

# The New CYA....



Covering Your Assets



- What is Asset Management & Why is it important?
- **The 5 Core Questions of Asset Management**
- Getting Started Using the USEPA STEP Guide
- Maintaining Your Assets Using CUPSS

# Asset Management Plan

## 5 Step Process:

- Asset inventory ...What do we have?
- What is required level of service?
- What parts are critical?
- What is life cycle cost?
- How do I fund it all?

# (1) Asset Inventory Plan

- Organize the Inventory Process
  - What do you own?
  - Where is it?
  - Have a Plan
- Assess condition of assets
  - Age
  - Useful remaining life
  - Value



# Asset Inventory Plan

- Prioritize your assets
  - Most Critical to system
  - Impact health and safety
  - Redundancy
- Sources of data
  - As-built drawings
  - Staff – current & previous
  - Photos & Previous

## (2) Required Level of Service

- What Level of Service do your customers expect?
- What are your utility's performance goals?
- What do the regulators require?
- Level of Service helps us...
  - Focus efforts and resources
  - Communicate service expectations and choices
    - Increased services equal increased costs
    - Rate impacts
    - Level of risk

# (3) What are my critical assets?

- Which assets are critical to Sustained Performance?
- You must Understand...
  - What causes assets to fail?
  - What is the likelihood and consequence of asset failure?
  - What does it cost to repair the asset?
  - What are other costs that are associated with asset failure?
- Asset Management Helps Understand Asset Risks
  - Predict when an asset will fail (determine likelihood)
  - Determine the Consequence of Failure (COF)



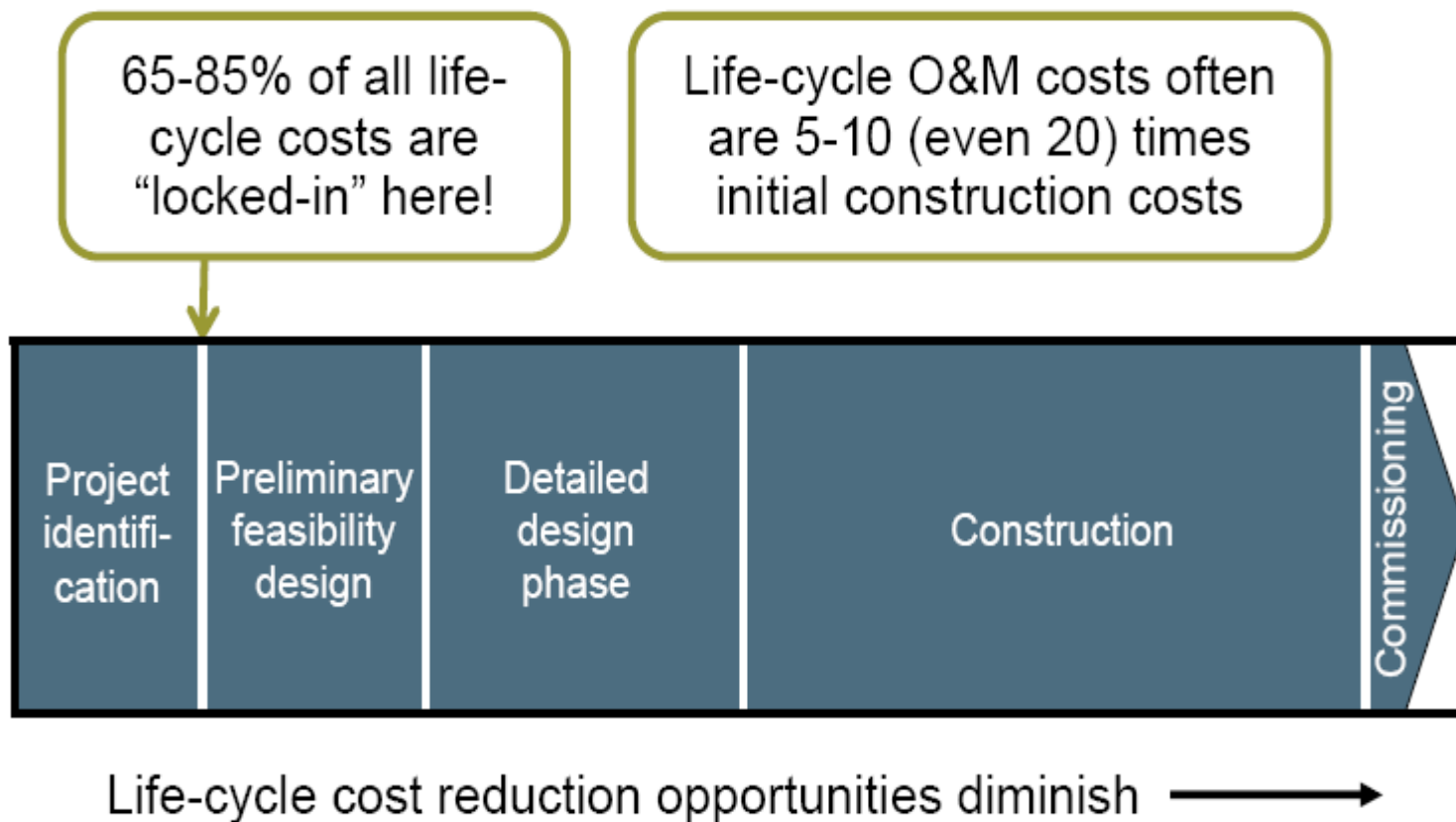
## (4) What is Life Cycle Cost?

The total cost of owning and operating an asset over its useful life.

- The goal of Asset Management is to achieve the lowest possible life cycle cost.
- Reducing the total life cycle cost will require careful maintenance and timely renovation / rehabilitation.
- Asset Management may cost money in the short-term but will pay big long-term dividends.



Over time, A.M. enables a system to determine the lowest cost options for providing the highest level of service.



# (5) Determine Funding Strategy

- Do you have enough funding to maintain your assets for the required Level of Service?
- Is your Rate Structure appropriate to sustain your system's long-term needs?
- Revise your rate structure.
- Fund a dedicated reserve from current revenues.
- Financing asset rehab, repair & replacement through borrowing or other financial assistance.

# Funding Strategies



- Identify which items will be funded 100% from reserves, and which items will be funded in part using other sources (primarily loans).
- It is not realistic or prudent to expect systems to fund capital replacement 100% from reserves. Plan to save 15-20% up front.
- The terms of a loan should not exceed the useful life of any asset. (i.e. a 20-year loan should not fund equipment with a useful life of 15 years).

# Using Asset Management helps...

- Move from a Reactive to Proactive Maintenance.
- Know the costs and benefits of **rehabilitation vs. replacement.**
- Determine lifecycle costs of critical assets.
- Spend resources based on asset conditions.
- Develop and validate your Capital Improvement Plan.

# Final Points...

- Form a Team
  - As an operator, you will need to take the lead
  - Use Baby Steps
    - Process may take a year or more
- Keep data as consistent and accurate as possible
- Focus on the Long-term
  - This is a continuous process



# Resources



## Taking Stock of Your Water System A Simple Asset Inventory for Very Small Drinking Water Systems



## Asset Management: A Handbook for Small Water Systems

One of the Simple Tools for Effective  
Performance (STEP) Guide Series

