

the WATER HAULER'S BULLETIN

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Irrigation With Saline-Sodic Waters

Use of poor quality, saline-sodic water for irrigation increased on the prairies during the 1980s because of increased demand for scarce water supplies. Comprehensive irrigation water quality guidelines have been developed for arid regions which continuously use saline-sodic waters for irrigation. In prairie environments, however, rain supplies about half the water requirement of irrigated crops. "There is evidence that alternating saline-sodic waters with rain can be damaging to soil structure and crop yield," says Gary Buckland, a research scientist with the irrigation branch of Alberta Agriculture, Food and Rural Development.

Saline irrigation waters (as measured by electrical conductivity) contain salts which may become concentrated in the soil to levels which reduce water uptake by the plant. This salt-induced water stress can reduce plant yield. Sodic waters contain high levels of sodium, and are measured by the sodium adsorption ratio (SAR). High sodium causes breakdown of soil structure, resulting in reduced infiltration and percolation of water and in a difficult to manage "cloddy" or "sticky" seedbed. These conditions indirectly affect plant growth by causing extremes in water stress or waterlogging, by restricting rooting depth or by decreasing crop emergence.



Soft Wheat grown in greenhouse and irrigated with saline water.

A series of studies examining irrigation with saline-sodic waters are being undertaken by the irrigation branch, Alberta Agriculture, Food and Rural Development, in cooperation with Agriculture and Agri-Food Canada, the University of Saskatchewan and the St. Mary River Irrigation District. The study reported here examined the effect of alternating saline-sodic irrigation waters with rain on the yield of soft white spring wheat.

Soil cores, 0.3-m in diameter and 1.35-m long, were taken from a non-irrigated soil and were placed in a greenhouse. The soils were irrigated with seven qualities of irrigation water, alternated with rain, over five successive crops. Qualities of the irrigation waters are shown in Figure 1 in comparison with general guidelines developed for arid soils. Irrigation waters ranged in quality from conventional water (W1) to highly saline and sodic (W7).

Yield differences were found between the five different crops, but are believed to be caused by differences in winter versus summer environments in the greenhouse. Yield differences caused by the irrigation waters did not begin to appear until the fourth crop. In the fourth and fifth crops (see Figure 2), the yield generally dropped with more saline and sodic waters. Lower yields were not associated with reduced water use by the crop, nor reduced water use efficiency, both of which are normally associated with increased salinity. According to Buckland, "It is not surprising that yield was not directly related to salinity." This is because the soil was initially non-saline, and after five crops the soil was only partially salinized. Also, a high frequency of irrigation was used (40-mm water depletion), which masked salt effects on yield.

The lower yields over time with the poorer quality waters paralleled reduced emergence of the crop (Figure 2) following seeding. Lower emergence was caused by ponding of water on the soil surface. Ponding is probably

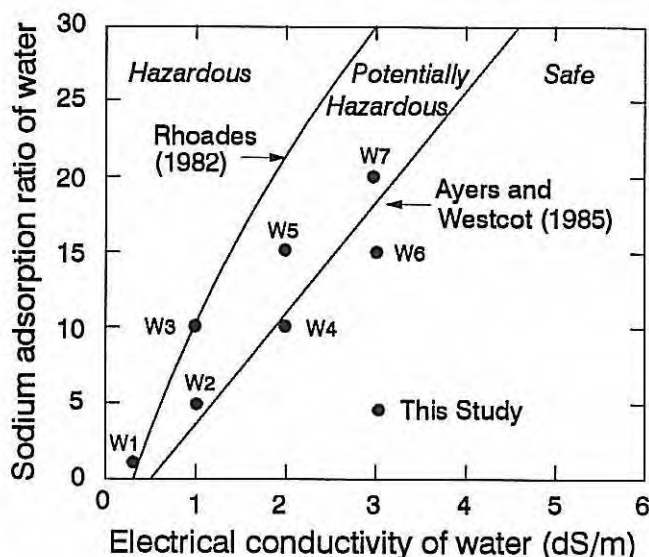


Figure 1

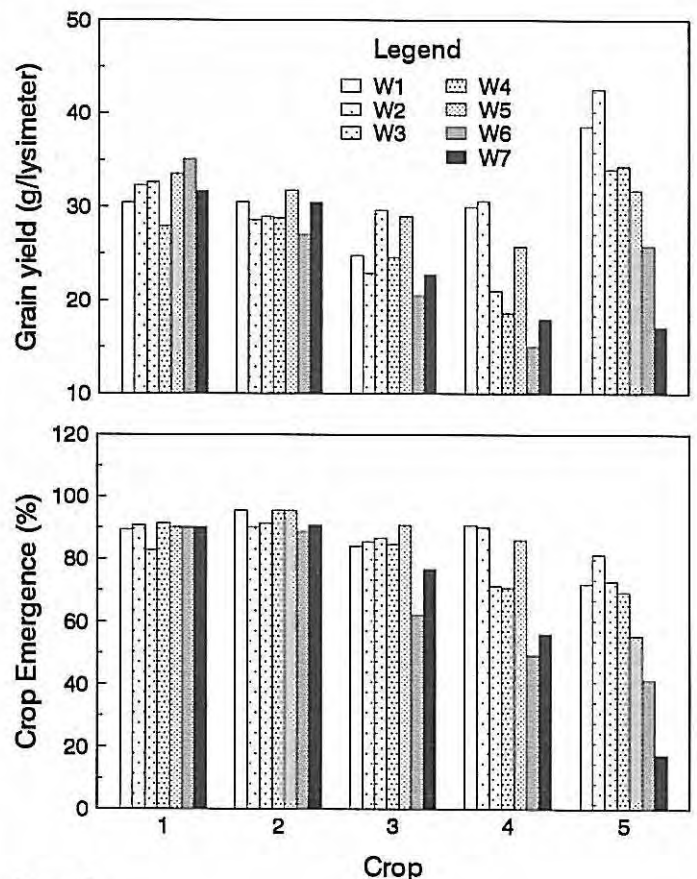


Figure 2

the result of the SAR of the water causing deterioration of soil structure and thus restriction of water infiltration into the soil. Large reductions in emergence were observed only with waters of SAR 15 or more (W5, W6 and W7 in Figure 1).

A series of infiltration tests, which are in progress, will examine how much the infiltration rate will be reduced by the different waters. As well, the stability, plasticity and strength of the soil surface will be measured to evaluate whether these tests can be used to determine the suitability of water for irrigation. These results will be reported in a later article.

For more information contact Gary Buckland of the Irrigation Branch, Alberta Agriculture, Food and Rural Development, Agriculture Centre, Lethbridge, Alberta, Canada T1J 4C7. Telephone (403) 381-5882. ■

Alberta Irrigation Projects Association Marks 50 Years

The Alberta Irrigation Projects Association, or AIPA as we all know it, marks its fiftieth birthday this year. Many changes have taken place since the association was founded back in 1946. "We have added new districts, developed unique funding programs in cooperation with the government of Alberta, and played a supporting role in developing new technologies that make up much of the irrigation infrastructure and farming practices today," states Stan Klassen, executive director.

By 1946, an important transition had occurred, whereby the original promoters of irrigation, headed by railway companies, had withdrawn. Irrigation projects were in disarray. Officials of existing projects soon realized that individual irrigation district "cap-in-hand" approaches were not getting them anywhere in dealing with senior governments. At their organizational meeting (early 1946), it was unanimously passed that the group would be called "The Alberta Irrigation Association," (it would not be officially known as the Alberta Irrigation Projects Association until it was officially incorporated in 1966). The members present at this meeting were to add much to irrigation in later years.

Membership in the AIPA is limited to the 13 irrigation districts of Alberta. For each 50,000 irrigable acres, or part thereof, a district can appoint one director to the group. An executive is elected from within. To give the Association annual operating capital, each district contributes on a per acre basis (17¢ in 1996) for every irrigable acre within their own district.

To summarize the history of the AIPA, one might say that the 1940s and 1950s were decades of trying to get senior governments to recognize irrigation for its worth and to educate the general public of the importance of irrigation and its contribution to the agricultural well-being of this province.

During the 1960s, through many meetings and resolutions and persistent perseverance on the part of the Association, people began to recognize the many benefits generated through irrigation. Actual progress was beginning to show as a cost-benefit study was conducted, a new Irrigation Act came into being and a cost-sharing formula was devised, setting the stage for the 1970s.

In the 1970s both provincial and federal governments began to participate financially in rehabilitation of the worn-out irrigation systems. The seventies was a decade of progress, when irrigation systems began to be rehabilitated, internal reservoirs were constructed, headworks were given uplifts and long-range plans for the 1980s were drafted.

The Association continued its work in the 1980s with great success. The AIPA has commissioned several exten-

sive irrigation studies, developed by independent consultants, that have articulated the advantages that the irrigation sector has provided, not only to the primary water users, but to Albertans in general, and indeed Canadians as well. "Everyone has benefitted from the information that has been documented, but it is also noteworthy, the job is never completely done. If we are to keep up with the changing world, we will need to move along further on this continuum of knowledge through further studies," says Klassen.

In the 1990s the AIPA embarked on new ventures; the Utilities Regulatory Process. "We recognized that since our irrigators are large consumers of both electricity and natural gas, it would be beneficial to be involved in the process that is responsible for the rates we pay." Klassen was asked to work with a regulatory consultant to put this process into effect. This was followed by the restructuring of the provincial electric utilities and culminated in a new Act, called the Electric Utilities Act. For the first time, AIPA is named as a member of the Electric Transmission Council which will advise and make recommendations to owners of transmission facilities, and to the Alberta Energy and Utilities Board. Klassen has been appointed as the AIPA representative on this Council, as well as a new Department of Energy Advisory Committee, which makes recommendations to the Minister.

"AIPA has enhanced its provincial profile significantly, and is committed to doing what it takes to continue the collaborative approach, both with government and the private sector, to see the irrigation sector play a major role in the government's new program of 'Growing Alberta,'" concludes Klassen.

The Alberta Irrigation Projects Association has demonstrated they are the united voice of irrigated agriculture in the province. Happy Birthday!

For more information please contact Stan Klassen, Executive Director, Alberta Irrigation Projects Association, 909 Lethbridge Centre Tower, 400 - 4 Avenue South, Lethbridge, Alberta, Canada T1J 4E1. Telephone (403) 328-3063. ■

NOTICE:

Alberta Irrigation Projects Association (AIPA) has moved their corporate offices, effective February 1, 1996 to:

909 Lethbridge Centre Tower
400 - 4 Avenue South
Lethbridge, Alberta T1J 4E1

Internet in Agriculture: Three Perspectives

Editors Note: This is Part One of a three-part series.

Seems like all you hear about these days is "the Information Super Highway" or "the World Wide Web" (WWW), most often referred to as "the Internet." "Imagine communicating with the leading experts in your area of interest without the hassle of time zones, travel or busy signals. Imagine having the latest information on that topic at your fingertips. These valuable resources are as close as your computer keyboard," says Greg Snaith, irrigation extension engineer. Presently there are 25-35 million Internet users in the world, connected by 4-5 million computers and a "web" network of communication systems, growing at a rate of about 10% per month. Much of the information is not new but access to the information is the key. With a computer, communications modem and software, and an account with an Internet service provider, anyone can access "the Net."

Michael Splinter is the environmental program manager with the faculty of extension at the University of Alberta. He provides instruction in Internet courses. Splinter explains, "There are basically four levels of Internet connection. Direct connection where the user is connected directly to a network. This is the fastest connection with full capabilities. The dial-in direct connection (most common) utilizes a modem and specialized software for access. Speed of access depends on the modem and type of phone line. The third, dial-in terminal account, connects onto another computer but is limited to the software on the host computer. Lastly, the e-mail account, although allowing only e-mail communication, can still retrieve text information and graphics files."

Hardware and software are the key to accessing the Internet. A minimum 386 computer is required to access the World Wide Web (WWW). A minimum modem speed of 14,400 baud rate is suggested. Otherwise information and data files will take too long to download. Software such as Trumpet Winsock allows the user to dial a local Internet service provider. Driving along "the highway" and "browsing" through the information available requires software such as NetScape (the most famous of the WWW browsers). It allows a user to peruse "Home Pages," which identify and index what's available from information sources, to download software, to participate in news groups, and to send e-mail. Endora is one of the best standalone e-mail applications for the Internet. Windows 95 has its own built-in Internet tools.

Most Internet users will require a local service provider to provide a dial-in direct connection. The Eastern Irrigation District, for example, is now a service provider. Service providers should offer technical assistance and required software. Typical service connection fees are \$20 to \$40 per month, depending on the amount of use. To adapt to the

Internet learning curve, take an Internet course often offered by local educational institutions or service providers.

Splinter also suggests that when searching for information on the WWW, utilize several search systems because they all have different information. There are several searchable databases which catalogue information on the Internet (primarily the WWW). Many of these "search engines" are available on Netscape's home page. (See bulletin insert for internet addresses.) Splinter mentions that "You can also use the Internet to search library databases. Books have been around a lot longer than the Internet and let's not forget that there is a lot of excellent information contained in books."

It's very important, though, to remember that anyone can put information on the Internet. This can be either good or bad news. Think critically about the information. Is the information political, social, personal, commercial or research? Is the purpose of this information to inform, to influence or to entertain? Does the source need to be qualified? Is there enough credible information presented to make an informed decision?

At the beginning of March 1995, an Internet pilot project was implemented by Alberta Agriculture, Food and Rural Development (AAFRD) and was on line June 1. The pilot, centred around "Barley," continued until August 31 when an evaluation was completed. Nearly 100 farm producers and farm suppliers tested the newly developed WWW site. Producers were very enthusiastic.

Doug Radke, deputy minister of AAFRD, comments that, "Development and use of the Internet for delivery of information and services within AAFRD and to our customers will be a priority direction for electronic delivery for the next few years. There will be an increased focus on partnering the development of information, especially through the use of Internet's capability to link to the information of other organizations." Having completed the pilot project, AAFRD's home page structure is being redesigned so that it can accommodate all areas in which AAFRD develops and provides information. (See bulletin insert for home page layout and Internet address.)

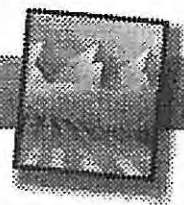
When Splinter was asked if an individual can get through life without a computer and the Internet he replied, "Why would you want to? This could become like literacy is today. Sure you're able to get through life if you are illiterate, but what is the quality of life? Computer literacy is becoming a critical part of many careers. People need to become more adaptable, the Internet is a part of this adaptability." Michael Splinter can be reached by e-mail at:

michael.splinter@ualberta.ca

His faculty's WWW home page is:

<<http://www.extension.ualberta.ca/>>

For more information please contact Gregory Snaith, P.Eng., Irrigation Extension Engineer, Alberta Agriculture, Food and Rural Development, Lethbridge, Alberta, Canada T1J 4C7. Telephone (403) 381-5856, e-mail: snaith@agric.gov.ab.ca



This site is designed for Netscape 1.1 with default settings

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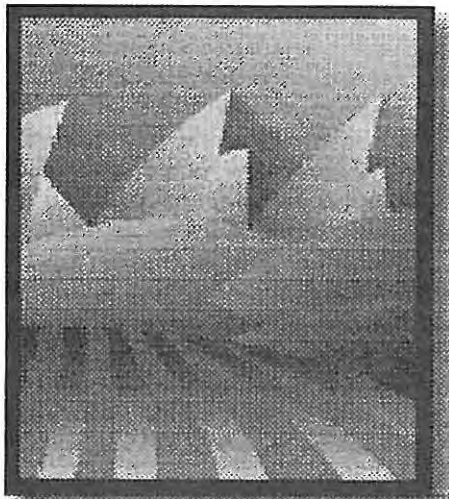
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There are several searchable databases which catalogue information on the Internet (primarily the WWW). Many of these search engines are available on Netscape. Examples are:

INFOSEEK NET SEARCH <<http://www2.infoseek.com>>
InfoSeek Net Search is a fast, accurate, and comprehensive way to search the Web. Just type your question in plain English, or enter as many words and phrases as you need to describe what you want to find. Search Tips gives you more information on formulating queries.

DEJA NEWS RESEARCH SERVICE <<http://www.dajaneews.com/>>
Usenet news searching is now possible with Deja News, which provides access to what it claims is the world's largest Usenet news archive. A variety of options allow you to tailor your search, including a "create a query" filter, which lets you limit your search by newsgroup, date, or author.

EXCITE <<http://www.excite.com/>>
Search a database the company claims contains more than one million Web documents or burrow through the past two weeks of Usenet news and classified ads. Excite also provides NetReviews - sites that journalists have evaluated for content quality - as well as up-to-the-minute news updates. From Architext Software.

THE LYCOS HOME PAGE: HUNTING WWW INFORMATION<<http://www.lycos.com>>
Lycos' new search engine and redesigned navigation bar lets you efficiently search document titles and content. It features a database that the company claims has millions of link descriptors and documents built by a Web crawler that brings in thousands of documents daily. The index searches document title, headings, links, and keywords it locates in these documents.

WEBCRAWLER SEARCHING <<http://webcrawler.com>>
This engine allows searches by document title and content. It is part of the WebCrawler project, managed by Brian Pinkerton at the University of Washington, which collects documents from the Web.

YAHOO <<http://www.yahoo.com/>>
Search engine search

CUSI (CONFIGURABLE UNIFIED SEARCH INTERFACE)
Nexor U.K. offers this tool, a single form to search a large number of different WWW engines for documents, people, software, dictionaries, and more.

W3 SEARCH ENGINES
Published by the University of Geneva, this list of search engines covers a wide variety of topics and subjects but is not updated very often.

The key to searching for information on the WWW is NOT to use only one database, search several, they all have different information.

Pipeline Settling Ponds

Location Can Make a Difference

The location and orientation of a settling pond in relation to the supply canal can make a difference in the amount of soil particles being carried into the pipeline. Abrasive particles cause excessive wear on valves, sprinkler heads or end up settling-out in the pipeline itself. The placement of settling ponds along supply canals has varied, depending upon the land available, orientation of the pipeline to the canal and other field constraints.

MPE Engineering Ltd. has found where a settling pond is located parallel to the canal, with the inlet at right angles to the longer dimension of the pond, deposition of particles is quite effective. MPE's Bill Laycock, P. Eng. believes it's because water entering the pond at right angles has no velocity along the pond. The 90-degree turn helps to slow down the flow at the upstream end of the pond, thus reducing the velocity in a shorter distance and allowing the silt particles to settle sooner. This is evident in the settling pond on the Magrath Irrigation District's Lateral B1C.

Many settling ponds are oriented where the longer dimensions are in line with the pipeline allowing water to enter at one end and flow straight through to the pipe inlet. A much longer pond is required to achieve the "settling effect" if the other dimensions are the same, says Jack Ganesh, P. Eng. of Alberta Agriculture, Food and Rural Development. "This is because of the velocity of entry of the water being in line with the pipe inlet. To destroy velocity and allow the water to deposit its particles, a baffle wall is usually installed just downstream of the pond inlet to diffuse the flow. The effectiveness of this type of structure has not fully been evaluated" states Ganesh.

"Some would argue" says Ganesh "that a baffle wall right in the path of the flow creates more particle disturbance. I feel if the entry velocity is low it should help, but at high velocity it is questionable."

Laycock states that besides the quicker deposition of soil particles, there is another advantage in orienting the settling pond parallel to the supply canal. Less land is taken out of production by the pond if it is in or partially in the existing canal right of way.

Deposition of particles in the pond during the operating season is governed by Stokes Law for falling bodies in a fluid and is true for sand particles but not silt and clay. According to Stokes Law, the terminal falling velocity of a spherical particle is:

$$V = \frac{gd^2}{18\eta} (\gamma_s - \gamma_f)$$



Lateral B1C settling pond is located parallel to canal.

Where V – terminal velocity in cm/s
 d – diameter of falling particle in cm
 γ_s – density of falling particle in g/cc - 2.65 for sand
 γ_f – density of the fluid in g/cc - 1 in case of water
 η – viscosity of the fluid in Poise
 g – acceleration due to gravity - 981 cm/s/s

Ganesh states "If we consider the finest sand with a size of 0.062 mm diameter and viscosity of the water at 21°C is 10.09 millipoise.

$$\begin{aligned} V &= \frac{981 \times (.0062)^2}{18 \times .01009} (2.65-1) \\ &= \frac{981 \times (.0062)^2}{18 \times .01009} (1.65) \\ &= 0.34 \text{ cm/s} \end{aligned}$$

which is 0.205 metre per minute

The velocity of flow towards the pipe inlet is 0.0338 m/s and the pipe inlet is 50 metres away. This means it will take the water 24.6 minutes to reach the pipe inlet. Since the pond is only 2 metres deep, it will take only 9.8 minutes for fine sand particles to reach the bed. The design is therefore adequate," concludes Ganesh.

There seems to be little doubt in the two design engineers' minds that a settling pond at a pipe inlet effectively reduces the particle load entering a pipeline. What seems to be even more effective from their experience is the parallel settling pond.

For more information please contact Bill Laycock, P. Eng., MPE Engineering Ltd., 2220 - 5 Avenue South, Lethbridge, Alberta, Canada T1J 4G6 at telephone (403) 329-3442; or Jack Ganesh, P. Eng., Irrigation Branch, Alberta Agriculture, Food and Rural Development, Agriculture Centre, Lethbridge, Alberta, Canada T1J 4C7 at telephone (403) 381-5869. ■

The Year 2000 Review

Irrigation districts are gearing up to address the "Year 2000" water license review that is to be carried out by Alberta Environmental Protection in the year 2000. This will be a major review of the water uses and needs in the South Saskatchewan River Basin. Outcomes of this review will likely set new limits on irrigation and set Instream Flow Requirements (IFN) for the South Saskatchewan River and its tributaries. Results of this review could have a significant impact on the water licenses of irrigation districts.

On May 28, 1990 the then Honourable Ralph Klein, Minister of Environment released a Water Management Policy to support multi-purpose water use in the South Saskatchewan River Basin. It was stated in the announcement that, "The Policy recognizes the importance of water to southern Alberta and the challenge of managing the resource to meet the many demands. There is a need to protect both instream flows and consumptive uses including municipal, domestic and agricultural water supplies. Expansion of the irrigation industry is important to Alberta's economy and is supported by this government, however, an upper limit to that expansion has been established as the demand for water exceeds the supply available." Mr. Klein also stated in the news release that, "Any irrigation expansion in the South Saskatchewan River Basin must reflect the environmental realities of the 1990s. We must manage our lakes, rivers and streams while considering environmental needs, as well as current economic needs, to ensure our quality of life is sustained for future generations." Mr. Klein continued, "that the agricultural industry and municipalities face the ongoing challenge to develop demand management techniques and to implement water conservation methods that are consistent with the goal of sustainable development."

An expansion limit was set at 1,709,000 acres of irrigation in the South Saskatchewan River Basin set by Order In Council in September 1991. The original policy stated that the guidelines for limiting irrigation expansion will be reviewed in the year 2000. It also stated that, "Ongoing work on instream flow needs will assist in refining the guidelines for limiting irrigation expansion within individual irrigation districts and in other areas."

Much of the responsibility to justify irrigation water requirements rests with the license holders. As license holders, the irrigation districts recognize the need to refine the data and analysis required to establish their case for an adequate and secure water supply at an acceptable level of risk for the years beyond 2000. Alberta Agriculture, Food and Rural Development (AAFRD) share

the concerns of the districts in this regard and will be working closely with the districts to address these matters.

On December 6, 1996 a "Year 2000 Steering Committee" was established. This effort was spearheaded by Alberta Irrigation Projects Association (AIPA) and the irrigation branch of AAFRD. The primary mandate of the committee will be to "identify and direct the studies required to accurately assess current and future requirements for sustainable irrigation district water management." Members of the committee include Stan Klassen and Brent Paterson co-chairs, Jim Brown, Jim Webber, Doug Clark, Gordon Zobell, Keith Francis, Fin McPherson, Wally Chinn, Andy Strang, Rick Ross and Allan Herbig.

The committee will help guide the data collection and research needed to address the water requirements for irrigation in a coordinated and consistent manner among the districts. The data collected and the research carried out needs to be done in a cost effective and efficient manner and needs to be rigorous enough to stand up to public scrutiny.

Three working groups will be formed under the direction to the steering committee. These working groups will be responsible for data collection and analysis related to:

1. On-farm water use requirements,
2. Distribution system requirements,
3. Water demand modeling.

Objectives of the on-farm steering committee will be to refine crop water requirements and determine current irrigation water use by farmers in order to better evaluate: potential needs and risk factors as a result of future markets, potential shifts in crop mix, improved on-farm water application systems and management practices.

The distribution system steering committee will work towards: gathering data to determine existing operational characteristics for canals and return flow channels, identify the success of current efficiency measures and continuing improvements in water management.

Several irrigation districts are presently putting in place mechanisms to better quantify how water is used in their districts. Several districts are installing additional return flow metering stations to measure the amount of water being returned to the river systems. The Eastern Irrigation District began a major water audit of their entire district in 1994 and will be updating it yearly. This year the St. Mary River Irrigation District is embarking on a major network of return flow measuring devices. Both Bow River Irrigation District and Lethbridge Northern Irrigation District are partners with AAFRD in block studies. These

3000-acre blocks are being monitored intensely, measuring inflows, on-farm water use and return flows. Information on climatic data, crop mixes, crop yields and farm irrigation methods are being collected.

The objective to the water demand modeling steering committee will be to develop, calibrate and implement the use of computer models that reliably predict future water requirements, as well as provide for operational management strategies for irrigation districts.

AAFRD has already started on revising the Existing Irrigation Water Requirements model developed by Alberta Environmental Protection. This model simulates the water required by various crops, rainfall received and district canal operations. Using historical data sets, the model will assist planners to assess the impacts of drought years, especially back-to-back drought years. The model will allow planners to adjust crop mixes, canal operations and expansion of acres to assess these water demand impacts. Changes to the existing program include more user-friendly interfaces and significant refinements in the logic used to determine runoff, seepage and crop use.

The next four years will be busy years for the committee and its working groups as they strive towards achieving their goal of refining current and future water needs for irrigated agriculture.

For more information please contact the co-chairs Brent Paterson, Branch Head, Irrigation Branch, Alberta Agriculture, Food and Rural Development, Agriculture Centre, Lethbridge, Alberta, Canada T1J 4C7 at telephone (403) 381-5140; or Stan Klassen, Executive Director, Alberta Irrigation Projects Association, 909 Lethbridge Centre Tower, 400 - 4 Avenue South, Lethbridge, Alberta, Canada T1J 4E1 at telephone (403) 328-3063. ■

Weir Does The Job

A basic requirement of any canal is to be able to deliver water out through a turnout at low flows. Normally this is accomplished by raising water in the canal by means of a concrete check structure. St. Mary River Irrigation District (SMRID) staff have been using a very effective structure that does the job at less than half the cost of a typical check structure.

SMRID design staff countered the trend of half a century of hydraulic design practices by designing and building a reinforced concrete weir in their Chin 2 Lateral. Ron Renwick, P. Eng., district engineer, feels the weir alterna-



Concrete weir checks water at low flow in the Chin 2 Lateral.

tive is very viable as checks in small laterals are often set and left at one level.

Often minimum actual canal waterlevels are less than minimum design levels. Consequently turnouts don't function properly. Normally the only solution has been to raise canal waterlevels by installing a check structure. Now the weir provides a lower cost alternative.

As simple as it may seem, the weir design took time to bring it from the idea stage to a fully-functional irrigation structure. The structure, constructed entirely of reinforced cast-in-place concrete (with the exception of the 150-mm silt and drain pipes) has an extensive 1500-mm deep cut-off below the canal bed. The weir itself rises 800-mm above the bed elevation. The upstream apron extends 600 mm in front of the weir and downstream the stilling basin extends 1500 mm to contain the hydraulic jump. Riprap is placed over a 150-mm depth of bedding gravel both upstream and downstream to further prevent bank erosion.

The design life of the structure is estimated to be 50 years plus. It was eligible for Irrigation Rehabilitation and Expansion Program funding.

SMRID staff have monitored the effectiveness of the Chin 2 weir and are pleased with how it performs. Careful hydraulic design was required to ensure that the weir maintained canal water levels at low flows and did not increase the water depth to any extent at high flows," states Renwick. Renwick warns, however, that in a canal with a lot of silt movement, the weir may trap silt, in spite of the silt pipes, causing a buildup of the canal bed to the height of the weir, thus creating very high waterlevels when the canal is required to pass high flows. Also once the weir crest elevation is set it cannot be adjusted.

For more information please contact Ron Renwick, P. Eng., District Engineer, St. Mary River Irrigation District, P.O. Box 278, Lethbridge, Alberta, Canada T1J 3Y7. Telephone (403) 328-4401. ■

A One-Day Seminar That Exceeds

A successful seminar has a clear objective and is one where participants go away feeling it was worthwhile and wanting to come back to another. The Raymond Irrigation District's annual ratepayers "Irrigation Seminar" exceeds all expectations. Originally the brainchild of district manager Gordon Zobell twelve years ago, the one-day seminar continues ongoing success. The idea for the mini conference came from Zobell's long-time involvement with the large Alberta Irrigation Projects Association's annual irrigation conference.

Zobell realizing many of his own irrigators could not afford the time nor had the interest in the more technical conference, arranged for a one-day seminar. He invites speakers with a wide variety of topics not all related directly to irrigation. Over the years he has had grains and cattle marketing speakers, MLAs, MPs, utility companies, funding and loan agencies, fire departments on ice and water safety, climatic change and the list goes on and on. Each speaker is limited to a relatively short time period (15 to 20 minutes) with ample time left for questions. To accommodate farm chores, the seminar starts at 9:30 a.m. and is over by 4:00 p.m. A hot lunch is provided free of charge.

Zobell says "The key to an effective seminar lies in the audience. When you get local people involved in the planning of the program, you are doing things with them rather than for them. It takes away the temptation to think in terms of what you think people should hear rather than what they want." RID board and staff attend the function and make themselves available to try and answer any irrigation related questions.

Sponsorship of the seminar is provided by local banks, businesses and the Agriculture Service Board. The district usually ends up contributing less than \$200. Anyone attending the seminar must preregister, but there is no fee. "Usually we have about 60 people attending which is many more than the 10 or 15 that show-up for our annual ratepayers meeting." Variety in the program heightens audience attendance and ensures people will be back with a neighbour or two next year wanting to hear about not only RID plans but other interesting topics as well.

For more information please contact Gordon Zobell, Manager, Raymond Irrigation District, PO Box 538, Raymond, Alberta, Canada T0K 2S0. Telephone (403) 752-3511. ■



Shown is part of the farm audience that annually attends the RID's Irrigation Seminar.

THE WATER HAULER'S BULLETIN

Designed to provide the operation and management personnel of Irrigation Districts with items of interest in their line of work. Comments are welcome. Please contact Duncan Lloyd, editor, at Area Code (403) 381-5539, Lethbridge.

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