

Water Bulletin

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Water Distribution System Modeling Rochester Public Utilities

Rochester Public Utilities (RPU) has retained PCE to complete a multiyear water distribution system modeling project. The project involves evaluating the existing system, developing the ultimate model demands taking into account the growth in the area and running the extended period simulation analyses using the WaterCad model. For each area the model is used to identify additional wells and storage facilities along with new mains to serve the increasing customer base.

PCE modeled the Hadley Valley area in 2006, the northwest high service area in 2007, and the main level service area in 2008. During the fourth year (2009) phase of the study, PCE will update the existing RPU St. Bridget/Airport/Willow Service Area computer model to reflect the existing and ultimate build out infrastructure and water demands. PCE will work closely with the Utility personnel to ensure the model is accurate for the existing scenarios and conditions. A report will be prepared based on the model analysis. The report will be completed by August 1, 2009.

Cost of Service Study To Serve The Metropolitan Airport Commission

The City of Minneapolis Water Works supplies water to Bloomington, Columbia Heights, Crystal, Edina (Morningside Area), Golden Valley, Hilltop, New Hope, the Metropolitan Airport Commission, and the in-city customers.

The City of Minneapolis retained PCE to complete a cost of service/rate study for supplying Minneapolis Water to the Metropolitan Airport Commission. The study developed revenue requirements for running the utility and apportion these costs to the various customers using the base extra capacity method developed by the American Water Works Association (AWWA).

The functional costs such as meter reading, billing, collection, and administrative costs were apportioned to various customers based on the number of bills. The study updated the depreciation schedule and developed a rate of return on the value of the water system needed to serve various customers. Equitable rates were developed for each customer served by the Minneapolis Water Works. At the conclusion of the study a report was prepared and submitted to the Minneapolis Water Works staff to present to the Metropolitan Airport Commission.

Water Rate Study Shakopee Public Utilities

Shakopee Public Utilities (SPU) has experienced a flat growth for the last couple of years and it is expected that it will not change substantially in the coming years. In addition, after the last study was completed the City implemented a reconstruction charge to pay for the replacement of water mains, fire hydrants, etc .

SPU wants to implement a separate irrigation rate for their commercial and industrial customers (if feasible) in addition to the normal water rates that they are charging at present.

SPU selected PCE to complete a water rate study in order to determine new rates that take into account the new population and demand projections, reconstruction costs, irrigation demands and the DNR requirements of water conservation. The cost of service method using the "Base-Extra Capacity" method developed by the American Water Works Association (AWWA) will be used to develop the new rates. To address the DNR requirements, an in-clining block rate will be developed for each customer class. The report is scheduled to be completed by July 30, 2009.

Naeem Qureshi

Naeem Qureshi has been selected to present a paper titled "Getting The Most Out Of The Filters", at the 2009 AWWA Annual Conference in San Diego on June 15, 2009. The paper discusses the results of the investigation at water plants in Alexandria, International Falls, Redwood Falls, and New Ulm, Minnesota and a program to improve the performance of the



Travis Michels

Travis Michels joined PCE as a design engineer in November 2008. Travis has a Degree in Civil Engineering from the Minnesota State University-Mankato in May 2008. He has previously worked as a field engineer for American Engineering and Testing. Presently he is working on the water rate study for Shakopee Public Utilities.



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