



LIETUVOS
GAMTOS
FONDAS

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Switching from Static Protection to Conservation of Natural Values with Active Management

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Contents

- Concept of conservational management;
- Nature management plans
- 4 field cases:
 - Dūkšta oak forest and River Valley,
 - Aukštumala Raised Bog,
 - Heathlands of Gaižiūnai,
 - Žemaitija National Park.

Habitat conservation

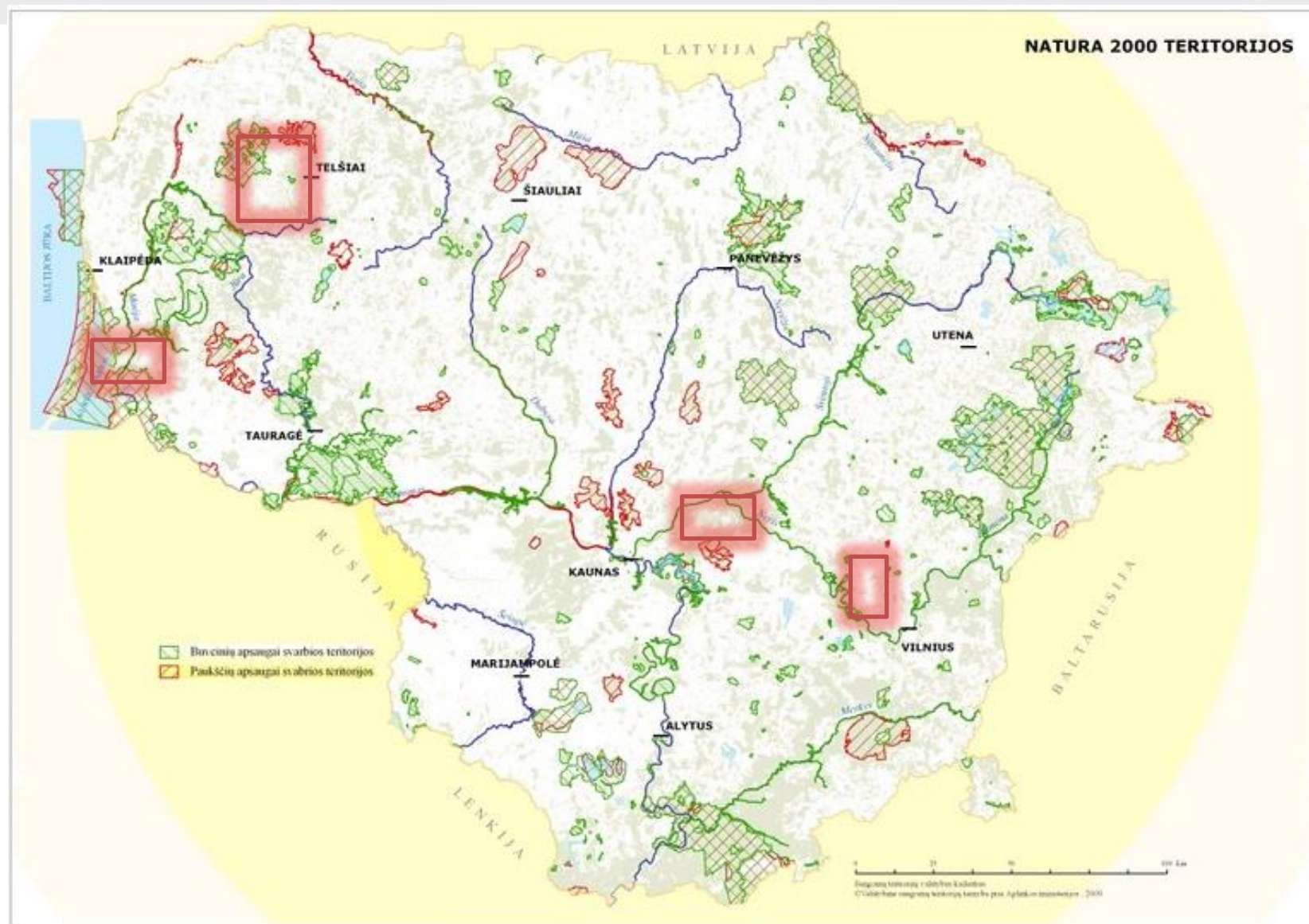


- Biological **conservation** as being a philosophy of managing the environment in a manner that does not despoil, exhaust or extinguish.
- Static Protection - custodian conservation.
- Conservational management, being an active part of the process in the area for maintaining a species or habitat in a particular state.

Nature management plans

- Necessary scientifically justify future activities and get funding for it.
- Perfect nature management plan should:
 - Provide scientific information where and what the nature values are,
 - Provide objectives for the territory,
 - Provide case scenarios for site development,
 - Provide information about necessary actions and its justifications,
 - Be approved with the public and stakeholders.

Field cases



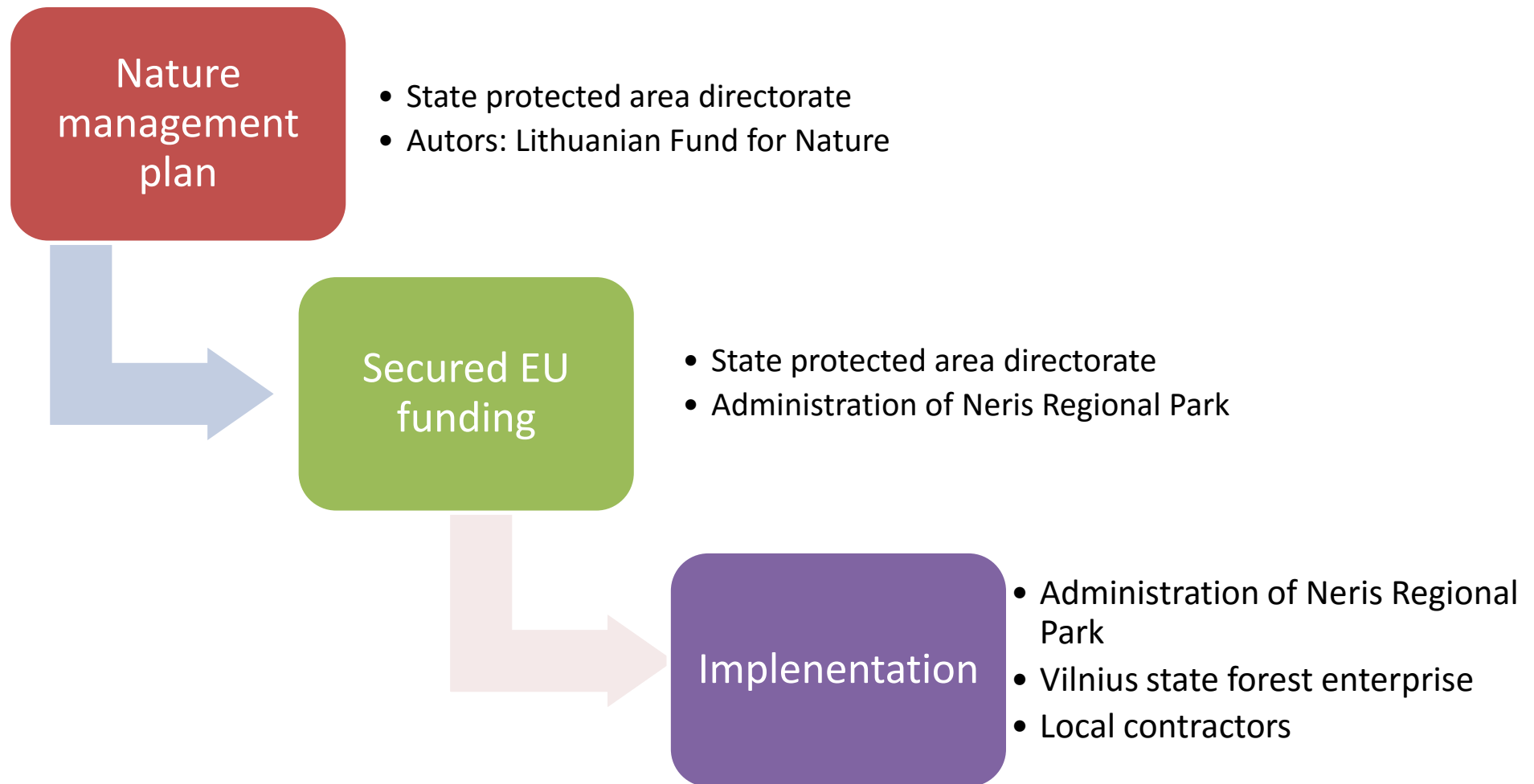


DŪKŠTA OAK FOREST AND RIVER VALLEY

The problem

- Natura 2000 area - 362,65 ha.
- EU habitats:
 - 6450 Northern boreal alluvial meadows,
 - 6510 Lowland hay meadows,
 - 9020 *Fennoscandian* hemiboreal natural old broad-leaved deciduous forests,
 - 9180 *Tilio-Acerion* forests of slopes, screes and ravines
- Annex II species:
 - *Osmoderma eremita*, *Barbastella barbastellus*, *Unio crassus*, *Ophiogomphus cecilia*, *Cucujus cinnaberinus*;
- 85 percent of oaks reached natural maturity, only 5 percent of oaks are in undergrown.
- Current open habitats are overgrowing by scrubs, spruce plantations in some parts of the forests.

Implementation and management



Main Activities

- Project area – 58 ha (53 ha of the forest, 4,5 ha);
- In open areas:
 - Removing of scrubs and mowing of meadow habitats;
- In the forests:
 - Restoration of former forest edges with old big oaks;
 - Removal of spruce and hazel in mature oak stands;
 - Reconstruction of spruce plantations to deciduous forest;
 - Planting of new oak;
 - Installation of nesting boxes for bats.

Removal of spruce and hazel in mature oak stands



Planting of new oak





AUKŠTUMALA RAISED BOG

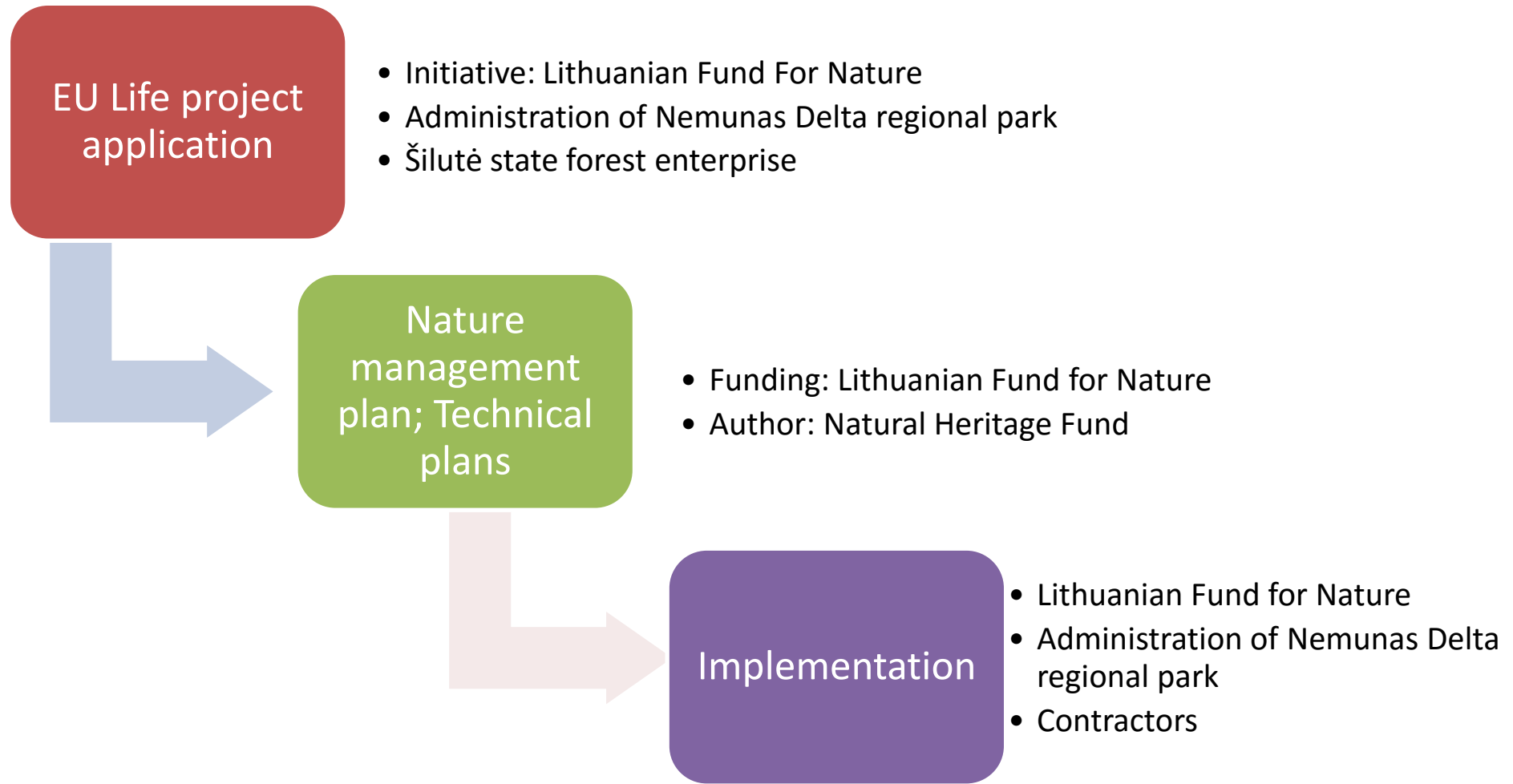
The problem

- Aukstumala raised bog is oldest scientifically researched wetland, dating back to 1900. Nowadays the telmological reserve covers 1017 ha area.
- Main problem – impact of dense network of draining ditches. Changed hydrological regime causes degradation of peat layer.
- The project's main objective: restoration of natural hydrological regime, which will help to reach and maintain favorable conservation status of the "7110* Active Raised bog" habitat within the Aukštumales Telmological Reserve. The foreseen conservation actions will also support other Annex II habitat types: "3160 natural dystrophic lakes" and bird species, found in the highmoor, e.g. Black Grouse, Wood Sandpiper.

The problem from the birds view



Implementation and management



MAIN ACTIVITIES

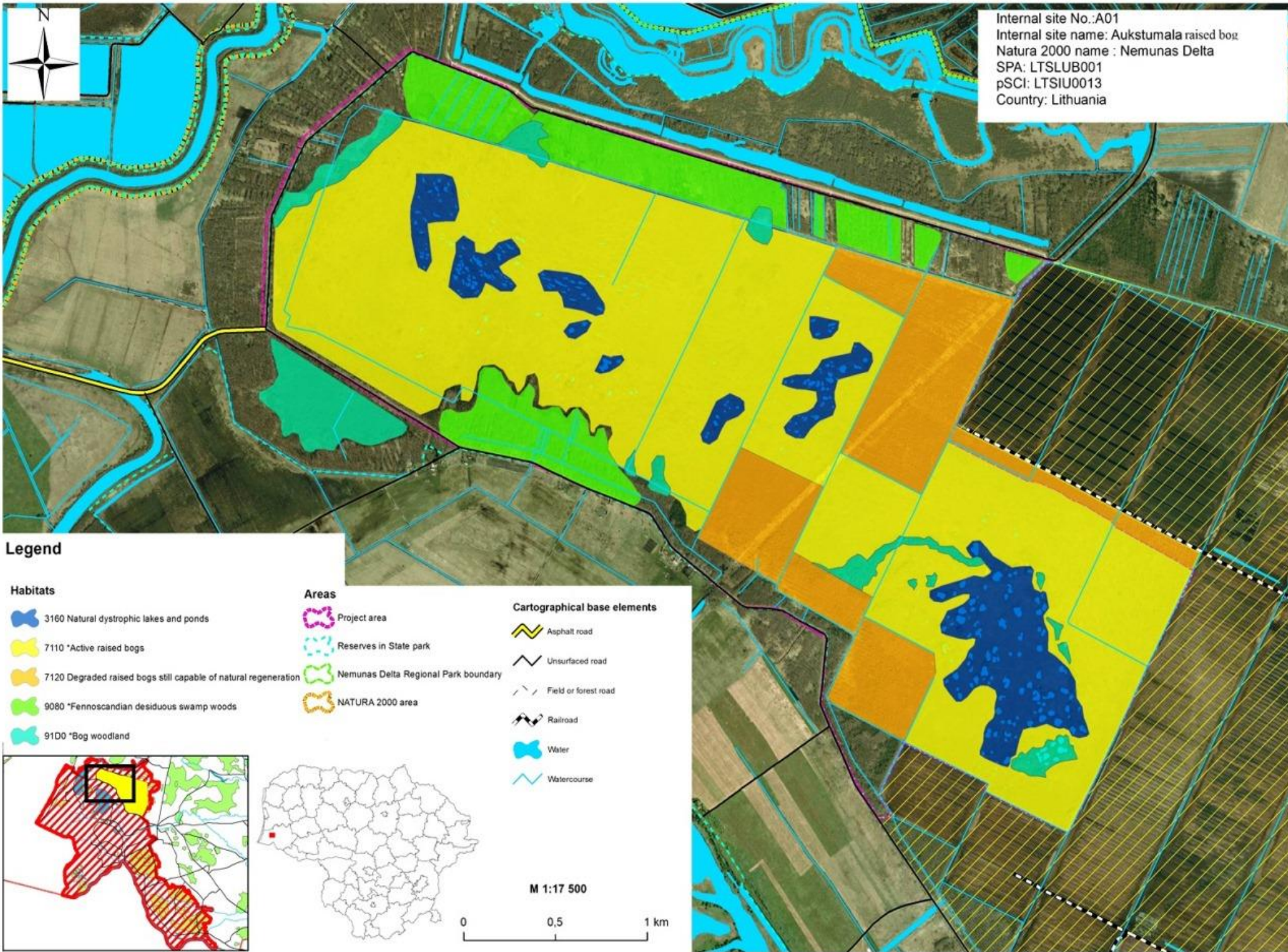
- Preparation of management plan
- Technical project for damming the ditches.
- Establishment of international raised bogs restoration expert group.
- Installment of dams: 20 in main ditches, about 500 in small ditches. Dams will vary in size from 1 m up to 6 m wide. Plastic planks and local wood will be used.
- Clearance of bushes and trees in 100 ha area performed.
- Monitoring hydrology and hydrological impact effects on biodiversity.
- Training of local nature guides
- Restoration of education path
- Creation of movie, preparation of other publications and organisation of events.



EXPECTED RESULTS

- Management plan and technical dam construction projects prepared
- 70 km of small ditches and 10 km of main ditches blocked, about 500 dams installed, 100 ha of unwanted vegetation cleared.
- Experts gathered, 6 events organised, 20 nature guides trained, 2 km long education path installed, oldest wetland scientific monography printed in Lithuanian, folder, book, poster printed, one exhibition for the Regional Park visitor center installed.
- More information at www.aukstumala.lt











HEATHLANDS OF GAIŽIŪNAI

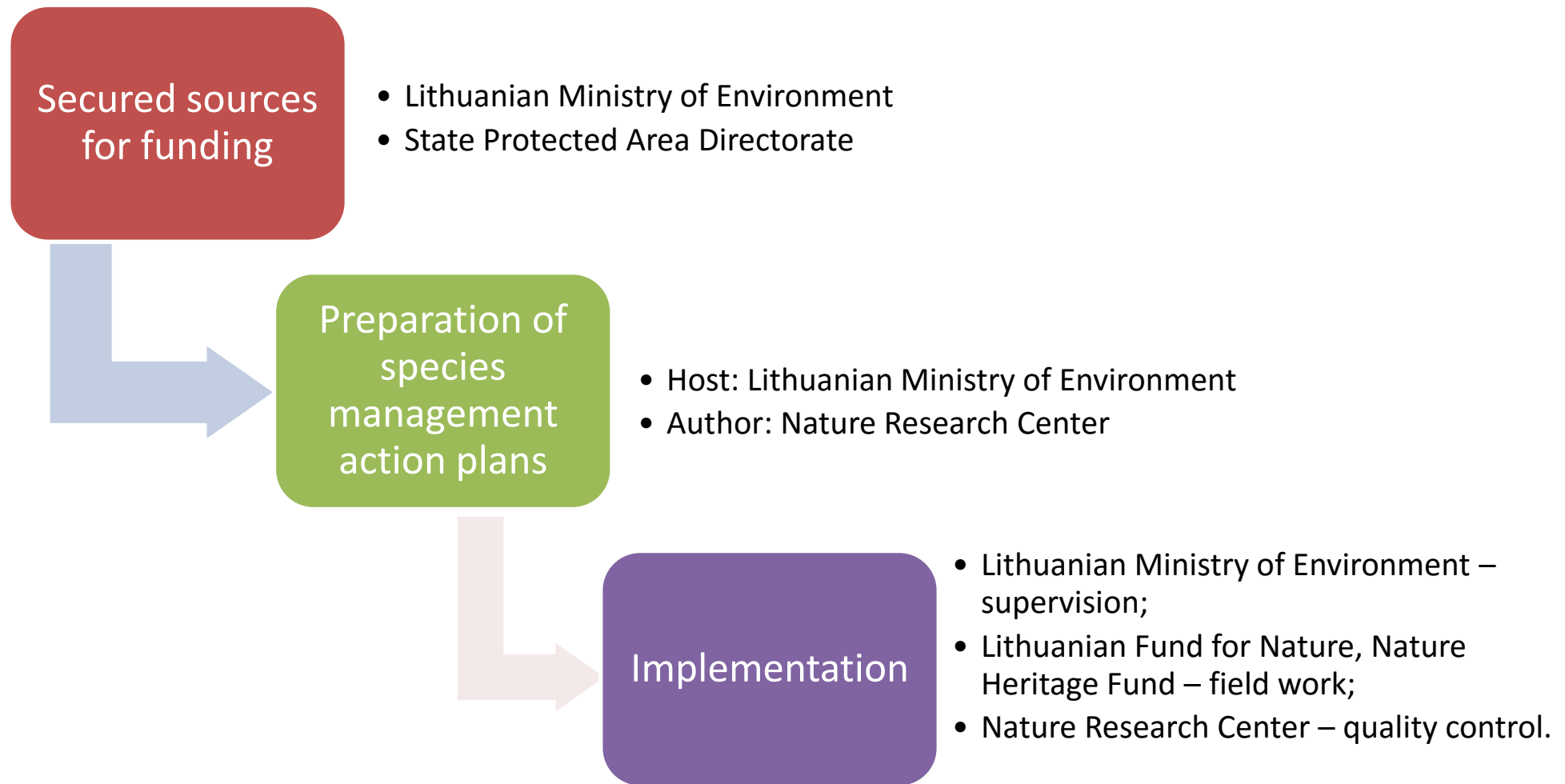
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Problem



- Prehistorical river delta territory used for century as a military polygon.
- Due to specific nature conditions and management practices heat (*Calluna vulgaris*) habitats (4030) formed and EU Habitat directive species Eastern Pasque Flower (*Pulsatilla patens*) is present.
- In last decades territory was not used and started overgrow with woodland.

Implementation and management





MAIN ACTIVITIES

- Removal of tree vegetation (188 ha)
- Restoration of heather habitats (5 ha)



Removal of tree vegetation



Restoration of heather habitats



Interesting experience



ŽEMAITIJA NATIONAL PARK



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The problem

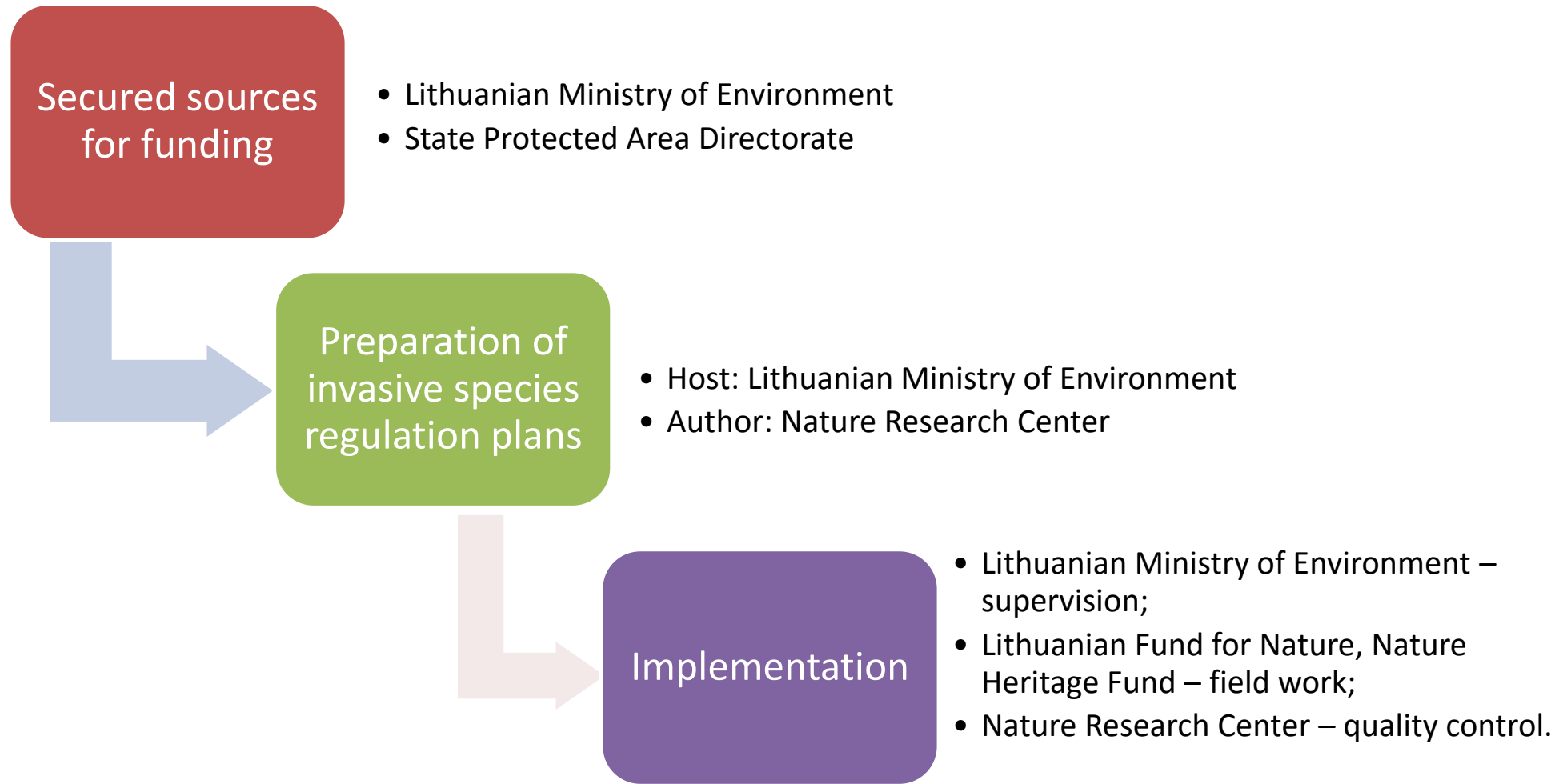
- Žemaitijos national park is one of the valuable protected areas in Lithuania.
- Area 18,000 ha
- It is designated as Natura 2000 area for birds as well as for habitats.
- Key Species types: *Crex crex*, *Bonasa bonasia*, *Liparis loeselii*, *Hamatocaulis vernicosus*, *Botrychium simplex*, *Lynx lynx*
- Key Habitat types:
 - Forests: 9010, 9020, 9050, 9080, 91D0, 91E0;
 - Mires: 7110, 7140, 7210, 7230;
 - Grasslands: 6230, 6410, 6450;
 - Freshwater habitats: 3140, 3150, 3160.
- Invasive species lupine (*Lupinus polyphyllus*) is abundant in the area.

Lupinus polymorphus



- Native to western North America from southern Alaska and British Columbia east to Quebec, and western Wyoming, and south to Utah and California. It commonly grows along streams and creeks, preferring moist habitats.
- Causes habitat destruction in meadows.
- Can cause live stock poisoning.

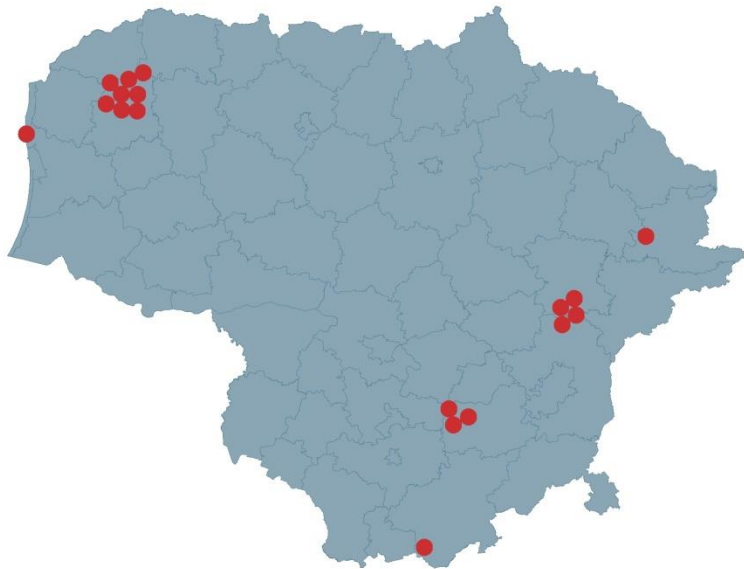
Implementation and management



Lupinus polymorphus



Implementation



- In total 18 sites were managed (187 ha) in Lithuania
- 6 sites (44 ha) cleaned from lupine in Žemaitija National Park.
- Management done in 3 stages:
 - Mowing of the vegetation;
 - Extraction of the invasive plants;
 - Mowing of the vegetation.

Area before implementation



Extraction of the invasive plants



Mowing of the vegetation



Mowing of the vegetation



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Thank you