

The Organization

The Atlantic First Nations Water Authority (AFNWA) was created to manage the delivery of safe drinking water and wastewater in participating First Nation communities in Atlantic Canada. The AFNWA is a First Nation owned nonprofit organization with a triple bottom line approach based on social, economic and environmental impact that was incorporated July 18, 2018. The AFNWA is incorporated under the *Canada Not-for-Profit Corporations Act* (the *Act*). This approach will ensure a culturally appropriate, service oriented, and technically strong First Nations water utility which will own, operate, and maintain water and wastewater systems on their reserves.

With a service approach based on social, economic, and environmental outcomes, AFNWA is responsible for the operation, maintenance, and capital upgrades of all water and wastewater assets in participating First Nations. The utility was fully operational by Spring 2022 and is led by a Board of Directors of up to 15 members, including 12 from First Nations leadership and three (3) technical experts. AFNWA's Board currently consists of nine (9) First Nations Chiefs and is chaired by Chief Wilbert Marshall of Potlotek. Currently, thirteen (13) First Nations communities have confirmed their commitment to the AFNWA.

Vision

To be a recognized leader for the delivery of water and wastewater services to First Nation communities across Canada.

Mission

To provide safe, clean drinking water and wastewater in all participating First Nations communities in Atlantic Canada, delivered by a regional water authority owned and operated by First Nations.

Strategic Goals

- To integrate First Nation culture and tradition and realize aspirations to achieve self-determination
- To support long-term self-governance
- To improve service delivery
- To ensure effective governance of the AFNWA
- To ensure financial sustainability of the AFNWA



ATLANTIC FIRST NATIONS WATER AUTHORITY (AFNWA) POSITION DESCRIPTION

The Atlantic First Nations Water Authority (AFNWA) is a water and wastewater utility incorporated under the Canada Not-for-Profit Corporations Act. The AFNWA is owned by First Nations located in NL, NB, NS, and PEI, with its head office in Millbrook, NS. The AFNWA employs approximately 50 full-time staff members located throughout the Atlantic provinces.

POSITION: Engineering Technologist – Asset Management

DEPARTMENT: Engineering

REPORTING RELATIONSHIP: Reports to Director of Engineering

LOCATION: Millbrook First Nation (near Truro, NS)

SALARY: \$65,330 to \$81,663 depending on experience and qualifications

PRIMARY FUNCTION: The Engineering Technologist – Asset Management personnel will play a key role in supporting the management and optimization of the organization's infrastructure assets. This position will focus on asset data collection, analysis, and reporting, ensuring the integrity, sustainability, capital prioritization, efficient operation of assets, condition assessments, for water and wastewater infrastructure. The successful candidate will work closely with engineering team, operations staff, and other stakeholders to improve asset performance, maximize value, and enhance service delivery.

You will be responsible for your personal safety and that of your co-workers by observing all Occupational Health and Safety Rules and Regulations and AFNWA's Occupational Health and Safety Program Manual.

DUTIES AND RESPONSIBILITIES:

- 1. Assist in the development and maintenance of asset management plans, strategies, and systems, specifically the Integrated Resource Plan (IRP).
- 2. Perform asset condition assessments and support lifecycle cost analysis to help prioritize maintenance and replacement activities.
- 3. Manage and update asset data in asset management software and ensure the accuracy and integrity of asset records.
- 4. Support the development of asset performance metrics and reporting tools to track and report on asset performance, risks, and costs.
- 5. Conduct inspections and audits of infrastructure assets to identify potential risks, damages, or deficiencies.
- 6. Collaborate with engineering teams to ensure assets are maintained according to best practices and industry standards.
- 7. Provide technical support to maintenance and operations teams, assisting with troubleshooting and problem-solving.
- 8. Analyze trends in asset performance and maintenance costs to provide recommendations for improvements and optimize asset lifecycle management.
- 9. Assist with capital planning, including the development of project proposals and cost estimates for asset replacement or upgrade projects.
- 10. Ensure compliance with regulatory requirements, safety standards, and environmental considerations in asset management processes.
- 11. Provide training and guidance on asset management processes and systems to internal teams.
- 12. Performs research, data collection, analysis and document preparation for technical reports and studies relating to asset management projects/topics.
- 13. Prepares cost estimates and preliminary background information required for the proposed candidate capital projects.
- 14. Liaises with First Nation agencies, developers, consultants, contractors, vendors and other related agencies.
- 15. Develops infrastructure rehabilitation and replacement strategies and programs.
- 16. Gathers and interprets data from existing records, field observations including CCTV, data collection equipment.
- 17. Maintains project optimization database.
- 18. Assists Engineering and Operations with capital needs coordination in preparation for the annual and long-term capital budgets.
- 19. Assists with the preparation of annual and long-term capital budgets.
- 20. Assists in developing and implementing asset management strategies, policies, and procedures.
- 21. Assists with developing Request for Proposals and Tenders, and manages contractors, consultants, and specialists to ensure compliance with contractual requirements and established safety and risk management standards.
- 22. Assists with the provision of project management duties related to asset management projects including project planning, contract document preparation, quality control and reporting.
- 23. Develops and maintains the asset registry.
- 24. Assists in maintaining the asset inventory in the ArcGIS online platform.
- 25. Performs such other related duties as may be assigned.

MINIMUM QUALIFICATIONS:

<u>Education:</u> Technical diploma in engineering sciences (or a related field) with an emphasis

on underground infrastructure management and municipal servicing (water, wastewater, stormwater); coursework related to asset management will be

considered beneficial.

Experience: Minimum five years of experience in infrastructure management or municipal

servicing (water, wastewater, stormwater) with an asset management focus including significant responsibility for data management using database systems,

and/or data analysis and interpretation using statistical or mathematical

techniques.

<u>Certificates/Licenses/Registrations:</u>

- The ideal candidate will be a registered member or eligible for provincial membership as Certified Engineering Technologist (C.E.T.).
- Must possess a valid Driver's License.
- Must be willing to undertake and maintain valid First Aid and GHS.

Other Knowledge, Skills, Abilities:

- 1. Strong written and oral communication skills.
- 2. Strong analytical skills with emphasis on infrastructure asset management, data collection and analysis, and system performance monitoring.
- 3. Knowledge of infrastructure management, including water, wastewater, or transportation systems, is an asset.
- 4. Strong understanding of asset management principles, practices, and software.
- 5. Proficient in data analysis, condition assessments, and performance reporting.
- 6. Skills in project coordination, system design, drafting and database management.
- 7. Knowledge of mathematical and engineering principles.
- 8. Familiarity with predictive maintenance and reliability-centered maintenance strategies.
- 9. Knowledge of applicable local and national standards, regulations, and best practices related to asset management.
- 10. Knowledge of data management and database principles.
- 11. Familiarity with asset condition assessment procedures, visual infrastructure inspections, and other data gathering techniques.

- 12. Computer knowledge and proficiency in software utilized in asset management applications including ArcGIS Online and AutoCAD.
- 13. Demonstrated organizational and problem-solving skills.
- 14. Ability to establish and maintain effective working relationships, with demonstrated experience working successfully in a team.
- 15. Demonstrated experience working with First Nation communities and agencies.
- 16. Fluency in Mi'kmaq or Wolastoqiyik language would be considered an asset.
- 17. The successful candidate will be asked to submit to a criminal record check and provide a medical examination report from a doctor.

Physical Demands:

- 1. Ability to work in field conditions, including conducting inspections and assessments in various weather conditions.
- Occasional lifting, carrying, and physical activities related to asset inspection and assessment.

To Apply:

Please email your resume and cover letter to Human Resources at HR@afnwa.ca, no later than April 10, 2025.

If all qualifications are equal, preference will be given to persons of Indigenous ancestry.