UPS

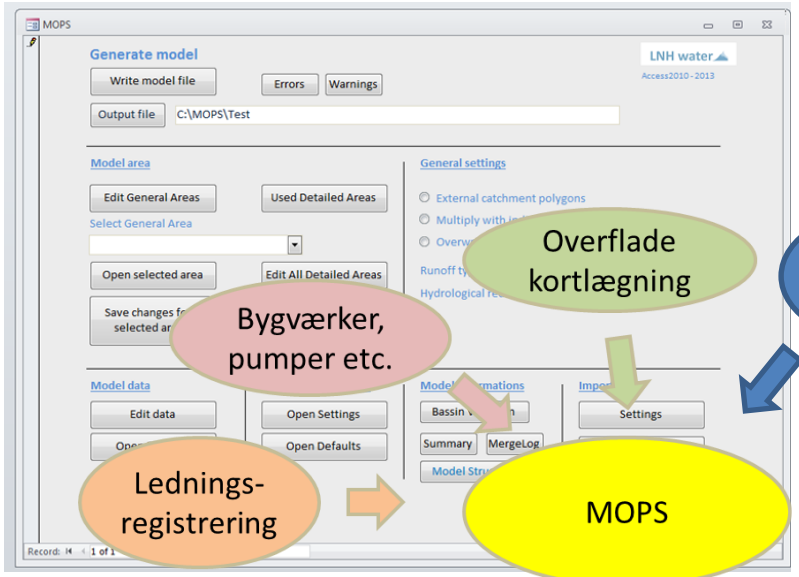
Udvikling af Planlægningsværktøj til prioritering af klimatilpasning og Skybrudsløsninger indenfor urban afstrømning

1/9-2016 to 1/4-2017

LNH water

- Established in 2008
- Consultants in Urban drainage
- Software Development:
  - 1d/1d modelling of urban flooding
  - Administration tool for sewer data and modelling
  - Hydraulic modelling tools

MOPS - **M**odel**OP**bygnings**S**ystem



Overflade kortlægning

Bygværker, pumper etc.

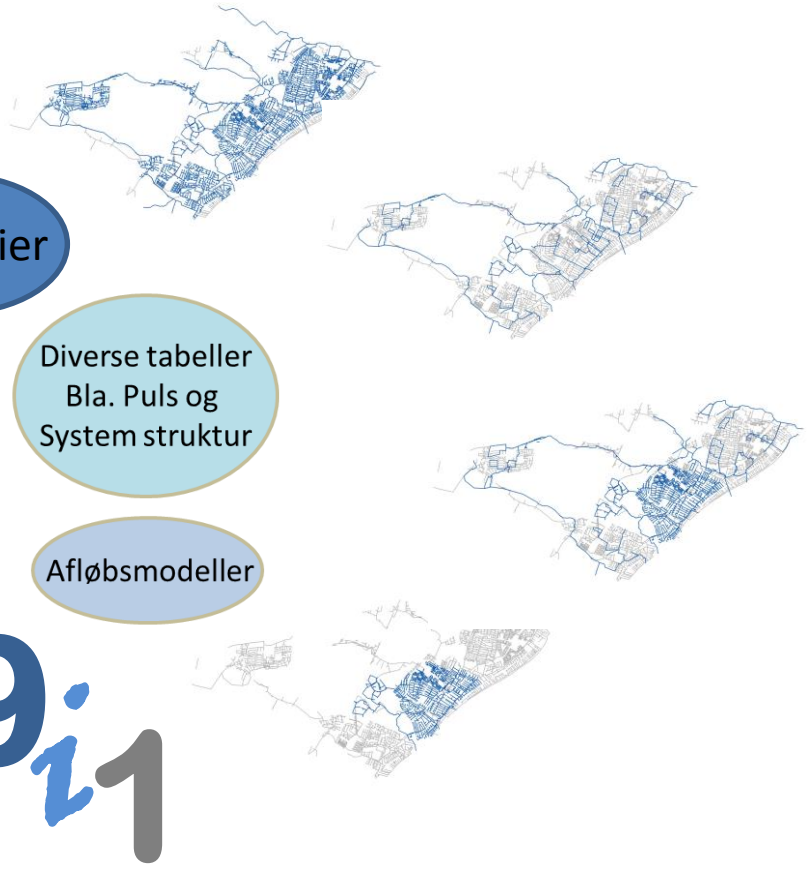
Lednings-registrering

MOPS

Scenarier

Diverse tabeller Bla. Puls og System struktur

Afløbsmodeller



UPS

- DTU Environment, DTU Management and LNH water – total of 1600 hours
- Development of modules compatible with MOPS:
  - Mapping of Urban Areas using high resolution ariel data
  - Implementation of climate adaptation measures in SWMM
  - Initial Conditions for Urban Rainfall-Runoff Models Using the Modified Horton's Infiltration Model and Historical Rainfall Data
  - Interface and tools for QGIS

Application process

- Contact already established
- Meetings with DTU Management and DTU Environment
  - What was needed?
  - Who could do what?
  - When could we do it?
- Joint collaboration writing the application and DTU Management was coordinating
- Meeting with VIS on formalities in the application
- Easy and fast process

Project process

- Standard for registration of hours and tasks
- Several meetings discussing progress and results
- Testing of modules
- Short report on the results

Results

- Paper to be presented at ICUD 2017 in Prague on infiltration and use of historic rain data
- MOPS optimized for handling large amounts of data and climate adaption measures are implemented
- MOPS compatible with SWMM
- MOPS compatible with QGIS
- Several plugins developed for QGIS
  - Surface mapping
  - Interface for editing the hydraulic models and presenting adaption measures
  - Flood mapping and risk assessment (existing plugin)