

**HIGHWAY 14 REGIONAL
WATER SERVICES
COMMISSION**

2022

Water Resources in Beaver County

Prior to 1991 communities and residents of Beaver County had only limited surface water from the Spring snow melt to treat for drinking water.

There is no sustainable surface or ground water supply in Beaver County.

The lack of water limited population growth and economic development.

Residents of Beaver County sought a solution to this concern.



ALTERNATIVE WATER SUPPLY

The City of Edmonton had an abundant supply of water from the North Saskatchewan River and there was water pipeline infrastructure existing from Edmonton to Sherwood Park.



PLANNING A REGIONAL WATER PIPELINE SYSTEM

ATCO had an existing natural gas pipeline right of way from Viking to Edmonton that they were willing to share with a water pipeline.



FUNDING

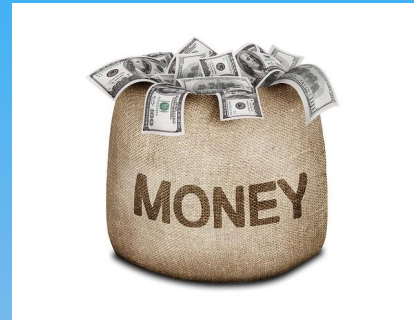
Provincial and federal grant money was awarded to the project but did not cover the entire project cost.

The communities were expected to raise the required funds but were not able.

ATCO offered to fund the portion of the project not covered by grant funding on the condition they would be the owner/operator of the pipeline.

The communities agreed.

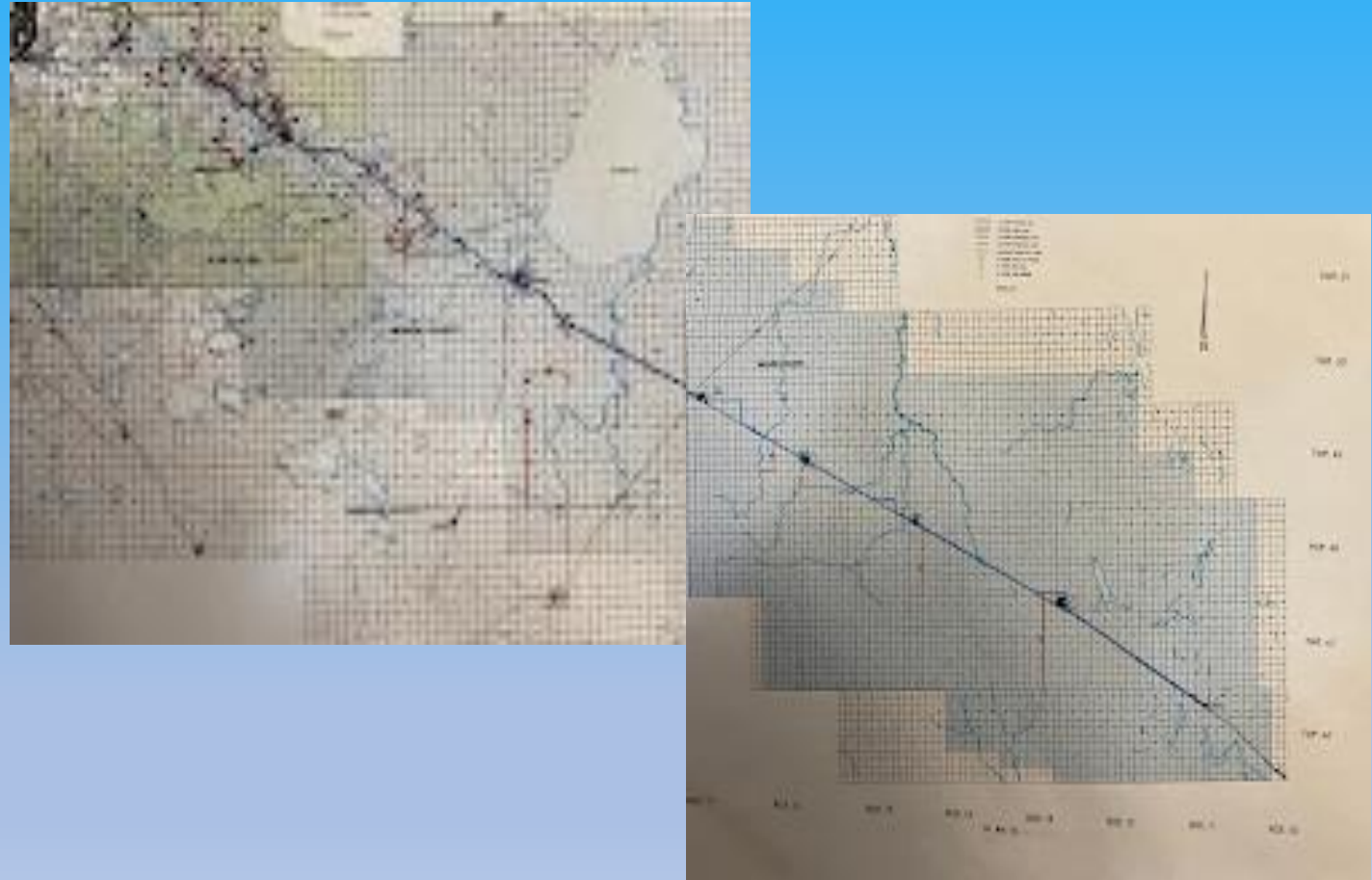
Grant Money + ATCO Money = Project Cost



CURRENT WATER SYSTEM

In 1991, the Highway 14 System was constructed from Sherwood Park to Ryley.

The Highway 14 System has continued to expand until it has become what it is today.



PURCHASE OF THE HIGHWAY 14 SYSTEM FROM ATCO

The Highway 14 Regional Water Services Commission was established in 1990 and has continued to oversee the operations of the Highway 14 Water System since.

In May of 2010 the Commission acquired all of the assets of the Hwy 14 System from ATCO.

The system was purchased at a price that compensated ATCO for the value they had invested in the system.

This left the Commission with a sizeable debt which is being reduced over 25 years.



HOW DO WE MANAGE THIS SYSTEM?

Since the Commission has taken ownership of the system many studies have been undertaken to determine how to best manage the Hwy 14 Water System in areas such as:



Capacity



Life Cycle



Financial Management



CAPACITY

The Hwy 14 Water System can be likened to a water hose with many branch lines that moves water from the source to the end user.

Like any system it has limitations due to its design parameters.

On average the Hwy 14 System currently operates at 80% to 90% of its design capacity.

Increasing capacity beyond the design parameters would require an entirely new pipeline at huge expense.

Therefore, careful and responsible water management by all users is necessary to ensure the sustainable supply of water for years to come.

Transmission Line



End User



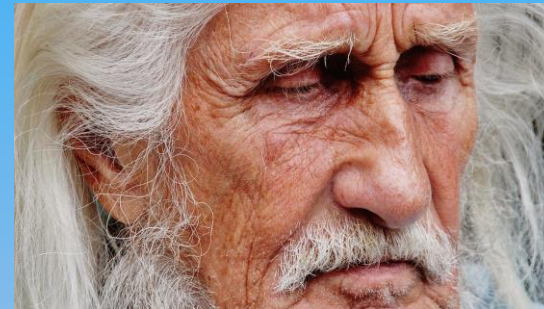
LIFE CYCLE

Where is the Hwy 14 water infrastructure in regards to its typical life cycle?

Originally, Engineers estimated the life span of the most crucial and expensive component of the pipeline, the pipe itself, to be up to 100 years. The current estimated lifespan of this infrastructure is closer to 75 years.

Eventually it will have to be replaced!

Currently, replacement costs do not qualify for government funding and replacement must be planned for, reserve funds collected from customers, and set aside.



Reserve Accounts

In conjunction with the engineering life cycle determinations, the Commission has established reserve accounts to set aside funds for future replacement costs.



SUSTAINABILITY

With careful, intentional, and progressive management of the Highway 14 Water System, it will continue to be the sustainable life line that it is today for residents of Beaver County.



**Thank-you from the Highway 14
Regional Water Services
Commission**

and

Please Conserve our Most Valuable Resource

Potable Water