

# Activity data for accounting & projections of GHG emissions from organic soils (C1.2, C2.2)



*LIFE OrgBalt: “Demonstration of climate change mitigation potential of nutrients rich organic soils in Baltic States and Finland” LIFE18 CCM/LV/001158*  
**KICK – OFF MEETING**

*October 24-25, 2019*

*Ministry of Agriculture of Latvia  
Republikas laukums 2-305, Riga, Latvia*

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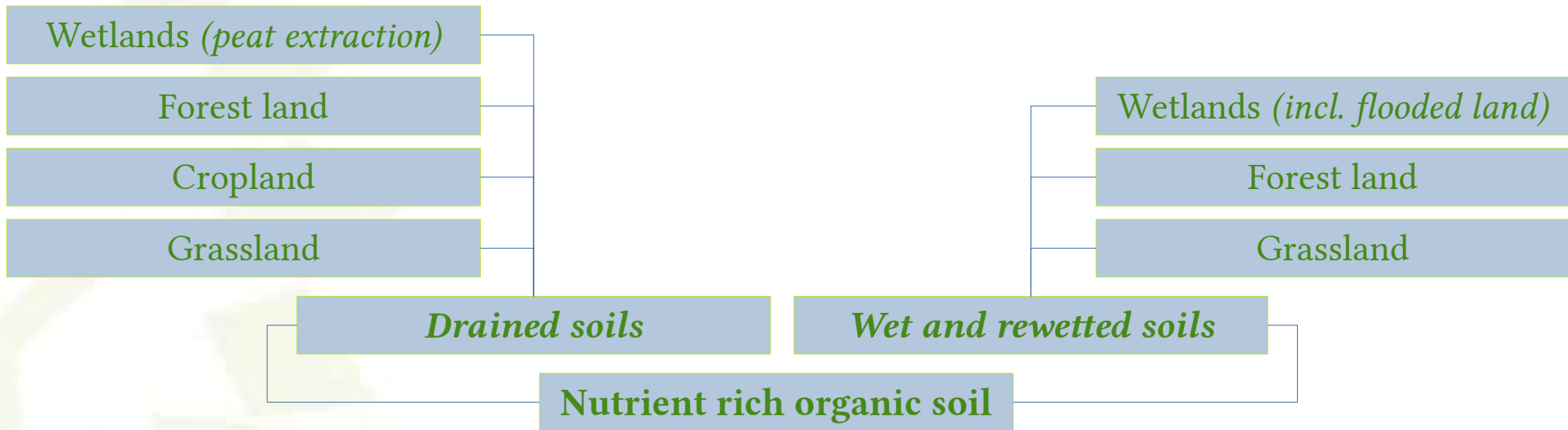
# Scope and involved partners

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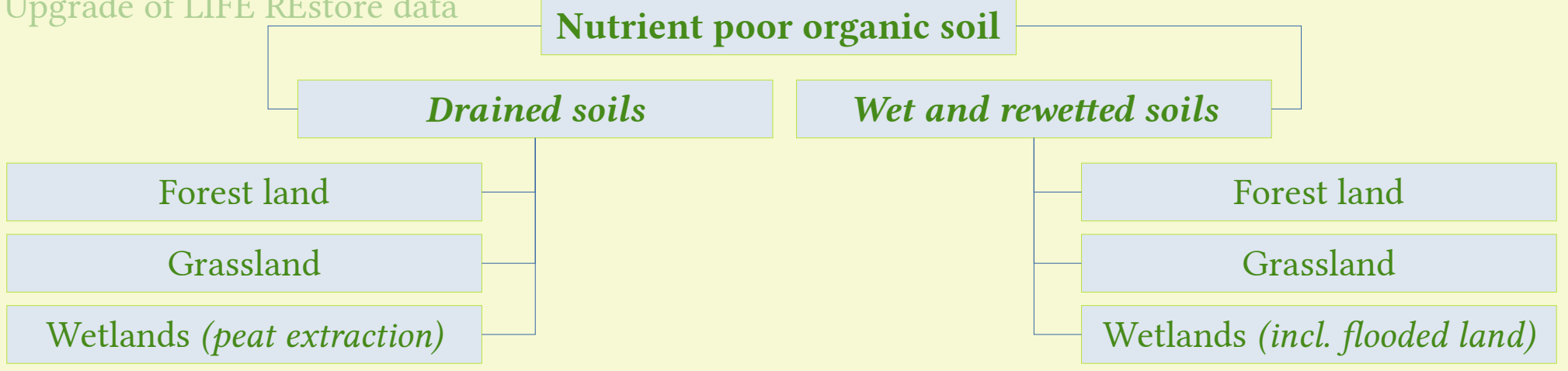


- Elaboration of set of organic soils related activity data for **Baltic States** (*already exist for Finland*) for different climate change and management (WOM & WAM) scenarios (C.2.2).
- Results of the scenario analysis will be summarised in report on projections of GHG emissions from organic soils in the Project region under different climate conditions in WOM & WAM scenario.
- Time frame of the data sets – 1990-2050 (*probably we need to go for post-2050*).
- The data sets will be later adopted for application in Action C5.
- Responsible person at LSFRI Silava (*temporarily*): Jānis Ivanovs (janis.ivanovs@silava.lv; +37 125 254 406).

# Land use categories



Upgrade of LIFE REstore data



# Management options

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- Forest growth models & litter input data (*different models, but harmonized input data and SUSI Simulator based modelling*).
- Cropping systems and yields in cropland (*indirect assessment according to LPIS data*) with machine learning based Sentinel I data processing as a future solution.

# Methods & data

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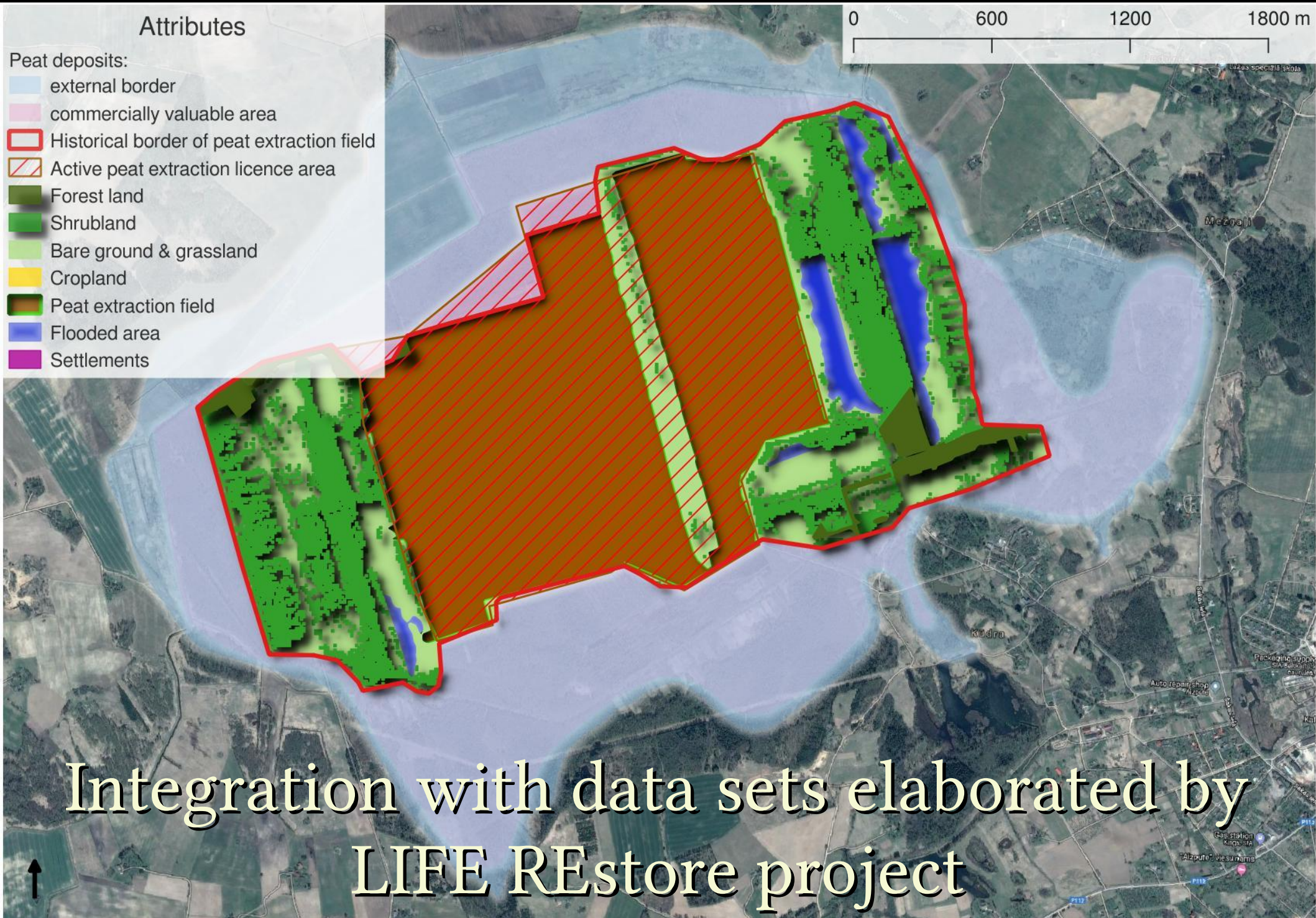
- Elaboration of specifications of activity data so that they can be integrated with SUSI peatland simulator.
- Knowledge gaps should be addressed in the Baltic and Finnish Action program (E.3.3).
- Input data for NFI plot level assessment:
  - Sentinel I and II (*flooded areas, vegetation indexes, carbon input*),
  - LiDAR data (*water regime, DTW maps for SUSI simulator*),
  - historical soil maps, soil monitoring data, e.g.,
  - LPIS (*forest lands, peat industry, farmlands, production data*).

## Attributes

### Peat deposits:

- external border
- commercially valuable area
- Historical border of peat extraction field
- Active peat extraction licence area
- Forest land
- Shrubland
- Bare ground & grassland
- Cropland
- Peat extraction field
- Flooded area
- Settlements

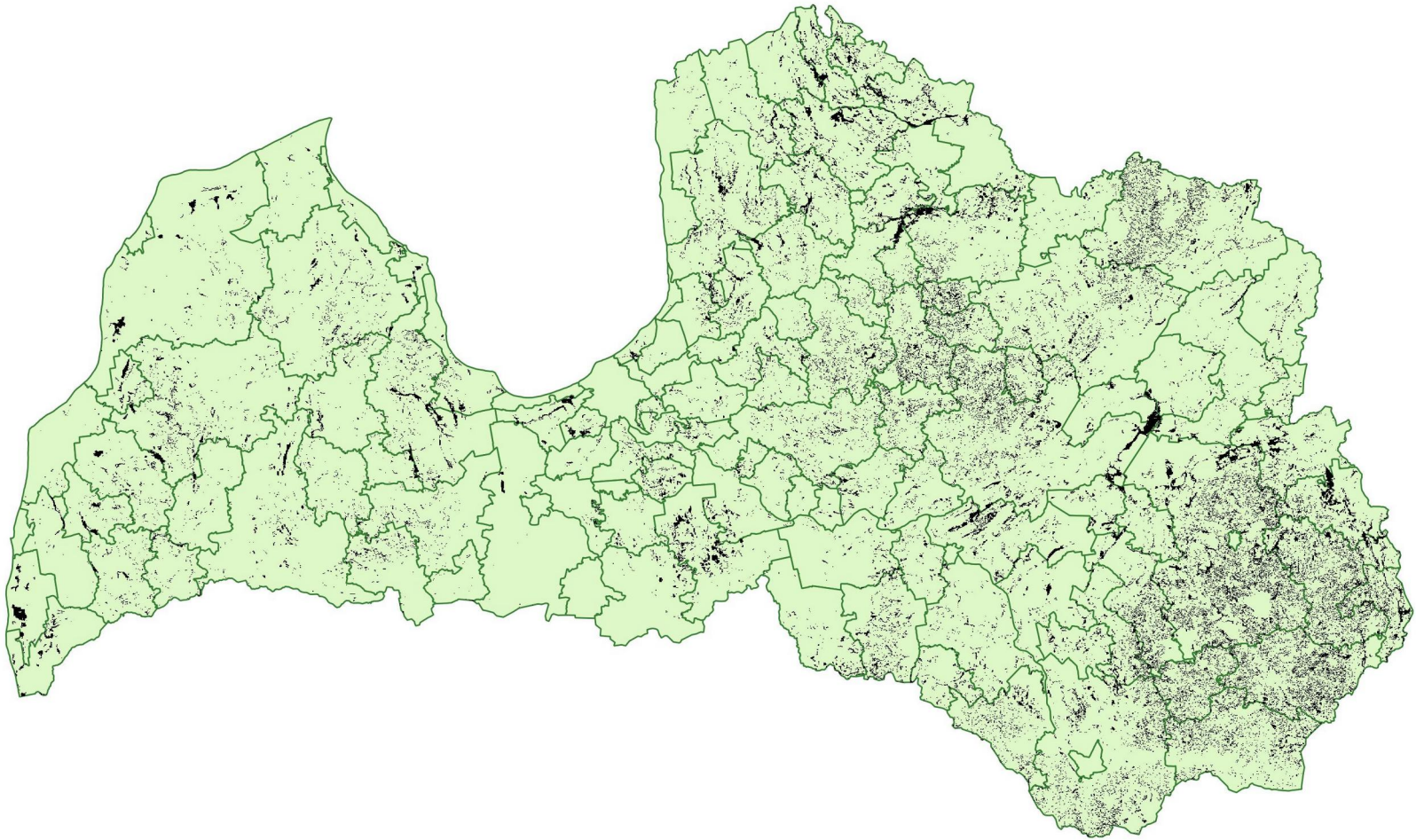
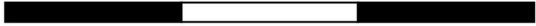
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Integration with data sets elaborated by  
LIFE REstore project

# Nutrient rich organic soils in cropland and grassland

0 50 100 150 km



# Nutrient rich organic soils in forest land

