

Master Water Plan



Three regional water utilities in the north Okanagan area of British Columbia determined that the most efficient way to meet the need for water of sufficient quality and quantity in the long term was to create a new single water utility to supply and distribute water for domestic and agricultural purposes. This single utility could undertake the significant water system improvements in the most efficient manner possible. The NOWA Master Plan was required to determine the best technical and management solutions in order to meet the regional needs. Earth Tech, as part of the project team, led the development of the financial and management strategies, which established a new regional water utility. This included the establishment of new regionally common consumption-based rate structures for domestic water, and a strategy to ensure the price stability of irrigation water rates throughout the region. Other financial and management recommendations were required to ensure that the new utility could undertake a major water quality upgrading works program and to ensure the long-term sustainability of the utility.

Challenges included the need to bring 3 former water utilities together under a single new regional utility under common management. In the past, domestic water billing was a blend of flat rate and consumption-based methods. The Master plan recommended the completion of the water metering program, and standard domestic water rates, as a common DCC strategy to meet the demands of future growth. Since about 50% of the water in the region is consumed by agriculture and contributes to one of the region's most important industries, the agricultural water system was recommended to be separated from the domestic system to ensure the continued stability of regional irrigation water rates, and to ensure that irrigation water avoided the cost of advanced treatment.

Strategies were also recommended to ensure the future sustainability of the utility with projections for capital replacement needs and the development of sufficient capital reserves.

PROJECT DETAILS

CLIENT: North Okanagan Water Authority
LOCATION: Vernon, British Columbia, Canada

REFERENCE INFORMATION

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PROBLEM

Three local water utilities were struggling with the need and growth costs required to meet new demands for water treatment and water demand.

CHALLENGES

A mixture of water billing approaches and management conventions had to be reconciled to a single regional approach. Resulting financial strategies met the needs of transparency and equity amongst domestic and agricultural customers in three local jurisdictions.

SOLUTION

The creation of a single water utility from 3 local utilities in order to meet the demand for high quality water. New consumption-based water rates for domestic water customers will increase gradually to pay for the proposed capital programs, while the agricultural system will be separated to ensure the stability of irrigation water prices.

BENEFITS

Domestic water customers will be assured of high quality water in the most affordable and sustainable manner. Agriculture within the region will remain competitive.