

In the arid West, the key issue in urban water policy is the quantity of water available, but in the East the urban water problem is essentially one of water quality. This statement may come as a surprise to anyone within earshot of the loud complaints of water shortages that have been voiced in the Northeast for the last several years. The water shortage in this part of the country is real, but it must be qualified. As the *New York Times* noted editorially about the water problems of New York City, "It is ridiculous for a city located on the banks of a river that pours 11 billion gallons of water past it daily to be suffering from a water shortage."⁴ The ample water supply of the Hudson River at New York is incredibly polluted. What is in short supply in the East is clean, unpolluted water, and reservoirs and distribution systems to bring it to the cities.

Water quantity and quality are closely related, particularly in the reuse of water. To be suitable for reuse, water must be of adequate quality. While urban uses have a relatively minor effect on the quantity of water, they seriously reduce water quality. Thus water supply and sewage disposal, which developed as separate functions of local government and still are administered separately in most communities, are in effect two phases of the single function of water resource management. This development stems from a number of causes, including: (1) the contiguity of many units of government in urban centers, so that one community's sewage disposal seriously affects another community's water supply; (2) the increasing reliance on the reuse of water because of expanding demand for water; and (3) the great variety of uses of water in metropolitan areas.

THE FAILURE OF LOCAL APPROACHES

The major problems facing local governments stem from their failure to keep pace with the demands of a growing urban population and an increasing per capita rate of water use. This failure has many aspects. Investments have been inadequate, particularly for sewage treatment facilities. Reliance on local responsibility for the supply of water and disposal of sewage has resulted in public health hazards, inefficient development of small facilities, and a failure to achieve economies of scale in utility development. In many suburban areas, development based on individual water and sewerage systems has been a serious problem. Central city contracts with suburban dwellers and agencies for water and sewage disposal services have alleviated some problems, but have failed to extend facilities to newly developing areas.

INADEQUATE INVESTMENT

Many communities in the United States that experience water shortages have access to adequate water supplies, but lack facilities to store and distribute enough water to meet their current or anticipated needs. A recent survey by the American Water Works Association found that in cities with a population of over 25,000, 20 percent reported deficiencies in water main capacity, 33 percent insufficient pumping capacity, 40 percent inadequate capacity, 43 percent too little elevated storage, and 29 percent lacked sufficient ground storage.

⁴ "Cleansing the Hudson," (editorial) *New York Times*, Sept. 3, 1965, p. 26.