

20 YEAR MASTER PLAN

CHAMPLAIN WATER DISTRICT (CWD)



CWD Site



Raw Water Pump Station

The 20-year Master Plan for CWD is a comprehensive review of the treatment, storage and distribution components of a water system that supplies an average of over 11 mgd to wholesale customers. CWD was the first water system in the nation to receive the Partnership for Safe Drinking Water's *Excellence in Water Treatment Award*. The extensive water distribution system includes six pump stations and 16 storage tanks. The master plan for this system includes the following components:

- Review of current demand for the 12 wholesale customers and development of demand projections for the existing and potential new geographic service areas within the rapidly growing Chittenden County.
- Evaluation and identification of deficiencies for all components of the existing facilities, including raw water, treatment, transmission and distribution system components and SCADA system.
- Analysis of treatment alternatives, including renovating the existing facility components compared to constructing a second remote treatment plant.
- Evaluation of transmission components and distribution storage facility alternative improvements to resolve deficiencies.
- Analysis of alternatives for system management including ongoing use of the computer water system model and GIS system implementation.

KEY FEATURES:

- Proactive planning for alternative disinfectant use and compliance with the future Stage 2 Disinfection By-Products rule.
- Development of the District's first GIS based water system computer model with water quality modeling capabilities.