



Combined Sewer Overflows A challenge for policy makers and the water sector

EurEau Commission 2 on waste water

1 February 2016

Storm water overflows Commission Study

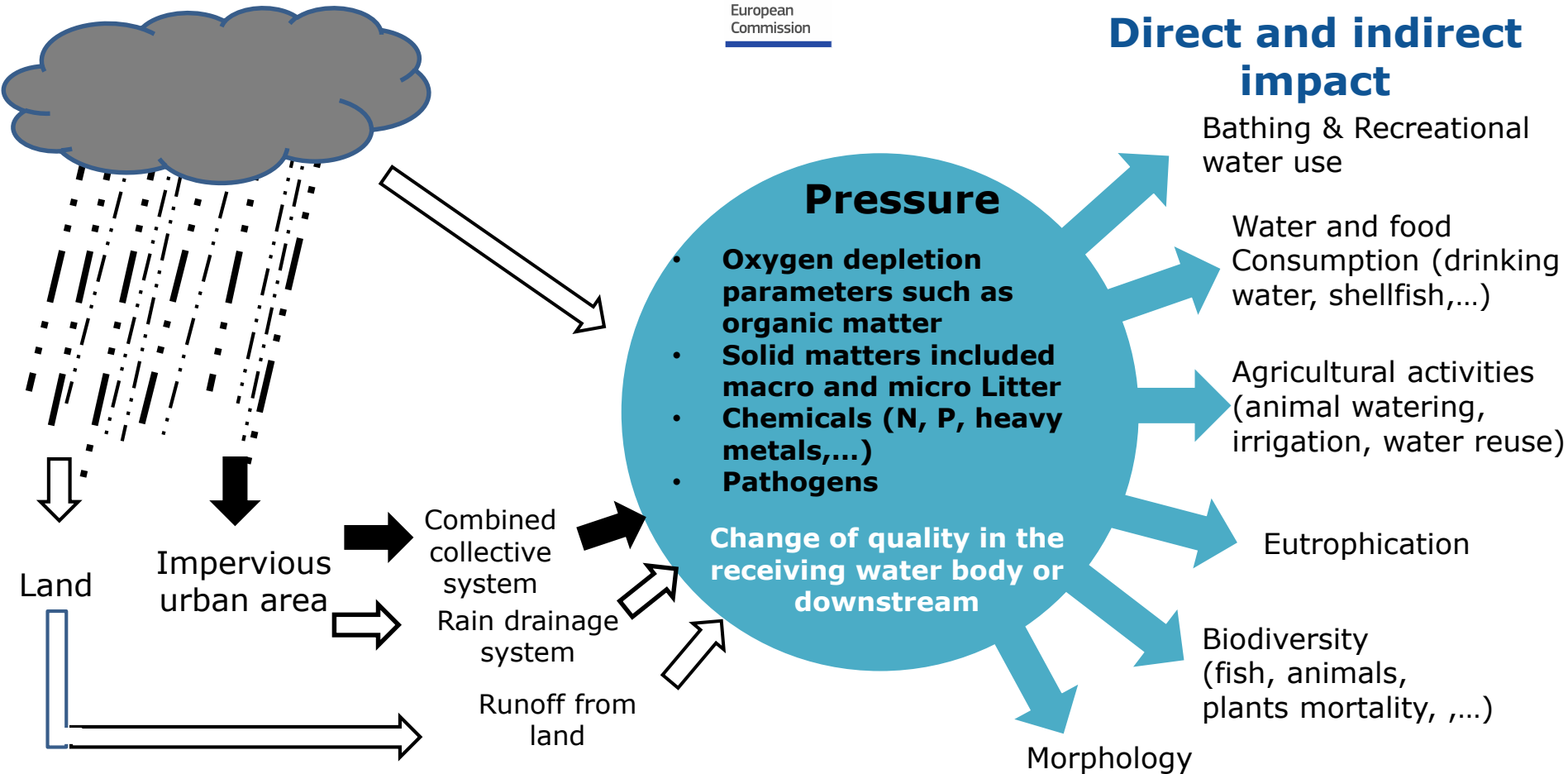


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Storm water overflows



Pressure and impact



Storm water overflows generate pressure and impact on Health and Environment in most of the European countries

Storm water overflows



European
Commission

Pressure and impact



Photo: Mario Moscatelli/OlhoVerde
<http://www.beachbrother.com/2015/05/quels-sont-les-risques-de-surfer-apres-de-fortes-pluies/>



Bandalong Litter Trap in Watts Branch in Washington, DC after one rain event
<http://stormwatersystems.com/bandalong-litter-trap-installations/>



Storm water overflows in the Gowanus Canal in Brooklyn
<https://www.youtube.com/watch?v=HzWOOqPAEGs>

Related to lots of different European or international water regulations. Measures have to be implemented:

- **In the Implementation programme of the Urban waste water treatment directive 91/271/EC** → treated except under unusually heavy rainfall
- **In the bathing water profiles of the bathing water directive (BWD) 2006/7/EC** → Good or excellent quality
- **In the programme of measures of the Water framework directive (WFD) 2000/60/EC** → good ecological and chemical status, protected areas objectives (shellfish, bathing water, ...)
- **In the programme of measures of the Marine Strategy Framework directive (MSFD) 2008/56/EC** → good ecological and chemical status, shellfish protection, marine litter reduction,...
- **In the target of the World sustainable development goal 6** → Halving the proportion of untreated waste water by 2030

Diversity of Member states regulation approaches

- definition of rain events,
- maximum number of spills authorized,
- dilution rate to build collecting system,
- volume objectives discharged without treatment,



**Lack of knowledge and
transparency about the
situation.**

**How are
the national regulations
really implemented?**

USA

Implementation of a specific federal policy (started in 1994)

- Local permit.
- Local action plans.
- Transparency.
- Public information.

Still under implementation

Increase in pressure and impact

Uncontrolled Urbanisation

- More impervious areas (more emission of pollutants)

Climate change

- Change of frequency and intensity of rain events (more emission of pollutants)
- Highest seasonal reduction of the flow of rivers (less dilution)
- Increase in the temperature of water bodies (microbiological impact)

Reduction measures have to be implemented when this pressure is the reason of not meeting the requirements of European and International regulations

- treated except under unusually heavy rainfall - UWWTD
- Good or excellent quality of bathing water - BWD
- good ecological and chemical status and protected areas objectives in 2015/2021/2027 (e.g. shellfish quality) - WFD
- good ecological and chemical status in 2020 (e.g. marine litter reduction) – MSFD
- Halving the discharges of untreated waste water by 2030 (sustainable development goals)

DISCUSSION POINTS

- ❑ **Implementation of national rain water overflows action plan (article 17 of the UWWTD)**

- ❑ **Ask MS to include systematically measures related to this topic:**
 - **in the bathing water profiles of the BWD**
 - **in the programme of measures of the WFD and MSFD.**

DISCUSSION POINTS

**Building national storm water overflows
and storage tank databases**

**→ establish indicators to follow the actions
plans and programme of measures**

Priority

**Agglomerations of more than 100 000 p.e.
(4% of the agglomerations \approx 50% of the
total generated load)**

DISCUSSION POINTS

Improve transparency

and implement

better alert system

(prevent the contact with contaminated water)



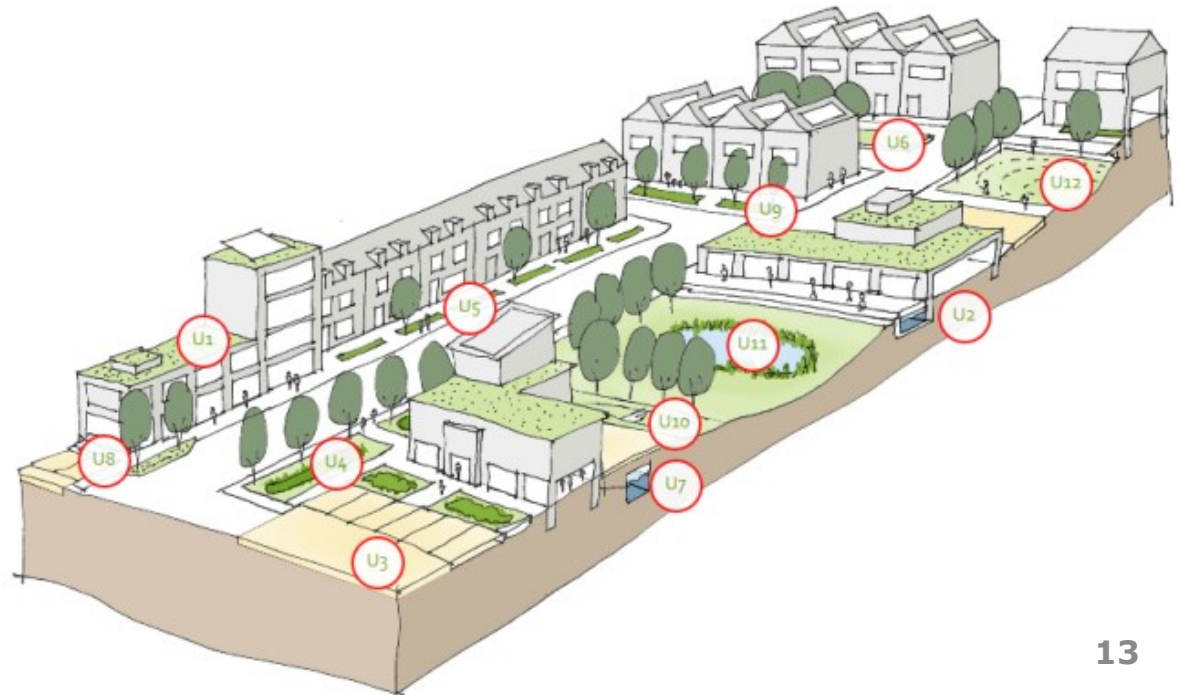
Natural water retention measures in urban areas to limit the introduction of rain water in combine collecting systems.

Commission contribution: best practices website



<http://www.nwrn.eu/>

Transversal and multi-benefit measures



**To be implemented in priority
because it has mid/long term
effects and
it is good for...**

**WATER QUALITY AND QUANTITY,
AIR QUALITY, CLIMATE, HEALTH,
BIODIVERSITY, FLOODING
PREVENTION, LANDSCAPE,
RECREATION...**

Other solutions that can be implemented

- Optimisation of rain storage in collecting systems**
- storage tank(s) related to the collecting system and/or the treatment plant**
- Increase in the capacity of pumping station(s)**
- Increase in the capacity of the treatment plant**
- Increase in the capacity of the collecting system**

Need

- a better knowledge
- a better management
- Implementation of measures to reduce emissions

Any other suggestions?



Thank you for your attention



<http://ec.europa.eu/environment/water/water-urbanwaste>

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