

# College Opportunities Lac La Biche Water, Wastewater Training Centre



December 1, 2016



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# What is the Project?

- To offer accredited potable and wastewater operator training in Lac La Biche
- Creation of a Centre of Excellence around water that is a unique from what is currently available.
- Use of a simulation training as a tool for improving water operator skill and confidence.
- Reduce practicum hours
- Increase employer and industry standards



# Why Water Management?

- The College believes that Water management is at the core of sustainable development
- Water Resources and Natural Resources Management is going to become increasingly important in our region and province.
- Portage College feel that it critical that there be local expertise to address issues on water and water resource management
- There is a critical shortage of water operators in northeastern Alberta

# Water issues in Aboriginal Communities?

- Almost half of the on-reserve homes in Alberta aren't connected to water treatment facilities
- 20 per cent of First Nations in Canada are under a drinking-water advisory indicating that the water supply is contaminated and that you have to boil your water before drinking it
- Although in Indigenous and Northern Affairs funds up to 100 per cent of construction costs and 80 per cent of operational expenses for water treatment facilities one critical component is the difficulty in finding operators to work in remote communities
  - Training local people can help



# What Does Portage Offer?

- History in Water Management training with SAGD DAWT as a standalone Continuing Education program and as an enhancement for the colleges Power Engineering students
- History of innovative program development and the use of simulation to enhance the learning experience
- Programs are developed to be offered either on premise or via online delivery
- The college recognized the need for this training, and set aside funds to finance program and facility development and had \$400,000 in funds reserved for the program
- Portage has a partnership with the Alberta Water and Wastewater Operators Association to co-develop training for their members
- Portage is a member in the Water North Coalition, an organization made up of northern municipalities, utilities and training providers who advocate for a unified approach to meeting the growing infrastructure and operational challenges facing northern Alberta water and wastewater systems.



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# Partnership with Lac L Biche

- Lac La Biche had identified environmental management, namely water management as a priority
- The county saw the potential for training its operators locally
- Keeping good jobs in the community and increased control over the operations of its facilities
- One of the long term goals of the program is to improve the health and management of the water quality of Lac la Biche and surrounding lakes
- Another priority is to provide an opportunity for public engagement and education of water and water bodies.

# Partnership with Lac La Biche

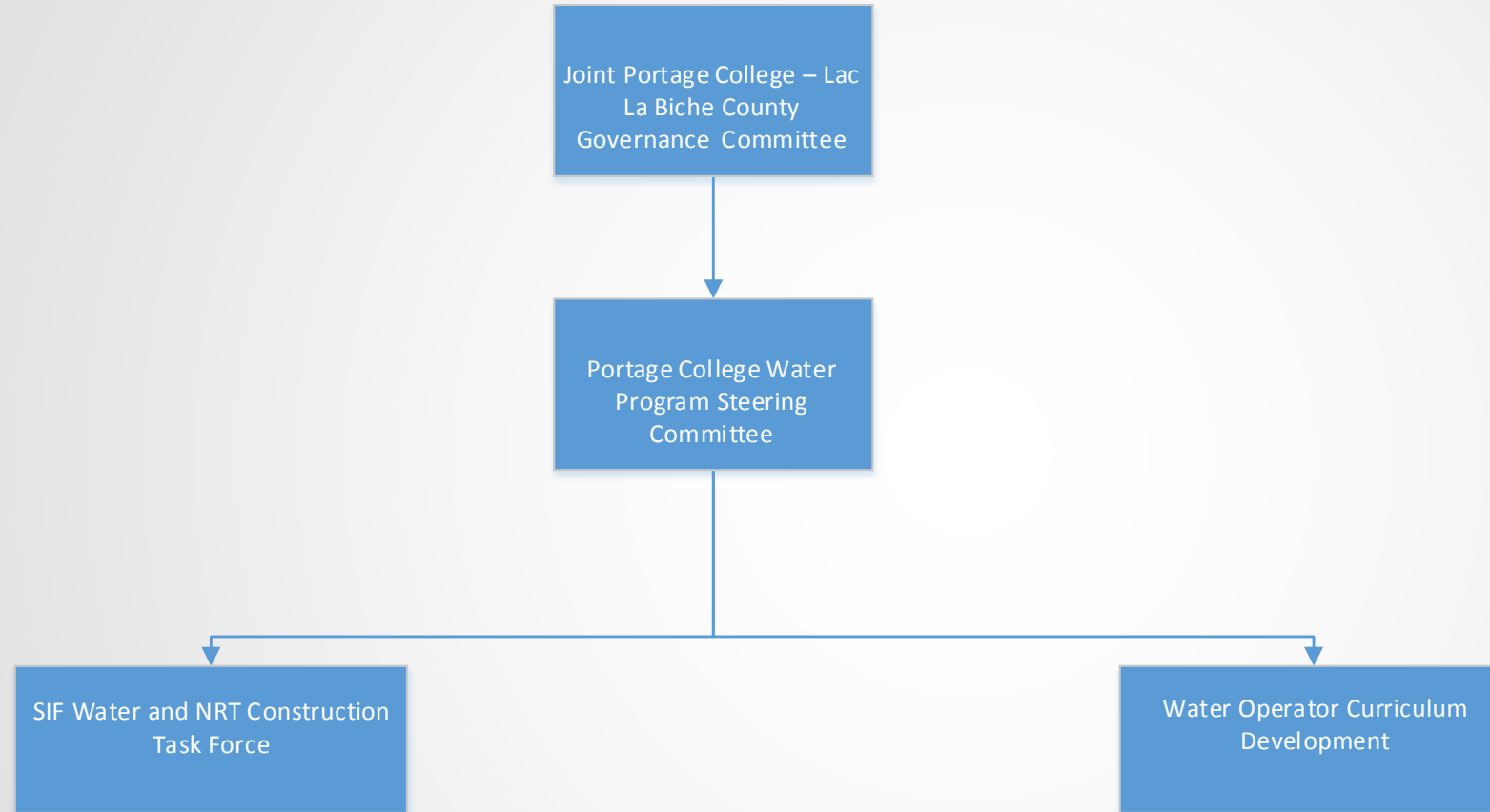
- This partnership didn't just happen, but was the result of over 2 years negotiation between the college and the county
- The college initial priority had been the construction of a water reference testing lab to provide a certified water testing lab in Northern Alberta
- The county had a desire to train its operators locally
- Keeping good jobs in the community and increased control over the operations of its facilities

# Partnership with Lac La Biche

- The college adapted its planning to align with the County need and reprioritized the Operator Training components of the project
- First phase would concentrate on Level 1 and Level 2 Operator Training using distance and onsite delivery
- The County signed on as a partner in April 2015 and committed \$600,000 to the project



# Partnership with Lac La Biche - Governance



## Post-Secondary Institutions Strategic Investment Fund

- Federal infrastructure economic stimulus program
- Investment of \$2 Billion over a three year period
- The program matches Half (50%) of a project's eligible costs
- The College applied for \$750,000 (total \$1.5 million for the project) to develop a lab to support Level 1 and 2 Operator training, and to design the simulators and facility required to support higher level training and applied research
- Additional \$125,000 for Curriculum Development

## Subject Matter Experts (SME)

- The College issued an RFP for a partner with expertise in water management and project management
- Stantec was the successful bidder and is working with the college on the development of Level 1 and Level 2 curriculum
- Stantec is also providing design expertise for the design of the first water operator simulator in Canada

## Project Challenges

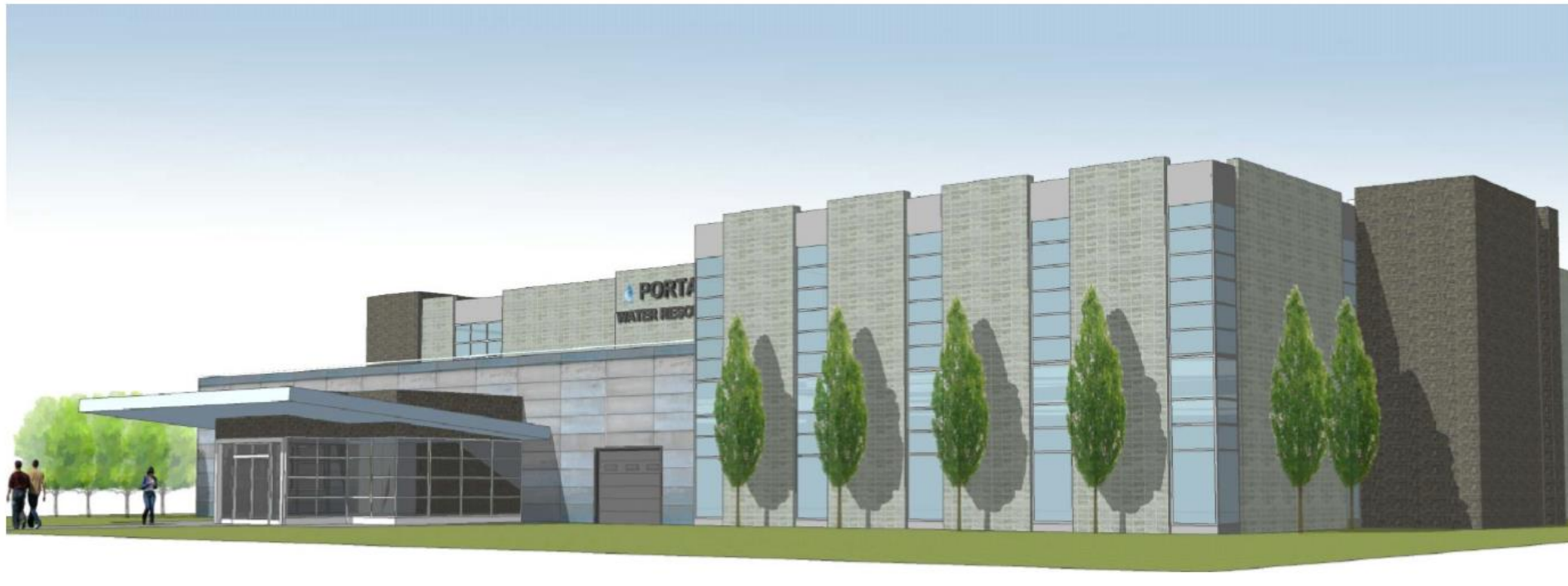
- Conceptual nature of the project. Not been done at a large scale in Alberta or in Canada
- Costs to develop, design and commission a project of this magnitude.

# How Did We Measure Success?

## Phase 1

- ▶ Accreditation of Level 1 and 2 curriculum by Alberta Energy and Parks
- ▶ Design for Building and Simulator to support the training needs of Level 3 and Level 4 Operator
- ▶ Documents developed for Submission to Government of Alberta for Capital ask to construct new facility
- ▶ Shovel ready project if another Federal infrastructure grant is announced

# Thank You To Our Partners!



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