OPTAIN : Csorsza and Felső-Válicka [Hungary]

Year of issue

2025

Summary

The Csorsza case study is located in Veszprém County, Hungary. The size of the study site is 21.3 km2, where 29% of the total catchment area is forest, 29% orchards and vineyards, 17% shrubs, 13% is arable land, 6% is grassland, and 5% is urban.

Some selected analysis are performed at the Felső-Válicka catchment, too. The Felső-Válicka study site is located in Zala County, flows in south-north direction into the River Zala. The size of the catchment is 131 km2. 27% of the total catchment area is forest, 35% is cropland, 11% is grassland, 3% is wetland and 11% is urban.

Both study sites are located in the catchment of Lake Balaton, therefore state of the environment and nature in these small catchments influences the touristic and economic potential of the Balaton region. Their water and nutrient management affects water quantity and quality of the lake. Extreme weather events will increase the environmental and social conflicts in the region.

Main challenges identified in both sites are decreasing soil erosion and nutrient load, preventing flash floods, and implementing integrated water resources conservation.

OPTAIN project aims to identify effective combination of the NSWRMs and optimize their allocation, in order to improve water and nutrient retention in the soil and the catchments. Emphasis will be put on suitable options to foster the resilience of agricultural production to climate change.

Location

46.90908, 17.67489

Project

OPTAIN

National ID

HU_07

Sector

Agriculture

Implementation status

Modeled

Overview

Country

Hungary

NUTS2 Code

Dél-Dunántúl

Sponge measures implemented in the case study

Cover crops

Coarse woody debris

Afforestation

Meadows and pastures

Design and Implementation

Project scale

Micro

Project scale specifications

Micro-scale: catchment of Felső-Válicka Stream, which is the subcatchment of River Zala.
Micro-scale: soil profile-based modeling of different land use types (forest, vineyards) of the catchment of Csorsza Stream, which belong to the catchment of Lake Balaton.

Project area

Felső-Válicka: size of the modelled catchment is 124 km2. Csorsza: size of the modelled catchment is 21 km2.

Financing

Total cost

6000000.00 €

Policy and Governance

Policy targets

Erosion Control

Improved Biodiversity

Increase Water Storage

Part of a wider plan

Yes

Public consultation

No

Has contractual arrangements

No

Impacts and Monitoring

Monitoring System

Presence of formal monitoring system

Hydrometeorological monitoring of the Felső-Válicka Stream is performed by the West-Transdanubian Water Directorate. Hydrometeorological monitoring of the Csorsza Stream is performed by the ATK.