



## Natural Water Retention Measures

Web-based knowledge  
Community of practice  
NWRM practical guide



## Pilot Project - Atmospheric Precipitation - Protection and efficient use of Fresh Water: Integration of Natural Water Retention Measures in River basin management

Service contract n°ENV.D.1/SER/2013/0010

# NWRM features: an overview of the main outputs and outcomes of NWRM initiative

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# Main outputs / outcomes

*Done so far*

## **Catalogue of measures:**

- 53 measures so far (4 sectors)
- continuously adjusted by our experts (polder, mulching)

## **Workshops:**

- first series in January 2014 → awareness raising
- second series ongoing

## **Case Studies collect:**

- 40 in-depth case studies
- light case studies (objective: 80!)

# Main outputs / outcomes

*Under development*

## **NWRM individual factsheets:**

- 53 factsheets (1/measure) grouped into 4 sectors
- literature review + know-how

## **Policy Questions:**

- literature review
- 12 synthetic documents (3 disciplines)

*Exemple: Economic Assessment of NWRM*

## **Platform for end-users:**

- targeting practitioners, managers, policy-makers
- friendly interface
- linked to the database

# Last version of the catalogue of measures

- Based at the beginning on Stella study
- Revised by NWRM experts
- Revised by Steering Committee (JRC, EPA, DGENV, ...)
- Currently: list of 53 measures  
last update: polders and mulching

# Last version of the catalogue of measures

	A	B	C	D	E	F	G	H
1	NWRM ID	ID	Sector	NWRM			Technical skill	NWRM description/definition
2	(01/14)			Name	Action	Biophysical benefit		
3	A1	A1	Agriculture	Meadows and pastures	Restoration, Maintenance	Source Control, Decrease of runoff, Flood protection	Planting	Meadows are areas or fields whose main vegetation is grass, or other non-woody plants, used for mowing and haying. Pastures are grassed or wooded areas, moorland or heathland, generally used for grazing. Due to their rooted soils and their permanent cover, meadows and pastures provide good conditions for the uptake and storage of water during temporary floods. They also protect water quality by trapping sediments and assimilating nutrients.
4	A2, A3, A12, A13	A2	Agriculture, Urban, Nature, Forest	Buffer strips and shelter belts	Restoration, Maintenance	Source Control, Decrease of runoff, Biodiversity enhancement, Soil conservation	Planting	Buffer strips are areas of natural vegetation cover (grass, bushes or trees) at the margin of fields, arable land, transport infrastructures and water courses. They can have several different configurations of vegetation found on them varying from simply grass to combinations of grass, trees, and shrubs. Due to their permanent vegetation, buffer strips offer good conditions for effective water infiltration and slowing surface flow; they therefore promote the natural retention of water. They can also significantly reduce the amount of suspended solids, nitrates and phosphates originating from agricultural run-off. Buffer strips can be sited in riparian zones, or away from water bodies as field margins, headlands or within fields (e.g. beetle banks). Hedges across long, steep slopes may reduce soil erosion as they intercept and slow surface run-off water before it builds into damaging flow particularly where there is a margin or buffer strip alongside.
						Water quality improvement		Crop rotation is the practice of growing a series of dissimilar/different types of crops in the same area in sequential seasons. It gives various benefits to the soil. A traditional element of crop rotation is the replenishment of nitrogen through the

# Case Studies Collect

**40 in-depth**

40 in-depth  
case studies



Case study template



In-depth case study  
factsheet template

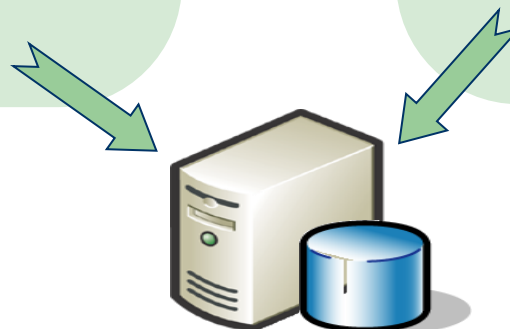
+

**80 light  
(2-3 per country)**

80 light  
case studies



Case study template



**Database**





**U1 – Green roofs**  
**Urban**

**53 NWRM  
factsheets**



**N3 – Floodplain**  
**Nature**

**53 measures**  
**4 sectors**  
**53 individual factsheets**

**Agriculture**  
**A1 – Meadows and pastures**



**Forest**  
**F5 – Land use conversion**



# Policy questions

## - Objective:

- Complete information already gathered in case studies and in the literature
- Provide decision makers with key messages

## - policy questions (0 to 12)

### **12 synthetic documents**

12 Policy questions

→ grouped under 3 disciplines

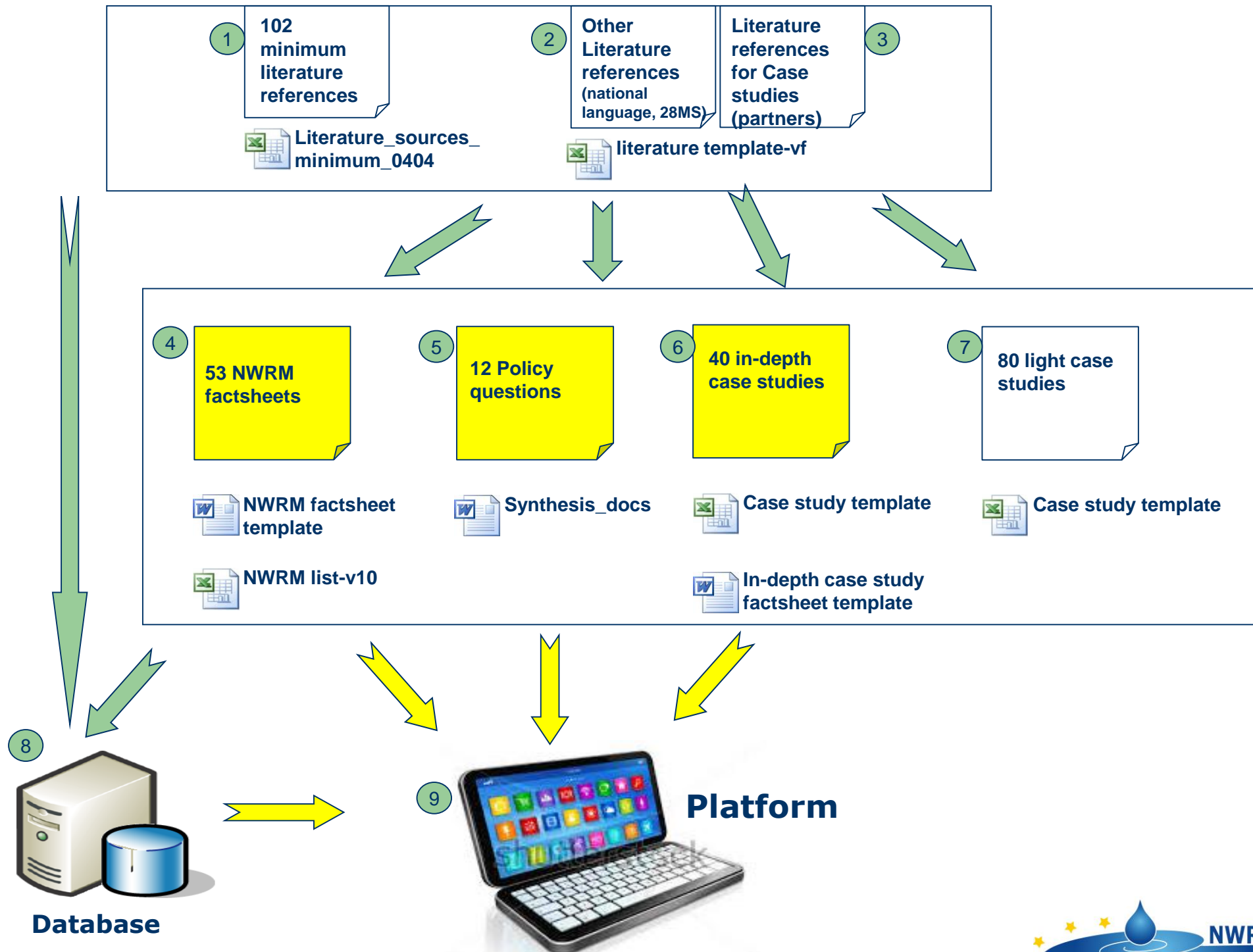
**Biophysical and technical aspects**

**Socio-economic dimensions**

**Governance, implementation and financing**

→ subdivided in questions

*Exemple: What is the role of policy coordination for implementing NWRMs?*





# Thank you for your attention!

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