

Paris metro sewer and water use historical evolution (1850-2000)

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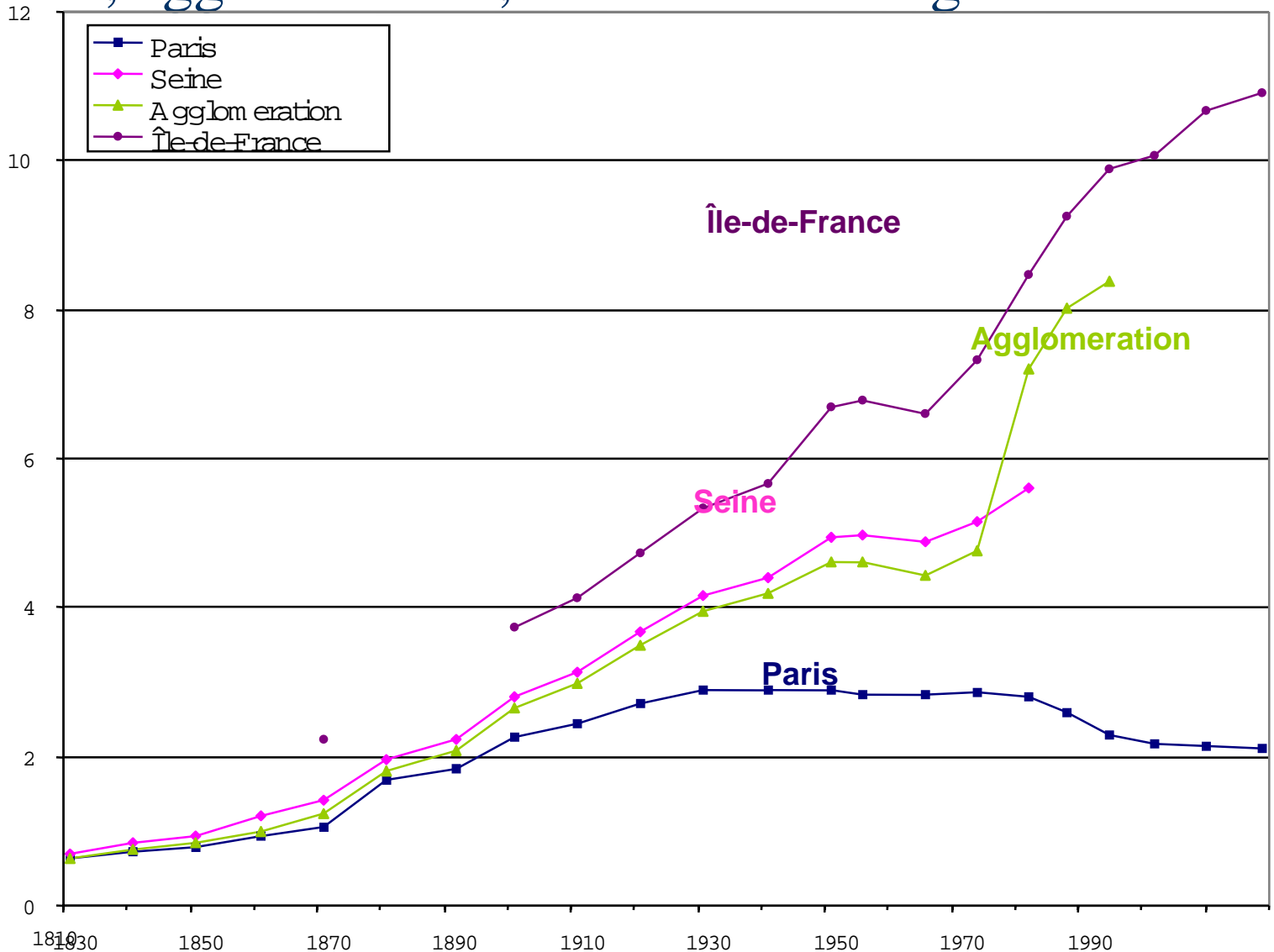
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CITÉ*



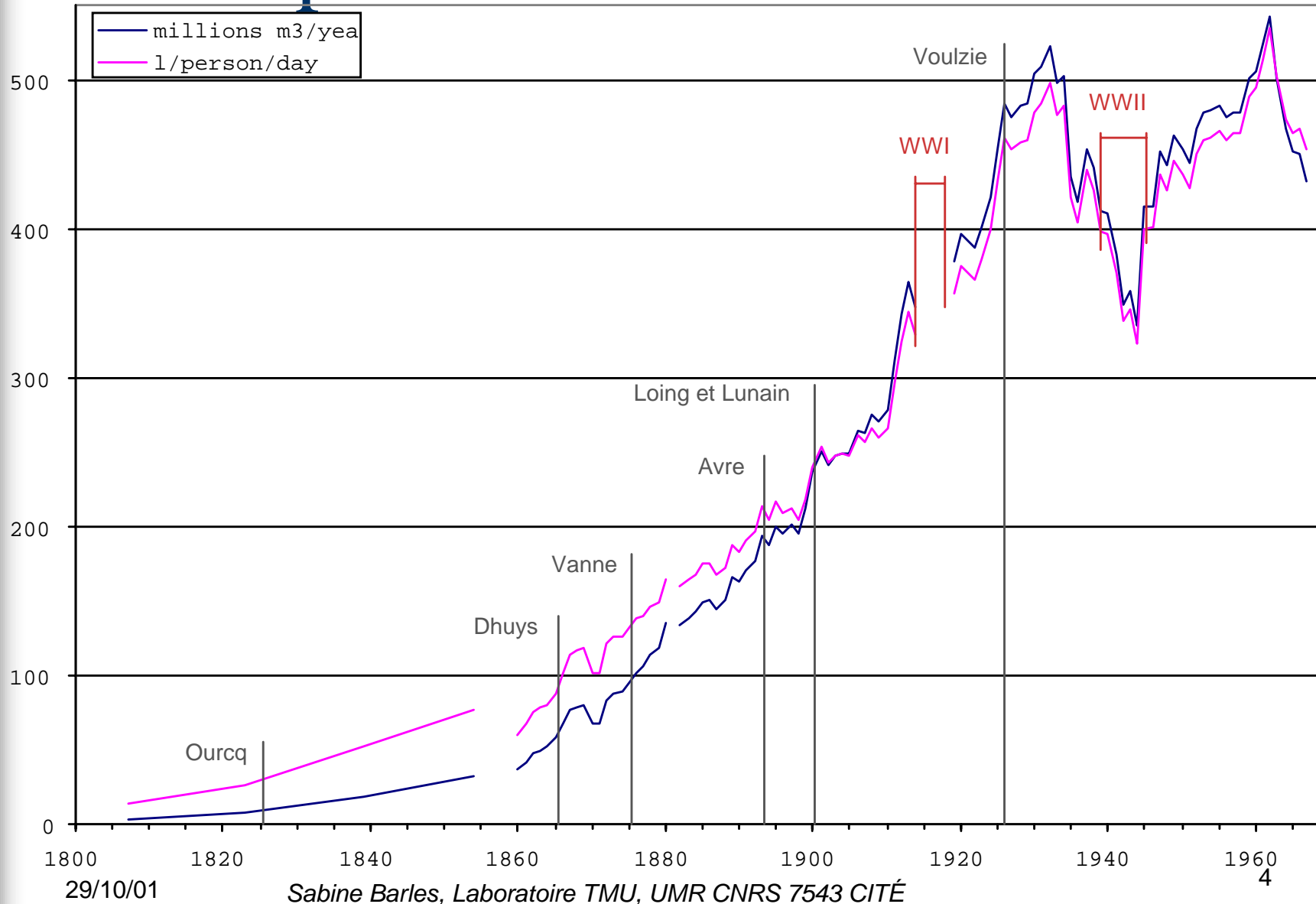
Paris conurbation sewer evolution

- 1811-1999 population
- 1807-1967 total urban water consumption
- 1900-1962 per capita urban water consumption
- 1806-1967 extension of sewers in Paris
- 1900-1960 WW collection rate
- 1865-1988 annual sewer discharge, treated and untreated wastewater
- 1880-2006 daily sewer discharge and treatment capacity

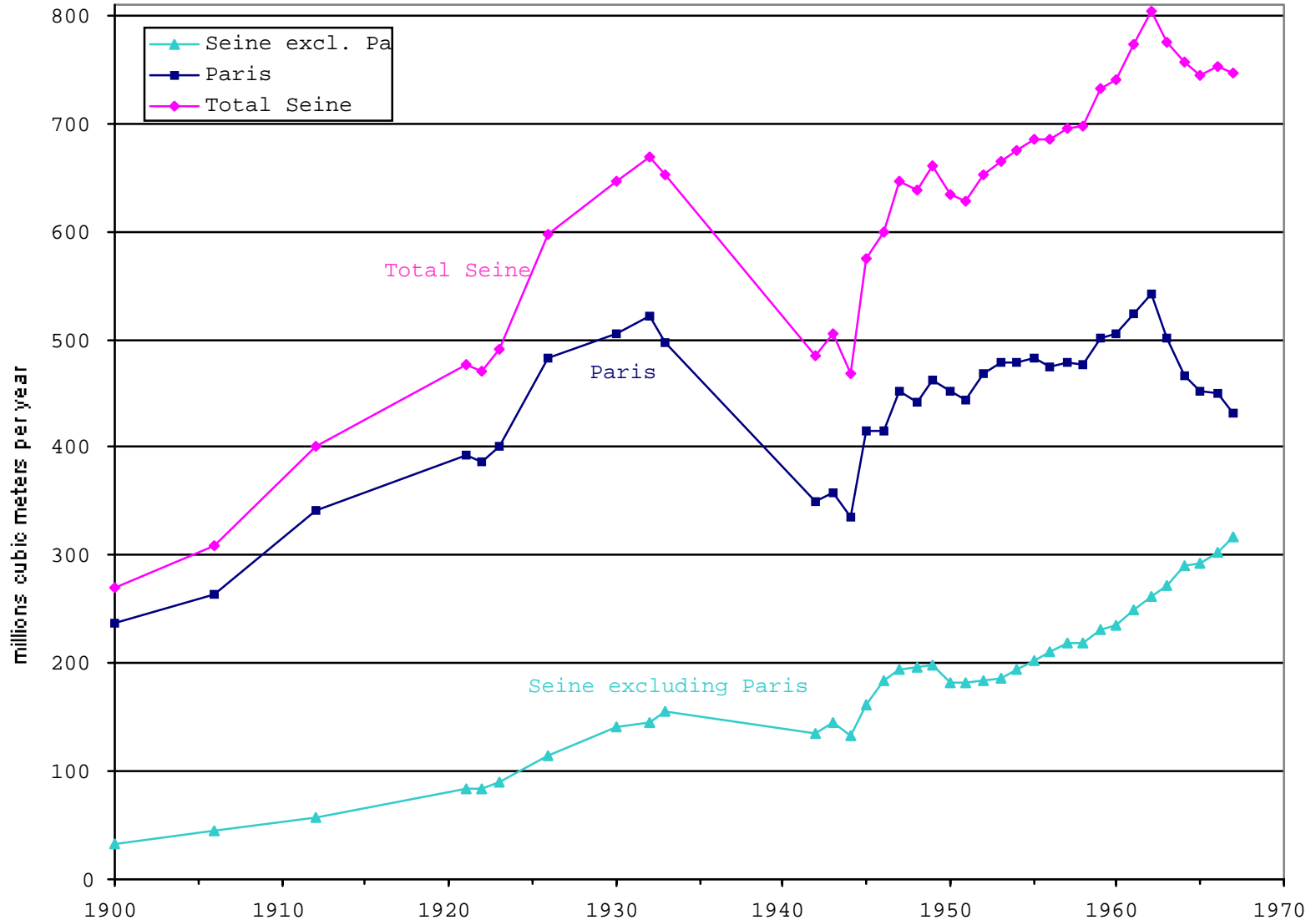
1811-1999 population: Paris, Seine district, agglomeration, Île-de-France region



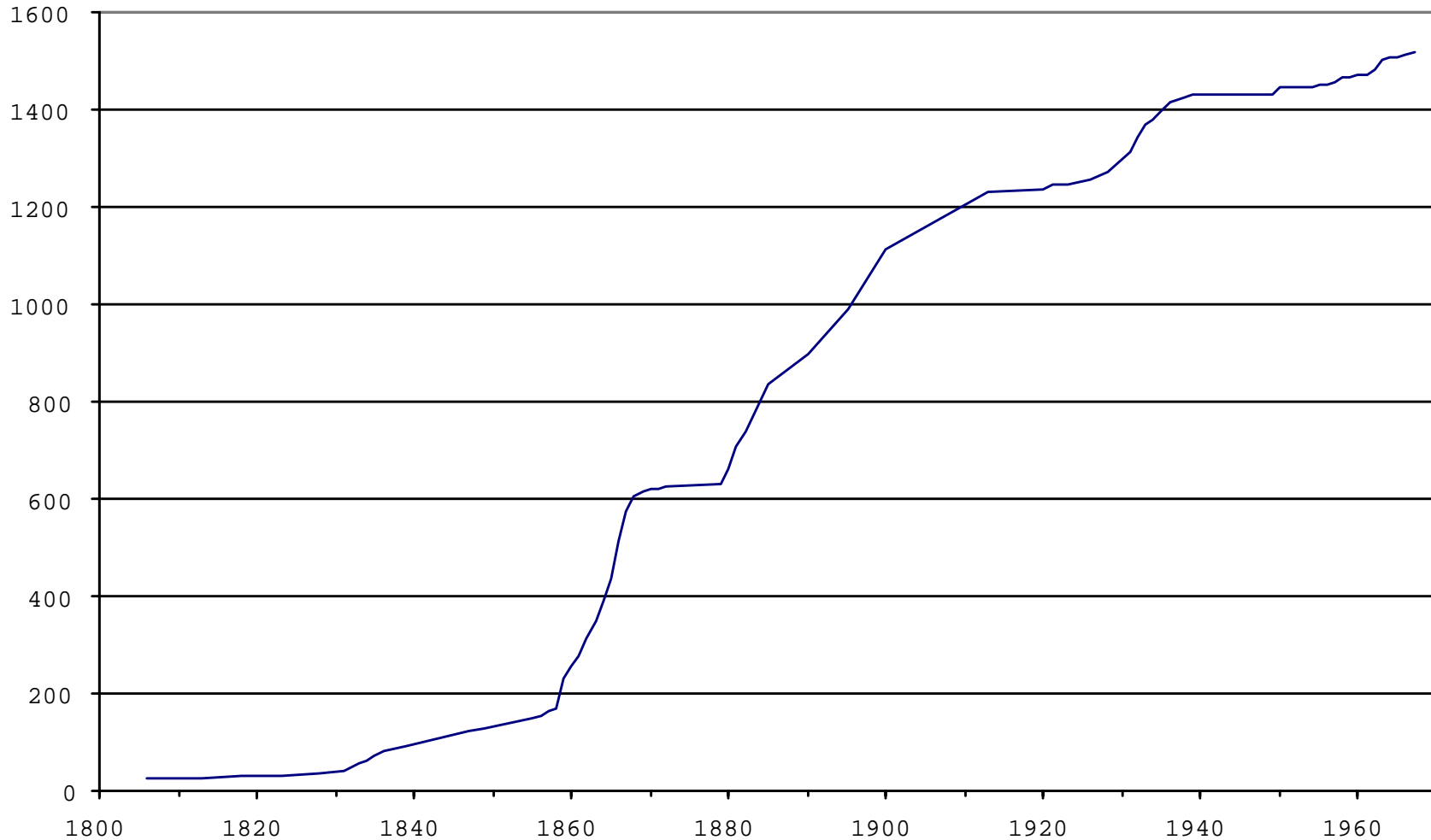
1807-1967 total urban water consumption: Paris



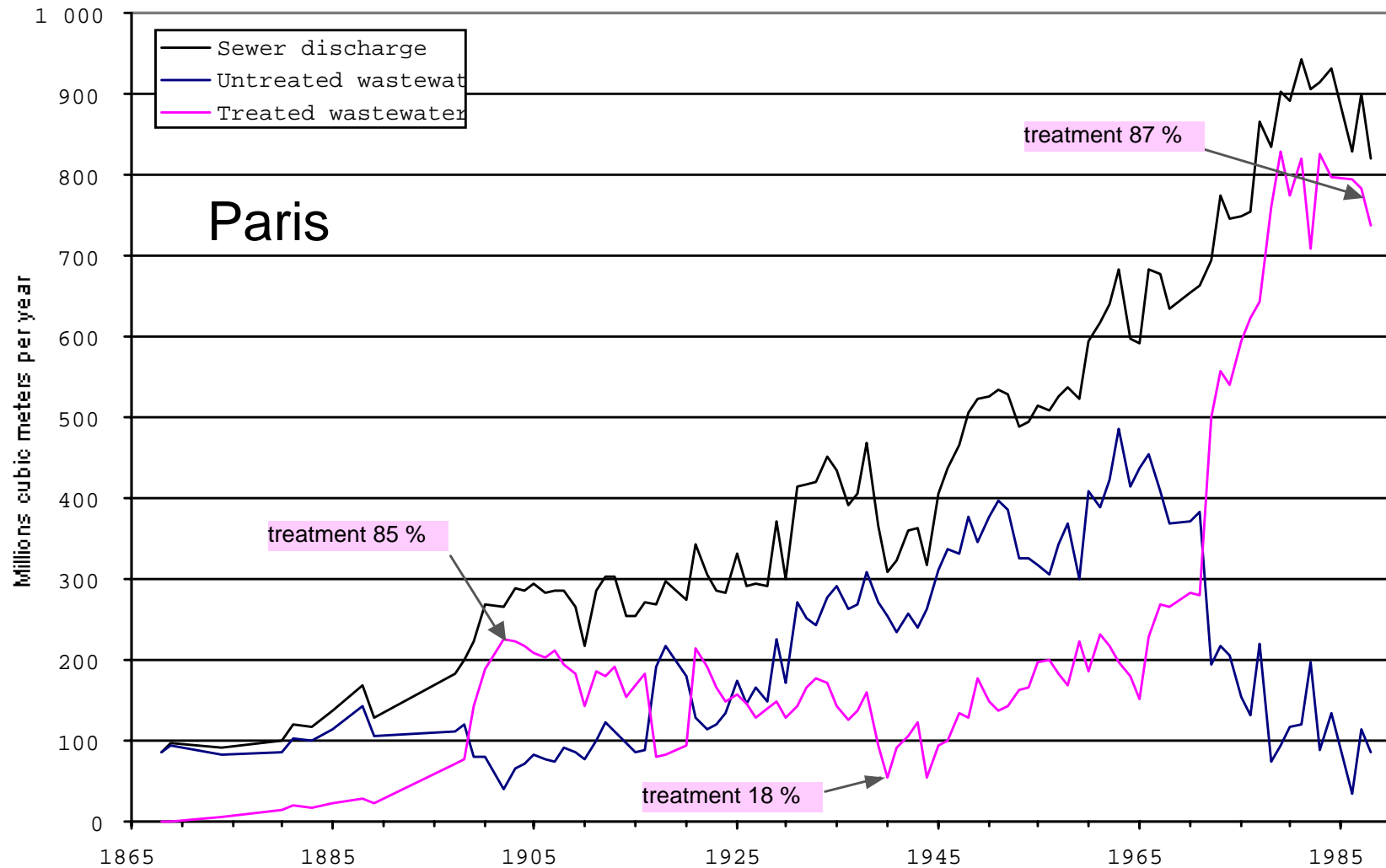
1900-1967 total urban water consumption: Paris, suburbs and county



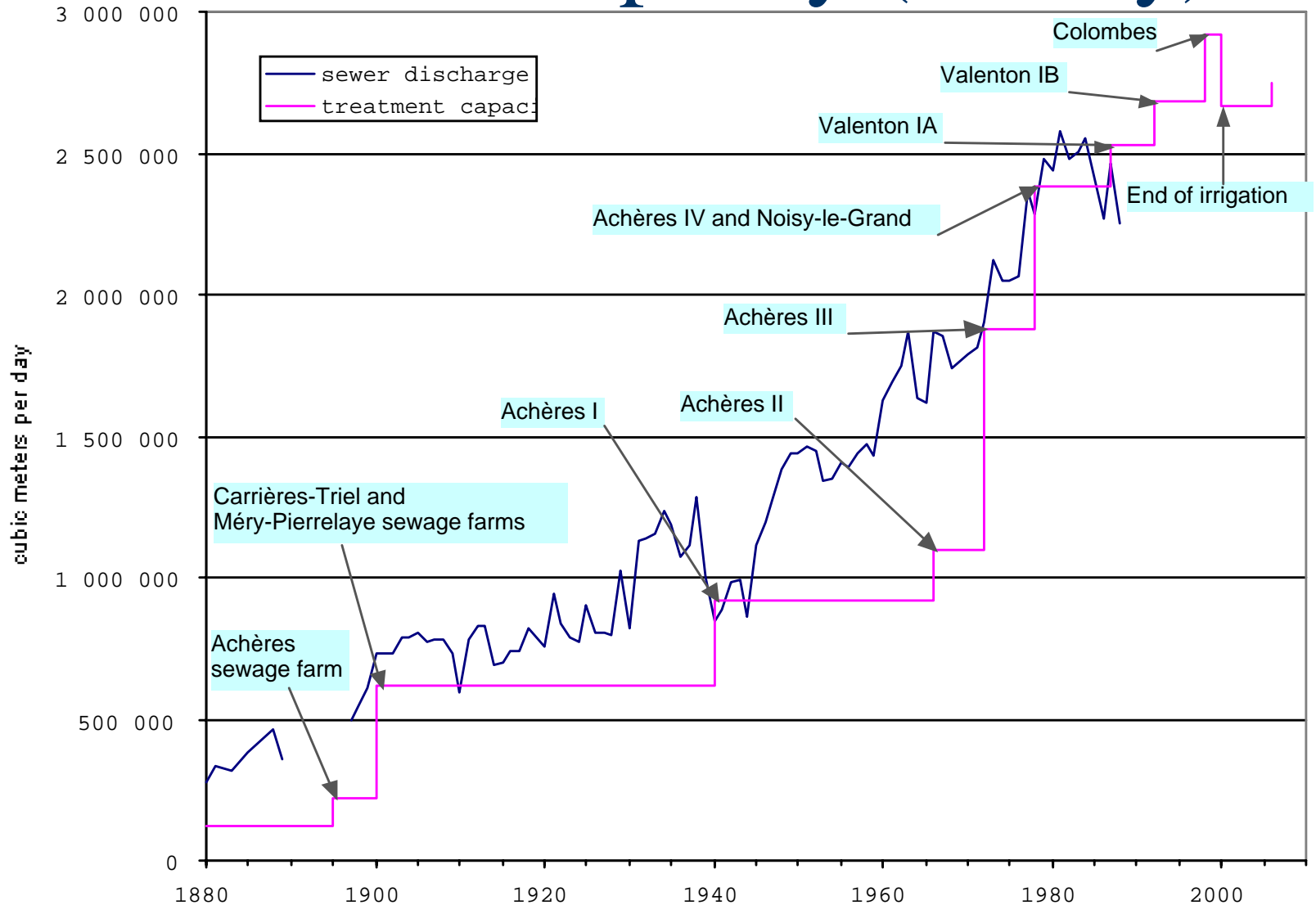
1806-1967 extension of sewers in Paris (km)



1865-1988 annual sewer discharge, treated and untreated wastewater



1880-2006 daily sewer discharge and treatment capacity (m³/day)

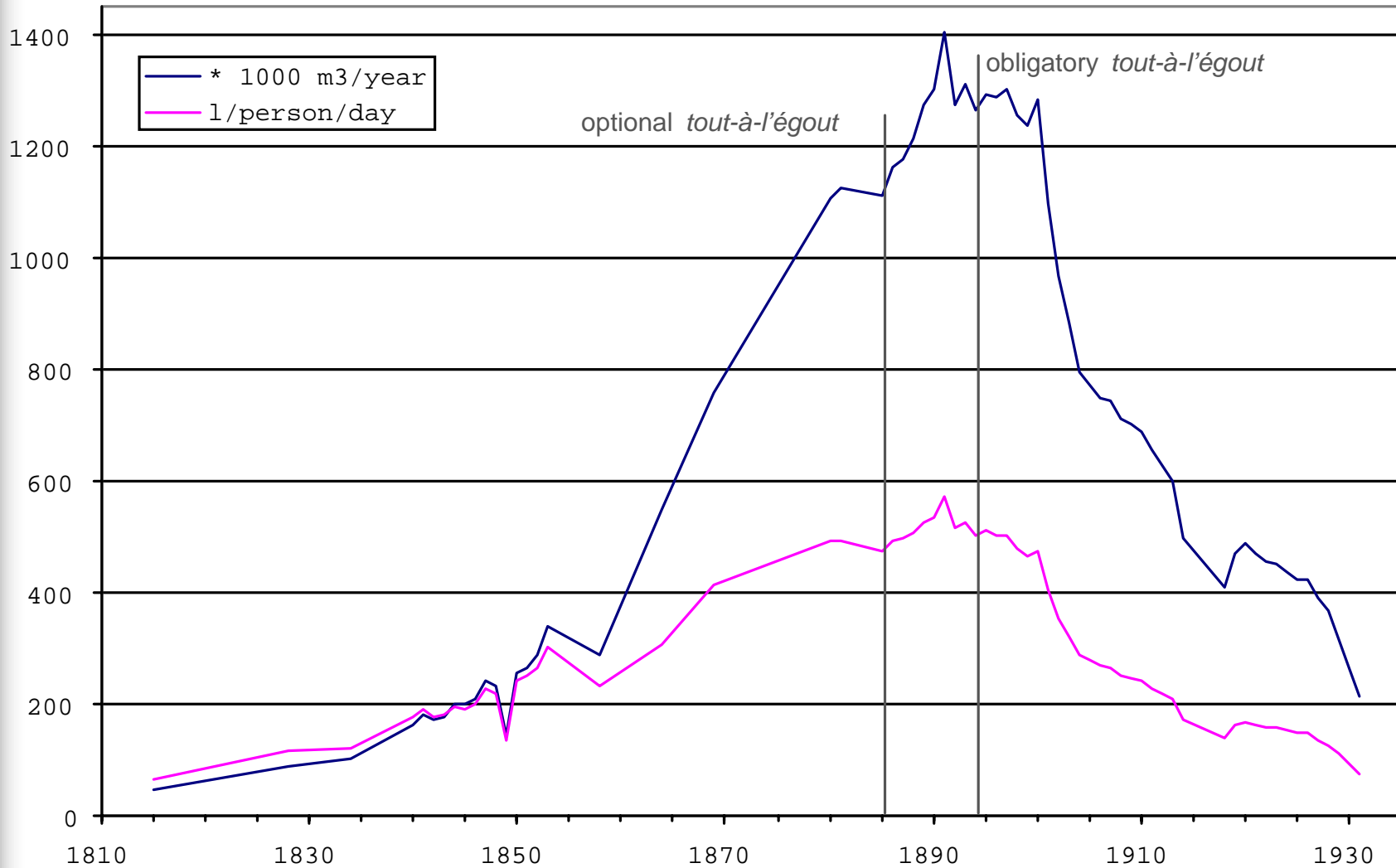




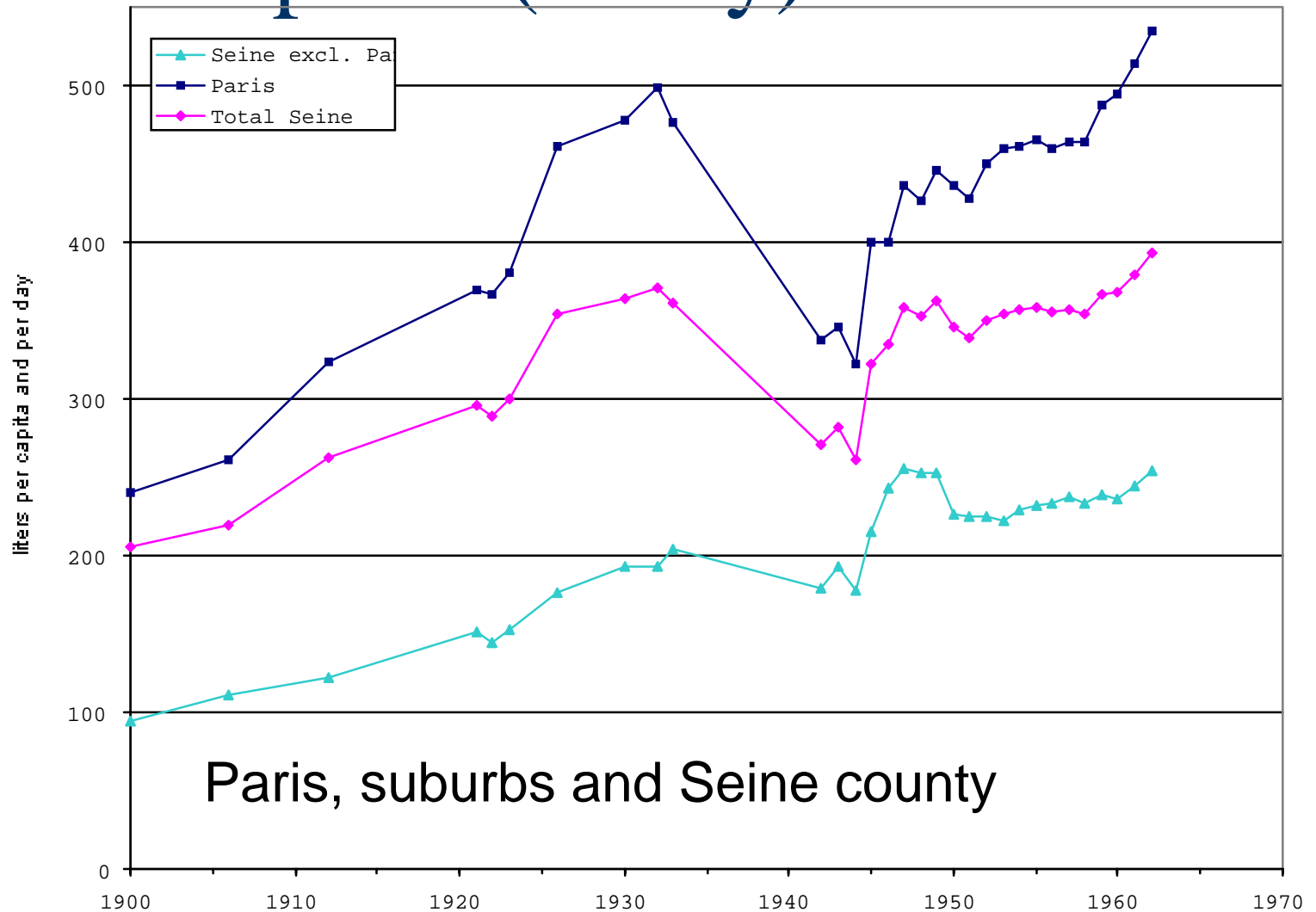
Discussion

- Any questions (not too much!?)

1815-1931 sewage sludge collected from cesspools: Paris



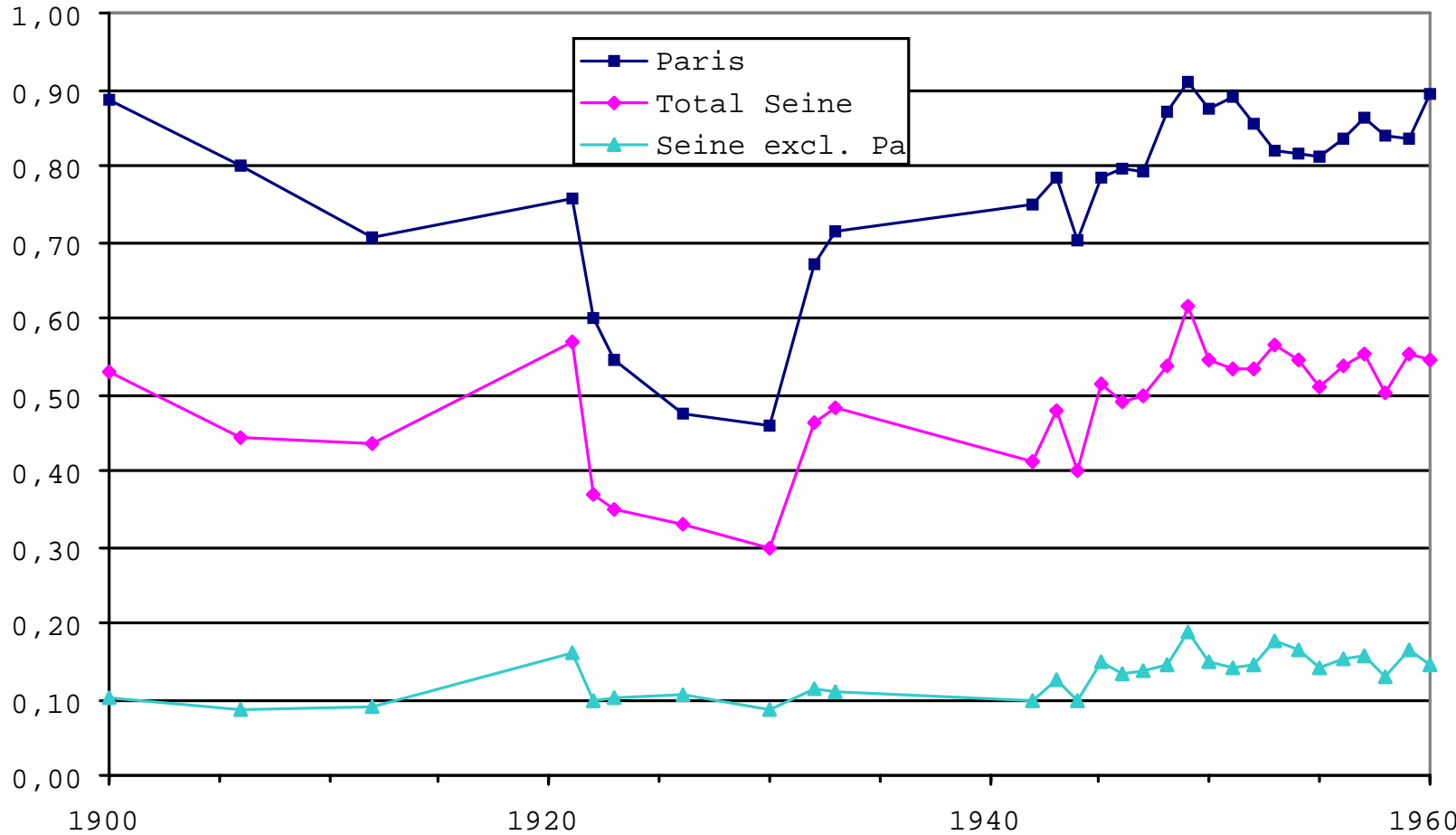
1900-1962 per capita urban water consumption (L/day)



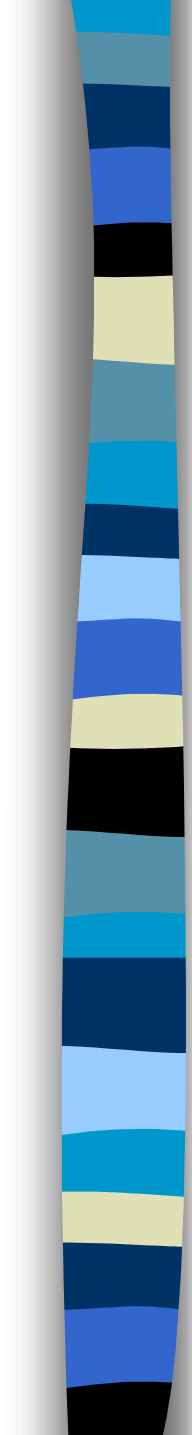
Paris, suburbs and Seine county

N. B. Missing data hide WW effect.

1900-1960 WW collection rate: Paris, suburbs and Seine county



$$\text{collection rate} = \frac{\text{total sewer discharge}}{\text{total water use} + \text{direct rainfall}}$$



Paris agglomeration

