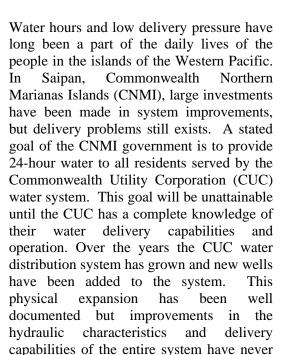


Development of a Source, Transmission and Storage model of the Saipan Water System

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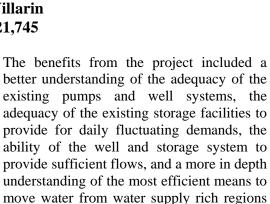


The Saipan water distribution system has been divided into 12 sub-regions. Each region is expected to operate somewhat independently. However, due to inadequate inflow to the system, system leakage, and lack of knowledge of the system behavior, the system is unable to provide 24-hour water services.

been fully examined.

In the past WERI researchers developed computerized models of each of the ten subregions of the CUC water system using the Haestad WaterCad water system modeling program. This model includes a physical system description, details of water usage, and parameters describing system operation.

This model provided the next step needed which is to examine the entire system behavior when the main distribution lines for each of the sub-systems are connected.



to those that have supply shortages in order

to maintain delivery of 24 hour water to all

areas in the system.

The project was split into two phases. The first phase started from the 12-system water models previously developed of the Saipan Water System. These models were skeletonized to remove all but the major water sources, tanks and transmission components and joined together at the boundary points. Researchers worked closely with CUC Engineering staff to be sure all included components were correctly modeled..

