AFFORDABILITY OF WATER SERVICES
DEVELOPING A NEW FRAMEWORK

WWEMA
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Effectively Communicating Change
at the National, State, and Local Level

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Who is NAPA?

- Established in 1967 to assist government leaders in building more effective, efficient, accountable, and transparent organizations.
- Chartered by Congress in 1984 to provide non-partisan expert advice.
- Unique feature is its 800+ Fellows—including former cabinet officers, Members of Congress, governors, mayors, and state legislators, as well as prominent scholars, business executives, and public administrators.
- The Academy helps government leaders at all levels address their critical management challenges through in-depth studies and analyses, advisory services and technical assistance, Congressional testimony, forums and conferences, and online stakeholder engagement.
- Under contracts with government agencies, some of which are directed by Congress, as well as grants from private foundations, the Academy provides insights on key public management issues, as well as advisory services to government agencies.
Review of Task

- The Senate Appropriations Committee, in a report on FY 2016 legislation, directed the Environmental Protection Agency (EPA) to contract with the National Academy of Public Administration (the Academy) — an independent, nonpartisan, nonprofit organization chartered by the U.S. Congress — “to conduct an independent study to create a definition and framework for community affordability.”
  - Report submitted to Congress October 2017
  - Panel of five Academy Fellows and Study Team of five

- Report includes:
  - Findings and recommendations focused on:
    - A revised **Community Affordability** Framework to *improve EPA’s ability to identify communities facing excessive financial burdens in meeting their CWA goals*;
    - The identification and evaluation of **Innovative Solutions** to *help communities address their Community Affordability issues while* providing clean water to citizens in the most cost effective manner possible;
    - The role of **integrated planning** in informing both community decision-making and regulatory actions to *achieve CWA and SDWA goals*;
    - The best ways to identify and assess the benefits and costs associated with these decisions; and
    - Performance standards that emphasize the outcomes vs. the process.
As a result of the year-long study, the Panel developed a number of observations regarding the challenges and opportunities for delivering clean and affordable water to the nation’s citizens. Some principal findings that informed the 21 recommendations in this report include:

- **Focus on Affordability**
  - User Affordability – *principally low income users*
  - Utility Financial Capability

- **Promote Innovative Solutions**
  - Lowering Cost
  - Creative Financial tools, Technology, Community Public Private Partnerships, *efficient & equitable pricing*

- **Integration and Integrated Planning**
  - More holistic approach – One Water
  - Economies of Scale
  - *Better communication/coordination to overcome bureaucratic and organizational “stovepipes”*
Areas of Focus and Recommendations

Focusing on Water Affordability Issues

Components of a Community Affordability Framework

Key Components

- User Affordability (Residential Indicator [RI])
- Utility Financial Capability (Financial Capability Indicator [FCI])

Key Elements

- Low-Income Water Affordability
  - Low-Income User Income
  - All Water Costs
- Percent of Low-Income Water Users
- Utility Financial Strength and External Constraints
  - Operational Efficiency
  - Debt Burden
  - Managerial Effectiveness
- Community Economic Conditions and Trends
  - Population
  - Relative Wealth
  - Economic Growth
  - Other Structural Issues
The Affordability Discussion

Recommendation #1
EPA should improve the metrics used for the RI and FCI components in the 1997 FCA Guidance if it wants to establish a common starting point for all permittees while still considering supplementary permittee data in assessing a permittee’s burden in meeting its CWA goals. Since there is no perfect way to measure affordability and financial capability, the metrics used should meet the following criteria:

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.

Recommendation #2
To improve the 1997 RI component, the elements defining the current component should be revised to:

1. Include all water costs, not just selected clean water costs, to include all drinking water and clean water costs – CSO control costs, stormwater costs, other sewer costs – as well as planned water infrastructure investments and any deferred costs of system operations and maintenance, in the burden assessment;
2. Focus on the income of low-income users most vulnerable to rate increases rather than MHI;
3. Identify the size of the vulnerable users relative to the utility’s total rate payer base; and
4. Avoid arbitrary normative thresholds to determine relative burdens.

Recommendation #3
To improve the 1997 FCI component, the current elements defining that component should be revised or refocused to:

1. Focus on the operational efficiency, debt burden, and managerial effectiveness of the utility supplying clean water services; and
2. Expand the socioeconomic components affecting the utility’s market conditions to include trends in population, relative wealth, economic growth, and other economic structural problems in the community served by the utility.
Integrated Planning

Components of an Integrated Planning Process

Scope
- Responsible Entities
- Compliance Obligations

Elements
- System Characteristics
- Challenges and Threats
- Stakeholder Input

Evaluates and Select Alternatives

Output
- Relative Priorities
- Proposed Implementation Schedule
- Financial Capability Assessment

Measure Success
- Metrics
- Monitoring
- Evaluation

Adaptive Management

Innovative Solutions
Infrastructure Planning
Criteria
Analysis
Integrated Planning

IP provides a tool to overcome several critical challenges impeding meeting CWA and SDWA goals for all Americans.

- Tension between competing imperatives
- Fragmented governance of the water industry and CWA/SDWA regulatory approaches

EPA, state & local regulators, and communities need to better understand how to use this tool to overcome these challenges.

**Recommendation #6**
EPA should develop additional guidance that articulates expectations for implementation and maps out the “how” for both the communities as well as the front-line regulators. This guidance could include a centralized repository of lessons learned and technical assistance that municipalities could access in order to inform their own IP implementation strategies.

**Recommendation #7**
EPA should establish guidelines for developing flexibilities that allow compliance with CWA and SDWA requirements within a timeframe that correlates with well-defined prioritization of community objectives, statutory and regulatory requirements, and integrated planning activities.
Recommendation #16
An evaluation of any state use of WIFIA loans to expand their SRF lending activities is needed to compare the advantages and disadvantages of this leveraging technique relative to other leveraging techniques (e.g., tax exempt bonds). The evaluation can also identify potential program or statutory impediments to increasing SRF lending operations by leveraging WIFIA resources and assessing WIFIA’s ability to meet its statutory goals by allocating some of its loan resources to increase SRF lending activity.

Recommendation #17
Those proposing financial reforms to address local community and utility water infrastructure investment needs should focus on the most critical issue – additional resources to lower costs and provide greater access to long-term financing to meet water infrastructure investment needs.
Recommendation #18
EPA should ensure that the Water Finance Clearinghouse and technical assistance activities provided through the Water Infrastructure and Resiliency Finance Center (Water Finance Center) include sharing information on the risks, costs, and advantages of any innovative financial instrument being proposed with states and localities before those instruments are used.

EPA’s Water Infrastructure and Resiliency Finance Center and the Environmental Finance Centers affiliated with universities in each of EPA’s 10 regions have the analytical expertise to develop and provide that information.

State statutory restrictions limit utilities’ ability to revise rate structures and offer Consumer Assistance Plans (CAPs) to help reduce impact of water rate increases on most vulnerable low-income users.

Recommendation #19
EPA should work with local and state governments to eliminate barriers restricting utilities’ ability to develop more efficient and equitable water rate structures, including specific CAPs for financially distressed low-income ratepayers. EPA’s Water Finance Center should continue to develop and disseminate information on CAPs to water industry stakeholders and other interested parties.
Conclusion

Complex Issue and Tremendous Efforts Being Made

- Affordability issues, fragmented organizational structures, bureaucratic “stovepipes”, competing/conflicting priorities and objectives, and massive investment costs continue to challenge achievement of CWA and SDWA goals.
- EPA has provided critical tools – Community Affordability Framework, Integrated Planning Framework – and some funding resources to help address a number of these challenges.
- The agency’s work to explore new and innovative approaches to achieving Water Quality Standards reflects forward-looking efforts.
- Panel recommendations will improve these tools, extend their use, promote further innovative approaches for achieving CWA & SDWA goals.
- These efforts will require additional resources to support implementation.

Looking ahead, some next steps EPA will need to consider include:

- Identify changes needed and processes required to better integrate Clean Water and Drinking Water functions within EPA to more completely achieve the advantages of effective community integrated planning.
- Develop and coordinate multiple strategic communications initiatives in order to strengthen the consistency of two-way messaging across regions and with the states and localities.
- Engage key stakeholders to develop detailed and acceptable metrics for measuring the critical elements in a new affordability framework.