DRAVSKO POLJE CASE STUDY

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FAIRWAY

POSSIBILITIES FOR EFFECTIVE COOPERATION BETWEEN STAKEHOLDERS TO IMPROVE DRINKING WATER

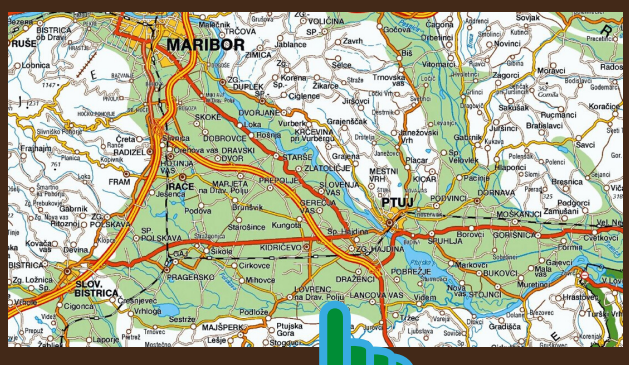
AREA CHARACTERISTICS

Dravsko polje is an alluvial plain of the river Drava, in north-eastern Slovenia.

It covers 293 km2 with altitudes between 205 to 364 m.a.s.l.

The agricultural land lies above an intergranular unconfined aquifer with 20 to 35 metres thick carbonate or silicon layers with high coefficient of conductivity of 10-3 m/s.

The depth from the surface to groundwater varies between 15 metres in the northern to 3 meters in the southern part of the study area.



DRNKING WATER SOURCES

The aquifer layer thickness is from 5 to 21 metres, with a medium to high level of groundwater, which is the main (100%) source of drinking water in the area.

The specific soil characteristics are the result of the deposition of river sediments and are usually light and airy (silt loam or a sandy loam texture), evolved on gravel and sand and are therefore shallow (0.24 to 0.77 metres) which is favourable for the majority of agricultural crops.

Average annual extraction is approx. 3.5 M m3/year which is distributed to the cities of Maribor and Ptuj and small and medium size villages around.

Total amount of inhabitants relaying on drinking water from this area is approx. 130,000.

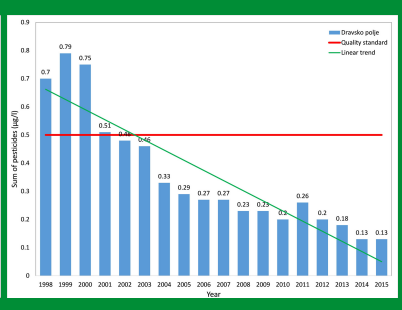
PROBLEM DESCRIPTION

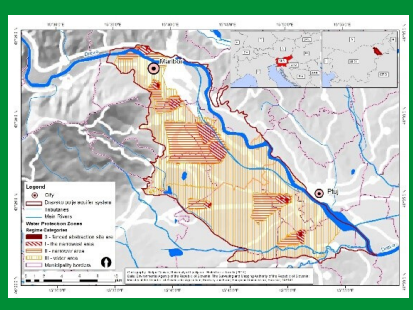
This soils are very susceptible to nutrient and pesticide losses/leaching into the groundwater.

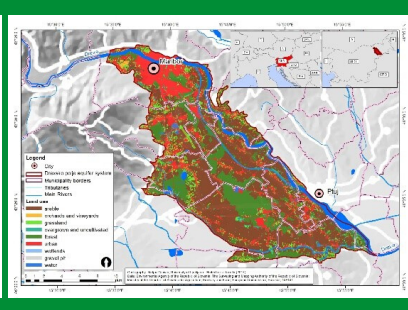
Shallow aquifer is contaminated by nitrates and pesticides mainly from livestock farms and intensive arable land management.

To reach acceptable quality of tap water, companies have to mix water from shallow and deep wells.

The last report of the quality of groundwater in aquifer of Dravsko polje showed slow improvment over the last decade, but the chemical status of groundwater is not improving at rate expected.







HOW CAN FAIRWAY HELP?

Fairway opens new area of research dealing with social aspects of organising official multifactor platform (e.g. water partnerships).

Through the project we would like to analyse and learn from other case studies how to improve communication between land managers (farmers), water companies and government.

Stakeholders/actors included in the MAP;
- Farmers
- Agricultural Companies
- Agricultural advisers
- Research organization
- NGO's
- Drinking water suppliers
- Governmental organizations

Fairway can answer to the questions regarding efficiency of national and common 'EU policies and expert and research knowledge transfer in to the practice which reflects in water quality status.

Established MAP will contribute to the formalisation of current occasional meetings of farmers with government. With expanding MAP with informed stakeholders and with sufficient knowledge and with support of research community the problems could be solved and misunderstandings cleared.

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