

# Advisory group "Agriculture and Environment

# 19 June 2012

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# Content

- First outcomes of the assessment of the River Basin Management Plans – focus on agriculture
- Update on the preparation of the 2012 Blueprint
- Water related measures in agriculture River Basin Network Factsheets





# First outcomes of the assessment of the RBMPs

# Elina Nikkola



# Status of adoption of WFD plans



GREEN - River Basin Management Plans adopted!

RED – consultations not started or ongoing

http://water.europa.eu/participation



- Commission's 3<sup>rd</sup> implementation report integral part of the Blueprint, to be published in November 2012
- Assessment based on reporting by MS (RBMPs, WISE and additional background documents)
- Commission's assessment is ongoing
  - Findings at EU level
  - General statements do not necessarily apply to all RBDs / all MS
  - There are many examples of good practises







### **Improved international cooperation**







#### Assessment River Basin Management Plans: Some general preliminary findings

- A lot of effort put into preparation of the plans
- High uptake of the **common framework** and common language on water management provided by the WFD
- Integration of ecological perspective into water management
- Enhancement of international cooperation
- Public *participation*, stakeholder involvement
- Impressive improvement in the knowledge base

- **4 Member States** yet to submit plans
- Low ambition in many of the plans (extensive use of exemptions)
- Lack of concrete measures and low ambition
- Lack of comparability in some areas (e.g. chemical status!)
- Dressing "business-as-usual" as WFD
- Not enough consideration of hydromorphological pressures



#### Specific measures (1)

#### Agriculture

- Improvement in knowledge base
- Different levels of involvement of farmers
- Lack of consideration of hydromorphological impacts, and insuficient data on nutrients
- Link with the Rural Development Programmes often missing

#### Hydromorphology

- New HyMo measures incorporated in all RBMP
- Environmental flows

#### • Article 9

- Narrow interpretation of water services (only covering public water supply and waste water treatment)
- Contribution to cost recovery only of households and industry (not other user groups, e.g. agriculture)
- Cost recovery: unclear calculation of financial costs, and no calculation of environmental and resource costs
- Incentive pricing rarely referred to, in particular water metering



#### Specific measures (2)

#### Chemical pollution

- Specific measures targeting industrial and urban waste water sources
- But usually too generic and rarely targeted at tackling exceedances of the standards for specific substances

#### Groundwater

- Where relevant, international coordination of measures has taken place
- Quite general measures, and rarely linked to specific WBs
- No distinctions between measures for preventing/limiting pollution and measures tackling hazardous or non-hazardous substances.

#### Protected areas

– In many cases, no additional measures implemented





#### Water scarcity and drougths

- Aknowledged in most RBMPs, but no differentiation between water scarcity and droughts
- Need to improve datasets and quality of data
- More data required on water demand and water availability trend scenarios
- Need to consider influence of other sectoral policies on the reduction of water scarcity and the mitigation of drought effects
- In international basins, major gap in dealing with water quantity

#### Adaptation to climate change

- Generally well addressed in most of RBMPs
- Some Programmes of Measures have been checked against the anticipated effects of climate change
- More influence on the selection of measures is expected from the 2nd RBMP cycle

#### Flood risk managment

• Some aspects of flood risk management have been considered as integral part of RBMPs, e.g. in the context of adaptation to climate change





#### **More information**



On water policy:

http://ec.europa.eu/enrivonment/water

WFD CIRCA Information Exchange Platform:

http://circa.europa.eu/ Public/irc/env/wfd/library

Email:

env-wfd-circa@ec.europa.eu



# A Blueprint to Safeguard Europe's Water Resources

- update

Henriette Faergemann



# What is the Blueprint?

- The Blueprint to Safeguard Europe's Water Resources will present the policy response to the challenges presented in the State of Water Report,
- Long-term aim: to ensure sufficient availability of good quality water for sustainable and equitable water use.
- Closely linked to EU 2020 Strategy and Resource Efficiency Roadmap.





# Why a Blueprint?

- Improving the **implementation** of current EU water policy
- Fostering the **integration** of water and other policies
- When necessary, seeking the **completion** of the current policy framework





# Synthesis of policy recommendations building on on-going assessments

Report on 2009 **River Basin** Management Plans Nov 2012 Stakeholders' Outlook of Policy Review Blueprint sustainability and views on **Options** Water Scarcity EU water vulnerability of То Impact & Droughts EU water policy Safeguard assessment Strategy instruments resources **EU Waters Climate Change** Vulnerability & Adaptation

Impact Assessment



# **Blueprint Foundations**

- Review of Water Framework Directive implementation (WFD Art 18)
- Review Water Scarcity and Droughts policy implementation (Council Conclusions WSD 2007)
- Review of water resources vulnerability (contribution to CC adaptation review – 2009 White Paper)
- Fitness Check on policy for protection of fresh water resources
- State of Water report from EEA to be published
- Studies





### **Stakeholder views**

No "one size fits all" solutions for water management

• Improvements in implementation of EU water policy are required but no need to revise the WFD now

• Need for a stronger basis for tackling the problems of water scarcity and droughts

Ecosystem services not systematically addressed within water policy

• More coherence needed with the CAP, regional, renewable energy and transport policies

• Potential to enhance synergies with chemical, pesticides, pharmaceuticals policies on issues such as risk assessment methods.

Improved analysis of the costs and benefits of water protection
measures is needed



# **From Objectives to Policy Options**

Achievement Good Ecological Status

> Adressing Water Stress

Resilience to Extreme Events Foster integration of water into sectoral policies

Increase the use of economic instruments

Achieve a more efficient water governance

Improve knowledge and tools



# **Blueprint Analysis - 1**

- Full ex-post WFD review not appropriate in 2012
- Blueprint problem description identifies
  - much progress on water quality, still a significant gap
  - need to strengthen water demand management
  - need to increase availability of clean water
- **12 priority** " problems" identified, **57 policy options** included in public consultation document





# BP Analysis - 2 Priority Problems

- Water allocation
- Drought management
- Land use/Agricultural impacts
- Inefficiency in buildings/appliances
- Inefficient infrastructure

- Lack of re-use
- Abstraction Control
- Water pricing
- Understanding costs and benefits
- Governance and capacity
- Data and information sharing





#### Measures aiming at protecting ecosystems

- *Restoring river continuity*
- Addressing the reduction of pollution at source
- Safeguarding drinking water and ground-water resources
- In most cases contributing to increasing the availability of clean water.







Source: Wikimedia Commons



### **Natural Water Retention Measures**

- Measures slowing down or reducing the flow of water downstream, leading to a more natural flow regime within a catchment, alleviating the effect of droughts & preventing floods through:
  - restoration of floodplains
  - natural flood defence measures
  - sustainable drainage systems
  - reforestation
  - wetland restoration
  - soil management, etc















# Water efficiency measures

- Needed in water stressed/potentially stressed areas
- All sectors need to contribute
- Cost efficiency needs to be considered – no one size fits all
- Water energy link





### Water re-use

- Water re-use has a strong potential for agriculture and industry
  - Challenge: using the right water quality for the right purpose, including grey water sources, but also rainwater harvesting, nondrinking water quality distribution etc.
- All options need to fully respect relevant public health and environmental standards



Source: Veolia



# Alternative water supply options

Artificial water

storage



#### Ground water recharge



#### Desalination



#### Rainwater harvesting



- Can be useful to supplement traditional sources
- Are becoming the largest contributors to meeting water demand for some regions
- When determining which solution can be appropriate **ALL** environmental and resource costs, social and political consequences need to be considered - Local factors crucial
- Proper water pricing crucial -WFD obligation to implement integrated water management and cost recovery programs essential





# Types of intervention at EU level

- *RBMP process* (*Guidance*) has limitations in ensuring integration between water policy and sectoral policies
- Need for further **integration** at EU level to support the implementation of strategic measures
- + horizontal actions
  - Use of economic & communication instruments: Pricing, Payment for Ecosystem Services, Labelling
  - Governance: skills and resources, effective working relationships between institutions, integration water quantity / good ecological status / vulnerability concerns
  - Improved knowledge base





#### Barriers to the implementation of pricing

- Insufficient knowledge (water accounts, environmental flows, economic instruments)
- Inappropriate and ineffective structures of present economic instruments
- Low social acceptability understanding the value of water
- Historical and legal reasons
- Pressure from sectors of economy
- Lack of pre-conditions
  - absence of water metering
  - illegal abstraction





# What can be proposed at EU level

- Mandatory metering for individual users
- Enforce proper art 9 implementation infringement procedures
- Impose conditionality for using EU funds (RD, CP)
- Produce guidance on cost recovery calculation & monetization of environmental and resource costs
- Removal of harmful subsidies
- Promoting water trading in some regions
- Promote efficient allocation mechanism





# **Public Consultation**

Running for 12 weeks - 16th March - 8th June 221 responses 24 Member States + Iceland, Norway and Switzerland and two non-European countries Member States accounted for over 95% of responses Industry: 25% Member State officials (counting both national administrative body and river basin authority/water management: 20%

NGOs: 19%





#### **Public consultation – some outcomes**

- CIS guidance on water accounting, e-flows and targetsetting (in favour 50%)
- Enhancing drought management planning through the next cycle of RBMPs (71%), no legislative action needed (59%)
- CIS guidance on the recovery of costs (59%)
- Using remote sensing to address illegal abstraction (57%)
- Developing guidance, best practices, and provision of an EU framework for green infrastructure supporting natural water retention measures (58%)
- Preparation of guidance for farmers on the effective application of measures for water quality and quantity objectives (62%)
- Requirement on metering for water abstraction permits 43% in favour and 40% against
- Water re-use: guidance on certification schemes (40%), CEN standards (38%)





### The 3rd EU water Conference May 2012

Total of 214 participants

#### Key messages:

- Accessibility of water, water scarcity and access to clean water => water use efficiency, water re-use
- Better cooperation between different policy streams such as agriculture and the new CAP, and energy policy, better cooperation and communication between sectoral policies (water, agriculture)
- Reliable public and private funding, need of water pricing, need to impose conditions on the use of EU funds (RD, Cohesion funds), WFD included in crosscompliance requirements
- More practical guidance





# **Blueprint next steps**

- Finalization of Impact Assessment including input from Public and stakeholder consultations over the summer
- Internal adoption procedures September November
- Publication Blueprint and review reports November 2012
- Blueprint launch conference 26-27 November 2012





### Water related measures in agriculture – River Basin Network Factsheets

### Elina Nikkola

**Participant River Basins** 





© EuroGeographics Association 2001, for administrative boundaries, on behalf of the national organisations responsible for official mapping of the displayed countries.

Districts, River basins or catchments involved in the RBN network

EU Member States

0 125 250 500 750 1 000 Kilometers Author: Emeric Angulano Dafa - source: RBN Members, CCM database Map source: NUTS regions EUROGEOGRAPHICS, 2001 Projection: ETR389 Lambert Azimuthal Equal Area



#### Tasks in the mandate:



#### **Evaluation of measures**

Objective: to evaluate in detail a limited number of key agricultural measures.

Output: common factsheets to be circulated among RB administrator, EG members; will feed a new and more complete version of the catalogue of measures. Measures selected for evaluation

**1. Buffer strips** 

- 2. Establishment and preservation of wetlands
- 3. Reduce water abstraction
- 4. Reduce fertilization
- 5. Avoiding spreading fertilizer and manure
- 6. Plant cover in winter
- 7. Catch crops
- 8. Application techniques of manure
- 9. Capacity of manure storage

**10.Erosion-minimising cultivation system** 

#### Tasks in the mandate



#### specific issues

**Objective**: to analyze specific issues related to RBMP and/or PoM and agriculture. Output: short articles and information sheets to serve as input for the EG as well as for distribution among RB managers and stakeholders.

**Specific issues** 

Indicators to monitor the implementation of the PoM

Financing the agricultural measures in the PoM

Farmers involvement, strategies and experiences

Interplay between the Flood Directive and flood related measures in the PoM

**Cost-effectiveness of agricultural measures** 

Comparison of policies and implementation strategies to reduce diffuse agricultural pollution

Irrigation





#### Study: Comparative analysis of Pressures and Measures in the RBMPs (Task 3a)

#### Arms:

- Analyze environmental effectiveness of key measures in the form of factsheets
- Update the Catalogue of Agricultural Measures (May October 2012)
- Support the work of the River Basin Network



# Furopean Commission

#### **Selected measures**

in blue those, which are common with the RBN

- 1. Buffer Strips
- 2. Establishment and preservation of wetlands
- 3. Targeted creation of woodland on arable land and grassland
- 4. Conversion of arable to low-input permanent grassland
- 5. Avoid spreading fertilizer and manure at high risk times and places
- 6. Crop Rotation
- 7. Plant cover in winter (including catch crops)
- 8. Water pricing
- 9. Water allocation
- 10. Water metering





#### **Difference between RBN and PM factsheets**

**RBN factsheets** allow for **more detailed** case specific information,, focus also on method and organisation of implementing the measures, primary source of information RBN partner written contributions

PM factsheets focus more on quantitative information and general conclusions, rely more on scientific studies and reports

Complementary approach: Information from RBN factsheets included in PM factsheets as illustrations and as case study examples





### **RBN** factsheets next steps

- EG on WFD and Agriculture meeting in April
- RBN meeting in June 2012
- Fact sheets(specific issues should be finalised in in October (RBN meeting)
- Information of factsheets and information collected are shared with all the RBN colleagues in charge of WFD implementation in agri sector beginning of next year
- Translation might be provided to a certain extent.
- The RBN members and the EG members are invited to contribute to the fact sheets and to the specific issues







http://rbn-water-agri.jrc.ec.europa.eu/

Managed/maintained by JRC

Main communication tool between the EG and the Network (restricted section)

The main instrument for disseminating network's outputs (open section): database of WFD agricultural measures, example of good
practices articles factsbeets

practices, articles, factsheets, ...

