



# Integrated drought management programme for Central and Eastern Europe

*Methodology guidance for preparation of drought  
management plans*

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*5th EUSDR Annual Forum  
Bratislava, Slovakia, 3-4 November 2016*



# Managing Water Extremes



- WMO/GWP Associated Programme on Flood Management (APFM) – *established in 2001*
- WMO/GWP Integrated Drought Management Programme (IDMP) – *established in 2013*



## IDMP in Central and Eastern Europe

1<sup>st</sup> phase: started in March 2013

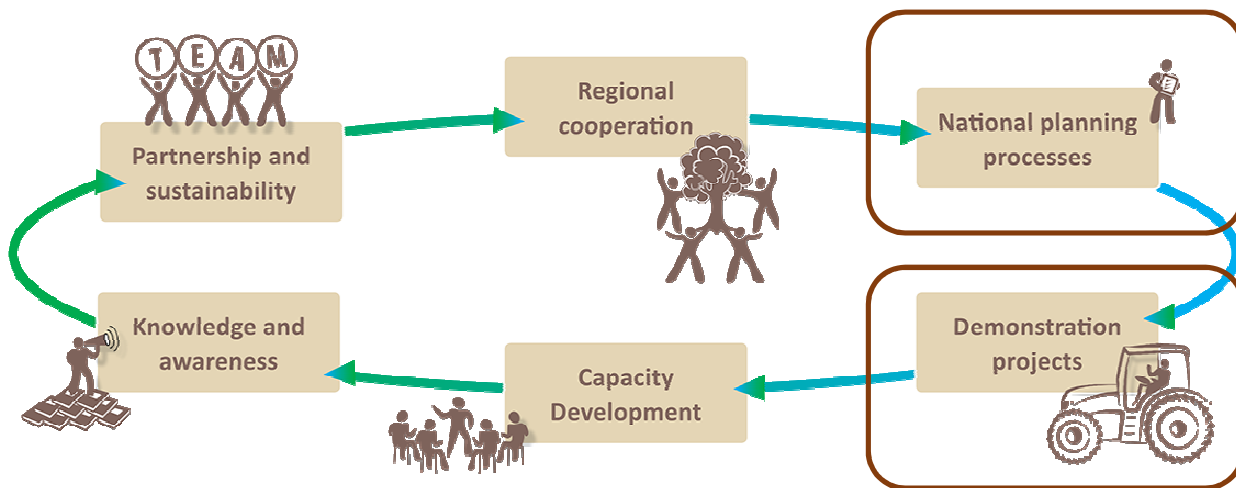
*2016 – preparation of project proposals and 3-year workplan*

2nd Phase: 2017 - 2019



# Focus

**Increase the capacity of the CEE region to adapt to climatic variability by enhancing resilience to drought.**



- ✓ variability and change in precipitation
- ✓ increased frequency of extreme weather events in the future
- ✓ well developed meteorological and hydrological monitoring but not as a support for decision makers
- ✓ limited sharing of information among countries
- ✓ lack of political will to solve the problem – drought was not considered as a relevant issue

# Approach

## From reactive to proactive drought management

**Knowledge management:** best practices in early warning and drought planning management

**Guidance on technical and institutional aspects:** tools and methodologies to support better drought risk management and response

**Advocacy:** stakeholder participation in integrated drought management through regional and country dialogues

**Capacity building:** drought risk awareness raising through vulnerability assessments and risk mapping to develop preventive action against drought



# Regional cooperation



## 10 countries & 28 institutions cooperating:

- ✓ Drought Management Center for Southeastern Europe
- ✓ Universities
- ✓ Hydro-meteo services
- ✓ Research institutes
- ✓ Ministries & state agencies



# Cooperation with national governments

## Main challenges:

Lack of political will to solve the problem  
– drought was not considered as a relevant issue.



## Solutions:

cooperation with national governments to help incorporate drought management issues into national programs, policies and plans

## National Consultation Dialogues

- **1st round – setting the stage**  
review of the current status
- **2nd round – how to overcome gaps** in the current drought management; developing Guidelines; national experiences and examples
- **3rd round – action plan/update** for preparation of the Drought Management Plan



# Cooperation with national governments

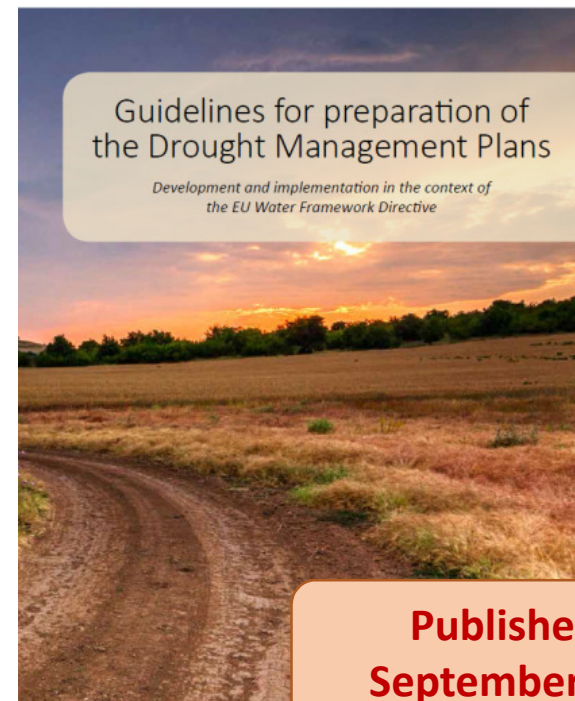
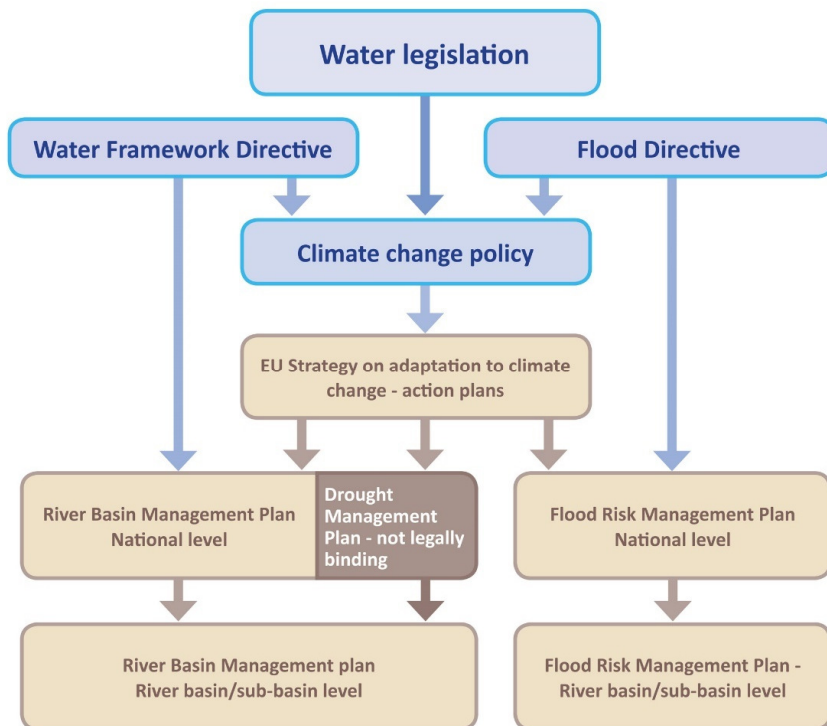
## Main challenges:

Gaps in the implementation of the EU Water Framework Directive (WFD).



## Solutions:

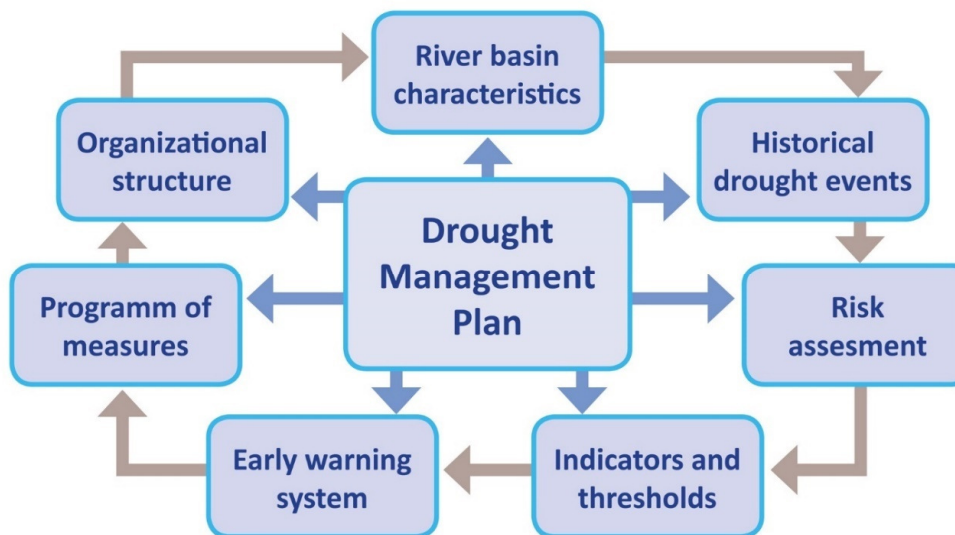
Preparation of guidance document



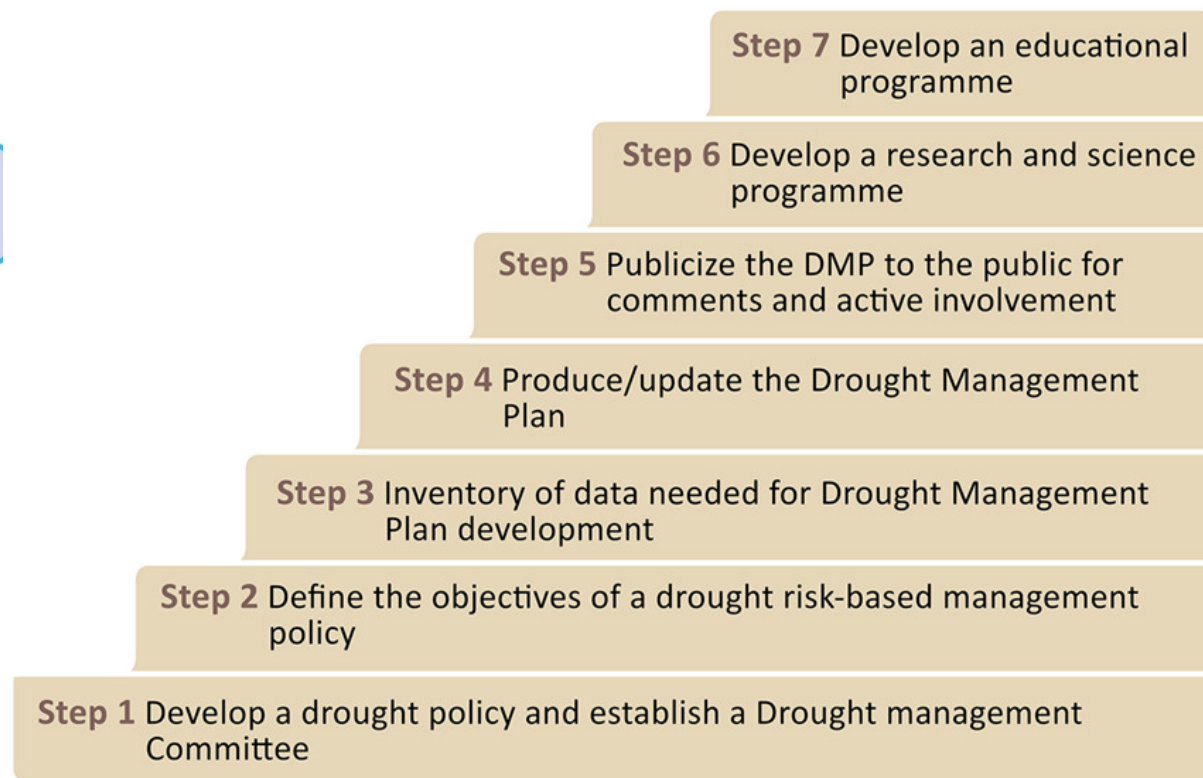
**Published in  
September 2015**

# Guidance for preparation of drought Management Plans

## 7 steps to integrate drought into planning process for development of the RBMPs



### Parts of the Drought Management Plan

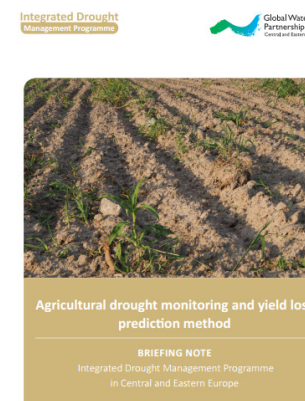




# Testing and describing new approaches towards proactive drought management

focusing on agricultural sector as one of the most vulnerable ones in the region

- **Natural Small Water Retention Measures**
- **Increasing soil water holding capacity**
- **Drought impact on forest ecosystems**
- **Remote sensing agricultural drought monitoring methods**
- **Updating agricultural drought monitoring and forecasting in Ukraine and Moldova**

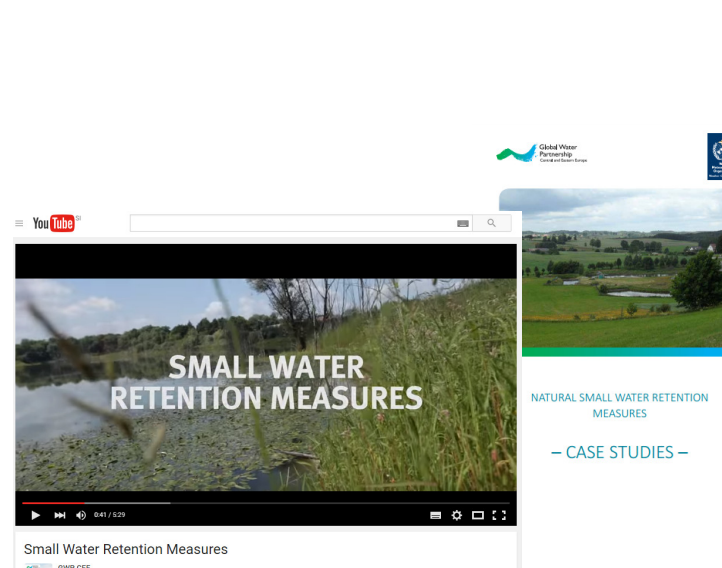


# Natural Small Water Retention Measures

adaptive measure which serves to adjust to extreme climate variability

it helps retain water in the land during wet periods and **make this water more available for ecosystems, agriculture and forestry during drought periods**

- improve the water conditions in the river basin
- increase landscape resilience against the effects of climate
- preserve biodiversity of habitats that are strongly related to water resources



NATURAL SMALL WATER RETENTION MEASURES  
combining drought mitigation, flood protection,  
and biodiversity conservation

– GUIDELINES –

# DRiDanube - Drought Risk in the Danube Region

- Project aims to increase the capacity of the Danube region to cope with drought by **enhancing resilience to drought** with recently developed tools and data sets;
- **New drought monitoring services** (using remote sensing products) will be developed and prepared for operational use;
- **Unified drought risk protocol** based on the EU Civil Protection Mechanism will be prepared;
- **Improve drought preparedness in the Danube region**



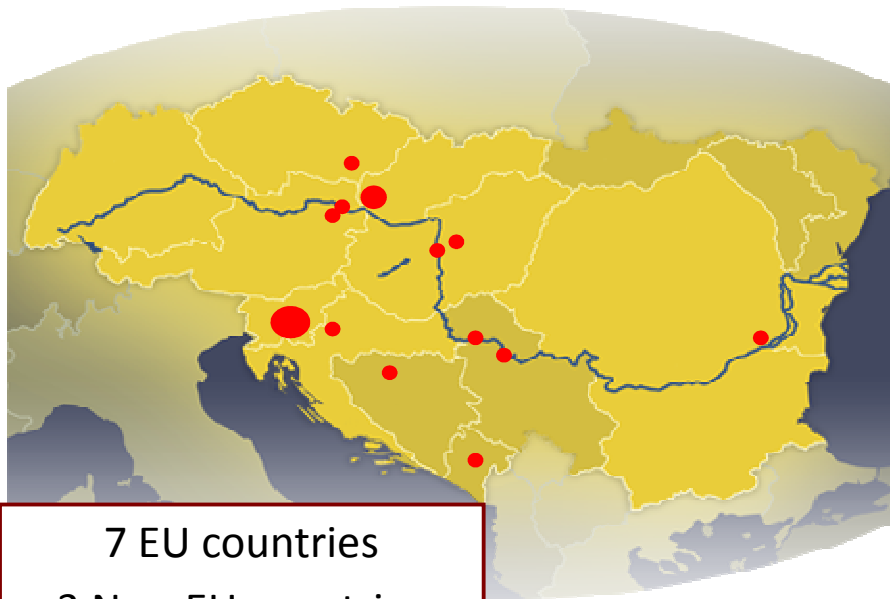
Approved in 1st Call of the **Danube Transnational Programme**

**Duration:** January 2017 – June 2019

**Lead Partner:** Slovenian Environment Agency (DMCSEE); GWP CEE – work package leader



# DRiDanube - Drought Risk in the Danube Region



7 EU countries  
3 Non-EU countries  

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15 partners  
8 ASP partners

## Main outputs:

- **Drought User Service** - a service based on most advanced available infrastructure (remote sensing data) to improve national capacities to monitor, forecast, evaluate and respond during drought development
- Common **methodology for drought Risk and Impact assessment**
- **Strategy to improve drought emergency response** to improve policy framework of drought management in the Danube region

Letter of Recommendations from EUSDR Priority Area 5

## IDMP CEE 2017 – 2019 focus

Improve the drought monitoring and unification of drought impacts and risk assessments for the whole region

Built capacities to monitor, forecast, evaluate and respond during drought development with **better accuracy and faster response time**

Integrate water security and drought resilience into **national development planning and decision-making processes**





# Thank you for your attention

[www.gwp.org/GWP-CEE/IDMPCEE](http://www.gwp.org/GWP-CEE/IDMPCEE)

[www.gwp.org/GWP-CEE](http://www.gwp.org/GWP-CEE)

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