



What Is A Water System?

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Session Overview

- What your water system does
- Your water system as a financial entity
- Regulatory framework



Let's Start With the Basics

- What does your water system do?



Water Systems Serve Multiple Purposes

Sometimes Those Purposes Conflict

- 1) System serves an important **environmental and health purpose** -- protecting community's water resources and supplying community with highest quality drinking water.



Dr. John L. Leal



Water Systems Serve Multiple Purposes

Sometimes Those Purposes Conflict

- 1) System serves an important **environmental and health purpose** -- protecting community's water resources and supplying community with highest quality drinking water.
- 2) System serves an important **public service** – providing community with basic services that everyone in the community can afford.
- 3) System serves as a well managed **public enterprise** – putting into practice forward-thinking sustainable business practices.



Water Systems are Important

- Customers rely on dependable, safe water 24/7
- Important to public health
- Water sustains the environment
- Quality of life
- Community has put trust in the system—you have a responsibility
- Need to hire right staff
- Remember! You as an elected official play an important role in this critical service

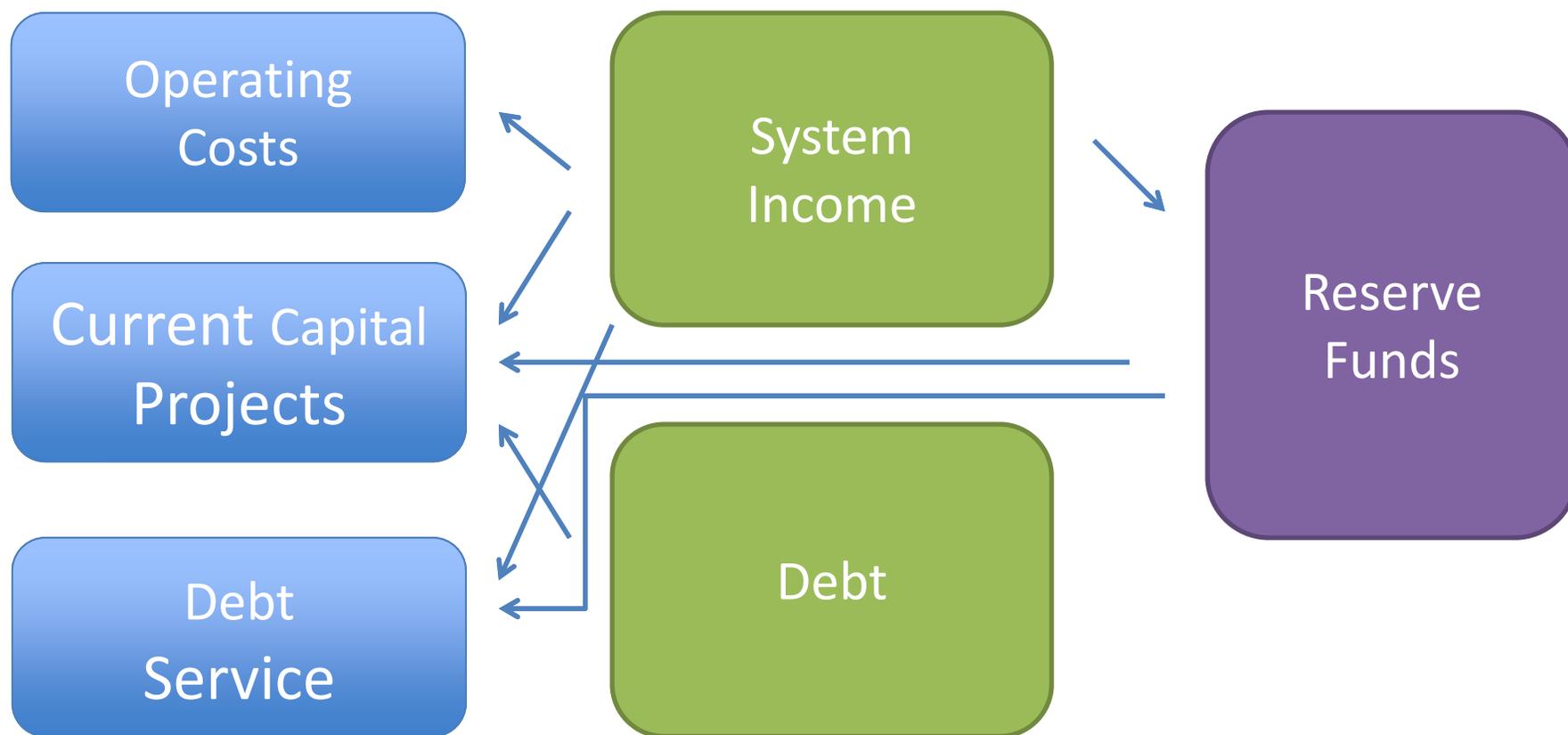


Water Systems as Financial Entities





Water System Finance Diagram





Three Types of Costs

- **Operating Costs**—what you need to run the system day in and day out
- **Capital Costs**—rehabilitation and replacement of existing infrastructure and new infrastructure
- **Debt Service**—what you owe on loans and bonds



Two Types of Revenues

- **System Income**—Money from rates, tap fees, impact fees, grants, other sources
 - Note: To be a true enterprise fund, not taxes!
- **Debt**—Money from bonds and loans



Many Types of Reserve Funds

- Capital Reserve Fund—Infrastructure rehabilitation and replacement
- Repair Fund—Known, ongoing maintenance issues
- Emergency Fund—Unknown, unanticipated maintenance issues
- Rainy Day Fund—Unexpected revenue shortfalls



How Much Do You Need In Your Reserves?

- It depends
- Enough to pay for your most expensive piece of equipment?
- Enough to cover your costs if you had no revenue for two months?
- Enough to cover the projects in your capital improvement plan?



Quick Overview of the Regulatory Framework



How are you regulated as a drinking water system?



Public Drinking Water System

A Definition

- A public water system (PWS) is a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves at least twenty-five individuals.
- USEPA Website - <http://water.epa.gov/infrastructure/drinkingwater/pws/pwsdef2.cfm>



EPA, and Your Primacy Agency



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Regulatory Framework



- You are responsible for public health
 - Safe Drinking Water Act
 - Revised Total Coliform Rule (TCR)
 - Groundwater Rule
- These are legally enforceable standards



Regulatory Framework



- Vermont Water Supply Rule
 - Regulates all aspects of PWSs, including source development, infrastructure construction, and operations
 - State administers the federal regulations that apply to all public water systems in the country, instead of USEPA (“primacy”)



<http://dec.vermont.gov/sites/dec/files/documents/vtwsr2010.pdf>

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Drinking Water & Groundwater Protection Division



- Working with drinking water systems to maintain safe drinking water
- Sanitary surveys of public drinking water systems
- Administers rules regarding water supply sampling
- Protecting groundwater and surface water sources
- Permitting for water system source development, construction, and operations; operator certification and well driller licensing





Regulations go beyond just the environment and public health



Regulatory Framework

- You hire people—
labor laws
- You use equipment—
occupational safety laws





Regulatory Framework

- You are governmental—
information transparency
- You are a monopoly





Regulatory Framework

- How many of you like being regulated?
- Water systems are regulators, too!
 - You cut off customers who don't pay
 - You prevent people from tapping their well into the system



Regulatory Framework

- Regulations are ultimately linked to public health
- You are in charge of the essential product to life—you have an amazing responsibility



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