

Master thesis - Towards a better use of rainwater in urban areas through quantitative assessments of water flows – application to the Espierres watershed : Files SWMM

To perform the modeling on SWMM.

1. Open the EPA SWMM
2. Open a project, choose one of the files .inp. It should open the project with a map.
3. If the map background doesn't appear, View > Backdrop>Load and choose the file with the same name .png for the image and .pgw for the World coordinates files, in the folder fond de carte. Click on Scale Map to backdrop image.
4. Choice of the duration of the rain: on the left side click on hydrology> Rain Gages>Rain(double click), change the Series Name in Time Series.
5. Run a simulation: click on the flash, ok.
6. See the results: Report>Summary. Then you can change the data to see.

Blommerie : Backdrop file (blommerie.png and .pgw)

- Blommerie.inp : all the subcatchments directly connected to the outlet.
- Blommerie-link.inp : the subcatchments are interconnected.
- Blommerie-FS.inp : modeling with the filter strip of 0.5m.
- Blommerie-IT.inp : modeling with the infiltration trench of 0.5m.

Nouveau Monde :

- Subcatchment+egouttage.inp : (backdrop file = sewage) subcatchment connected to the sewage system.
- Subcatchment+egouttage+FS.inp : (backdrop file = sewage) modeling with filter strips of 0.5m.
- Subcatchment+egouttage+FS-1m.inp : (backdrop file = sewage) modeling with filter strips of 1m.
- Subcatchment+egouttage+IT.inp : (backdrop file = sewage) modeling with infiltration trenches of 0.5m.
- Subcatchment+egouttage+It-1m.inp : (backdrop file = sewage) modeling with infiltration trenches of 1m.
- Subcatchment+egouttage-zoom.inp : (backdrop file = zoom) modeling of the lot of houses.
- Subcatchment+egouttage+toit plat-20-zoom.inp : (backdrop file = zoom) modeling with the flat green roofs at 20 % of the houses.
- SUBcatchment+egouttage+toit plat-zoom.inp : (backdrop file = zoom) modeling with the flat green roofs at 100% of the houses.