Regional Workshop on Urban Water and Sanitation Services in South and South-West ASIA, Kathmandu, Nepal (9-10 August 2017)

Tehran Metropolitan Urban Water and Sanitation Management Islamic Republic of Iran



Sadaf Safaai, P.E.













Tehran Regional Water Authority

Providing potable, agricultural, industrial and service water for City of Tehran

Tehran Province Water and
Wastewater Company (TPWWC)
Distribution of potable water &
collection of sewage within City of
Tehran

Tehran Engineering and Technical Consulting Organization (TETCO)

Design and construction of storm runoff water collection system within City of Tehran

City of Tehran: 750 sq. km



Tehran Water Resources

Nearby Dams: Karaj & Taleghan (350 MCM), Lar & Latian (338 MCM), Mamloo (55 MCM)

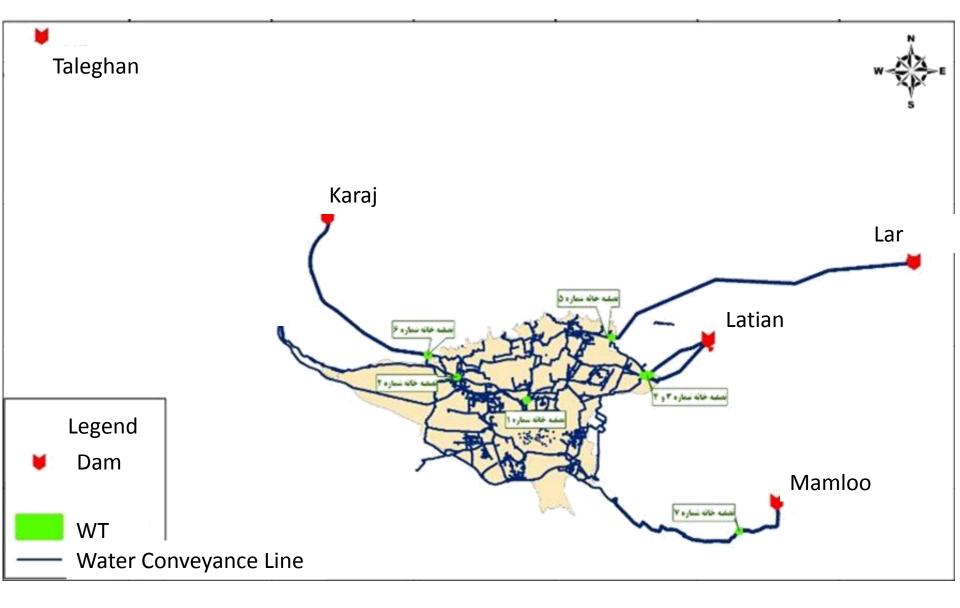
Underground Water: 272 MCM (502 wells, 50 to 300 M, 3.5 to 113 liter/sec)

Qanats: 210, 110 MCM

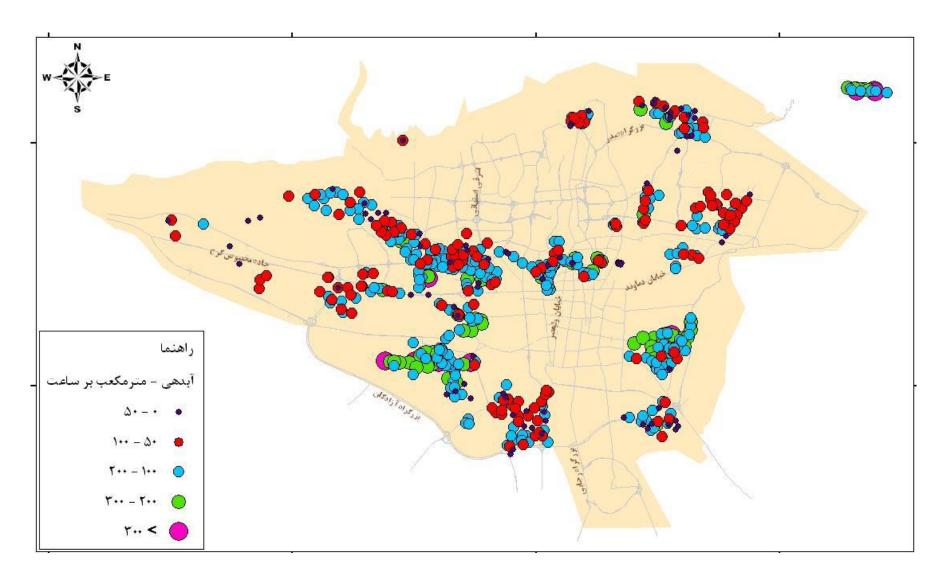
Current need: 1060 million cubic meter per year Planned need in 2030: 1290 million cubic meter per

year

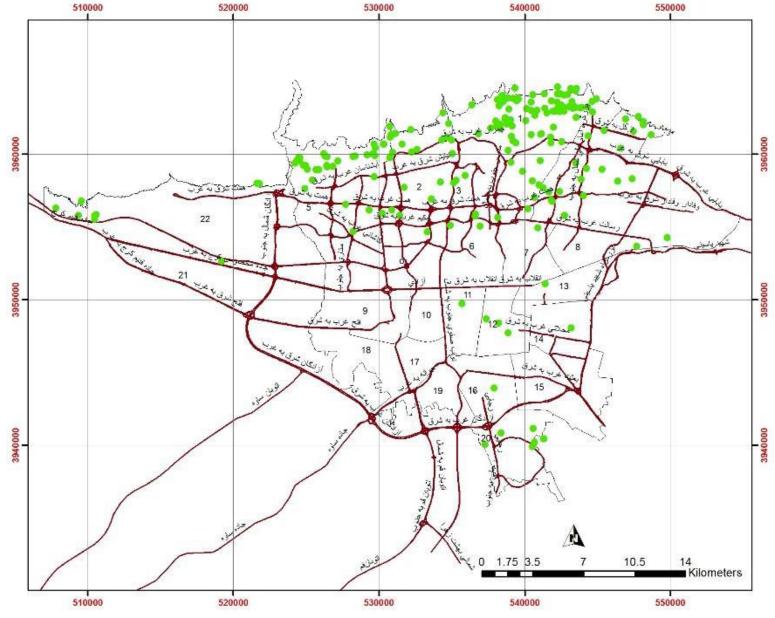






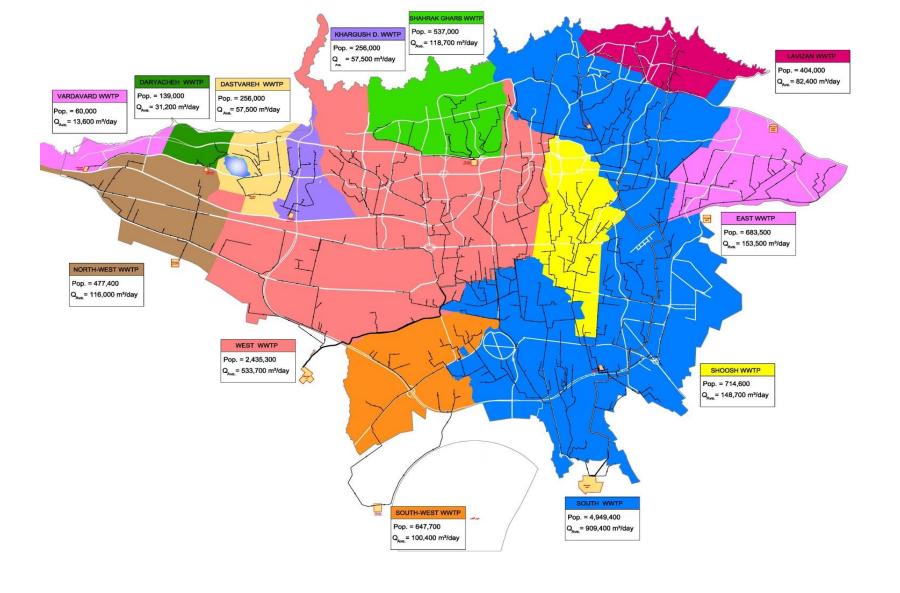








Qanats in Tehran



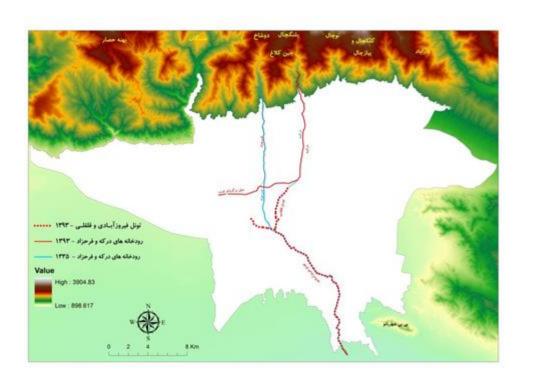


Tehran Sewerage Master Plan

- ❖ 9000 km of sewerage collecting pipeline with 600 m elevation difference between the northern and southern areas within the city
- ❖ 6000 km of sewerage system has been constructed, 3750 m in May 2016 to 2017- 4000 m of sewage conveyance line in the same period...
- World Bank and Islamic Development Bank are among the financers
- Total 900,000 of sewerage connections, 570,000 completed.



Tehran Sewerage Master Plan Progress



62 km of Urban River Restoration with the following goals:

- Promoting flood safety for rivers and flood plains
- Improving ecosystem service within urban areas
- Raise public awareness and promote community relationships with urban rivers
- Restore the quantitative river base flow and promote river water quality and aquifer recharge
- Renovation of old damaged urban areas in connection with rivers



Case Study: Darakeh & Farahzad River Restoration