



Likvidace invazních
druhů v praxi



STÁTNÍ FOND
ŽIVOTNÍHO PROSTŘEDÍ
ČESKÉ REPUBLIKY

Likvidace invazních druhů v praxi

Elimination of invasive species in practise

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Project partners: NP Podyjí, NP Bohemian Switzerland

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Norway funds the project through the Norwegian Funds as part of the Rago call under the administration of the State Environmental Fund of the Czech Republic, project number **3211100010**



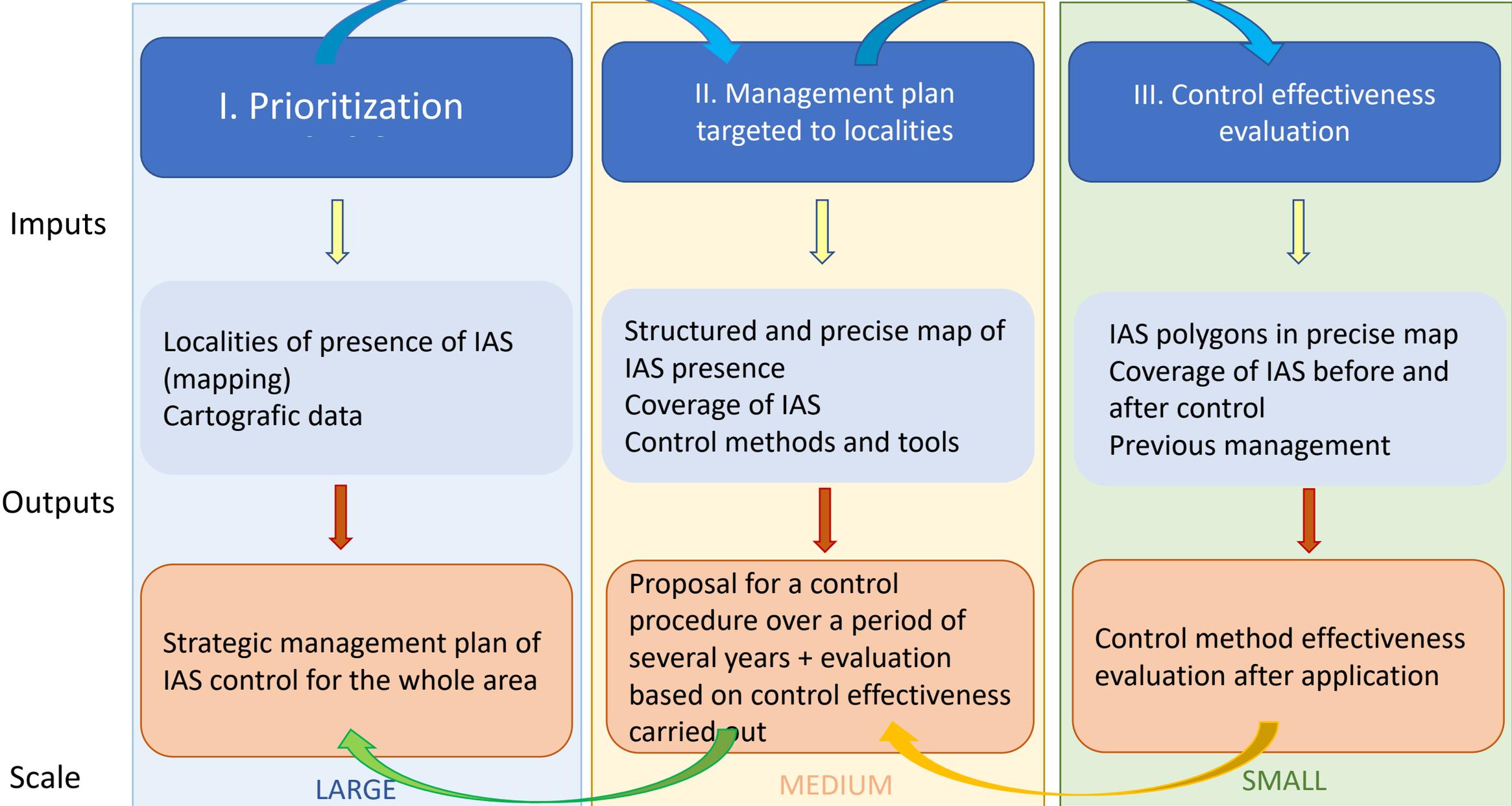
Targeted areas and goals of the project

- NP Czech Switherland, NP Podyjí, NP Šumava
- PLA Labské Pískovce, PLA Šumava
- Mapping of invasive alien species of vascular plants
- Control of invasive species in selected localities
- Testing of control methods and methodology of management
- Actualization and update of methodologies certified by the Ministry of Environment

Project motivation

- IPBES (2019) found that IAS are one of the five most important drivers of biodiversity loss globally
 - 85 % of the impact of biological invasions on native species are negative
 - 85 % of documented impacts negatively affect people's quality life
- ➔ IPBES (2023) undertook a landmark Assessment of Invasive Alien Species and their control
- The used methodologies were scattered and inconsistent, control methods often unsuitable for the elimination of IAS
- ➔ The effectiveness of control is low, and impact of IAS increases in time
- The awareness of IAS and their impact is low in the public in the Czech Republic

Management approach



Goals of the project

Mapping of IAS



Records of all IAS and their coverage at the locality

Habitat type

Vectors of spreading

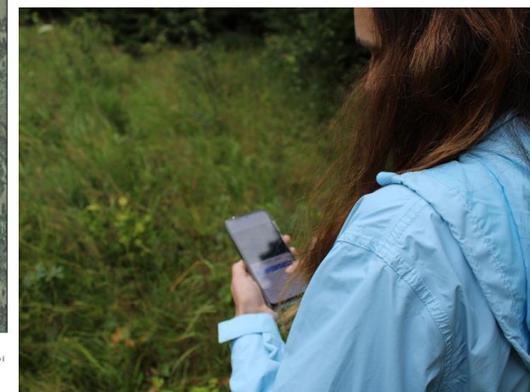
Phenology stage

Vitality

Management type

Output – the layer with polygons of IAS presence

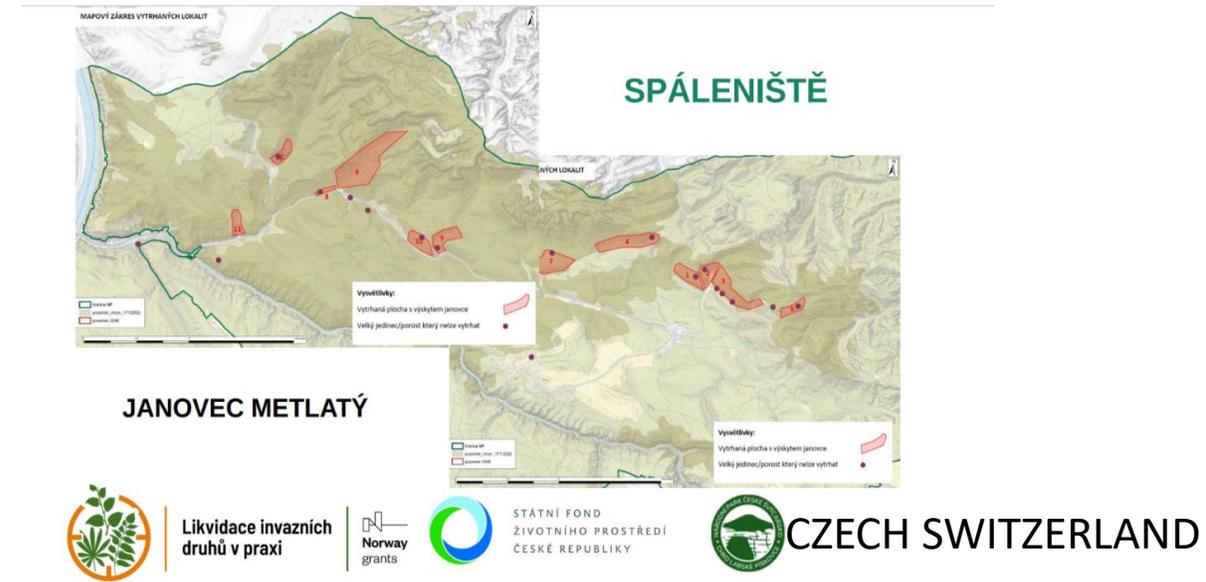
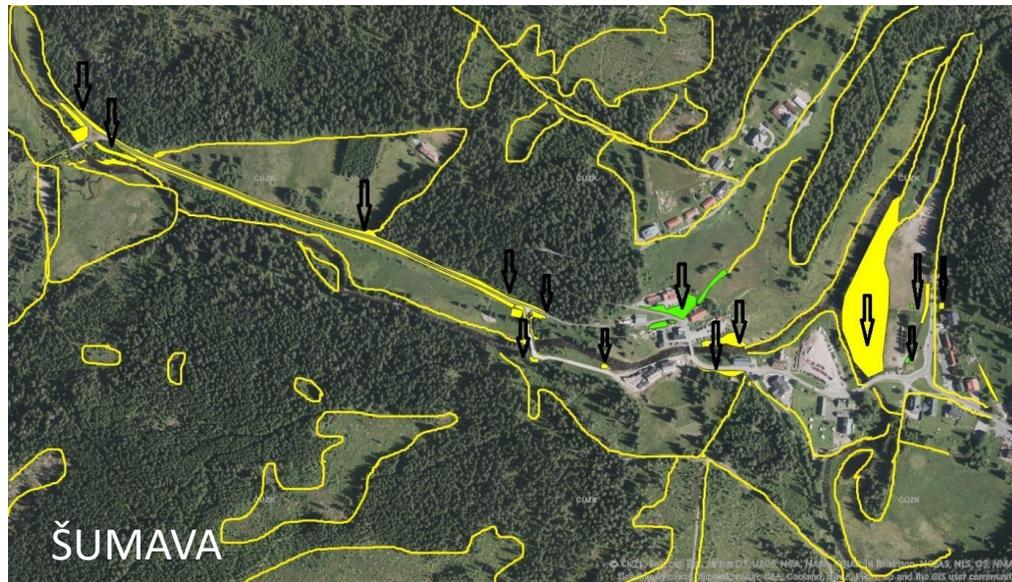
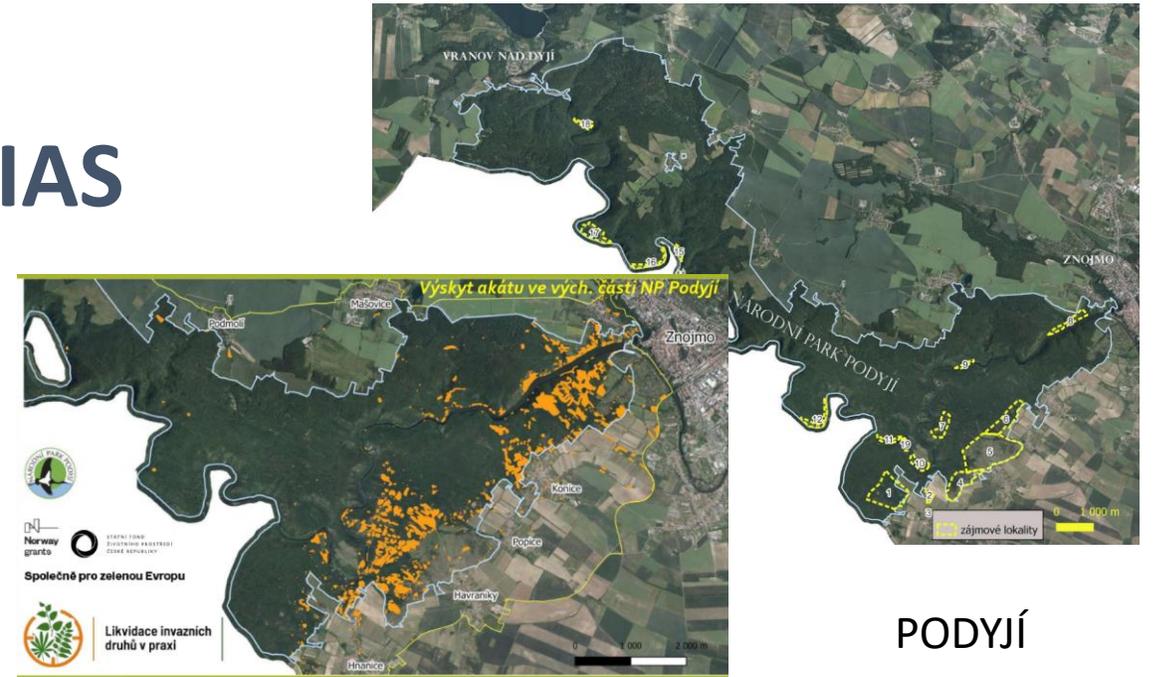
→ Prioritization of localities for management



Results of the project

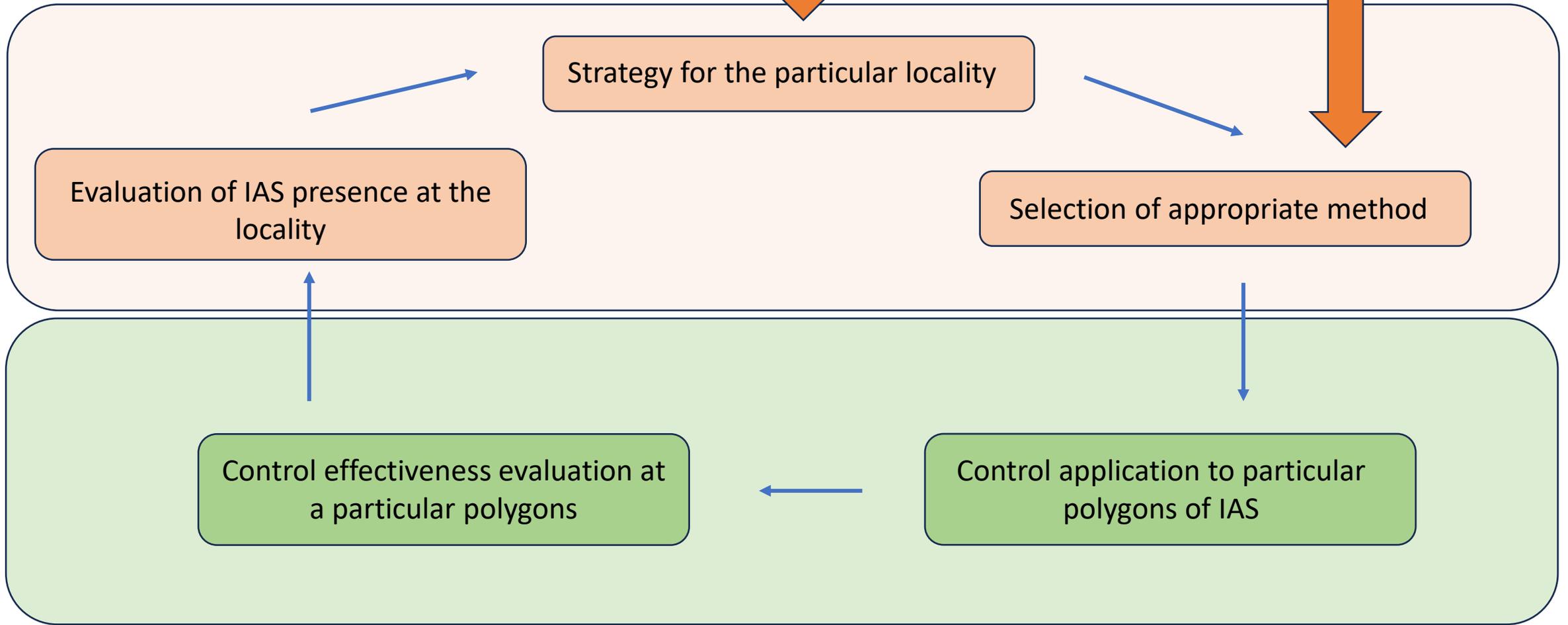
Mapping of IAS

- 19 localities at NP Podyjí
- 18 localities at NP Czech Switzerland and PLA Labské Pískovce
- 8 localities at NP and PLA Šumava



Goals of the project

II. Management plan targeted to localities



III. Control application and effectiveness

Results of the project

Control methods application

- NP CS – *Reynoutria* sp. – spraying, *Pinus strobus*, *Cytisus scoparius* – pulling out, cutting
- NP Podyjí – *Robinia pseudoacacia*, *Prunus cerasifera* – drilling and injection, *Solidago* sp. – spraying
- NP Šumava – *Lupinus polyphyllus* – pulling out



Results of the project

Control methods application

Injektáž navrtáváním kmene

| | | | |
|--------------|------------------|--------------|--------------------|
| Příprava | Herbicid | Nástroje | GPS trasování |
| Drill & Fill | Pracovní prostor | Navrtání | Aplikace herbicidu |
| Označení | Značka sprejem | Záznam počtu | |

Foto: Tomáš Jůnek

Hodnocení efektivity: Dřeviny

| | | |
|---|---|-----------------------------------|
| Částečná defoliace (<i>myrobalán</i>) | | |
| Chřadnoucí strom (<i>javor jasanolistý</i>) | Odumřelý strom (<i>javor jasanolistý</i>) | Odumřelý strom (<i>pajasan</i>) |

Management mladých jedinců: metoda částečného loupání

Částečné sloupnutí kůry na polovině kmínku a okamžitý zátěr herbicidem

Hodnocení efektivity: Dřeviny

| | |
|---|----------------------------|
| Zbytková vitalita: nedostatečný účinek herbicidu po injektáži | Spolehlivě odumřelé stromy |
|---|----------------------------|

Results of the project

Seminars and workshops

- Discussion on methodology with ANC, NP, Ministry of Environment, BI AS CR
- Field workshops with the demonstrations of methods



Presentation of the project

- Web pages - ragoinvaze.fzp.czu.cz
- Veletrh vědy, Noc vědců, Den Země, Den otevřených dveří
- Media contributions – ČRo Radionžurnál, ČRo Plus, MF Dnes
- Conference of invasive biology





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Norway
grants



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Thank you for your attention

... and thanks especially to project partners and collaborators

