

ESTONIAN WATER WORKS ASSOCIATION EVEL

Namur Urban waste water collection and treatment

26th of October 2015

Baseline data

- POPULATION : 105.000 inhab.
- POPULATION Meuse upstream : 92.000 inhab.
- POPULATION Sambre : 13.000 inhab.
- Collective treatment systems : 96.000 inhab. (13.000 m³ WW/d)
- Individual treatment systems : 9.000 inhab (+- 10 %).
- At the confluence of 2 main rivers : Meuse and Sambre



La Sambre

Le Houyoux

La Meuse

L'Orjo

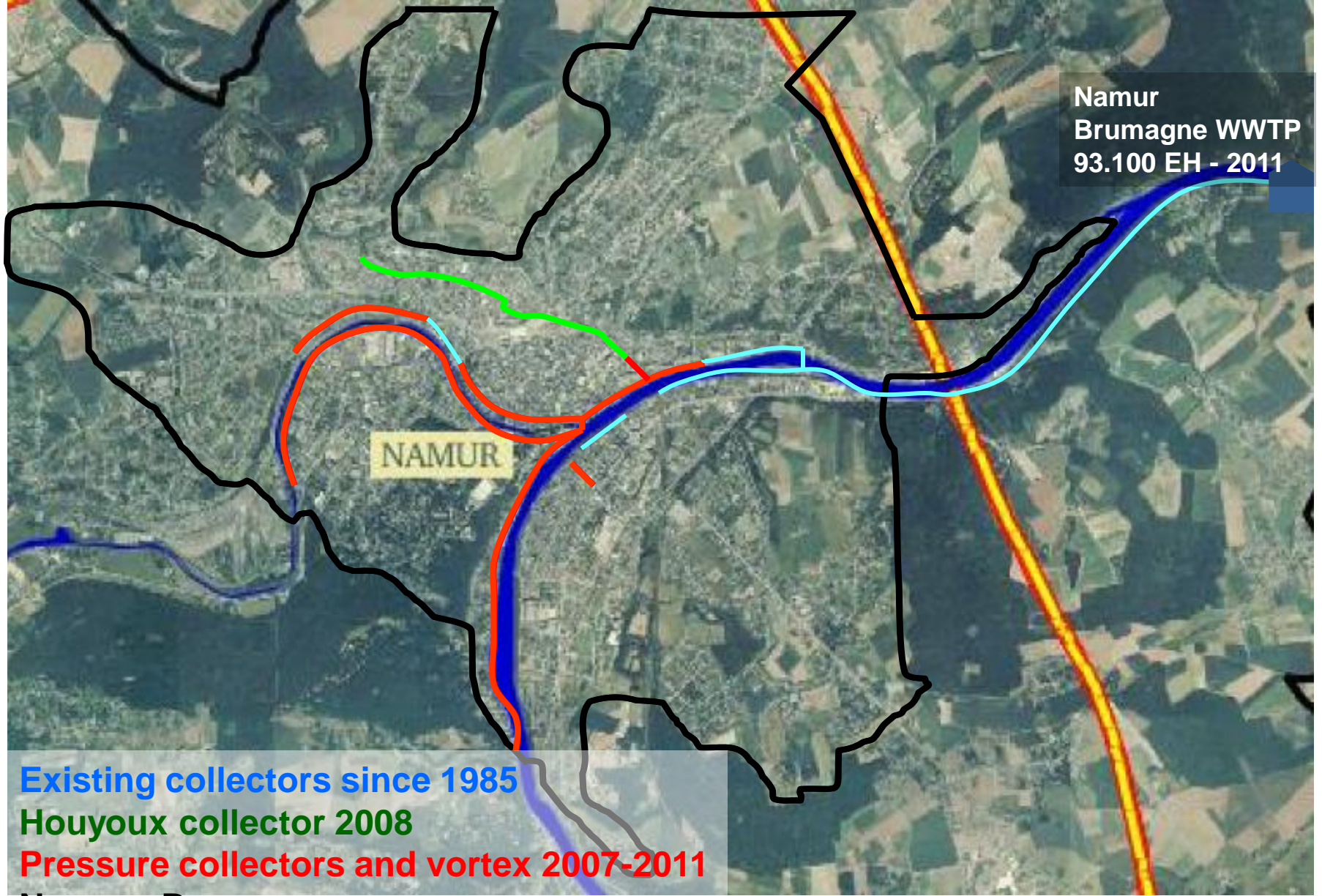


Origine du réseau d'égouts urbain

Namur
Brumagne WWTP
93.100 EH - 2011

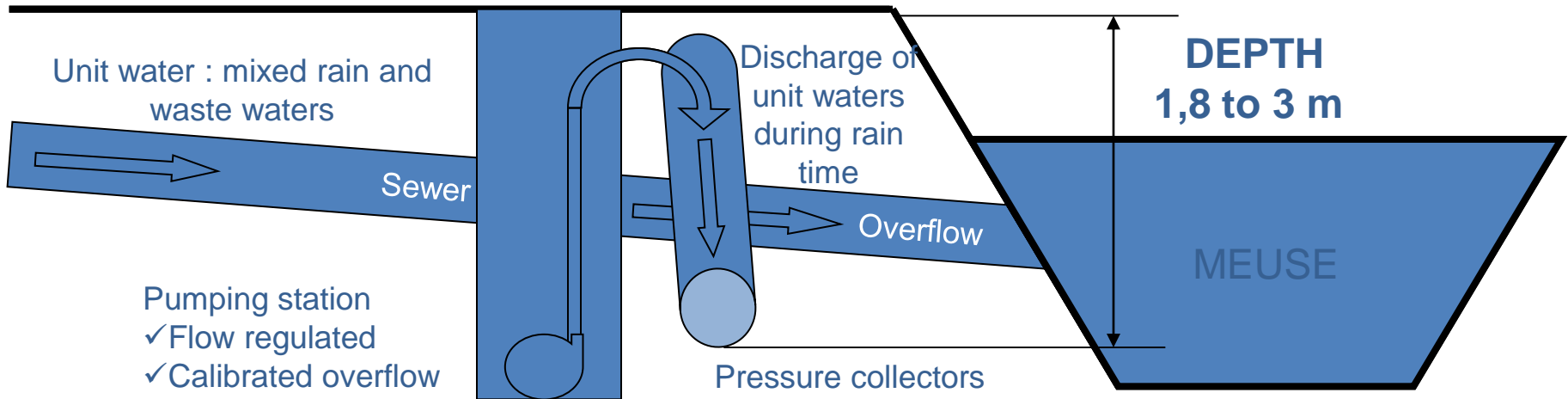
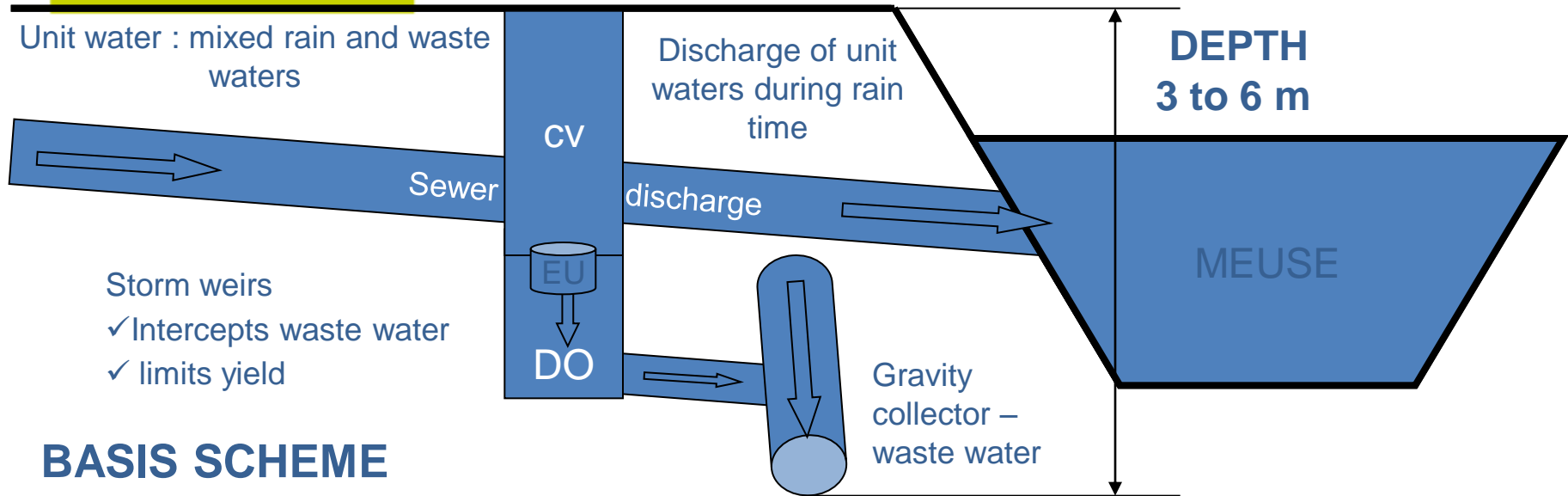
NAMUR

Existing collectors since 1985
Houyoux collector 2008
Pressure collectors and vortex 2007-2011
Namur - Brumagne area



Conception

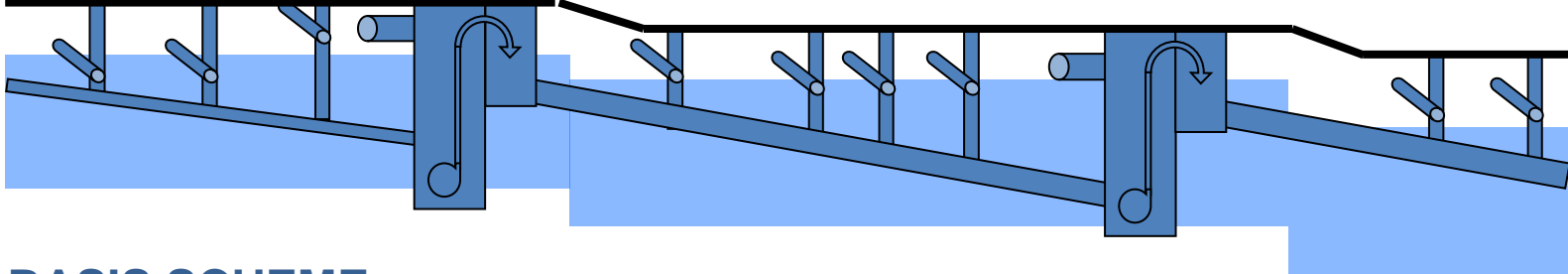
- Waste water pressure transport
 - Goal : Avoid to many groundworks and lower pipe sections
 - Objectives : Limit displacement of pipes and other networks
- Treatment of water discharge under rain time
 - Goal : Compensation of flow limit involved with pressure systems
 - Objectives: Lower discharge of water during rain time



UNDER PRESSURE SCHEME

Longitudinal profile of the collector

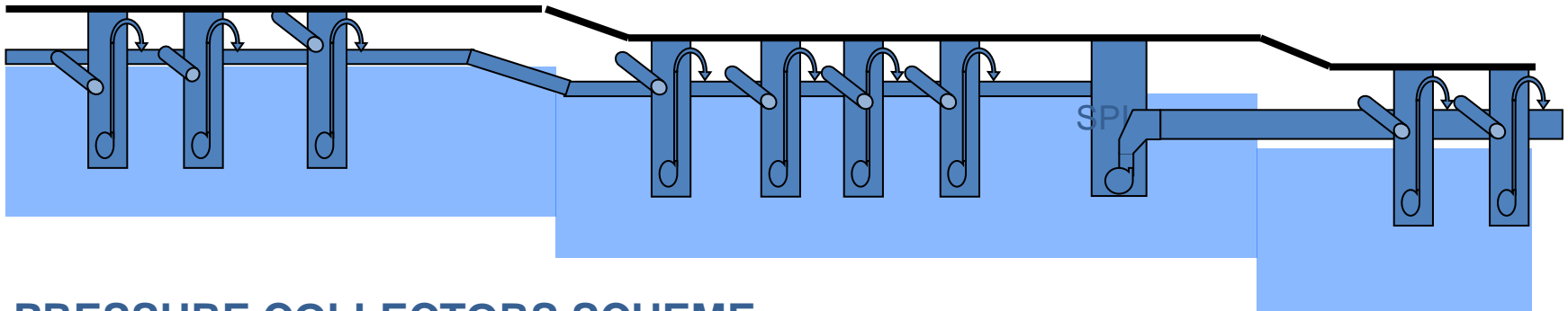
Path along the river



BASIS SCHEME : SUCCESSIVE PUMPING

Path along the river

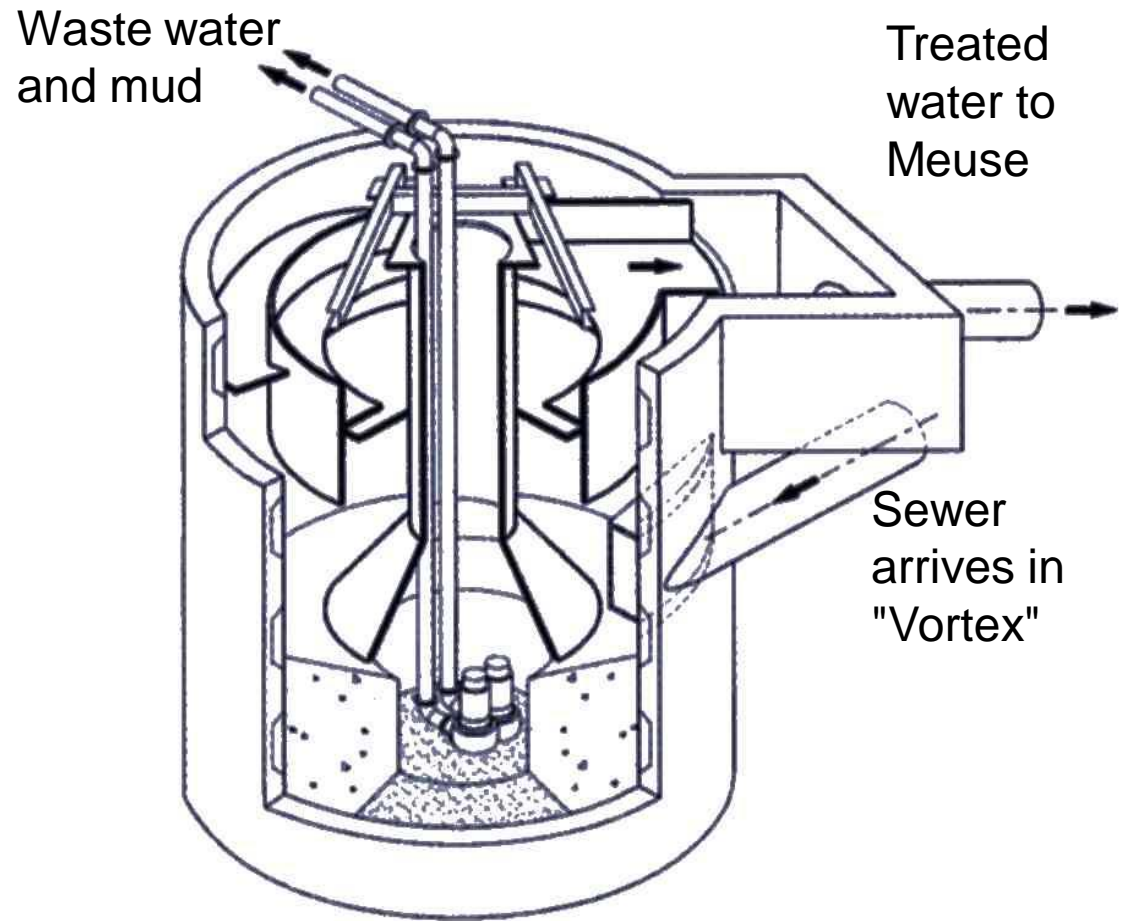
Intermediate pumping station



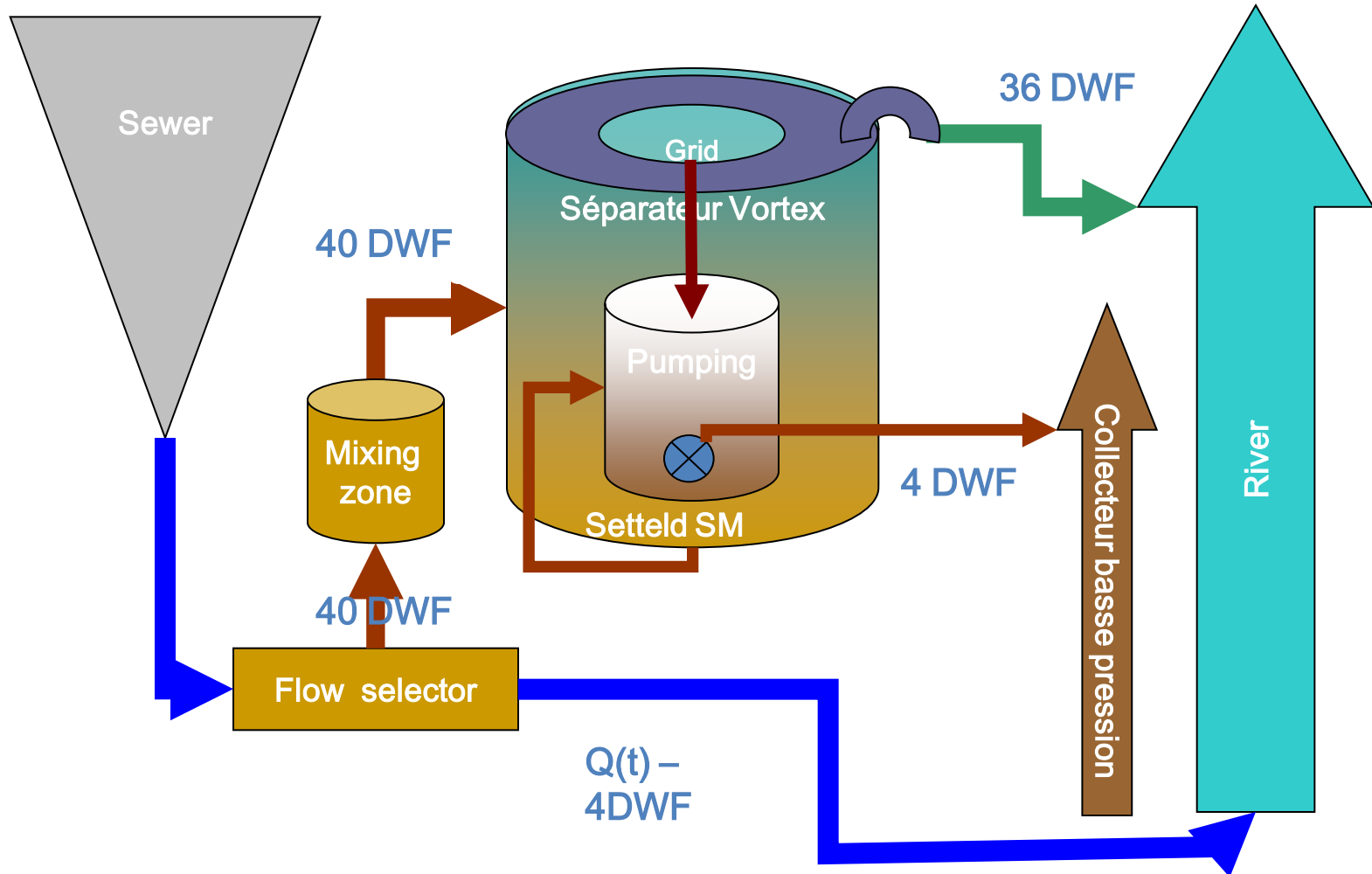
PRESSURE COLLECTORS SCHEME : PUMPING WITH ONE MAIN DISCHARGE

Rain water treatment

- Treatment system at each urban discharge
- « Vortex » technology
- Objectives :
 - Separate particulate matter (200μ)
 - Take off floating matter (>1 cm)



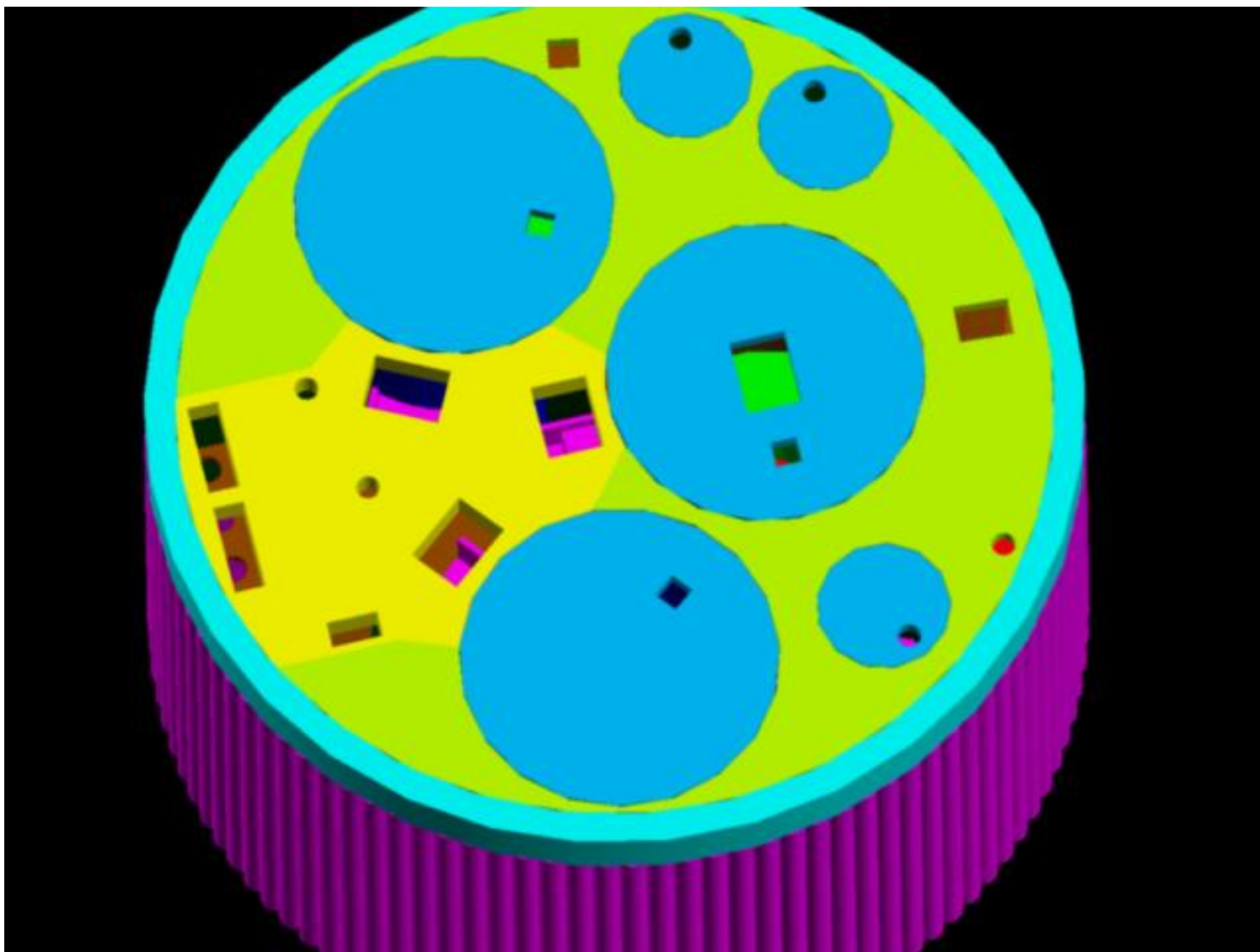
Summary



Main data's

- Vortex : 37 units
- Pumping stations :10 units
- Pipe lengths (cumulated) : 15 km
- Cross section of pipes : 200 mm upstream until 900 mm downstream
- Bidder : SM CFE – DANHEUX & MAROYE - NIZET
- Amount of works: 48.770.000 €
- Commissioning start from 05-2007
- End of works: 04-2011

Complex works





Thank you