Equity and Affordability in Rural Communities and Tribal Nations

July 23, 2020 Virtual Session 2

Introduction

The 2020 Aspen-Nicholas Water Forum virtual sessions are exploring what constitutes good water governance through the lenses of water affordability and equity. While this topic was chosen prior to the COVID-19 pandemic, the inequities exacerbated by the global health crisis across racial, gender, and geographic lines have further revealed the deep, systemic fault lines in our society and the critical significance of these conversations. The first virtual session, convened on May 28th, focused on exploring the impact of COVID-19 on urban water utilities, particularly the challenges of long-term household affordability and the financial resilience of utilities. On July 27th, the second virtual session of the series convened leaders from diverse corners of the water sector – rural and tribal community organizers, government representatives and policy makers, innovators, regulators, and more to explore the unique water affordability and equity challenges in rural communities, colonias, and tribal nations.

Water equity and affordability are often associated with urban contexts, but they are challenges for communities far beyond America's cities. When thinking about water affordability and equity, rural communities and tribal nations tend to be examined through a monolithic lens rather than through multiple lenses that recognize local context and the very different challenges that they face. While some of the most dire instances of water service inequity can in fact be found in rural and tribal spaces, other rural communities have high capacity, resilient water systems. Water is essential no matter where you live, but it can be more expensive to deliver water to disparate communities and locations compared to the costs of concentrated populations of cities. This leads us to ask: What drivers contribute most to water equity and affordability gaps in rural and tribal communities? What guarantees should we make for ensuring water services to any community in the U.S., regardless of how remote it might be? Can people living in these communities assume that they will have both safe, and affordable water? Who bears responsibility for ensuring safe, and affordable water: the community or Tribal Nation itself, the county, the state, or the federal government? Who pays, or who bears responsibility when the system fails to provide safe or affordable water and how do we account for histories of injustice in those decisions?

In answering these questions, the conversation paid particular attention to those communities that have never obtained access to water or wastewater services, often because of systemic structures and exclusionary policies. The compounding impact of these social and environmental injustices are becoming more evident with the current public health crisis. For example, an estimated 30-40% of the Navajo Nation does not have access to drinking water within their homes. The lack of access to running water, a necessity during a pandemic to disinfect and clean surfaces, has contributed to the disproportionately high infection rates per capita in the Navajo nation compared to other states.

In the past decade there has been growing bi-partisan support for investment in water at the federal level, new partnerships forming and multiple scales of governance, as well as policy and technological advancements. Yet, the compounding problems and challenges, ranging from acute crises (such as

infrastructure failure, floods, and water contamination) to long-term sustained pressure (such as climate change, emerging contaminants, and aging infrastructure) are outpacing these advancements. Challenges were out-pacing progress and resources prior to the pandemic. How can solutions match, or better yet exceed, the pace of problems? How can we ensure that solutions include a social and environmental justice lens to equitably meet the needs of all people, sectors, and geographies?

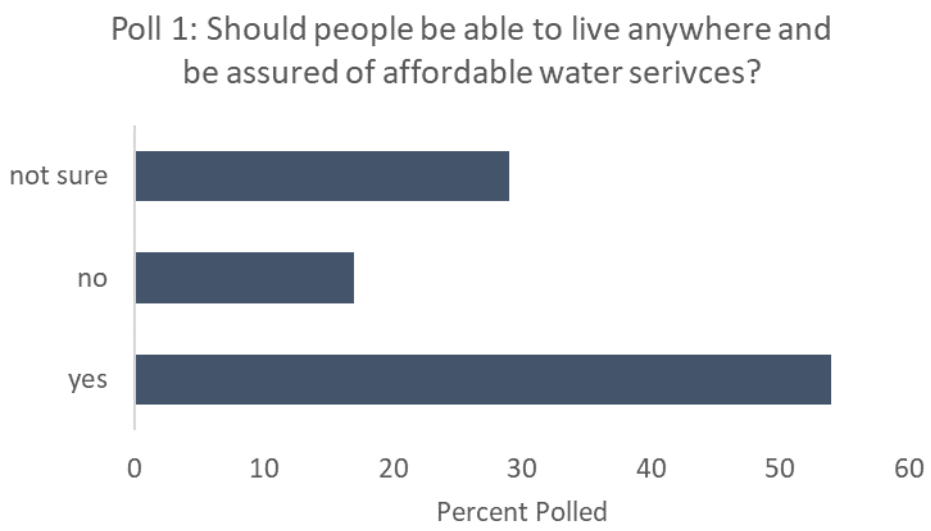
Water Services for Rural Communities and Tribal Nations

There are communities located across the U.S. that have historically been denied access to drinking water and/or wastewater services, because of intersecting forces of structural racism, poverty, and inequitable access to revenue through grant and loan programs. A single community may experience all three barriers. Historically, policies designed to provide funding and support to water and wastewater utilities did not have inclusive language for rural communities, or the designed solutions were unaffordable to those communities (see box: Wastewater in Lowndes County, AL).

Wastewater in Lowndes County, AL

Many African American communities in Lowndes County, AL do not have access to centralized wastewater services and must instead rely on individual septic systems. The soil and high water tables in many parts of the county make it impossible, or expensive, to use septic systems. These septic systems can cost around $28,000, a figure that exceeds the median household income in the county. In conjunction with the often poor conditions of individual homes where air conditioning bills, for example, can approach $300 for a mobile home in a hot summer, individual septic systems are not a financially viable solution. Widespread poverty in a community has big implications for access to water and sanitation. Even those poor communities with a centralized wastewater system may struggle with operating and maintaining their infrastructure. The pandemic has further brought to light both these inequities and the crucial importance of wastewater services for good public health, as traces of virus have been found in wastewater systems and failing wastewater is resulting in raw sewage backing into homes in communities without the resources to address these problems.

While the federal government has helped to pay for and subsidize capital infrastructure in many communities, long-term operation and maintenance often relies on fees paid by customers. The lack of economy of scale in small communities creates challenges: utilities serving large populations can afford to operate and maintain their systems at affordable rates to their customers (e.g. 100 people paying $20 each to raise $2,000) while those serving smaller populations bases often struggle to cover their same costs (e.g. 20 people paying $100 each to raise $2,000). The local nature of water and the financial systems structured around paying for water services have resulted in significant financial disparities between systems. Participants were asked whether people should be able to live anywhere and be assured access to affordable water services (see poll 1). A little over half of participants felt that Americans should be able to live anywhere and have access to affordable water services. Nearly 30% were not sure and the remaining 17% felt that the cost of water services may not be affordable in all areas.



Poll 1: Participants were polled during the meeting on whether water and sanitation should be affordable regardless of location.

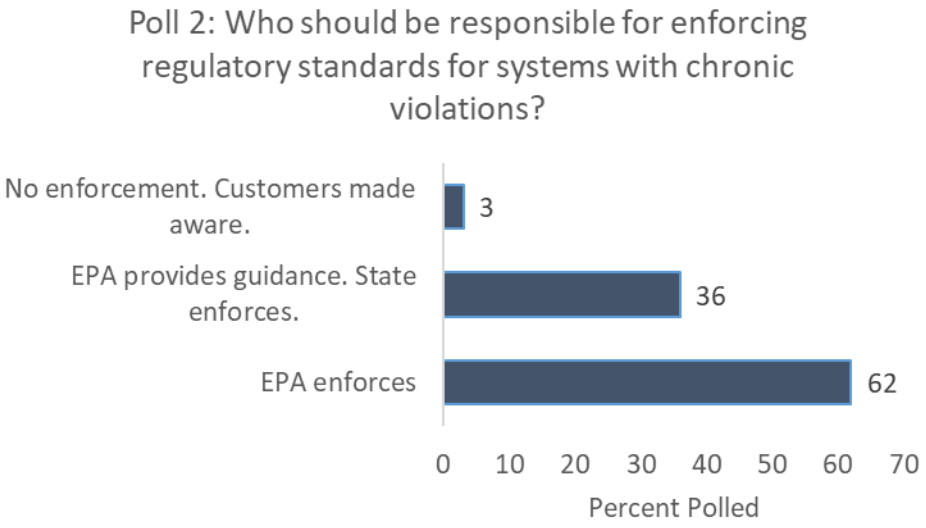
Much of America is rural land used primarily for agricultural production. The communities living in these areas have experienced increased stress from climate change impacts on water resources. The long-term and severe droughts in Colorado and California highlight the significant impact of these climate impacts on crops, junior water right holders, and rural communities whose wells went dry (and/or were contaminated) as groundwater levels dropped. In the Mississippi and Missouri River basins, extreme flooding and drought have strained the massive levee and dam systems built over a half century ago. The intersection of climate change, water shortages, and water contamination have resulted in numerous conflicts and high-profile lawsuits between states sharing river basins and aquifers. There is growing recognition and bipartisan support for expanding the federal role in this arena to more effectively address water resource issues and improve our nation's water security through infrastructure investments, technology development, conservation management, inter-agency collaborations, and policy changes This support has grown as the pandemic has further revealed the implications of limited to no water access and proper sanitation for communities, especially tribal and communities of color. Given the magnitude and diversity of challenges facing tribal and rural communities in their ability to access water, what are the roles and responsibilities at the federal, state, and local level?

Roles and Responsibilities

Federal and State governments have continuously negotiated their roles and responsibilities in overseeing water resources. While States took early responsibility for water rights, many did not take the lead on ensuring water quality. The public health and environmental consequences and disparities of poor water quality led to federal oversight with the passing of the Clean Water Act (1972) and Safe Drinking Water Act (1974). These new regulations required water and wastewater treatment plant to adopt new technologies and the federal government provided construction grants in the 1970s and 1980s to build or upgrade that infrastructure. In the 1980s and 1990s, the federal government shifted to loan programs administered by States. Since the 1990s, the amount of federal funding has declined and

state governments have not been able to fill the funding gap. Local governments have had to shoulder an increasing financial burden to pay for not only operations and maintenance but also to replace and build new infrastructure. Viewpoints on the role of federal government vary considerably with regards to their role in supporting local water resources. Over 60% of the participants believed that federal government should take a leading role to enforce chronic violations of regulatory standards (**see poll 2**). Very few believed that role should belong to local governments.

In the federal government, the US Department of Agriculture's (USDA) Rural Utilities Service Water and Environmental Programs (WEP) is the primary federal program exclusively focused on meeting the financial and technical needs of rural communities (10,000 people or less) to develop their water and wastewater services. These services ensure the long-term safety, health, and economic vitality of the communities that produce much of the food and energy in the United States. The program dedicates at least 2% of its funding to tribal communities. WEP plays the traditional federal role of providing financial support for one-time capital investments and works creatively with rural communities to provide flexibility in borrowing now and deferring payments during the pandemic.



Poll 2: The full text for this poll. **EPA enforces.** EPA should be able to trigger and enforce a mandatory protocol that might consider lawsuits, fines, emergency funding/technical assistance, or mandatory regionalization assessments. **EPA provides guidance. State enforces.** EA should provide guidance, but States should create and enforce their own protocols to handle these situations. **No enforcement. Customers made aware.** EPA/State should have limited enforcement capacity, as long as customers are aware of the problem and choose to remain in that community.

While the federal government has been the predominant provider of infrastructure funding for water and wastewater services, they often rely on States to administer funds and work with local communities to enforce regulations. The USDA recognizes the value of community partnerships. They have 47 state directors that oversee hundreds of field offices located within rural communities. These long-term relationships are essential to ensure local, state, and federal governments are developing solutions that will meet community needs. Building and maintaining those relationships is hard, but essential work to ensure tailored solutions have long-term sustainability and benefits.

Solutions

The group laid out a legacy of seemingly insurmountable problems forming faster than solutions. Yet, they also outlined several trends that offer glimmers of hope that we are moving towards greater equitable water access in rural communities and tribal nations. First, the variety and magnitude of crises across the country has made Congress more attuned to the multi-faceted importance of and challenges around water resources in diverse communities. Many are facing water resource challenges within their own communities and there has been more conversation and effort to expand the federal role in this arena and increase partnerships with state, local, and tribal communities. An example of this are recent water and sanitation access discussions in Congress, during which representatives have identified similar challenges within and across their communities. Some presidential candidates have even talked about wastewater, consequently broadening awareness and bringing knowledge of these challenges to the public's attention. Naming the challenges is an important step forward that was missing 20 years ago.

Second, as science and technology have advanced, there have been growing collaborative efforts to create new solutions and processes with multiple benefits for rural and tribal communities. For example, broadband companies may partner with utilities or road construction to put in, or replace, infrastructure in conjunction with their work. This might look like a broadband company laying their cable fiber underground alongside a new water pipe being laid for a development, thereby reducing infrastructure costs. Amidst the pandemic, collaboration among these essential services is especially important as we need water to live and broadband to attract economic businesses and educate our youth. Similarly, there are efforts underway to create greater flexibility to allow new science and technology to meet regulatory standards more cost effectively. Solutions can be more cost effective and affordable when they are tailored to the needs of a community. However, a challenge here is that it takes far too much time and effort to create flexibility in policy and/or obtain funding to support a collaborative effort and novel approach.

Third, there is growing bi-partisan recognition and support for the federal government to invest more money into water resources. While there seems to be significant financial resources available to meet the needs of rural and tribal communities, there are also significant barriers to accessing those funds. Resources can take months or years to reach a community in crisis. There needs to be a fundamental restructuring of these processes to move from legacy procedural approaches to a more agile outcomes-based future. Currently, even motivated federal agencies with strong support can take months to coordinate funding sources and resources and collaborate on a problem. Often state and local officials do not have the luxury to wait for these solutions. While coordination is critical to good governance, it is often the least utilized. The federal government has been making greater effort towards sustained interagency collaboration to streamline regulations and funding procedures.

Fourth, preliminary steps have been taken towards the restructuring and development of more inclusive, non-discriminatory policies and the inclusion of those who have historically been left out of water conversations. New policies must address the legacy impact of communities who have historically been excluded from receiving funds and support. For example, many Native Tribes do not have access to water supplies because of a lack of federal support, a federal law that prohibits tax collection (while state and local governments can), their location in areas without water (making it expensive to access), and contentious relationships with states over water rights, which often taken years to settle. This has resulted in huge gaps in water access and compounding other problems for these communities. While

the federal government has increased its capital investments for infrastructure, for example by including the construction of drinking water systems as part of Indian water rights settlements, they do not provide resources to fund ongoing operation and maintenance costs. Yet, they also do not allow Tribes to raise sufficient revenues from their citizens to operate and maintain these systems. The silver-lining is that the federal government does have ongoing legal obligations to the tribes: as claims are settled, some Tribes have succeeded in bringing economic development to their communities through water resources. Their newfound power has given them a voice at the table. For example, the Gila River Indian Community in Arizona had significant water rights and was included in the conversations around the Colorado River Basin Drought Response. These increasingly recognized rights not only get Tribes to the table, they place them at the head of the table in negotiations. The impact of the recent Supreme Court Decision regarding Oklahoma and Native American lands remains unclear at this point but will inevitably further change the role of tribes.

Fifth, there has been increasing momentum driving leaders to examine these affordability and equity challenges through an environmental justice lens. This is critical to avoid perpetuating solutions that continue to exclude communities from funding and technology solutions that might be best suited to address their particular challenges. Part of the solution is to ensure residents, members of a community, have a voice at the table to help **define** and **solve** the problem. When federal, state, and even local representatives bring a "solution" for a problem, sometimes the wrong problem, it often does not address the actual needs of the community or is not sustainable. Ensuring that the people living with the problem day-to-day are included and find value in the solution will ensure the problem is well defined and the solution is affordable and can be sustained long-term. And, unfortunately, in many states, federal leadership is required to ensure local and state officials allow these voices to the table in meaningful ways. Most changes related to racial justice in the South have only come through federal leadership.

COVID-19 and Rural Communities

The COVID-19 pandemic has created as an acute crisis for water utilities but will likely result in an even longer-term perpetuation of challenges stemming from declining budgets and revenues. The loss of financial reserves has historically resulted in deferring infrastructure payments. Most COVID-19 packages are only providing money for infrastructure projects and do not replace revenue losses nor restore utilities ability to operate and maintain the systems now. The community needs to help policymakers understand the importance of utilities receiving revenue now so that they can take care of their systems properly and continue to ensure the delivery of safe, affordable water and sanitation services. The pandemic may require the federal government to allocate more significant operational and maintenance support through this economic crisis. In rural America, cooperatives may give voice to these concerns and advocate on behalf of their communities and members. A voice also needs to be given to those communities that have been left behind, have no infrastructure or revenue now, and are experiencing incredible hardship from lack of access to water and sanitation. The hardship is amplified by the public health impacts of no water and sanitation during the COVID-19 pandemic. New policies and programs will be more successful if we understand and dismantle the systems in place that keep these communities from accessing water and wastewater services. While there is a need to respond quickly in the current crisis, a greater restructuring is needed to address racial disparity and environmental justice issues for the long-term.

Appendix: Additional Materials

Poll: How many times would you say is acceptable for a water system to violate federal or state standards before action is taken by the state or federal government?

A) 1 – 30%

B) 2 (within the same year) - 53%

C) 5 or more (overall) - 16%

D) 10 or more (overall) - 0%