

March 9th -10th, 2021, Daugavpils, Latvia / Anyksciai, Lithuania

1st Partner workshop

“Urban wetlands in cross border region Latvia-Lithuania: challenges of improvement of eco systems and services”

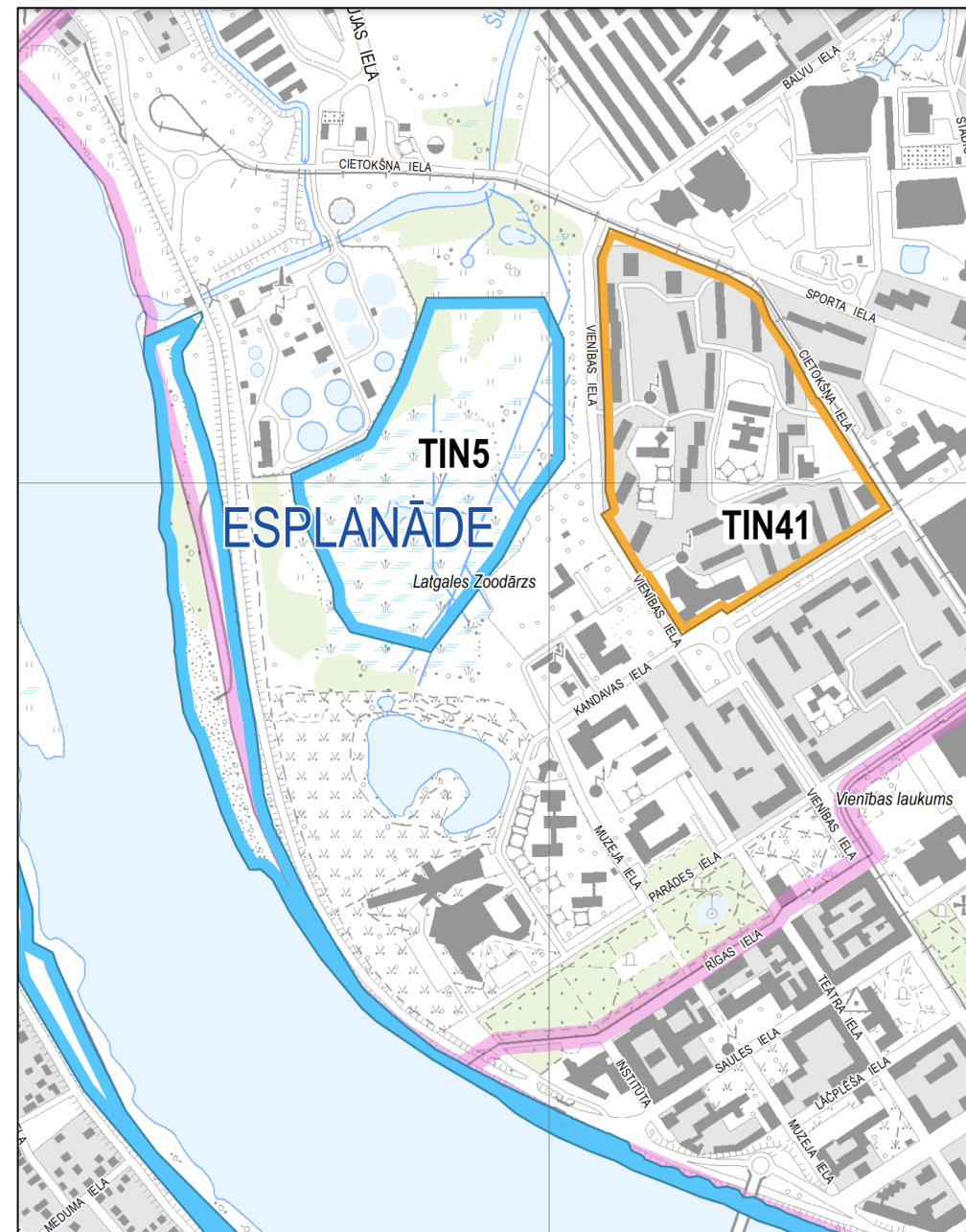
Current situation of Esplanāde wetland in Daugavpils, factors affecting the ecosystem and the necessary management measures



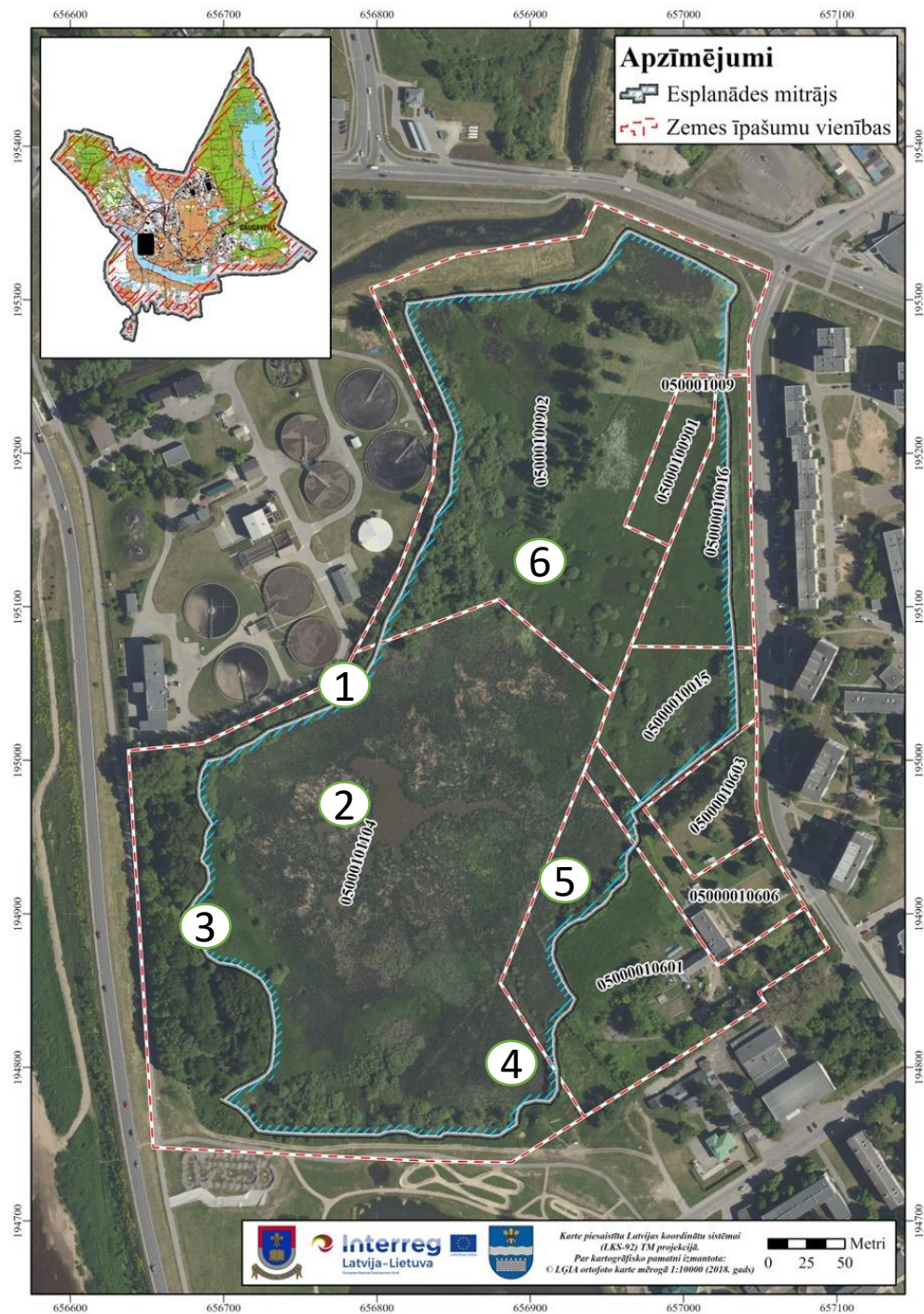
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Daugavpils University,
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Esplanade wetland area



Esplanāde wetland area in Daugavpils city spatial plan



Specially protected species found in the area

No.	English common name	Latin name	Conservation status		Estimation of population in the territory	
			Latvia	EU	Min	Max
1.	Black-headed Gull	<i>Chroicocephalus ridibundus</i>	SPS, MS		1000	2000
2.	Little Bittern	<i>Ixobrychus minutus</i>	SPS	BD	1	2
3.	Bluethroat	<i>Luscinia svecica</i>	SPS	BD	5	7
4.	Corncrake	<i>Crex crex</i>	SPS	BD	0	1
5.	Little Grebe	<i>Tachybaptus ruficollis</i>	SPS		1	2
6.	Red-backed Shrike	<i>Lanius collurio</i>	SPS	BD	1	2
7.	Eurasian Penduline-Tit	<i>Remiz pendulinus</i>	SPS		1	2
8.	Early Marsh Orchid	<i>Dactylorhiza incarnata</i>	SPS		-	-

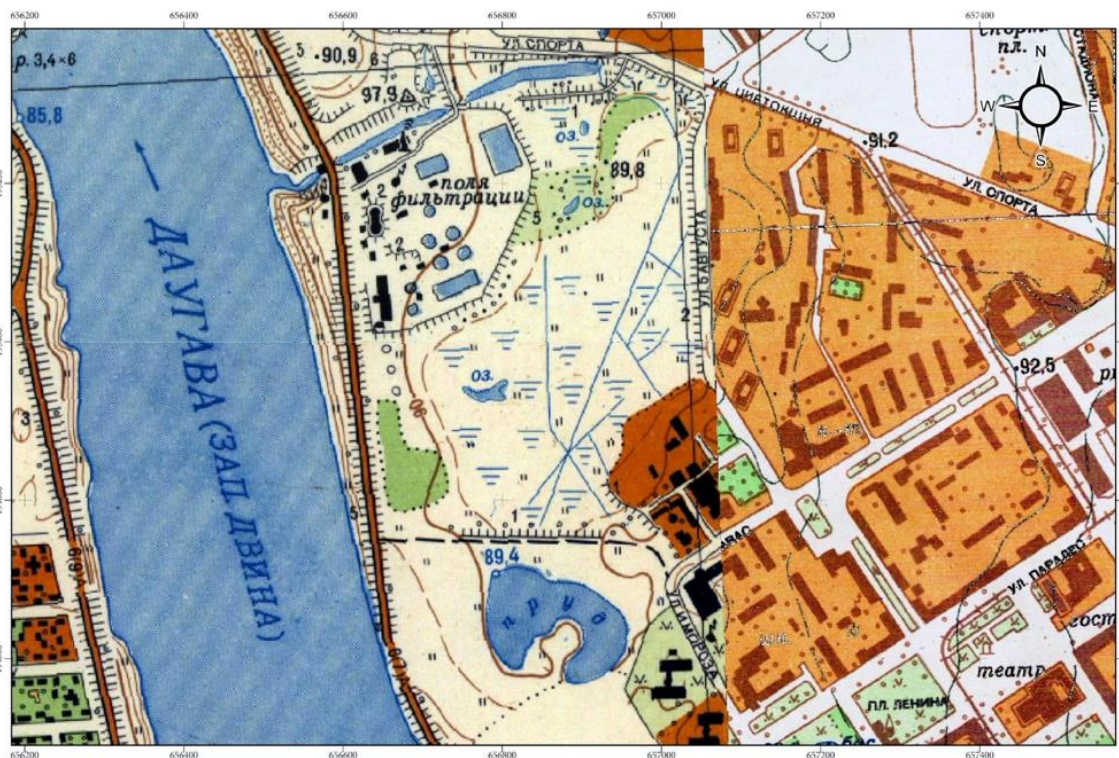
SPS - specially protected species

MS - for conservation of the species, micro-reserves can be established

BD - species included in the Birds Directive

Factors negatively affecting the natural values found in the territory:

- Changes of hydrological regime



Esplanāde wetland area in 1963



Drained hay meadows in place of the existing Esplanāde wetland (1975)



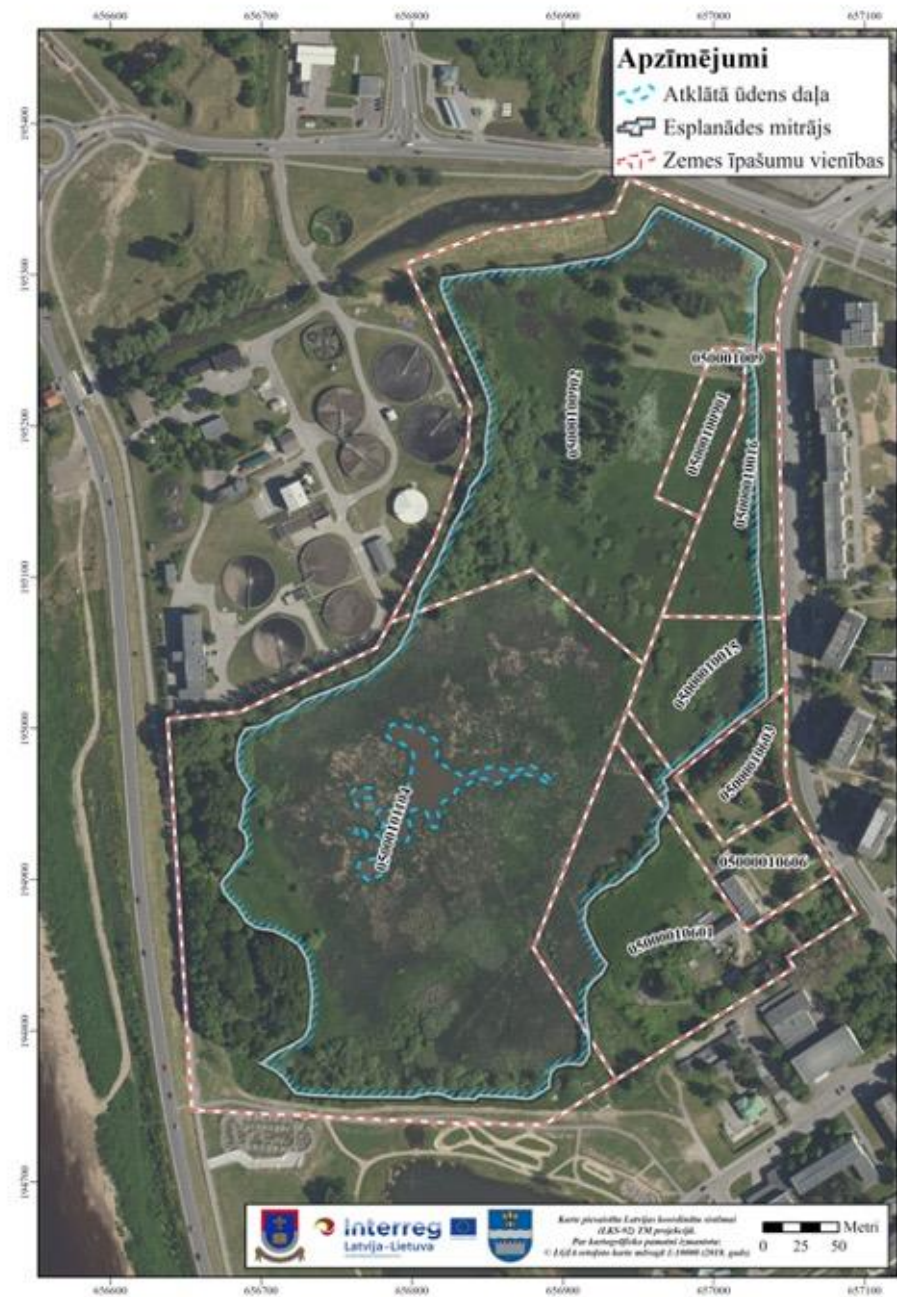
Map of the drainage system in Esplanāde wetland area



Some of drainage system elements are still functioning
 (Photo: D. Krasnopoļska)



Open water area in Esplanāde wetland in 1995



Open water area in Esplanāde wetland in 2017

✓ Increasing of plant biomass



(Photo: A. Erts)



(Photo: D. Krasnopoļska)

Monolithic stands of *Typha latifolia* and *Phragmites communis*

✓ Overgrowing with trees and bushes

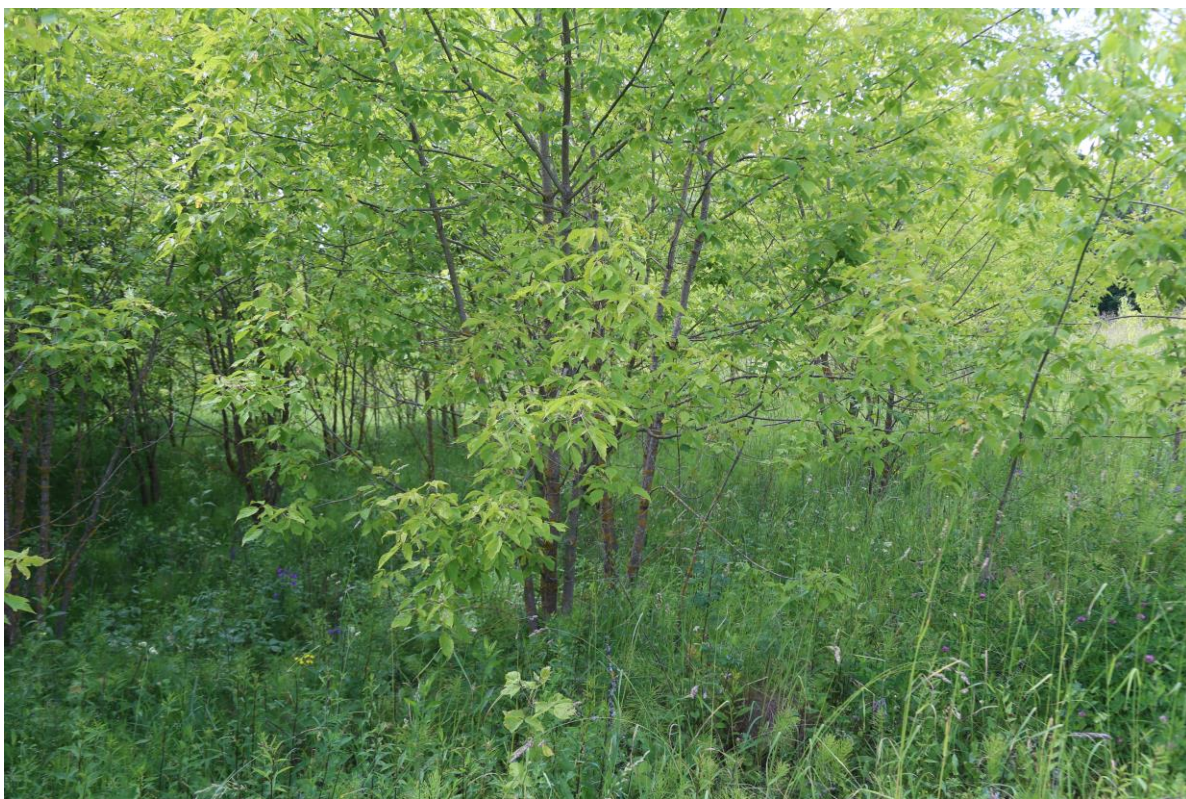


(Photo: A. Erts)



(Photo: D. Krasnopoļska)

✓ Distribution of invasive alien species in the wetland area



Ash-leaved maple *Acer negundo* (Photo: U. Valainis)



Tatarian dogwood *Swida alba* (Photo: V. Ērmāne)

✓ Distribution of invasive species in the wetland area



Himalayan balsam
Impatiens glandulifera
(Photo: N. Romanceviča)

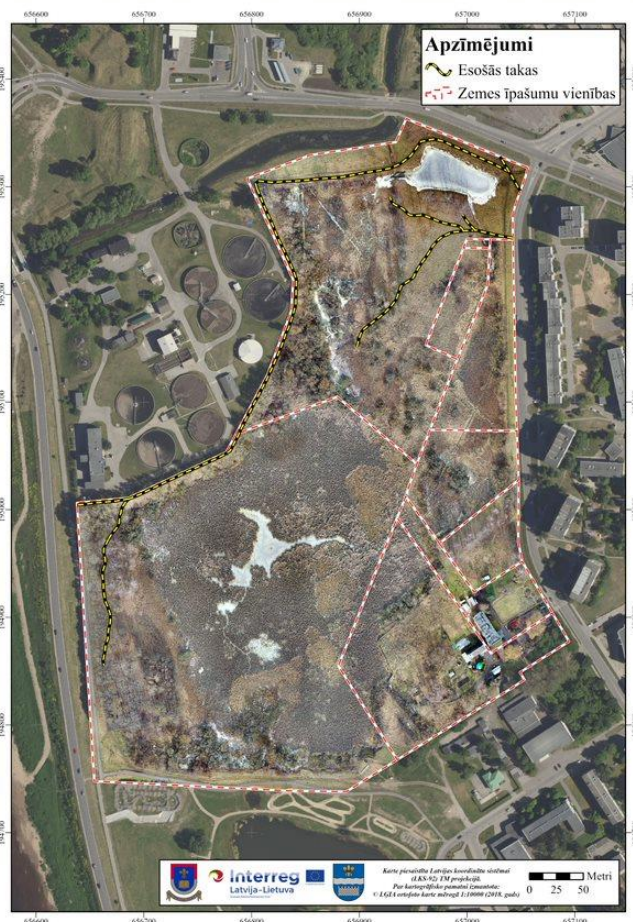


Wild cucumber
Echinocystis lobata
(Photo: U. Valainis)



American mink
Mustela vison
(Photo: J. Plinta)

- The impact of antropogenic factors on Esplanāde wetland



(Photo: D. Krasnopol'ska)

Existing network of trodden trails in Esplanade wetland



(Photo: A. Erts)



(Photo: D. Krasnopoļska)



(Photo: U. Valainis)



(Photo: A. Erts)

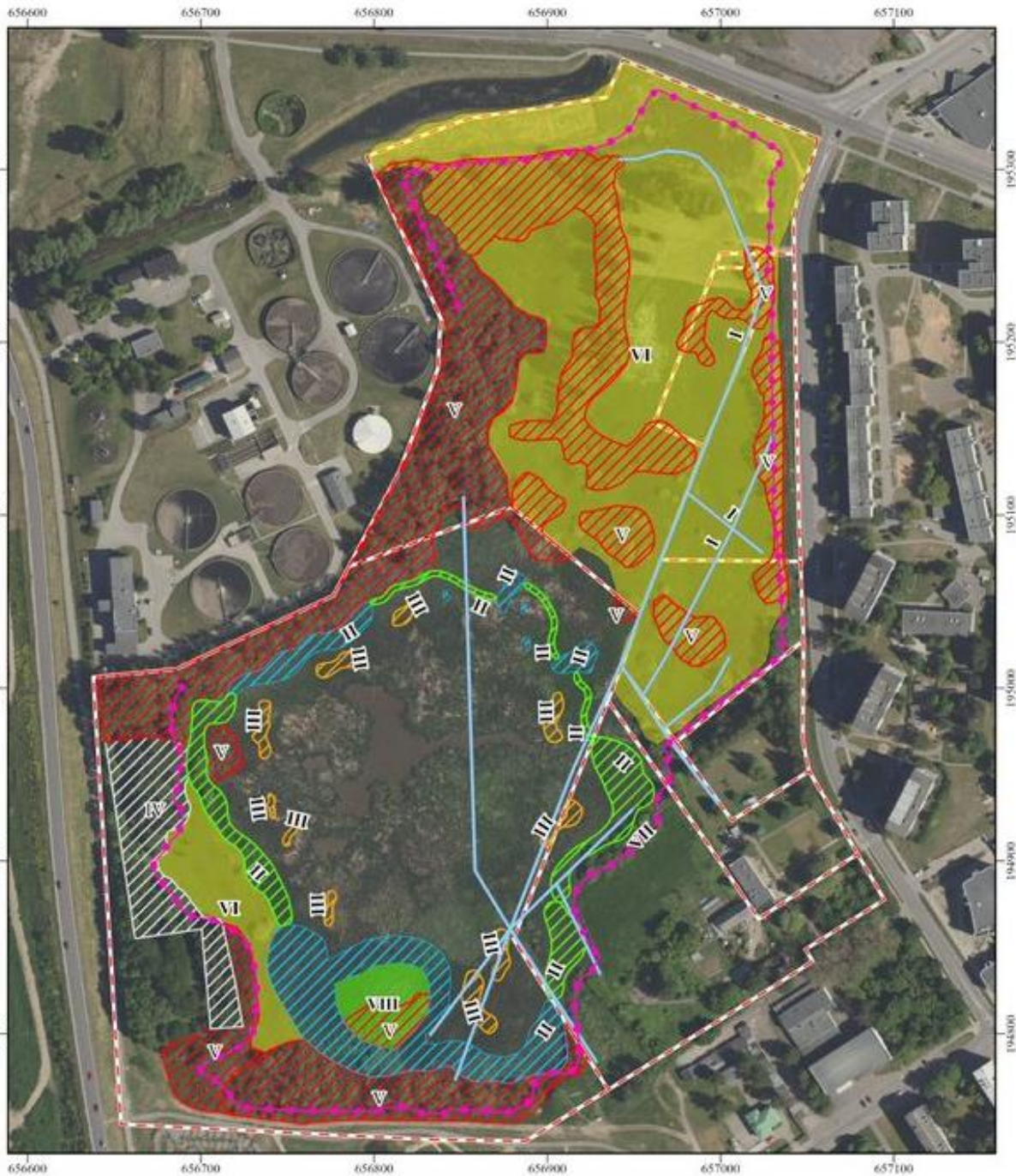


(Photo: A. Erts)



(Photo: A. Erts)

Recommended actions for the conservation and promotion of biological diversity in the Esplanāde wetland ecosystem and adjacent areas



I Preparation of a technical project for ensuring a constant hydrological regime in the territory of the Esplanade wetland

II Construction of a united circular system of ponds around the most vulnerable territory of Esplanade wetland

III Fragmentation of monolithic stands of *Typha latifolia* and *Phragmites communis*

IV Mowing of shoots of trees and bushes

V Cutting of trees and bushes

VI Restoration of biologically valuable grasslands

VII Development of amphibian/reptile protection fence

VIII Creation of artificial island for birds nesting

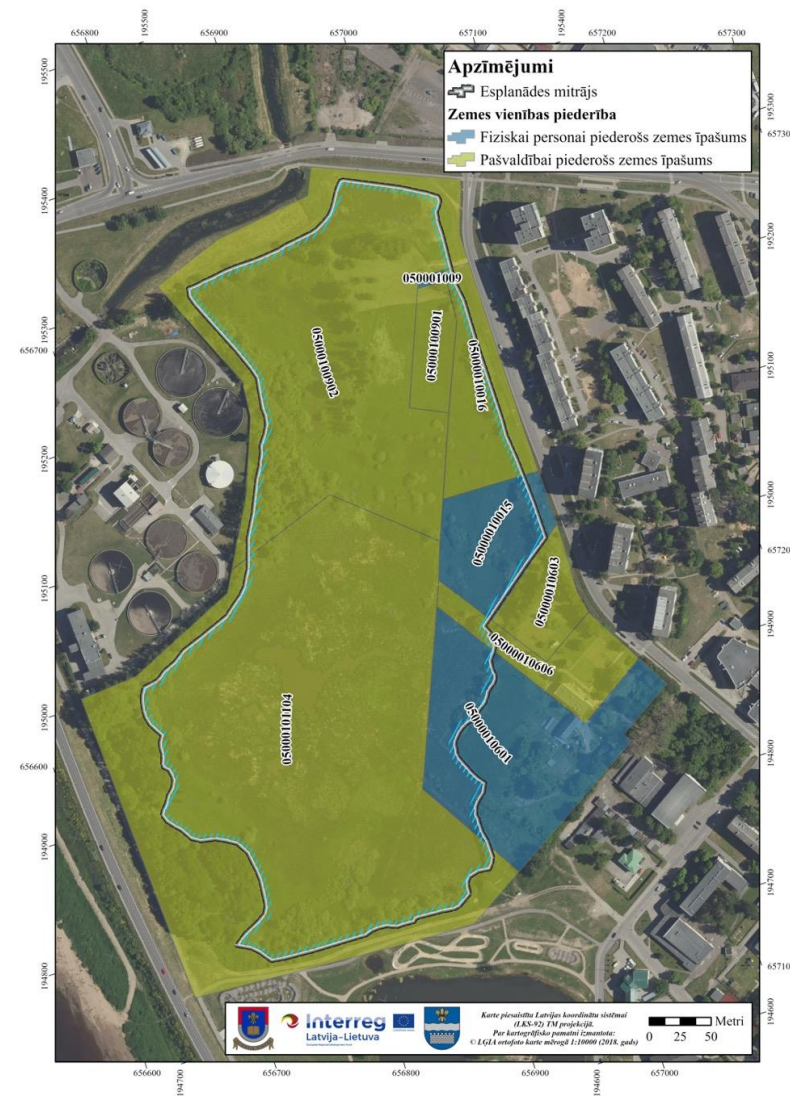
IX Removal of old metal fence from the territory

X Measures for limiting the spreading of invasive species

- The planning of conservation measures is limited also by the fact that part of the wetland belongs to private landowners



(Photo: A. Erts)



Thank You for attention!

