

EPN Comments on Proposed 2020 Financial Capability Assessment for Clean Water Act Obligations

October 19, 2020

On September 29, 2020, EPA provided a 30-day comment period for its proposed 2020 Financial Capability Assessment (FCA) under the Clean Water Act (CWA) for water services to disadvantaged communities. EPA intends to use the 2020 FCA as a replacement for current practices to evaluate the affordability of CWA control measures applicable in permitting and enforcement contexts.

EPN Background:

The Environmental Protection Network (EPN) recognizes that compliance with laws to protect public health and the environment may require investments that can increase costs of municipal services and that affordability of services is an important factor, among many, to be considered in defining compliance plans or revising water quality standards.

However, we recommend that any discussion of determining affordability be placed in the context of the existing deficit for water-related US public infrastructure, including the \$4.6 trillion that the American Society of Civil Engineers estimated in 2017 was necessary to bring US infrastructure up to “passing grade.” Chronic underinvesting in US public infrastructure on all levels (municipal, state, and federal) has accelerated in the past half century.^{1 2} Investment patterns in public and especially environmental infrastructure mirror the structural inequities evident throughout US public policy. Low-income communities and communities of color have received a disproportionately low fraction of the \$120 billion over the last half century that the EPA has devoted to constructing wastewater and drinking water infrastructure.³ This is manifest: two million Americans, predominantly low-income communities and communities of color, lack indoor plumbing; 12% of U.S. households struggle to pay water bills; over 9 million homes, often in the poorest US cities, receive water through lead pipes; and over 18 million people receive drinking water that exceeds EPA drinking water standards.^{4 5} In fact, with some exceptions, the preponderance of the 6-10 million remaining lead service lines and pipes serve low-income communities and communities of color who are poorly positioned to pay for their removal. The cost of replacing these is estimated to be about \$30 billion.⁶

¹ American Society of Civil Engineers. 2017. Making the Grade. Available at <https://www.infrastructurereportcard.org/making-the-grade/>.

² McNichol E/Center on Budget and Policy Priorities. 2019. It’s time for states to invest in infrastructure. <https://www.cbpp.org/research/state-budget-and-tax/its-time-for-states-to-invest-in-infrastructure>.

³ Coursen DF. 2020a. A just EPA budget for environmental justice. The Hill, August 25, 2020. <https://thehill.com/opinion/energy-environment/513525-a-just-epa-budget-for-environmental-justice>.

⁴ Ibid

⁵ Coursen DF. 2020b. A neglected environmental justice issue: indoor plumbing. The Hill, August 6, 2020. <https://thehill.com/opinion/energy-environment/510857-a-neglected-environmental-justice-issue-indoor-plumbing>.

⁶ <https://www.watertechnonline.com/home/article/15549954/replacing-all-lead-water-pipes-could-cost-30-billion>.

Current environmental disasters, including hurricanes and floods in the south and fires in the west and northwest, are exacerbating past water access problems and creating new ones. For instance, the burning of residences and whole communities has contaminated several drinking water systems.⁷

Flooding and sea incursions from hurricanes have caused \$100-335 billion of damage in just the past 3 years.

Given the above context, providing improved guidance on the affordability of water and wastewater infrastructure is appropriate. The proposed Guidance will exist within a policy and regulatory framework that already provides significant flexibility for managing rate impacts, including possible changes to water quality standards through variances and use-attainability analyses. Water systems also have opportunities to adjust rate structures to address affordability concerns. These existing tools, when fully and actively applied, have frequently proven to be appropriate and sufficient to resolve water system affordability issues associated with projects to address violations of drinking water and clean water standards. However, EPN acknowledges some benefit to providing additional metrics and boundaries around the affordability assessment. EPN also recognizes that the additional metrics and tools proposed in the Guidance may help to present a more complete picture of the financial capabilities of communities and the impact of project costs on their residents. Under the revised Guidance, it appears likely that more projects will be allowed extended schedules to come into compliance with CWA requirements and that time extensions are likely to be longer than under the existing guidance.

EPN Concerns:

However, to the extent that the proposed guidance results in extended schedules for projects to address noncompliance with clean and safe water laws, EPN recommends that the following concerns be addressed.

1) Unnecessary Health and Environmental Risk: The Guidance would authorize water pollution in violation of the CWA under compliance schedules that are extended beyond periods established by existing guidance under current practice (e.g., 1997 FCA Guidance and the 2014 FCA Framework, and integrated planning opportunities). Prompt compliance with violations of clean water laws is essential to protecting public health and safety, and environmental quality. Current practices for determining the length of compliance periods for resolving violations of these laws have been effective, and the agency needs to justify why these changes are necessary. Prompt compliance with violations of clean water laws is essential for ensuring high-quality source water for drinking water intakes and reducing drinking water treatment costs, as well as ensuring safe fisheries and recreational waters.

2) Undefined Compliance Periods: The Guidance could potentially authorize noncompliance for an undefined period. Although the Guidance indicates that compliance periods are not to exceed the life of the facility to which they apply, it does not define the “useful life of the facility” and could result in compliance schedules that are much longer than current schedules. EPA does not formally

⁷ Northey H. 2020. Torched towns beset by poisoned water. E&E News, Sept 23, 2020. <https://www.eenews.net/stories/1063714499>.

define “useful life,” but the Guidance includes a footnote stating, “Based on EPA’s experience with water programs, the assumed useful life of water infrastructure assets for the purpose of financing is typically 30-40 years.” This is an informal and ambiguous statement that is subject to rebuttal by violators and not an effective limit on future compliance schedules.

3) Failure to Consider Alternative Rate Structures in Addressing Affordability: The Guidance would authorize extended compliance periods based on projected rate increases for low-income residents, without consideration of more prompt compliance using other measures to assure that rates are affordable, such as alternative rate structures.

- Many water system rates are based on a flat service fee and/or a cost per gallon of water used. Because most households use comparable amounts of water, these current flat rates charge most households comparable rates regardless of income. In the event of increasing costs to meet clean water goals, these flat, or regressive, rate structures impose new costs on all ratepayers without respect to ability to pay. The proposed Guidance would effectively allow a delay in compliance as needed to reduce costs so that flat rates are affordable for the lowest income residents in a service area. This approach ignores the financial capacity of middle- and high-income ratepayers and delays the benefits of clean and safe water for the entire service area.
- Rate structures that recognize the varying degrees of ability to pay among customers are increasingly common. For example, the City of Philadelphia has adopted a tiered rate structure that avoids unaffordable rates on low-income customers while preserving overall rate revenue to the water system.⁸ Using a tiered rate structure, a water system might be able to comply with a conventional compliance schedule while keeping rates affordable for low-income customers.
- The Guidance refers to “Customer Assistance Programs” (p. 30) and proposes to consider the impact on affordability where such programs exist, but does not suggest that such programs are an alternative to or prerequisite for an extended compliance schedule.

4) Failure to Consider Financing Measures to Address Affordability: The Guidance does not address the opportunity that states and water systems have to address concerns with respect to the affordability of a compliance-related project for low-income customers using a reduced or negative interest rate for compliance projects funded with Clean Water State Revolving Funds (SRFs). A decision by a state SRF to reduce the interest rate charged on a loan for a compliance project can substantially reduce annual payments and help avoid cost increases for all customers.

The annual payment on a \$1m loan at 4% over 15 years is \$7,361 (25% of project cost is interest), but decreases to \$5,982 if the rate is reduced to 1% (7% interest) and to \$5,555 if 1% (0% interest). Reducing the interest rate on a loan can reduce costs to a water system and reduce impacts on low-income customers. Allowing a low interest rate is a strategy that should be applied in lieu of extending compliance schedules wherever possible but is not addressed in the Guidance. Low interest loans are consistent with the Federal Reserve’s current interest actions.

⁸ <https://www.phila.gov/press-releases/mayor/philadelphia-launches-new-income-based-tiered-assistance-program/>

- The Clean Water Act (33 USC 1383(i)) gives states an option of addressing rate affordability in disadvantaged communities through forgiveness of loan principal (i.e., negative interest rates). Although such assistance is limited in each state, this strategy could be applied in lieu of extending compliance schedules but is not addressed in the Guidance.
- It is important to note that new metrics, such as consideration of impacts on the lowest quintile income (LCI), can highlight affordability problems. Using such new metrics in the context of compliance schedules, but not in the context of state decisions concerning financial assistance such as loan forgiveness or local rate structure decisions, can result in a premature and unwarranted decision to extend compliance schedules.

5) Inefficient Use of Water Infrastructure Financial Capability: The Guidance undermines the Nation’s ability to finance the large backlog of needed water system infrastructure improvements by diverting limited ratepayer dollars from direct system improvements to increased financing charges that are associated with longer compliance schedules. EPA has reported water infrastructure needs of \$427b for drinking water and \$271b for clean water.

- In the event that a water system were to be granted an extended compliance schedule under the Guidance (e.g., 30 years rather than 15 years) on the grounds of needing to reduce flat rate impact on low-income customers, the system would likely seek to reduce *annual* project costs by extending spending to future, additional years. For example, in the case of a \$1m loan, financing it over 30 years rather than 15 years reduces monthly payments from \$7,361 to \$4,733 and thus helps moderate rate increases.
- In general, longer construction periods for a given project increase costs compared to shorter construction periods, even after adjusting for inflation. The Associated General Contractors reported a 7.4% annual increase in material costs in 2018,⁹ while the annual increase in the consumer price index is about 1%.¹⁰ In other words, the cost of construction is increasing much faster than the costs of other goods and services. Extending project periods increases the cost of a project and slows the rate of response to infrastructure needs.
- In addition, a longer construction period and an extended payment schedule are likely to result in a longer financing term. With a fixed interest rate, a longer financing term results in a water system paying significantly more for a project in the form of higher interest charges than it would pay for a shorter financing term. In the case of a \$1m loan at 4%, the interest paid over 15 years is \$325,000 (25% of project cost) but rises to \$704,000 (41% of project costs) in the event of a 30-year term.
- By adopting a tiered rate structure to avoid affordability impacts on low-income customers, rather than an extended compliance period, project costs would be reduced, health and environmental benefits would be attained sooner, and the option to fund other water infrastructure needs with saved funds would be retained.

⁹ <https://www.agc.org/news/2018/10/10/construction-material-costs-increase-74-percentage-contractors-continue-be-squeezed>

¹⁰ <https://www.bls.gov/cpi/>

6) Failure to Evaluate Impact of Aggregation of Clean Water and Drinking Water Rate

Impacts: The proposed Guidance would revise current practice by calculating rate burden based on cost of compliance with all rates related to both the CWA and Safe Drinking Water Act (SDWA) while retaining existing affordability criteria. This is a significant change to current practice in determining affordability in the context of an enforcement action, which is to consider the burden imposed under just the statute being violated (e.g., affordability of a schedule for a violation of the CWA would consider the costs imposed under the CWA, including sewage discharges, stormwater discharges, combined sewer overflows, and sanitary sewer overflows) but not consider the rates charged to comply with other environmental laws (e.g., the SDWA) or other Federal statutes or utility charges (gas or electric) more generally.

- By considering the combined rates of water and sewer utilities, rather than just clean water or just drinking water rates, the number of customers with rates deemed to be an unaffordable burden justifying a compliance extension is likely to significantly increase.
- Many communities are served by a sewer utility and a separate water utility, and perhaps a separate stormwater utility, each with separate billing, financial management, and compliance positions. The Guidance does not cite a basis for aggregation of clean water and drinking water rates when conducting affordability assessments, or describe how this change would alter compliance schedules, set based on affordability concerns. The Guidance also does not explain why water rates are aggregated but rates for other utilities, such as electricity, are not considered.
- Many major drinking water systems are developing plans to comply with the lead service line replacement provisions of the proposed revision to the Lead and Copper Rule and are planning to increase efforts to remove some lead service lines. As noted above, the total costs of lead service line replacement are estimated to be as high as \$30 billion. Under the Guidance, these costs could drive rate impacts that result in very long compliance schedules for remedy of any other drinking water or clean water violations. The Guidance does not recognize the potential impact of lead line replacement costs on other water compliance schedules, and a major expansion of the basis for calculation of rate affordability should not proceed without a clear assessment of the impacts of the change on other water-related compliance.

7) Significant Change to Water Quality Standard Revision Process: The Guidance proposes to revise procedures that allow lowering of water quality standards adopted under the CWA, either temporarily through a water quality standard variance or permanently through a change in designated use. It is critical that this Guidance discuss the impact of lowering water quality on downstream source water, fisheries, and recreational waters. The Guidance does not mention these impacts despite the fact that it allows wastewater and stormwater treatment to be delayed potentially for decades, leading to downstream contamination from toxics, harmful algal blooms, and pathogens that can threaten the health of downstream communities and increase the costs of drinking water treatment to meet national standards.

- EPA regulations at 40 CFR 131.10 provide that designated uses of waters that have been attained are not to be lowered but that uses not attained may be lowered under specific criteria, including a “use attainability” process that involves public review and comment and EPA approval. Among other things, a lower use must be justified based on demonstration of “substantial and widespread economic and social impact.”
- EPA regulations at 40 CFR 131.12 provide that for some high-quality waters, water quality can be lowered based on a finding that lower quality is “ necessary to accommodate important economic or social development” and a process that includes public review and comment and EPA approval.
- EPA regulations at 40CFR 131.14 allow a state to adopt a water quality standard variance, which is a time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflects the highest attainable condition during the term of the variance. The variance is to be “only as long as necessary to achieve the highest attainable condition,” must be reviewed every five years, must meet the highest attainable use, and include public participation.

EPN Recommended Changes to Guidance:

In light of the above concerns, EPN recommends that EPA consider expanding the proposed guidance to include the following:

- EPA should consider options to address the affordability of water projects for low-income residents using tools other than compliance extensions, including development of adjusted rate structures, expanded use of financing measures to reduce water system compliance costs, and consideration of water quality standards variances already authorized in EPA regulations.
- EPA should give special consideration to integrating decisions concerning compliance schedules, financing, rate structures, and water quality standards to deliver compliance that is both prompt and affordable.

In addition to modifying the proposed guidance as noted above, if EPA identifies water systems where no combination of existing tools can address affordability concerns, the agency should identify and propose new financial assistance authorities to support prompt compliance with health and environmental standards rather than policies that extend health and environmental risks indefinitely for low-income populations.

Thank you for the opportunity to comment on the proposed Guidance.