### Natural climate buffers



Texel



Peatland



Oesterdam



Meuse



Den Bosch



Secondary channel

Marjolein Sterk, ARK & Wageningen UR Genk, 23 October 2012 Annual EUROPARC Conference 2012















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# The principle

With climate buffers we attempt to:

- use natural processes as spatial solutions to develop resilient urban and rural landscapes;
- conserve existing functions (primaire);
- develop chances for other functions (secundaire);







































































































### **Pilots**

	Kempen~Broek	Weerterbos	Meuse
Defence			
Quality			
CO2			
Rural development			
Recreation			
Ecology			

















# Ecology















# Costs – 16 projects

Contributor	Min euro	<u>%</u>
Nature management organizations	2,14	1
Research & industry	0,01	<1
Local authorities/municipalities	17,38	11
Regional authorities/provinces	60,66	38
National government	61,19	39
Regional waterboards	11,76	7
Drinking water firms	0,10	<1
Charity funds/ lotteries	2,20	1
Others	0,39	<1
EU-funds	2,03	1

TOTAL 157,90 100%















### Retention measures















#### Lessons learned

#### Climate buffers:

- make others follow;
- are a solution for spatial planning;
- bring different needs together;
- can start a blueconomy.















# Future perspectives

- Dare to start; others will follow
- Start exchange of experiences and cooperative projects:
  Interreg
- Use (EU) funds to cross the threshold and earn the rest
- Research to quantify costs and benefits
- Green solutions are preferable to allocate EU-funds
- Oblige involvement of green solutions in decisions making (for water projects)



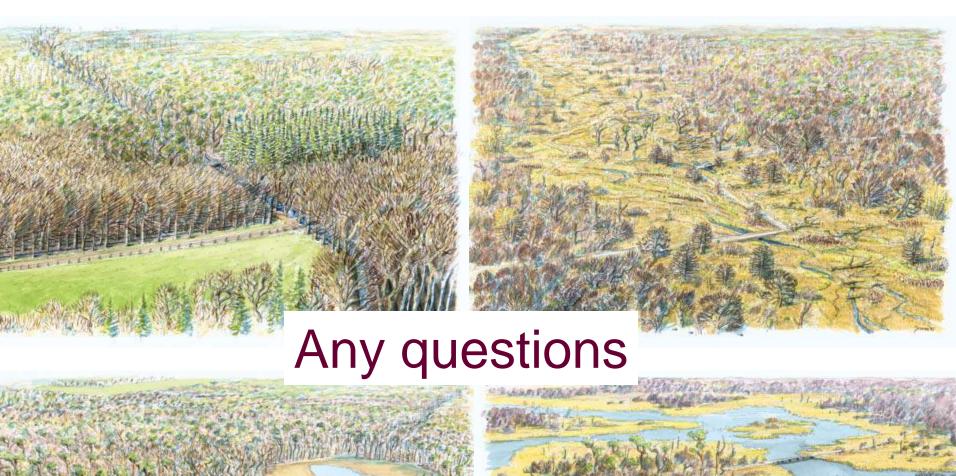
















Function	Processes
Defence against high water	Marshes and sandy foreshores, natural dune genesis, green dikes
Water retention	Space for water, retarding water discharges by sponge function
Water conservation	Water storage
Growth with rising sea level	Sedimentation by biobuilders e.g. sea grass, reed, shellfish
Sustainable urban landscape	Green walls and roofs













