

Work Package 3: Proposal for integrated development of the network of protected areas in Lithuania

Activity 3.3. Identification of key damaged ecosystems in the country

Summary of the report

In the context of national protected areas network expansion, the following damaged ecosystems were identified and analysed:

- Drained and excavated peatlands;
- Polders;
- Extinct Lakes (over the XX century) with surface area larger than 5 ha.
- Inland fishery ponds.

An identification and analysis of the spatial distribution and suitability of damaged ecosystems was carried out using ArcGIS Desktop software and the available spatial data of various damaged ecosystems, as well as protected areas, habitats and species, forests, and state land. Spatial data layers and maps of damaged ecosystems were prepared and presented in this report as well as in the interactive web mapping application.

The suitability of damaged ecosystems in the context of national protected areas network expansion was examined taking into account the existing and potential natural value of the damaged areas (potential importance for identified target species and habitats as well as potential importance to meet identified demand for ES or eliminate threats to identified carbon-rich ecosystems), the area, the location in relation to protected and other valuable natural areas, land ownership and management possibilities, i.e. opportunities to restore, form and maintain valuable habitats by applying nature management measures.

Main findings and suggestions of the performed analysis:

1. After examination of the drained and excavated peatlands, 16 abandoned peatland excavation areas are proposed to establish (or be included in) new national protected areas while 17 more are proposed to grant a stricter protection status.
2. After examination of the known polders, it is proposed to assign the Amalva polder, part of the Baltoji Vokė polder and parts of some polders in the Nemunas and Minija lower reaches (Veržės, Sausgalviės, Šyša, Uostadvaris, Aukštumalė, Minijas, Alkas) to the strictly protected areas, managed for the purpose of biodiversity protection.
3. It should also be considered to establish a new protected area on the basis of Ziemkelis meadows (former peatland and abandoned polder meadows in Kaunas district municipality).
4. After examination of the extinct Lakes (over the XX century) with surface area larger than 5 ha, 4 wetlands with the highest potential for establishment of new protected areas were identified on the site of former lakes of Jara, Dausinas, Raudenis and Duba. It should also be considered to include into the protected areas the eastern part of the former Lake Matarai (Margavone mire), which falls within the borders of the Republic of Lithuania.
5. In the context of national protected areas network expansion, two unused complexes of fishery ponds have the greatest potential: the former Grybaulia ponds and the former Žeimenai (Meškerinė) fishery ponds.