

History of the South Heart System

Early 1930's

Dr. Rutherford of the Research Council of Alberta completed a report that first proposed the South Heart Project. The project would address flooding problems downstream on the lower South Heart River and provide a water supply for area communities.

1946

The McLennan Chamber of Commerce finished a follow-up study based on Dr. Rutherford's report. The study recommended that the South Heart River be diverted through Winagami Lake to Kimiwan Lake, then west to Peavine Creek and/or Racing Creek.

Stated benefits were:

1. Provide flood control in the Lower South Heart River area,
2. Conserve and refresh the waters of Winagami and Kimiwan Lakes, and
3. Provide drainage to areas west of McLennan to Girouxville.

Other benefits mentioned included: future resort development on Winagami and possibly Kimiwan and an available water supply to the communities of McLennan, Donnelly, Falher and Girouxville.

This study-project proposal was forwarded to: Alberta Water Resources, Ducks Unlimited, PFRA, etc.

Ducks Unlimited and Alberta Water Resources responded favorably. Initial survey work was completed in late 1946. The results showed that the project was feasible and the provincial government undertook the project.

1950 North Channel was constructed.

1951 Dam #1 was completed.

1957 Original Winagami/Girouxville canal completed.

1959 South Outlet built.

1960 Dam #2 was built and South Channel built.

The completed project was altered from that originally proposed by the McLennan Chamber of Commerce. The maximum volume of flow that is able to be diverted from the South Heart River is actually much less than what was proposed. Alberta Water Resources could not find a natural westward flowing stream that was capable of handling the water volumes expected by high diversion rates from the South Heart River.

1973 - 1976

Public awareness of the project increases as a large spring runoff event in 1975 raises Kimiwan Lake and it floods McLennan's golf course and campground.

Landholders within the project area complain about high lake levels and/or flows in the South Heart River.

1977 - 1980

Complete rehabilitation of the McLennan-Girouxville canal. This included an outlet structure on Kimiwan Lake.

1981 - Present

The communities of McLennan, Girouxville and Donnelly express concern as to the quality and quantity of water available to them from the McLennan-Girouxville canal. The Town of McLennan expresses concerns over the low level of Kimiwan Lake.

Public input with respect to operations is often in conflict. Some want high lake levels, some want low levels. Public demands often exceed what the system can achieve, i.e., stabilize Kimiwan Lake water levels.

1986

The McLennan-Girouxville canal, between Winagami Lake and Kimiwan Lake, is rehabilitated a second time. This included, increasing the transmission capacity of the canal and building a new, higher discharge outlet from Winagami Lake.

1992

With the return of normal runoff volumes, from previous dry years, Winagami Lake and Kimiwan Lake rise substantially. Due to the increased water elevation the McLennan-Girouxville canal achieves maximum transmission capacity for the first time.

The South Heart - Winagami Study Team proposes the following:

1. That Dam #1, Dam #2 and the South Outlet be upgraded and/or replaced.
2. That Winagami Lake no longer be drawn down to provide additional storage for spring runoff.
3. That more water pass through Winagami Lake to increase the flushing rate and to allow for great control over fluctuating lake levels.

STATUS of SOUTH HEART RIVER DIVERSION SYSTEM AS OF

June 15/92

Spring target elevation 618.90

EL. 621.825
KIMIWAN
LAKE

DISCHARGE FROM LAKE
OUTLET STRUCTURE
WEIR SILL EL 618.96 (92-04-29)

INLET STRUCTURE
DISCHARGE TO LAKE
DISCHARGE TO CANAL

TOWN OF
McLENNAN
WEIR & RESEVOIR
CANAL

WINAGAMI - GIROUXVILLE CANAL
CONTROL STRUCTURE
DISCHARGE TO CANAL

F.S.L. 621.70
WINAGAMI
LAKE
EL. 621.73

HWY. 2A
C.N.R.

GATE # 1 OPENING
GATE # 2 OPENING
DISCHARGE
DAM No. 2

HEART
RESEVOIR
F.S.L. 626.06

DAM No. 1
DISCHARGE
GATE # 1 OPENING
GATE # 2 OPENING

WINAGAMI LAKE OUTLET
CONTROL STRUCTURE
DISCHARGE
100.005
100.005

TO HIGH
PRAIRIE

679

