



## Special points of interest:

- 2013 Water Measurement Workshop presentations are available
- 2013 Water, Agriculture and the Environment Conference presentations are available

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Irrigation in Southern Alberta has a history of almost 135 years from the development of small schemes in the early 1880's near Calgary to the 600,000 hectares of productive land putting high quality food on the tables of millions of people in Canada and around the world today.

The majority of this irrigated land base is contained within thirteen irrigation districts having an infrastructure of almost 7500 km in length.



There are many, many histories and accounts written of irrigation development in Southern Alberta. The following pdf files are a compilation of reports, briefs, letters and histories, scanned in their original state, written by several distinguished authors of yesteryear and provided here for your information or just for your reading enjoyment and interest.

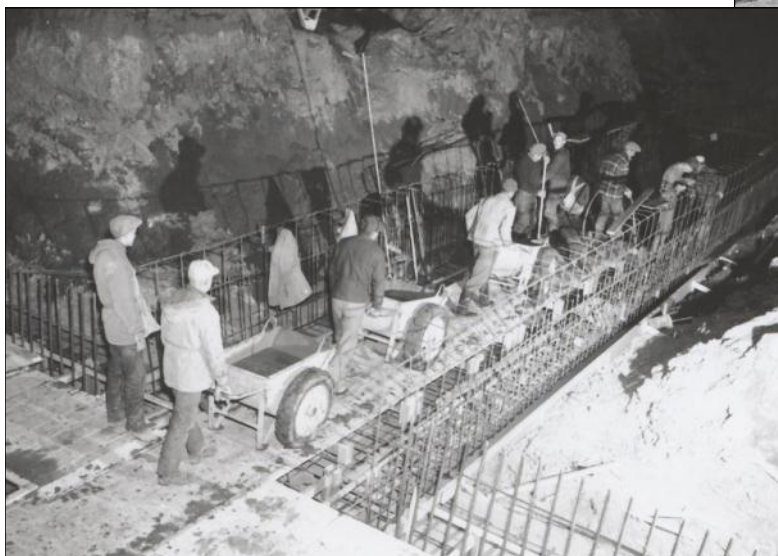


Follow the links to view the series of 27 documents.

- [History of Irrigation](#)
- [The Utilization of Water for Agricultural Purposes & Irrigation in Alberta](#)
- [Alberta's Experience in Irrigation](#)
- [The Economic Aspects of Irrigation](#)
- [The Development of Irrigation in Southern Alberta](#)
- [Western Waters and the Federal Government](#)
- [Lethbridge Northern Irrigation District](#)
- [Irrigation Development in Alberta—"The Ewing Report"](#)
- [A Brief History of the Development of Irrigation in the Lethbridge District](#)
- [The Galts, Father and Son & How Alberta Grew Up](#)

## Early History of Irrigation in Southern Alberta continued

- [St. Mary and Milk Rivers Water Development Committee \("The Meek Report"\)](#)
- [Irrigation Law](#)
- [The Hansen Report—Report of the Irrigation Study Committee to the Government of Alberta, 1958](#)
- [Magrath, The Garden City—Diamond Jubilee 1899-1974](#)
- [Brief to the Irrigation Commission, 1958](#)
- [The Proposed Irrigation of the Redcliff-Ronalane District, 1938](#)
- [Irrigation in Southern Alberta, 1882-1901](#)
- [Irrigation and Hydro in Southern Alberta, 1941](#)
- [A History of the Eastern Irrigation District](#)
- [The Galts and Irrigation in Alberta, 1975](#)
- [Irrigation in Alberta and Saskatchewan, 1965](#)
- [A Surveyor Advises the Government, 1895-1910](#)
- [The Canadian-American Irrigation Frontier Revisited— The International Origins of Irrigation in Southern Alberta, 1885-1909](#)
- [Boundary Waters Treaty—USA/Great Britain, 1909-1910](#)
- [Original Canal Caravan, 1980](#)
- [Red Deer River Irrigation Development, 1954](#)
- [Alberta Railway and Irrigation Company Organized](#)



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## UID Updates Mapped Infrastructure

Fred Rice, general manager of United Irrigation District had a plan for a project to update the mapped irrigation infrastructure of the district to accurately reflect locations of underground pipelines, drains, turnouts, points of delivery, remote points of delivery, etc.

Weather and erosion has reshaped many of the water channels and modern farming practices have farmers wanting to gain back more farm land.

In the last 10 years, approximately half of the canal infrastructure has been converted to underground pipelines.

Fred saw the need to have reliable and current mapped records of the infrastructure available for immediate access, including pipelines that have never really been located other than in the manager's personal database.

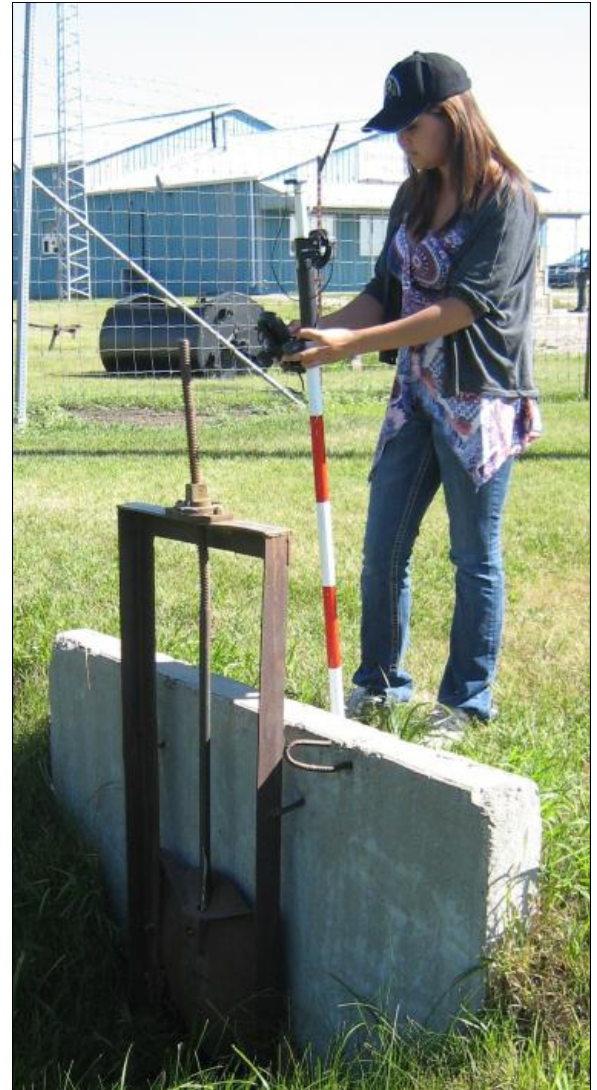
The collected data will benefit the district in many ways including:

- Create an updated and comprehensive GIS based map of the district
- Use in maintenance, construction projects, and non-irrigation related work such as records to supply to utility companies
- Use in Irrigation Rehabilitation Program planning and reporting-utilizing recorded turnouts and pipe sizes
- Locating places for off-stream storage

The first step was hiring a great summer student with the right knowledge and enthusiasm for the project. They found those qualities in Kim Rice.

After doing their research, Fred and Kim felt that the Ashtech Mobile Mapper 10 handheld GIS/GPS data collector with camera and video capabilities would be the best fit for their mapping project.

The mapping component could be achieved with open source free GIS software compatible to the mobile mapper



Kim Rice was a student in the Civil Engineering program at Lethbridge Community College in 2012. That summer, she snagged a great job working for the UID. Originally, she probably thought she was hired to assist with field projects like running the cat Skinner to crush rock for canal base and yes, walk the district canal works with her mobile mapper. However, with her knowledge and enthusiasm she collected the UID infrastructure data in 2 ½ months, exported it into an access database, created her own attribute tables and shape files and mapped results. Let's also mention that she assisted with the UID history project and built the United Irrigation District web site. Great work Kim... only 12 districts to go!!





## UID Updates Mapped Infrastructure (continued)

The infrastructure inventory collected and recorded using the Ashtech Mobile Mapper was loaded into the free open source geographical information system software named Quantum GIS. This enabled the UID to implement a comprehensive computerized mapping system of their GPS infrastructure inventories. The Quantum GIS mapping system stores and provides quick access to detailed descriptive information for the inventory collections, including access to pictures, videos and associated documents of the features recorded in the inventory.

Thanks to Kim and some leading edge, affordable technology, the UID has implemented a current, state of the art computerized infrastructure asset management system for their district.



Links:

Ashtech Mobile Mapper <http://www.youtube.com/watch?v=-Bp8wTIVpCM>

Quantum GIS <http://www.qgis.org/en/site/>

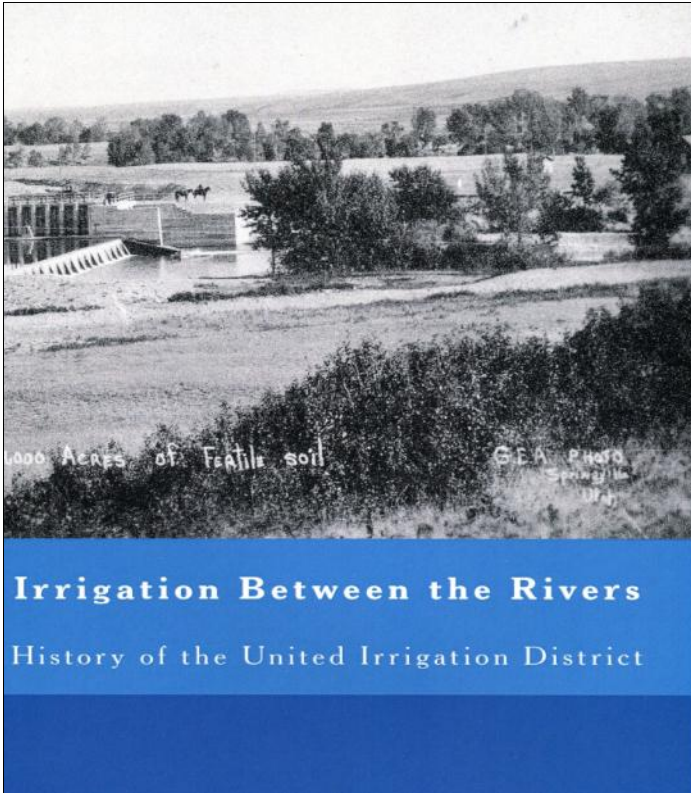
# United Irrigation District

For more information, contact:

Fred Rice, United Irrigation District,  
403-626-3255 [uid@glenwood.ca](mailto:uid@glenwood.ca)

## History of the United Irrigation District

The United Irrigation District has completed a history book documenting the creation and growth of the district from their humble beginnings in 1919 through to today.



*"I am glad that we were able to take the time to do this history of the UID. We felt that it is very important to keep history for future reference. In going over the minutes and other documents it is hard to believe that the farmers in this area took on the task to build the UID with personal risk, wisdom and foresight to see the good that water could do for the area. In two years they built the ditches, which is amazing with what they had. There have been many challenges for the UID over the years but the District as a whole has handled them and will continue to do so in the years to come. We should be proud of this District. I would like to thank Craig Smith, Natalie Woolf, Kim Rice and Corrine Brook-Allred for their help and dedication toward this history book. I hope you enjoy reading it."*

*Fred Rice—District Manager*

### *From the Preface*

*"Research of the minutes of the United Irrigation District indicates that the Board of Directors and management have desired to do a formal history of the District a number of times. Fortunately, Minutes of the Board meetings go back to August 1919, providing accurate documentation and information about the people and business of the UID. The preservation of this record is invaluable for the purposes of accuracy."*

*"It has been said that 'the grass is always greener where you water it'. In a region where rainfall is often limited, this becomes very apparent, especially by those whose livelihood is directly affected. The colonizers of the land between the Belly and Waterton Rivers from south of Hill Spring to Stand Off discovered this fact when they settled the land. A few attempts were made in the late 1800's and early 1900's to use the water resources of the Belly and Waterton. During the drought of 1917 to 1919, the need to unite efforts in providing water to this dry land crystallized into the formation of the United Irrigation District and the Lone Rock Irrigation District, becoming one District through amalgamation in 1920."*

*"The United Irrigation District's 93 year history has been marked with optimism, hope, depression, loss, holding on, changing, rebuilding, and moving forward. This history is intended to be a tribute to those who had the vision to start; the courage to organize and to build; the determination to hang on when hope was gone; the character to start again, to go to work, and to rebuild. It is also meant to provide the foundation for the next generation."*

# United Irrigation District


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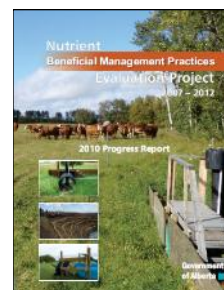
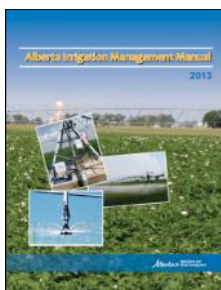
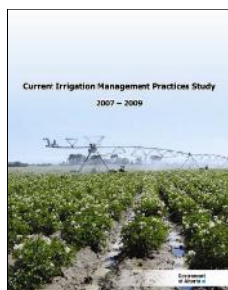
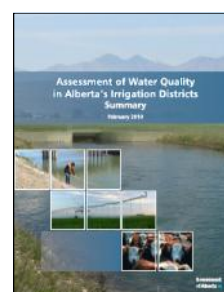
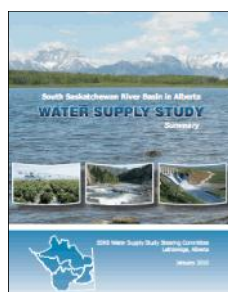
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## Completed Reports

Links to completed reports available on Alberta Agriculture's website [Ropin' The Web](#).



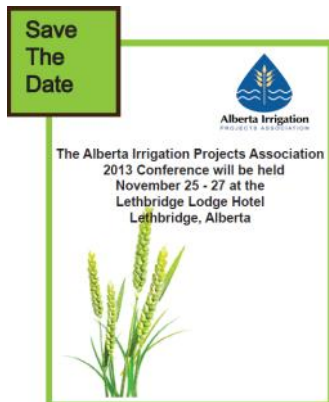
- [2012 Alberta Irrigation Information Report](#)
- [Alberta Irrigation Management Manual](#) 
- [Alberta Soil Phosphorus Limits Project](#)
- [Aquatic Weed and Algae Control in Irrigation Canals](#)
- [Assessment of Environmental Sustainability in Alberta's Agricultural Watersheds](#)
- [Irrigation Districts Water Quality Project 2011 to 2015: 2011 Progress Report](#)
- [Buffer Zones for a Healthy Watershed](#)
- [Crop Water Use and Requirements](#)
- [Crowfoot Creek Watershed Study](#)
- [Current Irrigation Management Practices](#)
- [Irrigation Rehabilitation Program 2011/2012 Status Report](#)
- [Irrigation Rehabilitation Program 2006 to 2012 Status Reports](#)
- [Irrigating to Enhance Quality and Yield](#)
- [Nutrient Beneficial Management Practices Evaluation Project](#)
- [South Saskatchewan River Basin \(SSRB\): Irrigation in the 21st Century](#)
- [South Saskatchewan River Basin in Alberta Water Supply Study](#)





## Past Events

**2013 Alberta Irrigation Projects Association Conference** was held on November 25 to 27 at the Lethbridge Lodge and Conference Centre.



**Water Measurement Workshop** was held on August 14 & 15 at the Alberta Irrigation Technology Centre near Lethbridge.

Topics will included:

- Water data management
- Emerging technologies in water measurement and water quality equipment
- Measuring in extreme conditions
- Why we measure water
- On farm water management
- Pipeline & flow measurement equipment maintenance
- Oil & gas flow measurement perspective
- Water flow measurement testing centres

Follow [this link](#) to see the presentations.



**2013 Water, Agriculture and the Environment Conference** was held on April 16 & 17 in Lethbridge.

Follow [this link](#) to see the presentations.



**2013 Irrigation Technical Conference** was held on June 6 in Lethbridge.

Topics included: Water Quality Update, Crown Managers Partnership – Invasive Species, Zebra Mussels Monitoring, Gabion Walls, Integrated Overshot Gate, New IPEX PVC Pipe Sizes, Puck Board Weed Deflector Update, Canal or Pipeline, Water Supply Study, Trench Safety, SMRID Master Plan, Water Use Recording System, and Irrigation Secretariat Update.

Follow [this link](#) to see the presentations.



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*This bulletin is intended to provide Alberta's irrigation industry with items of interest in irrigation. If you would like to submit articles or provide us with input, feel free to contact Don Gross by phone in Lethbridge at (403) 381-5872 or E-mail [don.gross@gov.ab.ca](mailto:don.gross@gov.ab.ca).*

*Current and archive copies can be viewed on the Alberta Irrigation Technology Centre web page at*

[www.demofarm.ca/water\\_haulers.htm](http://www.demofarm.ca/water_haulers.htm).

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