

# FOR DROUGHT

## Drought risk maps

- a unified drought risk assessment comparable among countries of the Danube region
- provide information about spatial distribution of the areas where meteorological drought occurred often as hazard with significant impacts on crop yield in the Danube region
- integrated into Drought Watch and available for maize, wheat, barley and oilseed rape for different drought occurrence probability levels (5, 10, 20, 30%)

## Drought impacts reporting networks

- near-real-time observations of drought impacts by reporters
- more than 1000 reporters (farmers, agriculture and forestry experts) across 10 Danube countries engaged in reporting observed drought impacts on weekly basis
- drought impact maps are a weekly operational product in Drought Watch based on reported observations of how drought influences crop yield or forest growth in the Danube region



**DriDanube**  
working in partnership

### Lead Partner:

- Slovenian Environment Agency (ARSO), Slovenia  
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### Partners:

- EODC Earth Observation Data Centre for Water Resources Monitoring GmbH (EODC), Austria
- Global Change Research Institute CAS, (CzechGlobe), Czech Republic
- Global Water Partnership Central and Eastern Europe (GWP CEE), Slovakia
- Hungarian Meteorological Service (OMSZ), Hungary
- Vienna University of Technology (TU Wien), Austria
- Szent Istvan University (SZIU), Hungary
- National Meteorological Administration (NMA), Romania
- Centre of Excellence for Space Sciences and Technologies (SPACE-SI), Slovenia
- Meteorological and Hydrological Service (DHMZ), Croatia
- Slovak Hydrometeorological Institute (SHMU), Slovakia
- Faculty of Agriculture, University of Novi Sad (FAUNS), Serbia
- Republic Hydrometeorological Service of Serbia (RHMS), Serbia
- Institute of Hydrometeorology and Seismology (IHMS), Montenegro
- Republic Hydrometeorological Service of Republic of Srpska (RHMZ RS), Bosnia and Herzegovina

More information on:

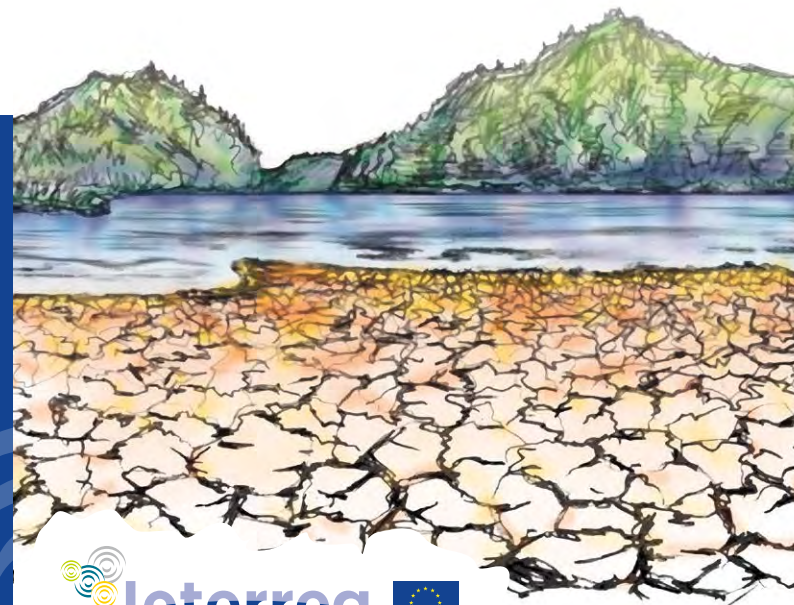
[www.interreg-danube.eu/dridanube](http://www.interreg-danube.eu/dridanube)



# DriDanube

## Drought Risk in the Danube Region

*Be prepared. Know the risks. Take action.*



**Interreg**  
Danube Transnational Programme  
**DriDanube**

Project co-funded by European Union funds (ERDF, IPA)

# BETTER PREPARED

## Drought Watch

- a web-based tool enabling more accurate and efficient drought monitoring and early warning across the entire Danube region
- includes a set of Earth Observation data from a range of operational remote sensing satellites, processed into ready-to-use drought information available to general public online
- improves operational day-to-day work of national authorities and end users in all phases of drought

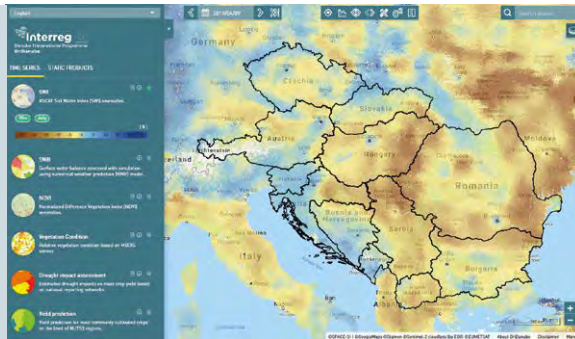
## Drought Strategy

- a document proposing a framework for improved drought management in the Danube region
- its optimal drought management model organises already-existing legislation and institutions in an optimal way of cooperating and reacting at different stages of drought development for wholesome risk management (from monitoring and early warning to response and evaluation)
- compiled together with stakeholders at 30 national seminars and trainings and 2 international conferences



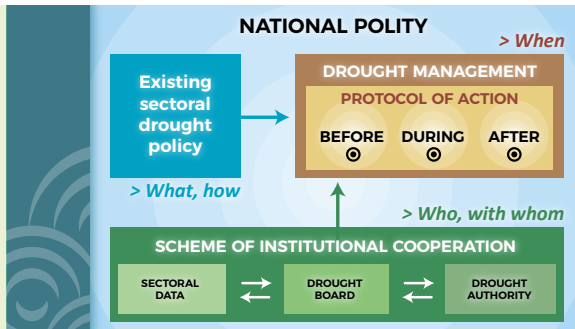
## Drought Watch

Soil Water Index, 9 April 2019



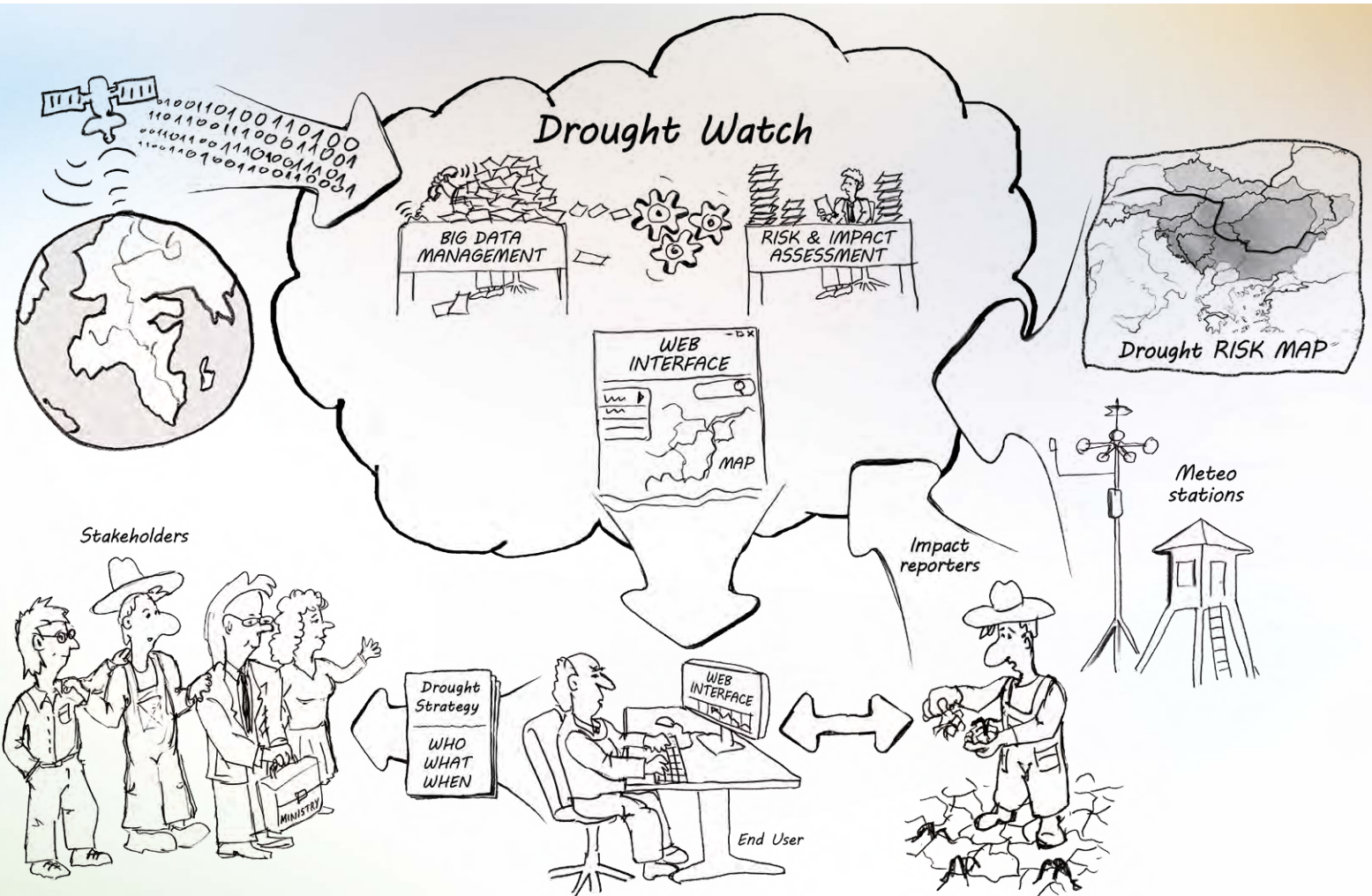
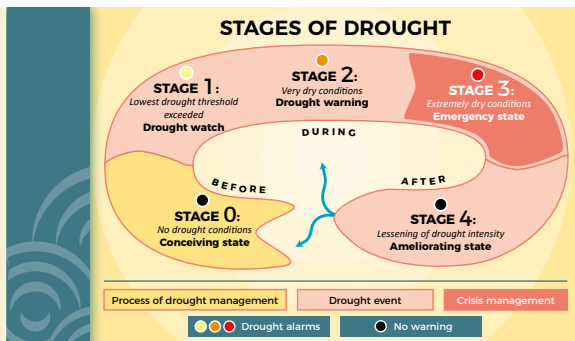
## Drought Strategy

Optimal drought management model



## Protocol of Action

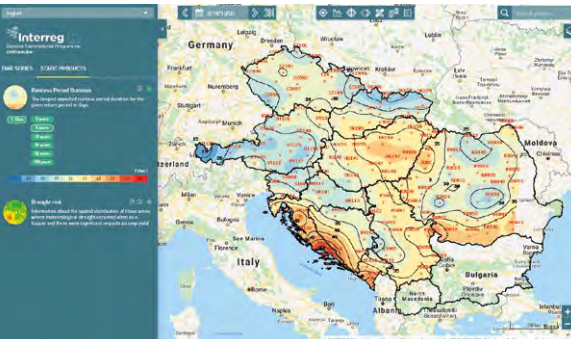
5-stage drought scale and accompanied behaviour



Use Drought Watch to monitor, forecast and respond during drought at <http://www.droughtwatch.eu/>

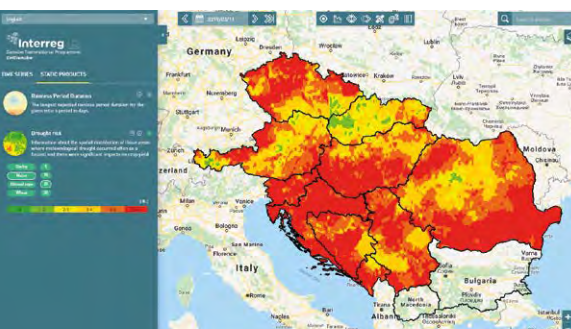
## Drought Risk - climatology

Expected length of longest rainless period during vegetation having a 5-year return period.



## Drought Risk - yield loss

Colour-code drought risk map for estimated maize yield loss upon 20% drought probability level.



## Drought Impacts

Observed estimations of drought impacts on main agricultural crops, 14 April 2019

