

LEVEL OF SERVICE



Level of Service (LOS) Statement

How do we want the system to perform in the long run?

Quality

- Regulatory compliance.
- Reduce/eliminate unauthorized discharges.
- Identify sources of Inflow and Infiltration and repair quickly.

Availability

- Make sewer service available to as many Conway Village residents as economically feasible.

Capacity

- Ensure that the system has enough capacity to meet demand.

Reliability

- Notify customers 48 hours prior to planned shutdowns.
- Repair unplanned shutdowns and leaks within 36 hrs where feasible.

ASSET MANAGEMENT STRATEGIES

Keys to Successful AM

Keep it simple
Form a living document
Bring everyone on board

Asset Management: An Ongoing Process

- Continually update asset inventory and condition of assets.
- Update the Level of Service to meet system performance requirements and customer expectations.
- Repair or replace major assets before they fail.

Brochure produced by:



January 2017

Portsmouth, NH
Phone: 603.436.6192
Concord, NH
Phone: 603.230.9898

underwoodengineers.com

CONWAY VILLAGE FIRE DISTRICT



**SEWER SYSTEM
ASSET
MANAGEMENT**

WHAT YOU SHOULD KNOW

What is Asset Management?

Asset Management (AM) planning helps utility managers determine how to operate and maintain their systems at the lowest cost while maintaining the desired level of service.

It consists of the following:

Asset Inventory - What do we own?

Level of Service - What are the expectations?

Critical Assets - What are the most important components?

Life Cycle Costing - How much will it cost to maintain?

Long-Term Funding Strategy - How will we pay for it?



Why is it important?

Safe and reliable sewer service is critical to public health and quality of life in our communities. Significant investments are required to repair and replace ageing infrastructure. Utilities will soon be faced with excessive costs to maintain service.

AM helps to better understand the condition of the system, current and future deficiencies and needs, and the financial resources necessary to rehabilitate and replace assets when necessary.

THE CVFD SEWER SYSTEM

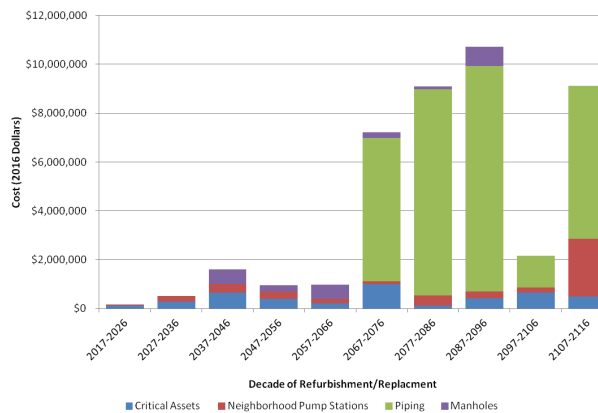
Utility Overview

- Provides sewer service to Conway Village area.
- Protects the environmental health of the community, including the designated Saco River.
- Average daily wastewater production is 270,000 gallons a day.
- Wastewater is collected by CVFD and transmitted to the North Conway Water Precinct for treatment.

Major Facilities

- Saco River Pump Station and Headworks.
- Transmission main.
- Bridge crossings.
- Emergency storage lagoon.
- Five neighborhood area pump stations.
- Gravity interceptor.
- Remote monitoring system.

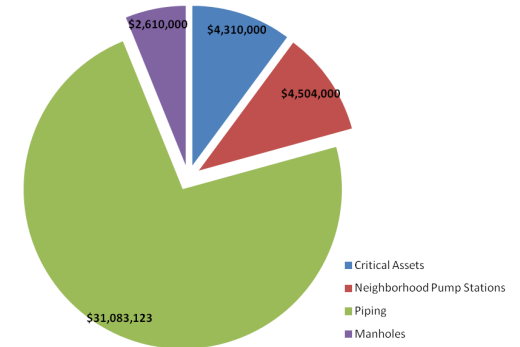
ASSET REPLACEMENT AND COST SCHEDULE (2016 DOLLARS)



LIFECYCLE COSTS

Cost Estimates

Underwood Engineers estimated costs over the next 100 years based on expected life span of assets. Costs included both major refurbishments and replacement of assets.



LONG TERM FUNDING PLAN

Life Cycle Costs

- Due to recent investments, the need for spending has been lowered over the next 20 years. However, a significant amount of debt needs to be paid back.
- The average annual cost of replacements and rehabilitation is \$34,900 over the next 20 years.
- After debt is paid off (~20 yrs), CVFD can begin increasing reserves to help mitigate the costs of future major upgrades.
- After twenty years, the annual need for replacements will increase to almost \$120,000 per year.
- Pipe is the largest and costliest component in the sewer system. After 50 years, large quantities of pipe will be due for replacement or rehabilitation along. The total annual estimated need after 50 years is nearly \$630,000.