

Proposed 2020
Financial Capability
Assessment for Clean
Water Act Obligations

September 22, 2020



AGENDA

September 22, 2020

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Welcome, Agenda Overview, and Zoom Introduction

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Speakers

- Shari Barash, Chief, EPA Office of Water's Standards and Health Protection Division, National Branch
- Sonia Brubaker, Director, EPA Water Infrastructure and Resiliency Finance Center
- Sarah Rae, Attorney-Adviser, EPA Office of Enforcement and Compliance Assurance, Water Enforcement Division

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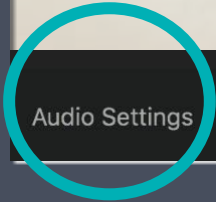
Additional Information

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Q&A

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Presenters



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Proposed 2020 Financial Capability Assessment for Clean Water Act Obligations

September 22, 2020

Roadmap

- ▶ Background
- ▶ Proposed 2020 FCA
- ▶ Use of 2020 FCA to Support Water Quality Standards Decisions
- ▶ Request for Public Comment

Background

- ▶ As part of the 2016 Appropriation, Congress directed EPA to contract with the National Academy of Public Administration (NAPA) to create a framework for “community affordability.” The resulting report from NAPA included several recommendations.
- ▶ The proposed 2020 FCA guidance reflects these recommendations and recommendations from stakeholders.
- ▶ The proposed guidance includes new metrics to inform a community’s implementation schedule, including indicators that more accurately reflect how much low-income communities can afford to pay for water infrastructure upgrades.

Overview

- ▶ The proposed 2020 FCA sets forth two alternative general approaches for assessing a community's financial capability.
- ▶ A community also may choose to submit:
 - ▶ Other Metrics with Standardized Instructions
 - ▶ Other Metrics with Submission of Information to be Determined by the Community
- ▶ The proposed 2020 FCA directly incorporates relevant portions of the 1997 FCA Guidance and the 2014 FCA Framework as Appendices. When finalized, EPA expects to use the 2020 FCA to support negotiations of schedules for implementing CWA requirements for municipalities and local authorities.

Proposed 2020 FCA - Alternative 1

Recommended Critical Metrics with Established Thresholds and Instructions

- ▶ **Residential Indicator (RI)**
 - ▶ Cost per household as a percent of MHI
- ▶ **Financial Capability Indicator (FCI)**
 - ▶ Six socioeconomic, debt, and financial indicators used to benchmark the community's financial strength
- ▶ **Lowest Quintile Residential Indicator (LQRI)**
 - ▶ Cost as percentage of low-income household
- ▶ **Poverty Indicator (PI)**
 - ▶ Five indicators used to benchmark the prevalence of poverty throughout the service area

LQRI- Critical Metric

Calculation of Lowest Quintile Residential Indicator

1	Ratio of Lowest Quintile HH Size to Median HH Size	70.2% (unless superseded by local info)	2018 value for United States based on U.S. Census Bureau Current Population Survey (CPS) data
2	Cost for Median Household		Line 109 from FCA Residential Indicator Analysis
3	Cost for Lowest Quintile Household		Line 1 * Line 2
4	Upper Limit of Lowest Income Quintile for Service Area		5-Yr ACS value for upper boundary of lowest quintile of household income in service area
5	Cost as Percentage of Low-Income Household		$(\text{Line 3} / \text{Line 4}) * 100$

LQRI Benchmarks

High Impact (Above 2.0%)

Mid-Range Impact (1.0% to 2.0%)

Low Impact (Below 1.0%)

Poverty Indicator - Critical Metric

Indicator	Strong (3)	Mid-Range (2)	Weak (1)
PI #1 Percentage of Population with Income Below 200% of Federal Poverty Level	More than 25% below National value	±25% of National value	More than 25% above National value
PI #2 Percentage of Population with Income Below Federal Poverty Level	More than 25% below National value	±25% of National value	More than 25% above National value
PI #3 Upper limit of Lowest Income Quintile	More than 25% above National LQI	±25% of National LQI	More than 25% below National LQ
PI #4 Lowest Quintile Income as a Percentage of Aggregate Income	More than 25% below National value	±25% of National value	More than 25% above National value
PI #5 Percentage of Population Receiving Food Stamps/SNAP Benefits	More than 25% below National value	±25% of National value	More than 25% above National value

Poverty Indicator Benchmarks

High Impact (Below 1.5)
 Mid-Range Impact (1.5 to 2.5)
 Low Impact (Above 2.5)

Financial Capability Matrix

Financial Capability Indicator	Residential Indicator		
	Low Impact (Below 1.0%)	Mid-Range (1.0% to 2.0%)	High Impact (Above 2.0%)
Strong (Above 2.5)	Low Burden	Low Burden	Medium Burden
Mid-Range (1.5 to 2.5)	Low Burden	Medium Burden	High Burden
Weak (Below 1.5)	Medium Burden	High Burden	High Burden

Lowest Quintile Burden Matrix

Poverty Indicator (PI)	Lowest Quintile Residential Indicator (LQRI)		
	Low Impact (Below 1.0%)	Mid-Range (1.0% to 2.0%)	High Impact (Above 2.0%)
Low Impact (Above 2.5)	Low Burden	Low Burden	Medium Burden
Mid-Range (1.5 to 2.5)	Low Burden	Medium Burden	High Burden
High Impact (Below 1.5)	High Burden	High Burden	High Burden

Expanded Financial Capability Matrix

FCA Burden (RI and FCI)	LQ Burden (LQRI and PI)		
	Low Burden	Medium Burden	High Burden
Low Burden	Low Burden	Low Burden	Medium Burden
Medium Burden	Low Burden	Medium Burden	High Burden
High Burden	Medium Burden	High Burden	High Burden

Schedule Benchmarks for Alternative 1

Expanded FCA Matrix Results	Recommended Implementation Schedule Benchmarks
Low Burden	Normal Engineering/Construction Schedule
Medium Burden	Up to 15 Years
High Burden	Up to 25 years (absent consideration of additional information)

- Consideration of other metrics may support an implementation schedule that goes beyond the schedule benchmarks.
- EPA does not anticipate establishing implementation schedules that would exceed the useful life of the community's water infrastructure assets.

Proposed 2020 FCA - Alternative 2

- ▶ Recommended Critical Metrics
 - ▶ **Financial and Rate Models** - looks at the impacts of rate increases over time on utility customers, including those with incomes in the lowest quintile.
 - ▶ **Poverty Indicator** - five poverty indicators used to benchmark the prevalence of poverty throughout the service area.
- ▶ Communities with more expensive CWA obligations may choose to employ the second alternative, given its more sophisticated evaluation of affordability over time.

Scenario:	Utility Proposed Scenario				Other Scenarios							
End Year:	2047				2036				2041			
Measure:	Rate Inc.	CPH (\$)	MHI (\$)	RI	Rate Inc.	CPH (\$)	MHI (\$)	RI	Rate Inc.	CPH (\$)	MHI (\$)	RI
2016	0%	566	64,814	0.9%	0%	566	64,814	0.9%	0%	566	64,814	0.9%
2017	7.5%	605	66,267	0.9%	5%	593	66,267	0.9%	5%	593	66,267	0.9%
2018	7.5%	647	67,753	1.0%	8.4%	639	67,753	0.9%	6.5%	629	67,753	0.9%
2019	7.5%	588	69,272	0.8%	8.4%	584	69,272	0.8%	6.5%	566	69,272	0.8%
2020	7.5%	629	70,825	0.9%	8.4%	630	70,825	0.9%	6.5%	601	70,825	0.8%
2021	7.5%	672	72,413	0.9%	8.4%	678	72,413	0.9%	6.5%	637	72,413	0.9%
2022	7.5%	719	74,037	1.0%	8.4%	731	74,037	1.0%	6.5%	675	74,037	0.9%
2023	7.5%	770	75,697	1.0%	8.4%	789	75,697	1.0%	6.5%	716	75,697	0.9%
2024	7.5%	824	77,394	1.1%	8.4%	850	77,394	1.1%	6.5%	760	77,394	1.0%
2025	7.5%	882	79,129	1.1%	8.4%	917	79,129	1.2%	6.5%	806	79,129	1.0%
2026	7.5%	944	80,903	1.2%	8.4%	990	80,903	1.2%	6.5%	856	80,903	1.1%
2027	5%	989	82,717	1.2%	8.4%	1,069	82,717	1.3%	6.4%	907	82,717	1.1%
2028	5%	1,037	84,572	1.2%	8.4%	1,154	84,572	1.4%	6.4%	962	84,572	1.1%
2029	5%	1,086	86,468	1.3%	8.4%	1,246	86,468	1.4%	6.4%	1,020	86,468	1.2%
2030	5%	1,138	88,407	1.3%	8.4%	1,345	88,407	1.5%	6.4%	1,082	88,407	1.2%
2031	5%	1,193	90,389	1.3%	8.4%	1,453	90,389	1.6%	6.4%	1,148	90,389	1.3%
2032	5%	1,251	92,416	1.4%	8.4%	1,570	92,416	1.7%	6.4%	1,218	92,416	1.3%
2033	5%	1,311	94,488	1.4%	8.4%	1,697	94,488	1.8%	6.4%	1,292	94,488	1.4%
2034	5%	1,374	96,607	1.4%	8.4%	1,834	96,607	1.9%	6.4%	1,372	96,607	1.4%
2035	5%	1,440	98,773	1.5%	8.3%	1,980	98,773	2.0%	6.4%	1,456	98,773	1.5%
2036	5%	1,510	100,988	1.5%	8.3%	2,139	100,988	2.1%	6.4%	1,545	100,988	1.5%
2037	5%	1,582	103,252	1.5%	0%	2,141	103,252	2.1%	6.4%	1,640	103,252	1.6%
2038	5%	1,659	105,567	1.6%	0%	2,144	105,567	2.0%	6.4%	1,741	105,567	1.6%
2039	5%	1,739	107,934	1.6%	0%	2,146	107,934	2.0%	6.4%	1,848	107,934	1.7%
2040	1.39%	1,764	110,354	1.6%	0%	2,148	110,354	2.0%	6.4%	1,962	110,354	1.8%
2041	1.39%	1,790	112,828	1.6%	0%	2,151	112,828	1.9%	6.4%	2,084	112,828	1.8%
2042	1.39%	1,816	115,358	1.6%	0%	2,153	115,358	1.9%	0%	2,086	115,358	1.8%
2043	1.39%	1,842	117,944	1.6%	0%	2,156	117,944	1.8%	0%	2,089	117,944	1.8%
2044	1.39%	1,869	120,588	1.5%	0%	2,158	120,588	1.8%	0%	2,091	120,588	1.7%
2045	1.39%	1,896	123,292	1.5%	0%	2,161	123,292	1.8%	0%	2,094	123,292	1.7%
2046	1.39%	1,923	126,056	1.5%	0%	2,164	126,056	1.7%	0%	2,097	126,056	1.7%
2047	0%	1,926	128,882	1.5%	0%	2,166	128,882	1.7%	0%	2,099	128,882	1.6%

Schedule Development for Alternative 2

- ▶ Unlike Alternative 1, EPA has not established benchmark percentages of household income. However, EPA intends to keep the percentage of household income spent on wastewater (and if added to the model, drinking water) utility bills within reasonable bounds when establishing compliance schedules.
- ▶ EPA does not intend for such a schedule to exceed the useful life of the community's water infrastructure assets.

Other Metrics

Other Metrics with Standardized Instructions

- ▶ Drinking Water Costs
- ▶ Potential Bill Impact Relative to Household Size
- ▶ Customer Assistance Programs
- ▶ Asset Management Activities
- ▶ Stormwater Management Costs
- ▶ Comparisons to National Data

Other Metrics with Submission Information Determined by Community

- ▶ Trends in unemployment rates
- ▶ Debt service coverage ratio
- ▶ Debt to income ratio
- ▶ Service area trends, such as population decline
- ▶ Locality specific info on household size
- ▶ State or local legal restrictions or limitations on property taxes, or other revenue streams, or debt levels
- ▶ Other Metrics

Drinking Water Costs - Other Metric

- ▶ If information on drinking water costs is submitted and supported by the documentation provided pursuant to the standardized instructions:
 - ▶ Under Alternative 1 EPA may permit a community to move from a “low burden” to a “medium burden” or from a “medium burden” to a “high burden” in the 2020 FCA Implementation Schedule Benchmarks. Or, if a community is already experiencing a high burden, EPA may use this additional information to support a schedule beyond the schedule benchmarks, not to exceed the useful life of the community’s water infrastructure assets.
 - ▶ Under Alternative 2 the information will be used to evaluate the impacts of rates for both wastewater and drinking water on household bills.
- ▶ EPA does not intend such schedule to exceed the useful life of the community’s water infrastructure assets.

Potential Bill Impact Relative to Household Size

- ▶ Standardized instructions for completing this analysis and submission of supporting documentation.
- ▶ EPA intends to view this data as an additional way for communities to demonstrate the impacts of program costs on various households.
 - ▶ If the table with modeled future rates in aggregate shows most cells in the low burden CPH category, then the program is relatively affordable, as opposed to having most cells in the high burden CPH category.
 - ▶ Based on the extent of “high burden” cells, EPA may use this information under Alternative 1 to allow an implementation schedule to go beyond the schedule recommendations in Exhibit 6, or
 - ▶ EPA may also use this information under Alternative 2.
- ▶ EPA does not intend such schedule to exceed the useful life of the community’s water infrastructure assets.

Potential Bill Impact Relative to Household Size

Household Size	% of SA HHs	MHI (escalated to 2047) per HH Size	CCF							
			2	3	4	5	6	7	8	9
1	26.83%	\$51,188	\$70.33	\$100.38	\$130.43	\$160.48	\$190.53	\$220.58	\$250.63	\$280.68
			1.65%	2.35%	3.06%	3.76%	4.47%	5.17%	5.88%	6.58%
2	33.76%	\$107,376	\$70.33	\$100.38	\$130.43	\$160.48	\$190.53	\$220.58	\$250.63	\$280.68
			0.79%	1.12%	1.46%	1.79%	2.13%	2.47%	2.80%	3.14%
3	16.33%	\$120,786	\$70.33	\$100.38	\$130.43	\$160.48	\$190.53	\$220.58	\$250.63	\$280.68
			0.70%	1.00%	1.30%	1.59%	1.89%	2.19%	2.49%	2.79%
4	13.37%	\$147,450	\$70.33	\$100.38	\$130.43	\$160.48	\$190.53	\$220.58	\$250.63	\$280.68
			0.57%	0.82%	1.06%	1.31%	1.55%	1.80%	2.04%	2.28%
5	6.37%	\$148,553	\$70.33	\$100.38	\$130.43	\$160.48	\$190.53	\$220.58	\$250.63	\$280.68
			0.57%	0.81%	1.05%	1.30%	1.54%	1.78%	2.02%	2.27%
6	2.22%	\$105,642	\$70.33	\$100.38	\$130.43	\$160.48	\$190.53	\$220.58	\$250.63	\$280.68
			0.80%	1.14%	1.48%	1.82%	2.16%	2.51%	2.85%	3.19%
7	1.11%	\$81,494	\$70.33	\$100.38	\$130.43	\$160.48	\$190.53	\$220.58	\$250.63	\$280.68
			1.04%	1.48%	1.92%	2.36%	2.81%	3.25%	3.69%	4.13%

Low Burden	Medium Burden	High Burden
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Customer Assistance Programs, Asset Management Activities, and Stormwater Management Costs

- ▶ Standardized instructions for submitting cost information and supporting documentation.
- ▶ Submission of the requested information should allow EPA to confirm that the appropriate costs are included as part of a community's FCA and will provide EPA with the appropriate assurances that those expenditures will be made.
- ▶ Such costs may be reflected in the Residential Indicator and LQRI under Alternative 1, and, if a community proceeds under Alternative 2, as part of a Rate Model Analysis.

Additional Scheduling Considerations

- ▶ EPA is also proposing the following additional considerations for scheduling CWA control measures:
 - ▶ Discharges to sensitive areas;
 - ▶ Use impairment;
 - ▶ Public health; and
 - ▶ Environmental justice.

Water Quality Standards (WQS) Decisions

- ▶ Current FCA Guidance and WQS Economic Guidance for public sector for decisions on designated uses, WQS variances, and antidegradation reviews are identical in substance
 - ▶ Use same two-phased approach, data and metrics; only terminology is different
 - ▶ *Residential Indicator = Municipal Preliminary Screener*
 - ▶ *Financial Capability Indicator = Secondary Score*
- ▶ EPA proposes to apply Alternative 1 of the proposed 2020 FCA to determine economic impacts for WQS decisions for public entities

Water Quality Standards (WQS) Decisions

- 3 Steps

- ▶ Step 1: Determine the Initial Economic Impact by using the 1995 WQS Guidance matrix
 - ▶ Residential Indicator and Secondary Score
- ▶ Step 2: Determine the Lowest Quintile Impact by using the LQI matrix in the proposed 2020 FCA
 - ▶ Poverty Indicator and Lowest Quintile Residential Indicator
- ▶ Step 3: Use the Expanded Economic Impact Matrix to combine the results from Step 1 and Step 2
 - ▶ Combines Initial Economic Impact (Step 1) and the Lowest Quintile Impact (Step 2) -- as shown on the next slide

Expanded Economic Impact Matrix - for use in WQS Decisions

- ▶ EPA intends that this proposed Expanded Economic Impact Matrix for Alternative 1, along with the WQS electronic spreadsheet tools for the public sector at <https://www.epa.gov/wqs-tech/spreadsheet-tools-evaluate-economic-impacts-public-sector>, would replace the worksheets and calculations for the public sector sections of the 1995 WQS Guidance.

Initial Economic Impact (MPS and SS)	Lowest Quintile Impact (LQRI and PI)		
	Impact Not Likely to be Substantial	Impact Unclear	Substantial Impact
Impact Not Likely to be Substantial	Impact Not Likely to be Substantial	Impact Not Likely to be Substantial	Impact Unclear
Impact Unclear	Impact Not Likely to be Substantial	Impact Unclear	Substantial Impact
Substantial Impact	Impact Unclear	Substantial Impact	Substantial Impact

Use of 2020 FCA to Support WQS Decisions

Results of Expanded Economic Impact Matrix For WQS Decisions	Recommended WQS Decisions
Impact Not Likely to be Substantial	<u>Does not support</u> revisions to designated uses, WQS variances, or antidegradation reviews leading to downgrading of high quality water
Impact Unclear	<u>Unclear support</u> for revisions to designated uses, WQS variances, or antidegradation reviews leading to downgrading of high quality water; Recommend evaluation of other metrics or the financial and rate models
Substantial Impact	<u>Supports</u> revisions to designated uses, water quality standard (WQS) variances, or antidegradation reviews leading to downgrading of high quality water

Proposed matrix provides guidance on how to apply the results of expanded economic impact matrix based on Alternative 1 of the proposed FCA, for WQS Decisions for public sector

Conclusion

- ▶ EPA is seeking public comment on the proposed 2020 FCA, and has developed 16 specific questions for feedback, such as:
 - ▶ Should EPA's previous FCA documents be consolidated into the 2020 FCA, as proposed, or should EPA continue to use the 1997 FCA Guidance as the controlling guidance with the 2020 revisions serving as a supplement?
 - ▶ What additional examples, calculations, or templates would you like EPA to develop to assist with assessing financial capability?
 - ▶ What supplemental information is relevant to support implementation schedules that go beyond the proposed benchmarks in Exhibit 6?
- ▶ EPA will accept comment for 30 days via the Federal eRulemaking portal at <http://www.regulations.gov/>, referencing Docket ID No. EPA-HQ- OW-2020-0426. Comments on the proposed 2020 financial capability assessment must be received on or before October 19, 2020.
- ▶ Additional information about the proposed 2020 FCA is available at <https://www.epa.gov/waterfinancecenter>.



Additional Information

For more information:

<http://www.regulations.gov/>

Docket ID No. EPA-HQ-OW-2020-0426

A recording of this webinar will be posted on the web within a few days:

<https://www.epa.gov/waterfinancecenter>