

## What is Needed for Asset Management Implementation

- 1. Additional Funding
- 2. First Nation Asset Management (AM) Policy
- 3. Asset Inventory
- 4. Condition Assessments
- Maintenance Management Systems (MMS), O&M Budgets, & Capital Forecasts
- 6. Accounting Practices
- 7. Gap Analysis





### What are Additional Funds Needed for?

Implementation of asset management will require additional funds for the following activities:

- Awareness
- Training
- New Staff
- Closing O&M and Capital Funding Gap
- Software (Not necessary initially)

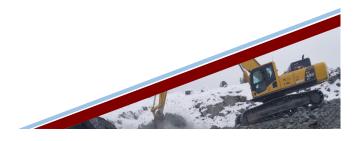




### First Nation Asset Management Policy

- Articulates the Chief and Council's commitment to asset management
- Provides policy statements to guide staff in carrying out the organization's business strategies, plans and activities
- Defines the underlying principles the community intends to follow when using AM practices to meet the requirements of their community's strategic plan(s)





### First Nation Asset Management Policy Example

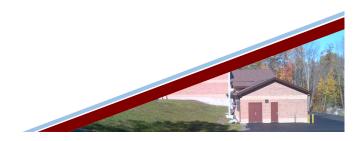
### 1. COUNCIL ASSET MANAGEMENT POLICY STATEMENTS

Asset management is a broad strategic framework that encompasses many disciplines and involves the entire organization. The term asset management, as used in this document, is defined as "the application of sound technical, social and economic principles that considers present and future needs of users, and the service from the asset". To guide the organization, the following policy statements have been developed:

- The [Community name] will maintain and manage infrastructure assets at defined levels of service that support public safety, community well-being and community goals.
- b) The [Community name] will monitor standards and service levels to ensure they meet the community's expectations, and support Council goals and objectives.
- The [Community name] will develop and maintain asset inventories of all its infrastructures.
- d) The [Community name] will establish infrastructure replacement strategies through the use of full life-cycle costing principles.
- e) The [Community name] will plan financially for the appropriate level of maintenance of assets to deliver defined service levels and extend the useful life of assets.
- f) The [Community name] will plan for and seek stable long-term funding to replace and/or renew and/or decommission infrastructure assets.
- g) Where appropriate, the [Community name] will consider and incorporate asset management in its other corporate plans.
- h) The [Community name] will report to citizens regularly on the status and performance of work related to the implementation of this asset management policy.

# Typically consists of four components:

- 1. Intent
- 2. Scope
- 3. Principles
- 4. Responsibilities for Leading Implementation



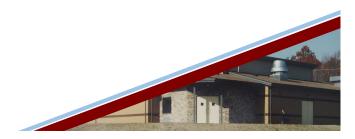
### **Asset Inventory**

ISC requires First Nations to record their assets and asset details in the Integrated Capital Management System (ICMS).

The inventory for funded assets already exists!

First Nations just need to inventory their non-federally funded assets.





### **Condition Reports**

The Asset Condition Reporting System (ACRS) reports provide condition reports, every 3 years, on federally funded assets but are often lacking information or are inaccurate due to inspector qualifications.

Extended ACRS (E-ACRS) provides a more detailed, professional report and an asset replacement forecast (ARF).

FNESL recently completed the E-ACRS reports for the UCCMM.



### **Condition Reports**

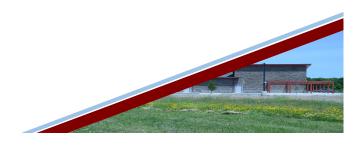
Capital needs for member First Nations has been compiled from existing studies.

Having an ARF provides estimates of the required capital inputs for capital repairs and asset replacements.

E-ACRS also provides an executive summary which identifies priority asset issues.

Qualified inspectors are required for E-ACRS.



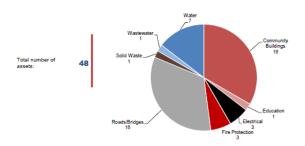


## Sample Executive Summary

### ASSET INVENTORY INSPECTED IN 2019

The E-ACRS process inspects those infrastructure assets in the categories related to: water, wastewater, roads/bridges, education, community buildings, fire protection, solid waste for which Indigenous Services Canada (ISC) provides an 0&M funding contribution. Power generation and distribution, and fresh water or marine outfalls are inspected separately.

### Asset Inventory



The detailed list of assets that were inspected can be found in Section 3: General Information, Excel file: Asset List.

### ASSET CONDITION 2019

E-ACRS inspections identify the general condition rating (GCR) for each asset. Asset condition is rated with consideration to its performance, operability, and compliance with applicable standards and regulations. Information from E-ACRS is used to identify maintenance needs and corrective actions required to protect the health and safety of community users.

Of the 48 active assets inspected in 2019, 1 asset (2%) is new, 35 assets (73%) are in good condition, 10 (21%) are in fair condition and 2 (4%) are in poor condition. A breakdown of asset condition per asset category is shown below.

Please refer to Section 3: General Information, Excel file: Asset List, for a listing of GCRs for each asset.



New	Good	Fair	Poor
The infrastructure is fit for the future. The infrastructure is generally in very good condition, typically new or recently rehabilitated.	The infrastructure is adequate for now. Some components of the infrastructure show general signs of deterioration that require attention.	The infrastructure requires attention and is showing general signs of deterioration The infrastructure is at risk and mostly below standard with many components approaching the end of their service life.	The infrastructure is at risk and mostly below standard with many components approaching the end of their service life.



### Sample Executive Summary

### **ASSET REPLACEMENT VALUE 2019**

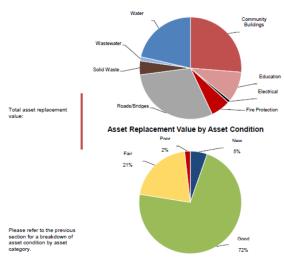
Inspections identify the repair and recapitalization needs of assets in order to keep them in good operating condition and protect the health and safety of community members.

The asset replacement costs shown below represent Class D estimates which are calculated for each asset. A Class D estimate is a preliminary estimate which indicates the approximate magnitude of cost of a project. It is suitable for developing long-term capital plans and for preliminary discussion on a capital project.

The inspected assets have a total asset replacement value of

See the charts below for a breakdown of the asset replacement value by asset category and by asset condition.

### Asset Replacement Value by Asset Category



### 35-YEAR CAPITAL ASSET REPLACEMENT CHART

The 35-Year Capital Asset Replacement Chart below shows existing infrastructure assets and asset component replacement costs over a 35 year timeframe. This is a preliminary charwhich can be used to build an Asset Replacement Plan for your community. The chart shows how information in the inventory can be used to illustrate when investments will likely be needed and the amount of these investments. These investments may be for the replacement of an asset or the repair/replacement of asset components. For example, the roof of a building may need a major repair and later on complete replacement during the lifetime of a building; the gravel roads need re-graveling every 10 years.

The target annualized capital replacement cost is indicated by the horizontal red line. To achieve the target, consider ways of prolonging the life of assets through preventative maintenance and coordination of capital work. Deferring a project, phasing a project over a number of years, or eliminating it may reduce the level of service and the risk of doing this has to be carefully evaluated. Use the knowledge of staff and others to help manage the "gap" between expenses and available revenues and consider factors to help balance the two to reach actions that are realistic, achievable and sustainable.

Please refer to Section 3: General Information, Excel file: 35-Year Asset Replacement Chart for details on each asset inspected.



Total 35-year capital replacement cost

Annualized capital replacement cost (Total 35-year replacement cost divided by 35):

Note: Costs are in net present value and do not include growth, upgrades or increased level of service. These figures will be updated every 3 years. Annual routine O&M funding is not represented in this chart.



### MMS, O&M Budgets, and Capital Forecasts

FNESL produced realistic O&M budgets for 4 schools using RSMeans data, a standard industry estimating methodology, and as-built drawings.

Three of these schools are in the UCCMM territory.

The following O&M components were considered:

- Repair & Maintenance
- Preventative Maintenance
- General Facility Maintenance
- Utilities First Nation provided
- Insurance First Nation provided



## MMS, O&M Budgets, and Capital Forecasts

FNESL designed 5 of the 6 UCCMM water treatment plants and has already prepared the detailed Maintenance Management System (MMS) budgets, with real O&M costing.

Only lacking realistic O&M budgets for roads and other buildings.





### MMS, O&M Budgets, and Capital Forecasts

One community is using the Manager Plus software that FNESL recently updated to include their new Elevated Storage Reservoir (ESR).

UCCMM will be looking at other software that may be appropriate.





### **Accounting Practices**

Tribal Councils and technical groups should advise their member First Nations to align their accounting practices by potentially using a common auditor.

First Nations should align their accounting on an asset by asset basis.

First Nations who acquire certification through the First Nation Financial Management Board will have no issue with aligning their accounting practices for AMP.

Gap analyses need to be identified and strategies prepared to close the gaps.



### In Summary

