

Twinning blue-green corridor 31.08.-01.09.2011



Heerener Mühlbach in the Lippe catchment



○ Location of the water body Heerener Mühlbach

EG = Emschergenossenschaft

LV = Lippeverband

Impressions of the site visit

Water body before ecological improvement



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Impressions of the site visit

Water body after ecological improvement



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Impressions of the site visit

Water body during ecological improvement



Impressions of the site visit

Art works contribute to communication



Discussion with the Future Cities partners



Ecological improvement of water bodies

Disconnection of storm water

Flood prevention



Results: benefits and monitoring of ecological enhancement

Who benefits?	What are the benefits?	How monitor success?
ecosystems	<ul style="list-style-type: none"> ➤ Better quality of water ➤ Creation of new places for species 	<p>Physical & Chemical analysis</p> <p>Ecological analysis (species...)</p>
inhabitants	<ul style="list-style-type: none"> ➤ Better quality of life: recreation, playground ➤ Raised awareness of the people 	<p>Complain from citizens</p> <p>Feed-back from maintenance services</p> <p>Feed back from neighbourhood watch</p> <p>Use of social network (Twitter/Facebook)</p>
water board	<ul style="list-style-type: none"> ➤ Reach the aims of EU WFD ➤ Better flood resilience ➤ Cheaper treatment 	<p>Quality of the water</p> <p>Quantity of the water</p> <p>Analysis of the evolution of the costs</p>
municipalities	<ul style="list-style-type: none"> ➤ Set up the discussion ➤ More attractive city 	<p>House prices (€/m²)</p> <p>Development of the city</p>

Results: some ways to communicate about measures

Some communication ways

Some examples

- | | |
|--|--|
| ➤ Actions previous construction works to fit with the “happening in my backyard” | Information evening (Heerener Mühlbach, DE-LV) |
| ➤ Exhibition on the place of the measures | “Walking on water”, EGLV |
| ➤ Communication campaign including site visits | Arnhem: action in shopping mall with sewer system presented on a truck |
| ➤ Open-day | on purification plant, NL, EG |
| ➤ Package for children/ school | Booklets for children (Arnhem, EG) |

Results: some ways to motivate for disconnection

- Communication campaign
- Rules, convention
(Flanders, Emscher catchment)
- Subsidies
- System of fine (voluntary/obligatory base)
- On-site advices through „disconnection ambassadors“
- Divided yearly fee benefiting disconnected household
(€/m² paved area + €/m³ waste water)



Quelle: Ilias Abawi, Emschergenossenschaft

Results: flood prevention, public responsibility vs. private precaution

- From central prevention...



Flood retention basin in Heerener Mühlbach



Dikes in Emscher & Lippe catchment

Results: flood prevention: public responsibility vs. private precaution

- ...to decentral prevention...
- ...and private adaptation



- Disconnection-infiltration
- Flood proof building (NL-Tiel)
- Acceptance

Recreating rain reservoirs as dynamic public parks, Rotterdam, Inhabitat

Main learning lessons for the Lippeverband

- We think we are on the right way:
 - with the ecological improvement of water body (technic, monitoring, communication)
 - with the way to motivate for disconnection (strom water convention, divided fee)

- And...

Main learning lessons for the Lippeverband

- ...We should explore the opportunity:

Communication

- to use social network to include citizens in the transformation process as in Arnhem, NL
- to communicate the dealing with open urban water bodies in housing areas as in NL (less fear against drowning of children)
- to change from the question “How much does adaptation cost?” to the question “How much risk do we take?”

Instrument

- to finance more „disconnection ambassadors“ as in Arnhem, NL
- to transpose the flemish rule for new building to use rain water in our catchment.
- To include uncertainties of climate change in regulations such as “Anerkannte Regeln der Technik” as in the “code of good practice” in Flanders, BE

Measure

- to create multi-functional areas for water retention and urban design as in Rotterdam, NL

Thanks for your attention!