



Modeling and Hydraulic Analysis of Municipal Water Distribution Network using WaterGems (a case study Mahabad, Iran)

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More over the water distribution network are important as giving service; also they are noticeable as extreme costs that perform for design, produce and performance, operation, maintenance, improvement and renewal. According as the projects usually have financial restriction, economic problems are introduced as one of the most important and the most parameters determinant and the design which has least design, performance and exploitation cost, will be preference. Therefore, it is necessary at design, performance and exploitation of water distribution network should find optimum model that impose lesser cost. in this study Water distribution Network of Mahabad City in North west of Iran considered for modeling Using WaterGems.

In general, in all previous soft waters that surveyed, designer for entry to own prime information should apply some manual and preliminary calculation on maps of ideal zone and at the end, it restores to a processing program relevant to water supply grid by taking of necessary geography information of analog maps. These preliminary steps are very temporize and tedious and they also cause to produce innumerable human and calculating errors that envisage doubt fully the truth of obtained result of said program. The results show that, WaterGems Could be reliable software to simulation and modeling of Mahabad City Water supply Networks design.

Keywords: Water distribution Network, Modeling, Hydraulic Analysis, WaterGems, Mahabad city.