SIDC

Saskatchewan
Irrigation
Development
Centre

Canada Saskatchewan

A Cooperative Venture

In 1985, the governments of Canada and Saskatchewan agreed to establish a centre to plan and coordinate federal and provincial irrigation research and demonstration activities in Saskatchewan.

The Prairie Farm Rehabilitation Administration's (PFRA-Agriculture Canada) irrigation demonstration farm at Outlook, Saskatchewan, was chosen as the site for the new facility. It offered land in a central location in the province, an experienced staff, and operating facilities.

The farm was upgraded to accommodate increased research and demonstration activities, renamed the Saskatchewan Irrigation Development Centre and was officially opened on April 1, 1986. It is now one of the most modern irrigation research and demonstration centres in the country.

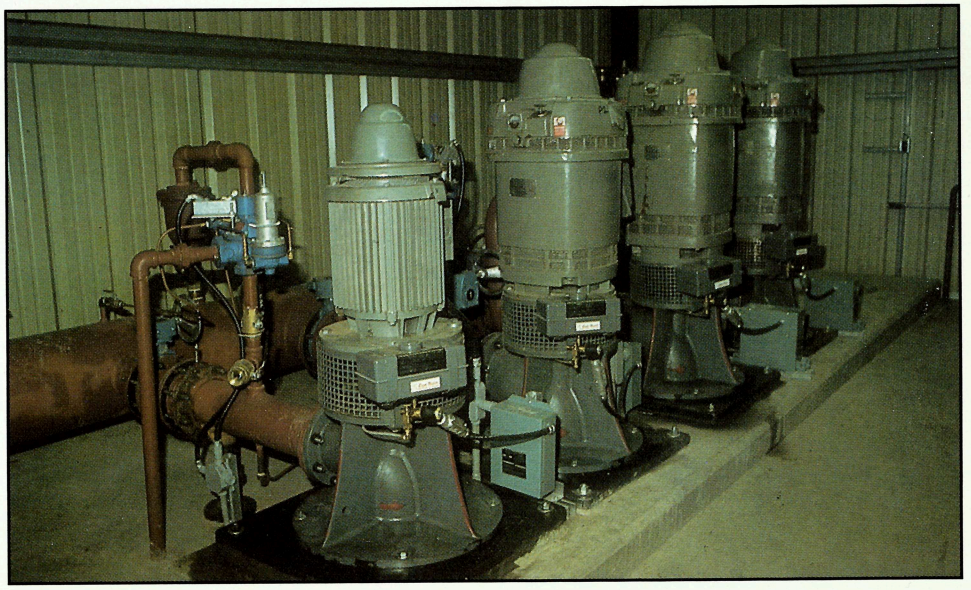
facilities

Something Old, Something New

Canada and Saskatchewan shared the costs of upgrading the farm. Sask Water designed and installed a fully automated pipeline irrigation system; PFRA rehabilitated irrigation works and installed improved weather data equipment. Specific work included:

- adding a pumphouse with 2 x 125 hp, 1 x 75 hp and 1 x 15 hp electric turbine pumps
- removing all gravity water supply canals and installing a buried pressurized water supply pipeline
- bringing three phase power to the site
- installing three electrically powered centre pivots, and one specially designed linear irrigation system
- upgrading existing flood irrigation systems
- improving surface drainage and installing subsurface drainage in selected locations
- establishing an on site meteorological station.

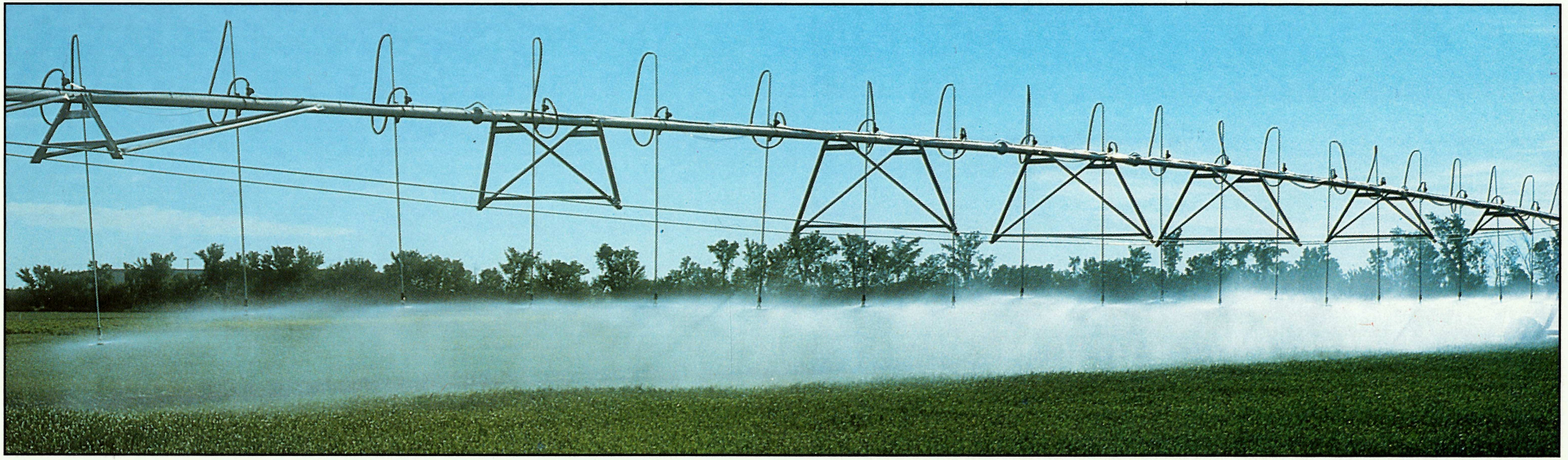
Pump site beside the main canal for the South Saskatchewan River Irrigation District #1 showing intake and scrubbers. The scrubbers remove algae and debris from the intake screen.



Turbines inside pumphouse. Water under constant pressure is supplied to each irrigation system by buried pipe.

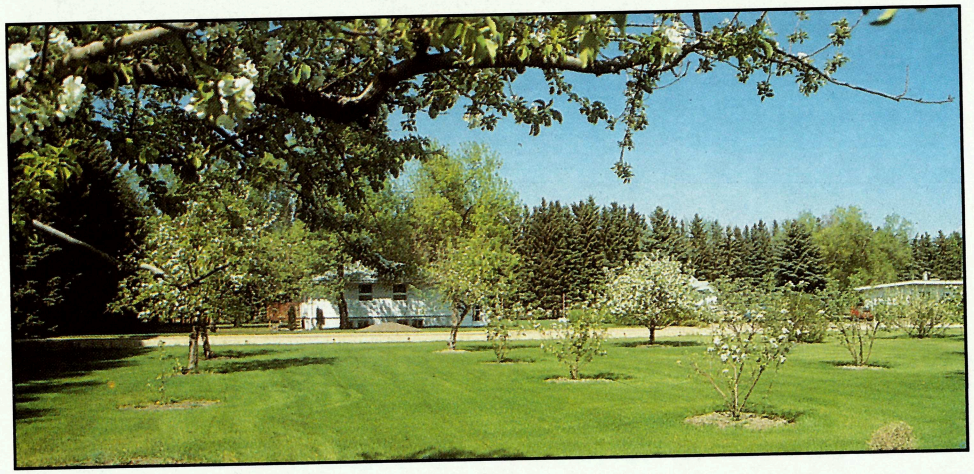
Outlet valve for flood irrigation.

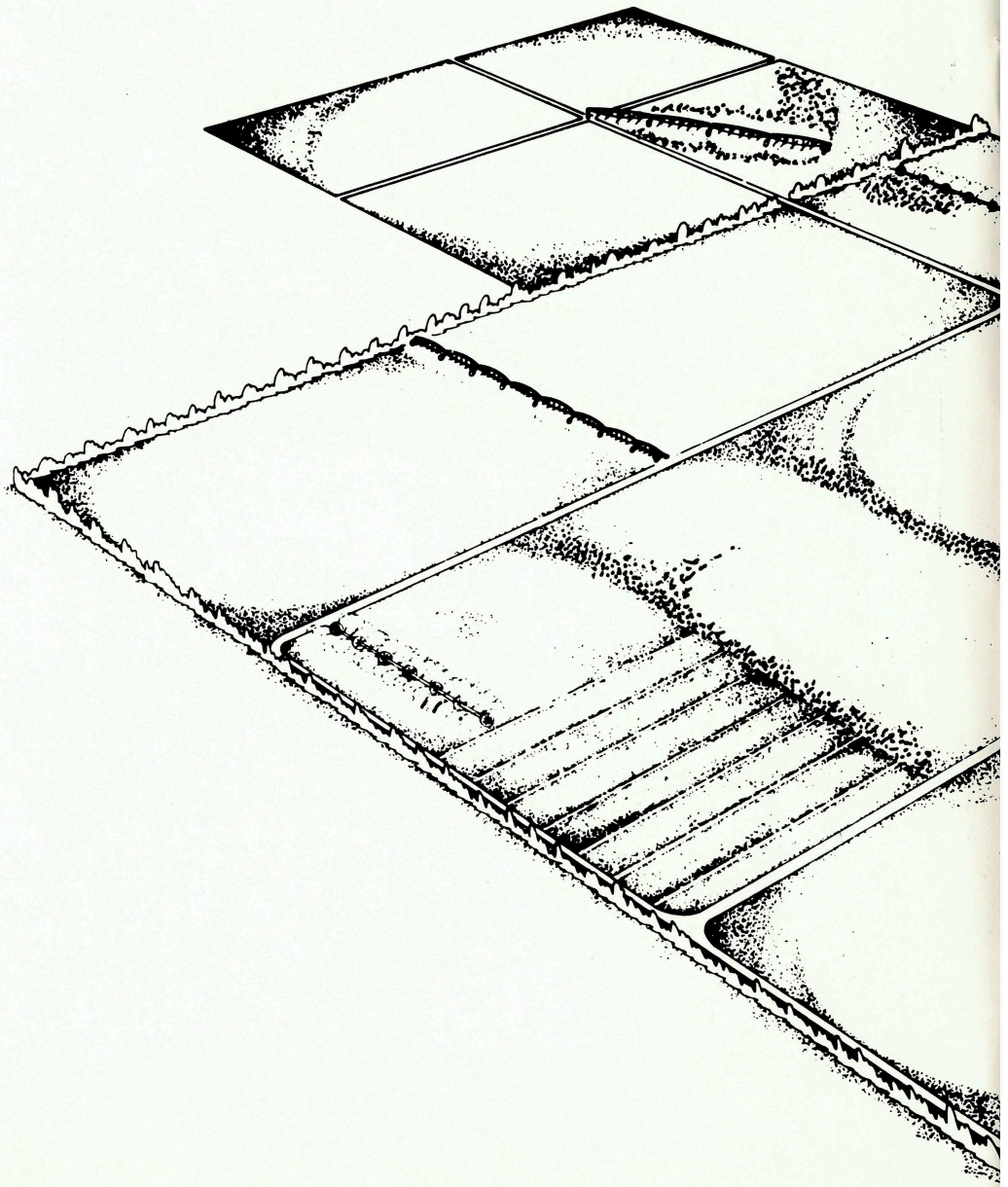
Ditch to improve surface drainage.

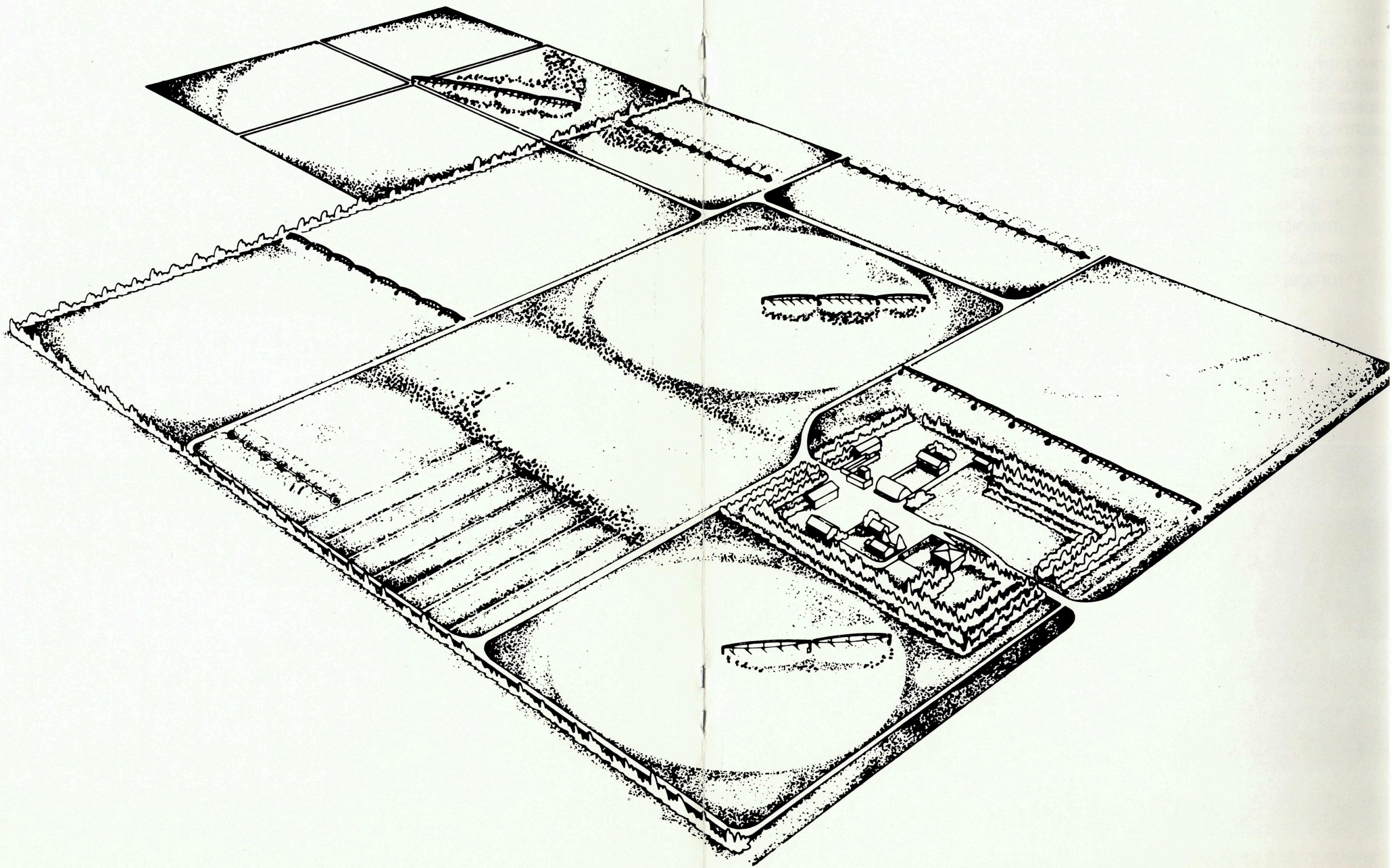


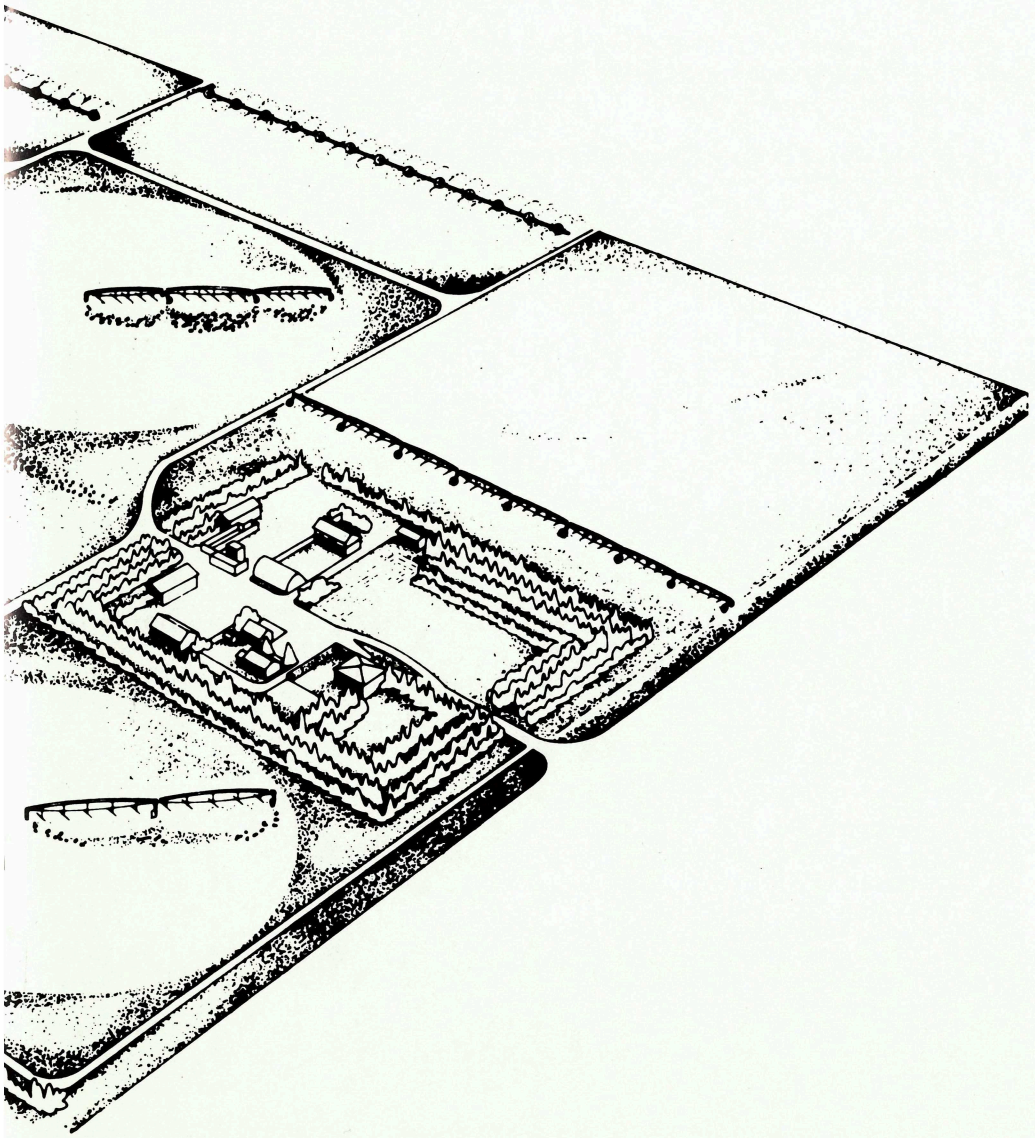
Linear irrigation system. The sprinklers are operated individually and can be raised or lowered to accommodate wind conditions or crop heights.


Agriculture Canada
Prairie Farm Rehabilitation Administration
Soil and Water Conservation Branch
Saskatchewan Irrigation Development Centre
Centre du Développement d'irrigation de la Saskatchewan
Irrigation Services
HOURS OF OPERATION
8:00 A.M. - 12:00 NOON
1:00 P.M. - 5:00 P.M.
MONDAY TO FRIDAY









Finding the Answers

The Centre's research and demonstration programs are aimed at assisting farmers in maximizing the benefits of their irrigation operations (1) through improved on-farm techniques, and (2) the development of improved, marketable crops. Some of the Centre's activities include:

— irrigation scheduling and water management

— evaluation of new and existing cereal, forage, oilseed and special crops

Cone seeder used on research plots.

Infrared thermometer to measure the temperature of the crops canopy. By relating this figure to the temperature of the air, it can be determined if the crop is under stress.

Tension meters used to measure soil moisture tension to aid in the proper scheduling of irrigation.

— application of chemicals and fertilizers through the irrigation system (fertigation and chemigation)

— subsurface drainage

— soil conservation practices

— equipment evaluation

— irrigation agronomy

In addition, the Centre provides the land and facilities for irrigation research funded by other agencies.

Centre pivot operating at Rudy-Rosedale Pasture. The site is demonstrating the large scale production of alfalfa under irrigation using marginal land and drainage water.

A wheel move irrigation system used on small research plots.

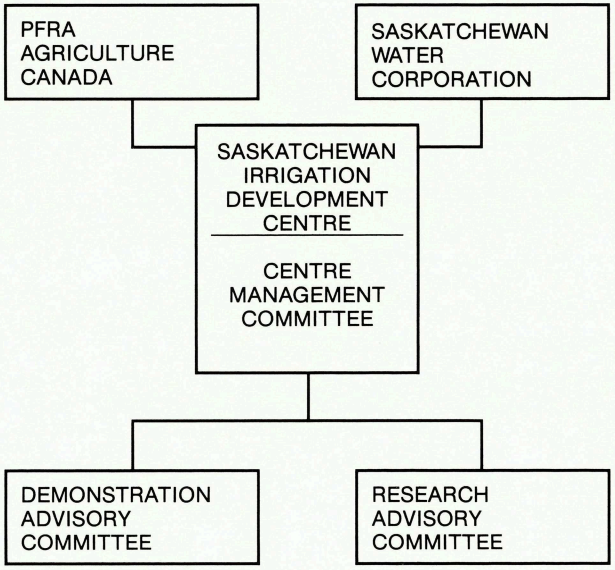
Demonstration of canola under irrigation.

organization

How the Centre Operates

Three committees govern the operation of the Centre:

1. The Centre Management Committee is the main governing body of the centre. It is made up of members from PFRA-Agriculture Canada, and the Saskatchewan Water Corporation. This body coordinates the Centre's general operation and budget.
2. The Research Advisory Committee identifies irrigation research needs and ensures that the proposals are scientifically and technically sound. This group includes membership from the University of Saskatchewan, Agriculture Canada Research Branch and PFRA, Saskatchewan Agriculture, Saskatchewan Water Corporation, and farmers who are irrigating. This group prioritizes and recommends irrigation research projects at Outlook and selected sites for support funding.
3. The Demonstration Advisory Committee identifies and recommends a demonstration program responsive to the needs of irrigation farmers. It includes membership from Agriculture Canada, PFRA, Saskatchewan Agriculture, Saskatchewan Water Corporation, and farmers who are irrigating.



funding

PFRA-Agriculture Canada provides the Centre's operating and management staff and funds for maintenance of land, facilities and equipment. Saskatchewan Water Corporation provides financial assistance for research contracts, technical and equipment support for researchers, and extension services.

Tobin — a variety of canola — under irrigation.

Demonstration of flax and barley under irrigation.

Sunflowers. Netting is used to protect the seeds from birds.

Agriculture
Canada

Prairie Farm
Rehabilitation
Administration

Administration du
Rétablissement agricole
des Prairies

SASKATCHEWAN
WATER
CORPORATION