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TAIEX-ECRAN Sub-Regional Workshop on Appropriate Assessment on Serbian Pilot Sites (Natura 2000)

Workshop I: Screening (Stage I of Appropriate Assessment)

Topic: Pilot project screening

Novi Sad, Autonomous Province of Vojvodina, Republic of Serbia 24 – 26 September 2014



This Project is funded by the European Union



A project implemented by Human Dynamics Consortium

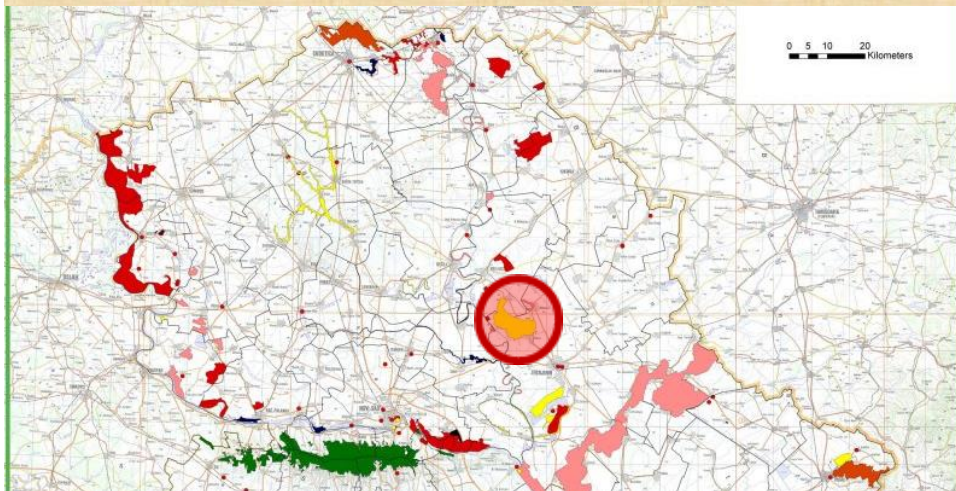
Okanj bara and Rusanda reserves location within Autonomous Province Vojvodina



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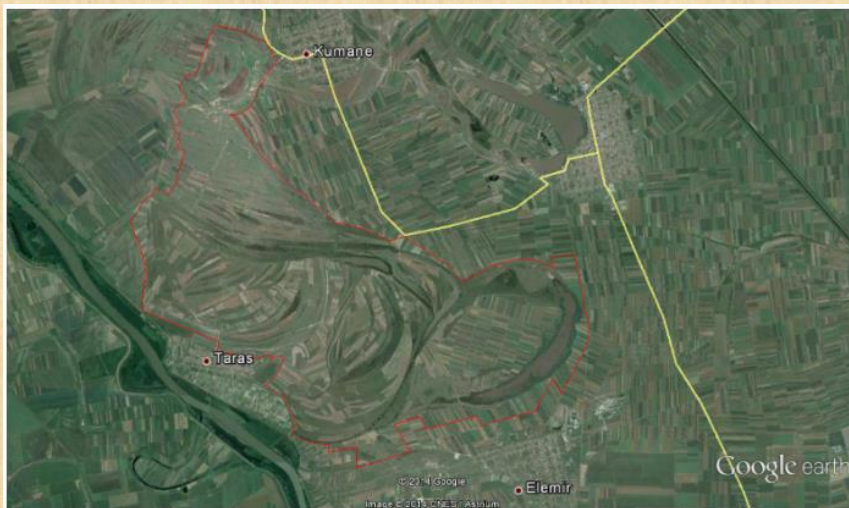
Natura 2000 site(s)



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Okanj bara Special Nature Reserve, 5,480 .9404 ha







Google earth

miles 6
km 10



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Target features of Okanj bara Special Nature Reserve		
English name	Scientific name	
Birds		
Black-winged stilt, common stilt,	<i>Himantopus himantopus</i>	<i>nesting</i>
Eurasian bittern, great bittern	<i>Botaurus stellaris</i>	<i>nesting</i>
Pied avocet	<i>Recurvirostra avosetta</i>	<i>nesting</i>
Red-footed falcon	<i>Falco vespertinus</i>	<i>nesting</i>
Species (animals)		
European ground squirrel	<i>Spermophilus citellus</i>	
European fire-bellied toad	<i>Bombina bombina</i>	
Species (plants)		
	<i>Bassia sedoides</i>	
Glasswort	<i>Salicornia europaea</i>	
	<i>Scorsonera parviflora</i>	
Habitats		
1530	*Pannonic salt steppes and salt marshes	
1340	* Inland salt meadows	
The sign "*" indicates priority habitat types		
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Okanj bara Special Nature Reserve

Okanj bara and oil refinery near Elemir

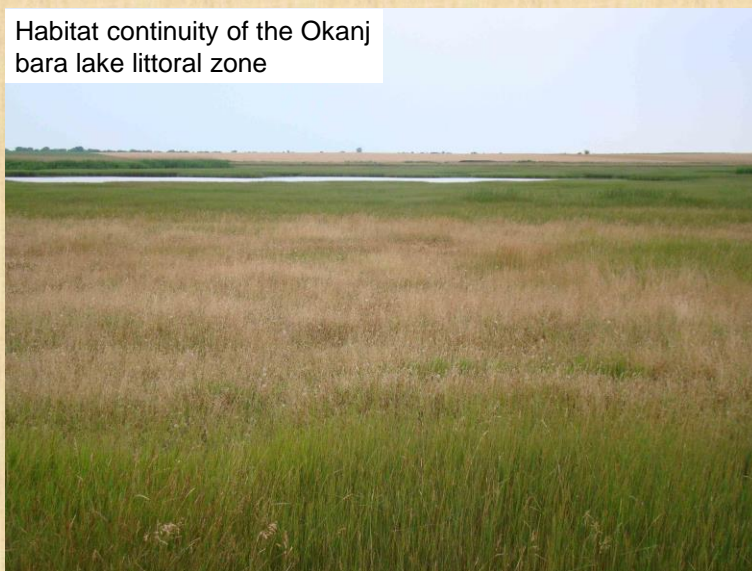


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Okanj bara Special Nature Reserve

Habitat continuity of the Okanj
bara lake littoral zone



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Okanj bara Special Nature Reserve



Habitat continuity of the Okanj
bara lake littoral zone



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Annual habitats of the Okanj
bara lake littoral zone



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Pasture of cows and sheep is optimal management of salty meadows



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Okanj bara Special Nature Reserve



Barley (*Hordeum hystrix*)



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Siberian Statice (*Limonium
gmelinii* subs. *Pannonicum*)



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Sea aster (*Aster tripolium*
subs. *Pannonicus*)



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Okanj bara Special Nature Reserve

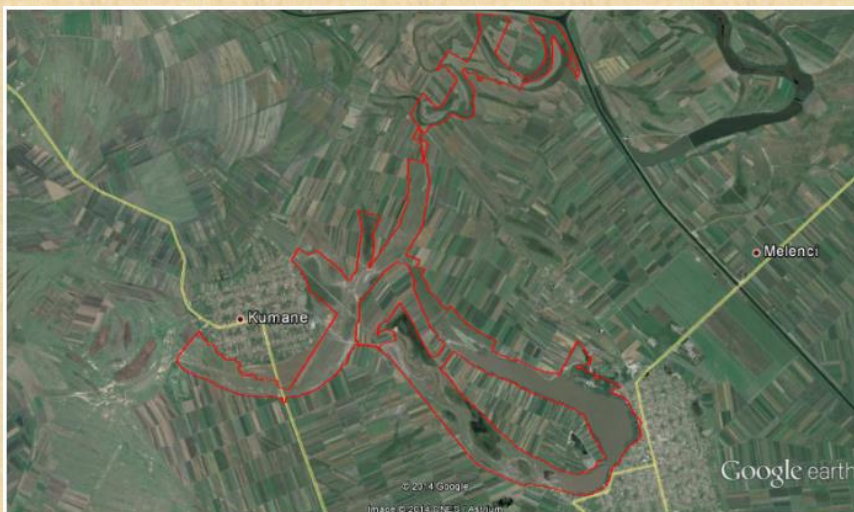
European green toad
(*Bufo viridis*)



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Rusanda Nature Park, 1,159.9789 ha



Google earth

miles
km

4
7



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Rusanda Nature Park

- 21 habitat types from Annex I of the Habitats Directive
- 15 priority habitat types
- 10 rare and endangered habitats
- 6 typical and representative habitat types according to Serbian national classification from #1530 - Pannonic salt steppes and salt marshes (priority habitat type)
- 211 bird species recorded since 1950
 - o 171 protected bird species
 - o 82 nesting bird species
 - o important staging post along bird migration route



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Rusanda Nature Park

Habitats of the
Rusanda lake littoral
zone



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Rusanda Nature Park

Annual seablite
(*Suaeda maritima*)



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Target features of Rusanda Nature Park

English name	Scientific name	
Birds		
Black-winged stilt, common stilt,	<i>Himantopus himantopus</i>	nesting
Common crane	<i>Grus grus</i>	migrating
Eurasian bittern, great bittern	<i>Botaurus stellaris</i>	nesting
Pied avocet	<i>Recurvirostra avosetta</i>	nesting
Red-footed falcon	<i>Falco vespertinus</i>	nesting
Species (Animals)		
European ground squirrel	<i>Spermophilus citellus</i>	
European fire-bellied toad	<i>Bombina bombina</i>	
Species (Plants)		
	<i>Bassia sedoides</i>	
Glasswort	<i>Salicornia europaea</i>	
	<i>Scorsonera parviflora</i>	
Habitat n.		
1530	*Pannonic salt steppes and salt marshes	
The sign "*" indicates priority habitat types		



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Rusanda Nature Park

Annual seablite
(*Suaeda pannonica*)



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Rusanda Nature Park

Habitats of the Rusanda
lake littoral zone



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Rusanda Nature Park

European pond turtle
(*Emys orbicularis*)



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Rusanda Nature Park

Black-winged stilt
(*Himantopus himantopus*)



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Rusanda Nature Park

Habitats of Rusanda salty meadows and pastures



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Rusanda Nature Park

Habitats of Rusanda temporarily flooded meadows



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Rusanda Nature Park

Southern inlet of the Rusanda lake



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Rusanda Nature Park

Channel in the pastures between Kumane and Melenci



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Rusanda Nature Park

Flock of common cranes (*Grus grus*) near Melenci in May 2014



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Gass and oil drilling rig near Melenci



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Pilot area in future

- Both reserves should be in future integrated to the Natura 2000 network.
- Both reserves, thanks species and habitats occurrence will be declared as SCI as well as SPA.
- Actually is not sure, if future would established one Natura 2000 site, covering both reservation or two independent.
- For our workshop and screening we will regard both reservations as independent N2K sites (both declared as SPA and SCI)



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Project introduction

- Pilot area is important source of natural gas and oil.
- Oil and gas is excavated here for ages, now by the company Gazpromneft NIS Serbia
- Company keen to reach EU standards as well as lower environmental pollution: problem of CO₂ in natural gas.
- During years 2013 – 2014, project for CO₂ separation and its transportation and pumping into earth implemented
- Project consists of three basic parts:
 - a) CO₂ separation unit at Elemir
 - b) Gas pipeline to the pumping station
 - c) Pumping station pumping CO₂ underground
- The trench for pipeline should be



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Project introduction

- Pipeline: steel pipe, Ø168,3 * 11.0 mm and Ø114,3mm that will transport the dried carbon dioxide extracted from natural gas.
- Start route: Elemir- Amine plant facility for the preparation and transportation of oil and gas
- Completion of the route: Melenci - SNGS "Rusanda,,
- Trench proportions proposal:
 - Breadth 0,5 m
 - Depth 1,00 m



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Project introduction –relation to both reserves

Var. 1: 12,86 km



Var. 2: 11,83 km



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Okanj bara – detail of pipeline location

Var. 1

Var. 2



Google earth

miles 2 4
km



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Rusanda - pipeline location

Var. 1

Var. 2



Google earth

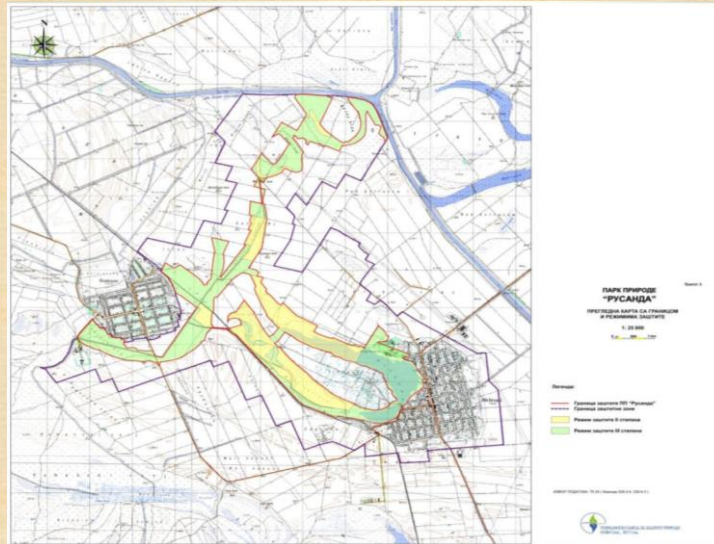
miles 4 7
km



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Protection zones in Rusanda Natural park and pipeline



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Rusanda – detail of Var. 1 of pipeline location



Google earth

feet 4000
km 1



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Results of screening

Appropriate assessment yes or no?

Reasons for AA , if implemented



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