



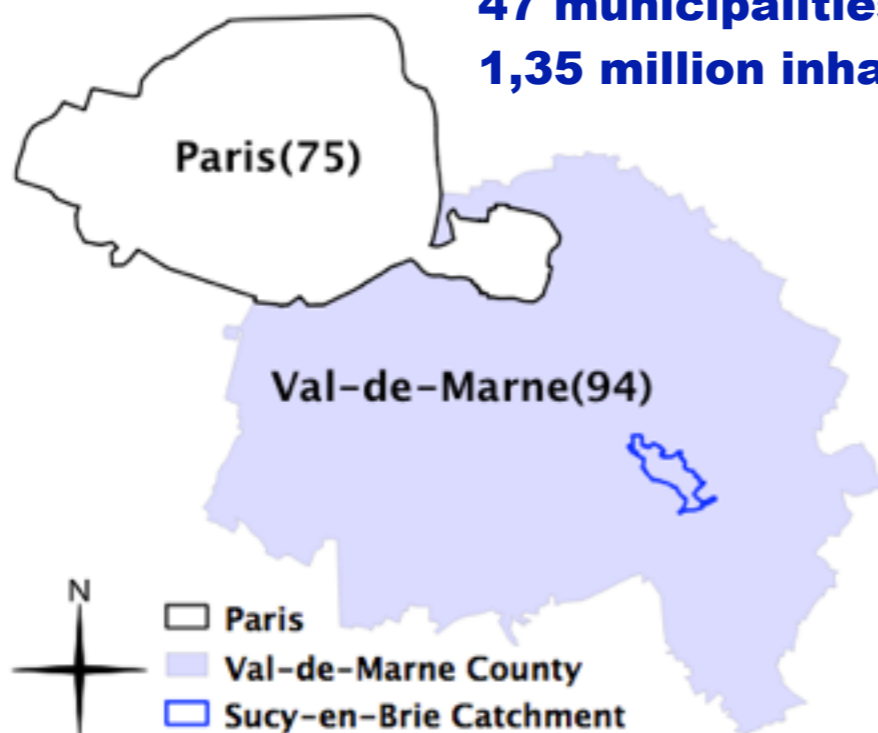
RainGain International Local Government Conference on Surface Water Flooding

Ph. Bompard & A. Ichiba
London, Wednesday, 8 October 2014

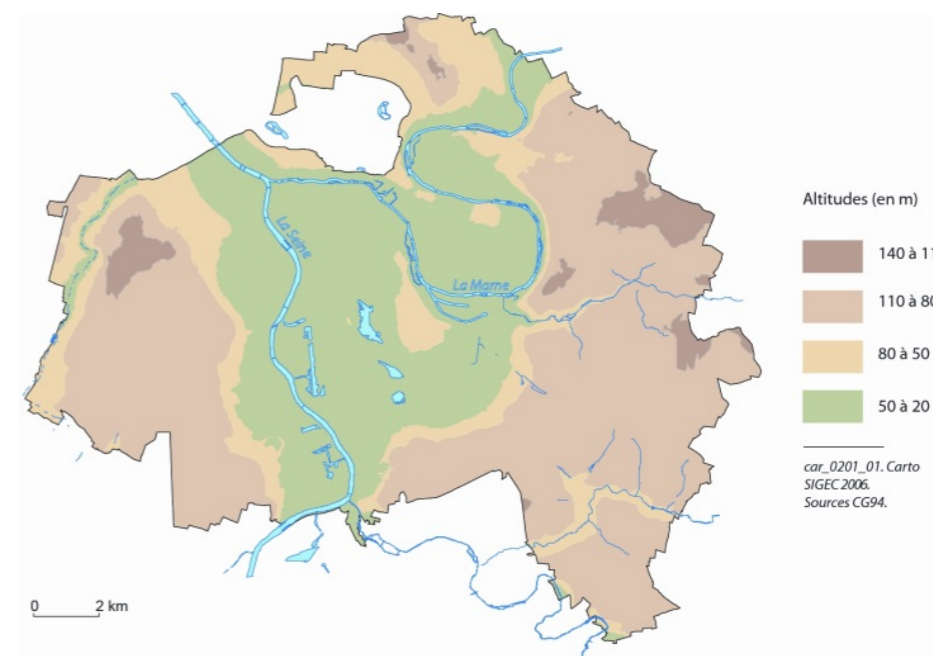


local enivrement

245 km²
47 municipalities
1,35 million inhabitants

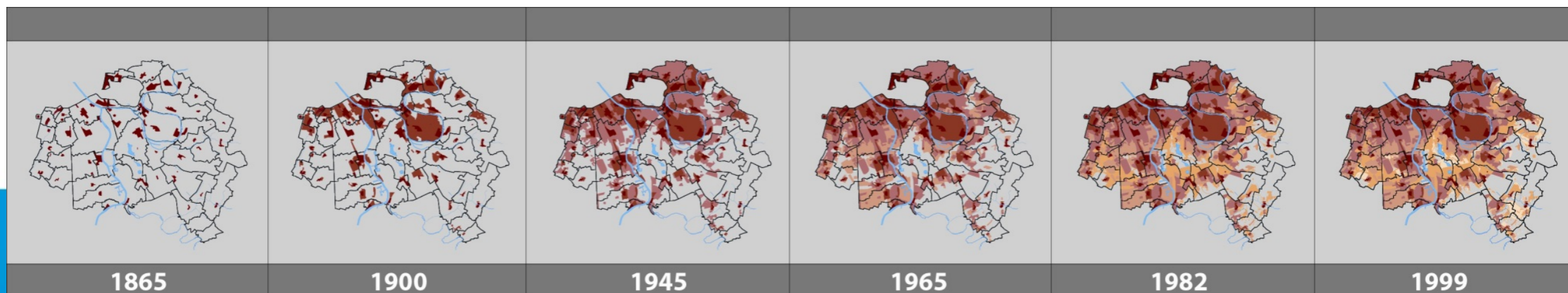


Flate Topography



2 main rivers in Paris region(Seine & Marne)

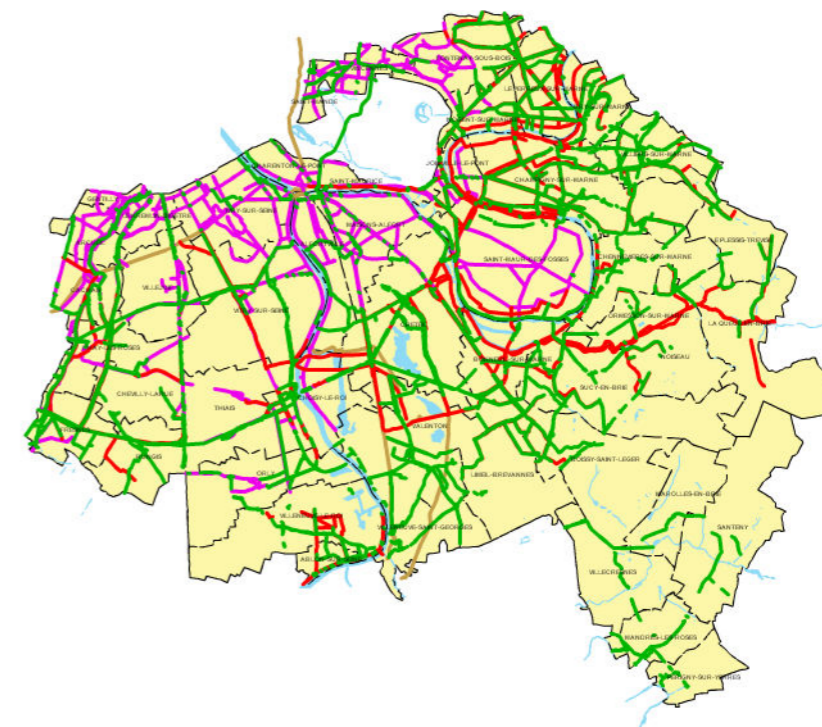
Increase of urbanisation



Sewage system and equipments

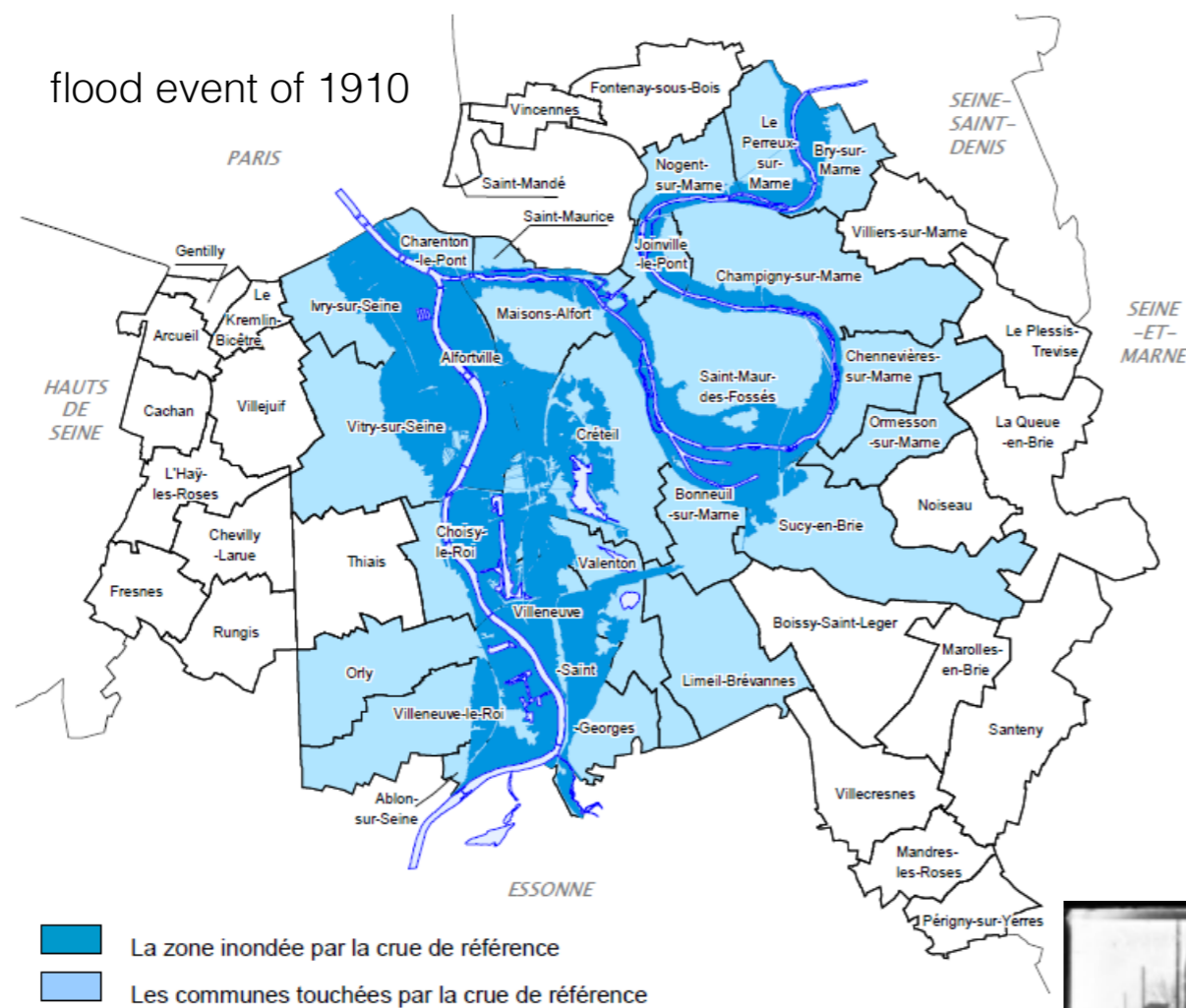
30 typing bucket rain gauges operated in real time

900 km sewer network (75% separated)



24 pumping stations
222 measurements points Flow and level
200 electromechanical equipments

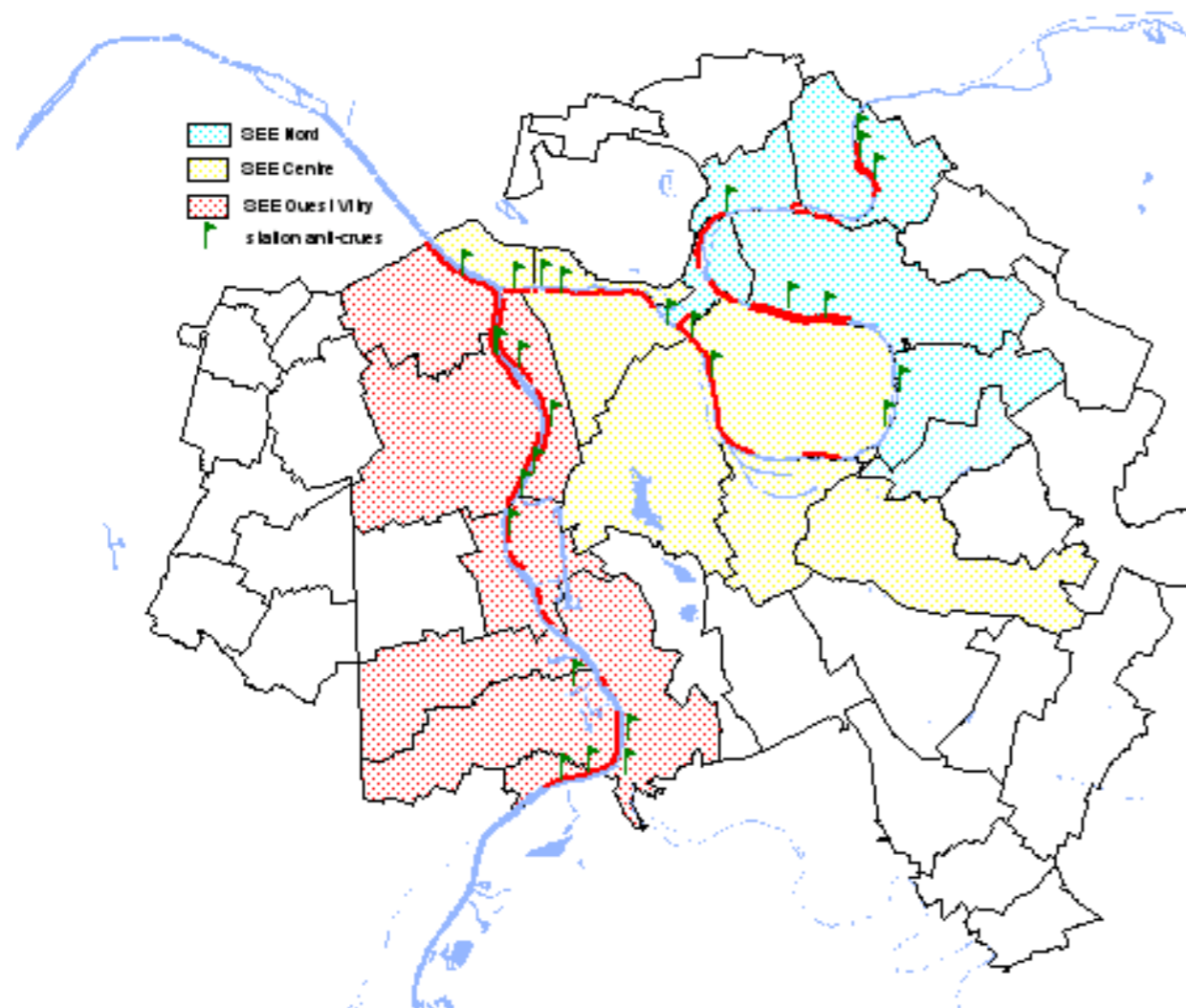
Flood issues: river flood



Source gallica.bnf.fr / Bibliothèque nationale de France

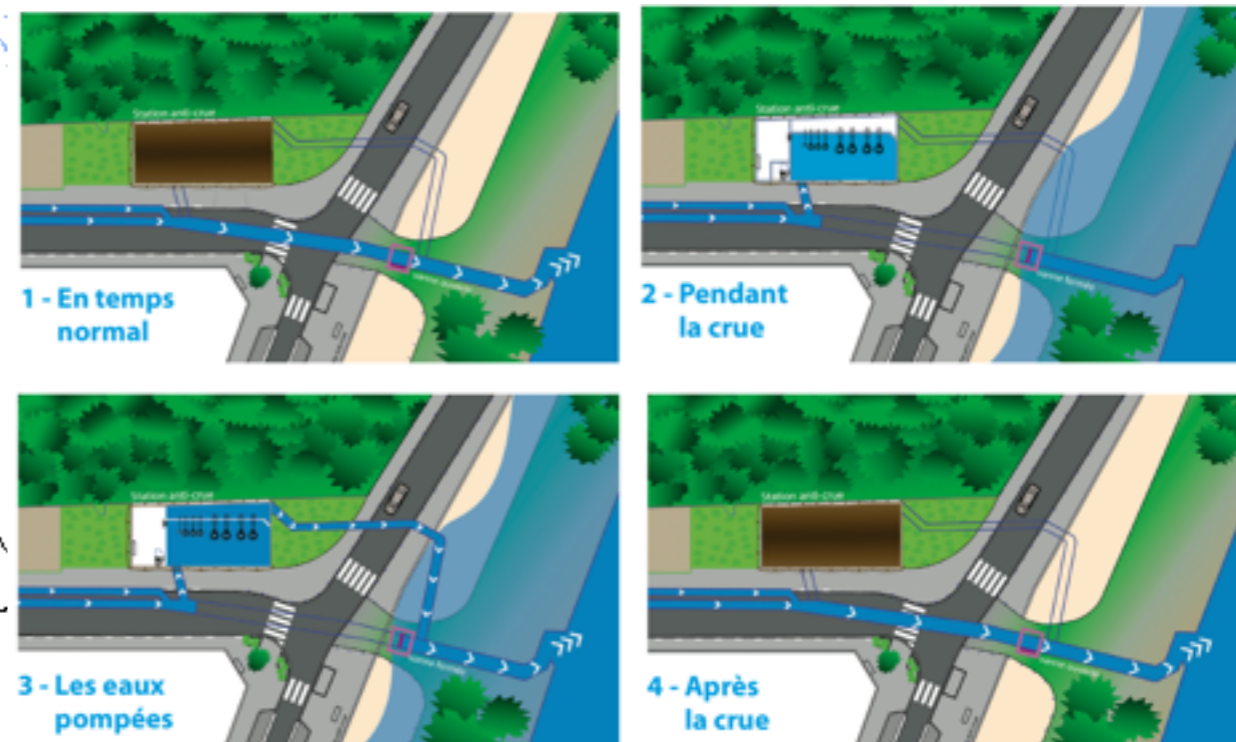
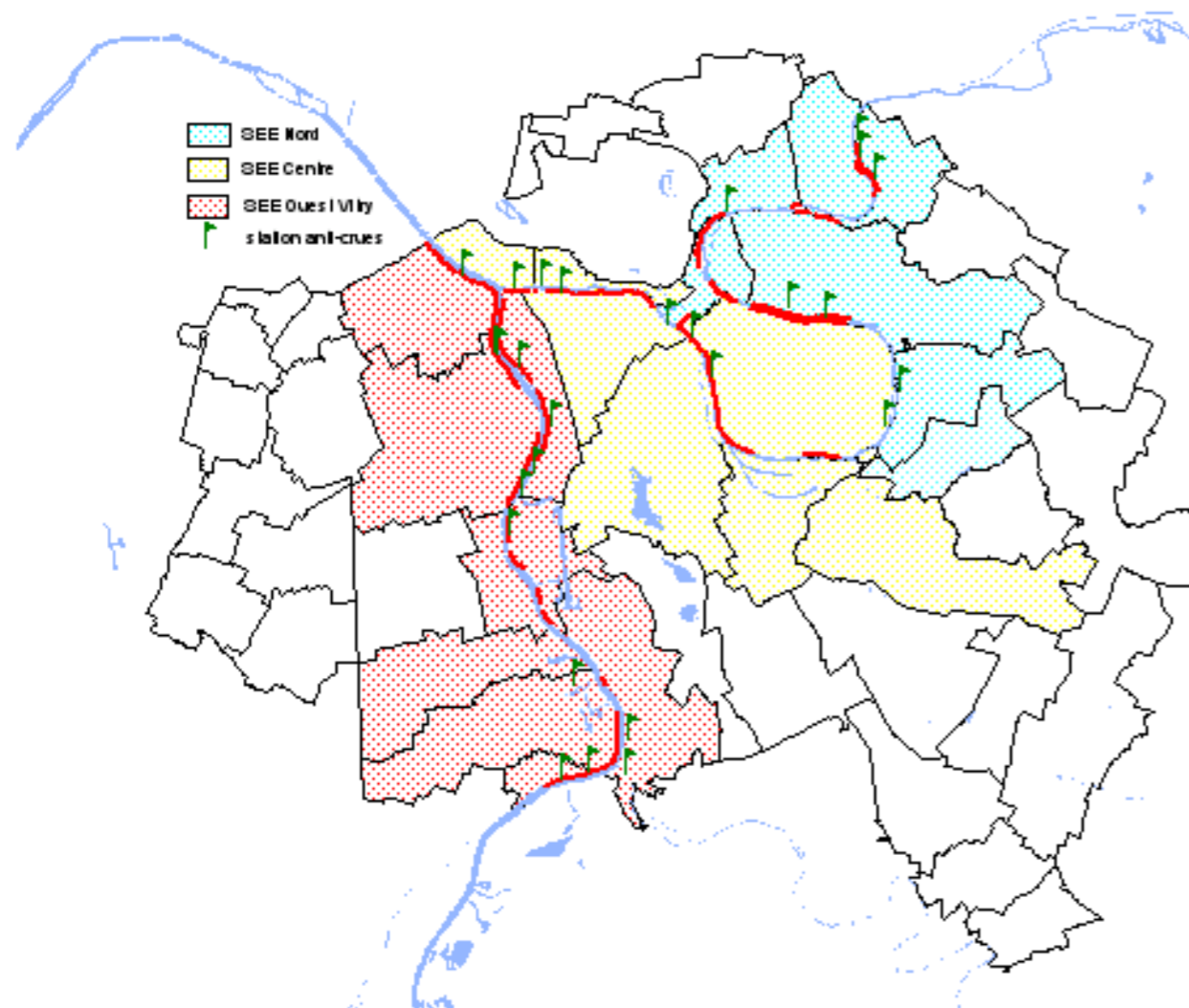
Flood issues: river flood

small protection wall

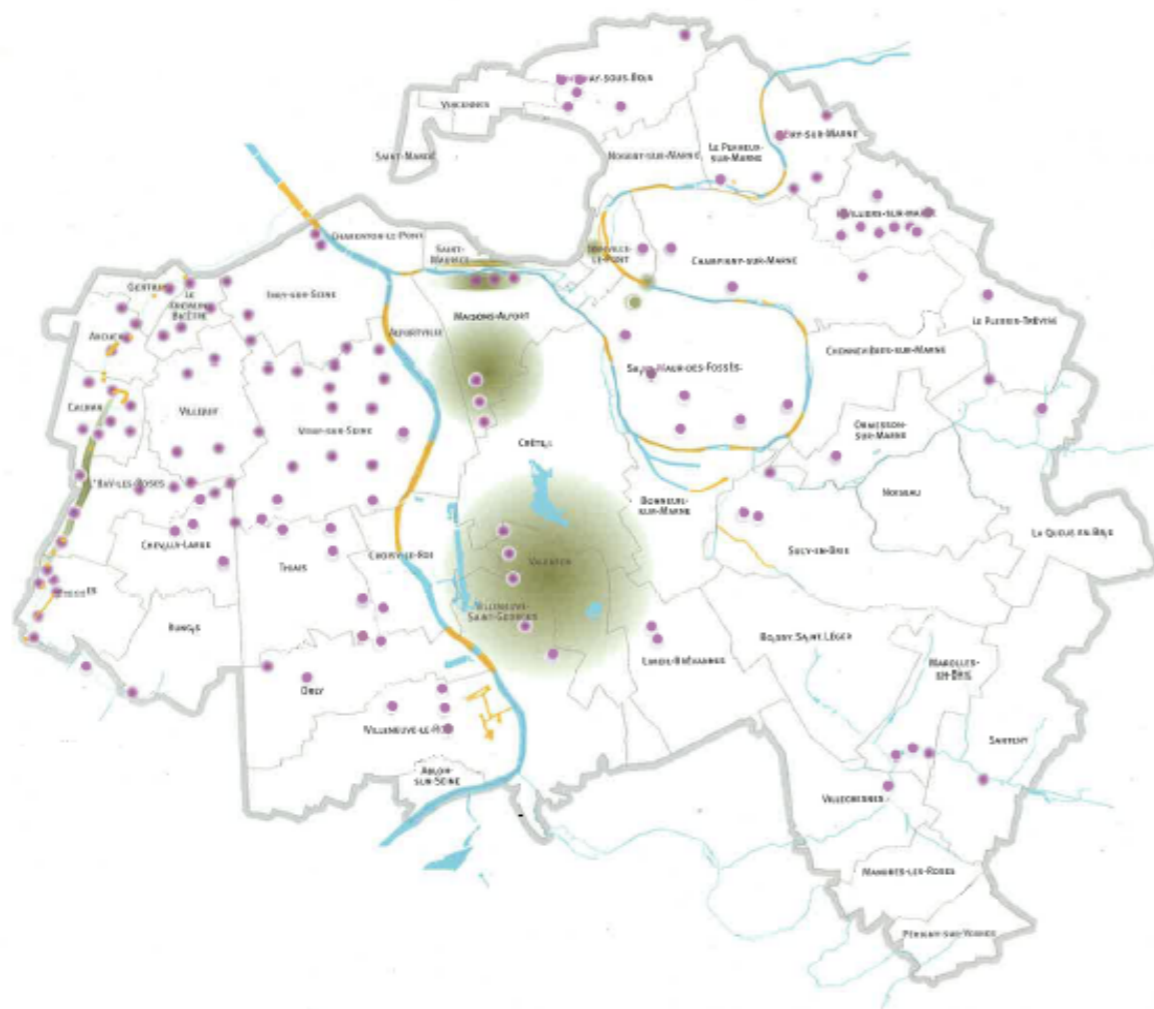


Flood issues: river flood

Anti flood station

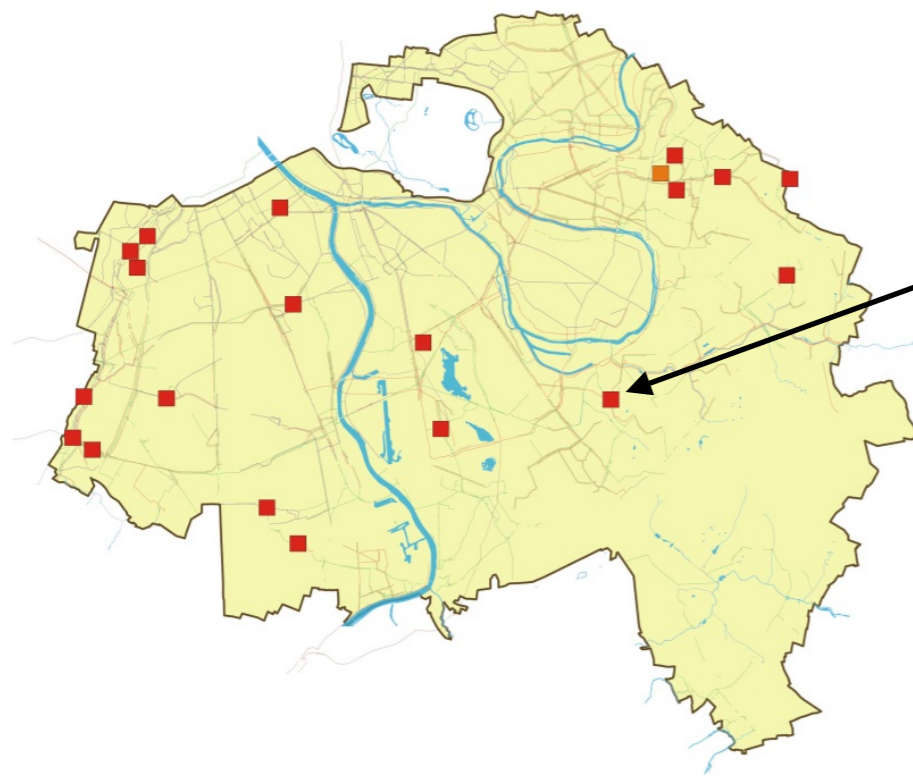


Flood issues: sewage flood



Flood issues: sewage flood

Sucy retention basin (10 000 m3)

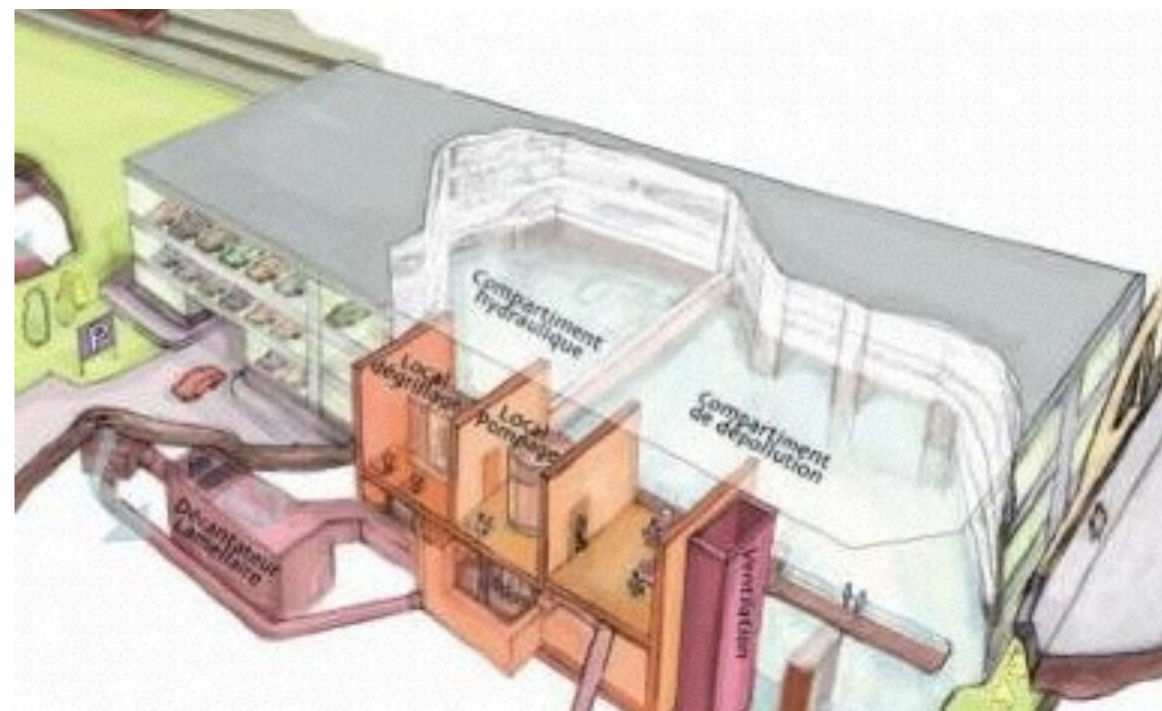


20 storages basins, from 200 to 75000 m3



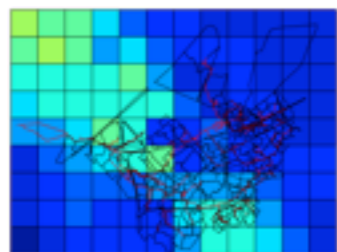
2 compartments ==> 2 objectives

1. Protection against flooding by volume storage during the peak flow
2. Depollution of pluvial water before releasing it into the natural environment (Marne river)



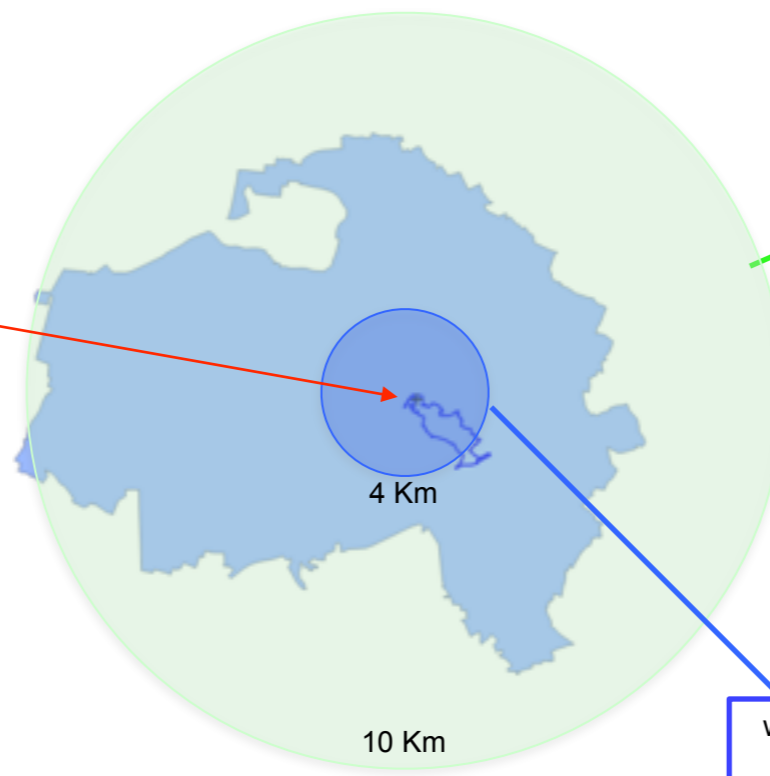
radar forecasting system

C band radar reflectivity R



C_band_radar

37km



Early-warning threshold:
36mm in 30mn

observed in 4 radar pixels

warning threshold:
25mm in 30mn

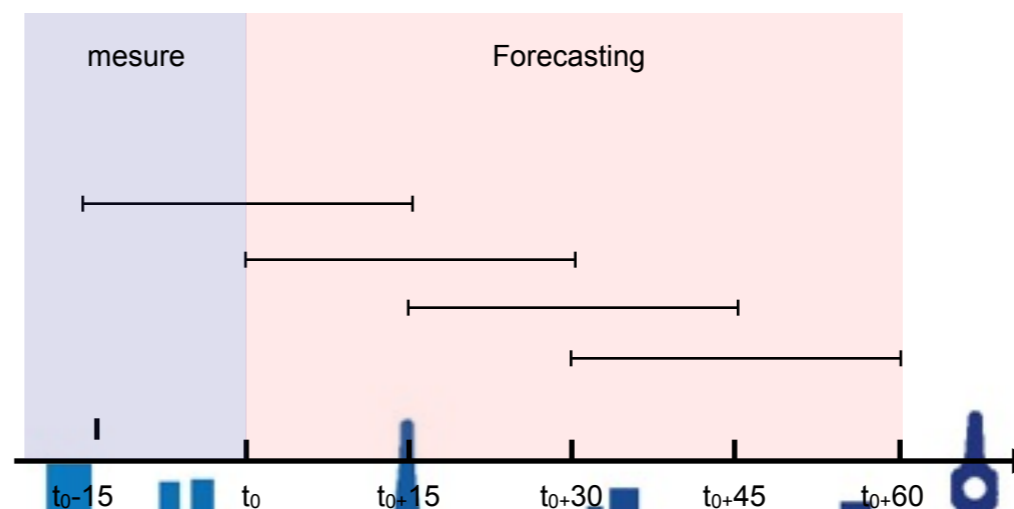
radar reflectivity correction



Rain-gauge network used in real time



Exemple of the calculation of the cumulative rainfall



Anti flood exercise



Thank you for your attention

