

# Water Dispatch

water information and commentary

November 2006

## Partner with WID to conserve water

The WID Board offers water users an opportunity to partner with them for on-farm water conservation projects. The Board put three policies in place this fall aimed at creating efficiencies on-farm that will equate to water savings for the whole district. WID Water Master Brian Sander saw applications to help a water user move from flood irrigation to a pivot and one to convert pivots to low pressure drop lines. The program will also look at installing dugouts that the district can fill periodically rather than constantly running small amounts of water down small laterals in the district for stock or yard and garden users. "We approved a dugout for Graham Jackson out near Cluny. He was on an inefficient ditch that took 5 cfs at the top to get 2 cfs to his farm. With the dugout, the district fills it twice a year and serves Jackson well," Sander says. Jack-

son hired a contractor to do the dugout and WID shared the cost. The WID also put in a culvert and a structure to raise the canal level to fill the dugout. "I'm sure it will make it easier for me and my neighbors who won't have to put up with a whole bunch of water washing out pasture or cutting the ditch banks," Jackson says. "The WID was

very good to work with. The fellows that came out to do the work were very professional and did a good job. I would suggest that anyone get involved in this sort of project. We all know that conserving water is a big focal point with government and the public," he says. The Board feels that the dugout projects



Graham Jackson dugout after construction WID file photo

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## Bow RiverKeeper visits WID



Bow RiverKeeper executive director Danielle Droitsch spent a day with Jim Webber touring irrigation works Sept. 25. Webber and Droitsch shared information about their organizations, goals for water conservation and potential to help each other achieve those goals.

Droitsch says, "Meeting with the WID was a valuable experience as I believe that communication between groups like Bow RiverKeeper and the irrigation community is important. I was particularly impressed with Jim Webber's knowledge of irrigation practices and his progressive approach to watershed protection. I learned about the concerns of the WID as well as the challenges this district faces. I was also glad to provide some of our perspectives so that our efforts were not misinterpreted. Overall, it was an excellent education experience that will definitely inform my efforts to protect the Bow River and its watershed. We all have a lot in common."

Western Irrigation District produces this newsletter to keep all users of water informed about water issues and WID efforts to protect and manage the resource in this region. Contact WID, 934-3542.

## Stormwater management gaining recognition

WID water users are not alone with their concerns about water quality impacts from stormwater in surface waters. WID manager Jim Webber spoke at a Low Impact Development conference in October about WID's stormwater study and concerns and found he was among friends.

"The conference was a pleasant surprise in that many other organizations recognize stormwater impacts need addressing. We are not a voice in the wilderness," he says.

"There is momentum building." The challenge now is to create regional plans to address stormwater. "A developer can't operate in isolation," Webber says. He points out that a regional plan would allow all developers to work within an overall plan rather than expecting each developer to design a piece that fits into the overall target stormwater discharge allowances. The next step is to work with the planners and get it into a practical form so developers can comply.

WID water users can expect to hear the results of the district's stormwater impact study at the 2007 Farmer's meetings.



*Wendy Aupers and Jim Webber use a coffee break at the Low Impact Development conference to share ideas and information.*

*Photo by C. Lacombe*

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### Partner with Board

have better potential to realize water savings and better serve water users. However, they will review all applications and make decisions based on potential water savings. "It builds some efficiency into the system for the water users and leaves more water in the system for operations that need it in the canal - not seeping away or flowing back to the river unused" Sander says. The policies are: On-farm Efficiency Grant for equipment improvements; Operational Efficiency Grants for small dugouts and Operational Supply for large water storage dugouts to store 2-3 days of pivot operation. Copies of the policies and applications are in the WID office and there is a lot of information on Ropin' the Web ([www.agric.gov.ab.ca](http://www.agric.gov.ab.ca)) about building efficient dugouts.

### What's happening with the water license?

Approximately 10 years ago, the WID Board began litigation against the Alberta Government regarding the WID Water Licence. Litigation arose because in 1963, when the provincial government took over responsibility for water licences, the Alberta Government arbitrarily reduced WID's historic Federal Licence granted in 1921 with a high priority and significant volume. The litigation seeks to restore WID's entitlement to the volumes set out in the 1921 Licence or financial compensation. The WID needs a volume higher than the current licence as stated. Recognizing the cost and risk of litigation, WID agreed to a mediation of the dispute with the Alberta Government. That process concluded successfully with the under-

standing that both parties would ratify the settlement. The WID Board ratified it in September 2005. Fourteen months later, the Alberta Government has not ratified the settlement, notwithstanding a number of assurances that they would. In the face of a stalled settlement, WID has no alternative but to revive the litigation in an effort to demonstrate to the Government that this issue of its contested water rights must be finally resolved by Court Order or settlement. Hopefully, a reactivation of the litigation process will revitalize the settlement process. WID's counsel now has a resumption of the litigation process underway and time should tell whether the resolution, which we consider close at hand, can be achieved.

### Water use down in 2006

WID Water Master Brian Sander estimates the district diverted about 30,000 less acre-feet in 2006 than in 2005.

"We do a water audit every year and report to Alberta Environment," explains Sander.

When Sander analyzes the end of season water numbers, he can compare the size of the diversion into a given area and the use in that area. The numbers and past knowledge give him cues about where the system works well and where the Board may need to address infrastructure conditions that reduce efficiency in water delivery.

"We can see what kind of minimum flows we need to maintain and that indicates some of the flaws in our infrastructure and ways we can improve," he says. It also allows ditchriders an opportunity to assess their individual management practices and make adjustments toward more effi-



## Every drop and every student counts

Some Alberta students have a new and exciting way to learn about water resources in Alberta this year. Alberta Irrigation Projects Association (AIPA) worked with several partners to produce a video and learning tools directed at the Alberta Grade 8 curriculum. Although other water education tools exist, AIPA executive director David Hill explains, "This is probably the most innovative in its approach because its tied to the curriculum and it

uses kids to teach their peers. The lessons in science are delivered in language that kids understand." Teachers in the Lethbridge School District and Lawrence Grassi Middle School in Canmore used the Every Drop Counts teaching tool this year. Hill says teacher feedback suggests the project achieved more than it set out to do. "We ended up with a lot more information than teachers expected," Hill says. "Although the project specifically target-

ed Unit E of the Grade 8 curriculum, feedback suggests the videos and information applies to many units within the Grade 5 to 12 curriculum."

"Sometime next summer, we will get teachers together that cover more Grades, go through the material and teacher's guide and begin to broaden where else they can use it." If you want to look at the material currently available, visit [www.everydropcounts.com](http://www.everydropcounts.com)



SCADA station at Chestermere  
Photo by C. Lacombe

Water users in the WID may notice smoother water delivery in the future thanks to a sophisticated flow monitoring system called Supervisory Control And Data Acquisition (SCADA).

SCADA is a series of flow monitors and automated controls installed at key locations on the Western Headworks canal that enables WID operations staff to monitor and control water flows through a cen-

## SCADA can conserve water and time

tral computer. The system has a function that allows operations staff to get an early warning about changes in canal levels. If a canal goes above or below a certain level, an alarm will alert the staff. This function will allow area supervisors warning of potential problems before they happen and allow time to react before damages occur. This system is in use on the Alberta Environment owned headworks that the WID operates and provides an invaluable management tool. "A laptop will become a supervisors' tool working alongside the weed fork and pike pole," says Brian Sander WID Water Master. "It should really help their time management."

With a complete SCADA system in place, a ditchrider can order water, watch it flow through the district, judge what time it will arrive for the water user and notify

the water user what time they can begin irrigating. Sander also expects the system to assist with water conservation by making water delivery more accurate. It will also give operations staff a good indication of where water hits snags or places where volumes drop because of faulty infrastructure. This function will offer the WID Board valuable information for prioritizing rehabilitation projects.

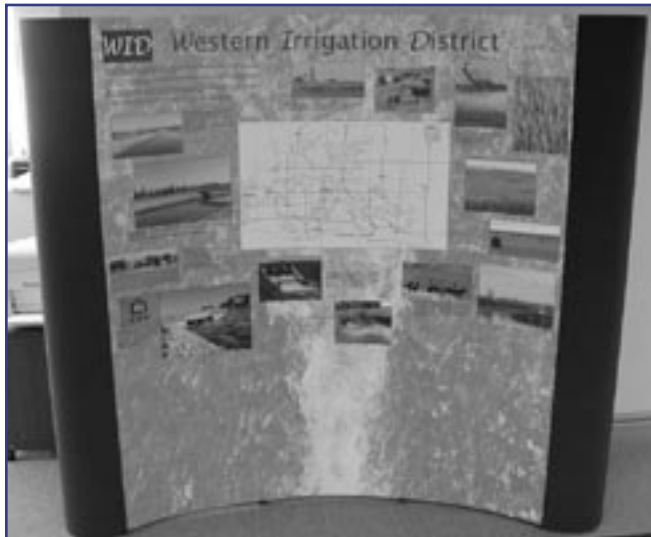
Sander says that SCADA installation will take place along with canal rehabilitation throughout the district over the next 10-15 years.



Flow measuring weir on A Canal WID file photo

## WID Conference presence gets graphic

The WID Board commissioned a pop-up display to set up at conferences. The display aims to educate the public about WID's size, scope, activities and regional benefits.



Umbel Communications delivered the product under budget and WID manager Jim Webber says, "It seems to draw people for a closer look. I think it turned out well."



### Ditchrider Contacts

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Don Brownlee	Carseland	899-4641
Pat Smith	Gleichen/Cluny	325-4642
Wes Sproule	Rockyford	325-4640
Antoine Mortreuil	Crowfoot	325-4639
Jeff Maude	Strathmore	325-4601



## WID waits to maximize return

The WID Board found a way to maximize its capital gains on 75 acres of land at Chestermere. The Board entered into an agreement with a land developer in 2000. Under this agreement, the WID retains ownership of the land while the developer, NewNorth, undertakes the process to secure development permits to create residential lots.

NewNorth will shoulder the expense of building residential infrastructure and recoup its costs of development and marketing as the development progresses. In about three years, NewNorth and WID will split the profits from the sale of the developed land.

“We’re patient and passive in the project,” says WID Chestermere office manager Keith Crowder. “We’re patient in terms of getting the return on the land when it’s sold to the end user. We’re passive in that the WID is not involved in the financing or the provision

of services and other costs associated with getting this land turned into residential lots.” He explains that if the WID simply sold the land to the developer, the district would have only received about 20% of the land’s potential value after development.

“Fortunately, the WID can take advantage of waiting for the developer to apply their expertise to bring the land to its highest and best use. It’s also good timing due to market pressures increasing the value of the land.”

“It provides us with a substantial capital return on the land.” The project plans to create about 350 lots for sale in a development called Kinniburgh South. *Illustrations submitted by Urban Systems*



## WID weir renamed Harvie Passage

If all goes as planned, in the spring of 2008 the area surrounding the WID weir will become Harvie Passage – a safe, environmentally friendly river feature that adds to Calgary’s extensive park system. In 2000, the Bow Waters Canoe Club began talks and negotiation to redesign the weir into a series of pools and gentle rapids to enable boating safety while maintaining its function as a diversion into the Western Headworks canal.

Over the past five years, the project gained support from many organizations and financial input from the province and other

supporters. WID manager Jim Webber and Parks Foundation representative Howard Heffler both contributed expertise to this project from the beginning.

Heffler explained that the design process involved engineers, white water recreation designers, WID, Fisheries and Oceans Canada, landscape architects and others. Three key design requirements were continued effectiveness of the weir function, boater safety and fish passage.

A scale model helped the designers move into a more detailed design.

“We went through a total of 19 different

iterations to refine the design,” Heffler says. It also confirmed the hydraulics to make sure high river flows won’t damage the structure or affect water levels.

The project should go forward after the 2007 irrigation season. “Principally for fisheries concerns and low flow in the winter, the time to build it is in winter. We would begin when the irrigation season ends, work through the winter and have it open the next spring (2008),” Heffler says. To read more about this project, visit [www.harviepassage.ca](http://www.harviepassage.ca)



*Photo illustration submitted by River Valleys Committee*

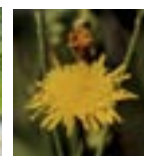
### What flowers are in your neighborhood?



Canada Thistle



White cockle



Perennial Sow Thistle



Scentless Chamomile



Toad Flax

Often mistaken for benign natural beauties, these invaders can crowd out cultivated crops and native plants. The WID controls noxious weeds on canal right-of-ways. Take note of infestation sites and call, 934-3542.