Where Water Works Wonders

### IRRIGATION UPDATE

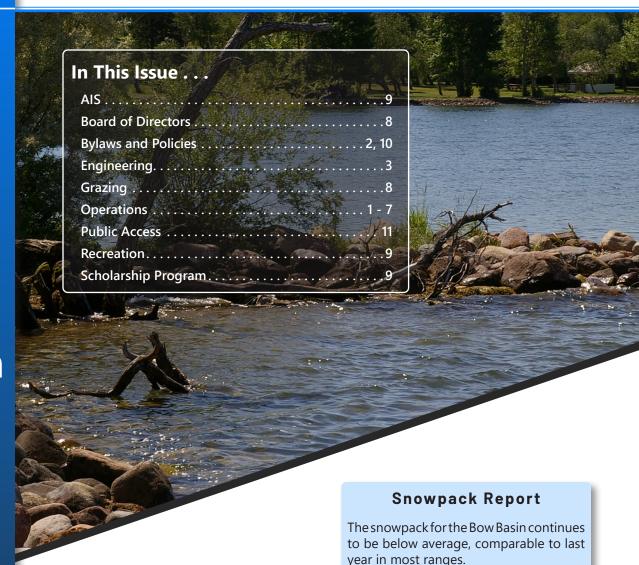


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# Eastern Irrigation District

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P.O. Box 128 550 Industrial Road West Brooks, Alberta Canada T1R 1B2



#### **District Water Supply**

As of publication date, major District reservoirs are 90% full. For a summary of Maximum Water Bylaw #970 (2024) and the revised Drought Plan Guidelines, see page 2.

Diversion began on April 3<sup>rd</sup>, with priority going to refilling reservoirs from winter levels to FSL (Full Supply Level) in anticipation of the upcoming irrigation season. The earliest date for water delivery was April 29<sup>th</sup>, where available off main trunks of the conveyance system, to May 6<sup>th</sup>, in all areas. Contact your Water Operator for availability in your area (see centerfold map for newly adjusted areas and contacts).

Click HERE to view the Snowpack Data (https://

rivers.alberta.ca/)

#### Maximum Water Bylaw #970 (2024)

Maximum Water Bylaw #970 governs the maximum amount of water that may be delivered by the District to each acre receiving water for irrigation purposes and for any other purpose. At January's Corporate Planning sessions and subsequent board meetings, a focus of review was given to the Drought Plan Guidelines and the maximum amount of water allowable per acre. The 24"/acre maximum on a parcel (average of 18"/acre across the District) remains (Stage 1 of Drought Plan Guidelines); however, to support efficiencies in water use the District will begin each irrigation season with an 18"/acre maximum on a parcel (Stage 2), and will increase or decrease this amount by entering a different stage of the plan, taking into account various factors including time of year, snowpack, precipitation, river and reservoir levels, local soil moisture conditions, and weather forecasts. Each operating month, and specifically in June, the stage will be confirmed or may be adjusted by resolution of the Board. The ability to transfer or purchase deliveries of water is provided in selected stages of the drought plan as shown below. The bylaw may be viewed on the District's website. (click HERE to view Bylaw #970)

At the April 23, 2024, Board Meeting it was approved to move to Stage 3 of the Drought Plan and impose a maximum allotment of 15"/irrigated acre for the 2024 irrigation season. The District continuously monitors diversion, storage, and conveyance and will increase the maximum inches as it is in a position to do so or will decrease the amount if required.

Drought Plan Guidelines					
Water Delivered for Irrigation Purposes	Max Inches to Parcel	With Transfers / Purchases	RWUP Agmts	Other Purposes Agmts	Other License Holders
<b>Stage 1:</b> Maximum 24"/acre to any Point of Delivery plus option to purchase up to an additional 4 inches of deliveries, subject to the average delivery across the entire District not exceeding 18"/acre. No water transfer option. Option to purchase inches also subject to water availability and obtaining consent from Manager.	24"	28" (4" of Purchases)	Maintain Efficient Use	Maintain Efficient Use	Maintain Efficient Use
• transfer any amount of unused irrigation water, up to 24" to any other Parcel; an application to transfer is not valid and shall not be acted upon until approved by the District.  No option to purchase additional inches. Above is subject to the average delivery across the entire District not exceeding 18"/acre.	18"	24" (6" of transfers)	Maintain Efficient Use	Maintain Efficient Use	Maintain Efficient Use
Stage 3: Maximum volume of water to any Point of Delivery being something less than 18"/acre as determined by the Board from time to time (the "Drought Maximum Threshold") plus option to:  • transfer up to 6" above the applicable Drought Maximum Threshold to any other Parcel.  An application to transfer is not valid and shall not be acted upon until approved by the District. No option to purchase additional inches. All above subject to average delivery across the entire District not exceeding the Drought Maximum Threshold.	< 18" (as set by the Board)	6" above set amount (by transfers)	Reduced by same % as farms	Reduced by same % as farms	Reduced by same % as farms

**Stage 4:** If a priority call is made that forces junior license holders located within the District to stop diverting water and those license holders do not have enough water in storage to get them through the period, the District may be willing to:

- Provide an assignment for a portion of the District's water license to any municipality that needs one on the condition that the municipality has their own drought / conservation plan and has implemented it (this plan must be realistic). The District will provide these assignments at a reasonable cost.
- Provide an assignment to most other industries or license holders that require one; many may be able to go without an
  assignment for a period of time. The District will provide these assignments at a reasonable cost.
- Provide only very limited assignments to Ducks Unlimited to prevent major wildlife losses; most projects can be shorted for a year. The District will provide these assignments at a reasonable cost.

#### **Snake Lake Reservoir Expansion Project**

First presented to the Board in 2018, the Snake Lake Reservoir expansion project has been given extensive consideration regarding its operational benefits to fully supply 50,000 irrigation acres downstream and thereby reducing off-river acres by 35%, construction viability, and the project's overall feasibility. In 2020, the Government of Alberta (GOA) announced a historic investment to expand irrigation through Provincial funding grants and Federal financing, with the Snake Lake Reservoir expansion project receiving approval as one of the off-stream storage projects eligible for the Alberta Irrigation Modernization (AIM) program. In light of this, the District included the project in its irrigation expansion modelling and 2021 plebiscite proposal.

In March 2022, the project footprint lands were secured by the District. Throughout 2022 and 2023, extensive boreholes, penetration tests, rock cores, and laboratory analysis have been undertaken to analyze the physical, chemical, and geotechnical properties and to determine the existing ground conditions under the proposed dam berms and within the expanded reservoir. A provincial Environmental Impact Assessment (EIA) is required and currently underway with an expected completion and submission date of late summer.

The Snake Lake Reservoir expansion project is located approximately 15 km southeast of Bassano and 32 km northwest of Brooks. The current reservoir is contained by 2 earth-fill dams: 1 along the east end and 1 along the west end. The maximum storage at its present size is 14,900 acre-feet at full supply level (FSL). Outflow from the reservoir is through the east dam outlet structure, located near the north end of the east dam. Water is conveyed from the reservoir via the Snake Lake Canal to the Springhill Canal, which supports approximately 50,000 acres downstream.

The size and capacity of Snake Lake Reservoir will be expanded, which will help offset the direct use of water from the Bow River when it tends to run lower in the summer. Earthworks will include the construction of approximately 8 km of earthen berms, up to 20 m in height. Total storage in the expanded reservoir is estimated to be 70,000 acre-feet which would support the 50,000 acres downstream with 16.8 inches of water, excluding evaporation and operational spill. A new low-level outlet structure will be constructed at the north end of the expanded reservoir to deliver water into the Snake Lake Canal, which will have its capacity increased to 800 cfs under the IRP program, to fully support the downstream acres.

The Board in February approved the project at an estimated cost of \$273 M and is funded through the AIM Program and District Capital Works Program.



#### **District Water Sharing Agreements**

As part of a drought mitigation plan, Alberta Environment & Protected Areas (EPA) spearheaded and facilitated the negotiations of formal water sharing agreements between the major license holders on the four southern tributaries: Bow River Basin, Red Deer River Basin, Oldman River Basin, and Upper Tributaries of the Oldman River Basin. Memorandums of understanding (MOUs), which would be implemented during a drought, were then presented to irrigation district boards for ratification. The Bow River Basin MOU was given approval by the Board of Directors on April 2, 2024. This MOU is not unlike the informal cooperative methods that have been in place for years between the districts.

#### Water Ordering and Recording

A parcel's total water usage for the irrigation season is calculated using the irrigation system's designated flow rate and the periods of time quantified between ON date & time and OFF date & time water orders. Timely communications with your Water Operator ensure an efficient conveyance system. If you have any concerns or questions regarding the flow rate on any of your irrigation systems, please contact your Water Operator or your Divisional Superintendent so that remeasuring may occur. The District encourages irrigators to have their pivot or wheel flow rates metered for accuracy prior to the irrigation season if, for example, the equipment has been renozzled.

#### **Irrigation Recording** and Management App

To support your on-farm tracking of water usage and aid in your irrigation planning, please sign up for IRMA (Irrigation Recording & Management App) by contacting Mark Porter. This tool provides real time water use information on all parcels in your farming operation and is especially useful if nearing a maximum use in water. And for those already signed up, remember to contact the office if you have any parcel updates. (click HERE to view IRMA)

Mark Porter, **Information Services Supervisor** 

Cell: 403-363-5920 Email: mark.porter@eid.ca

#### Behind the Matter... **Water Delivery Date**

Each year, the water delivery date is set by motion at the March Board of Directors Meeting. Opening diversion is dictated by the amount of ice and snow at the Bassano Dam and in the main canals and structures, but typically occurs late March/ early April. In a normal year, reservoirs are initially topped up from winter levels to FSL (Full Supply Levels) while the conveyance system is also being charged. Considerations for setting the water delivery date for irrigators and other water users includes the remaining ice and snow in the smaller canals and structures, weather conditions, and irrigator demand. Conditions are evaluated as they unfold, and the delivery date is adjusted as needed and as can be accommodated (sometimes requiring snow and ice removal where possible to open up the system). Since 2000, the average date for the delivery of water has been between May 6th - 7<sup>th</sup>, making this year's May 6th water delivery date within the typical time frame. In any year, water delays in some parts of the District may sometimes be attributable to resolving any maintenance issues that may arise with charging the system.



#### **Aquatic Weed Abatement**

To improve water quality, in addition to treating with chemical, the District has installed screens with mechanical sweepers and gabion walls. Where there is room, it is preferred to install gabion walls as there is little to no future maintenance and the walls are excellent at filtering aquatics from the water. Throughout the construction season, usually 4 – 6 new gabion walls are installed and in some cases they replace mechanical sweepers.

The District also undertakes a clipping program typically in the drainage systems to help increase flow and remove problems associated with aquatic weeds. Drains that are selected are ones that are known to be problematic or are identified by Operations staff.

#### Sprinkling of Roadways

Please be reminded that the sprinkling of water on the driving surface of roadways by irrigation equipment is prohibited within the County of Newell under County Bylaw No. 1743-11. Upon receiving notice of a violation, a Community Peace Officer will inspect the area and request the person responsible to remedy the situation immediately. Failure to stop sprinkling the driving surface at the request of the Community Peace Office may lead to a charge being laid against the person or persons responsible.

The EID also urges irrigators to keep the irrigation water from all infrastructure equipment within the assessed irrigation area and advises that all water used, even unintentional irrigating of ditches and roadways, counts towards the total water allocation and could mean you reach your irrigation cap earlier than expected.



#### **Chemical Treatment of Canals**

The EID has seen successful results in implementing a scheduled chemical treatment program for canal reaches prone to aquatic weed issues. Following is the 2024 schedule, subject to weather conditions, for canals in this program:

- **Tilley Main Canal:** 
  - May 15, May 29, June 7, June 12, June 26, July 10, July 24, August 7
- **North Branch Canal:** 
  - May 16-17, May 30-31, June 13-14, June 27-28, July 11-12, July 25-26, August 8-9, August 22-23
- 17-G Springhill:
  - May 15, May 29, June 12, June 26, July 10, July 24, August 7,
- **Rolling Hills Main and Secondary A Canals:** 
  - June 28, July 15, August 30
- **Bow Slope and 17 Bow Slope Canals:** 
  - June 21, August 30
- 16 Springhill:
  - June 24, July 9
- **Antelope Creek Canal:** 
  - July 12
- **H West Bantry Canal:** 
  - June 24

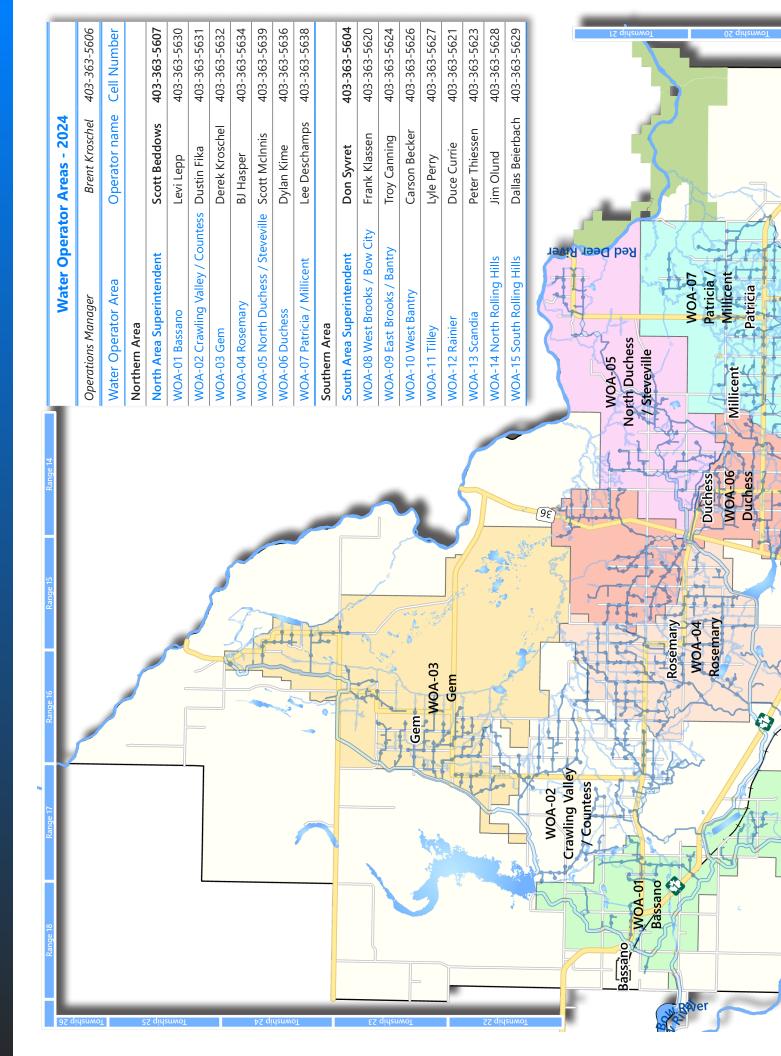
**Herbicides used are** (Special Use Approval Registration Number 10572-05-01):

- Canals are treated with:
  - Magnacide H (Acrolein) PCP Act Regulation Number 10948 – for aquatic vegetation and algae.
- Canal banks are treated with:
  - Vanguish (Dicamba) PCP Act Registration Number 26980 – for broadleaf weeds, brush and willows.
  - Vision Max (Glyphosate) PCP Act Registration Number 27736 – for Canary grass, Downy Brome, and

Contact Brent Kroschel if you have any questions regarding this program. Brent Kroschel,

Operations Manager

Cell: 403-363-5606 Email: brent.kroschel@eid.ca



#### **Annual General Meeting Update**

The District was pleased to announce at this year's AGM of funding received from the Federal and Provincial Governments through the Universal Broadband Fund 50/50 towards the EIDNet Fibre Project, for a total of \$8,303.402. The Universal Broadband Fund is part of the Government of Canada's coordinated plan to connect Canadians with broadband services through its "High Speed Access for All: Canada's Connectivity

Strategy". The Alberta Broadband Fund is part of the Alberta Broadband Strategy to improve access to highspeed internet. The EIDNet Fibre Project has combined and Alberta Broadband Fund. Each fund will commit its 8 phases to 4, with Phase 1 (One Tree, Duchess & Rosemary) and Phase 2 (Bantry, Tilley, Cassils & Snake Lake) complete and Phase 3 (Rainier, Bow City & Scandia) and Phase 4 (Patricia, Rolling Hills & Gem) scheduled for completion in 2024 and 2025 respectively.

Members of the Board of Directors are elected by the irrigators. The Eastern Irrigation District has adopted a practice of staggered elections in which 2 directors are elected in one year, 2 directors are elected the next year, and 3 directors are elected in the following year. This method of elections provides for long term stability in the governance, administration, and operation of the District.

- Division 3 (Patricia/Millicent): Mr. Brad Deschamps was elected by acclamation; this is Mr. Deschamps' 1st term of office.
- Division 6 (Tilley): Mr. Brent Schroeder was elected; this is Mr. Schroeder's 2<sup>nd</sup> term of office.



#### **Community Grazing Allocations and Turn-Out Dates**

The Grazing Association Committee (GAC) met on April 11, 2024, and recommendations were then made to the Board of Directors. At the April 23, 2024, Board of Directors Meeting the following was approved:

- Maximum number of cow/calf pairs per member for the 2024 grazing season is 60 for full members, 40 for 2nd year members, and 20 for 1st year members.
- Cattle Grazing Turn-Out Date for regrass/tame/irrigated pasture is May 15th.
- Cattle Grazing Turn-Out Date for native pasture is June 1st.

Rick Volek, Land Administrator - Grazing

Cell: 403-793-0497 Email: rick.volek@eid.ca

#### **Aquatic Invasive Species Prevention Program**

As movement of aquatic invasive species into new areas mainly occurs by travelling watercraft, the EID initiated the AIS Prevention Program in 2018. ALL BOATERS, including users of kayaks, canoes and paddleboards, wishing to access EID reservoirs must follow approved prevention procedures and each year complete a watercraft information form. The District's major reservoirs and downstream canal systems continue to be monitored; no signs of mussels within District infrastructure have been found to date. Additional AIS information and reservoir access rules may be found on the District's website. Help do your part to prevent the introduction of invasive mussels to this area. To enroll in the program or for more information, contact Brandi Doerksen.

Brandi Doerksen, Land Administrator - Aquatic Invasive Species

Cell: 403-363-9694

Email: brandi.doerksen@eid.ca



#### Rolling Hills Reservoir Campground

Subject to weather conditions, the Rolling Hills Reservoir Campground will open for the season this year at 8:00 a.m. on Monday, May 13, 2024, and close at noon on Monday, September 30<sup>th</sup>.

- Daily Camping 403-363-5603
- **Group Camping** 403-362-1400
- (110 daily sites) \$40/night, including GST, plus an additional \$5/day for 50 amp sites
- (2 areas, 5 single sites each) \$200/night, minimum of 2 nights, plus \$25 reservation fee, including GST



#### **Scholarship Program**

The Eastern Irrigation District Scholarship Program has been offered since 2008 and is continuing in 2024. Residents (within the EID) and irrigators (farmers within the EID) may apply, and all career fields are eligible! Scholarships are awarded for trades, diplomas, certificates, or degrees:

- Post-Secondary Education at a recognized North American university \$2,000
- Diploma or Technical programs (2-3 year programs, and condensed programs) \$2,000
- Certified Trades (Alberta Certification Trades) \$1,000

Master's programs or a second trade, diploma, certificate, or degree do not qualify. To obtain an application form and review requirements, download the form from www.eid.ca under the Information tab or visit or call the District Office (403-362-1400).

#### **Updates on Policies and Bylaws**

Bylaws and policies relevant to irrigators may be viewed on the District's website.

[see website for bylaws and policies]

#### Capital Assets Charges Bylaw #969 (2023)

The Capital Assets Charges Bylaw levies a charge on each irrigation acre added to a titled unit and shown on the assessment roll and sets the purchase price the District will pay for irrigation acres sold to the District by a landowner. It also assigns a general assessment audit penalty for prohibited irrigating of acres, outlines responsibilities for irrigation works, and contains a 2% annual payment escalator. Purchase prices and charges may be adjusted more than the automatic 2% annual escalator by Board decision. The bylaw is reviewed annually in November. Any applicants in the following year may then be aware of any adjusted charges. The current charges are:

- \$750/acre for converting terminable acres to irrigation acres;
- \$1,500/acre for infill and efficiency acres up to 50 irrigation acres per parcel;
- \$3,600/acre for infill and efficiency acres over 50 irrigation acres per parcel; and
- \$3,600/acre for acres assessed to dry parcels (new acres).

#### Fees Bylaw #972 (2024)

The 2024 Fees Bylaw was approved based on the overall calculated cost for the delivery of water (amortization of irrigation works, administration, maintenance, operations, equipment pool, and special projects), this year \$37.20/ac-ft being the average cost per ac-ft of water used. Depending on the type of water conveyance or agreement, the fees are either based on a percentage of cost or will have a flat fee assigned and may include charges for additional water over a typical set amount. The bylaw now also contains current charges and hook-up fees for household purposes agreements and various rural water use agreements, and current charges and hook-up fees for other purposes agreements. Charges for water delivery to newly subdivided parcels were increased to \$5,100/acre foot, with a minimum of \$10,200 for 2 acre-feet.

#### **Farm Improvement Policy**

The Farm Improvement Policy was revised by:

- increasing the cost-share amounts for landowners for machine leveling, gated pipe, and eliminating spill past a pump;
- eliminating the grant for surface irrigation to side-roll wheel moves;
- excluding brushing, and the removal of trees, landowner buildings and foundations from work that may be performed by the District for the landowner; and
- · adding clarity regarding grant eligibility.

### Delivery and Distribution of Water Bylaw #973 (2024)

The Delivery and Distribution of Water Bylaw regulates the delivery and distribution of water to a user, allows the District to stop the delivery of water when certain activities occur, and imposes conditions that must be satisfied before the delivery and distribution of water to a user may be restored. Revisions to the bylaw prohibit irrigators from using water delivered by the District in excess of a maximum instantaneous flow. In addition, the fee for turning back on water that has been turned off due to a landowner contravention of the bylaw has been increased from \$1,000 to \$5,000.

#### **Water Delivery and Operations Policy**

The Water Delivery and Operations Policy was revised to accommodate the implementation of maximum instantaneous flow restrictions and registering restrictive covenant agreements against title to the landowners who are permitted by the District to irrigate subject to a reduced maximum instantaneous flow.

#### Rate Bylaw #971 (2024)

The 2024 Rate Bylaw was approved with a \$5.00/ acre water rate (operating costs in 2023 were \$29.00/ assessed irrigation ac.), a pressure surcharge rate of \$12.50/acre, and a surcharge rate of \$60.00/acre for acres under a terminable agreement which have been identified as being eligible for conversion to irrigation acres but have not been converted at the request of the agreement holder.

#### **Public Access**

The EID went into the winter with a significant soil moisture deficit. Conditions have improved, but possibly not enough to prevent the return of high fire hazard access restrictions. Please monitor the EID website over the spring and summer for potential changes to public access restrictions.

Fishing season in most of the EID reopens on May 8th. Anyone accessing EID lands is reminded to follow all EID Public Access rules, which can be found at:

#### https://www.eid.ca/public\_access.html

The EID is moving towards mandatory written permission for hunting on EID land. Written permission may be obtained on the EID website (later this year), by calling the office, or by emailing Daniel Buell.

All users of EID lands are reminded that dumping waste of any kind, including yard waste, is prohibited and may be punishable by fines and/or being banned from EID land.

Daniel Buell,

Land Administrator - Habitat, Wildlife & Access

Cell: 403-363-5618 Email: daniel.buell@eid.ca



#### Canal/Drain Ownership & Salvage Fishing

In general, the large canals and drains are owned by the EID and public access is allowed, unless otherwise indicated. Other canals and drains are often not owned by the EID and not open for public access, in which case the EID only has an easement for water conveyance infrastructure. Salvage fishing after the canals have been dewatered has always been a popular activity. A \$5.00 salvage licence is required and can be obtained from the Fish & Wildlife offices in Medicine Hat, Lethbridge, Hanna, Calgary, or Edmonton. The license allows a set number of sportfish of any size to be harvested from the dewatered canals using gear (dip net or beach seine) otherwise not permitted. The licence does not authorize the construction of fish traps in EID canals or the removal, addition, or relocation of armor (rock) from EID canals. The licence is not valid in locations where the fish may enter a reservoir on their own, typically downstream of the last drop structure before the canal flows into a reservoir. Please respect gates, instructional signs, and neighbouring landowners when salvage fishing. Use extreme caution if salvage fishing around EID water control structures.

# EASTERN IRRIGATION DISTRICT

PO BOX 128 550 INDUSTRIAL ROAD WEST BROOKS AB TIR 1B2







## Please Note:

All Annual Reports and Newsletters can be read on-line at:

www.eid.ca