

It's Not Just Math:

How Water Rates Drive Policy and Shape your Community's Future

Kirk Stinchcombe, CEO of Waterworth & Water System
Financial Management Specialist



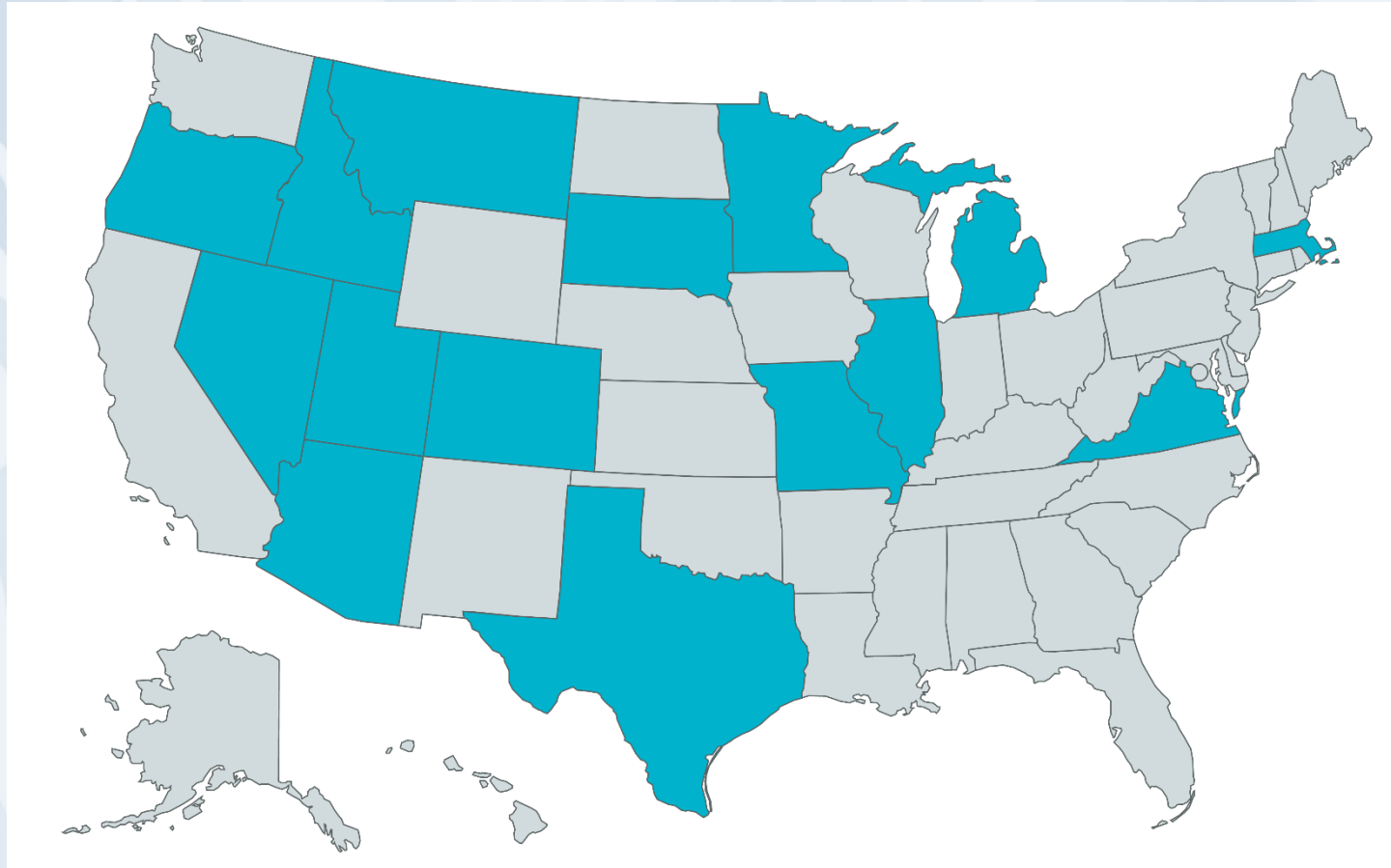
IGFOA ANNUAL CONFERENCE • SEPTEMBER 8-10, 2019

Waterworth's Mission



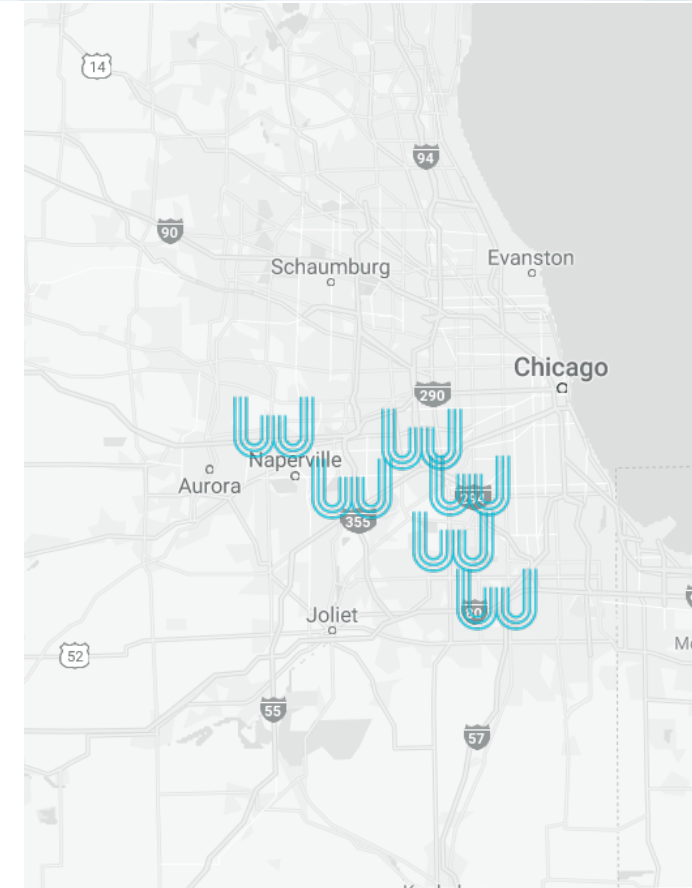
To sustain water systems and the communities that depend on them.

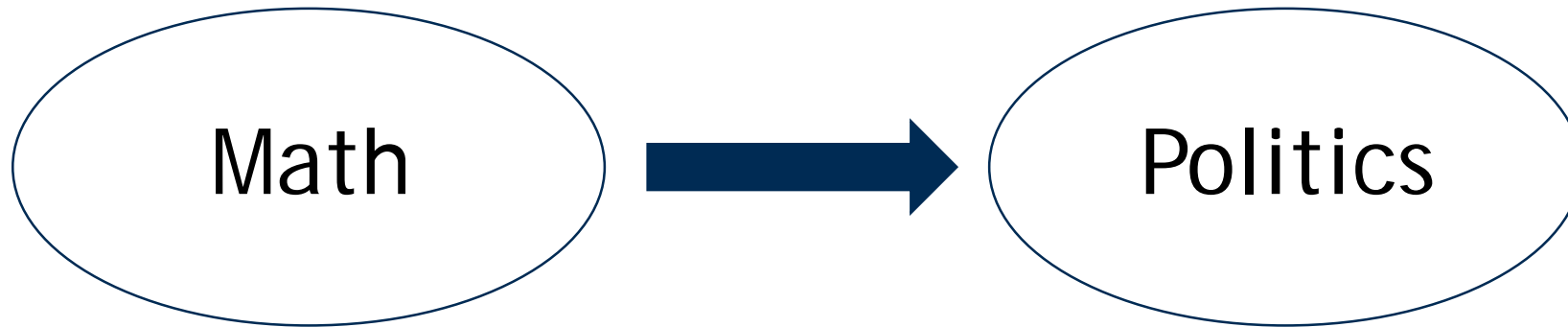
Waterworth Users



Waterworth & Illinois

- Orland Park (pop. 56,767)
- Tinley Park (pop. 56,703)
- Moline (pop. 43,483)
- Warrenville (pop. 13,140)
- Western Springs (pop. 12,975)







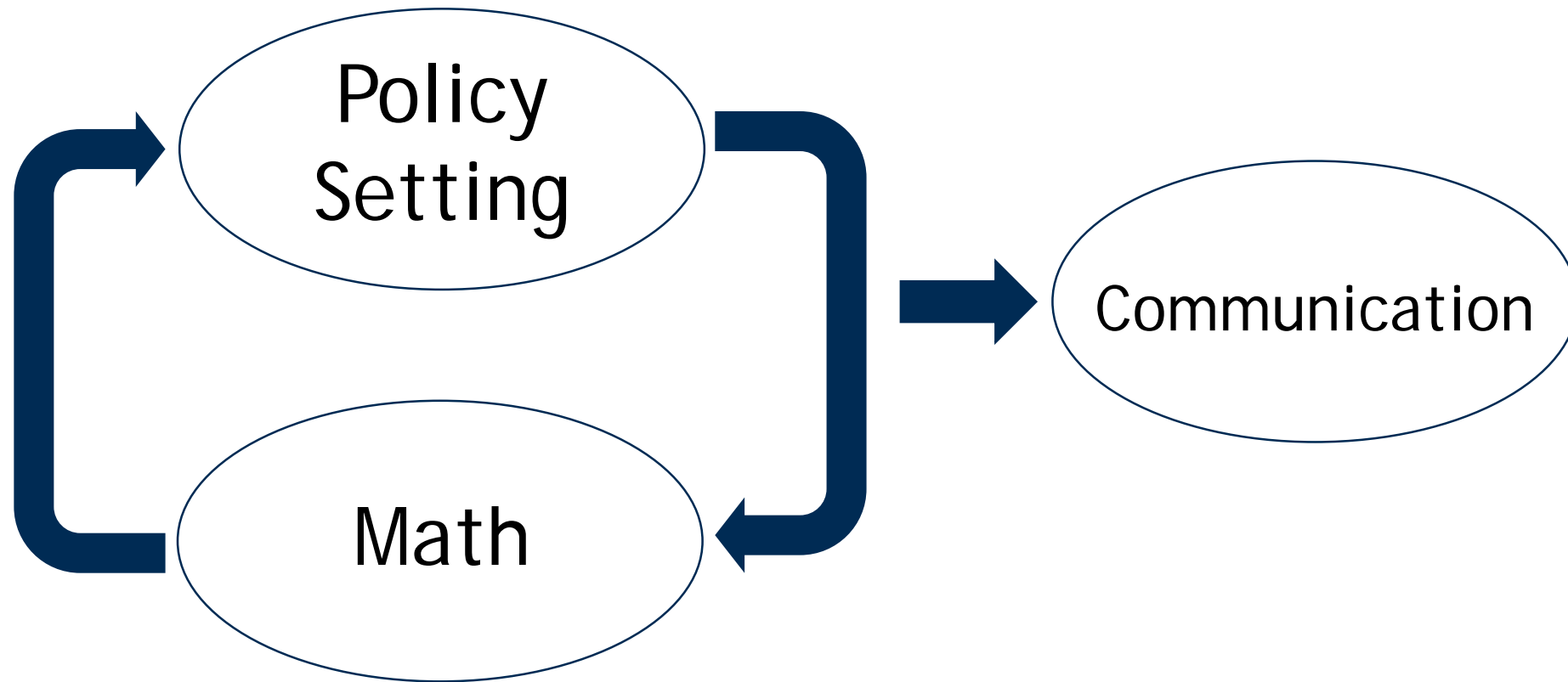
Municipal water
managers are stuck
between a rock and a
hard place

If you
undercharge,
water services
eventually fail...



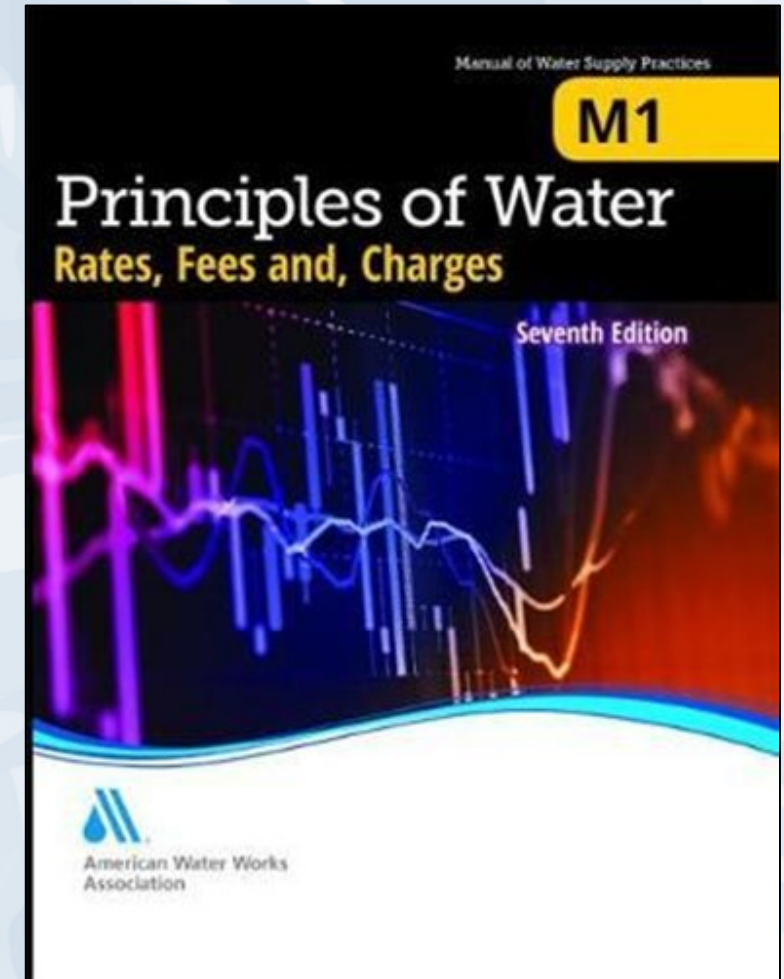


If you overcharge (or are seen to overcharge), you may face community and political backlash



So What Are the Policy Issues?

- Effectiveness in yielding total revenue requirements (full cost recovery)
- Revenue stability and predictability
- Stability and predictability of the rates themselves from unexpected changes
- Promotion of efficient resource use Fairness in the apportionment of total costs of service among the different ratepayers
- Avoidance of undue discrimination (subsidies) within the rates
- Dynamic efficiency in responding to changing supply-and-demand patterns
- Freedom from controversies as to proper interpretation of the rates
- Simple and easy to understand
- Simple to administer
- Legal and defensible



Key Policy Issues



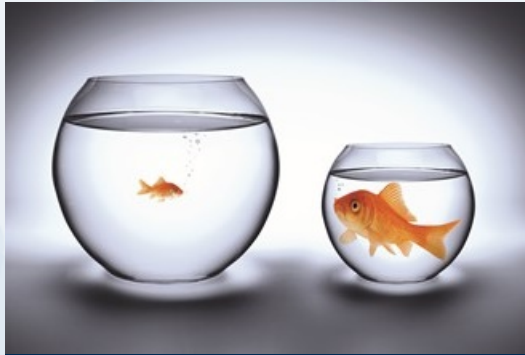
Full Cost Recovery?



Revenue Stability?



Simplicity?



Equity?



Water Use Efficiency?



Affordability?



Let's Look at Just One Example...

Intergenerational Equity

Full Cost Recovery



Components of a Rate Review



Full Cost Recovery



Cost of Service



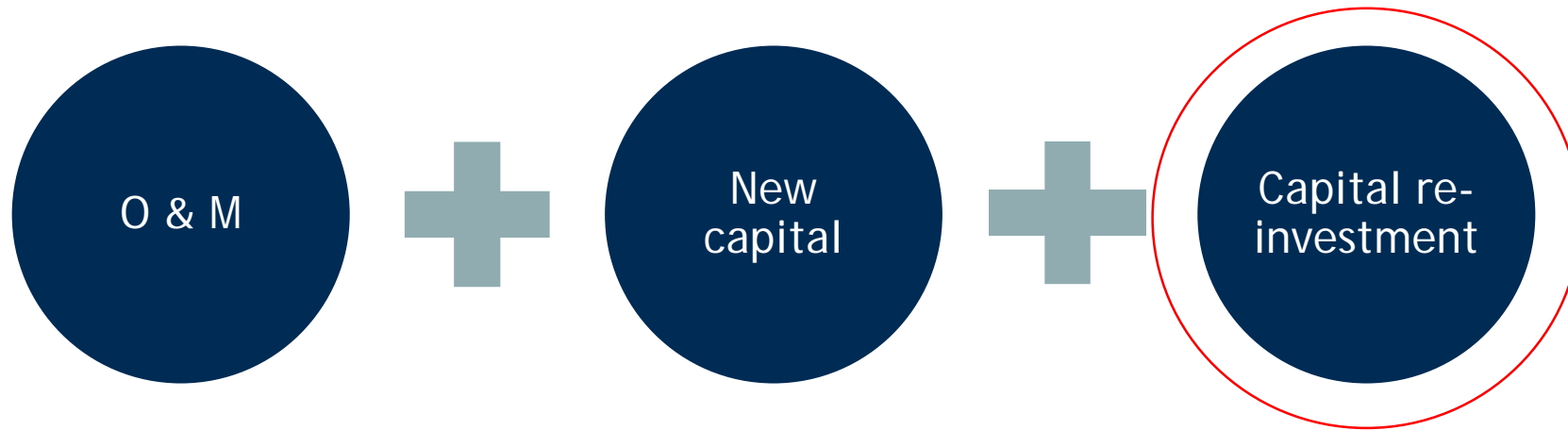
Rate Design

Full Cost Recovery



Full Cost Recovery

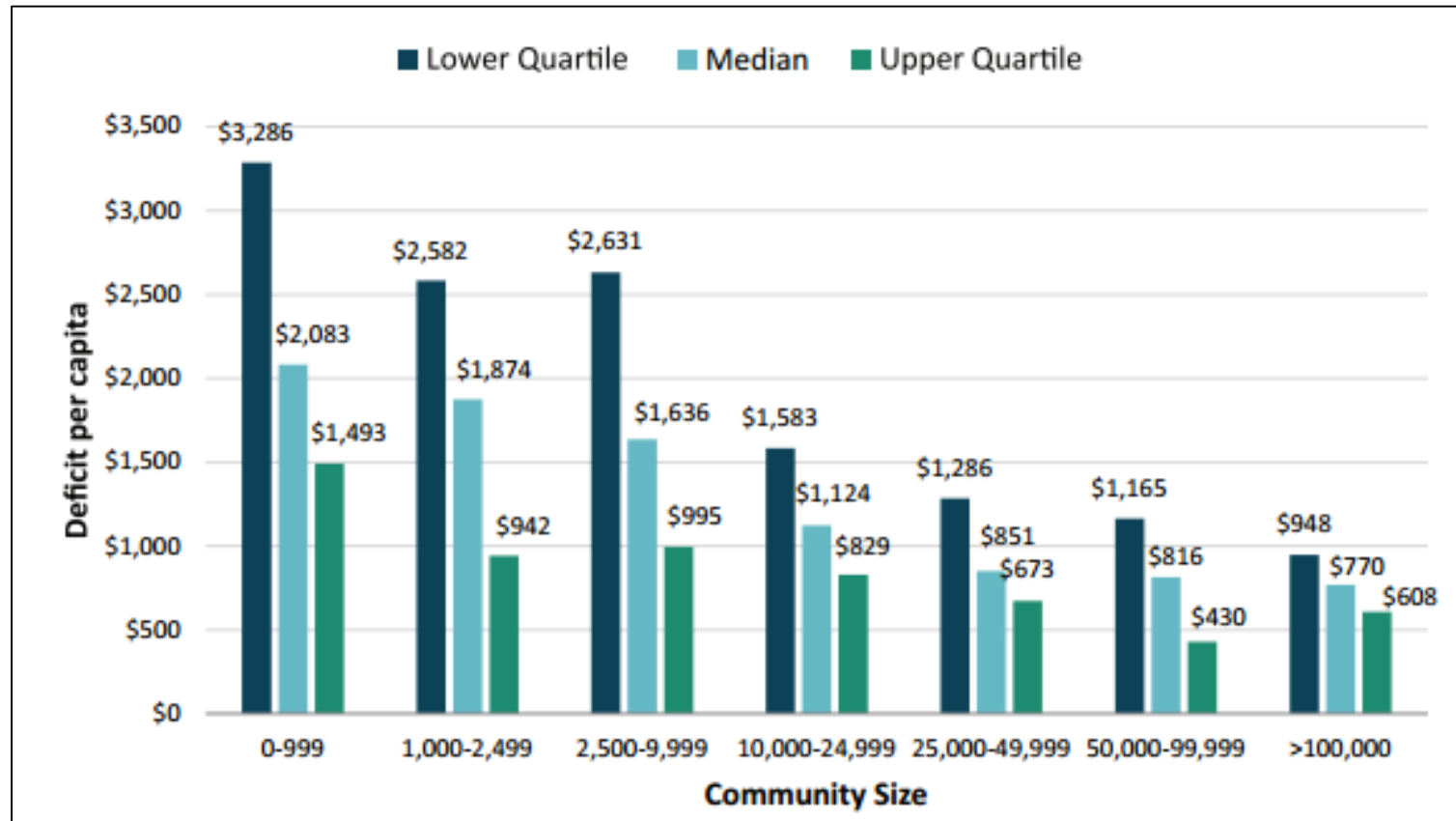
Full Cost Recovery



How should you budget for the “wear and tear” on your water infrastructure
(aka “capital re-investment”)?



The Infrastructure Deficit



Consequences

- Public health risks
- Wasteful
- Overcons
- Reduced
- Intergene



Intergenerational Equity

“...an obligation to conduct ourselves so that we leave to the future the option or the capacity to be as well off as we are.” (Robert Solow, 1974)

= *Sustained quality of life*



A Good Policy Setting Methodology

1. Policy workshop(s) at the start of a rate review
2. Test with elected officials (and perhaps the public) early
3. Written, formal policy statements to guide the rest of the project

This process does not need to be time consuming or laborious

“..since current users of an asset benefit from its use, they should pay their pro rata [proportional] share of the costs involved in the future replacement of the assets.” (Asset insights, n.d.)

Key Policy Issues



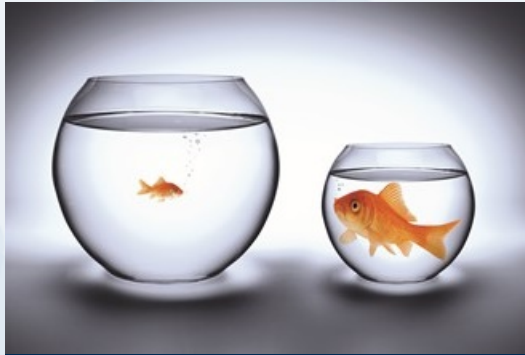
Full Cost Recovery?



Revenue Stability?



Simplicity?



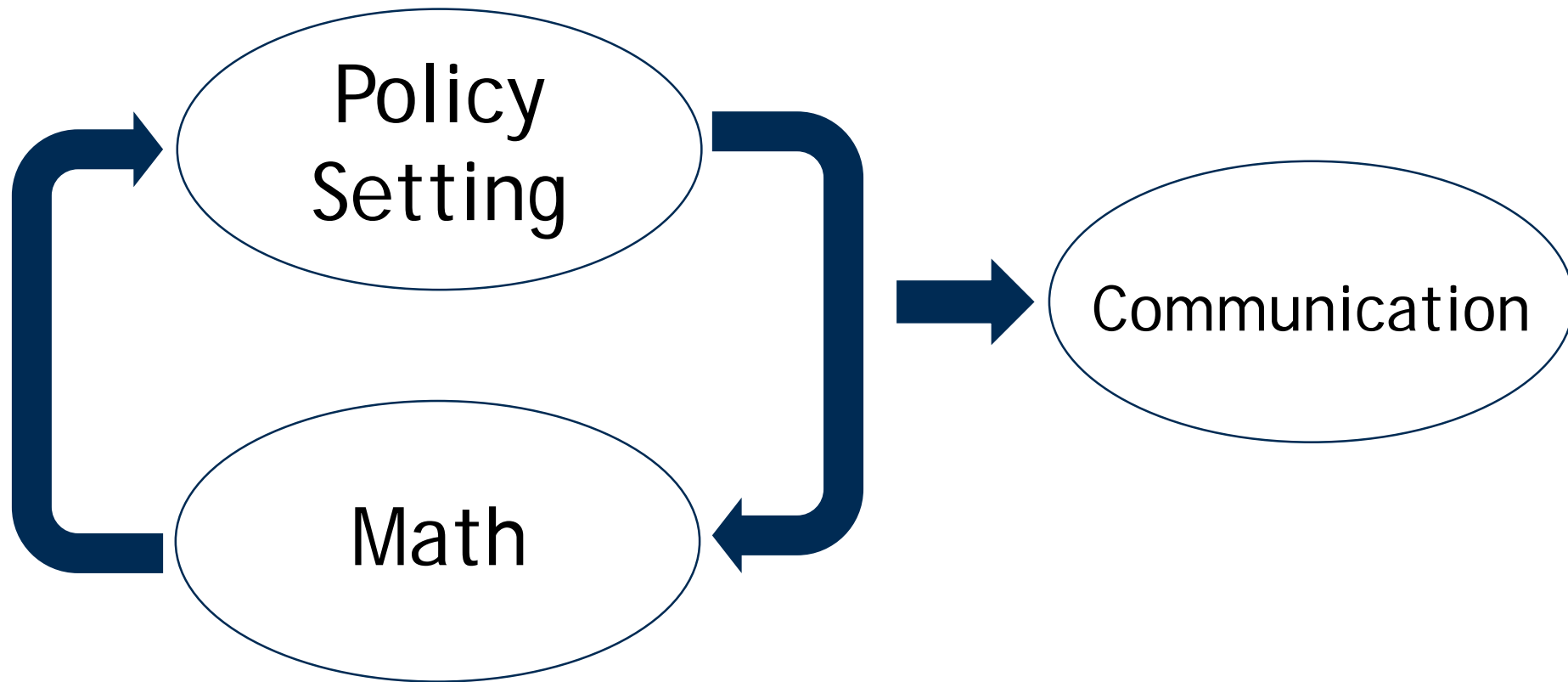
Equity?



Water Use Efficiency?



Affordability?

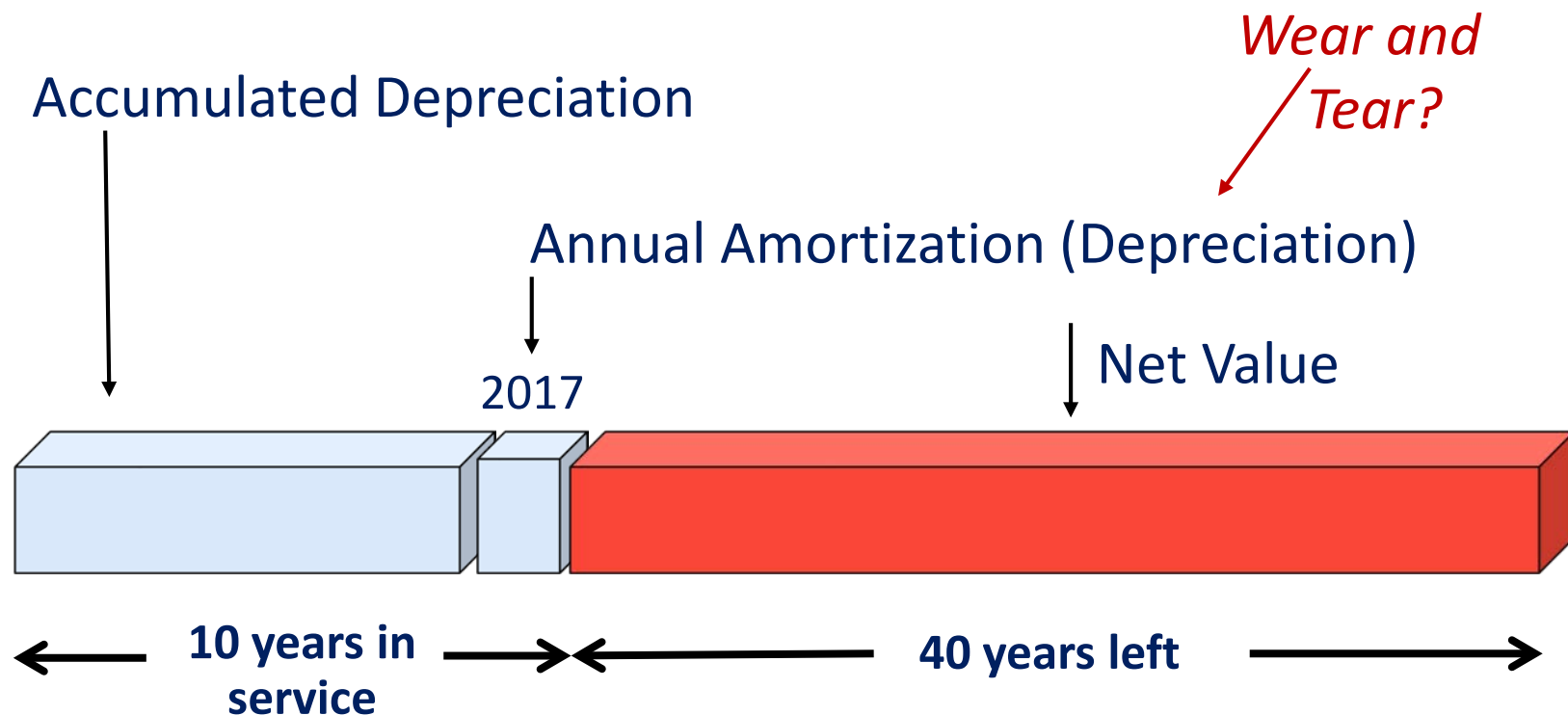


$$\eta = \frac{(Q_1 - Q_0) \div (Q_1 + Q_0)}{(P_1 - P_0) \div (P_1 + P_0)}$$

How should you budget for the “wear and tear” on your water infrastructure
(aka “capital re-investment”)?



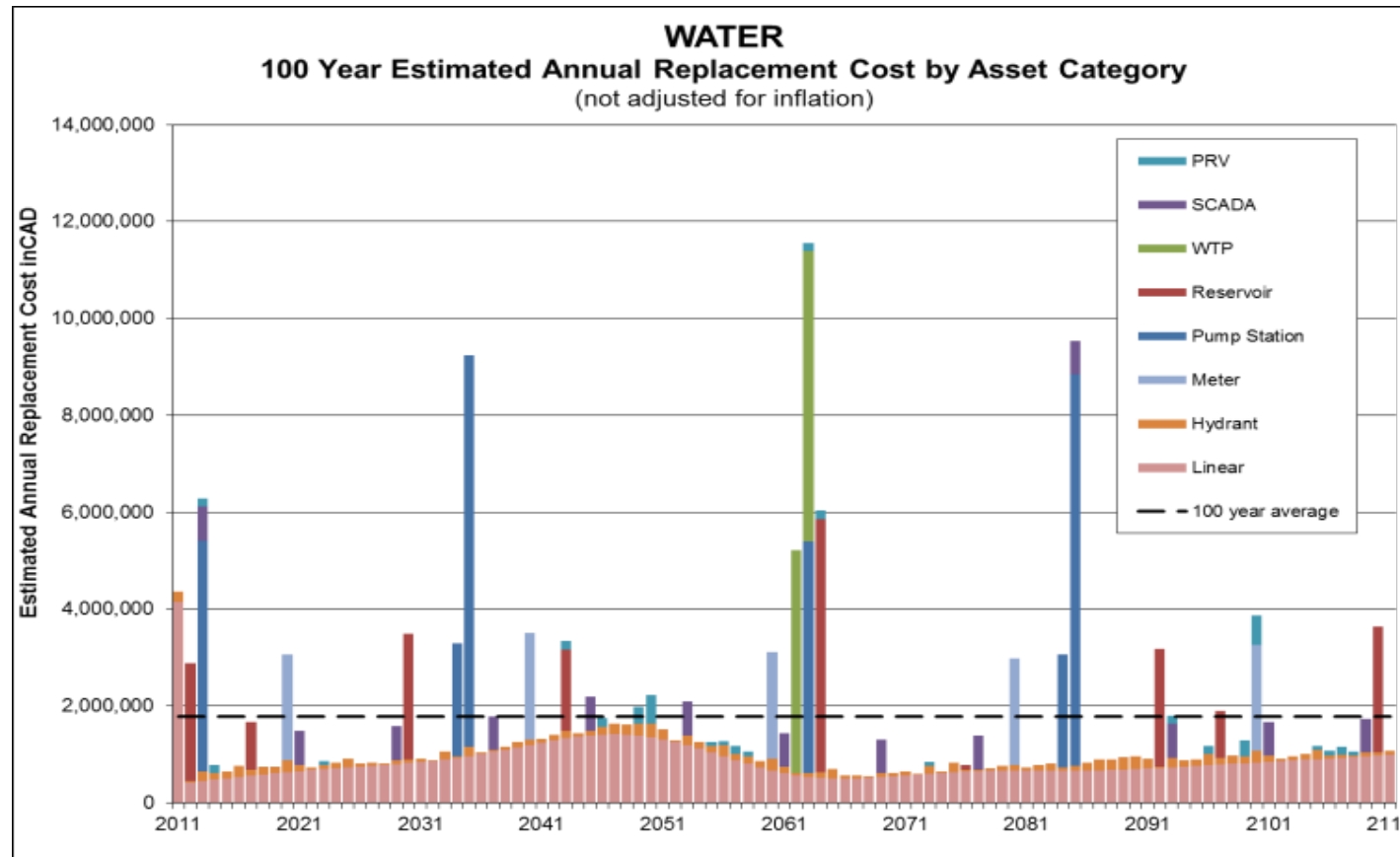
“Wear And Tear” In Accounting Terms



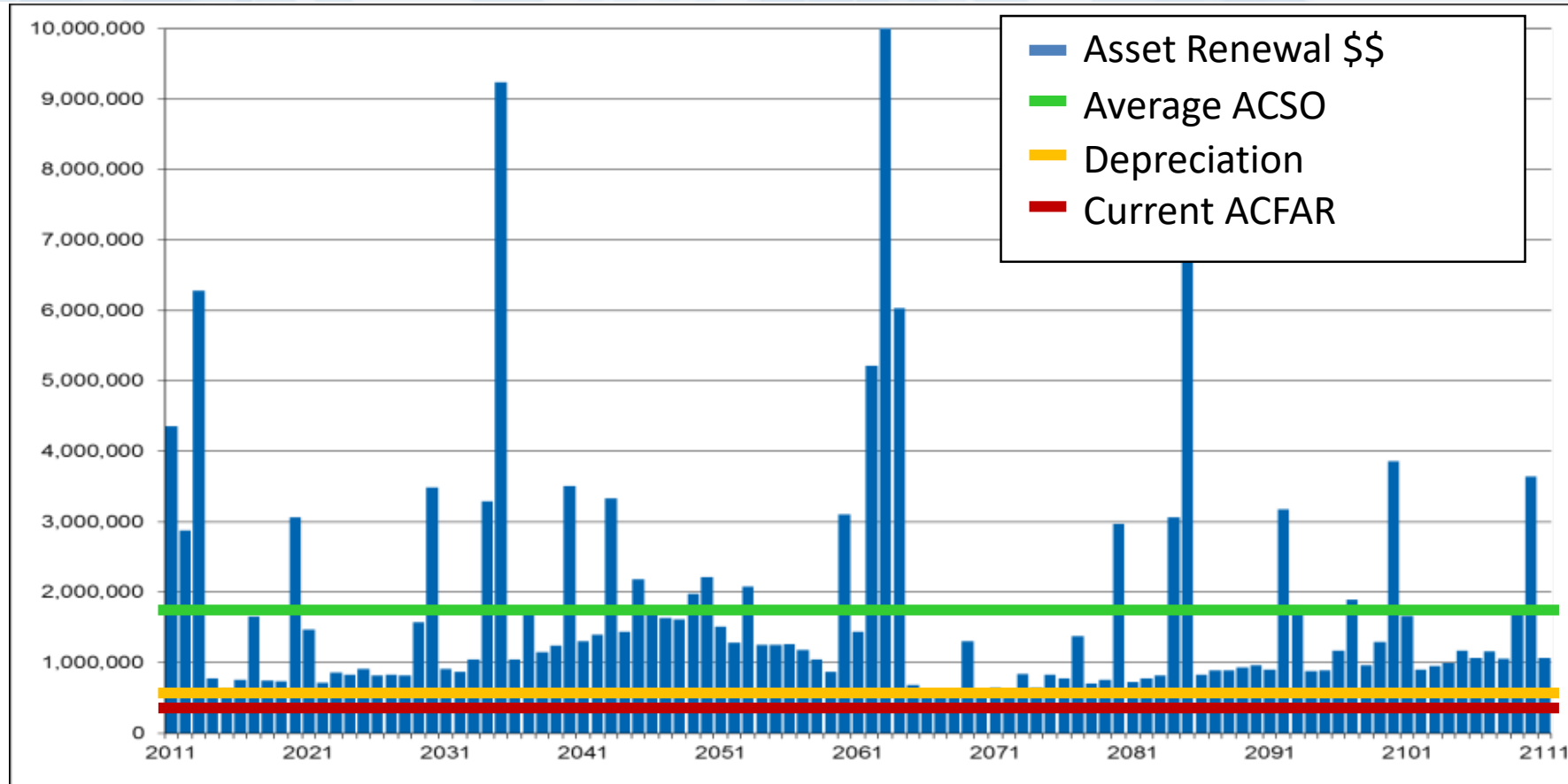
Annual Cost of Sustainable Ownership (ACSO)



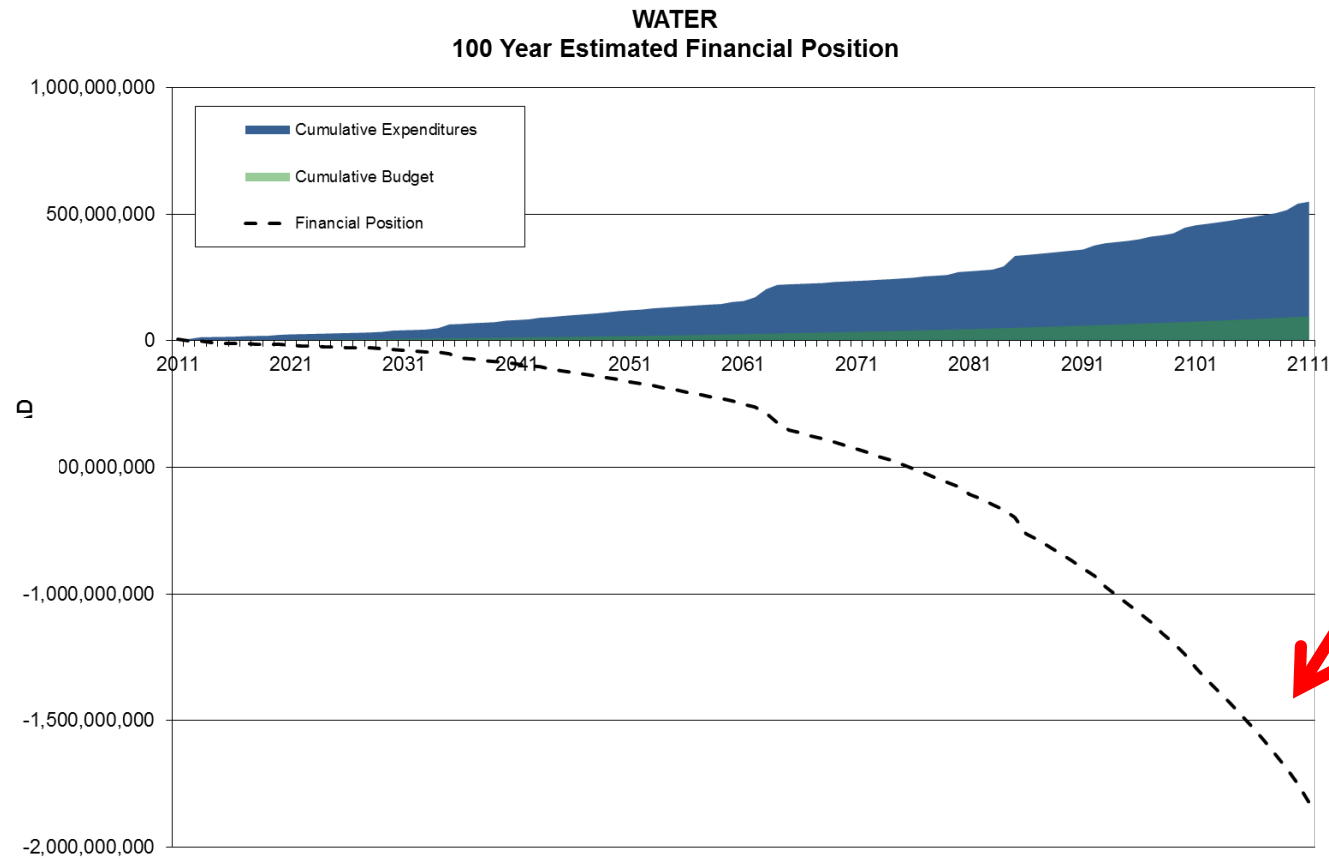
Asset Replacement Schedule (ARS) – 100 Year Projection



100 Year Projection Of Asset Renewal Expenditures (\$)

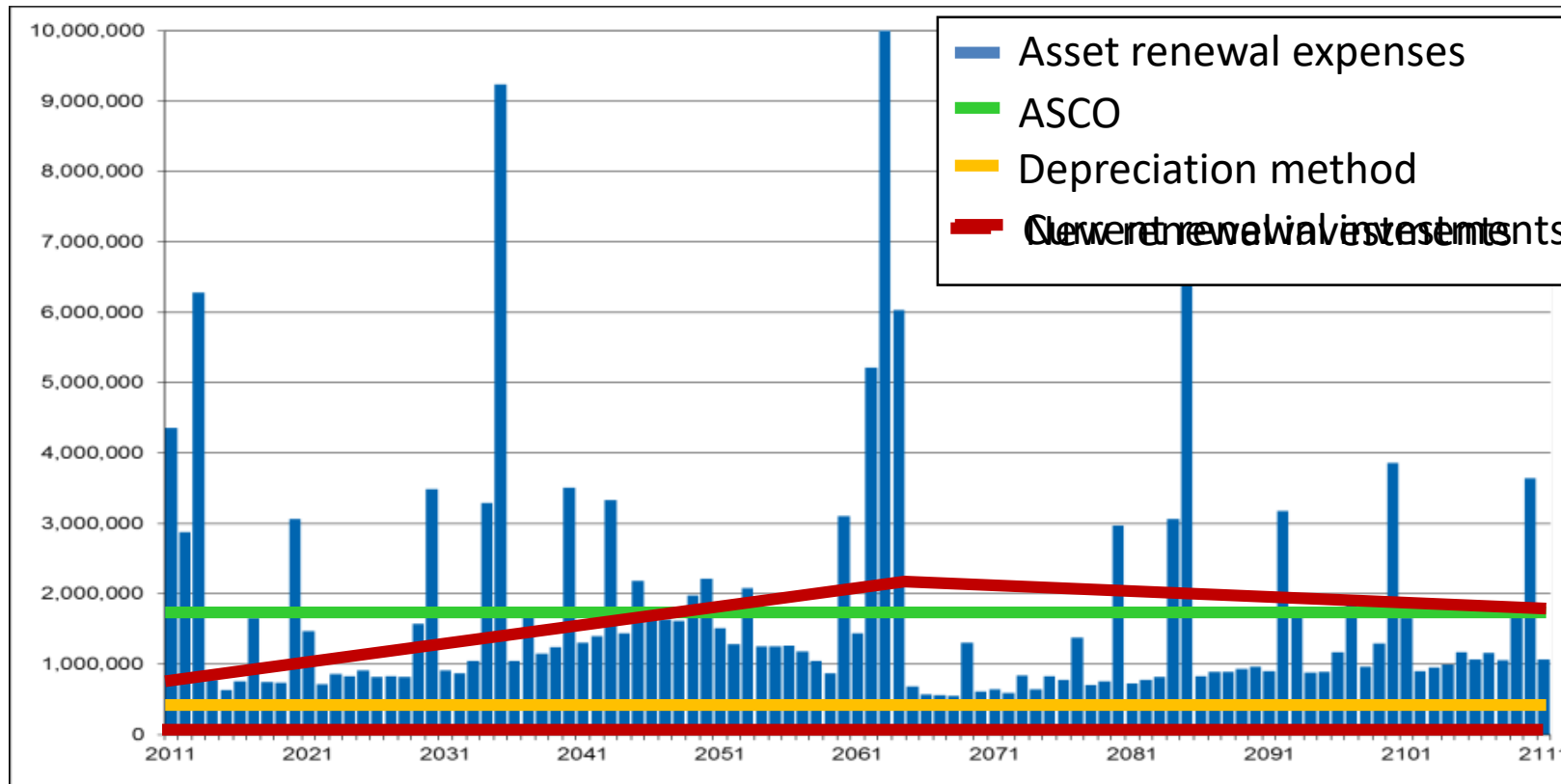


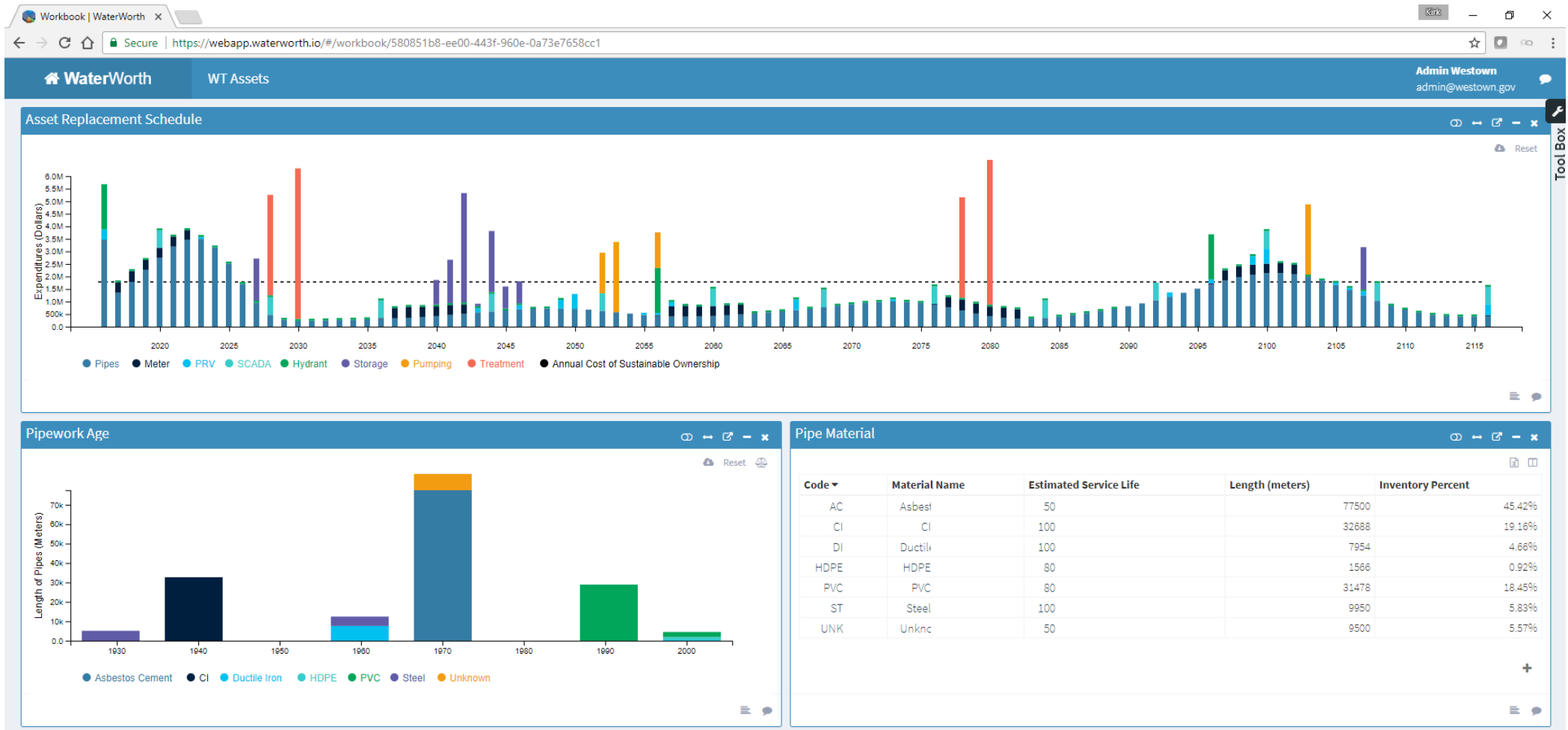
Say \$300,000 ACFAR increased by 2% annually for 100 years, then...

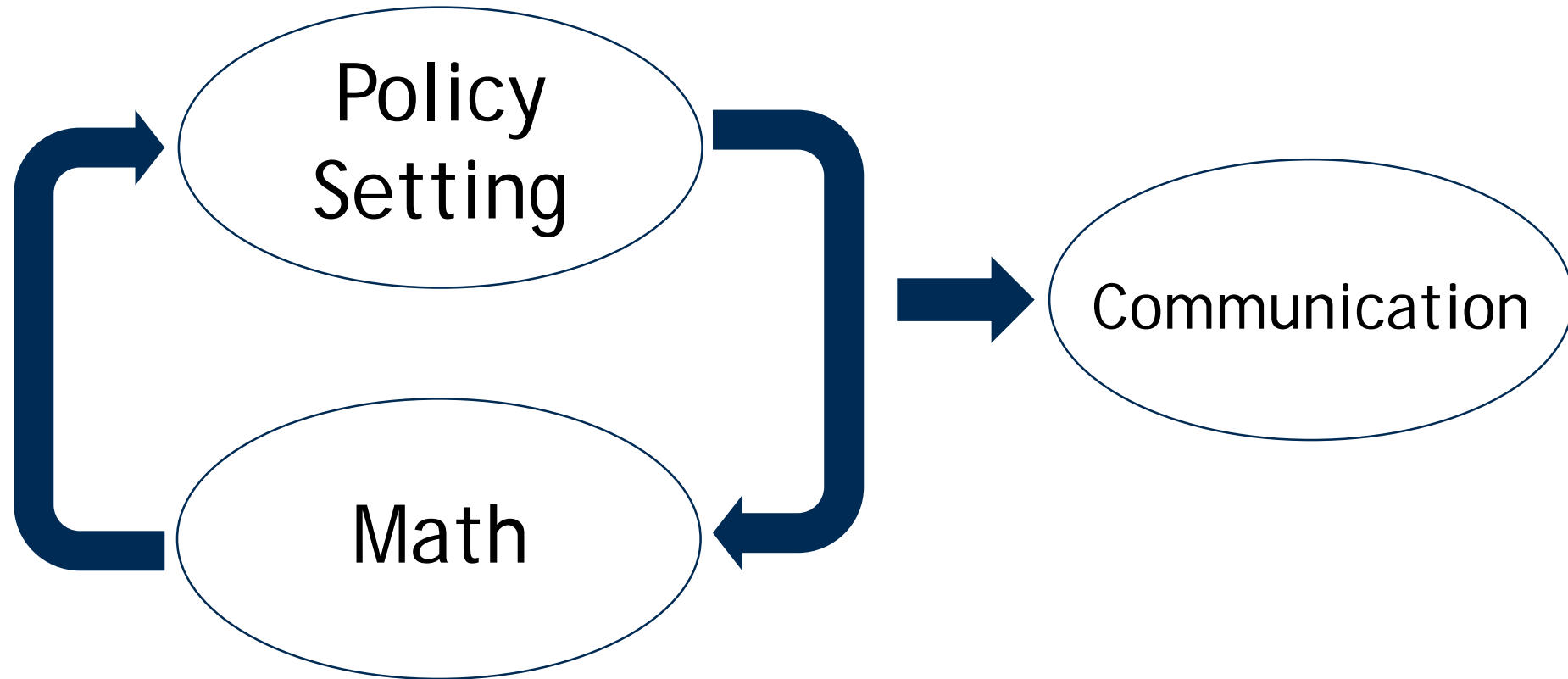


**Growing
Political
Problem!**

To bridge the gap between current renewal investments and ASCO, increase investments gradually to avoid rate shock and moderate shifts in intergenerational equity







Affordability



A Rates Communications Plan

- Situation Analysis
- Stakeholder Analysis
- Communications Risk Analysis
- Key Messages
- Channel Strategy
- Communications Schedule

This process does not need to be time consuming or laborious

What Are Key Messages?

Key Messages

Key messages are the integral points that everyone needs to know.

- With any project or program, **three to five** main messages are typically sufficient.
- They are formulated to respond to the questions and concerns of audiences within your community, but are general enough to be easily understood.
- **Not the content of the communications** (rather, they guide content development)

Examples of Key Messages

1. The new water rates ensure that we can provide continuous services and safe water, today and into the future.
2. Charging a portion of the water bill based on the amount used allows individuals and businesses to take control of their own costs.
3. The new rate structure promotes water conservation, which benefits our community and our environment.

← → ↻ 🏠 ⓘ www.financingsustainablewater.org/implementation/public-participation-and-support ☆ 📺 ⋮

📱 Apps 🌐 Waterworth - Water R. 📄 Thesaurus.com 📊 Base CRM 🌐 Econics 📄 SuperSaaS 📧 Yahoo Mail 🌐 Alliance for Water Effi. 📄 Smallpdf.com ⚡ Login | Econics Admin » 📁 Other bookmarks

FINANCING SUSTAINABLE WATER
Rates. Revenue. Resources.

About | Blog | Contact Us

f t YouTube in

A project of the
Alliance for Water Efficiency

HOME WATER EFFICIENCY BUILDING RATES IMPLEMENTATION FISCAL SUSTAINABILITY TOOLS RESOURCE SEARCH

Home • Implementation • Public Participation and Support

Internal Engagement

Institutional Approval

Public Participation and Support

Effective Billing Systems

Public Participation and Support

Utilities must build external support for the rate structure among a diverse group of customer stakeholders — residential, industrial and commercial — elected officials, and community groups, such as ratepayer advocacy groups and environmental groups.

The value of public participation in formulating policies has become increasingly important. Involving customers and other stakeholders in the initial stages of rate revisions conveys the message that customer concerns will be taken seriously. A community that feels responsible for the stewardship of its water resources and has an opportunity to shape the management of those resources is more likely to be receptive to and supportive of difficult decisions that ultimately benefit them. Below are tips for utilities

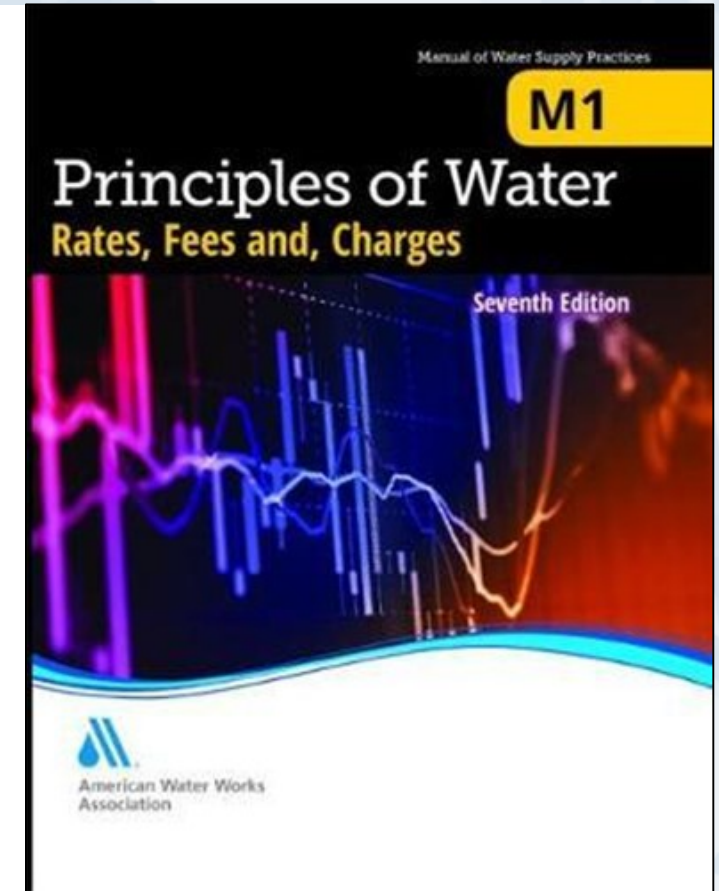
www.financingsustainablewater.org

Lasting Community Support



Disclaimer

- This is a broad, high level presentation on a few aspects of rate setting
- It is not intended as specific advice for any one water service providers situation
- There is no substitute for looking at local data and consideration of site specific factors
- When in doubt, get help or consult authoritative sources



A photograph of a water treatment plant interior, showing a complex network of stainless steel pipes, valves, and flanges. Some valves have red handles, and there are blue-painted sections. The background shows more industrial equipment and structural elements.

Charging for water
services is complicated

Some Take Aways

- The way we set water rates shapes the future of our communities
 - When you set rates, you set community policy
- The starting point is to examine your objectives
- Setting policy at the start and planning communication at the end will dramatically bolster chances of success in your rate setting process
- There are many resources available to make this task much easier, even for small systems



W A T E R W O R T H TM

Contact us

www.waterworth.net

info@waterworth.net

1 844 34 WATER

 [@waterworthnet](https://twitter.com/waterworthnet)