

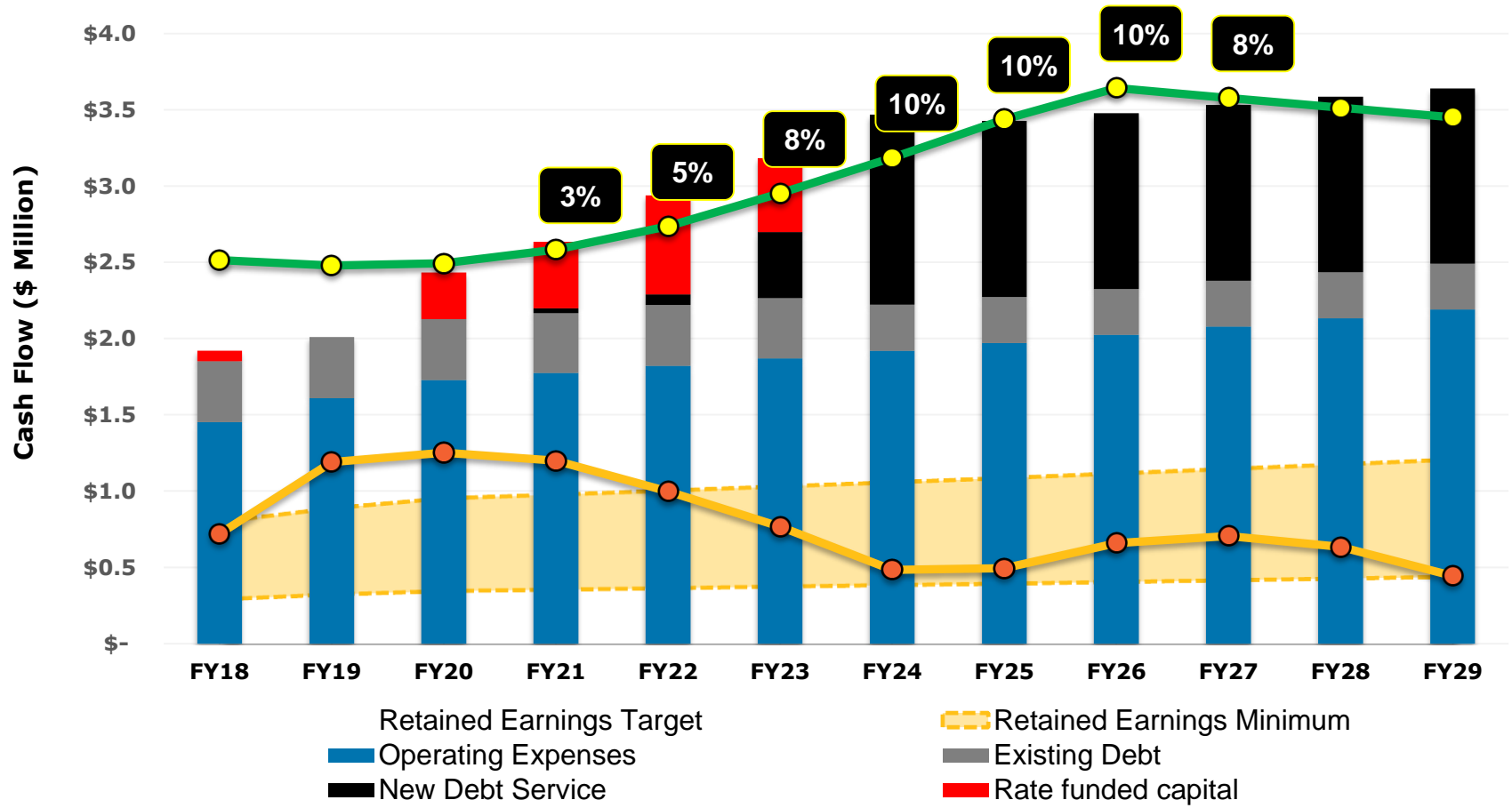
SMALL COMMUNITY CONFERENCE NITROGEN & PHOSPHORUS REMOVAL

Rate Making and the Secret to Project Funding

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KEYS TO RATE SETTING

Schedule 1.3: Proforma - Proposed



OVERVIEW

When is this going to happen?

How much is it going to cost?

How are we going to pay for it?

WHEN IS THIS GOING TO HAPPEN?

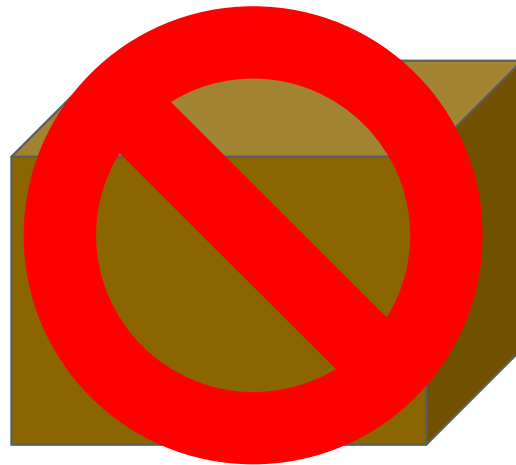
- Time is on your side ...to a degree
- It's not as far off as you think ...so start now



HOW MUCH IS IT GOING TO COST?

- **Upgrade costs**

- **Depending upon permit, will either consist of**
 - Process modification
 - New unit process
- **Budgeting considerations**
 - Other plant needs
 - Design and permitting
 - Construction escalation



HOW ARE WE GOING TO PAY FOR IT?

Enterprise fund concept

Accounting methodology designed to separate utility costs from general fund.

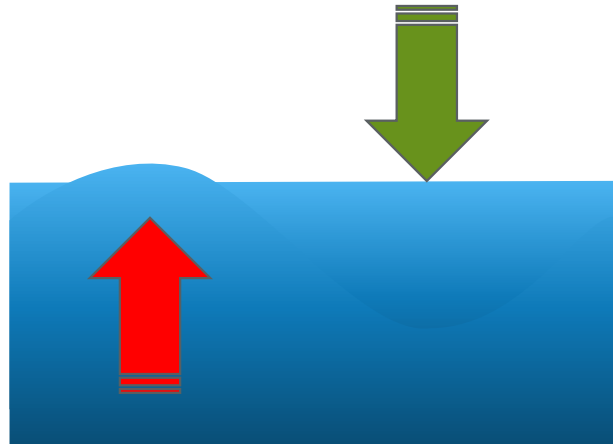
User rates

Concepts

- Costs are borne by those receiving the benefit
- Closed system (Zero-sum game)

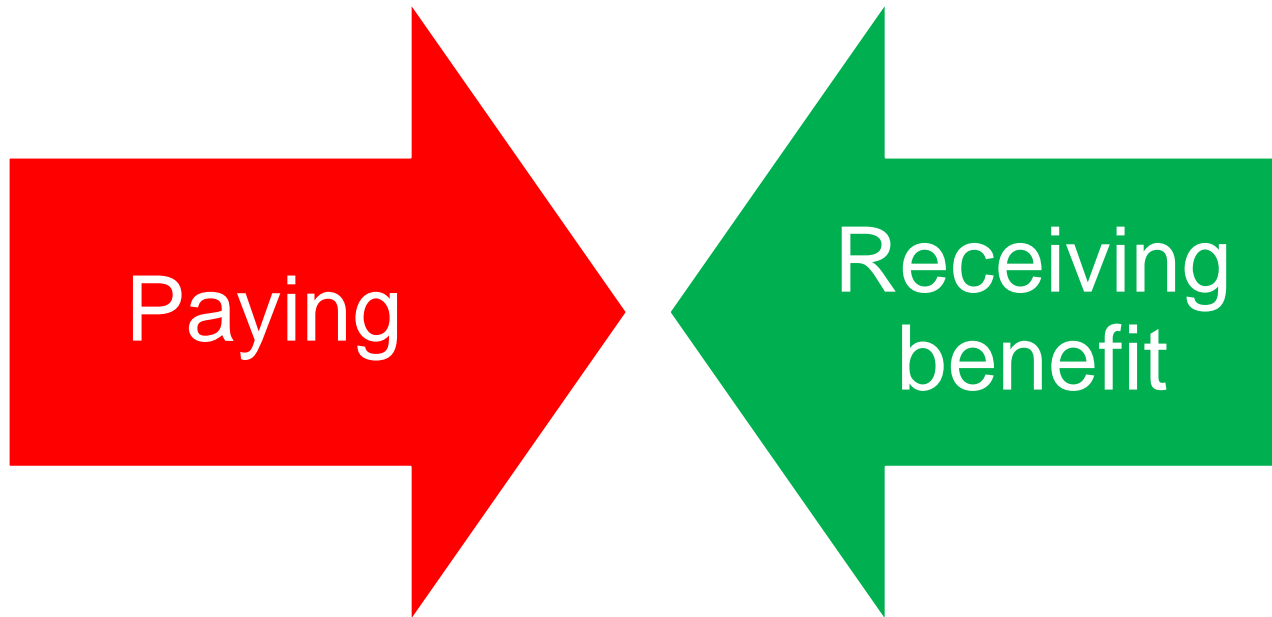
Equity

Affordability



EQUITY

Concept



**In what
proportions?**

EQUITY

Why do you have sewers?

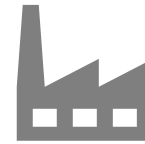
Replace failing septic systems?

Serve high density areas?

Allow building in previously “unsuitable” areas?



Benefits residents



Benefits entire
community

FUNDING CONSIDERATIONS

Rates

- Represent full cost of service
- Build reserves in advance of debt
- Look at high strength users

General Fund

General Fund Alternatives

- MA: Municipal Water Infrastructure Investment Fund
- Cape Cod and Islands Water Protection Fund

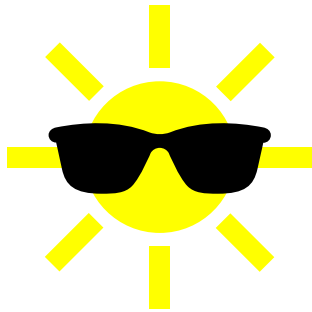
PPP

- Public Private Partnerships

AFFORDABILITY

Affordability is subjective

To some that's
warm



Say its 65°F
outside today



To others, it's
chilly



**Same value,
different
interpretations.**

AFFORDABILITY

Measuring affordability

Current: Residential Indicator

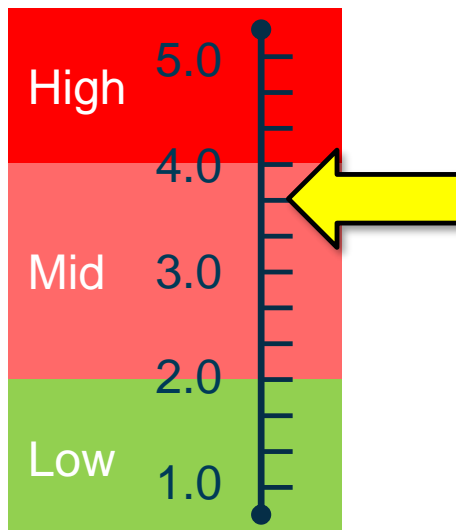
Comes from 1990's EPA Guidance Document

Two components: Community and household

Average residential cost divided by median income

Water AND Sewer

Economic
Burden



$$\begin{array}{l} \text{Total cost: } \frac{\$2,400}{\text{MHI: } \$62,000} = 3.8\% \end{array}$$

AFFORDABILITY

Measuring affordability

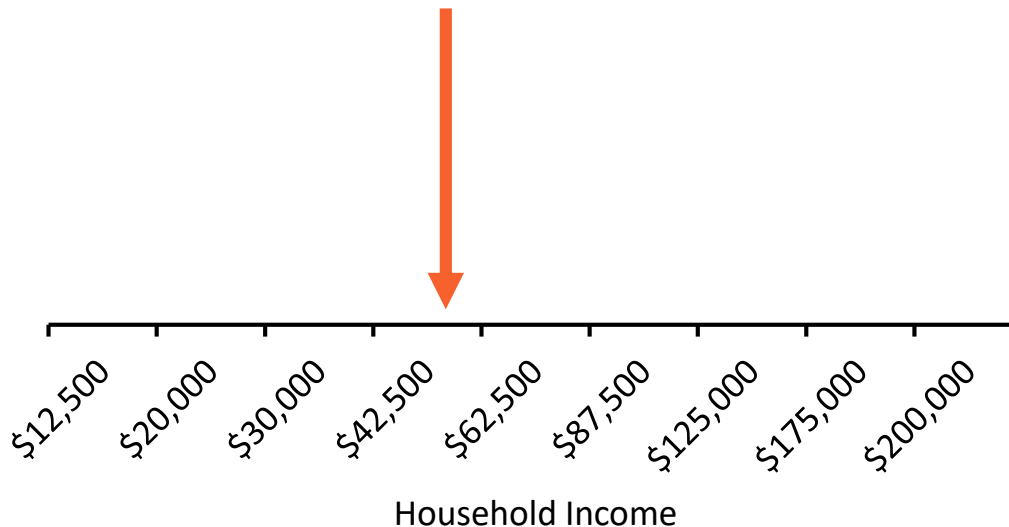
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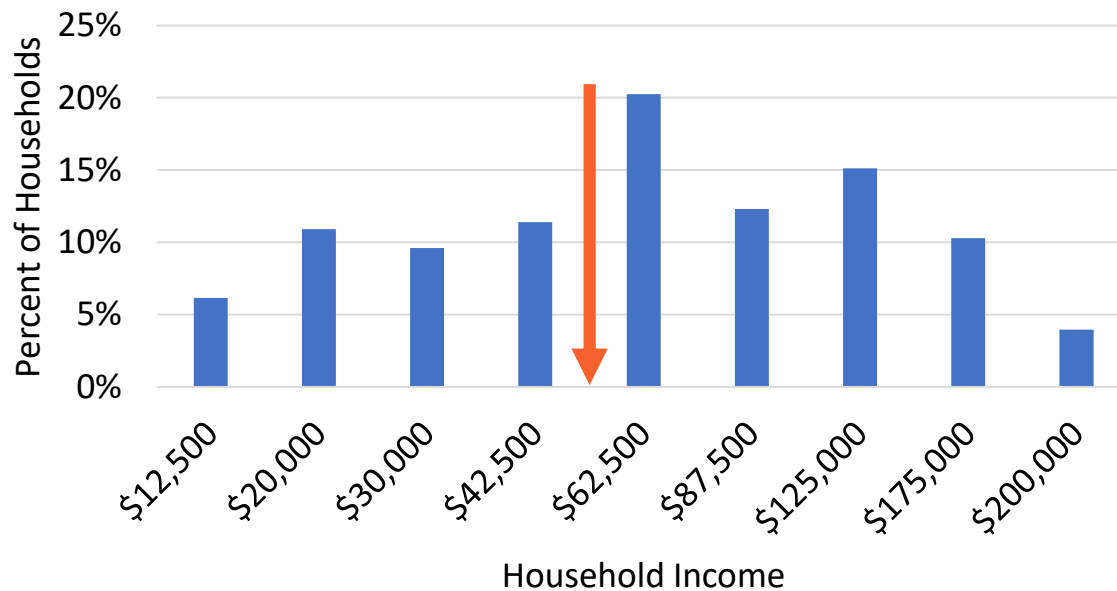
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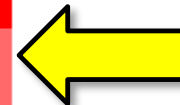
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Water AND Sewer

From	To	No. Households	Percent of Total	Cost as %
\$10,000	\$14,999	381	6%	19.2%
\$15,000	\$24,999	677	11%	12.0%
\$25,000	\$34,999	595	10%	8.0%
\$35,000	\$49,999	706	11%	5.6%
\$50,000	\$74,999	1,256	20%	3.8%
\$75,000	\$99,999	763	12%	2.7%
\$100,000	\$149,999	937	15%	1.9%
\$150,000	\$199,999	638	10%	1.4%
\$200,000	more	246	4%	1.2%
			6,199	Total



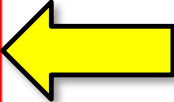
AFFORDABILITY

Measuring affordability

Proposed: Household Burden Indicator

Comes from 2019 AWWA / NACWA / WEF Report
Two components: Community and household
Residential cost divided by 20% percentile income

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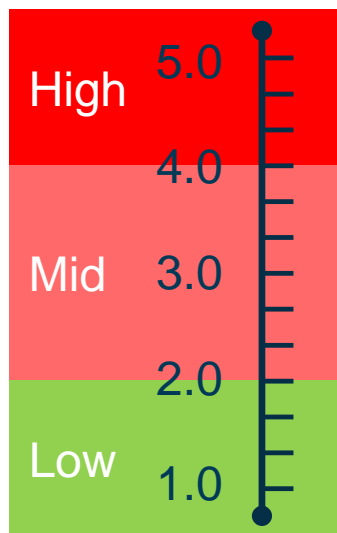
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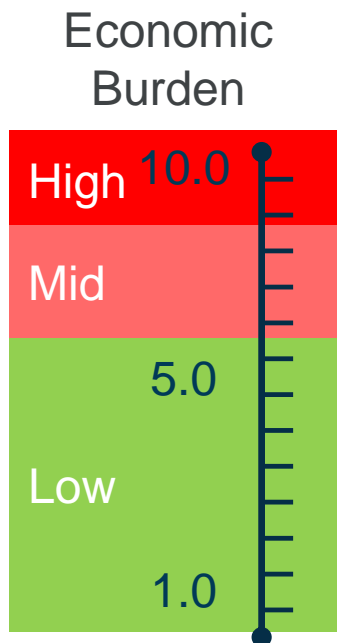


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TAKE AWAYS



Your challenges are unique



Need to think outside the box



Take the long view



Don't focus only on permit upgrades