



## National Administration "Apele Române"

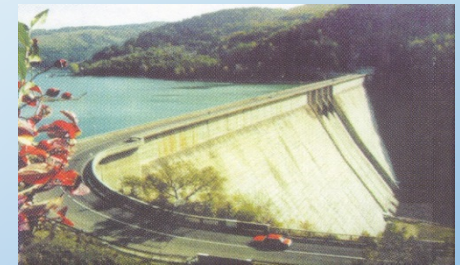
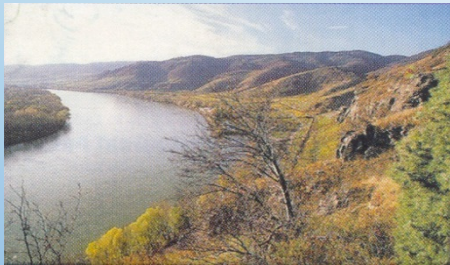
6, Edgar Quinet Street, District 1, code 0100180, Bucharest, Romania

Tel: 0213151301; 0213110146; Fax: 0213122174; 0213103526

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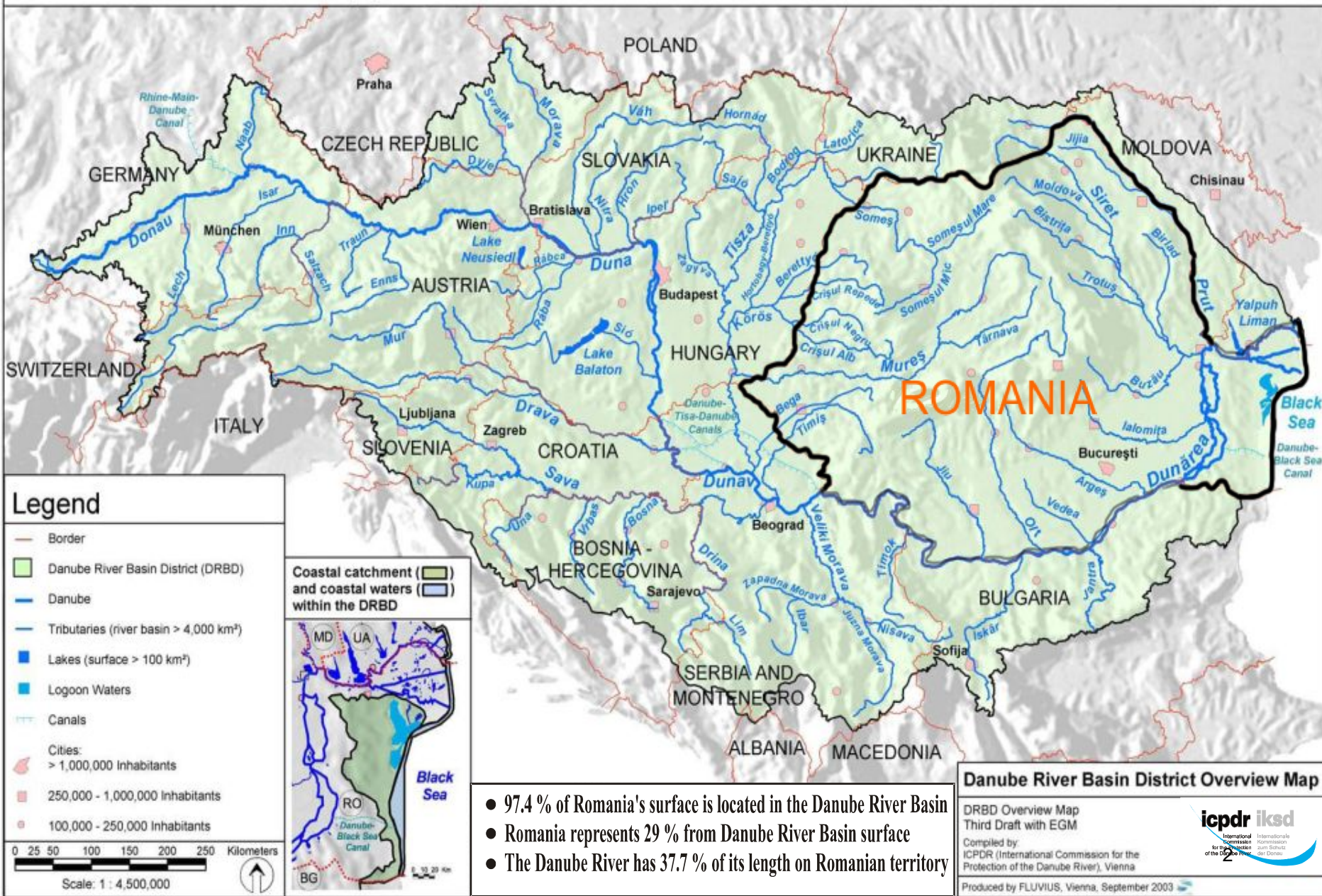
# Implementation of the water Directives in Romania



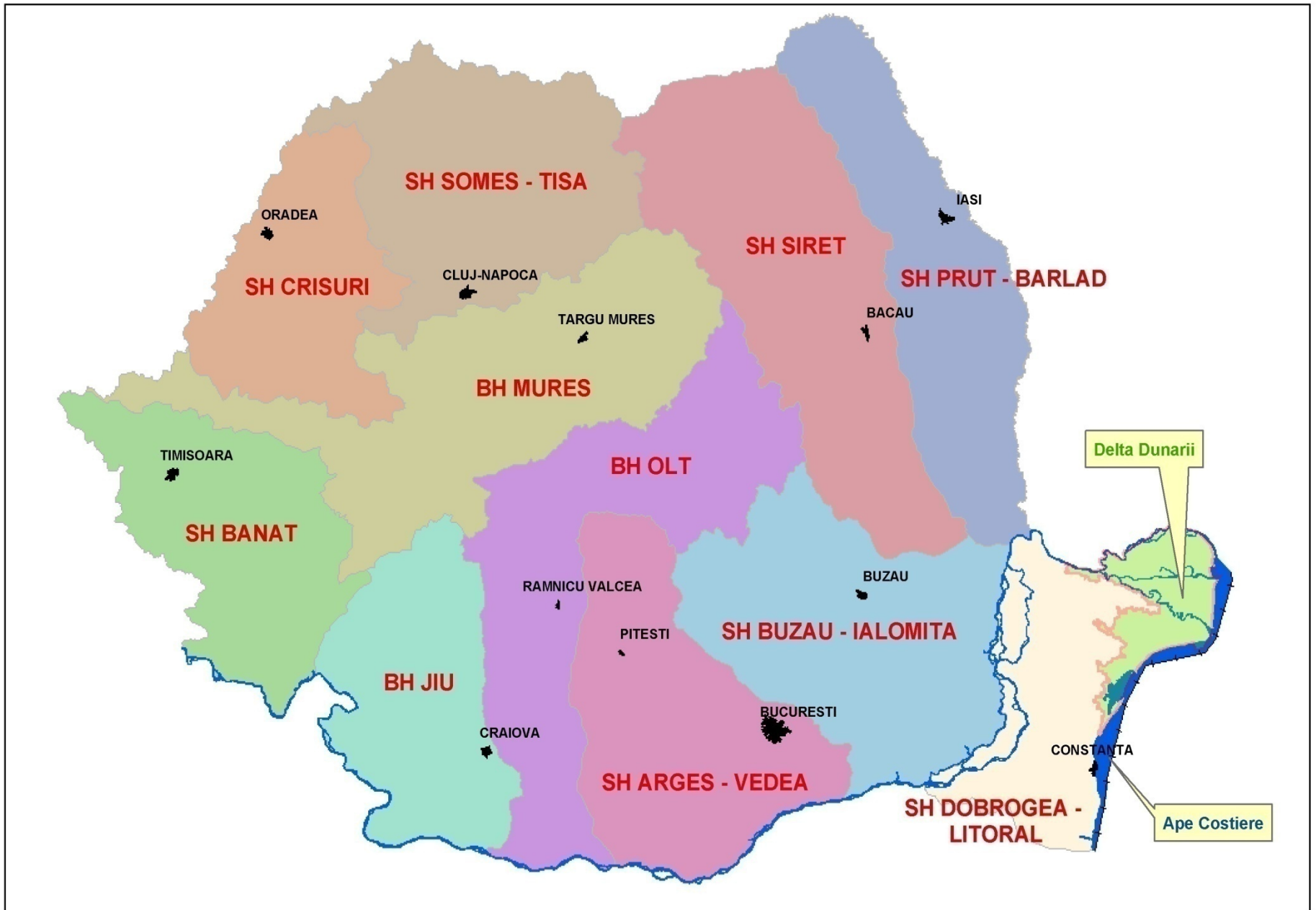
***Mrs. Elena TUCHIU, Director of Management Plan Department  
National Administration "Apele Romane", Romania***



# Danube River Basin District. Overview map



- 97.4 % of Romania's surface is located in the Danube River Basin
- Romania represents 29 % from Danube River Basin surface
- The Danube River has 37.7 % of its length on Romanian territory



River basins /sub-units in Romania



# Implementation of WFD in Romania

- **Legal:** Water Law 107/1996
  - amended and completed by the Law 310/2004, Law 112/2006, OUG 3/2010, Law 146/2010 for transposition of the Water Framework Directive 2000/60/EC and of the Floods Directive 2007/60/EC
- **Organizatorical:**
  - Ministry of Environment and Climate Change, Department of Water, Forests and Fisheries
  - National Administration “Apele Romane”
    - 11 River Basin Administrations
    - National Institute for Hydrology and Water Management (INHGA)
- **Consultative** : River Basin Committees
- **Tehnical:**
  - Elaboration and implementation of guidelines, studies, research, training
  - Endowment with hardware and software for GIS, database and with lab devices for ensuring monitoring
  - Participation in international projects
  - Participation at international, European, basinal and bilateral activities

# WATER RESOURCES PLANNING

## SCHEME OF DEVELOPMENT AND MANAGEMENT - components-

QUANTITY  
WATER MANAGEMENT



QUALITY  
WATER MANAGEMENT



# RIVER BASIN MANAGEMENT PLAN (RBMP)

## RIVER BASIN MANAGEMENT PLAN

### GOAL and OBJECTIVES

Setting of measures, actions, solutions and works for protection of surface and ground waters through:

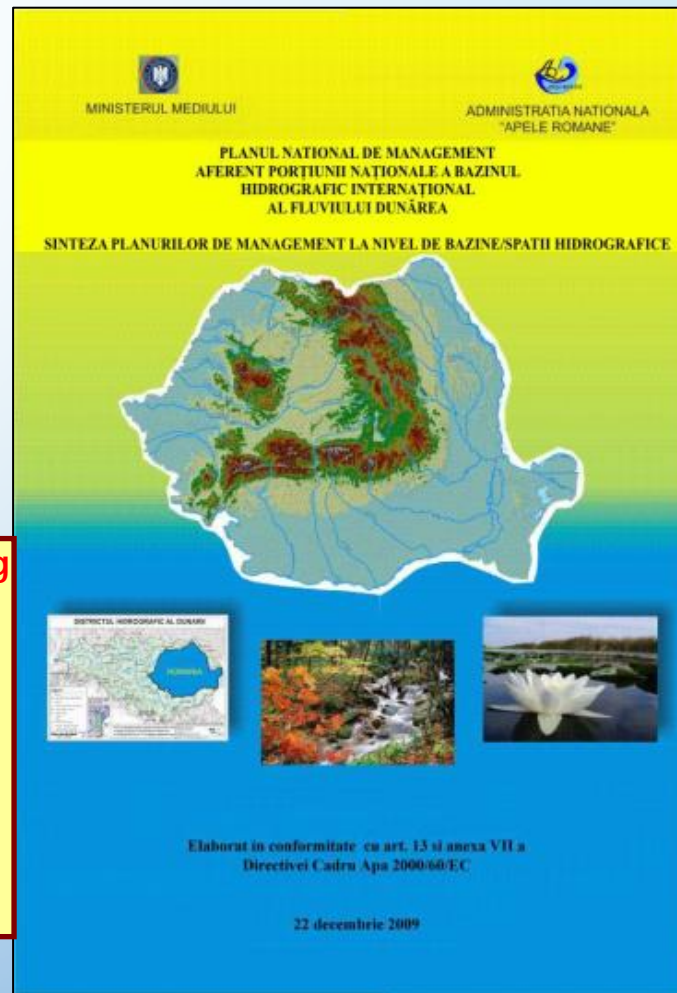
- prevention of further deterioration and reaching and maintaining of good status of aquatic ecosystems
- promotion of sustainable water use
- progressive reduction of pollution from priority substances and ceasing out of discharges, emissions and losses of priority hazardous substances
- progressive reduction of groundwater pollution and further
- pollution prevention

### ELABORATION DEADLINE

22 December 2009

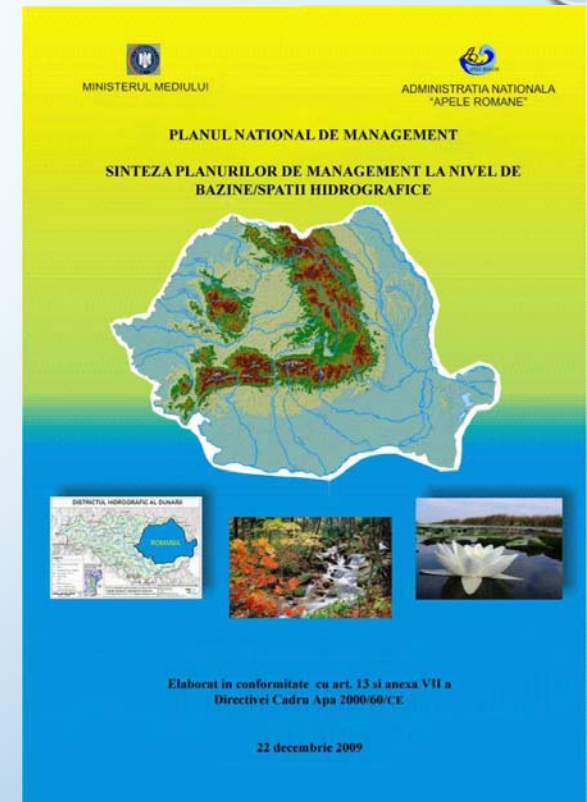
### UPDATE

each 6 years



# The main steps through WFD implementation

- ✓ National management plan - the synthesis at the national level of 11 river basin management plans (RBMPs)
- Elaboration at 22 December 2009
- RBMPs were presented, discussed and approved in the river basin committees
- Reporting to European Commission at 22 March 2010
- ✓ Approved through governmental decision 80/2011 after SEA procedure
- ✓ Elaboration and reporting to the EC of the interim report on POM implementation – 2012
- ✓ Update of characteristics of the river basins, review of the environmental impact of human activity and economic analysis of water uses (art. 5 of WFD) - 2013
- ✓ Interim overview of significant water management issues at the river basin level (22.12. 2013 – 22.06. 2014) – public consultation process!
- ✓ current and next steps 2014 – 2016: Elaboration, approval and reporting of the second River Basin Management Plans and of the second National Management Plan





# SIGNIFICANT WATER MANAGEMENT ISSUES IN THE DRBD AND AT THE NATIONAL LEVEL

**Organic pollution**



**Zero emission of untreated wastewaters**

**Nutrients pollution**



**No threat or impact by eutrophication**

**Hazardous substances pollution**



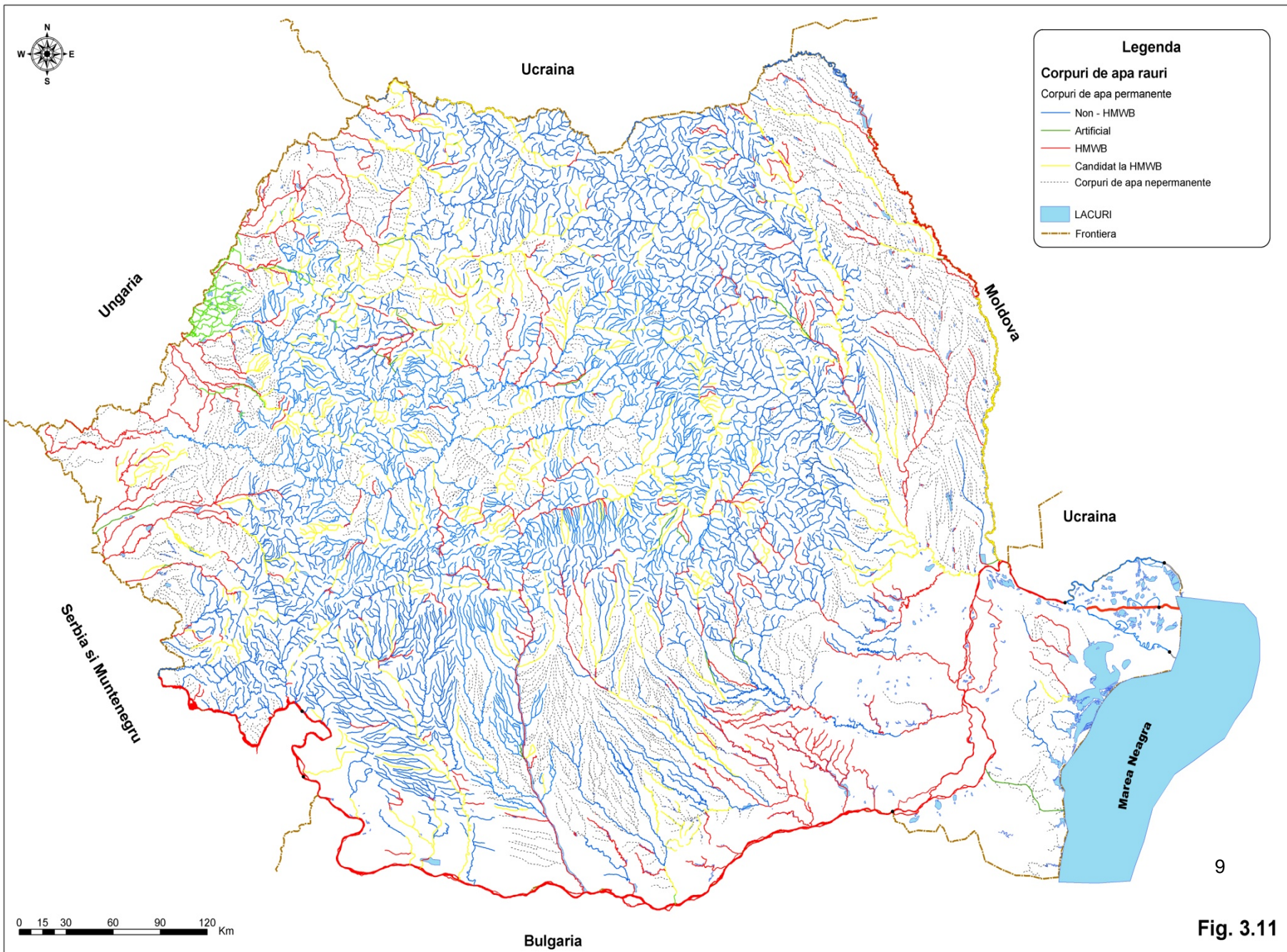
**No risk or threat to human health or to aquatic ecosystem**

**Hydromorphological alterations**



**Acquatic ecosystems habitat for all native species**

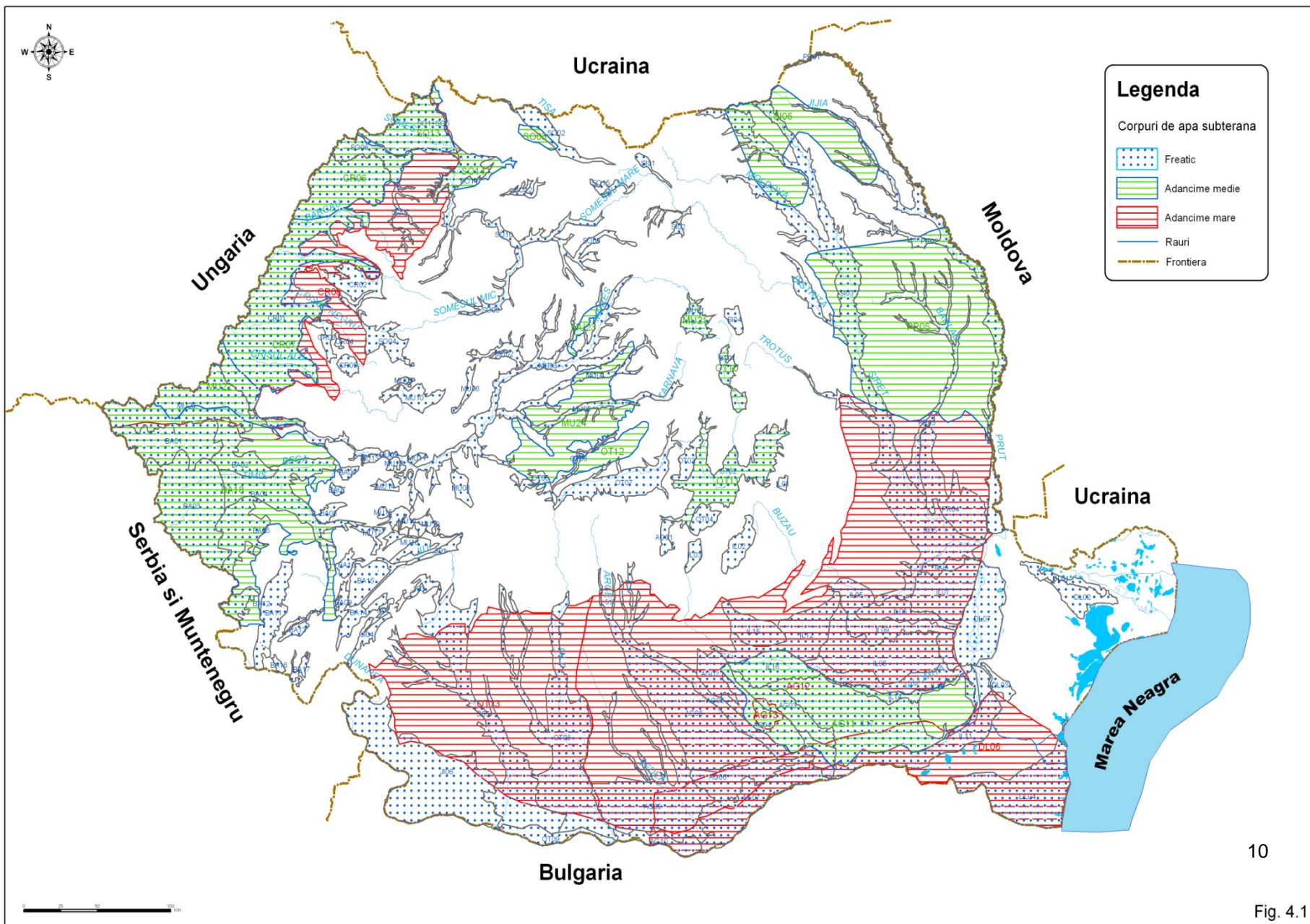




**Corpurile de apa de suprafata**

**Fig. 3.11**





**Corpuri de apa subterana**

# PROGRAM OF MEASURES

## Categories of pressures:

- Agglomerations
- Agricultural activities
- Industrial activities
- Hydromorphological alterations

## ⇒ BASIC MEASURES:

- ⇒ minimum set of **obligatory** measures
- ⇒ WFD Art. 11/3 and Annex VI part A
  - UWWT-Directive
  - Nitrates Directive etc

## ⇒ SUPPLEMENTARY MEASURES:

- ⇒ set of **additional** measures to reach the environmental objectives
- ⇒ WFD Art. 11.4 and Annex VI part B
  - Legislative, administrative, economic instruments
  - educational projects, research etc.

➤ Total costs 2010-2027 – around 21 billions Euro



# Basic measures for human agglomerations

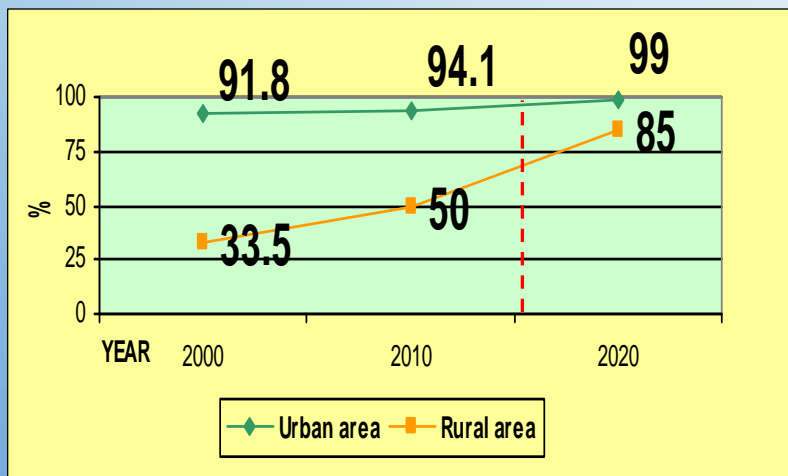
- ✓ RO is a sensitive area - more advanced wastewater treatment for nutrients for all agglomerations above 10,000 p.e.
- ✓ Compliance deadlines:
  - agglomerations above 10,000 p.e. by 2013 for wastewaters collection and 2015 for advanced wastewater treatment;
  - agglomerations 2000 -10000 p.e. – by 2018 for wastewaters collection and secondary treatment
- ✓ Basic measures are generally:
  - Works for extension/construction of sewerage network, for extension/construction of UWWTPs with secondary and advanced treatment (nutrients removal) and sludge management.

# Basic measures for human agglomerations

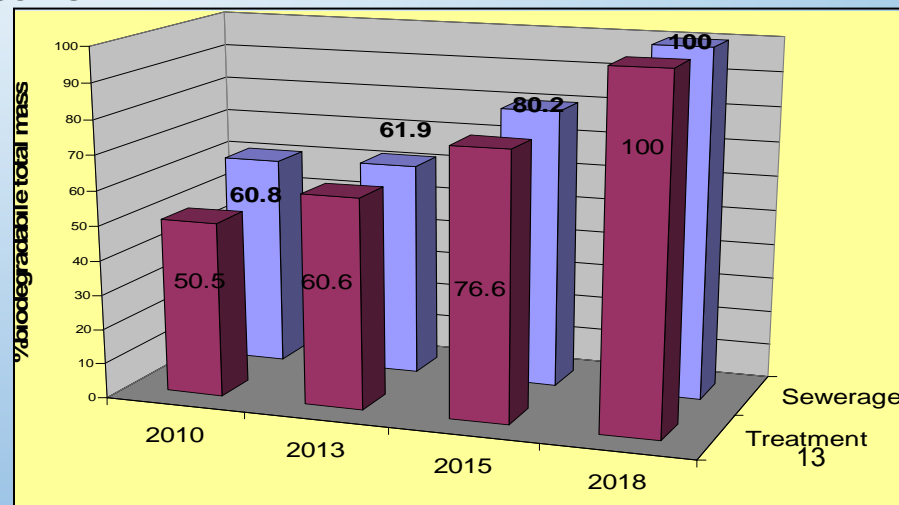
## IMPLEMENTATION PERIOD

EU Directive	Transition period	Associated costs (billion EURO)
<i>Drinking Water Directive 98/83</i>	2015	5.6
<i>Waste Water Directive 91/271</i>	2018	12,8

## Connecting rate to water infrastructure



Water supply infrastructure



Waste water infrastructure

# Basic measures for agriculture (Nitrate Directive)

- ✓ NVZs were designated in 2005 - 6.94% of country surface and then revised in 2008 and enlarged - 58% of the surface. Since June 2013, **whole territory approach** is applied



Measures generally refer to :

- implementation of the provisions of Good Agriculture Practices Code and APs
- construction of manure storage and waste water storage facilities
- construction/upgrading waste water treatment plants
- implementation of BAT



2004                      2006    2007                      2009                      2011    2013                      2015

**Characterisation**

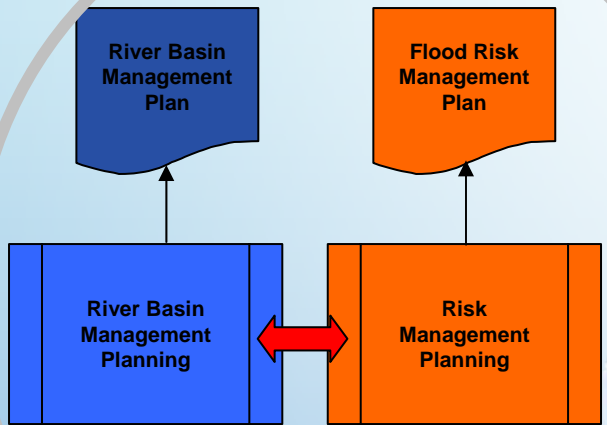
**Monitoring programme**

**River Basin Management Plan**

**Good status**

**Preliminary evaluation of floods risk**

**Flood Risk Management Plan**



# FLOODS RISK MANAGEMENT LEGAL FRAMEWORK AND IMPLEMENTATION STEPS

💧 **Directive 2007/60/EC (Floods Directive)** – transposed into the national legislation (Water Law 107/1996 with further amendments)

💧 ***National Strategy for Flood Risk Management on medium and long term*** (G.D. 846/2010)



- 1) **PRELIMINARY FLOOD RISK ASSESSMENT – 22.03.2012**
- 2) **FLOOD HAZARD AND RISK MAPS - 22.03.2014**
- 3) **FLOOD RISK MANAGEMENT PLAN - 22.12.2015**

# FLOOD RISK AND FLOOD RISK REDUCTION IN CLIMATE CHANGE CONTEXT

*National Strategy for Flood Risk Management:  
general framework for objectives and measures*

*River Basin Development Plan  
(STRATEGIC PLAN for  
QUANTITATIVE Water Management  
issues including FLOODS)*

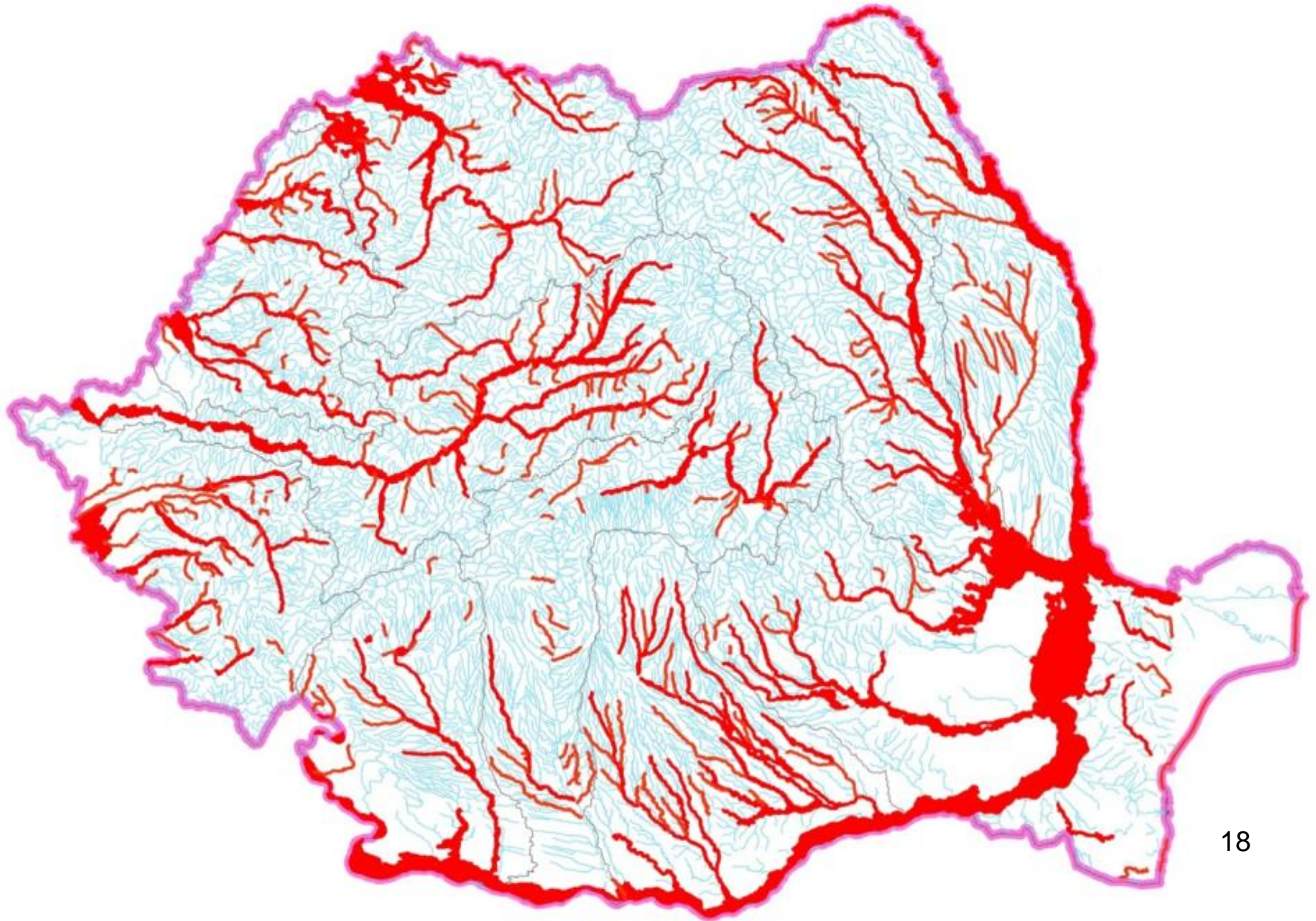
*Floods Defense Plans at  
the locality, county and  
river basin level*

*-adress to operative  
measures, before,  
during and after floods*

*National Plan for Floods Protection, Prevention and Mitigation  
(PROJECT having as result hazard and risk maps and FLOOD  
MEASURES PLANNING)*



# POTENTIAL SIGNIFICANT FLOOD RISK AREAS









# TIMETABLE OF THE WFD AND MSFD

**WFD (2000)**  
**Water Law**  
**107/1996 s.a.**



**MSFD (2008)**  
**GO no 71/2010,**  
**Law 6/2011**



River Basin Management Plans (1 <sup>st</sup> cycle in 2009) 	National marine strategy
6 year reporting cycle	6 year reporting cycle
Analysis of the characteristics of the RBD, pressures and impacts and economic analysis of water use 2004, 2013 (and each 6 years thereafter) 	Initial assessment (characteristics, pressures/impact, socio-economic analysis), determination of GEnS, environmental targets 2012 (and each 6 years thereafter) 
Monitoring 2006 	Monitoring 2014 (“Technical and administrative support for the joint implementation of the MSFD in Bulgaria and Romania”)
Measures 2009/2012 2015 (and each 6 years thereafter) 	Measures 2015/2016 (and each 6 years thereafter)
GS/GP + prevent deterioration + progressive reduction and phasing out of PS/PHS 2015  <b>work continuously done</b>	GEnS 2020





Thank you for attention !

