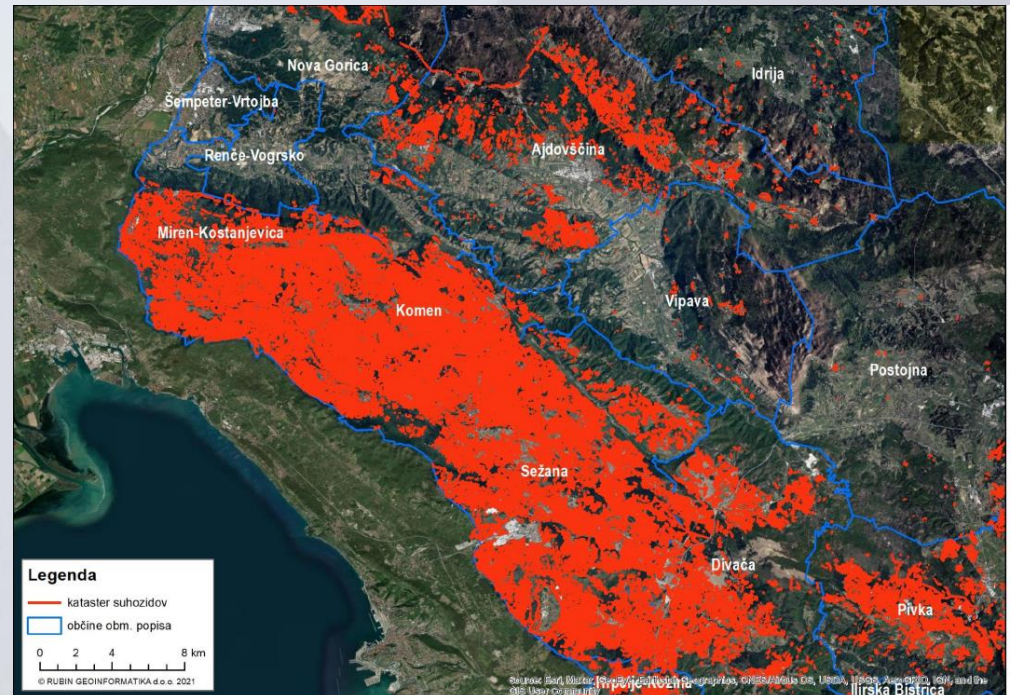


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- Interreg project „SUSTAINABLE TOURISM STRATEGIES TO CONSERVE AND VALORISE THE MEDITERRANEAN COASTAL AND MARITIME NAUTRAL HERITAGE“
- Mapped 3.651 km<sup>2</sup> of Slovenia.
- 11.725 km of dry stone walls.
- On average 3,21 km of dry stone walls per 1 km<sup>2</sup>!

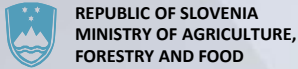


RABA_ID	Actual use		Agricultural land (GERK)		
	km	ha	km	ha	
1100		81	8	43	4
1131/		/		12	1
1180		1	0	1	0
1211		96	10	53	5
1221		14	1	10	1
1222		138	14	26	3
1230		265	27	127	13
1300		2141	216	850	86
1320/		/		296	30
1410		613	62/	/	/
1411/		/		4	0
1500		1568	157/	/	/
1600		153	15/	/	/
1610/		/		4	0
1800		379	38/	/	/
2000		5996	603/	/	/
3000		259	27/	/	/
5000		10	1/	/	/
6000		1	0/	/	/
7000		1	0/	/	/
SUM		11716	1179	1426	143

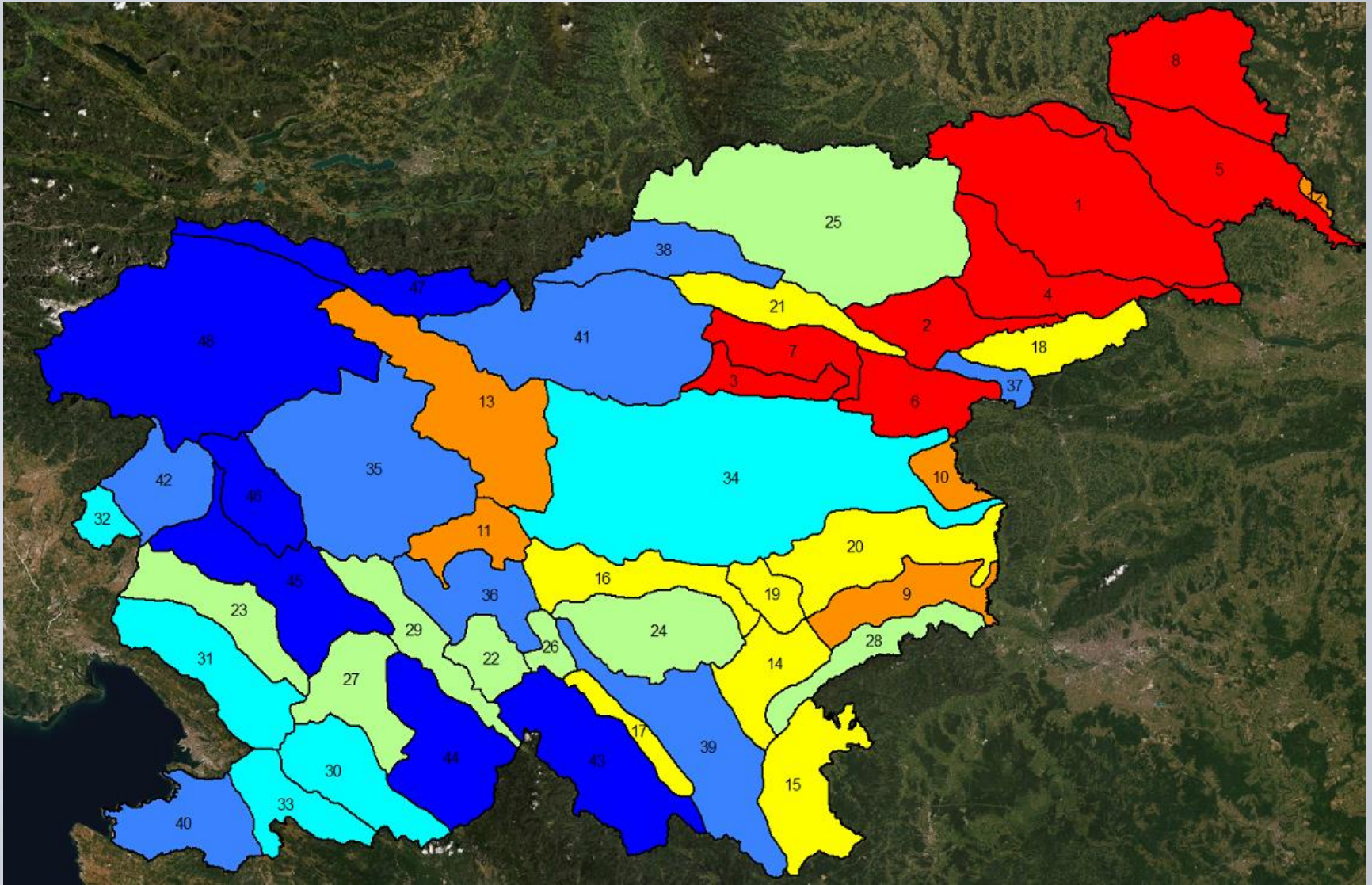




# Targeted research project „Landscape heterogeneity and the forthcoming agricultural policy measures in Slovenia“

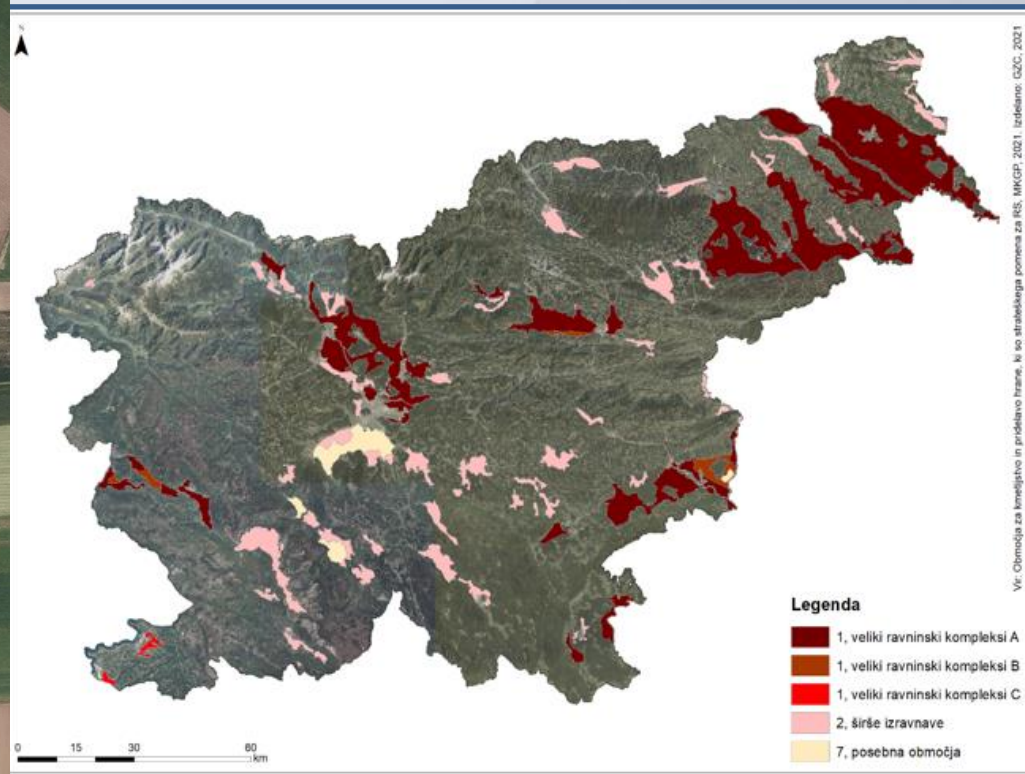


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# Preparation of an initial spatial layer of landscape features in selected areas

- Inventorization of: hedgerows; solitaire trees and bushes; group of trees and bushes; trees in line; woody riparian buffer strips; small water features and local wetlands.
- Main sources Digital Relief Model, Digital Orthophotos and The Land Use Database.
- On most problematic areas - 2.751 km<sup>2</sup>!



# LF in the Slovenian CAP Strategic plan



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## SWOT analysis - Weakness:

- loss of landscape features (hedgerows, group of trees, solitary trees,...) and mosaics of the agricultural landscape in some areas due to intensification of agricultural use on one hand and abandonment of traditional management systems on other.

## Identification of needs:

- Preservation or improvement of biodiversity of habitats and species in agricultural landscapes, especially in Natura 2000 sites;
- **Preservation of agricultural landscapes and landscape features;**
- Maintaining the pollination ecosystem service by improving the habitat quality for wild pollinators;

## Definitions and conditions to be provided in SP (article 4):

- Appropriate definition of “permanent grassland” and „eligible hectare“ – it includes landscape features!

## Conditionality:

- GAEC 8 - Minimum share of agricultural area devoted to non-productive areas or features and Retention of landscape features.

## Article 70 (Environmental, climate-related and other management commitments):

- Agri-environment-climate payments (Preservation of hedgerows; High-trunk meadow orchards; Hummocky meadows;... )

## Article 72 (Area-specific disadvantages resulting from certain mandatory requirements):

- Natura 2000 payments (in certain areas)

## Article 73 (Investments):

- Non-productive investments in the conservation of meadow orchards (installation or renovation of meadow orchards, hunting perches, nesting boxes, hotels for wild pollinators)
- Non - productive investments in the arrangement of hedgerows, dry stone walls and other landscape features

## Article 77 (Cooperation):

- EIP projects
- Implementation of measures from protected area management plans

## Article 78 (Knowledge exchange and dissemination of information)



**THANK YOU FOR YOUR ATTENTION!**