Actual development of water and wastewater systems in towns is an outcome of several interrelated factors such as physical, economic, and social environments. Demography is also an important factor to consider in the formulation of development strategies. Too often in policy papers, population increase only serves as an argument for urgent action, but rarely as a factor in its own right that affects chances of improving a grave situation. A model is developed to generate water management options in urban areas related to population growth. A hypothesis is that management should go small in periods when the city expands rapidly. A study is presented of the development of water and sanitation in the town of Kisumu in Kenya on the shore of Lake Victoria during last century. The aim is to describe and analyze actual development in the water sector and to foresee what prospective developments could be identified in light of continued rapid population growth. The slow growth of the town in the colonial period allowed towns to adequately meet the needs of all residents for water. The extremely rapid population growth after Independence in 1963 interacted with other factors to cause a successive deterioration of residents' access to water and sewage disposal.