



# Westbank Irrigation District

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**Okanagan Basin Water Board**

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## **Water Conservation & Quality Improvement Grant Application Progress Report**

The Westbank Irrigation District (WID) with support from the District of West Kelowna has made application for grant funding in the total amount of \$53,500 and titled the "Westbank Parks Irrigation review & Metering Strategy". Fifty per cent of this amount was requested as grant from the OBWB. Fifty per cent was to be paid by the Westbank Irrigation District.

The Grant was approved for \$20,000 by the OBWB and the Westbank Irrigation District budgeted for another \$20,000 bringing the total expenditure for this project to \$40,000.

The Westbank Irrigation District is an improvement district whose primary purpose is the treatment and distribution of potable water. WID has been incorporated since 1922 and has grown from a small community of agricultural users to a large primarily residential community of approximately 14,000 people. WID has over 5,400 water service connections with continuing growth within the residential category.

Due to the incorporation of the District of West Kelowna (DWK) the Westbank Irrigation District will have its Letters Patent dissolved on December 31<sup>st</sup>, 2010. The former improvement district will then come under the authority of the DWK as a local service area.

During the past few years WID completed construction of the \$18.8 million Powers Creek Water Treatment Plant and has also committed \$1.8 million on a universal water meter program. The total spent or committed to date on these two projects is approximately \$20.6 million. This significant capital expenditure was financed totally by existing customers and new development.

In order to maximize the life of this capital investment, WID has implemented a comprehensive water conservation strategy. The first component of this water conservation strategy was to implement water sprinkling restrictions (2003); the second component was the introduction of a universal water metering program (water meter installation 2006-2009; metered water rate implementation 2010); the third component will likely be the future separation of agricultural water from the water treatment facility.

Since the introduction of sprinkling regulations in 2003, WID's maximum day demand has decreased by 22.7% (from 44.3 to 34.2 ML/d) and the total annual demand has decreased by 24% (from 5,958 to 4,523 ML). This reduction in water demand has occurred while the WID's number of connections has increased by 19.9% during the past 7 years.

A significant part of seasonal irrigation is the sprinkling of public parks and it became apparent that many of these public spaces were not irrigated in an efficient manner and/or not in compliance with the WID's sprinkling policies. It was decided that these public parks required a review prior to the installation of water meters. The purpose of this review was to ensure that the parks are irrigated as efficiently as possible. As well, due to the WID's introduction of a water

metered rate effective in 2010, it is important to ensure that the water meters are sized appropriately in order to ensure adequate performance as well as to minimize costs associated with the new metered water rate (WID will be imposing a fixed charge based on the water meter size in addition to charging for every cubic metre of water consumed).

The DWK also has future plans to control public park irrigation based on the information gained by local weather events. For this reason close cooperation between WID and the DWK was essential in order to plan a professional parks irrigation system with the potential for this future add-on.

As of the end of September, WID and DWK staff has:

- 1) Identified which of the 24 public parks within the WID service area require an irrigation review and have completed the review;
- 2) Determined the sizing and the appropriate layout of water meters as well as other necessary components (PRV; back flow prevention; valves; etc.);
- 3) Submitted the scope of work to qualified contractors to receive competitive bidding for the installation of the park irrigation equipment.

Wid is presently awaiting results from the bid process and will review this information when it is received.

Once the successful contractor has been selected the work will commence to complete the installation of all park irrigation before the end of 2009 and prior to the implementation of the new water metered rate in 2010.

During 2010 the irrigation of these parks will be managed to conform to the WID sprinkling regulations and water consumption will be measured on a monthly basis. This information will be communicated to DWK and the sprinkling practices adjusted to minimize water usage while ensuring that the parks may be utilized by the public as designed.

In summary, the project is on schedule to achieve the goals as set out in the original application. Completion of the project is still expected by year end 2009.

Please refer to the attached schematic of a typical water meter installation for public parks as well as the chart showing the decline in WID's water demand over the past 6 years.

Respectfully submitted by,



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General Manager,  
Westbank Irrigation District



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### Annual Water Demand 2002-2009



