EPA's Proposed 2022 Financial Capability Assessment for Clean Water Act Obligations

March 14, 2022





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Welcome, Agenda Overview, and Zoom Introduction

Speaker

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Additional Information



will be recorded

at a later date.

and made available

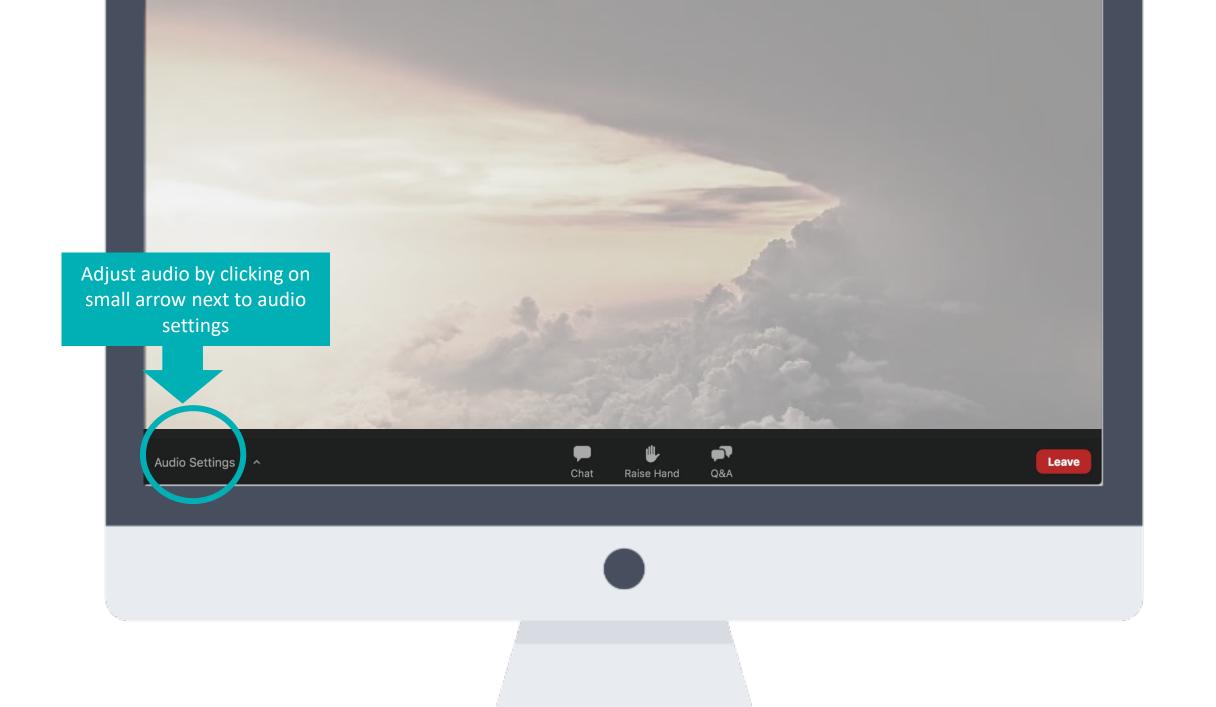
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Presenter



Chrisna Baptista
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Roadmap for Today's Discussion

- Timeline
- Background
- Structure of Proposed 2022 FCA
 - Overview
 - Options for Comment: Incorporating lowest quintile income and poverty measures
 - ► Example Calculations for Alternative 1 Metrics
- Questions for Public Comment
- Conclusion

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Direction from Congress and NAPA Report

- In 2016, Congress directed EPA to contract with the National Academy of Public Administration (NAPA) to create a framework for "community affordability"
- NAPA's report, <u>Developing a New Framework for Community</u> <u>Affordability of Clean Water Services</u> (Oct 2017), included the following recommendations:
 - ► Improve EPA's financial capability assessment metrics
 - Include all water costs (Clean Water Act and Safe Drinking Water Act)
 - Focus on low-income users rather than median household income
 - Expand the socioeconomic components to include economic structural problems in the community

Timeline of Updates to Financial Capability Assessment (FCA) Guidance

- September 2020: EPA published a proposed 2020 FCA Guidance in the Federal Register with a 30-day comment period.
- ▶ January 12, 2021: EPA signed a Federal Register notice for a 2021 FCA Guidance and posted a prepublication version on the web.
- ▶ January 20, 2021 and after: Federal Register notice was not published and the pre-publication version of the 2021 FCA Guidance underwent review per the White House Regulatory Freeze Pending Review Memorandum, including engagement with outside stakeholders.

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Background: 1997 CSO Guidance for Financial Capability Assessment and Schedule Development

- Explains how an NPDES permittee can assess its financial capability based on factors identified in the Combined Sewer Overflow (CSO) Control Policy to develop compliance schedules for implementing CSO controls.
- Normally, the CSO control implementation schedule is the time required for normal engineering and construction practices. However, the implementation schedule can be lengthened based on consideration of financial capability.
- Establishing an implementation schedule for CSO controls is a negotiation involving the permittee and EPA and state NPDES authorities which is memorialized in a permit or enforcement mechanism.

Background: 1995 Interim Economic Guidance for Water Quality Standards

- Used by states and EPA in considering economics at various points in the process of setting or revising water quality standards (WQS).
- Meant to assist states and applicants in understanding the economic factors that may be considered, and the types of tests that can be used to determine if a designated use is feasible to attain, if a WQS variance can be justified, or if degradation of a high-quality water is warranted.

Background: Financial and Economic Guidance in Two CWA Programs

- ► 1997 CSO Guidance for Financial Capability Assessment and Schedule Development
- ▶ 1995 Interim Economic Guidance for Water Quality Standards
- Both guidances have a similar 2-step methodology but use different terminology.

Step 1: Evaluate Impacts to Household

Municipal Preliminary Screener (1995 WQS Guidance) Residential Indicator (1997 CSO Guidance)

 $\frac{Average\ Cost\ Per\ Household}{Median\ Household\ Income} = \%\ MHI$

Step 2: Evaluate Community Financial Capability

Secondary Score (1995 WQS Guidance) Financial Capability Indicators (1997 CSO Guidance)

Metrics on community's ability to obtain financing and socioeconomic health include:

- Bond Rating
- Net Debt as % of Full Market Property Value
- Unemployment Rate
- MHI

- Property tax Revenues as a % of full market property value
- Property Tax Collection Rate

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Overview: Alternative 1

Four metrics recommended to determine financial capability

Two Metrics from 1997 FCA Guidance (developed from CSO Policy)

- Residential Indicator (RI):
 - Cost per household as a percent of MHI
 - 2% shows a "high" financial impact
- Financial Capability Indicator (FCI):
 - Six socioeconomic, debt, and financial indicators used to benchmark the community's financial strength

Two New Metrics that focus on lowest quintile income households and poverty

- Lowest Quintile Income Indicator (LQII):
 - Community's lowest quintile income (LQI) benchmarked against the national LQI
 - More than 25% below national LQI shows a "high" financial impact
- Poverty Indicator (PI):
 - Five elements from Census data points to indicate the prevalence of poverty and other poverty related issues in a community

Alternative 1, cont'd

Four metrics are combined to show an "impact" level and associated recommended benchmarks for compliance schedule length.

Expanded FCA Matrix Results	Recommended Implementation Schedule Benchmarks
Low Impact	Normal Engineering/Construction Schedule
Medium Impact	Up to 15 Years
High Impact	Up to 20 years (or up to 25 years based on additional considerations)

Alternative 2

Alternative 2 will combine financial rate modeling and lowest quintile and poverty indicators to determine a schedule that attempts to reduce rate shock and overly burdensome water rates, not to exceed 25 years for unusually high burdens.

Financial Alternatives Analysis

- ▶ Under either Alternative 1 or Alternative 2, where lowest quintile income and poverty indicators show a potential impact, FCA should include a description of current and planned efforts to mitigate the environmental and financial impacts on low-income households before seeking an extended schedule or WQS revision
 - ► Financial considerations identified in CSO Policy: grant and loan availability; previous and current residential, commercial and industrial sewer user fees and rate structures; and other viable funding mechanisms and sources of financing

Financial Alternative Analysis, cont'd

- ► Appendix C provides a "checklist" of financial options—including loans, grants, customer assistance programs and alternative rate structures.
- ► EPA would provide resources where needed in this analysis (e.g., Water Finance Clearinghouse, Municipal Ombudsman, Environmental Finance Centers) and encourages subsidy and grant consideration from governmental funding sources.

Other Metrics

- Instructions provide for submittal of additional information for consideration, such as:
 - Drinking Water Costs
 - ► Potential Bill Impact Relative to Household Size
 - Customer Assistance Programs
 - ► Asset Management Costs
 - Stormwater Management Costs

Additional Scheduling Considerations

- Schedules should take into account
 - Discharges to sensitive areas;
 - Use impairment;
 - Public health; and
 - ► Environmental justice.
- Reducing exposure to raw sewage should be a priority in any negotiated schedule.
- Any implementation schedule should sequence projects to mitigate public health and environmental impacts to areas with potential environmental justice concerns as early as possible.
- Before seeking an extended schedule, EPA also encourages communities to actively involve the affected public by holding public meetings.*

Application to Water Quality Standards (WQS) Decisions

- Alternative 1 will apply to determine economic impacts for WQS decisions for public entities, i.e., use changes, WQS variances, and antidegradation reviews
 - ► Financial and rate models (in Alternative 2) or Other Metrics could be used in conjunction with Alternative 1 (but not alone) to support WQS decisions
- In addition to completing an economic analysis, consideration of opportunities to mitigate impacts to areas with potential environmental justice concerns is recommended

Considerations for Applying FCA to Support Use Changes

- ➤ Cautions the use of analyses and metrics recommended in the Proposed 2022 FCA for use changes based on 40 CFR 131.10(g)(6) (commonly referred to as "Factor 6")
- Provides specific recommendations for additional analyses for use changes
- Includes a reminder of triennial review requirement and expectation that triennial reviews include evaluating current economic information

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Incorporating Lowest Quintile Income and Poverty Measures

- Lowest Quintile Income Indicator
 - ► EPA proposes to benchmark a community's lowest quintile income against the national lowest quintile income
 - ► This replaces the Proposed 2020 FCA Guidance's benchmark for cost as a proportion of lowest quintile income
- Poverty Indicator
 - ► Five elements from Census data points to indicate the prevalence of poverty and other poverty related issues in a community

Incorporating Lowest Quintile Income Measure

Proposal for consideration of lowest quintile income

Strong	Mid-Range	Weak
More than 25% above national LQI	±25% of national LQI	More than 25% below national LQI

Incorporating Poverty Prevalence: Five Proposed Elements

- Percentage of Population with Income Below 200% of Federal Poverty Level
- Percentage of Population Receiving Food Stamps/SNAP Benefits
- Percentage of Vacant Households
- ► Trend in Household Growth
- Percentage of Unemployed Population 16 and Over in Civilian Labor Force

Options for Incorporating Lowest Quintile Income Measure

- PROPOSED OPTION 1 FOR COMMENT: Combine consideration of lowest quintile income and poverty elements into a Lowest Quintile Poverty Indicator
- ► PROPOSED OPTION 2 FOR COMMENT: Calculate separate Lowest Quintile Income Indicator and Poverty Indicator

Proposed Option 1 for Comment: Lowest Quintile Poverty Indicator

Indicator	Strong	Mid-Range	Weak	Weighting
Upper Limit of Lowest Income Quintile	More than 25% above National LQI	±25% of National LQI	More than 25% below National LQI	50%
Percentage of Unemployed Population 16 and Over in Civilian Labor Force	More than 25% below National value	±25% of National value	More than 25% above National value	10%
Percentage of Population Living Under 200% of Poverty Level	More than 25% below National value	±25% of National value	More than 25% above National value	10%
Percentage of Population Receiving Food Stamps/SNAP Benefits	More than 25% below National value	±25% of National value	More than 25% above National value	10%
Percentage of Vacant Households	More than 25% below National value	±25% of National value	More than 25% above National value	10%
Trend in Household Growth	>1%	0-1%	<0%	10%

Proposed Option 2 for Comment: Lowest Quintile Income Indicator and Poverty Indicator

Lowest Quintile Income Indicator

Score	Upper Limit of Lowest Income Quintile		
Weak	More than 25% below National LQI		
Mid-Range	±25% of National LQI		
Strong	More than 25% above National LQI		

Poverty Indicator

Indicator	Strong	Mid-Range	Weak
PI #1: % Population with Income	More than 25%	± 25 % of	More than 25%
Below 200% of Federal Poverty Level	below national	national value	above national
	value		value
PI #2: % Population Receiving Food	More than 25%	± 25 % of	More than 25%
Stamps/SNAP Benefits	below national	national value	above national
Programme and the second	value		value
PI #3: % Vacant Households	More than 25%	± 25 % of	More than 25%
	below national	national value	above national
	value		value
PI #4: Trend in Household Growth	>1%	0%-1%	<0%
PI #5: % Unemployed Population 16	More than 25%	± 25 % of	More than 25%
and Over in Civilian Labor Force	below national	national value	above national
	value		value

Options for Incorporating Lowest Quintile Income and Poverty Measures

- Seeking feedback and will choose one option for final FCA
- Developed to meet National Academy of Public Administration (NAPA) recommendations:
 - To "focus on the income of low-income users most vulnerable to rate increases"
 - That metrics be: 1. Readily available from publicly available data sources; 2. Clearly defined and understood; 3. Simple, direct, and consistent; 4. Valid and reliable measures, according to conventional research standards; and 5. Applicable for comparative analyses among permittees.

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Example Community

- Service area LQI = \$26,000
- Service area MHI = \$75,000
- Service area = 10,000 households
- ► Total flow = 10 MGD
- Residential flow = 8 MGD
- Total Annual Current and Projected WWTP and CSO Costs = \$15M

National Benchmarks (2019 5-year ACS)

- National LQI = \$25,766
- National MHI = \$62,843
- Percent of Unemployed Population 16 and Over in Civilian Labor Force = 3.4%
- Percent of Population Living Under 200% of Poverty Level = 30.9%
- Percent of Population Receiving Food Stamps/SNAP Benefits = 11.7%
- Percent of Vacant Households = 12.1%

Step 1: Calculate Residential Indicator

► Residential Indicator = Mid-Range Impact (1.6%)

Total Costs * Residential Flow / Total Flow = Residential Share of Costs

\$15M * 8 MGD/10MGD = \$12M residential share of costs

Residential Share of Costs / Number of Households in Service Area = Cost Per Household

\$12M / 10,000 households = \$1,200 cost per household

Cost per Household / MHI of Service Area x 100 = Residential Indicator

\$1,200 / \$75,000 x 100 = 1.6% = Mid-Range Residential Indicator

Step 2: Calculate Financial Capability Indicator

► Financial Capability Indicator = Mid-Range Impact (1.7)

Indicator	Strong (3)	Mid-Range (2)	Weak (1)	Example Community
	AAA – A (S&P) or	BBB (S&P) or	BB - D (S&P) or	
Bond Rating	Aaa – A (Moody's) or AAA – A (Fitch Ratings)	BAA (Moody's) or BBB (Fitch Ratings)	Ba – C (Moody's) or BB - D (Fitch Ratings)	BBB = Mid-Range (2)
Overall Net Debt as % of Full Market Prop. Value	Below 2%	2% - 5%	Above 5%	10% = Weak (1)
Unemployment Rate	More than 1 Percentage Point Below the National Average	± 1 Percentage Point of National Average	More than 1 Percentage Point Above the National Average	5.4% for service area is >1% above 3.4% national value = Weak (1)
Median Household Income	More than 25% Above Adjusted National MHI	± 25% of Adjusted National MHI	More than 25% Below Adjusted National MHI	(\$75K-\$62,843) / \$62,843 = +19.3% = Mid- Range (2)
Property Tax Rev. as % of Full Market Prop. Value	Below 2%	2% - 4%	Above 4%	4.1% = Weak (1)
Property Tax Collection Rate	Above 98%	94% - 98%	Below 94%	98.5% = Strong (3)
FCI Score			Sum of Ratings	(10) / 6 = Mid-Range (1.7)

Step 3: Option 1 - Combined Calculation for Initial LQPI

► Initial LQPI = Medium Impact (1.9)

Indicator Score

Indicator	Strong (3)	Mid-Range (2)	Weak (1)	Weighti ng	Example Community
LQPI #1: Upper limit of Lowest Income Quintile	>25% above National LQI	±25% of National LQI	>25% below National LQI	50%	\$26,000 = 0.9% above national value of \$25,766 = Mid-Range (2)
LQPI #2: % of Unemployed Pop. 16 and Over in Civilian Labor Force	>25% below National value	±25% of National value	>25% above National value	10%	5.4% = 58.8% above national value of 3.4% = Weak (1)
LQPI #3: % of Pop. Living Under 200% of Poverty Level	>25% below National value	±25% of National value	>25% above National value	10%	41% = 32.7% above national value of 30.9% = Weak (1)
LQPI #4: % of Pop. Receiving Food Stamps/SNAP Benefits	>25% below National value	±25% of National value	>25% above National value	10%	13.6% = 16.2% above national value of 11.7% = Mid-Range (2)
LQPI #5: % of Vacant Households	>25% below National value	±25% of National value	>25% above National value	10%	9% = 25.6% below national value of 12.1% = Strong (3)
LQPI #6: Trend in Household Growth	>1%	0-1%	<0%	10%	0.7% = Mid-Range (2)
Initial Lowest Ouintile Poverty					

Weighted average of LQPI #1 at 50% and remaining LQPI Indicators at 10% = Medium Impact (1.9)

Step 3: Option 2 - Two-Step Calculation for Initial LQPI

► Initial LQPI = Mid-Range LQII + Mid-Range PI = Medium Impact

Lowest Quintile Income Indicator	Strong (3)	Mid-Range (2)	Weak (1)	Example Community
LQII: Upper limit of Lowest Income Quintile	>25% above National LQI	±25% of National LQI	>25% below National LQI	\$26,000 = 0.9% above national value of \$25,766 = Mid-Range (2)
LQII Score				Mid-Range (2)

Poverty Indicators	Strong (3)	Mid-Range (2)	Weak (1)	Example Community
PI #1: % of Unemployed Pop. 16	>25% below	±25% of National	>25% above	5.4% = 58.8% above national value of
and Over in Civilian Labor Force	National value	value	National value	3.4% = Weak (1)
PI #2: % of Pop. Living Under	>25% below	±25% of National	>25% above	41% = 32.7% above national value of
200% of Poverty Level	National value	value	National value	30.9% = Weak (1)
PI #3: % of Pop. Receiving Food	>25% below	±25% of National	>25% above	13.6% = 16.2% above national value of
Stamps/SNAP Benefits	National value	value	National value	11.7% = Mid-Range (2)
PI #4: % of Vacant Households	>25% below	±25% of National	>25% above	9% = 25.6% below national value of
71 #4. % Of vacant flousenoids	National value	value	National value	12.1% = Strong (3)
PI #5: Trend in HH Growth	>1%	0-1%	<0%	0.7% = Mid-Range (2)
Poverty Indicator Score	Average of five poverty indicator factors = Mid-Range (1.8)			

Step 4: Perform Financial Alternatives Analysis if Initial LQPI Score is "medium" impact or "high" impact

► Initial LQPI = Medium Impact

Result of Financial Alternatives Analysis	Adjustment to Initial LQPI Score	Rationale			
Community: - Does not perform the analysis, - Does not consider all alternatives, or - Finds financial alternatives to lessen impact on LQI HHs but does not commit to pursue alternatives.	Initial LQPI Score is adjusted down, potentially limiting flexibility in schedule or WQS decisions: - "Medium" LQPI is adjusted to "low" - "High" LQPI is adjusted to "medium"	Community can do more to assist its lowest quintile households, so poverty concerns should not be used to justify a longer schedule or certain WQS decisions.			
Community performs a Financial Alternatives Analysis and commits to pursuing feasible financial alternatives to reduce the impact on lowest quintile households.	Depending on negotiations or discussions with EPA and EPA's consideration of likelihood of remaining impacts, the Initial LQPI Score may be adjusted or stay the same.	Community commits to taking additional actions to help its lowest quintile; as a result, the lowest quintiles may or may not continue to be significantly impacted.			
Community performs a Financial Alternatives Analysis and EPA determines that community has taken all feasible steps to help lowest quintile households, but there are still significant impacts on the lowest quintile.	Initial LPQI Score stays the same, potentially providing increased flexibility in schedule or WQS decisions: - "Medium" LQPI stays "medium" - "High" LQPI stays "high"	Community has taken all feasible steps to help its lowest quintile, so impacts to lowest quintile households may be used to justify a longer schedule or certain WQS decisions.			

Step 5 : Determine Final LQPI Score

Financial Alternatives Analysis shows the community has taken all feasible steps to reduce impacts on LQI HHs but there are still significant impacts on the lowest quintile, so Final LQPI Score = Medium

Result of Financial Alternatives Analysis	Adjustment to Initial LQPI Score	Rationale
Community performs a Financial Alternatives Analysis and EPA determines that community has taken all feasible steps to help lowest quintile households, but there are still significant impacts on the lowest quintile.	Initial LPQI Score stays the same, potentially providing increased flexibility in schedule or WQS decisions: - "Medium" Initial LQPI Score stays "medium" for Final LQPI Score.	Community has taken all feasible steps to help its lowest quintile, so impacts to lowest quintile households may be used to justify a longer schedule or certain WQS decisions.

Step 6: Combine Metrics

► Financial Capability Matrix = Medium Impact

	Residential Indicator				
Financial Capability Indicator	Low Impact (Below 1.0%)	Mid-Range (1.0% to 2.0%)	High Impact (Above 2.0%)		
Strong (Above 2.5)	Low Impact	Low Impact	Medium Impact		
Mid-Range (1.5 to 2.5)	Low Impact	Medium Impact (1.6% RI, 1.7 FCI)	High Impact		
Weak (Below 1.5)	Medium Impact	High Impact	High Impact		

Expanded Financial Capability Assessment Matrix = Medium Impact

	Final Lowest Quintile Poverty Indicator Score		
FCA Score (RI and FCI)	Low Impact	Medium Impact	High Impact
Low Impact	Low Impact	Low Impact	Medium Impact
Medium Impact	Low Impact	Medium Impact	High Impact
High Impact	Medium Impact	High Impact	High Impact

Step 7 : Develop CWA Compliance Schedule

- Consider Other Metrics, as appropriate
- Consider public health, environmental justice, and environmental impacts
- ► 2022 FCA Recommended Implementation Schedule Benchmarks for Alternative 1

Expanded FCA Matrix Results	Recommended Implementation Schedule Benchmarks
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Medium Impact	Up to 15 Years
High Impact	Up to 20 years (or up to 25 years based on additional considerations)

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Questions for Public Comment

- 1. Should the Final 2022 FCA incorporate a single new metric—LQPI—that considers lowest quintile income and poverty indicators together? Or should the Final 2022 FCA incorporate two new metrics (a lowest quintile income indicator and a poverty indicator) to be calculated separately and combined in a matrix?
- 2. EPA is seeking additional examples or case studies of funding and financing considerations to add to Appendix C: Financing and Funding Considerations.
- 3. EPA is seeking feedback on the current proposed scheduling benchmarks of 20 years for "high" Expanded FCA Matrix impacts, or 25 years for unusually high impacts. If commentors propose different benchmarks, EPA is requesting examples to support the basis for such benchmarks.

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- ► EPA will accept comment for 60 days via the Federal eRulemaking portal at http://www.regulations.gov/, referencing Docket ID No. EPA-HQ-2020-0426-0070. Comments on the Proposed 2022 Financial Capability Assessment Guidance must be received on or before April 25, 2022.
- Additional information about the Proposed 2022 FCA Guidance is available at https://www.epa.gov/waterfinancecenter/financial-technical-assistance-and-tools-water-infrastructure#affordability.

Additional Information

For more information:

http://www.regulations.gov/ Docket ID No. <u>EPA-HQ-2020-</u> 0426-0070

A recording of this webinar will be posted on the web:

https://www.epa.gov/waterfinancecenter

