

Powers Creek Water Treatment Plant Up and Operating!

Westbank Irrigation District's new 54 ML per day In-Filter Dissolved Air Flotation (DAF) Powers Creek Water Treatment Plant has been completed and has been operating since March 2007. The facility is the largest of its kind in Canada and specially designed to treat water from an uplands raw water source. The In-Filter DAF type of treatment utilizes a poly aluminum chloride coagulant to assist with flocculation and the removal of suspended matter (turbidity and organics) through the DAF clarification process. The clarified water then passes through anthracite and sand to further polish the treated water. Chlorine will still be utilized for disinfection of the treated water, albeit at reduced quantities due to the high quality of the processed water. Ultraviolet disinfection is being planned in the next few years as well. UV treatment will further enhance the safety of treated water.

The Powers Creek Water Treatment Plant produced treated water consistently below 0.3 NTU during the spring freshet of 2007 and as of June was producing water below 0.1 NTU.

WID has 6 operations staff qualified to operate and maintain both the water treatment and the distribution system. WID supplies water both for domestic and irrigation customers totaling over 13,000 persons, with an annual water demand of 5,400 ML.

The overall construction period has been about 17 months since awarding the contract to Maple Reinders as the General Contractor on October 31st, 2005. The two primary goals have been met as follows: 1) the project has been completed below budget, and 2) the plant was treating water prior to the spring run off in 2007.

The total cost of the 54 ML Powers Creek water treatment plant and including the 8 ML treated water reservoir is approximately \$18.1 M, about \$500,000 below budget. Funding for the project has been 100% by the Westbank Irrigation District ratepayers and by developer contributions. As an improvement district, WID is not eligible for senior government grants and has been saving for water quality improvements for the past ten years. WID has contributed approximately \$10 M directly towards the construction and will borrow \$11 M to cover the remaining cost of this project and the \$2 M cost of a universal water metering project currently being completed.

The District celebrated the Official Commissioning of the Powers Creek Water Treatment Plant in March 2007 and the Official Opening was held in October 2007. Tours of the facility will be available to the general public during the Official Opening celebrations.