Chapter 12

LONG-TERM PLANNING

As stated earlier (see page 227), one of the main functions of management is the development of technical and financial plans for future expansion. Every water system, whether large or small, should periodically review its present adequacy and its future requirements.

First, it is necessary to analyse the ability of the system to deliver water of adequate quality and quantity, under sufficient pressures, at times of maximum demand. The forecast of future requirements will then involve the determination of the area and population to be served and the future total consumption. With a sound financial policy which provides for accumulation of depreciation reserve, it is possible to co-ordinate construction and financing and to make them both simpler and more economical than they would otherwise be. It is worth remembering that it is much better to keep up and improve the system through small construction programmes undertaken yearly than to allow deficiencies to accumulate and needs to become acute. These yearly improvements, however, should be planned to fit in with ultimate objectives and requirements.

The elaboration of technical plans for future expansion requires a thorough knowledge of the original design and basis for the water system. As a rule, such plans should be submitted to the public health administration for review and approval by its public health (sanitary) engineering department—when, of course, they are not prepared by this department itself.

In addition, the planning engineers and government officials should not lose sight of the possibilities of integrating individual village systems within a broader district or regional water-supply scheme. In analysing the principles which should guide long-range planning for water service, Wolman has stated:

"One of the major characteristics of water supply service in the past has been, with some important exceptions, that it has been confined largely to the development and extension of water service within limited political boundaries—usually those of the familiar municipality... Orthodox water planning, geared to restricted geographical areas, and to the considerations of earlier decades, has inhibited more imaginative solutions. The traditional political boundary has, perhaps, played an unfortunate part in restraining water service—whether the service was publicly or privately owned. An awareness of these realities is a prerequisite to solving problems which new and unexpected demands have posed."

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