

INDIGENOUS SERVICES CANADA ALBERTA REGIONAL OPERATIONS WATER AND WASTEWATER PROGRAM

June 4, 2024



Indigenous Services
Canada

Services aux
Autochtones Canada

Canada

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Who We Are

The water strategy team works in partnership with First Nations in Alberta to deliver **water and wastewater** projects funded through the First Nations Water and Wastewater Enhanced Program (FNWWEP).



Adam Kuehnbaum
Engineering Manager



Felix Chan
Senior Engineer



Madison Van Tassell
Capital Planning Officer



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Project Officer

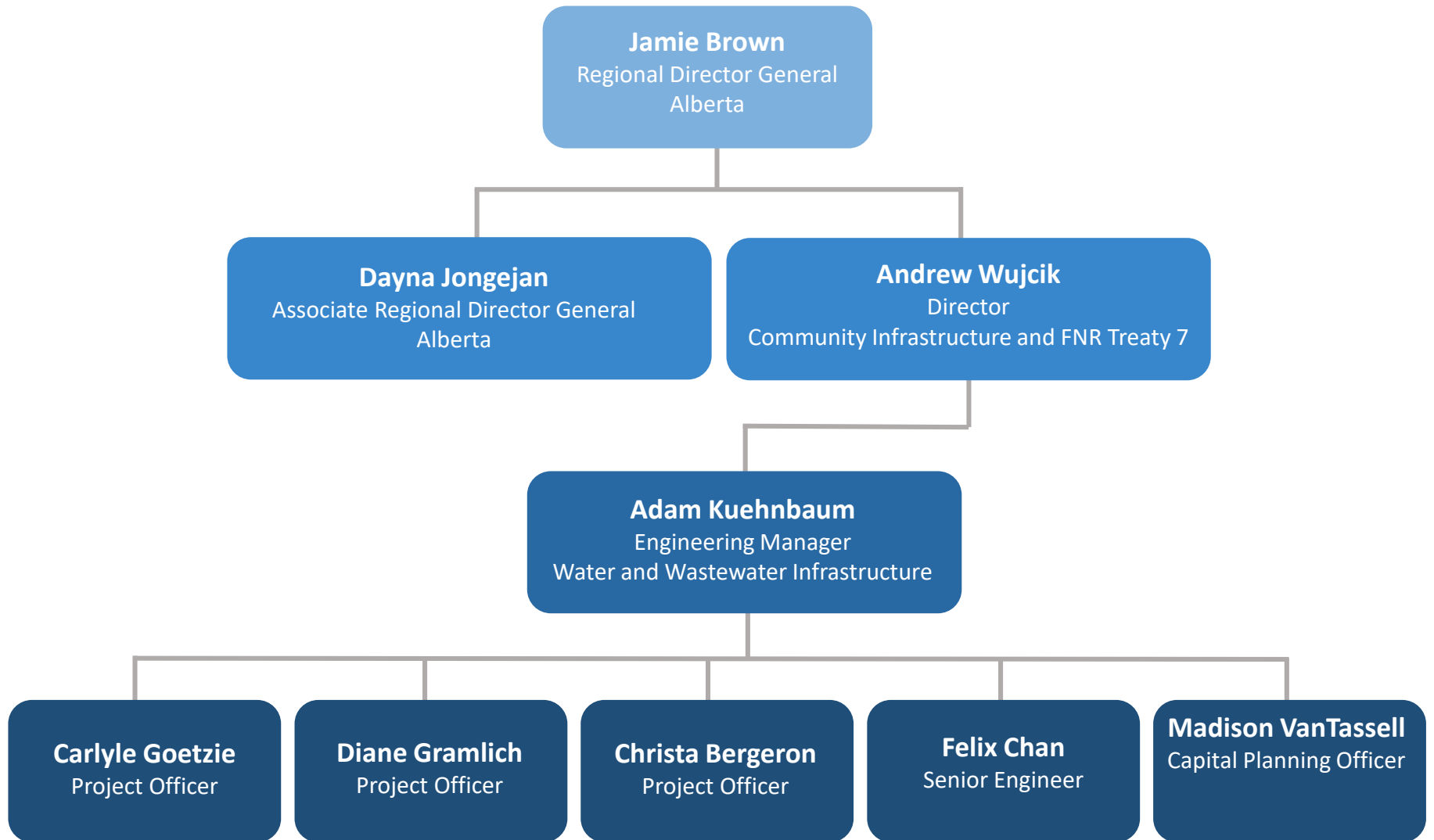


**Diane Gramlich on
leave until July 2024**
Project Officer



Carlyle Goetzle
Project Officer

Organizational Structure



What We Do

Infrastructure Project Planning and Delivery

First Nation Infrastructure Investment Plan (FNIIP)

- What is it?
 - It helps to identify the **infrastructure needs and priorities** and to strategically plan **infrastructure investments** in First Nation communities.
- The National FNIIP is developed each year.
 - It is based on infrastructure investment plans at the community and regional level.
 - A First Nation will submit a community-level plan to a regional office in order to be considered in the National FNIIP.
 - Submission for the community-level plan is due **September 30** but it can be updated throughout the year.
- Capital projects are identified on FNIIP. They are divided into two categories:
 - **Major** Capital Projects
 - **Minor** Capital Projects
- Our team is available to discuss FNIIP with Nations and assist them with infrastructure planning.

What We Do

Infrastructure Project Planning and Delivery

Major Capital Projects (Total Estimated Cost >\$1.5M)

Feasibility Study

- Look at current conditions of water infrastructure and develop options to meet objectives.
- Options analysis must include a **life cycle cost estimate (LCC)** for each option.
 - LCC estimate must consider both the capital cost and the long-term operations and maintenance costs.
- Project Approval Request (PAR) Development.
 - Projects <\$30M require review and approval within the AB Region.
 - Projects >\$30M require review and approval at headquarters.

Design

- Once the PAR has been approved and funding secured, an engineering consultant is typically procured to design the recommended solution.
- ISC Environment (RO) and Public Health (FNIHB) reviews.
- TSAG involvement to provide operational recommendations
- Process typically takes **one year**.

Construction

- A project can go out to tender to procure a contractor for construction.
- Involvement of TSAG and FNIHB critical at commissioning step.
- 6 • Construction of new water and wastewater system typically takes **two years**.

What We Do

Infrastructure Project Planning and Delivery

Minor Capital Projects (Total Estimate Cost <\$1.5M)

- Nations work with our Senior Engineer or Project Officer on options to secure funding.



What We Do

Infrastructure Project Planning and Delivery

First Nation Water and Wastewater Enhanced Program (FNWWEP)

- FNIIIP projects are funded under the **FNWWEP** program
- Fiscal Year **2023/24** budget
 - **\$117M**
- Fiscal Year **2024/25** budget
 - **\$100M**
 - Team is supporting **217 active projects** so far this year.
- FNWWEP program must be delivered according to the **Capital Facilities and Management Program (CFMP)**
 - CFMP is the '**rule book**' for the use of program funds
 - Outlines requirements for Feasibility Study, Design, Construction phases, PAR requirements and **procurement policies**
 - Tendering Policy
 - **Professional Services**
 - **<\$100K** – **sole source** with demonstration of value for money
 - **\$100K to \$500K** – **invited** tender
 - **>\$500K** – **open public** tender
 - **Construction Services**
 - **<\$200K** – **sole source** with demonstration of value for money
 - **\$200K to \$1M** – **invited** tender
 - **>\$1M** – **open public** tender
 - Various other thresholds depending on procurement strategy (CM, own forces)

What We Do

Annual Performance Inspections (API's)

Neegan Burnside Report

- An Initial National Assessment was completed by Neegan Burnside in **2009/10** and **2010/11**.
- A report was sent out to each First Nation.

Annual Performance Inspections

- Completed on an **annual basis**.
 - Have been led by FNTSAG since 2011/12.
 - Summary letters are sent to Chief and Council with cc to Public Works Directors annually
- API's identify risks associated with water and wastewater systems.
 - Risks are categorized under five different headings.
 - The weighted risk for each category is combined to calculate an overall risk for each system.
 - Each system is identified as a **high**, **medium**, or **low** risk system.

WATER

- Source Water – 10%
- Design – 30%
- Operations – 30%
- Reporting – 10%
- Operators – 20%



WASTEWATER

- Effluent Receiver – 20%
- Design – 25%
- Operations – 25%
- Reporting – 10%
- Operators – 20%

What We Do

2023/24 API Results

- Water Systems:
 - **1 High Risk System**
 - **21 Medium Risk Systems**
 - **43 Low Risk Systems**
- Wastewater Systems:
 - **5 High Risk Systems**
 - **38 Medium Risk Systems**
 - **17 Low Risk Systems**

What We Do

Water Legislation

- Team is involved in supporting engagement and communication efforts with respect to **Bill C-61**: First Nations Clean Water Act. Several engagement events held throughout the past year and the **second reading** in the House of Commons is still **in progress**.

Litigation Files

- Team works with the Litigation Management Resolution Branch and the Department of Justice on various litigation files in the Region.

Policy, Protocol and Guideline Review

- Team works with the ISC Strategic Water Management (SWM) team in HQ on review and updates to policies and protocols
 - **Protocol for Centralized Drinking Water Systems in First Nations Communities**
 - Comments received and working on addressing in revised protocol
 - **Protocol for Decentralized Water and Wastewater Systems in First Nations Communities**
 - Dalhousie has been procured by **SWM** to provide background information on the state of decentralized systems on reserve across Canada and provide recommendations on best practices with respect to operations and maintenance of decentralized systems
- Tendering policy update expected in FY 2024/25
 - Revision has been shared with First Nation communities for review.

What We Do

Provincial Working Groups

- **Government of Alberta First Nation Regional Water Tie-In Program**
 - Partnership with AB Indigenous Relations and AB Transportation
 - Funding targeted to support a potable water supply to FN boundary.
 - Program is opportunity driven (**5 communities connected to date**).
 - ISC is responsible for project costs that fall within the boundary of the FN.
 - GOA has allocated **~\$100M** for the program, which reported to be **fully allocated**.
- **Drought Management Working Group**
 - ISC has received updates from the Province on status of the drought conditions.
 - As of **May 30, 2024**, there are **21 water shortage advisories** in place for select water management areas in Alberta



Boat Launch Dock at St. Mary's Reservoir



Boat Launch at the Oldman Reservoir Public Recreation Area

What We Do

Decentralized Systems

- Over **1000 decentralized water** and over **800 decentralized wastewater system inspections** have been **completed**.
- Capital projects involving improvements to the decentralized systems are underway in 10 communities
 - Inspection programs continue to be completed in other communities.
- Over **150 drinking water advisories** on decentralized systems have been **lifted** to date.
- Support of FNIHB and community based water monitors required to test and lift advisories on systems



What We Do

Operations and Maintenance (O&M)

- O&M funding is a subsidy to assist with operations and maintenance costs for eligible assets.
- Funding is based on a **national asset formula** which takes into account factors such as the geographical location and proximity to city centers.
- A review of the full formula was completed by headquarters and resulted in significant **increases** in the O&M funding provided.
- Water and wastewater assets are now funded at **100%** of the amount calculated by the formula.
 - previously funded at **80%** of the calculated amount.
 - bills for purchase of water from a **regional water system** are considered an **eligible O&M expense** and **covered** under the O&M program
- A new tool has been developed to outline the **labour component (in \$)** included in the O&M provided for water and wastewater
- Tracey Travis (Regional Program Development Advisor) leads the O&M program for Alberta Region.

What We Do

Drinking Water Advisory (DWA) Group

Regional Drinking Water Advisory (DWA) Group

- An Initial National Assessment was initiated in 2010/11.
- Collaborative approach in rectifying DWA issues.
- Participants include:
 - ISC
 - ISC FNIHB
 - TSAG - CRTP
- Meetings are held weekly to review the ISC FNIHB report.
- Discuss common issues to resolve **past**, **current**, and **outstanding** drinking water advisories.
- Work collaboratively to develop DWA Work Plans with the goal to mitigate **ALL DWA's**.

What We Do

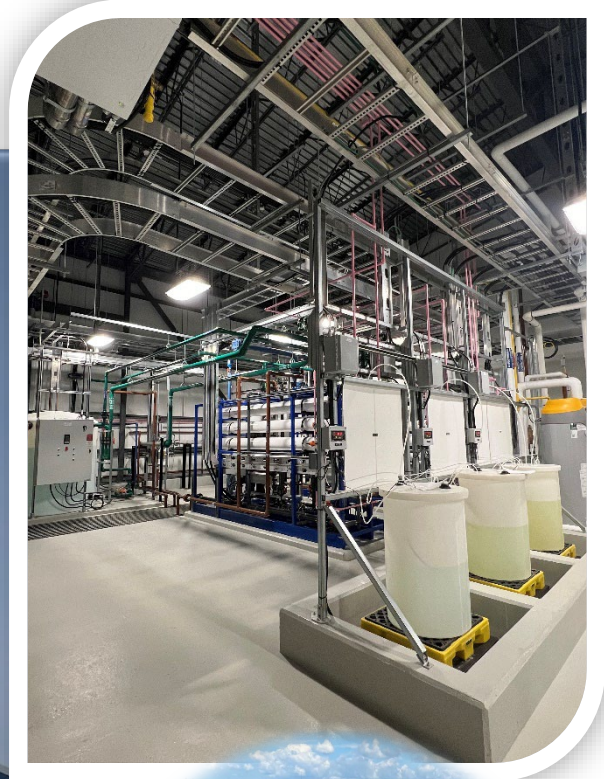
Capacity Building Initiatives

- Group out of Strategic Water Management in HQ focused on initiatives to support capacity building within communities.
 - A few projects supported across the country to date
 - **C RTP Survey** conducted by **Malatest**
 - Emails sent to operators across Alberta Region asking for feedback
 - Purpose of the survey is to hear feedback from you so that their program can better support
 - Three **\$250** random draws for completed surveys
- Certification
 - What are the barriers to certification?
- What can be done to support you in your community?



Projects

Duncan's Water Treatment Plant



Projects

Siksika Nation - AAYoungman WTP



Past Projects

Bushe River Water Treatment Plant



Projects

Kehewin Cree Nation – Watermain



Contact Information

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Questions?