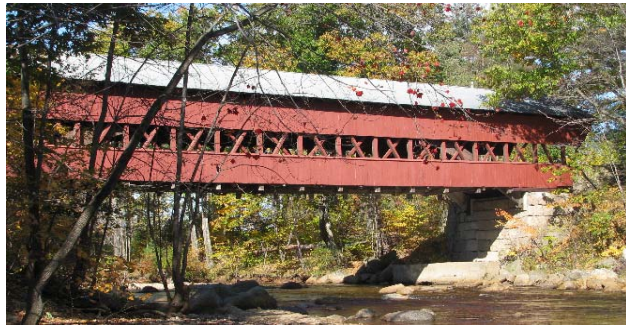


LEVEL OF SERVICE



The Level of Service (LOS) Statement defines the way in which the utility managers and operators want the system to perform over the long term.

The following highlight the CVFD's LOS statement.

Quality

- Maintain clean and safe drinking water in compliance with State and Federal Regulations.

Availability

- Make water available to as many Conway residents as economically feasible.

Supply

- Minimize watering bans.
- Limit use to own sources, stay independent of North Conway Water Precinct.

Distribution

- Minimum water pressure should be 35 psi, with average pressure ranging from 60 to 80 psi.

Reliability

- Notify customers 48 hours prior to planned shutdowns.
- Respond to supply or quality issues affecting a significant level of customers within 1 to 2 hrs.
- Repair unplanned shutdowns and breaks within 36 hrs where feasible.

ASSET MANAGEMENT STRATEGIES

Keys to Successful AM

Keep it simple
Form a living document
Bring everyone on board

The following techniques are used to help keep Asset Management a successful on-going process.

- Continually updating the asset inventory and condition of assets over time.
- Update the Level of Service over time. Keep consistent with desired performance and customer expectations.
- Repair or replace assets that have a high probability of failure and high consequence of failure.
 - These will have the largest impacts on the system.

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CONWAY VILLAGE FIRE DISTRICT

WATER SYSTEM ASSET MANAGEMENT



INFO YOU SHOULD KNOW

What is Asset Management?

Asset Management (AM) planning is a decision-making tool that helps 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 the system owns.

Level of Service - How the system performs.

Critical Assets - Identifying the most important risks and assets.

Life Cycle Costing - Costs of maintaining the system.

Long-Term Funding Strategy - How the system will pay the costs.



How does it help?

Safe and reliable drinking water is critical to public health and quality of life in our communities. Significant investments have been made to build water infrastructure, but these systems are aging. Utilities will soon be faced with excessive costs to maintain service.

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

THE CVFD WATER SYSTEM

Utility Overview

- Provides water to Conway Village and surroundings in the Town of Conway, NH.
- Average daily demand is 180,000 gallons a day.

Water Sources

- Two active wells located in Conway.
- Water from both wells is treated at an on-site facility with chlorine for disinfection and caustic soda for corrosion control prior to distribution.

Water Storage

- Two active storage tanks are located on Bald Hill Rd in Albany, NH.
- Combined capacity of 0.765 million gallons.

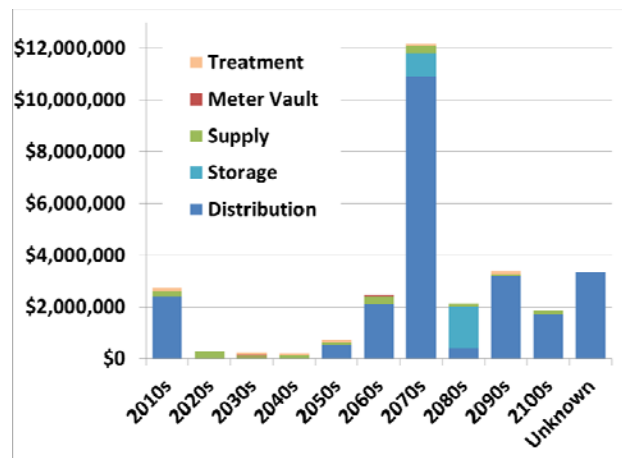
Distribution Mains

- CVFD owns and operates approximately 21 miles of water main of various materials, age, and sizes.

Emergency Supply

- In times of insufficient supply, CVFD maintains an emergency connection to purchase water from the North Conway Water Precinct.

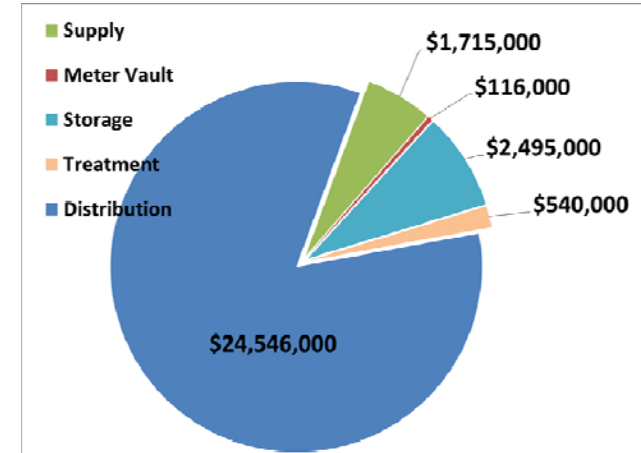
ASSET REPLACEMENT AND COST SCHEDULE (2014 DOLLARS)



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

- The average annual cost to be set aside for future projects is \$294,000. This may be unfeasible for CVFD. A more attainable goal would be to set aside 50% of the total costs, and rely on debt and grants to cover additional costs.
- Due to recent investments, the need for spending has been lowered over the next 50 years, and a significant amount of debt needs to be paid back.
- After debt is paid off (~20 yrs), CVFD can begin setting aside reserves to help mitigate the costs of future major upgrades, the majority of which will be necessary in the 2070s.
- If the CVFD plans to save 50% of the total cost for future projects, and distribute the cost over 80 of the next 100 years, they will need to **save \$184,000 per year** starting in 2034.