

Type: Urban water spaces - flowing

Category: Urban water systems

Open water elements in the urban environment with flowing water



Description

Open water elements in the urban environment with flowing water, e.g. rivers, streams.

Spatial scale

City quarter/street; City; Region

Problems addressed

- Heat: reduces heating up of surrounding areas
- Heavy precipitation (Floods): buffering and drainage of rain water, flash floods are therefore reduced

Combination with other types of measures

- Green open spaces
- Water retention; water drainage
- Urban setting

Implementation – functionality issues

Effects of buffering and draining rain water depend among others on catchment parameter and precipitation characteristics.

The effect of cooling and preventing heating up is improved when water is moving with many turbulences (spray effect).

Further benefits

- Increases sustainability and life quality in the city quarter
- Can improve biodiversity, e.g. for aquatic and riparian life-forms
- May be combined with recreational public space which is cooler in summer than its surroundings
- Restoration of a channelled stream may improve underground functions, biodiversity, ecological functions
- Combination with disconnecting rain water from the sewer system and draining storm water into open spaces: reduces risk of drying out in times of drought/ heat.

Economic issues

The costs vary according to size and complexity of measure

Acceptance

- Acceptance of neighbours may not be very high as they are afraid of littering, noise and smell of the water body and surroundings.
- Acceptance can be improved by early involvement of stakeholders and citizens.

Possible obstacles

- Could cause flooding itself
- Might cause accidents
- Available space/ conflicts with other urban uses may arise.

Find examples in Structural Fact Sheets



Green-blue corridor
Kamen, DE



Water Vision
Nijmegen, NL



Ambition note
Wvi, Ieper, BE



Climate dike
Tiel, NL



Urban planning
Wvi, Ieper, BE



Renewable energy
Rouen, FR