

ENVIRONMENTAL FINANCIAL ADVISORY BOARD

February 26, 2016

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Dr. Andrew Sawyers, Director
Office of Wastewater Management
United States Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Dr. Sawyers:

The Environmental Financial Advisory Board (EFAB) is pleased to present you with recommendations regarding how the Water Infrastructure Resiliency and Finance Center (WIRFC) can best support small systems in developing financial capacity.

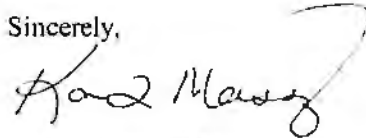
Under your leadership, EFAB was issued a charge from the U.S. EPA's Office of Water in May 2015 to determine what role WIRFC could play to address/support financial capacity development for small drinking water and wastewater systems. A work group was formed to evaluate the best way for WIRFC to collaborate with various entities providing technical and financial assistance in order to help small water and wastewater systems become more financially sustainable.

The EFAB believes that financial capacity is but one part of overall capacity development which also includes technical and managerial capacity. Without proper or adequate funding, technical and managerial challenges small systems face may or can be exacerbated. Therefore, EFAB believes that WIRFC should consider financial capacity as one of its main activities since it has the potential to be the most impactful in terms of improving public health.

The EFAB believes that WIRFC should understand the resources and tools that exist to help enhance system financial capacity and to build its work around these tools, fill in gaps in resources, and provide coordination rather than recreate resources that already exist. Detailed steps which WIRFC can take to assist small systems in developing financial capacity have been set forth in the enclosed document using a phased manner which can be altered depending on the resources available and the priorities set by WIRFC. Phase I is immediate term which includes maintaining a list of available financial capacity resources. Phase II would be within the next 2 to 4 years and includes WIFRC serving as a clearinghouse of resources and providing a peer to peer exchange in order to share information between systems. Finally, Phase III would be the next 3 to 10 years where WIFRC can focus on facilitating complicated projects/issues especially in terms of system restructuring.

In conclusion, we are pleased to provide you with the detailed results of our recommendations in a document entitled "Financial Capacity Development for Small Drinking/Wastewater Systems." We hope that you find our specific recommendations valuable and thank you for the opportunity to assist you with this charge.

Sincerely,



Karen Massey, Chair
Environmental Financial Advisory Board

Financial Capacity Development for Small Drinking/Wastewater Systems

Agency Charge:

The Environmental Financial Advisory (EFAB) received the following charge from EPA's Water Infrastructure Resiliency and Finance Center (WIRFC) at the May 2015 board meeting in Washington, D.C.

What role can the Center play to address and/or support financial capacity development for small drinking water and wastewater systems?

Many small systems face an array of challenges that severely limit their ability to become and remain financially sustainable. These challenges include developing a sustainable financial system through affordable rate structures, the ability to adequately analyze the financial implications of various infrastructure alternatives, and then obtaining funding to support the construction, operation, maintenance, and replacement of infrastructure of the alternative chosen. These challenges are also driven by limited technical capacity of staff working at these small systems. Assistance in these areas is provided by a number of entities including EPA, USDA, technical assistance providers (e.g. National Rural Water Association, Rural Community Assistance Partnership), and the Environmental Finance Centers, but these efforts are often not well coordinated.

The Center requests EFAB identify ways in which the Center can work with various entities to provide a coordinated array of technical and financial assistance to help small systems address the challenges described above. This strategy could include identifying the full array of funding sources available and assistance to successfully develop funding applications to meet their needs.

Discussion

Financial capacity is one part of capacity development that includes technical, managerial, and financial capacity. However, having proper or adequate funding is fundamental to many of the other challenges a water utility faces. Without adequate funding, a system cannot recruit or retain operators, perform necessary tests to ensure compliance, repair infrastructure, replace infrastructure, or handle emergencies as they arise. Without funding, it is nearly impossible to perform technical or managerial activities. Therefore, EFAB believes that WIRFC should consider financial capacity as one of its main activities. We believe that this particular issue has the potential to be the most impactful in terms of improving public health. Systems will require proper funding in order to address public health concerns.

There has been quite a bit of work done in the area of financial capacity with many tools already in existence and many organizations offering help in this area. This is not to say that there is not more work to be done in this area, quite the contrary; many small utilities struggle with trying to obtain and maintain financial capacity. Rather, it is EFAB's contention that it would be best for WIRFC to understand the resources and tools that exist for financial capacity

and to build its work off these tools and fill in gaps in resources rather than recreate resources that already exist. Therefore, one of the first activities completed by the EFAB was to inventory some of the existing tools and resources. This list is presented below along with links, where applicable. This list is not prioritized in any way.

Available Resources or Tools

- List of funding sources by state developed by the EFC Network
<http://efcnetwork.org/resources/funding-sources-by-state/>
- Small Community Water Infrastructure Exchange
<http://www.scwie.org/>
- Engineers Without Borders
<http://www.ewb-usa.org/>
- American Water Works Association Small Communities
<http://www.awwa.org/resources-tools/water-knowledge/small-systems.aspx>
- Community Engineering Corps
<http://www.communityengineeringcorps.org/>
- Water Environment Federation Small Communities
http://wef.org/publications/page_wet.aspx?id=4647&page=ca§ion=Small%20Communities
- Oklahoma Public Water Supply and Wastewater Planning Guides and Fiscal Sustainability Plan Edition
<http://www.owrb.ok.gov/guides/>
<http://www.owrb.ok.gov/guides/WastewaterPlanningGuideFSP.pdf>
- Assessing Managerial Capacity Guide (from EPA Workgroup)
<http://water.epa.gov/type/drink/pws/smallsystems/upload/epa816k12004.pdf>
- Pennsylvania Early Intervention/Early Distressed Community Program
<http://community.newpa.com/programs/early-intervention-program-eip/>
<http://pelcentral.org/what-we-do/local-government/early-intervention-program/>
- State Clearinghouse Programs
(WIRFC would need to determine how many states have these and where they can be accessed)
- Guidebook to Sustainable Management of Rural and Small Systems 2013 (EPA et al)
- Workshop in a Box: Sustainable Management of Rural and Small Systems 2013 (EPA et al)
- Making a Difference for Rural and Small Utilities 2015 (EPA/USDA)
- Rural Development's Sustainable Management tools
<http://www.rd.usda.gov/programs-services/services/sustainable-management-tools>
- AWWA Small Systems Rates manual:
<http://www.awwa.org/store/productdetail.aspx?productid=6742>
- National Association of Regulatory Utility Commissioners
<http://www.naruc.org/>

- Small Public Water Systems and Capacity Development
<http://water.epa.gov/type/drink/pws/smallsystems/index.cfm>
- Government Finance Officers Association
<http://www.gfoa.org/>
- Online resources and support for water and wastewater operators (Illinois)
<http://smallwatersupply.org/>
- State Water Finance Program Guides
- Steve Grossman Study on Financing Teams

Some of the Greatest Concerns/Challenges for Small Systems

There are many concerns and challenges that small systems face in trying to obtain and maintain financial capacity. The EFAB compiled a list of what we felt were the biggest challenges and concerns faced by small systems in this area.

- Adverse to taking on debt. Small systems may delay or avoid major system upgrades in order to avoid taking on debt. This practice may result in systems who wait too long to complete their infrastructure upgrades so that the project becomes an emergency and may cost several times more than a planned replacement. Also, many systems have become grant reliant, either delaying upgrades or waiting for systems to fail in order to qualify for emergency grant funding. Local and national funding agencies have become somewhat complicit by awarding funding based on emergencies that were due to lack of upkeep.
- Maximum debt capacity reached. In addition to being averse to taking on debt, some small systems have the problem of being at their maximum debt capacity. Systems in this situation have reached the limit of their ability to use debt to finance infrastructure projects and cannot use this mechanism for funding.
- Generally supports other aspects of municipal government. The water system revenues may be used to support other aspects of the government, such as other public works, rather than being a dedicated enterprise fund. This transfer may be done overtly or covertly. Sometimes monies are directly transferred while other times the water funds may be used to pay salaries of individuals who work in more than one area of government. This practice is prevalent in small communities and severely restricts the community's ability to finance needed infrastructure.
- No financial expertise. Small utilities often lack financial expertise within their leadership structure. They may have no one with experience in bookkeeping or financial matters. It may be too expensive for them to hire such personnel, so they may depend on volunteers or less qualified individuals. Often they don't know where to turn to gain or acquire this expertise.

- No technical expertise. Similar to the situation with financial capacity, small systems often have few personnel and the personnel they have may be tasked with many functions other than water or wastewater. These systems are highly unlikely to have an engineer on staff or other personnel highly trained in the engineering aspects of the utility. Often they do not know where to turn to gain or acquire this expertise.
- Lack of willingness to take pro-active action. Small systems often lack managerial competency and staffing consistency. They have part-time managers and finance staff which focus on the highest priority actions needed to keep the system running.
- Lack of a separate finance utility (enterprise fund). Enterprise funds can be established “for a utility, health care, recreational transportation facility.” The fund allows the community/system to better account for the total cost of the service they are providing and how that service is being funded. Furthermore an enterprise fund allows the surplus or retained earnings generated by the system to remain with the system.
- Need to raise rates. Small systems may understand that they need to raise rates, however, they may not have the financial capacity to hire a financial professional to conduct rate impact studies, trend analyses or develop additional data to determine what rates are appropriate to maintain and improve the system and develop a plan to obtain acceptance. A related issue to raising rates might be that the system’s constituents are aging on a fixed income and/or declining in numbers making raising rates difficult. Small communities also often lack the political will to raise rates.
- Help with Raising Rates. When small systems choose to raise rates, they may have limited experience regarding the best way to do this. In many cases, they would benefit from an outside source to assist them with the rate increase process and presenting this information as well as the need to raise the rates to the public.
- Ability to identify/define/educate/community what they should be doing. Since water/wastewater infrastructure is often unseen, it can be difficult for a system to educate their constituents regarding the need for infrastructure investments. Education/outreach is important when discussing potential rate increases or informing the public about changes to the system. EPA has the “Value of Water” campaign which may be very helpful in this effort.
- Some small systems are located in remote areas and rely solely on whichever engineering firm is willing to work with them. Many small systems are located in areas that are serviced by only a small number of engineering firms, or possibly only one, making it very difficult to use a qualifications based selection process. Furthermore, if the same engineer both scopes out the project and designs it, there can be a conflict of interest or a lack of a second opinion regarding the selected alternative.

- WIRFC should define what is meant by success in the area of building financial capacity, including how it could be measured and how to know whether success has been achieved.
- WIRFC should look at lessons learned over the last ten years at both the state and local level in the area of building financial capacity. This will provide guidance regarding where practice should move in the next ten years.

Phase III: Recommendations that can be implemented within the next 3 to 10 years.

- WIRFC should concentrate on hard or extremely complicated projects. EPA may be better situated to understand and navigate between states/systems especially when it comes to the possibility of restructuring. EPA may have a better handle on approaches that may be able to be used to address these issues. EPA could develop a series of case studies based on this work. It is anticipated that this work would be generated by the states and systems reaching out to EPA and asking for this assistance and is not intended to be the other way around (EPA generating this work on their own.)
- WIRFC may be able to be a clearinghouse for projects that are having trouble finding funding for a variety of reasons. Perhaps information sharing could be done by webinars, conference calls, and opportunities for sharing between states.
- One way to help systems understand how to define and measure success in the area of financial capacity is to have a mission statement and to understand, develop, and set up goals. WIRFC may be able to have a role in assisting systems in this effort. Goals may also tie to policies and procedures and WIRFC may also be able to promote the development of better policies and procedures. For example, a policy could be put in place that some action occurs, such as an automatic rate increase, when a certain financial ratio is reached.

EFAB is suggesting that approximately 25 to 33% of WIRFC's focus needs to be on financial capacity for small systems (we've defined as 10,000 population or fewer.) The extent of the ability to provide these services will be directly related to the number of staff and the relative importance WIRFC places on financial capacity. However, WIRFC may also be able to expand this emphasis if it coordinates efforts with the EFCs, subcontractors, or other assistance providers. WIRFC can use these recommendations to help determine what types of staff (number, experience, expertise) they should hire in the future.

- **No affordable alternative.** Costs associated with adhering to public health and water quality standards can be challenging for small systems. Often there are few infrastructure alternatives which allow them to meet regulatory requirements and these alternatives may not be affordable. In some cases, the "best" alternative is some form of restructuring. Restructuring could involve contractual operations, a system lease, a circuit rider or a sale or other form of consolidation. Given the unpopularity of such approaches, many individuals and organizations are reluctant to advocate or even acknowledge their existence or their efficacy. Clearly, however, each of these options can address the small system challenges cited above.
- **System size defeating economy of scales.** Often the cost to operate small systems per unit volume of production is greater than larger systems. Capital and material costs may also be more due to the small quantities purchased. Additionally, the fewer the customers (residential/commercial/industrial) the less the opportunity there is to spread out costs.

The EFAB Workgroup considered the possibility of EPA developing a tool similar to FED FUND to introduce systems to funding sources. We had several discussions regarding this possibility but in the end decided it was not the correct tool or was not worth the resources that would need to be expended. A tool of this type would require considerable work to maintain and update. However, over time, if WIRFC desired, a tool of this type could be developed.

Recommendations

What is the role of WIRFC?

The EFAB, in considering the nature of the recommendations to WIRFC, determined that a phased approach would be best. Some recommendations are items that WIRFC would be able to implement right away, while others would take more time, and possibly, additional staff. WIRFC can also look to outside resources, such as the Environmental Finance Centers (EFCs), who can help implement some of these recommendations. In addition, if WIRFC served in a role of coordinating different TA providers (e.g., National Rural Water Association, Rural Community Assistance Program, EFCs, and others) it would be able to further the reach of their services.

The recommendations will be split into three phases as shown below. The recommendations would involve providing services via acting as a repository of information, contracting out services, partnering with others, and direct involvement of WIRFC staff.

Phase I: Recommendations that can be implemented immediately

- WIRFC should maintain a list of resources and tools, both national and by state, for financial capacity. The list should be updated as new tools are developed and when changes have occurred. The list should be readily available to states and small systems. The list of resources should include a description of what the resource is, who could

benefit from it and how it can be used by a small system. EFAB recommends that WIRFC concentrate on resources related to the need to increase rates, the process of increasing rates, and communicating rates as an initial starting point.

- WIRFC should be a coordinator and/or a promoter of the “Value of Water” campaign and ensure that states and localities are aware of the availability of these resources.
- WIRFC should match the resources to the concerns/challenges to help systems connect resources to their needs. For example, if your challenge is “Need to Raise Rates,” tools and resources that assist with rate setting would be appropriate for this purpose. Some challenges may have multiple resources while some resources may fit multiple challenges. A simple chart or matrix may work well for this purpose or a list of resources could be developed with a description of the resource followed by the list of concerns/challenges that fit that resource. WIRFC should examine whether a tool, such as GI Wiz (Green Infrastructure Wizard) could be used to improve access to the resources.

Phase II: Recommendations that can be implemented within the next 2 to 4 years.

- WIRFC should consider how the resource information would be structured including recommendations on how a utility would use the resource. WIRFC could use quotes from utilities who have found the resources to be beneficial to help promote the use of the resource list.
- The resource list could include a section in which a utility could leave a comment indicating whether the resource was helpful or not and possibly why it was or was not helpful. This information could be used to help improve resources for the future.
- WIRFC should act as a clearinghouse for work that the state SRF’s or regulatory agencies are doing that are positively impacting financial capacity. For example, Montana has a requirement that systems have to raise their rates to a certain level in order to be eligible for funding. Providing these types of examples from state to state will help improve financial capacity. As part of this effort WIRFC could share coordination models that are used by states with other states. In addition, WIRFC could host a sharing forum for states and regions or sit in periodically on sharing forums coordinated by states or regions.
- WIRFC should facilitate a peer to peer exchange in which water utilities seeking assistance can be paired up with water utilities who would be able to help that utility with the issue they are facing. The peers do not need to be in the same state or even in the same region if hosted by WIRFC.