# Water Study “De Vloei”

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| Status | Study, Finished |
| Location | Belgium, West Flanders, Ieper, De Vloei |
| Spatial info | Urban quarter or street; building; residential area |
| Measure type(s) | Green open spaces; Water retention; water drainage; urban water spaces – standing water |
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## Description and Aim

The water study comprises investigations to keep the discharge of rainwater to areas downstream to the absolute minimum (which goes further than what legislation dictates), also in the future and to calculate what measures are needed to reach this goal. The study comprises:
1) an inventory (on hydrology, geology, legal regulations, present infrastructure for water, possibilities and problems in the area) paying attention to the adjacent quarter and its water problems.
2) Specific calculations regarding the planned buildings and pavements, current and future rains (including climate change), the possible use and infiltration of rainwater.
3) Proposed measures to bring the rainwater in a surface water network and minimize run-off towards downstream areas. Also solutions are given for the sewer water.

## Adaptation to climate change

### Problems addressed:

Heavy precipitation/flooding, Drought

Lesser total amount of rain water in summer. Increased amount of rain water during winter

### Receptor(s):

Population, Infrastructure, Built environment, Natural resources

Aims: Minimise run-off of rain water to downstream areas, also in the future // Sustainable water use // Reduce the impact of periods of drought, also in the future

## Experiences

### Functionality:

After implementation of the results of the water study: Less risk of flooding; Less risk on running dry of the surface during periods of drought; See also structural fact sheets about implementing the results of the water study: Use of rainwater, slowed run-off, infiltration of rain water,

### Further synergies/benefits:

Liveability: the surface water structure allows for social contact, playgrounds and recreation around the water system; Ecology: a system of ponds and green structures allows for more species (plants and animals) to survive in an urban area.

### Costs:

56.600 €. The water study is more elaborated than in a standard project, which means an extra cost. If the proposed measures are implemented: avoid costs due to flooding; Social gain: quality of life rises

### Funding:

European funding/Flemish funding/funding by the De Vloei project partners

### Stakeholder involvement:

Study: All project partners of De Vloei, Consultant; Implementation of the results of the study: Individual builders and property development companies, Architects, Contractors, Municipality of Ieper, Consultants;

### Obstacles/restrictions:

All project partners need to be convinced of taking climate change into account before realisation is possible and have to be convinced of bringing the rain water in a surface water network instead of underground pipes.
The consultant was not that experienced in the matter of climate change. It took guidance and extra work from the project partners to get all the needed information in the study.