Recapitalization of Central Avenue

Community of Inverness

CANADA'S MUSICAL coast

Inverness County

Water & Wastewater Assessment

In 2019, Dillon Consulting completed an assessment of existing water and wastewater infrastructure within the Municipality.

Project goal:

- Overview of Water & Wastewater infrastructure
- Identify potential capital investments over the next 10 years

Project Focus:

- Linear Infrastructure → Piping
- Complex Infrastructure
  - Treatment plants
  - Water storage tanks
  - Lift stations

Executive Summary

- The Municipality currently owns an estimated **$186 Million** of Water and Wastewater assets.
- Based on condition, age and performance of water and wastewater assets the estimated 10 year Investment Cost to renew and repair the condition of the asset is **$103,100,000.00**
- Of the $103,100,000.00 approximately 37% for linear infrastructure and 63% for complex.
- Significantly higher than the National Average
- Due to: Infrastructure age, condition and lack of ongoing maintenance.
- Failures could lead to potential risks to public health, environmental damages, inability to operate within compliance with regulatory approvals, fines and significant disruptions to the community served.

Water & Wastewater Inventory

The Municipality Owns and Operates:

- **23** lift stations
- **2** water booster stations
- **6** WWTPs (7th collection system)
- **8** WTPs (**1** inactive)
- **7** water reservoirs
- **45.7 km** of sanitary sewer
- **10.7 km** of wastewater forcemain
- **71.3 km** of watermains

General Breakdown of Assets (largest to smallest):

1. Inverness
2. Port Hood
3. Whycocomagh
4. Mabou
5. Cheticamp
6. Port Hastings
7. Judique

System Connections

Approximately **14,000** residents served (2018), **2,900** + connections

Community	Estimated System Connections
Inverness	1,500
Port Hood	300
Whycocomagh	330
Mabou	160
Cheticamp	450
Port Hastings	105
Judique	75
TOTAL	2,920

Condition Rating Scale

Condition Ratings for Assets

Rating	Condition	Description
1	Very Good	Like new/physically sound and performing as intended.
2	Good	Minor superficial deterioration.
3	Fair	Showing deterioration and wear.
4	Poor	Major portion of the asset is deficient, functions but has major problems.
5	Very Poor	Physically unsound, unreliable and has reached or exceeded useful life.

Condition – Linear Infrastructure

General Condition of Linear Infrastructure by Community

Community	Description
Chéticamp	Condition: FAIR – Showing deterioration and wear.
Inverness	Condition: VERY POOR – Physically unsound, unreliable and has reached or exceeded useful life.
Judique	Condition: POOR - Major portion of the asset is deficient, functions but has major problems.
Mabou	**Condition: FAIR – Showing deterioration and wear.**
Port Hastings	**Condition: FAIR – Showing deterioration and wear.**
Port Hood	**Condition: FAIR – Showing deterioration and wear.**
Whycocomagh	**Condition: VERY GOOD – Physically sound and performing as intended.**

Capital Investment by Community

Estimated Breakdown by Community

Community	Estimated Asset Replacement Value	Estimated 10 year Investment Cost	
Cheticamp	$19.8 M	$16.0 M	15.5%
Inverness	$48.5 M	$42.6 M	41.3%
Judique	$12.0 M	$4.1 M	4.0%
Mabou	$28.0 M	$6.0 M	5.8%
Port Hood	$30.4 M	$16.4 M	15.9%
Whycocomagh	$28.0 M	$7.7 M	7.5%
Port Hastings	$19.2 M	$10.3 M	10.0%
Total	**$185.9 M**	**$103.1 M**	**100%**

Opportunities

- Recapitalization of Central Avenue in Inverness
- J-Class Roads Program - Cost share program (NSTIR/MOCI) for paving of subdivision (J-Class) streets.

➢ There are 96 J-Class Roads within the Municipality, 39 of which are within the community of Inverness, given that Inverness represents 41.3% of the Municipality's Water & Wastewater Infrastructure Deficit it is an opportunity while the roads are planned to be resurfaced to also replace underground linear water and wastewater infrastructure.

Evidence Based Decision Making, Community of Inverness

- Growth Management Strategy
- Inverness Wastewater Treatment Plant and Collection System – System Assessment Report & Pre-Design Study
- Flushing & CCTV Program
- Outfall Inspection
- Generator Project
- Surveying
- Geotechnical Investigation
- Water Modeling Study
- Wellfield Development/Enhancement Program
- Flow Monitoring Program
- Biosolids Management Plan

Detailed Design of Central Avenue

Consultant Team	Scope of Work	Amount
R.V. Anderson & Associates Limited	Detailed Design of Linear Water & Wastewater Assets	$186,162.00
Crandall Engineering/Englobe & Upland Planning & Design	Detailed Design of 'Complete Streets', above ground infrastructure (sidewalks, crosswalks, active transportation, etc.,)	$170,740.00
TBD	Geotechnical Investigation	$25,000.00 (projected)
Clean Earth, R.V. Anderson & Associates Limited	Flushing & CCTV Program, oversight and traffic control	$35,550.00
	Total	**$417,452.00 (including HST)**

Funding Assembly

Atlantic Canada Opportunities Agency (ACOA) (Complete Streets)	$100,000.00 (requested)
Provincial Funding (Complete Streets)	$70,740.00 (requested)
Provincial Capital Assistance Program (PCAP) 50/50 Cost Share - Geotechnical Investigation 50/50 Cost Share Flushing & CCTV 50/50 Cost Share Survey	$40,524.00 (Provincial) Confirmed
Municipality of the County of Inverness, Provincial Capital Assistance Program (PCAP) 50/50 Cost Share - Geotechnical Investigation 50/50 Cost Share Flushing & CCTV 50/50 Cost Share Survey	$40,524.00 (Municipal) Budgeted, Confirmed
Municipality of the County of Inverness, Detailed Design of Central Avenue (Linear Infrastructure)	$165,664.00
Total (to date)	**$417,452.00**

Contribution Percentage by Funding Source

Funding Source	Contribution	Percentage
Federal	$100,000.00	23.96%
Provincial	$111,264.00	26.65%
Municipal	$206,188.00	49.39%
Total	**$417,552.00**	**100.00%**

Staff Recommendation & Next Steps

- For Municipal Council to consider funding $165,664.00 the Detailed Design of Linear Infrastructure Replacement along Highway 19 and Central Avenue.
- Integrate the design work above and below ground and ensure various consultant teams are working in close collaboration with NSTIR.
- Continue working with NSTIR, project consultants and project partners task force to complete the detailed design projects.