CASE STUDY – SAO LUIZ SECTOR SAO PAULO / BRASIL

Non Revenue Water Management Technologies





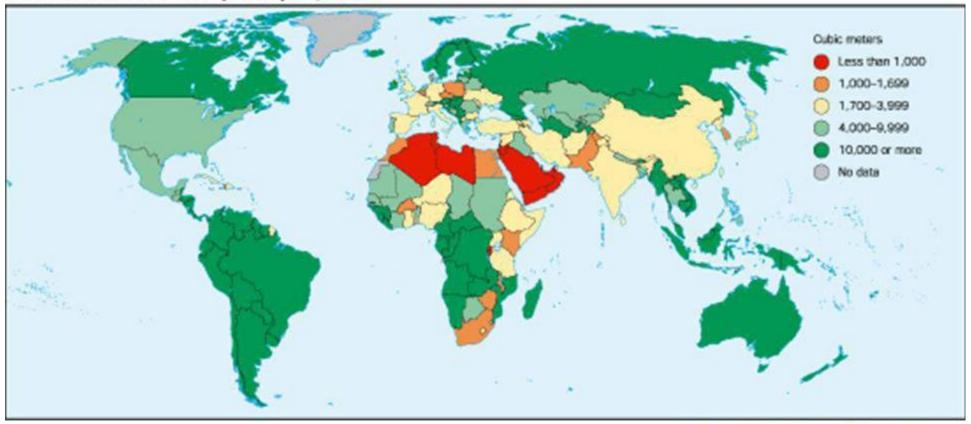
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CRITICAL SITUATION IN SAO PAULO

Freshwater resources per capita, 2000

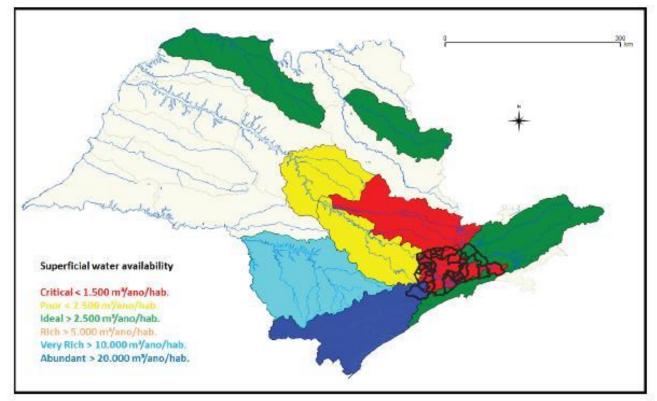


FONTE: WORLD BANK ATLAS





CRITICAL SITUATION IN SAO PAULO



Fonte: Adaptado de DAAE. Hidrografia da CPRM (www.cprm.gov.br/) Bacias de ANA (www.ana.gov.br/) e shapefiles RMSP a partir da página do IBGE (www.ibge.gov.br/).





CRITICAL SITUATION IN SAO PAULO





Fonte: CBH-AT (2014)

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OPTIMIZATION OF THE WATER SUPPLY SECTOR JARDIM SÃO LUIZ - SABESP

Sector Numbers

- Number of connections ~ 164.000
- Population ~500.000
- Mains extension ~1.000 km

Deadline for implementation

• 18 months

Water Loss Savings

- Goal: 680.035 m³/month
- Savings: 1.029.998 m³/month





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1ST PHASE – INFRASTRUCTURE WORK

- Installation of 5 km of bulks mains (700 and 800mm) and a 15,000 m³ metal reservoir;
- New Pump Station with **SCADA and variable frequency drive**







2ND PHASE – LOSS REDUCTION ACTIONS

- Sectorization of the distribution system (1,553m of new mains with permanent monitoring through **data loggers and telemtry**
- Implementation of 16 PRVs with advanced control and telemtry
- Leak Detection using traditional acoustic methods and advanced data logger technology





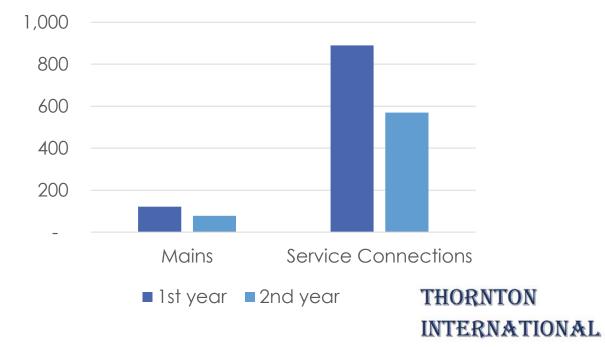






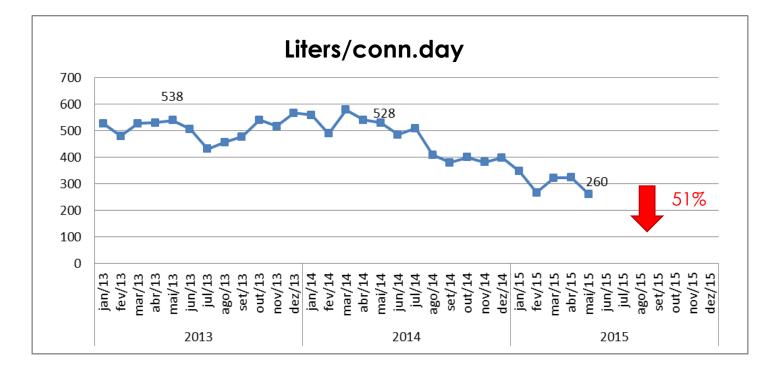
REDUCED BURST FREQUENCY

| Unreported Bursts | 1st year | 2nd year |
|---------------------------|----------|----------|
| Mains | 121 | 78 |
| Service Connections | 889 | 569 |
| Total | 1.010 | 647 |
| Nr of bursts / km | 1,01 | 0,65 |
| Burst frequency Reduction | -36% | |





WATER SAVINGS









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