

# A Water Utility Manager's Guide to Community Stewardship



**American Water Works  
Association**

*Dedicated to the World's Most Important Resource®*

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# A Water Utility Manager's Guide to Community Stewardship

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# Executive Summary

**W**ater utilities play an important role in the community by providing an essential service. Today's utilities are recognizing they can build on current practice to adopt a broader community stewardship role. **Community stewardship** is the practice of leveraging the utility's assets and operations to benefit the larger community, lessen negative impacts from utility activities, and provide service equitably across the service area, particularly for traditionally underserved neighborhoods. Many utilities already integrate community stewardship throughout some of their functional areas as an integral part of their business models.

Adopting a community stewardship role also means supporting the *whole* community, particularly neighborhoods that are disadvantaged, underserved or have experienced disproportionate environmental impacts (referred to as environmental justice communities). Utilities may not have created the adverse conditions and past inequitable experiences of these neighborhoods, but rather have inherited this legacy from past land use and zoning practices and discrimination. However, utilities have an opportunity to design their services so that past injustices are not replicated and services and programs are distributed equitably.

Across the country, utilities are looking for creative ways to embody the community stewardship role by helping everyone to have access to clean water, ensuring water service is affordable, investing in local businesses and providing community benefits. This guide highlights utility innovators and provides utility managers with strategies and tools to support their local communities, effectively engage underserved communities and apply a social equity lens to water service delivery. Strategies are outlined as a menu of options around the following utility functional areas:

- **Capital Planning**—how to eliminate disparities in access to service and service quality.
- **Project Design**—how to reduce impacts of the project design on adjacent communities and integrate positive co-benefits into the design.
- **Construction & Preventative Maintenance**—how to reduce construction impacts on and provide co-benefits to adjacent communities.
- **Contracting & Procurement**—how to increase contracting and procurement services with local, small, minority- and woman-owned businesses.
- **Finance**—how to make services affordable to all residents served.
- **Customer Service & Communications**—how to increase access to information and assistance.
- **Environmental Stewardship**—how to increase opportunities for environmental stewardship and access to utility open space areas.
- **Human Resources**—how to promote a welcoming culture and increase diversity, equity and inclusion in hiring, promotion and tenure.

## Benefits of a community stewardship role

Adopting a community stewardship role can result in many benefits to the utility and broader community including:

- Increased local business development and economic growth
- Increased neighborhood stability, prosperity and resiliency
- A stronger sense of community
- Improved public and community relations
- A stronger foundation of goodwill during times of crisis
- Stronger local and regional partnerships
- Fewer project delays due to conflict and litigation
- Customer satisfaction, support and appreciation
- Cost savings from reduced water shut-offs and collections
- Additional funding sources available due to partnerships and multi-use projects

## Principles to Integrate Community Benefits and Social Equity into Core Utility Business

- Ensure inclusive and equitable service to the full community.
- Reduce and mitigate utility impacts to the community, especially disproportionate impacts to disadvantaged communities
- Integrate community benefits into investments throughout the utility, such as hiring, contracting and construction.
- Engage the community to integrate meaningful input into decision-making about plans, projects and programs.
- Partner with other utilities, agencies, community organizations, civic groups and foundations to leverage utility investments to benefit the *whole* community.

Case studies throughout the guide highlight a range of innovative social equity programs including:

- Infrastructure service line extension
- Lead service line replacement
- Community stewardship partnerships
- Customer affordability programs
- Customer assistance programs
- Disadvantaged business contracting
- Community benefits programs

Depending on each utility's goals and local community needs, utility managers can choose from a menu of strategies and methods that are most relevant to the local context and provide the most benefit to disadvantaged communities served by the utility.

The guide is organized into the following chapters:

**Chapter 1—Introduction** provides an historical context, overview of community stewardship, along with principles and definitions.

**Chapter 2—Putting it into Action** provides a menu of strategies, examples and resources organized by utility functional areas.

**Chapter 3—Effective Community Engagement** provides guidance for how to engage the community effectively and meaningfully.

**Chapter 4—Case Studies** provides a set of case studies that offer examples and strategies for how other utilities have integrated community benefits and social equity into their programs.

**Chapter 5—Resources and Tools** provides references to tools and resources for further consideration.

# 1. Introduction

**W**ater utilities play an important role in the community by providing an essential service. The water sector is recognizing that today's utilities can leverage this existing role by adopting a broader community stewardship role as an integral part of their water service mission. **Community stewardship** simply means leveraging the utility's assets and operations to benefit the larger community, lessen utility impacts and provide service equitably across the service area, particularly for traditionally underserved neighborhoods. Examples of community stewardship include integrating service affordability, workforce development and local hiring considerations into utility operations to create economic opportunity for both individual households and businesses more broadly.

Many utilities may already integrate community stewardship throughout some of their functional areas as integral to their business model. The Effective Utility Management (EUM)<sup>1</sup> concept developed through a collaboration of the major national water organizations outlines ten attributes to effective utility management. Many of the EUM attributes integrate community stewardship principles as an integral component of effective utility management. In particular, the EUM framework includes the community stewardship role under community sustainability which promotes the following attributes:

- Actively leads in promoting and organizing improvements to community and watershed health within utility and with external community partners.
- Actively leads in promoting welfare within the community for disadvantaged households.
- Uses operations to enhance natural environment.
- Efficiently uses water and energy resources, promotes economic vitality, and engenders overall community improvement.
- Maintains and enhances ecological and community sustainability including pollution prevention, watershed and source water protection.

*AWWA's Policy on Public Involvement and Customer Communication notes that "Water providers have a key role in support of the public and the communities they serve. They manage a crucial natural resource that is essential to people's health, community economies and the fabric of social stability. Water quality and reliability are not solely technical – they are also critical health, lifestyle, economic, social and political issues."*

## 10 Attributes of Effective Utility Management

1. Product Quality
2. Customer Satisfaction
3. Employee and Leadership Development
4. Operational Optimization
5. Financial Viability
6. Infrastructure Strategy and Performance
7. Enterprise Resiliency
8. Community Sustainability
9. Water Resource Sustainability
10. Stakeholder Understanding and Support

<sup>1</sup> [Effective Utility Management A Primer for Water and Wastewater Utilities, January 2017.](#)

# Supporting the whole community

**A**dopting a community stewardship role means supporting the whole community, particularly neighborhoods that are disadvantaged, underserved or have experienced disproportionate environmental impacts (referred to as environmental justice communities). Early in the 20<sup>th</sup> century many cities and counties began to incorporate discrimination (ethnicity, race, religion) into their local land-use and zoning policies and practices. One of the hallmarks of this practice was to designate specific areas as the *only* places where certain people were allowed to live. This practice became known as *residential segregation*. Many of these same communities were also designated as mixed-use zoning. This meant that residential, commercial and industrial land-use and development could be sited in these areas while strictly enforced residential development only zoning was enacted in the same cities or counties where some whites lived. This practice was known as *expulsive zoning*. This allowed locally unwanted land-uses (LULU's) such as sanitary and hazardous waste landfills, sewage treatment plants, highways, incinerators, pipelines and industrial plants, to be sited and built in many instances adjacent to where diverse and lower-income populations resided, went to school, recreated and generally lived their lives.<sup>2</sup>

Utilities did not create these conditions or establish the negative juxtapositions of these neighborhoods, but rather have inherited this legacy from past land-use practices and discrimination. Utilities have an opportunity to design their services and new infrastructure improvements so that past injustices are not replicated, and that services and programs are distributed equitably across the service area. Important terms when considering how to support the whole community include:

**Disadvantaged communities** are communities who do not have the same access to services as others in the service area due to lower incomes, less education, language and cultural barriers or racial discrimination. These communities may need different consideration to level the playing field.

**Underserved communities** are communities who have inadequate infrastructure and lack services that exist in the rest of the community, such as utilities, sidewalks, lighting, waste collection, schools, libraries and grocery stores.

**Environmental justice** is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies<sup>3</sup>, and refers to “decisions [that] support sustainable communities where people can interact with confidence that their environment is safe, nurturing, and productive...”<sup>4</sup>

**Environmental justice community** refers to communities that bear a disproportionate burden of adverse environmental and health impacts (environmental injustices) relative to the rest of the community, and who are often composed of people of color, tribal, low-income, immigrant, refugee and/or non-English-speaking. This may include impacts due to highways, rails, ports and industrial uses that reduce health and impact quality of life.

**Social equity** is the concept that policy, programs and practices are applied with fairness and justice.<sup>5</sup> Equitable service means applying a social equity lens to the utility's services and programs to ensure that all customer needs are met. *Equity (and equitable) is different than equality. Equality provides the same opportunities to everyone. Equity is focused on providing opportunity based on need.*

**Service Equity** means providing inclusive and equitable service to all customers, so that all customers have equitable opportunities, access and results. Some individuals or communities may need different levels of support to gain equitable service.

<sup>2</sup> For further discussion, see “Planning with Diverse Communities,” American Planning Association Planning Advisory Service Report 593 by Ivis Garcia, AICP, Andrea Garfinkel-Castro, Deirdre Pfeiffer, AICP.

<sup>3</sup> U.S. EPA: <https://www.epa.gov/environmentaljustice/learn-about-environmental-justice>.

<sup>4</sup> Bunyan Bryant, Professor Emeritus, former Director of the Environmental Advocacy Program at University of Michigan School for Environment and Sustainability.

<sup>5</sup> Definition adapted from D5 Coalition.

# Principles of community stewardship

The following five principles provide a framework for implementing community stewardship throughout utility operations.

- 1. Ensure inclusive and equitable service to the whole community.** Strive to provide the same product quality and standard of service throughout the service area regardless of variations in geography, demographics and ability to pay. Adopting a **community stewardship lens** to utility work can identify inequities that are built into the social and physical fabric of a community. In some cases, the service area may include disadvantaged or underserved populations that experience environmental justice impacts.
- 2. Reduce and mitigate utility impacts to the community, especially disproportionate impacts to disadvantaged, underserved or environmental justice communities.** Consider how to reduce impacts to residents and businesses in utility construction and operation. Impacts may include noise, dust, air pollution, odors, and traffic and pedestrian disruption.
- 3. Integrate community benefits into investments throughout the utility functions, such as hiring, contracting project design and construction.** **Community benefits** are simply the positive effects on a community that result from the construction and operation of utility water services. Community benefits can include workforce development, jobs, contracting opportunities, amenities such as art, trails and open space, and environmental education.
- 4. Engage the community to integrate local needs and meaningful input into plans, projects and programs.** Reach out to the impacted community early and often during capital planning, project design, construction and program development. Consider how to effectively engage disadvantaged and underserved communities. Community engagement goes beyond outreach (notifying the community through one-way communication) to providing opportunities for the community to discuss options and influence the process and decision-making.
- 5. Partner with other utilities, agencies, community organizations and philanthropies to leverage utility investments to benefit the community.** The utility can leverage its role as an institutional anchor to build local partnerships and programs that benefit the community beyond the utility's water service delivery role. In addition, the water utility can coordinate with other utilities (e.g., regional power utilities) to increase both project efficiencies and community benefits. Coordinating with agencies on local and regional plans and initiatives can identify collaboration opportunities resulting in greater community benefits than would be realized by acting alone.

# Benefits of a community stewardship role

## Principles to Integrate Community Benefits and Social Equity into Core Utility Business

- Ensure inclusive and equitable service to the full community.
- Reduce and mitigate utility impacts to the community, especially disproportionate impacts to disadvantaged communities
- Integrate community benefits into investments throughout the utility, such as hiring, contracting and construction.
- Engage the community to integrate meaningful input into decision-making about plans, projects and programs.
- Partner with other utilities, agencies, community organizations, civic groups and foundations to leverage utility investments to benefit the *whole* community.

Adopting a community stewardship role can result in many benefits to the utility and broader community including:

- A stronger sense of community
- Greater customer satisfaction
- Increased local business development and economic growth
- Increased neighborhood stability, prosperity and resiliency
- Improved public and community relations
- A stronger foundation for action in times of crisis
- Cost savings from reduced water shut-offs and project delays
- Stronger local and regional partnerships
- Additional funding sources available due to partnerships and multi-use projects

Across the country, utilities are looking for creative ways to embody the community stewardship role by helping everyone to have access to clean water, ensuring water service is affordable, investing in local businesses and providing community benefits. This guide highlights these utility innovators and provides utility managers with strategies and tools to support their local communities, effectively engage underserved communities and apply a social equity lens to water and wastewater service delivery.

Many of these strategies can be adopted to address the specific challenges in other communities regardless of utility size or region.

This first chapter provides an introduction, principles and definitions. The remaining guide is organized into the following chapters:

**Chapter 2—Putting it into Action** provides a menu of strategies, examples and resources organized by utility functional areas.

**Chapter 3—Effective Community Engagement** provides guidance for effective community engagement.

**Chapter 4—Case Studies** provides a set of case studies that offer examples and strategies for how other utilities have integrated community benefits and social equity into their programs.

**Chapter 5—Resources and Tools** provides references to tools and resources for further consideration.

## 2. Putting it into Action

Community stewardship does not have to be developed as a separate program but is best when integrated directly into the existing standard operating procedures. This chapter provides a set of strategies for increasing community stewardship within existing utility activities, as shown in the table below. The chapter is divided into sections for each functional area that include strategies, resources and implementation examples to provide greater value to the community and address inequities within its service area. Depending on each utility’s goals and local community needs, utility managers can select the functional area within their utilities most ripe for adopting a community stewardship role and choose from a menu of strategies and methods most relevant and beneficial to local underserved communities.

### *A Menu for Integrating Community Stewardship into System Planning, Management and Operations*

Utility Functions	Community Stewardship Considerations	Opportunities
<b>A. Capital Planning</b>	Evaluate how to eliminate disparities in access to service and service quality.	<ul style="list-style-type: none"> <li>• Infrastructure access</li> <li>• Water quality</li> <li>• Disaster preparedness</li> </ul>
<b>B. Project Design</b>	Consider how to reduce impacts of the project design on adjacent communities. Consider what positive co-benefits to integrate into the design.	<ul style="list-style-type: none"> <li>• Community benefits</li> <li>• Impact mitigation</li> <li>• Small business opportunities</li> </ul>
<b>C. Construction &amp; Preventative Maintenance</b>	Consider how to reduce construction impacts on adjacent communities. Consider what positive co-benefits to integrate into the construction process.	<ul style="list-style-type: none"> <li>• Impact mitigation</li> <li>• Small business opportunities</li> </ul>
<b>D. Finance</b>	Consider how to make services affordable to all residents.	<ul style="list-style-type: none"> <li>• Customer assistance programs</li> <li>• Implement water use efficiency programs</li> </ul>
<b>E. Contracting &amp; Procurement</b>	Consider how to increase contracting and procurement services with local, small, minority- and woman-owned businesses.	<ul style="list-style-type: none"> <li>• Workforce development</li> <li>• Small business opportunities</li> <li>• Social impact bidding</li> </ul>
<b>F. Customer Service &amp; Communications</b>	Consider how to increase access to information and assistance.	<ul style="list-style-type: none"> <li>• Culturally relevant and accessible communications</li> <li>• Community engagement on utility services and conservation</li> <li>• Community liaisons</li> </ul>
<b>G. Environmental Stewardship</b>	Consider how to increase opportunities for environmental stewardship and access to utility open space areas.	<ul style="list-style-type: none"> <li>• Community benefits</li> <li>• Community education</li> </ul>
<b>H. Human Resources</b>	Consider how the utility can promote a welcoming culture and increase diversity, equity and inclusion in hiring, promotion and tenure.	<ul style="list-style-type: none"> <li>• Inclusive organizational culture</li> <li>• Organizational diversity, equity and inclusion</li> <li>• Workforce development</li> </ul>

# A. Capital Planning

## Introduction

### Potential Partners

- Regional Agencies
- Local planning agency(ies)
- Local social services agency(ies)
- Neighborhood associations
- Local churches
- Neighborhood-based advocacy groups

Capital planning is an ideal opportunity to consider alignment of utility investments with broader community needs and goals. Capital planning is a complex process influenced by many factors, including the system condition, future growth areas, funding, regulatory obligations, customer goals and the political and historical context. Capital planning for water service can be coordinated with, even leverage, other planned community investments (e.g., changes in streetscapes, community green space, etc.).

To identify synergies with other local development goals utilities can reach out to local planning and development agencies as well as community organizations to understand current plans, programs and initiatives.

The goal of capital planning is to ensure reliable, high quality water service. By ensuring the community is actively involved in developing the capital plan, utilities can better understand customers' current service levels and expectations, as well as better anticipate and minimize adverse impacts on particular groups or neighborhoods. This section provides a checklist to identify focus areas for a utility, a set of strategies to consider, case study examples and resources.

## Triple bottom line in asset management

Many utilities are adopting an asset management approach using a triple bottom line evaluation when considering which projects to fund. Triple bottom line accounting expands the evaluation of costs and benefits beyond the utility to include environmental and social factors. Social factors can include both qualitative and quantifiable benefits.

### TRIPLE BOTTOM LINE

*Utilities are using triple bottom line (economic, environmental, and social factors) to expand traditional cost-benefit evaluations in project planning*

## Assessment Checklist

Does the capital planning process:

- Actively engage the community and local partner agencies in the development of the capital plan?
- Identify community goals beyond water service and is consideration given to how the utility's future work could support those goals?
- Identify and address areas that receive a lower level of service, poor water quality or suffer from inadequate infrastructure due to historic circumstances?
- Evaluate if disadvantaged or environmental justice communities will be adversely impacted by planned activities, and identify options to minimize negative impacts?
- Proactively consider how to increase benefits, especially to underserved communities?
- Engage potential partners and include evaluation of opportunities to meet the needs of underserved areas beyond the utility's current service area?<sup>6</sup>

<sup>6</sup> For more discussion, see Naman and Gibson, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4566538/>

# Strategies

## 1. Strive to provide equitable product quality and level of service

Level of service refers to providing customers the service they desire from the utility and includes the product quality and reliability. Product quality is evaluated based on both regulatory requirements and customer needs. Typical customer needs for safe drinking water include water that meets regulatory water quality objectives as well as taste, color/clarity, and odor, pressure and reliability expectations.

A number of factors could lead to different levels of service within a utility's service area. Examples with respect to drinking water include differences in the source of water supply, water age and the condition of distribution piping and storage facilities. For wastewater systems, areas that experience sewer backups or overflows would be an example. A utility can:

- Identify differences in the quality or reliability of the water service using existing data or by collecting additional information to characterize drinking water taste, color, odor, pressure and reliability; sewer service challenges (e.g. number and severity of sewer backups, overflows, etc.); and stormwater impacts (e.g., flooding frequency and severity).
- Survey customers to understand perceived differences in service for their neighborhoods relative to the balance of the service area.
- Communicate differences in service within the utility's service area, determine the necessary steps to address the underlying causes, evaluate the financial implications of necessary improvements, and integrate solutions into the utility's capital plans.

## 2. Understand variation in demographics and infrastructure across the service area

Every service area varies in some degree by income, culture, housing type, infrastructure and services. Often times, households with lower incomes, renters, communities of color, immigrants and refugees are concentrated in portions of the service area with fewer community services and poorer infrastructure including transportation, schools and civic amenities. These neighborhoods can also have greater environmental risks such as adjacent industry, freeways and rail lines. This housing can be in low-lying flood prone areas with all the associated risks including flooding and sewer back-ups. Being adjacent to industrial sites also has implications for water infrastructure in facility sizing and operating practice. Water service to adjacent housing can be both positively and negatively impacted. Inadequate infrastructure and infrastructure that does not meet the needs of the residents leads to lower quality of life including greater health risks. Evaluate how demographics and infrastructure vary across the utility's service area. How do these align with variations (either real or perceived) in quality and level of service?

- Which neighborhoods contain higher numbers of disadvantaged households and therefore warrant closer attention for disproportionate impacts?
- Are utility capital projects having a disproportionate impact (positive or negative) on low-income and/or communities of color? If so, how?

Local planning agencies are key partners. Resources to support community research include:

- Community, county and regional planning organizations typically have data that describe local demographics and trends. More importantly, they have professionals who can provide insights into the available data and community-level responses.

- Community governing bodies, chief elected or administrative officers and individual agencies (e.g., planning agency, economic development agency, housing agency, health department, transportation department, etc.) typically have both near-term and strategic plans that the water utility can utilize to improve coordination and identify synergies between its activities and other planned improvements.
- Neighborhood-level information to assess impacts on local businesses can be challenging to find, but local planning agencies, local chambers of commerce, and neighborhood specific business associations are potential resources.
- When local planning assistance is not available, the EJ Screen tool developed by EPA as an online reference to look up disadvantaged communities experiencing environmental impacts using census data.
- When using census data, consider the data's strengths and limitations, particularly outside of major metropolitan areas where less detailed data is gathered, and the data is aggregated over large areas.

### **3. Engage the community to integrate community goals and needs into the plan**

Engaging the community in the capital planning process can build trust and support for the utility's capital plan, while also laying the groundwork for positive community relations that will help future project construction run more smoothly. Active engagement early and throughout the planning process is both important and difficult to realize. Refer to Chapter 4 for guidance on creating effective community engagement. Specific community engagement considerations during the planning phase include:

- Reach out to neighborhood leaders and organizations to understand community goals and concerns.
- Enlist neighborhood leaders and organizations in outreach efforts to the broader community.
- Provide a range of engagement options/opportunities in order to gain meaningful community and public input (e.g., direct mail/surveys, community meetings, street-level meetings).
- Be clear about what input is needed at each phase, what decisions the community input can influence, as well as decisions that have already been finalized.
- Be creative about how the utility can address community goals and concerns.
- Enlist local partner agencies in identifying individuals and organizations to reach out to as well as their knowledge about outreach strategies that are ongoing or have worked well previously.

#### **4. Reduce and mitigate impacts to disadvantaged communities**

Not only can construction of new facilities have an impact on neighborhoods, so can completed facilities, including the impacts of ongoing utility operations, including noise, odor, lights and traffic. There are also real and perceived risks from water service operations (e.g., accidental release of chlorine or ammonia gas). During capital planning, utilities have an opportunity to consider how to reduce and mitigate negative impacts, especially to disadvantaged and underserved communities. Whether siting a new facility or planning an upgrade to an existing facility, the utility can engage the community in the planning process in order to understand common concerns and identify solutions to avoid or mitigate potential adverse community impacts.

Utilities can also consider how to reduce risk and potential impacts during hazard mitigation, disaster preparedness or climate adaptation Plans. During disasters and emergencies, disadvantaged communities may be impacted more severely than the rest of the community due to:

- Location in a low-lying flood plain, next to industrial facilities, and proximity to water utility facilities.
- Isolated neighborhoods cut off by rail, highways, or walls that prevent through traffic and limit ingress and egress.
- Lower rates of car ownership and inadequate public transportation.
- Language and cultural barriers.
- Lack of adequate emergency warning systems or emergency preparation to meet the needs of environmental justice communities.
- Lower-income populations that may not have the resources to relocate temporarily out of harm's way.

#### **5. Provide community benefits that align with community needs**

Utility projects and operations can also provide community benefits, such as jobs, enhanced stormwater management, streetscape improvements, local art and open space. By engaging the community during the capital planning phase, the utility can better identify opportunities to integrate additional beneficial elements into capital projects.

By collaborating with other agency partners, water utility upgrades can also leverage other public and private investments within environmental justice communities. Many community benefits can be low cost or cost neutral. For example, providing space for a community mural, designing an access road to double as a trail, rerouting truck traffic, and engaging the community in plant selection for the landscaping are all elements that can help the facility become an asset to the neighborhood.

## Implementation Examples

### Wabasso Corridor Plan, Indian River County

The West Wabasso has historically been home to many low-income residents. Despite rapid growth in surrounding areas, the community has been severely underserved, with limited infrastructure and access to community improvements. Poor water quality has adversely affected community health, while drainage issues created transportation and flooding problems. After Wabasso residents contacted Indian River County, the county recognized the urgency and prioritized water-related infrastructure improvements, which are outlined in the Wabasso Corridor Plan. Total funding to date for the improvements has reached over \$4.1 million, including \$3.2 million in grant funding and \$924,000 in local matching resources, resulting in water infrastructure improvements as well as other investments to improve community quality of life. See Chapter 4 for full case study.

### Lower Rio Grande Public Waterworks Authority

The Lower Rio Grande Public Waterworks Authority and the community have been working together to develop a public waterworks system through the consolidation of several rural waterworks systems. The Lower Rio Grande Public Water Works Authority was established and worked closely with local communities to plan and develop a safe public drinking water system with strong community investment, ownership and leadership. See Chapter 4 for full case study.

## Resources

### Seattle Public Utilities (SPU) Race and Social Justice Initiative

- What is Service Equity? <http://www.seattle.gov/util/AboutUs/SPUandtheCommunity/ServiceEquity/ServiceEquity/index.htm>
- Environmental Justice & Service Equity Division Strategic Framework [https://www.seattle.gov/util/cs/groups/public/@spu/@diroff/documents/webcontent/3\\_036352.pdf](https://www.seattle.gov/util/cs/groups/public/@spu/@diroff/documents/webcontent/3_036352.pdf)

### US EPA

- *EJSCREEN* is an environmental justice mapping and screening tool that provides a nationally consistent dataset and approach for combining environmental and demographic indicators. The tool provides demographic and environmental information for a geographic area selected by the user based on publicly available data sorted into 11 environmental, 6 demographic and 11 environmental justice indexes. (<https://www.epa.gov/ejscreen>)

### Lead Service Line Replacement Collaborative

- <https://www.lslr-collaborative.org/>

# B. Project Design

## Introduction

**P**roject design offers an important opportunity to integrate community benefits, reduce adverse impacts to residents and position the utility as a trusted community neighbor. Integrating input early in the design process offers the greatest ability to influence outcomes for the least cost before design and construction are complete.

Project design is an excellent phase to engage the community in siting and design considerations in order to ensure public support of the project when it goes into construction and operation. The community can help identify and prioritize potential impacts, as well as benefits to be considered during the design phase.

Asking environmental justice communities for their input to help shape a project during the design phase can re-set relationships on a more positive footing. This is also an opportunity to build relationships with other local agencies. Engaging agency partners (such as transportation, parks, schools, planning) can identify opportunities to leverage community investments to achieve multiple goals that benefit the community.

Foundations and community-based organizations are yet another group of potential partners that can broaden the community impact and enhance the utility's reputation as a good neighbor and institutional partner. For further information, see "Contracting and Procurement" section.

## Assessment Checklist

Does the project design:

- Increase benefits and reduce adverse impacts to the community, especially to disadvantaged and environmental justice communities?
- Reflect consideration of input from community engagement?
- Reflect consideration of input from local agency, organization and foundation partners?
- Integrate community benefits?
- Consider negative impacts borne by disadvantaged communities both within and adjacent but outside the utility's service area?

## Strategies

### 1. Consider project siting options that reduce impacts and increase benefits to disadvantaged communities

While initial capital planning encompasses all phases of project identification, prioritization, funding, design, and construction, project design is where there is an opportunity to address potential issues both with respect to siting and facility performance. Initial planning will prioritize capital investments based on ranking criteria (e.g., criticality, improvements to service or quality, long-term growth, etc.); project design is an opportunity to respond to and address impacts and incorporate community benefits. This stage is when the feasibility of impact mitigation options and community benefit addition will be assessed and ultimately incorporated or not.

Infrastructure facilities are typically sited based on least-cost, least-societal impact, but because of historic land use patterns, those analyses can lead to repeatedly impacting



low-income communities and resulting in cumulative impacts such as noise, dust, air pollution and traffic. As a consequence, residents of some communities can experience a lower quality of life than residents of neighboring communities, potentially even facing greater risk of health consequences. To avoid repeating this cycle, project siting analyses should look beyond typical practice to consider cumulative impacts due to poverty, isolation, disinvestment and the presence of other facilities. This may require the utility re-evaluate the view that the least societal impact is achieved by placing utilities where other industrial facilities have always been located. Water utilities have a diverse range of facilities (e.g., pipe networks, treatment facilities, pump stations, stormwater retention, maintenance yards, administration offices, customer service offices, etc.) to which this approach can be applied.

Some utility facilities must by necessity be in a certain locations in a community (e.g., pump stations or storage tanks). In these instances, the utility can consider ways of designing the facility to not cause negative impacts. Site selection, architectural design, operational practices can all contribute to the utility's facility ultimately blending positively into the neighborhood.

Green infrastructure is a unique instance where community benefit is readily apparent to the community, often in the form of green space. The utility can evaluate siting options to ensure that green infrastructure projects with inherent benefits are distributed equitably across the service area, or even aim benefit in a targeted way to those communities most in need.

## **2. Design to reduce community impacts**

Whether designing a new facility or upgrading an existing facility, consider how to stem, reduce or mitigate facility impacts. Larger utility infrastructure facilities in particular can have negative impacts on surrounding residents and businesses, including noise, pollution, odor, visual impacts and truck traffic. Often these impacts can be reduced through creative design and technology. Impacts that cannot be eliminated can be mitigated through emissions reduction strategies, traffic rerouting or other community benefits such as public art, landscaping and open space that buffer industrial sites and their resulting traffic, odor, and sounds.

The design stage of a project must, first and foremost, ensure that the project technical objectives are achieved (e.g., is a sufficient water volume stored, is water pressure adequate, etc.). Design is an opportunity to ensure that the neighborhoods understand the purpose of the facility and how it relates to the service they receive. It is also a chance for the utility to better understand and reflect on lived service experience from customers. Understanding customer experiences can not only inform the facility design, it can also inform preparatory work (e.g., distribution system flushing, valve servicing, leak testing, etc.). Disadvantaged households and households where English is a second language may not be providing as much customer service feedback as more affluent portions of the service area. The utility may need to invest in additional community engagement to reach these households.

## **3. Integrate community benefits into the project design**

Utility infrastructure accounts for some of the largest investments in a community. Funded almost exclusively by rate payers (e.g., the community itself), these capital projects can be a tool for neighborhood transformation by incorporating community benefits such as public art, environmental education, trails, special landscaping, parks and open space. Some projects such as green infrastructure have the ability through design to offer community benefits.

When engaging in community benefit addition, it is important to obtain community and partner agency input not only to prospectively recognize opportunities to add "benefits" but also to realize when such additions are unhelpful or counterproductive.

## Multi-use design

By integrating multiple uses into the design process, some of these benefits can be relatively cost-neutral to integrate into the project. Examples include:

- Design a utility access road or easement to double as a running and bike trail (accounting for necessary security precautions.)
- Incorporate enhanced stormwater management into greenspace design.
- Incorporate landscape design that features native plants, attracts butterflies and birds, and serves as an environmental buffer.
- Provide a space for a community historic marker, mural or art project along a facility wall or other visible location to celebrate local culture and promote environmental stewardship.

Maintaining adequate site security can lead to limited public access to many water utility facilities. While access may be limited, facility grounds can be designed to support necessary functions, security, and cost-effective maintenance, while also presenting a positive presence in the community.

## Partnerships

Reach out to local transportation, planning, public works and education departments to identify opportunities to collaborate on a project that could result in addressing mutual goals and provide greater benefits to the community. Examples include:

- Partner with a parks agency or non-profit to integrate open space features above or around utility facilities.
- Partner with a community non-profit or local nursery to integrate murals, landscaping, or wetland restoration into the project design.
- Partner with community leaders to utilize surplus utility properties for community benefit (e.g., re-purposed buildings, green space, walkways, community gardens, etc.).
- Multi-agency projects can be complex and time-consuming to develop. However, this added investment often results in strengthened public relations, agency partnerships and community good will. Federal and state funding opportunities increasingly emphasize local partnerships and multiple benefits in their selection criteria.

## 4. Engage the community to cultivate community support and stewardship

Following capital planning, project design offers the ideal opportunity to engage the community so that when construction begins, the utility can feel confident it has community support and cooperation.

Taking a proactive approach to community engagement can help the utility provide clear answers to community concerns directly and transparently—even when a complete solution is not available. Refer to Chapter 3 for guidance on effective community engagement. Tips for effective community engagement during the project design phase include:

- Research the community to learn about the demographics and key stakeholders. Colleagues in planning, social services, environmental, housing and education departments can be a good source of community information.
- Reach out to community leaders including schools, community groups, local businesses and faith institutions to learn about community issues and gather input on outreach strategies.
- Clearly explain the options and decision criteria for the project.
- Gather input on potential impacts and community benefits.

- Engage community partners in some aspect of implementation, such as art, landscaping, green spaces, stewardship and education.
- Develop customer advisory committees with focus groups to better understand community concerns and expectations.

## 5. Build social equity into contracting and procurement for project design

Refer to the Contracting and Procurement Section for strategies to extend contracting benefits to small, local and disadvantaged businesses during project design.

## Implementation Examples

### The Equity Toolkit, Seattle Public Utilities (SPU)

SPU has adopted an Equity Toolkit that can be applied to any project, decision, program or analysis to address possible inequities. The checklist includes guidance on conducting stakeholder analysis; developing an inclusive outreach and public engagement plan; management discussions and decision making; master or comprehensive plan development, policy or code development; and service, project or program development. (for full case study, see Chapter 4)

### Riverfront Park, Camden County Municipal Utilities Authority

When Camden County Municipal Utilities Authority (CCMUA) took over the management of the wastewater treatment plant, they prioritized community engagement and addressing the longstanding odor issues impacting the neighborhood. Building on a \$50-million investment in odor control, CCMUA used funding from a county open space grant to purchase an adjacent abandoned industrial property and turned it into a riverfront park. The utility worked with a broad group of stakeholders to design the green space and provide recreational and riverfront access to this environmentally impacted community. CCMUA partnered with other municipal agencies to maximize limited resources to achieve multiple benefits for the community. (for full case study, see Chapter 4)

### Community Advisory Committee, Louisville Water Company

For the Riverbank Filtration Project, the Louisville Water Company constructed a mile-and-half-long tunnel 120 feet below the ground that crossed several different neighborhoods. During the early phase of the project, the Louisville Water Company developed a community advisory council (CAC) with participants from the broad range of stakeholders, including representatives from disadvantaged neighborhoods, more affluent neighborhoods and well-connected special interest groups. This approach helped level the playing field by giving all stakeholders a seat at the table with equal voices helped to factor social equity into the project during the design phase.

## Resources

### Seattle Public Utility

- Equity Tool Checklist (<http://www.seattle.gov/util/AboutUs/SPUandtheCommunity/ServiceEquity/PlanningAnalysis/index.htm>), Seattle Public Utility.

### San Francisco Public Utilities Commission

- Community Benefits Policy (<https://sfwater.org/modules/showdocument.aspx?documentid=3676>).
- Environmental Justice Policy (<https://sfwater.org/modules/showdocument.aspx?documentid=3686>).

# C. Construction & Preventative Maintenance

## Introduction

**C**onstruction and preventative maintenance (such as flushing and lining rehabilitation) is often when the utility is most visible in the community. Even though construction projects are necessary to expand, modernize and maintain service, community members often get frustrated by the impacts of the construction process on their lives.

Utility field activities can range from construction of a single plant or transmission line that takes years, impacting the same neighborhood day-after-day, to brief emergency responses to a main or service line break in the early hours of the morning. Utility outreach and engagement needs to be appropriate to the scope and timeframe of the construction activity. The basic principle of early, clear and consistent communication to inform the public of the project and associated impacts is generally applicable, and it can significantly reduce community tension related to construction.

Some households, particularly in environmental justice communities, do not receive notice until very late in the process that construction is slated for their community. Households may not speak English, track local news where such construction might be posted, frequent the utility or community's website, be routinely engaged in civic events, or receive a letter to customers (e.g., a rental unit). Special efforts may be needed to ensure all residents are contacted and informed about the pending project.

Utilities can also employ a range of strategies to reduce impacts to residents and businesses during construction<sup>7</sup>. Consider how to reduce noise and dust that can result from increased truck traffic, construction equipment and other construction related activities. Finally, utilities can benefit the local community by structuring procurement and contracting to preference local, small and disadvantaged businesses.

## Assessment Checklist

As part of preparing for construction, has the utility:

- Notified the community of the project and potential impacts and disruptions, with specific attention to reaching disadvantaged communities?
- Provided contact information for a community liaison to address questions and concerns?
- Adopted strategies to reduce construction impacts to the community?
- Has the utility structured procurement and contracting to benefit local businesses?

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*The Effective Utility Management Framework includes community stewardship attributes under:*

### **Infrastructure Strategy and Performance**

- Coordinate repair efforts within the community to minimize disruptions.

<sup>7</sup> [https://www.fhwa.dot.gov/ENVIRONMENT/noise/construction\\_noise/handbook/handbook07.cfm](https://www.fhwa.dot.gov/ENVIRONMENT/noise/construction_noise/handbook/handbook07.cfm)

## Door Hangers or Factsheets for Impacted Households

Essential elements include:

- ❑ The project name, description and purpose
- ❑ A map of what areas will be impacted
- ❑ A list of potential impacts
- ❑ Anticipated construction hours
- ❑ The duration of the project
- ❑ Contact information for the utility staff responsible for answering questions
- ❑ Provide translated versions of materials for neighborhoods that have populations that do not speak English.

## Strategies

### 1. Provide early, clear and consistent communication

Prior to construction, notify the public of the project and anticipated impacts. In addition to communication tools available through the utility or local government, utilize existing communication channels familiar to the community. Ask a knowledgeable partner about the best ways to communicate with the community during the project.

When engaging a neighborhood, always acknowledge residents' concerns and be clear about what the utility can and can't do to mitigate anticipated impacts. If the utility is unsure what is possible, follow up after gathering the necessary information.

Depending on the size, duration, and nature of the project, public meetings can provide an important and necessary tool for describing the project and associated impacts to the community. Through organizing or participating in community meetings, utility staff and consultants can advise community members on construction plans, potential impacts and disruptions.

Holding meetings in neighborhood gathering places at convenient times, such as early evenings or Saturday mornings, is important to reaching potentially impacted households, particularly disadvantaged households. In-person meetings provide opportunities to build relationships with the neighborhood and learn about concerns that may not have been considered yet by the utility.

Share information in a timely fashion on significant changes in project scheduling, construction hours and associated impacts in the neighborhood, and secondary impacts like consequences for transportation. Providing good news is important as well as communicating challenges. Regular communication reduces uncertainty for households and businesses in the affected neighborhood(s).



## 2. Minimize construction impacts and disproportionate impacts

Typical construction impacts to communities include noise, vibration, dust, air pollution, road closures and loss of public areas, including parking spaces, due to staging. At a minimum, utilities can meet local, state and federal standards to evaluate and reduce impacts to impacted communities. Utilities can reduce impacts beyond required standards and address more specific local concerns. Although special care can be taken in disadvantaged neighborhoods, the following are good practices for projects throughout the service area:

- Consider limiting construction to business hours to reduce noise and vibration impacts to residents. Check with local businesses to determine if the contractor can avoid times of the day when the work could significantly impact their business such as the lunch hour or scheduled deliveries. In some cases, machinery or construction techniques can be altered to reduce noise, dust and vibration.
- Dust can be managed by mulching or wetting exposed soil and gravel, especially during grading and dry and windy periods. Stockpiles should be covered thoroughly and only the portion in use should be exposed. Utilizing low emission vehicles and equipment can reduce air pollution.

Road closures can impact access to homes and businesses, work commutes and business deliveries. To minimize disruption, develop a traffic management plan that seeks to maintain access and minimize traffic delays. Provide clear detour signage that includes the anticipated timeline of the closure and contact information for updates.

- When establishing staging areas for stock piles, equipment, portable toilets and vehicles, consider minimizing the size of the staging area, the duration and the visual impact.
- Consider compensating local businesses for use of under-utilized portions of their property or parking area. Ensure the staging area is restored to its previous or improved condition once the project has ended.
- Finally, reach out to other utilities and transportation entities to coordinate projects planned for the right of way to save money and reduce construction-related impacts.

### Example Construction Mitigation Techniques

- Minimize disruption of water and sewer service to community (e.g., installation of temporary water supply lines, etc.)
- Time construction activity relative to activity in the community (e.g., avoid construction during nighttime hours near residences)
- Consider noise levels in construction equipment choices (e.g., equipment with adequate muffler systems, compressors with noise abatement baffles, etc.)
- Ensure equipment operators are adequately trained on proper equipment operation techniques and briefed on construction site-specific considerations
- Apply dust suppression techniques appropriate to the construction activity
- Consider community traffic patterns in timing construction activities
- Provide temporary entrances to businesses
- Install and maintain erosion and sediment controls
- Manage water releases from dewatering to avoid damage to property and traffic impacts
- Maintain construction site to minimize construction debris

### 3. Structure procurement and contracting to benefit local and disadvantaged businesses

Refer to the Contracting and Procurement Section for strategies to extend contracting benefits to small, local and disadvantaged businesses during construction.

## Implementation Examples

### Right of Way Project Coordination, Seattle, WA

The City of Seattle has established the Project and Construction Coordination Office (PCCO) to coordinate projects planned for the right of way to save money, protect public assets, and reduce construction-related impacts. The PCCO sequences utility, paving, and other projects on the public streets by collecting schedule and location information on all planned construction, and by meeting with project managers, utility managers, and executives to create logical project sequences. The PCCO hosts [Project Coordination Groups](#) to manage planning and sequencing of work in the right of way six months to five years before projects begin and coordinates active construction in designated areas where high impact projects are in close proximity to one another through the [Access Seattle Hub Coordination](#) program. Refer to Chapter 4 for full case study.

### Construction Mitigation Protocol, East Baltimore Revitalization Initiative

In 2002, East Baltimore Development Incorporated (EBDI) formed a cross-sector nonprofit partnership called the East Baltimore Revitalization Initiative (EBRI) to help lead an 88-acre redevelopment effort which required tearing down hundreds of vacant and derelict properties. Many of these buildings were rowhouses that contained lead-based paint and asbestos, and there was overwhelming evidence that indicated demolition activities on nearby sites had introduced unsafe levels of lead dust into the atmosphere. In response, EBDI developed a protocol outlining 12 core elements to ensure that safety was a priority during redevelopment activities, including inexpensive techniques such as the widespread notification of when and where construction activity will occur; adequate use of fencing, barriers, and other means to limit access to sites and to keep children away; and the ample use of water to reduce the spread of dust. The EBDI protocol has proven to be so effective that it has generated interest from people across the country.

## Resources

- Minimizing Construction Impacts on the Community, Vancouver Community Fact Sheet for the Capilano Water Main Project ([http://www.metrovancouver.org/services/water/construction-maintenance/ConstructionProjectPublications/CWMP\\_MinimizingTrafficImpactsFactSheet.pdf](http://www.metrovancouver.org/services/water/construction-maintenance/ConstructionProjectPublications/CWMP_MinimizingTrafficImpactsFactSheet.pdf)). August 2015.
- City of Seattle Project Construction Coordination Office (<http://www.seattle.gov/transportation/projects-and-programs/programs/project-and-construction-coordination-office>)
  - Project Coordination Groups (<http://www.seattle.gov/transportation/projects-and-programs/programs/project-and-construction-coordination-office/project-coordination-groups>)
  - Access Seattle Hub Coordination (<http://www.seattle.gov/transportation/projects-and-programs/programs/project-and-construction-coordination-office/construction-hub-coordination>)
- East Baltimore Development Initiative Demolition Protocol (<http://www.ebdi.org/uploads/pdfs/EBDIDemolitionProtocol.pdf>). East Baltimore Development, Inc. 2010.

# D. Finance

## Introduction

**W**ater utility bills can be challenging for low-income households. Such households pay a disproportionately higher share of their income for utility services. This situation is further exacerbated when low-income households face an unexpected crisis or must rely on a fixed income. Costs can include initial account setup fees, deposits and monthly service rates. If customers are unable to pay their monthly service bill, they may be subjected to additional shutoff fees, late payment fines and interest on past due balances. In October 2018, AWWA adopted an affordability policy strongly recommending “the adoption of policies and procedures by utilities, regulators, and governmental entities to address the affordability challenges experienced by some of their residential customers.”<sup>8</sup> Utility leaders are recognizing that creating a product the customer can’t afford is a “we” problem, not a “they” problem and are proactively addressing the issue by developing Customer Assistance Programs (CAPs).

CAPs benefit community members in need by retaining access to water service crucial to daily life (which may impact public health, nutrition, job security and child care), reducing penalties and fees, avoiding stigma of a shutoff, and avoiding time lost to addressing a shutoff. In addition to humanitarian reasons, CAPs can benefit the utility by strengthening community relations and improving the financial health of the utility by developing a proactive solution to a recurring problem with significant administrative costs. In some cases, utilities may be spending more resources managing shutoffs than they save by shutting off service.

Utilities have developed a range of CAPs to ensure those in need still receive water service. In 2016, EPA conducted a survey that determined nearly 30% of 795 utilities had one or more customer assistance programs.

## Assessment Checklist

Does the utility:

- Assess the total annual resources expended for managing shutoffs and collections relative to resources recovered due to shutoffs?
- Consider the impact of bad debt control (through shutoffs) on susceptible populations?
- Evaluate what qualifies as low-income in a specific community and what percent of the service area would qualify?
- Offer accommodations for special populations (e.g., veterans, seniors, disabled, single head of households)?
- Offer one-time protections for extenuating circumstances such as a job loss, injury, illness or eviction?
- Engage the community in considering what types of affordability programs would be most helpful?
- Consider water use efficiency programs, including exchanges and rebates, to help residents reduce consumption, thus reducing their water bills?

*The Effective Utility Management Framework includes community stewardship under:*

### **Financial Viability**

- Set predictable and adequate rates to support utility’s current needs and plans to invest in future needs, taking into account affordability and the needs of disadvantaged households when setting rates.

<sup>8</sup> AWWA Affordability Policy, adopted October 2018: <https://www.awwa.org/Policy-Advocacy/AWWA-Policy-Statements/Affordability> (weblink obtained February 11, 2019)

# Strategies

## 1. Determine who qualifies for customer assistance

The Water Research Foundation published the guide “Customer Assistance Programs for Multi-Family Residential and Other Hard-to-Reach Customers” (2017) which outlines a detailed set of steps and tools utilities can use to develop a CAP. The guide includes strategies for learning about which customers are most in need in their service areas, outreach strategies and program design.

The first step in considering a CAP is determining who will qualify for assistance. Utilities can gain insight by talking to other utility sectors and public agencies in the region to learn about effective local approaches that can be aligned or adapted. Several standard methods are outlined below:

### **A. Use existing eligibility requirements from other sectors (i.e., electricity, natural gas, and telecommunications) or public assistance programs when enrolling customers.**

Examples include the Family Electric Rate Assistance Program (FERA); the Federal Low-Income Home Energy Assistance Program (LIHEAP); the Low-Income Energy Efficiency Program (LIEE); Medicaid/Medi-Cal; Women, Infants, and Children Program; Supplemental Security Income; Temporary Assistance for Needy Families (TANF); or Tribal TANF.<sup>9</sup>

### **B. Use an industry standard measure.**

Use an established measure of affordability. Though percent of median household income (MHI) has been used as an affordability metric in the past, it does not accurately reflect the customer’s ability to pay. New research<sup>10</sup> recommends a method that (1) measures household-level affordability (rather than the entire utility’s financial capability); (2) provides for basic water needs (rather than average consumption); (3) focuses on low-income households (not average- or median-income customers); and (4) accounts for essential costs other than water and wastewater. The proposed method looks at *household-level affordability* (the percentage or ratio of basic water and wastewater costs to disposable household income for low-income customers) or *as basic cost of service*, which factors in household number and local minimum wage. These measures may be calculated for an individual customer or aggregated statistically for any defined group of customers.

In April, 2019 AWWA, the National Association of Clean Water Agencies, and the Water Environment Federation jointly funded, “[Developing a New Framework for Household Affordability and Financial Capability Assessment in the Water Sector.](#)” This report recommends using a metric to guide affordability efforts based on (1) household burden (i.e., basic water service costs of drinking water, wastewater, and stormwater costs combined) as a percent of the 20<sup>th</sup> percentile household income and (2) poverty prevalence (i.e., the percentage of community households at or below 200% of Federal Poverty Level).

The [Water and Wastewater Residential Rates Affordability Assessment Tool](#) developed by UNC School of Government Environmental Finance Center uses census data of the local community to help utilities assess the relative affordability of its water and wastewater rates on its residential customers using multiple metrics. This provides the utility with more information and a more comprehensive understanding of the affordability of its rates than percent of median household income. The tool evaluates affordability for a range of customer scenarios and allows a utility to compare two rate structures side-by-side.

<sup>9</sup> <https://pacinst.org/wp-content/uploads/2013/01/water-rates-affordability.pdf>

<sup>10</sup> “Measuring Household Affordability for Water and Sewer Utilities”, Manuel P. Teodoro, *Journal AWWA*, , January 2018

## 2. Determine the CAP that will best address those in need

EPA developed the publication “Drinking Water and Wastewater Utility Customer Assistance Programs” (April 2016) which provides guidance to utilities on CAPs and summarizes the different types of CAPs currently in use nationally as shown in the table below. Each utility will have unique circumstances to consider when determining which CAPs may best address customer and utility needs.

### Summary of Types Customer Assistance Programs

Type of CAP <sup>11</sup>	Description	Examples
<b>Bill Discount</b>	Customers receive a bill discount based on qualifying criteria such as low-income, veteran, senior, domestic violence victim, disability, or renters.	<ul style="list-style-type: none"> <li>• reduce monthly water bill, based on household size, household income and type of service</li> <li>• lower or waive past-due disconnection charge</li> <li>• lower or waive the security deposit amount</li> <li>• prevent shut-off while low-income application is processed</li> <li>• offer budget billing which provides a consistent bill each month, reducing seasonal fluctuations</li> </ul>
<b>Flexible Terms</b>	Customers are offered flexibility in paying their bill through an extension or payment plan.	<ul style="list-style-type: none"> <li>• grant an extension or payment plan for a limited time</li> </ul>
<b>Lifeline Rates</b>	Customers pay a subsidized rate for a fixed amount of water to cover basic needs and then charged regular rates for use beyond the “lifeline” amount.	<ul style="list-style-type: none"> <li>• provide subsidized rate for a fixed amount of water to cover basic needs.</li> </ul>
<b>Temporary Assistance</b>	Customers offered one-time or limited assistance up to a specific amount to account for special circumstances such as job loss, injury, extended illness, temporary disability, death of head-of-household, divorce or eviction.	<ul style="list-style-type: none"> <li>• provide emergency payment assistance up to a set amount and/or number of times per year</li> <li>• waive late payment penalties</li> <li>• provide a payment extension</li> <li>• waive security deposit for new account</li> </ul>
<b>Water Efficiency</b>	Utilities offer water efficiency programs to low-income customers to reduce costs from water leakage.	<ul style="list-style-type: none"> <li>• repair leaking plumbing fixtures</li> <li>• remove charges for “lost” water when leak repair is verified</li> <li>• provide low-flow fixtures or rebates</li> <li>• provide one-time leak forgiveness</li> </ul>

<sup>11</sup> U.S. EPA Drinking Water and Wastewater Utility Customer Assistance Programs, 2016.

### 3. Consider a range of funding sources, including engaging local partners to manage a separate fund

Though some utilities may be restricted by state regulations in offering differentiated rates or funding CAPs through rate revenue, many utilities have identified a range of creative approaches to funding CAP programs. Examples include:

- Building the cost of CAP programs into the rate structure<sup>12</sup>
- Customer and employee voluntary contributions (e.g., the “round up” bill option). For example, San Francisco Water Power and Sewer offers 15% deduction on water bill funded through tax-deductible donations and unused credits from customers who overpay on their water bill.
- Donations from foundations, charities or non-profit assistance programs. For example, in the City of Sacramento, the Salvation Army Family Services offers one-time assistance up to \$100.
- Innovative revenue streams such as revenue from placing ads and antennae on water towers and other utility structures. For example, the City of Napa funds its assistance program specifically from leasing cell phone tower space on the city’s water tank property site.

Partnerships can also result in creative ways to meet other needs of struggling households. As a primary customer contact, utilities can provide agency referrals for housing, food and other utility services.

Social service agencies and nonprofits engaged in assisting disadvantaged households can be effective partners in facilitating access to water utility assistance programs. Importantly, these organizations are already organized to provide information and assistance to disadvantaged households in the community. They are a known point-of-contact for households facing financial challenges and many are trusted resources for the communities they serve. Such organizations are familiar with verifying compliance with household income requirements. As partners, they can coordinate delivery of multiple assistance programs thereby maximizing assistance delivery while streamlining access for recipients.

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<sup>12</sup> See [“Navigating Legal Pathways to Rate-Funding Customer Assistance Programs”](#) by UNC

## 4. Conduct community engagement and education to reach those in need

Conduct community engagement to determine how best to reach customers most in need. For example, consider how CAP outreach programs can reach both renters and landlords to ensure benefits are extended to renters. In some cases, the landlord may be paying the utilities and then passing the utility cost on to the renter. In these cases, bill inserts that describe CAPs would not reach the renters who may have affordability challenges. Alternatively, in some cases renters may pay higher bills due to leaking fixtures that the land owner will not repair.

Consider what community engagement and education may be needed to reach underserved communities. Translating communications and offering workshops in the neighborhood with a local community organization can significantly increase engagement. For example, disadvantaged households can reduce the cost of water service by conserving water; providing specific outreach on water-efficiency assistance programs can directly benefit these households.

Determine what metrics to use to evaluate progress and be prepared to adapt if the program is not succeeding. In gathering information, disaggregate by census tract and demographic to understand who is and is not participating. Success will rely on both utilizing multiple communication channels and an adaptive management approach that implements, assesses success, and re-engages based on lessons learned from previous actions.

## Implementation Examples

### Lead Service Line Replacement Program (LSLRP), Cincinnati, Ohio

After the Cincinnati City Council enacted [ordinances](#) requiring the replacement of all lead in service lines (LSLs) by 2032, the Greater Cincinnati Water Works (GCWW) developed the Lead Service Line Replacement Program (LSLRP) to remove all lead water service lines from the water system. GCWW started long-term outreach efforts to educate the community about the need to address LSLs by hosting monthly meetings in all 52 city neighborhoods. To help make private LSL replacement more affordable, the city developed a cost share and financing program which enables property owners to pay off their share of line replacement costs over five or ten years as a semi-annual assessment to their property tax bill at zero percent interest. See Chapter 4 for full case study.

### Care to Share Customer Assistance Program, Chapel Hill, NC

Orange Water and Sewer Authority (OWASA)'s [Care to Share Customer Assistance Program](#) partners with the Inter-Faith Council for Social Services (IFC) to administer a customer assistance program for water and wastewater bills. Anyone can donate money directly to the IFC, and OWASA customers can make voluntary donations as they pay their monthly water and wastewater bills. OWASA collects the donations on the bills and turns the money over to the IFC, which administers the program independently of OWASA.<sup>13</sup>

### Water Access Volunteer Effort, Detroit, MI

The [Water Access Volunteer Effort](#) (WAVE) offers households that meet WAVE's low-income requirement and are in danger of losing their water service up to \$500 of WAVE funds once per year to pay off their water bills and stay connected to water service. Since 2003, WAVE has used over \$2 million in individual donations to help over 9,200 households in Detroit pay off their water bills.<sup>14</sup>

<sup>13</sup> <http://efc.web.unc.edu/2015/10/28/customer-assistance-programs/>

<sup>14</sup> <http://efc.web.unc.edu/2015/10/28/customer-assistance-programs/>

## American Water's H2O Help to Others Program

American Water runs the [H2O Help to Others Program](#) in a number of states funded by corporate, customer and employee donations. In [Pennsylvania](#), the H2O program provides assistance to both water and wastewater customers who qualify with a monthly income of under \$3,975 for a family of four. Customers can get either up to \$500 per year for their water bills or up to an 80% discount on the monthly water service fee, as well as water-saving devices and conservation education. Applicants can also receive a \$500 annual grant for their wastewater bills, or a 15% discount.

## Senior Rebate Program, Miami-Dade Water and Sewer Department

As part of their its efficiency toilet rebate program, Miami-Dade County wanted to reach low-income seniors. In coordination with the Office of the Property Appraiser, it evaluated property data to locate clusters of properties that were tax exempt under the county's Low-Income Senior Citizen Exemption. Residents that qualify for the property tax exemption could also be eligible for the toilet rebate. Using this information, the Water Conservation Program mailed property owners in these targeted areas information about the senior high efficiency toilet rebate program. The program offers low-income seniors a rebate to replace up to two toilets with high efficiency toilets which can reduce their water bill. To broaden their outreach, all educational materials are provided in the three prominent languages - English, Spanish and Creole.

## Partnership Opportunities

- Community economic development, health and social service agencies and non-governmental organizations may also provide expertise and assistance in designing and implementing programs.
- Local charities, foundations and businesses may be interested in supporting customer assistance programs.

## Resources

- *Drinking Water and Wastewater Utility Customer Assistance Programs* ([https://www.epa.gov/sites/production/files/2016-04/documents/dw-ww\\_utilities\\_cap\\_combined\\_508.pdf](https://www.epa.gov/sites/production/files/2016-04/documents/dw-ww_utilities_cap_combined_508.pdf)). EPA, April 2016
- *Water and Wastewater Residential Rates Affordability Assessment Tool* (<https://efc.sog.unc.edu/resource/water-and-wastewater-residential-rates-affordability-assessment-tool>). UNC School of Government Environmental Finance Center
- *Addressing Affordability as a Necessary Element of Full-Cost Pricing* (<https://awwa.onlinelibrary.wiley.com/doi/full/10.5942/jawwa.2017.109.0132>). Journal American Water Works Association, 2017.
- *Developing a New Framework for Household Affordability and Financial Capability Assessment in the Water Sector* (<https://www.awwa.org/Portals/0/AWWA/Government/DevelopingNewFrameworkForAffordabilityReport.pdf>)
- *Navigating Legal Pathways to Rate-Funding Customer Assistance Programs* (<https://efc.sog.unc.edu/project/navigating-legal-pathways-rate-funded-customer-assistance-programs>). Environmental Finance Center at the University of North Carolina at Chapel Hill, 2017.
- *Customer Assistance Programs for Multi-Family Residential and Other Hard-to-Reach Customers*, Water Research Foundation <https://www.waterrf.org/research/projects/customer-assistance-programs-multi-family-residential-and-other-hard-reach>

# E. Contracting and Procurement

## Introduction

**C**ontracting and procurement is an important opportunity to invest in the local community to promote local businesses and economic development. Utilities have a tremendous opportunity to support local contracting and procurement for project design, construction and ongoing operations such as community engagement. Utility leaders are recognizing their potential role to leverage utility investments to grow the local economy and lift up low-income neighborhoods within the community.

Utilities have the discretion to structure contracting and procurement to include preferences for local hiring, small businesses, and minority- or woman-owned businesses. This strategy invests rate funds locally rather than investing these funds with companies and jobs located outside the community. In some cases, the utility can break down contracting and procurement into smaller jobs more suitable to local small businesses—for example paving, landscape installation, interpretative signage and community outreach. Utilities can also consider partnering with a local agency, non-profit or business to out-source performance in this area including local subcontractor utilization and workforce development to benefit the local community. In addition, utilities can preference bids that include a social impact component such as corporate grants, volunteer projects, or internships that benefit the local community.

## Contracting and Procurement Checklist

Does the utility:

- Have a plan or policy to increase contracting services with local, small, minority- and woman-owned businesses?
- Have a plan or policy to increase procurement of goods from local, small, minority- and woman-owned businesses?
- Consider enlisting smaller on-call contracts for some services, which could be more accessible to small businesses?
- Integrate community benefits into the bidding selection process?
- Provide growth and development opportunities for contractors and service providers?

# Strategies

## 1. Identify opportunities to support disadvantaged businesses within contracting and procurement

Utilities often use classifications for disadvantaged businesses as defined by the federal Small Business Administration, state agency or local jurisdictions. These typically include:

- Local Business Enterprise (LBE)
- Small Business Enterprise (SBE)
- Minority-Business Enterprise (MBE)
- Woman-Owned Business Enterprise (WBE)

For federal grant funding, the Federal Fair Share Objective requires the recipient to encourage and facilitate participation by Minority Business Enterprises and Women-owned Business Enterprises (MBE/WBE).

Utilities can employ a range of strategies to enlist more disadvantaged businesses in contracting and procurement, such as:

- Include preference points in bid selection for small business prime or subcontractor
- Advertise applicable contracts as a small business set-aside
- Divide scope into smaller bids, carving off elements appropriate for smaller firms
- Distribute appropriate solicitations to disadvantaged businesses
- Conduct outreach and capacity building workshops for potential small bid contracting opportunities

Engaging disadvantaged businesses can be combined with other initiatives like water conservation, backflow prevention and control and full lead service line replacement, where water utility can provide specific training and authorization that enhances the marketability of a qualified business.

## 2. Integrate community benefits into bid selection

In addition, utilities can request and preference bids that include a social impact component such as corporate grants, volunteer projects and internships that benefit the local community. Utilities can add selection criteria in the Request for Proposals for social impact contributions that will be in addition to the requested scope of work that benefit the community at no additional cost to the rate payer. Once a firm is selected, these commitments can be included as part of the contract with specific deliverables and timeframes similar to other scope elements. Many companies already have a corporate responsibility program including charity drives, employee community projects and local grants that can be offered to the impacted neighborhood.

## Sample Community Benefits Included in Contracting Proposals<sup>15</sup>

As part of its Social Impact Program, San Francisco Public Utilities Commission identified the following range of community benefits that have been provided at no cost to the ratepayers through their social impact contracting.

Benefit Areas	Community Benefit Examples
<b>Workforce Development</b>	<ul style="list-style-type: none"> <li>• Offer career exploration and summer internship programs that expose students to careers in civil and environmental engineering, architecture, environmental planning, construction management, and others.</li> <li>• Partner with local workforce and youth development agencies and community-based non-profits to develop training curricula for entry-level jobs and provide job placement assistance.</li> <li>• Support community efforts to remove barriers to employment (e.g., access to affordable childcare, assistance with accrued fees and fines, literacy programs, re-entry initiatives).</li> <li>• Provide in-kind support to local nonprofits (laptops, software) so they can improve the technology skills of low-income, low-skilled workers.</li> </ul>
<b>Economic Development</b>	<ul style="list-style-type: none"> <li>• Support small, local businesses and nonprofits by:</li> <li>• Supporting programs that build business management capacity.</li> <li>• Offering mentorship to develop their business plans and diversify funding sources.</li> <li>• Coordinating with other agencies to support capacity building and hire locally.</li> </ul>
<b>Education</b>	<ul style="list-style-type: none"> <li>• Advance engineering and science education in disadvantaged communities impacted by the utility.</li> <li>• “Adopt a local school” and provide support and resources in the neighborhoods impacted by the utility.</li> <li>• Bring professional staff into the community to promote STEM subjects and civic engagement. (e.g., serving as mentors to students, tutoring, or making presentations in classrooms)</li> <li>• Support scholarship awards to college or to learning experiences for youth.</li> <li>• Educate students and residents about sustainability practices (e.g., rainwater harvesting, xeriscaping, etc.)</li> </ul>

<sup>15</sup> Adapted from SFPUC Community Benefits Program Social Impact Partnerships 2018  
<https://sfwater.org/Modules/ShowDocument.aspx?documentid=11622>

## Implementation Examples

### Social Impact Program, San Francisco Public Utilities Commission (SFPUC)

SFPUC ensures the communities impacted by the utility's operations benefit from the work by leveraging ratepayer investments with its Social Impact Partnership Program. All proposals for SFPUC contracts worth \$5 million or above must include a Community Benefits component. Contract bids are evaluated for their voluntary contributions, and successful contractor proposals ensure that local businesses and workers receive economic benefits from a project. Examples of successful contractor-sponsored projects include trainings for area small businesses and nonprofits, and mentoring partnerships with local businesses and nonprofits to help them develop business plans and diversify funding sources. (for full case study, see Chapter 4)

### DC Water Business Development Plan

To help address economic inequities among its customers, the Washington D.C. Water and Sewer Authority (DC Water) developed a Business Development Plan in 2009 that outlines a framework to improve participation of traditionally underrepresented populations in its work around the city. The plan provides goals for certified local LBEs, LSBEs, MBEs and WBEs to participate as vendors, prime contractors, subcontractors and joint ventures for the utility's many contracts. The plan also includes a Fair Share Program that encourages and facilitates participation by MBEs and WBEs in federally funded work. DC Water's Business Development Plan has resulted in significant gains for minority and women-owned businesses. (for full case study, see Chapter 4)

### Clean Water Partnership<sup>16</sup>

Prince George's County Department of the Environment has executed a first of its kind, community-based public private partnership with Corvias Solutions, referred to as the Clean Water Partnership. Under this partnership approach, Corvias and Prince George's County have committed to resolve stormwater regulatory challenges and create benefits for the local economy through a variety of participation goals and performance requirements, including using local subcontractors and providing development and mentorship programs to grow small local businesses. These efforts are designed to increase the participation of local, small, minority, and women owned business enterprises in Prince George's County.

## Resources

- DC Works Business Development Plan <https://www.dewater.com/business-development-plan>
- SFPUC Social Impacts Program <https://sfwater.org/Modules/ShowDocument.aspx?documentid=11622>

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<sup>16</sup> <https://thecleanwaterpartnership.com/program-goals/>

# F. Customer Service and Communications

## Introduction

**C**ustomer Service and Communications offer the opportunity to build customer satisfaction over time with a diverse customer base and the broader community. Utilities have adopted a range of strategies to improve customer service through culturally-sensitive communication, timely response to complaints, developing long-term relationships, and engaging customers in decision-making. As the face of the utility, customer service and communications staff have the opportunity to create an inclusive, welcoming and accessible organization to all consumers. Achieving this will mean understanding who the utility's customers are and what they need from the utility.

## Customer Service and Communications Checklist

Does the utility...

- Understand the demographic and language diversity across the service area?
- Understand the needs, priorities, values and interests of neighborhoods within its service area, including disadvantaged neighborhoods?
- Have community liaisons assigned to build relationships and provide customer service to specific geographic areas and customer groups?
- Support staff in building relationships and partnerships with trusted community leaders and institutions to help better serve customers?
- Know what venues to use to communicate effectively across the range of communities in the service area?
- Communicate in language that is understood by the communities it serves? Does it connect utility activities or proposals to values held by the community?
- Connect public involvement to decision-making and community needs?

## Strategies

### 1. Understand the demographics and context of the communities across the service area

Mapping the demographics of a utility's service area can be an effective way to learn where different communities are located within the service area and consider any disparities in service. Because communities are often organized around socioeconomic status, race/ethnicity, and language, understanding the locations of different groups of people can help a utility match communication and customer service resources to the right customers. Maps that can help tell the story of a community include:

- Economic factors, such as household income, unemployment and underemployment
- Cultural factors, such as race and ethnicity
- Age distribution factors, such as children and the elderly
- Language factors, such as language spoken at home or English proficiency

*The Effective Utility Management Framework includes community stewardship under:*

### **Customer Satisfaction**

- Provides reliable, responsive, and affordable services.
- Receives timely customer feedback.
- Is responsive to customer needs and emergencies.
- Provides tailored customer service and outreach to a range of customer groups.

### **Stakeholder Understanding and Support**

- Engenders understanding and support from oversight bodies, community and watershed interests, and regulatory bodies for service levels, rate structures, operating budgets, capital improvement programs, and risk management decisions.
- Actively engages in partnerships and involves stakeholders in the decisions that will affect them.

## Integrating Communication Efforts With the Strategic Communication Plan

Utility communications always occur in the context of the utility's strategic communication plan and the communication priorities and delivery channels reflected in that plan. That plan likely already includes strategies to effectively develop and deliver information to utility customers. It can be useful to make sure that customer outreach utilizes all of the tools available through the existing plan and review existing plans and strategies to ensure that utility communications are indeed reaching all of the utility's audiences.

<https://www.awwa.org/Policy-Advocacy/Communications-Outreach/Public-Communications-Toolkit#7601432-strategic-planning>

Tennyson, Ray (2005). Creating a Strategic Communication Plan That Gathers No Dust. *Journal AWWA, January*, 97:1.

Economides, et al. (2012). Examining the benefits of effective public outreach. *Journal AWWA, January*, 104:1.

To gain additional context and evaluate differences in the distribution of services, it can be helpful to overlay this socioeconomic data with relevant geographic information such as:

- Important boundaries, such as neighborhoods, communities, regions, watersheds and service areas
- Important infrastructure features, such as transportation, other utilities and industrial uses
- Risk designations such as flood zones and other hazard areas
- Water service infrastructure information, such as age of infrastructure, frequency of maintenance issues, recognized water quality issues, sewer backups, sewer overflows, performance metrics (e.g., response time, time to completed repair, etc.), and trends in regulatory compliance monitoring.

Mapping this information will provide the utility with a basic understanding of the variation in customers groups, where they live and how the natural and built environment impacts neighborhoods differently. For additional tips on mapping and links to mapping tools, including how to identify environmental justice communities, refer back to the Capital Planning section. Importantly, developing an understanding of communities within the geography of a locality is what local planning and social service agencies do on a day-to-day basis. These agencies can be valuable partners to utility staff.

## 2. Understand and address the needs, priorities and interests of the customers

Environmental justice communities commonly experience disproportionate financial, safety and public health stressors when compared to other communities, but the community's top-priority needs and interests may not be clear without investigation. Customers are most likely to engage

productively with a utility when they understand why the interaction is relevant to their household or community's daily experiences.

Finding ways to partner with communities to address their top needs, priorities and interests can build trust and goodwill between a utility and its customers. In some cases, the utility may find that its programs and resources can directly support meeting a need. In other cases, the utility may be able to serve as a connector or convener to engage other community resources and partners.

Strategies for learning about community needs include:

- Reach out to local agency staff in planning, health and social services.
- Utilize a community needs assessment.
- Build relationships with trusted community leaders and institutions (see Strategy 3).
- Use community liaisons to build long-term relationships in a community (see Strategy 4).

## 3. Build relationships and partnerships with trusted community leaders and institutions

Environmental justice communities have often had negative experiences with public utilities and government agencies. Because of this history, it can be difficult to build trust and improve relationships. If this is the case in the service area, consider establishing

relationships and partnerships with leaders and institutions that are already trusted by the community. These groups can serve as resources to help utilities better understand and connect with hard-to-reach communities.

Common examples include:

- Neighborhood, community or business associations
- Social service agencies and organizations
- Faith-based institutions
- Environmental justice advocates
- Civic groups, fraternal and Greek organizations
- Community development agencies and organizations

#### **4. Utilize community liaisons to build long-term relationships with customers**

Consider designating community liaisons or community involvement specialists assigned to geographic areas who can build a long-term relationship with their assigned communities. This consistency builds institutional knowledge and trust between a utility and its customers, which allows a utility to get to know the community and its needs, priorities and interests on a deeper, ongoing level. It also allows a utility to learn how to best communicate with customers in various communities over time. When possible, consider hiring a community liaison from the local area where that staff person would be assigned; this allows the utility to benefit from the staff person's knowledge of the neighborhood, existing relationships and trust with the community they serve.

#### **5. Use modes of communication that are familiar and effective**

Just as needs, priorities and interests vary between communities, the networks of communication within communities vary as well. Some communities rely on online/electronic communication, while others rely on more traditional interpersonal and institutional networks of communication. Preferences can also vary by age and other factors within a community, so it is important to learn from other organizations facing similar outreach objectives and to speak directly with communities to learn what mode(s) of communication will work best for them. In every community there are some households that face vision and hearing challenges. Consider coordinating with social service agencies to reach households where family decision-makers have vision or hearing challenges and for guidance on adhering to federal guidelines prepared under the Americans With Disabilities Act.

Putting in the up-front work to understand what modes of communication are familiar and most effective in a community will result in more meaningful, effective and cost-efficient communication over time. It will also go a long way towards helping staff build the trust and relationships emphasized in the strategies above.

#### **6. Use language customers can easily relate to and understand**

Whether the utility is conducting a public education campaign, responding to customer damage claims, or communicating about an upcoming infrastructure investment, using language that people can understand and relate to is critically important for getting the message out. As with many professions, the water sector has developed a specialized language full of terms and acronyms that are not familiar to most customers. In addition, utilities serve customers whose language and communication needs vary due to the language spoken at home or disability. Approaches to addressing language barriers include:

#### **Common Modes of Communication**

- Mail (e.g., postcards, utility bills)
- Targeted announcements (e.g., hire neighborhood youth to conduct door-to-door engagement, flyers and signs posted around a neighborhood)
- Community-based media (e.g., newspapers and radio stations that serve specific communities)
- Community-based organizations and their newsletters (e.g., neighborhood associations, after school programs, advocacy groups or environmental organizations, scout troops)
- Community-based gathering places (e.g., community centers, convenience stores, barber shops, laundromats, faith-based institutions)
- Electronic communication (e.g., email, social media, websites)

- *Use plain language to communicate.* When developing communications, ensure that documents use commonly understood terms. Define acronyms, scientific terms, legal terms and other technical terms that may not be commonly used.
- *Provide communications in the primary languages used by customers.* For example, the utility may wish to provide a Spanish language option on the customer service line or provide written communications in multiple languages targeted to specific customer communities.
- *Subscribe to an interpreter service.* In some service areas, where a significant number of languages are spoken, it may be cost effective to subscribe to a phone-based interpreter service to ensure communication with as many customers as possible.
- *Ensure written electronic communications are accessible.* For customers with sight disabilities, ensure electronic documents are compatible with screen reader technology to allow them to access communications through e-readers.

## 7. Connect public involvement directly to decision-making and community needs

When conducting public involvement, especially when working with environmental justice communities, utilities should intentionally look to connect public engagement to opportunities for customers to influence decision-making and address community needs. Customers who are impacted by environmental stressors are more likely to engage when they know that their input might change the outcome, and that there is an opportunity to influence a decision that directly impacts their own community. Refer to Chapter 3 for guidance on effective community engagement, including how to select the appropriate level of public participation based on the potential impact of public involvement on decision-making.

## Implementation Examples

### Holistic Partnership Building, San Antonio Water System

The San Antonio Water System (SAWS) has developed a holistic approach to community partnerships that support the utility's customers. Instead of working in a silo to address customers who are behind on their utility bills or who are consuming disproportionate amounts of water, the utility emphasizes partnerships with other service providers in the community. As staff attend community events, they are encouraged to intentionally connect with other service providers in attendance, gather contact information and build relationships that can benefit utility customers. This information goes into a service providers list maintained by the staff for future reference. Some partnership examples include:

- Dress for Success, which provides clothing that is appropriate for job interviews to women in need.
- Financial assistance with pet care from local providers, such as a program that provides free food for pets that are spayed/neutered.
- Tuition and book assistance for job training programs.



When staff check in with customers who have high water consumption rates, they are able to have a broad conversation about household priorities and needs, including but not limited to water consumption. If the household identifies needs beyond water efficiency strategies and resources, utility staff are able to use the service providers list and draw on the relationships they have developed with other service providers to help ensure that the customer's additional needs are being addressed. The utility also employs strategies that help build relationships with their customers and service provider partners over the long-term including:

- Working with schools to notify parents on what to look for to avoid a disconnect.
- Hosting an annual luncheon to thank service provider partners for supporting their customers.
- Streamlining the customer assistance application process by coordinating between water and other local utilities (gas and power).

These unique investments in partnership building have fostered significant good will for the utility in the community and strengthened relationships with customers. (for full case study, see Chapter 4)

### **Community Liaison Program, City of Seattle<sup>17</sup>**

The City of Seattle's Community Liaison program was created to help the city better engage and serve historically underrepresented communities. The program was modeled after other "trusted advocates" programs and aims to establish Community Liaisons as embedded community leaders from a variety of immigrant and refugee communities, communities of color, and communities of seniors, youth, and people with disabilities. The Community Liaisons have expertise in their communities' needs and trusting relationships with community members, allowing them to build bridges between city government and community interests. The liaisons are paid competitive wages as independent contractors for their work. Also see full case study in Chapter 4 describing SPU's approach to ensuring prompt and equitable access to [Customer Damage Claims](#) services.

## **Partnership Opportunities**

- Local community groups can be good resources in conducting outreach and education within local communities. Consider enlisting groups with an ethnic, civic or cultural affiliation with the neighborhood.

## **Resources**

- Terminology Guidance for Water Professionals (<https://www.waterrf.org/resource/terminology-guidance-water-professionals-or-what-you-say-not-what-people-hear>). Water Research Foundation, 2017.
- Website Strategies for Water Professionals (or, What You See Is Not What Google Sees...). (<https://www.waterrf.org/resource/website-strategies-water-professionals-or-what-you-see-not-what-google-sees>). Water Research Foundation, 2017.

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<sup>17</sup> <https://www.seattle.gov/neighborhoods/community-liaisons>

# G. Environmental Stewardship

## Introduction

*The Effective Utility Management Framework includes community stewardship under:*

### **Community Sustainability**

- Actively leads in promoting and organizing improvements to community and watershed health within utility and with external community partners.
- Actively leads in promoting welfare within the community for disadvantaged households.
- Uses operations to enhance natural environment.
- Efficiently uses water and energy resources, promotes economic vitality, and engenders overall community improvement.
- Maintains and enhances ecological and community sustainability including pollution prevention, watershed and source water protection.

### **Environmental Education and Conservation**

- Ensures water availability through long-term resource supply and demand analysis, conservation, fit for purpose water reuse, integrated water resource management, watershed management and protection, and public education initiatives.
- Manages operations to provide for long-term aquifer and surface water sustainability and replenishment.
- Understands and plans for future water resource variability (e.g., changing weather patterns, including extreme events, such as drought and flooding).

**U**tilities play an important role in protecting and conserving our nation's water resources. The work of environmental conservation naturally aligns with advancing environmental justice because communities and utility customers with the fewest resources often have the least access to the financial and health benefits provided by water conservation investments. Whether protecting source waters, managing open space around water infrastructure, or advancing best practices in a residential setting, environmental conservation programs can provide significant benefits to the communities that need them most.

## Environmental Stewardship Checklist

- Address the lack of access to drinking water and wastewater service within their service area and in nearby areas
- Provide residential water conservation assistance programs accessible to those most in need
- Integrate green infrastructure investments equitably across service area
- Provide equal access to utility open space areas
- Ensure that green infrastructure investments are appropriate to and appropriately placed in the community
- Provide environmental education and access, especially to underserved communities

## Strategies

### **1. Ensure access to water**

As of 2014, the U.S. Census identified 630,000 occupied households in the United States that lacked indoor plumbing and proper wastewater management. Access to indoor plumbing facilities and water services is important to community health and quality of life for individual households.

A [map of these households](#), generated by the Washington Post, demonstrates households lacking indoor plumbing are not evenly distributed across the U.S. Instead they are concentrated in certain areas of the country. This means that for some utilities, addressing indoor plumbing and water service needs can be a part of the utility's environmental protection and conservation program.

### **2. Ensure all households have access to water conservation strategies**

Many utilities conduct community education and provide water conservation incentives such as low-flow appliance rebates and fixture retrofitting. The utility may want to evaluate whether the water conservation programs are reaching those most in need, such as low-income households. The utility may want to consider language and other outreach barriers to promote adoption of the water conservation tools and practices. Partnering with a community organization with relationships in the neighborhood can be an effective way to reach communities and understand their needs. For additional information on potential communication strategies, see Section F. For additional information

on potential financial incentive strategies, see Section D and the SPU case study in the Implementation Examples.

### **3. Meet community needs in environmental justice communities through green infrastructure investments**

Green infrastructure investments can help protect water quality and increase watershed capacity. They also provide co-benefits for the communities where they are installed. These co-benefits can be targeted to meet community needs in low-income communities, communities of color and environmental justice communities. Opportunities for co-benefits include:

- Increasing the aesthetic value of a neighborhood,
- Protecting housing, businesses and schools against flooding,
- Providing environmental and community heritage education through signage, and
- Building a job training pipeline for careers in the water sector.

### **4. Provide access to environmental education, recreation and open space, particularly for underserved communities**

Utilities that are engaged with source water protection or that manage open spaces may find partnership opportunities to increase public access to outdoor areas through outdoor trails and parks. Spending time outdoors is correlated with an increase in health and well-being. And as with all investments, the utility can evaluate whether its open space areas and environmental education programs are equally accessible to all communities in the service area, particularly underserved communities.

## **Implementation Examples**

### **Addressing Indoor Plumbing Needs, Eastern Shore of Virginia**

Virginia's Eastern Shore has residences that lack indoor plumbing. Residents in these circumstances use night pails, unpermitted privies or backyard portable toilets. In addition to the impact on quality of life for residents, this antiquated problem results in human waste disposal practices that threaten water quality in the Chesapeake Bay watershed and endanger the local seafood and tourism economy. Historically, the full extent of the problem has not been documented but is suspected to impact hundreds of homes. The Accomack-Northampton Planning District Commission (A-NPDC) has championed efforts to solve the indoor plumbing challenge. Over the past several decades, A-NPDC has led a comprehensive rehabbing effort that will improve water quality, protect the local economy, and provide basic plumbing for families without access. Funding has traditionally come from the state's Indoor Plumbing Rehab (IPR) and Community Development Block Grant (CDBG) programs; however, in recent years, funding cuts and shifts in funding priorities have led the A-NPDC to look for more diverse sources of funding that will allow them to significantly accelerate rehabilitation efforts to ensure residential plumbing on the Eastern Shore meets modern day standards for the United States.

### **Income-Qualified Toilet Program, Seattle Public Utilities**

Seattle Public Utilities is reducing water usage by partnering with income-qualified homeowners and multi-family low-income housing providers to replace old and inefficient toilets with water-saving toilets. According to the utility, "toilets are the biggest water user in most homes and multi-family buildings." Qualified homeowners can receive free installation of an efficient toilet and free recycling of the outdated toilet. Qualified housing providers can receive free toilets, plus up to \$100 installation per toilet, and free replacement of top-load clothes washers in common areas. This program is a win-win for the utility's environmental conservation efforts and for the financial well-being of



the utility's lowest-income customers. The utility has found that participating buildings typically reduce water use by 15-30 percent. See Chapter 4 for full case study.

### **Green Infrastructure Planning, Freeport, IL**

The East Side in Freeport, IL, is an African-American neighborhood located in the floodway of the Pecatonica River. The neighborhood's economic vitality and housing quality have been impacted negatively over time by the neighborhood's location in the floodway. Residents contend with recurring major and minor flood events and are subject to floodway regulations that limit improvements on structures. These regulations, which were not in place when the neighborhood was built, make it challenging to improve and expand both housing and neighborhood businesses. Over time, housing quality has severely declined, and most commercial businesses have vacated the neighborhood.

In 2013, U.S. EPA and the City of Freeport partnered to conduct a community needs assessment. Community residents identified flood impacts as a top priority for the neighborhood. Through a community flood mapping exercise, government agencies were able to tap resident experience to help identify flooding hot spots. These hot spots were later confirmed through an engineering analysis. The community selected both green and grey infrastructure improvements as strategies to address flooding impacts, protect East Side homes, improve water quality in the adjacent Pecatonica River, and improve the aesthetics of the community. Residents also emphasized the need to train and hire neighborhood residents to install green infrastructure in their own community—both as a way to build ownership of the conservation investments and also to create a pathway to landscape work for unemployed and underemployed community residents.

### **Access to Outdoor Spaces, Los Angeles Bureau of Sanitation**

Many cities experience a lack of open space for their residents or find that due to historic land use patterns, open space is distributed inequitably, leaving low-income communities with little to no access. According to the Trust for Public Lands (2015):

“The National Recreation and Parks Association recommends 10 acres of park space per 1,000 residents, however, Los Angeles’ park space is 38 percent below the national recommendation with 6.2 acres of park space per 1,000 residents. South Los Angeles is significantly worse still as its park space is 96 percent below the national recommendation with 0.42 acres of park space per 1,000 residents.”

The Los Angeles Bureau of Sanitation (LASAN) is working to address environmental conservation, ensure a resilient watershed, and expand access to open space through an innovative green alley network in the Avalon neighborhood of South Los Angeles. This demonstration project aims to retrofit nearly a mile of alleyways in Avalon with green infrastructure investments that will increase open space and advance environmental, social and economic benefits for residents and for the City of Los Angeles. Project leaders at LASAN are partnering closely with both youth and adult leaders in the Avalon community to envision alleyway design, create job opportunities, and find ways to leverage green infrastructure investments and community education to change the community's relationship to water.

## Partnership Opportunities

- Community-based organizations, environmental and environmental justice groups can be good resources to conduct outreach and education within local communities. Consider enlisting groups with an ethnic, civic or cultural affiliation with the neighborhood.
- Local and regional parks departments along with environmental groups can provide expertise and resources for open space and trail opportunities.

## Resources

- *1.6 million Americans don't have indoor plumbing. Here's where they live.* ([https://www.washingtonpost.com/news/wonk/wp/2014/04/23/1-6-million-americans-dont-have-indoor-plumbing-heres-where-they-live/?utm\\_term=.57b97f8ae657](https://www.washingtonpost.com/news/wonk/wp/2014/04/23/1-6-million-americans-dont-have-indoor-plumbing-heres-where-they-live/?utm_term=.57b97f8ae657)) Ingraham, 2014.
- *City of Los Angeles Bureau of Sanitation Efforts to Advance Water Equity* (<http://uswateralliance.org/organization/city-los-angeles-bureau-sanitation>). US Water Alliance, 2015.
- *East Side Revitalization: Reducing the Impacts of Flooding and Floodway Regulations.* (<https://semspub.epa.gov/work/07/30296056.pdf>) U.S. EPA Region 5, 2013.
- *Free Toilet Programs for Income-Qualified Customers* (<http://www.seattle.gov/util/EnvironmentConservation/MyHome/ReduceWaterUse/LowIncomeToiletOffer/index.htm>). Seattle Public Utilities, 2018.
- *Freeport Forward! Riverfront Enterprise Area Plan.* (<http://projects.skeo.com/wp-content/uploads/2017/05/Freeport-Riverfront-Enterprise-Area-Plan.pdf>) Fehr Graham and Skeo Solutions, 2016.
- *Indoor Plumbing Needs on the Eastern Shore of Virginia.* ([http://www.a-npdc.org/wp-content/uploads/2016/03/Eastern-Shore-I-PR-Report\\_DRAFT-FINAL\\_2015.11.03b\\_2-up.pdf](http://www.a-npdc.org/wp-content/uploads/2016/03/Eastern-Shore-I-PR-Report_DRAFT-FINAL_2015.11.03b_2-up.pdf)). Skeo Solutions, 2015.
- *The Avalon Green Alley Network Demonstration Project: Lessons Learned from Previous Projects for Green Alley Development in Los Angeles and Beyond* ([https://www.tpl.org/sites/default/files/files\\_upload/ca-green-alley-avalon-green-alleys-demo-project.pdf](https://www.tpl.org/sites/default/files/files_upload/ca-green-alley-avalon-green-alleys-demo-project.pdf)). Trust for Public Land and UCLA Luskin Center for Innovation, 2015.
- *Inclusive Outreach and Public Engagement Guide* ([https://www.seattle.gov/Documents/Departments/ParksAndRecreation/Business/RFPs/Attachment5%20\\_InclusiveOutreachandPublicEngagement.pdf](https://www.seattle.gov/Documents/Departments/ParksAndRecreation/Business/RFPs/Attachment5%20_InclusiveOutreachandPublicEngagement.pdf)). Seattle Racial and Social Justice Initiative, 2012.

# H. Human Resources

## Introduction

*The Effective Utility Management framework considers the community stewardship role within human resources through the following attributes:*

### *Employee Leadership and Development*

- Recruits, develops, and retains a competent, safety-focused workforce.
- Is a collaborative organization dedicated to continual learning, improvement, and adaptation..
- Implements procedures for institutional knowledge retention, workplace safety, and continual learning (e.g., standard operating procedures).
- Invests in/provides opportunities for professional and leadership development.
- Supports an integrated and well-coordinated senior leadership team.

**H**uman resource practices offer the opportunity to invest in one of the utility's most valuable resources—the people who make the utility function through the full range of utility operations. As utilities focus on diversity, equity and inclusion they create an inclusive and results-oriented organizational culture.<sup>18</sup> Many utilities are seeing the value in hiring, promotion and tenure of diverse staff and cultural training to help staff navigate and respect differences and to work more productively within the utility and externally with the customers and broader community. Utility leaders are also promoting the vision of social equity within the organizational culture to better embody the utility's role in community stewardship.

Research shows as the diversity of teams increases so does the chance of making better decisions. In fact, the most diverse teams made better decisions 87 percent of the time”

“Hacking Diversity with Inclusive Decision Making,” <https://www.forbes.com/sites/eriklarson/2017/09/21/new-research-diversity-inclusion-better-decision-making-at-work/#50269c414cbf> (retrieved from the web on 2/12/19)

### **Diversity, Equity and Inclusion**

The terms below are useful for setting hiring, promotion and tenure goals.

*Diversity*—The demographic mix of people taking into account elements of difference such as racial and ethnic groups, income, spectrum of built environment settings (rural to urban), faith communities, LGBTQ+ populations, people with disabilities and, gender.

*Equity*—Social equity is the concept that policy, programs and practices are applied with fairness and justice. *Equity (and equitable) is different than equality. Equality provides the same opportunities to everyone. Equity is focused on providing opportunity based on need.*

*Inclusion*—Refers to the degree to which diverse individuals are able to participate fully in the decision-making processes within an organization or group. Inclusion is about fostering an environment in which the contributions of all people are respected and employees have an opportunity to be included. While a truly “inclusive” group is necessarily diverse, a “diverse” group may or may not be “inclusive.”

<sup>18</sup> Definitions in text box were adapted from: *Benchmarking Diversity: A First Look at New York City Foundations and Nonprofits* at [philanthropynewyork.org](http://philanthropynewyork.org) or <http://philanthropynewsdigest.org/news/philanthropy-new-york-foundation-center-report-benchmarks-diversity-at-new-york-city-foundations-and-nonprofits>.

## Human Resources Checklist

Does the utility:

- Have a policy that guides internal diversity, community engagement and social equity as an organizational value?
- Have a goal for staff diversity and local hiring?
- Work to create a pipeline of diverse candidates in the field?
- Invest in creating a respectful and inclusive culture?
- Build the capacity of staff to work productively with diverse populations both within the utility and broader community?
- Strategies

### 1. Create an authorizing environment

Some utilities have adopted specific policies to guide community engagement and integrate environmental justice into operations. An adopted policy promotes a shared understanding of expectations and implementation strategies among staff, management, elected officials and the community to guide capital planning and other utility operations. When formulating a new utility policy, consider specific goals and criteria to promote an equitable level of service, engage the community more effectively, identify and evaluate project-specific and cumulative impacts and integrate community benefits.

### 2. Set goals for the utility's personnel to reflect the diversity of the local community

Having personnel who are reflective of the diversity of the local community can help a utility maintain positive community relationships and include varied perspectives in thought leadership and decision-making. According to the Brookings Institute, "Water workers tend to be older and lack gender and racial diversity in certain occupations pointing to the need for younger, more diverse talent." Women only make up 14.9% of the water workforce compared to 46.8% of the national workforce. Black and Asian workers only make up 11.5% of the water workforce compared to 18% of the national workforce,<sup>19</sup> and in many cases staff may not fully reflect the communities they serve. Women and "people of color tend to be underrepresented in higher-level, high-paying occupations involved in engineering and management." As the baby boomer generation retires, there is an opportunity to diversify the workforce. Setting goals for diversity may include:

### Utility of the Future

The Utility of the Future (UTOF) framework provides a model for utilities to achieve more efficient operations, enhanced productivity, and long-term sustainability through the following four building blocks:

- recovery and new uses of a full range of resources;
- engagement as a leader in the full water cycle and broader social, economic, and environmental sustainability of the community;
- transformation of the internal utility culture in support of these innovations; and
- engagement in the community and formation of partnerships necessary for success when operating outside of the traditional span of control of the utility.

### Commitment to Diversity

"AWWA recognizes the role of diversity as being essential to the growth, structure, and continued success of any organization. Diversity should be an inherent trait of any organization and is manifest in the mosaic of people who bring a variety of backgrounds, perspectives, values, and beliefs as assets to a group or organization in which they interact."

AWWA offers a Diversity Award the following factors:

- Bringing a variety of backgrounds, perspectives, values and beliefs as assets to a group or organization with which they interact.
- Establishing an environment that recognizes and encourages the effective use of each individual's talents and other contributions to the cause of diversity.
- Promotion and fostering of diversity programs such as mentoring, support networks, internship programs, co-op programs, work study, diversity training, or other opportunities.
- Development of management accountability/tracking methods as means of quantifying the impact of the efforts to increase and maintain diversity.

<https://www.awwa.org/Membership-Volunteering/Awards/Diversity-Award> (retrieved from the web on 2/12/19)

<sup>19</sup> "Renewing the water-workforce: Improving water infrastructure and creating a pipeline to opportunity," Brookings, 2018: <https://www.brookings.edu/research/water-workforce/> (retrieved from the web on 2/12/19)

## Recruiting, Hiring & Retaining Veterans

Before hiring new Veteran employees, consider surveying current employees and asking Veterans to voluntarily self-identify. Current Veteran employees could serve as mentors to new Veteran employees and help with Veteran recruitment. [The Employer Toolkit](#) contains links to valuable resources to help your organization recruit, hire and retain Veteran employees.

<https://www.awwa.org/Resources-Tools/Resource-Topics/Workforce/Veterans>

## Governmental Alliance for Racial Equity

Governmental Alliance for Racial Equity (GARE) is a national network of government working to achieve racial equity and advance opportunities for all. GARE's membership network is composed of a professional peer-to-peer network of over 80 jurisdictions that enables governments to exchange information, collaborate to advance their practice and develop solutions to racial equity challenges. GARE provides tools, resources and trainings to support local and regional government in advancing racial equity within their organizations and service delivery.

<https://www.racialequityalliance.org/about/who-we-are/>

Setting goals for the utility staff to reflect the gender and racial/ethnic diversity of the service area and have the skills to communicate effectively with the diverse population served.

- Aiming to increase diversity at every level of the organization (e.g., staff, executive leadership, board).
- Setting a local hiring goal to directly increase the ties between staff and the community.
- Explore resources to support veteran hiring.<sup>20</sup>

## 3. Invest resources in creating a pipeline of diverse candidates in the field

In some cases, utilities may find that increasing the diversity of their staff requires investing in community education with the goal of building a pipeline of candidates who may otherwise not have considered a career in the utility field. The Brookings report recommends a water workforce playbook to increase the pipeline of diverse candidates. Opportunities to build a candidate pipeline include:

- Supporting environmental education at elementary and secondary schools.
  - Partnering with local community colleges or trade schools to align workforce development with utility job skill needs.
  - Offering tours of the utility to local schools and other community groups.
- Offer a “water bootcamp” to introduce water careers to younger and other non-traditional workers to explore water careers and gain experience.
  - Starting an internship and formal mentoring program.
  - Participating in local career fairs.
  - Updating job descriptions to provide greater flexibility to select qualified applicants.
  - Making sure job descriptions and utility branding include the utility's values around diversity, equity and inclusion as well as the opportunities to build the local community through utility work.

## 4. Invest resources in training staff at all levels in cultural competence

Utility personnel may not have professional training or experience in community engagement and may not be familiar with the concept of cultural competence. Cultural training helps staff across all levels of the utility navigate and respect differences while building productive relationships both within the utility and across the customer base and broader community. Training can create a shared understanding of social equity, the utility's role as a community steward and sensitivity to the issues and needs of disadvantaged, underserved and environmental justice communities. By investing professional development resources in these topics, staff will be more supported, able to engage productively and able to troubleshoot with each other transparently as they tackle their work.

<sup>20</sup> The AWWA Veterans Workforce Initiative has developed toolkits for employers looking to hire Veterans and flyers for Veterans interested in the water sector.

## 5. Invest in growing an inclusive, high-performing culture

Every organization has a culture. Organizations with an inclusive, high-performing culture cultivate and invest in the growth of that culture over time. Workforce diversity author Rachel Gilbert, advises, “The concept of diversity and inclusion needs to be regarded as a value—not just a program or priority.”<sup>21</sup> Cultural development can include:

- training staff in organizational culture development
- intentionally aligning the mission, vision, values, strategic planning and operational principles of the utility for the purpose of developing an inclusive and diverse organizational culture,
- discussing the organization’s current culture and identifying high performing areas and areas where growth is desired,
- investing in the utility’s human capital through onboarding and professional development trainings, and
- creating feedback loops to engage staff in guiding organizational change.

These types of investments, which are often overlooked in the day-to-day business of organizations, can help create a high-performing work environment where all staff are included and contributing to their fullest. When staff feel valued and included and are given the tools for success, the utility benefits. The utility can increase its performance and become a sought-after workplace in the community.

## Implementation Examples

### Water Boards Leadership Institute for Rural Communities

The Rural Community Assistance Corporation (RCAC) runs a six-month leadership development program that focuses on developing the capacity of utility leadership and staff to build trust and communicate effectively. The program includes tools, tips and techniques for effective community engagement. Modules include board development, management, and communicating with communities, legislators and funders.

### Race and Social Equity Mission and Goals, Seattle Public Utilities

Seattle Public Utilities (SPU) developed an authorizing environment that recognizes specific racial and social equity goals. The utility defines service equity as providing “inclusive and equitable service to all customers” and recognizing that utility systems “carry important and documented inequities based on race, income, and gender”.

Three critical strategies guide the SPU’s equity work. They include:

1. Embed race and social justice and service equity across SPU.
2. Work to include under-represented groups when working with communities.
3. Continue to align equity efforts within SPU, with city, county, and community efforts.

SPU incorporates environmental justice and service equity into a variety of program areas, including community partnerships, the Women and Minority Business Enterprise program, Branch Equity Teams, equity planning and analysis, and its Local Hazardous Waste Management Program. (for full case study, see Chapter 4)

<sup>21</sup> “Workforce Diversity,” *Journal AWWA*, February 2019

## DC Water's Human Capital Management Program

DC Water's 2013 strategic plan, *Blue Horizon 2020*, outlined a strategy for the utility to "recruit, develop and maintain a high performing workforce." The utility's human resources department has set out accomplish that goal by re-thinking its approach to human capital. Recognizing that its people are the utility's most important resource, DC Water has focused its human resource efforts on strengthening its organizational culture and improving employee engagement by investing in onboarding, change management, performance management and engagement. These investments are helping DC Water create a results-oriented, high performing work culture (for full case study, see Chapter 4).

## Partnership Opportunities

- Local community colleges and trade schools may be good resources for workforce development training and local recruitment.

## Resources

- *Achieving World Class: DC Water Human Capital Management Program*. Clifford Mustaaafa Dozier, 2018.
- *EPA'S Role in Addressing the Urgent Water Infrastructure Needs of Environmental Justice Communities* ([https://www.circleofblue.org/wp-content/uploads/2018/03/NEJAC\\_WaterInfrastructureFinancingDraft.pdf](https://www.circleofblue.org/wp-content/uploads/2018/03/NEJAC_WaterInfrastructureFinancingDraft.pdf)). National Environmental Justice Advisory Coalition, 2018. Page 36.



# 3. Effective Community Engagement

**C**ommunity engagement is the process of involving residents, businesses and other stakeholders in decisions that have the potential to impact them. Decisions could be related to utility policies, plans, projects or programs. Many federal, state and local regulations require public notice and input. However, going beyond the minimum requirements, community engagement is based on the principle that involving the community during initial planning and throughout the process will lead to more effective and sustainable outcomes over the long-term. Community engagement is an important component of the utility's community stewardship role, and if done well, can support the local economy, neighborhood stability and community resilience as an integral part of their water service delivery mission.

## Benefits of Effective Community Engagement

Taking a proactive approach to community engagement can improve customer satisfaction and relations with the larger community. Shifting perspectives to think of the utility as part of the broader community can help evolve an "us-them" approach to a "we" approach to doing business. The quality of community relationships also has direct business implications for utilities by avoiding negative publicity and regulatory delays and providing more certainty during a decision-making process rather than reacting to unforeseen community resistance under pressure. According to *The Community Engagement Guide for Sustainable Communities*, community engagement is a process through which community members are empowered to own the change they want to see. The report summarizes the benefits of effective engagement as:

- Legitimacy and increased support for plans and projects.
- Improved community/government relations.
- More complete community and agency understanding of the issues.



*The Effective Utility Management framework considers the community stewardship role within human resources through the following attributes:*

### **Stakeholder Understanding and Support**

- Actively engage in partnerships and involves stakeholders in the decisions that will affect them.
- Engender understanding and support from oversight bodies, community and watershed interests, and regulatory bodies for service levels, rate structures, operating budgets, capital improvement programs, and risk management decisions.



# Steps for an Effective Community Engagement and Outreach Process

This chapter outlines important steps to develop an effective community engagement process that can be adopted when developing a project, program, policy or plan. It may be that the utility is launching a large capital planning process, developing approaches to meet regulatory requirements, considering a new rate strategy, or rolling out a new environmental stewardship program. In any case, these steps can help build support for the final recommendation and partnerships for implementation, enhance public relations and increase employee morale by creating a more productive and meaningful engagement process with the

community. Depending on the local context, utilities may enter the process at different points or invest more time in a particular step.

## Evaluate the Utility's Current Community Engagement Efforts

As the utility anticipates upcoming decisions and associated planning documents, reflect on the questions below:

- Is the community aware of utility activities or decision points?
- Are documents easily accessible, written in plain language, and translated in multiple languages as needed?
- What level of community engagement is currently employed?
- What are the utility's expectations for level of engagement by the community?  
How do these differ from the community's expectations?
- What would it take to get to the next level of engagement?

## 1. Define the Decision Points in the Process

Start by identifying which policies, plans, programs or projects will soon be under development or revision. Each of these has a series of decision points in the process that may include defining the scope and goals, understanding existing conditions, identifying and evaluating alternatives, selecting recommendations and outlining implementation. Each of these points in the process provides an opportunity for community engagement when stakeholders can provide valuable input on the utility's recommendations.

## 2. Identify and Learn about the Stakeholders

**Stakeholder** refers to anyone who has an interest in the outcome of the decision. Stakeholders will vary depending on the scope and location of each project and can be grouped by their interests, such as local government, business and residential.

Relations between the utility and each of these groups can vary widely based on the degree of shared interests, trust and past conflicts. Public engagement efforts can tend to focus on those stakeholder groups with shared interests and low conflict such as other local agencies. However, reaching out directly to impacted communities, despite past

conflicts, can help the utility understand community concerns and explore feasible ways to address those concerns, resulting in more productive relationships going forward.

To reach stakeholders in underserved communities, begin by conducting initial interviews and research to identify community leaders and organizations. Strategies to reach community leaders can include attending existing community meetings, hosting a community event or festival, and knocking on doors to get to know residents. Reach out to active neighborhood associations, community organizations, housing organizations, after-school programs and local churches to identify leaders who know the stakeholders in their communities, including common concerns and meeting preferences. Begin conversations by asking about community concerns and goals and then look for intersections or compatibility with utility goals. Recognize that these initial discussions can be challenging and take time if neighborhoods have had a history of mistrust, broken promises and lack of investment. Understand that community members may have grown weary or cynical over time from past planning that has not addressed their concerns or resulted in improvements to their neighborhoods.

Stakeholder research can also include identifying local agencies and organizations that have a stake in the process and may be able to collaborate on shared goals or provide information and resources to strengthen the process. Helpful contacts could include staff from planning, transportation, public works, public affairs, social services, economic development, health services and other local utilities. These agency staff may have plans and data that will be helpful in learning about related initiatives and existing conditions in the community and environment.

### Expand the Stakeholder Circle

Think outside the box to identify a diverse set of stakeholders to engage in the process. Review the following list of stakeholders and identify which relationships are already in place and which would be new for the utility.

- Local government staff
- Local and regional agencies
- Community groups
- Environmental organizations
- Neighborhood associations
- Housing associations
- Schools
- Churches
- Social service agencies
- Health departments
- State and federal agencies
- Public safety departments
- Potential funders

### Evaluate the Status of Stakeholder Relationships

Based on the stakeholders identified, reflect on the following questions:

- How would one characterize the utility's relationship with each stakeholder group, especially underserved communities?
- Is the utility's engagement more frequent with some groups than others? If so, why?
- Is the utility's engagement more positive with some groups than others? If so, why?
- What are the most persistent roadblocks to developing positive relationships with impacted or underserved communities?
- Who are the (real or perceived) winners and the (real or perceived) losers in a specific action or project?

## 3. Build New Stakeholder Relationships

Effective community engagement is built by establishing professional and personal relationships that support trust, meaningful dialogue and collaboration. Even though it takes time, investing in relationship-building early in the process will serve the utility well beyond the current policy or program. Take the time to meet with community leaders to learn about their programs, goals and concerns even beyond the scope of the current utility project. Identify and acknowledge long-standing environmental justice concerns and challenges. Often utilities are well positioned to identify other partners and resources

to address community needs that are beyond the utility’s purview. Share information about the range of utility programs and services that may be useful to the community. As the utility develops trust, relationships with community leaders can become invaluable resources to reach the broader community and design an effective process.

## 4. Determine the Level of Engagement

Ultimately, the utility and its governing body are responsible for making final decisions within their granted authority. The utility manager must decide where in the process the community can provide meaningful input. Build trust with the community by being transparent about which decisions are open for discussion and which are not. Involving the community earlier in the process, at strategic decision points, will increase overall support and ownership of the final outcome. In some cases, smaller decisions that may not make a big difference to the utility can be hugely important to the community.

### Determining the Level of Community Engagement

The International Association for Public Participation’s (IAP2’s) Spectrum of Public Participation discusses public participation levels in increasing order of the potential impact of public involvement on decision-making. Increased levels of engagement can lead to decisions with more public support. The appropriate level of community engagement can vary depending on specific outreach goals, timing, location, community culture and access to technology. The table below outlines IAP2 levels of engagement.

Level of Engagement	Public Participation Goal	Promise to the Public
<b>INFORM</b>	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	“We will keep you informed.”
<b>CONSULT</b>	To obtain public feedback on analysis, alternatives and/or decisions.	“We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.”
<b>INVOLVE</b>	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	“We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.”
<b>COLLABORATE</b>	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	“We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.”
<b>EMPOWER</b>	To place final decision making in the hands of the public.	“We will implement what you decide.”

## 5. Design the Engagement Process

Build on the community information gathered and new relationships developed to structure an engagement process that fulfill's the utility's goals and meets the community's and the utility's needs. Enlist new community partners to provide input on messaging, outreach and meeting details. Develop a community engagement and media strategy that interacts and communicates with existing civic, faith, school, youth and recreational groups. Reach out to local ethnic press (radio, newspapers, websites, public access TV) to better reach the targeted audience. Ask environmental justice organizations and other civic groups for their perspectives and recommendations on how best to ensure effective communication, coordination, collaboration and decision-making.

Community meetings provide an excellent opportunity for the project team, including municipal staff and resource partners, to hear first-hand the community's experiences, needs and priorities. Recognize that underserved communities may bring up concerns that are outside of the utility's purview, but taking an actively listening role and acknowledging the concerns helps to build trust over time. It also provides an opportunity for the community to learn about the project. Design the discussion to accentuate the important role the utility plays in customers' daily lives and explore how the utility's work can help the community address some of its concerns. Consider engaging a neutral facilitator for initial meetings to support productive listening, dialogue and problem-solving. Host project kickoffs and events in the impacted neighborhoods and engage local community leaders as speakers to send a clear message that they are an integral part of the utility's engagement process. Look for opportunities for the plan or project to address multiple community priorities. For example, stormwater management approaches could include green infrastructure design, stream and river restoration efforts, flood mitigation, access improvements and enhanced community green space.

### Evaluate Current Levels of Engagement

For a utility, review the IAP2 levels of engagement examples outlined on previous page and then explore the following questions:

- What engagement methods has the utility used in the past that were successful? Which methods were less successful? Why?
- What expectations does the community have about engagement in the decision-making process?
- What are the utility's expectations?
- Was there a recent decision where the community expected a much greater level of engagement?
- Is there an upcoming decision where the utility might increase the level of engagement of impacted or underserved communities?

## A Well-Designed Process

- Work with community leaders to identify appropriate meeting times and locations for interested community members and gather these leaders' input on the outreach materials to ensure messaging resonates with the community. Ask if there are existing meetings planned that the utility could attend.
- Determine if interpretation is needed and work with local interpreters when possible.
- Consider offering food and childcare to support the participation of working families.
- Consider co-hosting with another local agency or organization that has programs and services to share with the community such as health services and disaster preparedness.
- Open conversations by asking about community needs and goals. Start with the community's broader goals and concerns.
- Connect utility goals with community quality of life and avoid technical jargon that may alienate residents from participating in the conversation.
- Use inclusive language, such as "residents" rather than "homeowners" or "citizens."
- Explain how community input will inform the project outcomes.
- Look for opportunities to convene a broad range of stakeholders on a community tour to create a shared understanding of the opportunities and constraints.

## Interactive Communication Methods

Effective community engagement relies on a two-way exchange of information between the utility and the public. Consider designing public meetings with some of the following methods to encourage interaction and two-way communication:

- Set up poster stations where community members can place dots to share their priorities and write in other considerations.
- Staff the stations with knowledgeable staff who can discuss questions, ideas and concerns with the community
- Include time in the meeting for breakout group discussions, so community members have more time to share their ideas.
- Consider including a separate activity for youth to share their ideas about the project.
- Add community ideas to a flip chart to demonstrate that their comment was heard and acknowledged.

In addition to public meetings, other tools include:

- Distribute printed or online surveys to gather concerns and preferences.
- Provide contact information for the project manager on all documents.
- In some cases for smaller project areas, door-to-door outreach can be an effective way to discuss projects and plans directly with community members.

## 6. Report Back and Adapt

Incorporate time in the project to follow up with the community, provide updates and build partnerships for implementation. Inevitably project details and timelines will change, and sharing timely updates with the community will help build trust. Even during periods of inactivity, it is important to stay in touch and keep core partners informed. Check in regularly with local leaders to see how the community is perceiving project efforts.

Reporting back to the community helps bring transparency and accountability to utility operations. Establishing shared indicators of performance with the community early in the process can help assess progress toward the utility's and community's goals. When identifying what to monitor and report, consider employing citizen science (where community members participate in data gathering) to engage the community in monitoring an issue of concern.

### **Citizen science and community-based participatory research:**

Citizen science is a form of community-based participatory research (CBPR). As defined by the W.K. Kellogg Foundation Community Health Scholars Program, CBPR is a “collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. Recognizing the value of engaging the public in scientific investigations, CBPR begins with a research topic of importance to the community, has the aim of combining knowledge with action and achieving social change to improve health outcomes and eliminate health disparities.” Citizen science can create a shared understanding of current conditions and change over time. Citizens can participate in or lead research efforts both by analyzing existing data and gathering new data for analysis.

Utilize the power of young people to bring people together around a vision for the future.

- Engage young people in a way that meaningfully informs design decisions, such as drawing on their ideas for neighborhood improvements or mapping their preferred walking routes and identifying impediments along the way.
- Integrate dedicated youth activities at community meetings and events that provide education on water quality and environmental stewardship.

### **Celebrate Milestones**

Bring the community together to celebrate successful milestones and to build partnerships for long-term stewardship.

- Community celebrations provide an opportunity to share how community input was integrated into the plan, and to share project updates.
- Milestone events also help build broader awareness about the utility services and enlist watershed stewards.
- Invite resource partners to co-host and share information about related efforts, such as stewardship and health services.
- Partner with community organizations to sponsor a fun element related to art, food or music.

## 7. Formalize the Process

Once it has invested in developing an effective process, the utility can leverage this work by formalizing the relationships and process in one or more ways. Utilities have used the following tools to support proactive, more predictable and meaningful community engagement.

### Community Advisory Committee

Creating a permanent community advisory committee (CAC) is an effective method for keeping the community informed and gathering input. Utilities may also designate community liaisons to ensure information flows productively between community leaders and the utility. When forming a CAC, ensure the membership is representative of the neighborhoods and includes community leaders from underserved neighborhoods. Consider compensating members for their time and expertise and offering food, meeting times, meeting locations and childcare to remove barriers to participation.

### Community Grants

Finding adequate resources is an ongoing priority and challenge for environmental justice groups working in distressed areas. Utilities can help by keeping the groups updated on grant funding, capacity building, technical assistance and other resources offered by partner agencies and foundations. Utilities can help open the door to local foundations, local businesses and relevant federal funding opportunities by offering to be a fiscal sponsor or co-applicant. Securing funding for community organizations will enable them to partner with the utility in developing an effective and sustainable community engagement process.

### Community Organization Contracts

Utilities may choose to contract with a respected local community-based organization to conduct community outreach on behalf of the utility. Community-based organizations can leverage existing relationships in the community to reach residents and may bring needed language skills. Contracts can be structured to provide a minimum level of outreach throughout the year with options to add services for special projects as they arise.

## Community Benefits Agreement

A Community Benefits Agreement (CBA) is a contract signed by community groups and a public or private entity detailing a range of community benefits that the entity agrees to provide as part of a capital project or development. CBAs are designed to address community concerns and directly relate to the land use and/or environmental impacts of the proposed project or development. Past CBAs have included a range of benefits including job hiring commitments, living wage jobs, new public facilities and amenities, new or improved transportation infrastructure, environmental remediation, and commitment to sustainable, low-impact construction practices.

### A Community Stewardship Plan

A Community Stewardship Plan provides a foundational document to inform community engagement and benefits for each future utility policy, plan, program and project. The plan can include the utility's policy statement and programs to support community stewardship, environmental justice and community engagement. A comprehensive multi-year document, the plan is developed with community input and updated periodically to track goals and stay current and relevant. The plan serves as a roadmap of shared expectations for utility staff and the community by outlining how the utility will address local concerns and goals across upcoming projects, decision documents, planning processes, and pilot projects or programs.

## Collaborative Problem Solving

When engaging with underserved communities, conflicts can arise due to historical tensions around broken promises, disinvestment, discriminatory practices, and lack of trust. Adopting a collaborative problem-solving approach can help multiple stakeholders reach agreement on top priority goals. Collaborative problem-solving involves bringing the key stakeholders together around an issue to explore solutions towards mutually beneficial outcomes. Convening a range of stakeholders and partners can increase areas of overlapping interest between two or more stakeholders and bring more resources to the table that can be leveraged to develop creative, mutually beneficial solutions. Consider what role the following stakeholder groups could contribute in a collaborative goal setting process:

- People with formal power to make a decision—may include utilities, councils, boards and regulatory agencies.
- People with power to block—may include unions or advocacy groups with capacity to litigate.
- People affected by the decision—includes underserved communities. The more affected a group is by a decision, the more involved they should be in the decision-making process.
- People with relevant information, resources or expertise—may include scientists and partner agencies.

As the utility reflects on a current or recent community conflict, explore how some of these collaborative problem solving approaches might reduce tension and increase creative solutions.

- Identify and agree on very specific locations and timing of the concern, rather than trying to tackle the issue more generally.
- Identify gaps in knowledge or disagreements about facts and agree to jointly fact-check information, data and assumptions through a third-party, neutral technical advisor.
- Identify partner organizations or agencies that may be able to provide resources or technical assistance to address the concern or generate a mutually agreeable solution.
- Identify funding to try out a pilot solution to the issue before committing to larger operational changes.
- Identify a smaller workgroup with representation from the key interest groups to generate viable options with pros and cons for discussion with the larger group.
- Identify an early and easy win/win goal to generate positive momentum that can be used to work up to more challenging, higher priority goals.

# Implementation Examples

- City of Seattle Community Liaison Program (see Page p.33)
- Case Study Seattle Public Utilities Environmental Justice and Service Equity (for full case study, see Chapter 4)
- Greater Cincinnati Water Works Lead Service Line Replacement (for full case study, see Chapter 4)
- San Antonio Water System Uplift Program (for full case study, see Chapter 4)

# Resources

- Seattle Community Engagement Plan: [https://www.seattle.gov/Documents/Departments/ParksAndRecreation/Business/RFPs/Attachment5%20\\_InclusiveOutreachandPublicEngagement.pdf](https://www.seattle.gov/Documents/Departments/ParksAndRecreation/Business/RFPs/Attachment5%20_InclusiveOutreachandPublicEngagement.pdf)
- Seattle Community Resources Guide: [http://www.seattle.gov/Documents/Departments/Neighborhoods/Shared/CommunityResourceHub/DON\\_Handbook\\_web.pdf](http://www.seattle.gov/Documents/Departments/Neighborhoods/Shared/CommunityResourceHub/DON_Handbook_web.pdf)
- EPA Environmental Justice Collaborative Problem Solving Model: <https://www.epa.gov/sites/production/files/2016-06/documents/cps-manual-12-27-06.pdf>



# 4. Case Studies

This chapter provides a set of in-depth case studies that offer examples and strategies for how other utilities have integrated community benefits and social equity into their programs.

Utility Function Section	Case Study
Capital Planning	<ul style="list-style-type: none"> <li>• Infrastructure Service Expansion, Indian River County, Florida</li> <li>• Lead Service Line Replacement, Cincinnati, Ohio</li> <li>• Small Water Systems, Lower Rio Grande</li> </ul>
Project Design	<ul style="list-style-type: none"> <li>• Social Equity Program, Seattle, Washington</li> <li>• Community Stewardship Partnerships, Camden, New Jersey</li> </ul>
Finance / Affordability	<ul style="list-style-type: none"> <li>• Customer Affordability Program, San Antonio, Texas</li> <li>• Customer Assistance Program, Philadelphia, Pennsylvania</li> </ul>
Contracting & Procurement	<ul style="list-style-type: none"> <li>• Disadvantaged Business Contracting, DC Water, District of Columbia</li> <li>• Community Benefits Program, San Francisco Public Utility Commission</li> </ul>
Customer Service & Communications	<ul style="list-style-type: none"> <li>• Customer Communications, San Antonio, Texas</li> </ul>
Environmental Conservation	<ul style="list-style-type: none"> <li>• Community Stewardship Partners, Camden, New Jersey</li> </ul>
Human Resources	<ul style="list-style-type: none"> <li>• Human Capital Management Program, DC Water, District of Columbia</li> </ul>

## Infrastructure Service Extension

### Indian River County Utilities, West Wabasso, Florida<sup>22</sup>

Wabasso is an unincorporated town in Indian River County, Florida. West Wabasso has a high percentage of low-income residents. For example, a 2016 study found that 62 percent of West Wabasso households were extremely low-income, compared to 25 percent of all other households in Indian River County. The median income in West Wabasso is only \$6,250, while the value of an average home is less than \$30,000. The West Wabasso community has also been severely underserved, with limited infrastructure and access to community improvements. By the year 2000, West Wabasso residents still used shallow groundwater wells that supplied brownish drinking water and used bottomless septic tanks. Additionally, local roads and sidewalks were not paved, leading to severe drainage issues. Poor water quality adversely affected community health, while drainage issues created transportation and flooding problems.

Wabasso residents contacted the county government to request assistance with growth management and infrastructure improvements in West Wabasso. Indian River County recognized the urgency of improving conditions in the historically underserved community and prioritized water-related infrastructure improvements. The Indian River County Planning Department began work on the Wabasso Corridor plan, which was created in 1995 and updated in 2000 and 2017. For West Wabasso, the Plan called for road paving, drainage and water-related improvements (Phase 1), followed by water line installations

<sup>22</sup> Information gathered from <http://www.irccdd.com/wabasso/documents/020617/2017-DRAFT-Corridor-Plan.pdf>.

and septic tank and sewer improvements (Phase 2). Phase 1 began in 2005 and finished in 2008; Phase 2 is ongoing.

Project funding came from federal Community Development Block Grants, a 2005 Disaster Recovery Initiative program and local sources, including Indian River County Utilities, the Indian River County Health Department, and the Indian River County Local Housing Assistance Program. Total funding to date for the improvements has reached over \$4.1 million—\$3.2 million in grant funding and \$924,000 in local matching resources. Indian River County has also requested resources from the Florida state legislature to fund additional water line installations, septic tank improvements and road right-of-way improvements in West Wabasso. Non-water-related improvements called for in the plan address West Wabasso Park, a community center, sidewalks and streetlights, a school and several abandoned homes.

In 2008, the Board of County Commissioners approved a resolution formally recognizing the West Wabasso Community Neighborhood. Implementation of the Wabasso Corridor Plan from 1995 to the present has resulted in significant water-infrastructure related improvements in West Wabasso, including:

- Installation of municipal water lines and connections, enabling West Wabasso residents to stop using decrepit wells and septic tanks and improving public health.
- Replacement and repair of wells and septic tanks for people unable to connect to the municipal water lines.
- Paving of roads and right-of-way improvements to address local drainage issues.

Other community improvements in West Wabasso between 1995 and today include:

- New pavilions, walking trails, basketball courts and tennis courts in West Wabasso Park.
- Improvements at Dasie Hope Center.
- Street lighting.
- New sidewalks along a major corridor.
- Residential rehabilitation projects and roof repairs.
- Demolition of abandoned homes.
- Improvements at the old Douglas School (Douglas Headstart Center).

Local funding spent on these community improvements totals \$449,000 to date.

#### **Implementation Tips**

- Listen carefully to community concerns and take action to address them.
- Develop funding expertise at the local, state and federal levels and help communities access these resources for water infrastructure improvement projects.
- Recognize that it can take time to put infrastructure-related improvements in place.

#### **Key Resources**

- Indian River County: <http://www.irccgov.com>
- Indian River County Local Housing Assistance Program and the State Housing Initiatives Partnership (SHIP) Program: [http://www.irccdd.com/planning\\_division/ship](http://www.irccdd.com/planning_division/ship)
- Wabasso Corridor Plan: <http://www.irccdd.com/wabasso/documents/020617/2017-DRAFT-Corridor-Plan.pdf>

# Lead Service Line Replacement

## Greater Cincinnati Water Works, Cincinnati, Ohio

Greater Cincinnati Water Works (GCWW) supplies more than 48 billion gallons of water a year through 3,000 miles of water mains to about 235,000 residential and commercial accounts in the greater Cincinnati area. GCWW is a national leader in water quality research and technology to protect public health. A GCWW study found that the city's 27,000 lead service lines (LSLs) connecting water mains to structures posed serious health risks to city residents. Disturbance of lead lines is known to increase the risk of lead entering water, so the only way to reduce this risk is through full replacement of the lead line, including the line on both private and public property. Landowners faced significant costs (about \$5,000) to replace LSL sections on their properties. In early 2016, GCWW started outreach efforts to educate the community about the need to address the LSLs, hosting monthly meetings in all 52 city neighborhoods.

In June 2017, Cincinnati City Council enacted [ordinances](#) that required the replacement of all LSLs by 2032. GCWW then started the Lead Service Line Replacement Program (LSLRP) to remove all lead water service lines from the water system. Once notified by the City of Cincinnati, a property owner has 30 days to hire a contractor or contract with GCWW to complete the work. To help make private LSL replacement more affordable, the City developed a cost share and financing program. Property owners can pay off their share of line replacement costs over five or ten years as a semi-annual assessment to their property tax bill at zero percent interest.

GCWW also established a customer assistance program, Help Eliminate Lead Pipes (HELP), as part of the LSLRP to provide additional assistance to qualifying low-income property owners beyond GCWW cost sharing. The city dedicated a \$200,000 annual revenue stream from cell phone advertising space on city water towers for the program. Privately donated funds from GCWW customers, corporations, city employees and others also help fund the program.

Community input shaped both programs. "People in challenging situations—such as long-time homeowners on a fixed income facing rising property taxes—helped us think through what was realistic and affordable," said GCWW Director Cathy Bernardino Bailey. "We came up with the 10-year payback period and the HELP Program as well as our newsletter and maps based on community feedback. A homeowner who qualifies for assistance will pay about \$20 a month for the removal and replacement of the lead line on their property. Everyone should have the opportunity to replace their lead service lines and provide their families with lead-safe water."

The program has a 35 percent participation rate. As of November 2018, HELP has provided almost \$51,000 in payment assistance to low-income homeowners. GCWW expects LSLRP and HELP participation to increase further in 2019, when it starts advertising the programs. "Our outreach efforts have been vitally important," noted Bailey. "We took the time and energy and structure and planning to have continuous conversations and messages for almost two years, until we took the first line out. People have been with us every step of the way."

*"Everyone should have the opportunity to replace their lead service lines and provide their families with lead-safe water."*

GCWW Director Cathy Bernardino Bailey

### Additional GCWW Services

GCWW offers free lead testing for anyone in the service area.

Customers can determine if their pipes need replacing by visiting a website, using an interactive lead service map, or by calling a helpline.

Customers can request to participate in the LRCRP and HELP program by phone and email.

### Implementation Tips

- Start community outreach early, sharing general information to start and then incorporating community feedback during every project stage, from planning and design through to implementation and operation.
- Make communication as easy and direct as possible, offering several methods of contact.
- Explore creative funding and financing methods. In Cincinnati, GCWW's use of advertising revenues and zero percent financing helped make the LSLRP and HELP program possible.
- Provide regular project updates in person, online and in newsletters sent with utility bills. Highlight achievements, next steps and timelines. Share any challenges and identify solutions.
- Consistently ask for customers' feedback and tell them how the utility will use their input in the program design.
- Get out in the community as much as possible and be open to learning. People's needs and priorities, neighborhood history, and current community conditions vary widely. Assumptions invite misunderstanding.
- Recognize the expertise of the customers. They are the people who live, work and grow up in the service area. Many have lived there for decades. Ask them questions and listen well. They are vital information resources.

### Key Resources

- To learn more about the LRCRP and the HELP program, visit [lead.myGCWW.org](http://lead.myGCWW.org).
- LSLRP Legislation (enabling ordinance): <https://www.cincinnati-oh.gov/water/assets/File/Lead/CincinnatiLeadServiceLineReplacementOrdinance.pdf>
- GCWW Lead Newsletter: <https://la.mygcww.org/news/>
- Lead Look-Up Map: <https://gcww.maps.arcgis.com/apps/webappviewer/index.html?id=0a170c268c694e46a8a4e394630df0bd>
- GCWW Annual Report: <https://www.cincinnati-oh.gov/water/about/annual-report>



# Small Water Systems

## Lower Rio Grande Public Water Works Authority, Southern New Mexico

The Lower Rio Grande Public Water Works Authority (LRGPWWA) formed in 2009 as a result of more than five years of collaboration and cooperation between five mutual domestic water associations. These associations, which served separate colonias in Southern New Mexico, had decided to develop a water system partnership to address challenges with ownership, maintenance and capital improvement costs. The partnership formed through an Ownership Transfer, meaning that the LRGPWWA Partnership makes decisions for all partnering water systems. Success has led to growth. The partnership now serves 14 communities across southern New Mexico.

Colonias—unincorporated towns with substandard housing on lots that lack basic services such as water, electricity, and waste management—are common in areas along the United States-Mexico border region. These communities grew in the borderlands as a result of lax legislation that allowed property owners to subdivide and sell land without infrastructure improvements. These communities sometimes develop their own systems to provide services such as water and sewer; however these organizations often struggle to finance the demands of their systems and provide a living wage for their staffs or volunteers if they lack staff.

In 2005, the mutual domestic water associations from the Vado, Berino, Desert Sands, Mesquite and La Mesa communities began to meet to discuss the possibility of forming a water system partnership. Four of the five associations signed a Memorandum of Understanding later that year, committing to work together as the Regional South Central Domestic Group (RSCDG). By partnering, the group hoped to reduce duplication of efforts, meet regulatory requirements more efficiently, and develop sustainable funding that could stabilize delivery of utility services and provide a healthy working environment with competitive pay and benefits to utility staff. Because this collaboration proved to be beneficial to all, they formed the Lower Rio Grande Mutual Domestic Water Association as an umbrella entity to secure and administer funding for regional projects.

However, the group required enabling legislation from the State of New Mexico in order to discuss a formal partnership through a merger and transfer of ownership. As the partnership grew and strengthened, RSCDG began to work with state and local lawmakers to pass House Bill 185 in 2009, which formally created the LRGPWWA and gave it the legal authority to conduct mergers with willing water associations. Each of the five original water associations joined.

Following the creation of the LRGPWWA, the Authority worked with the New Mexico Office of the State Engineer to complete the merger and define a service area. The Authority also worked with the Rural Community Assistance Corporation to develop a draft merger plan and a final governance document. The collaboration required to work through each hurdle and develop consensus on a path forward strengthened the working relationships between staff at each of the merging associations and helped to build trust over time.

As of 2018, the LRGPWWA has expanded from serving five formerly independent water system to 10, and from 8 Colonias communities to 16. The merger has cut water rates in half some of the utility customers facing the cost of arsenic treatment. The merger has also helped to expand the utility's capacity to meet maintenance needs efficiently while still ensuring a high quality work environment for utility staff. Utility staff are proud to work for an organization that is community-based and that provides competitive pay and benefits for workers.

### Implementation Tips

- Use a neutral, third-party facilitator to facilitate conversation between the potential partner utilities.
- Work closely with the residents of communities served by each utility to ensure that their priorities, lived experience and felt needs will guide partnership considerations and outcomes.
- Work with communities in the language that is most comfortable for them to ensure full participation.
- Determine what kind of partnership is right for the utilities (e.g., informal cooperation, contractual assistance, joint powers agencies, ownership transfer).
- Develop organizational partnerships with relevant entities that can help with startup needs such as advocating for enabling legislation or providing technical assistance.
- Commit to building trust and consensus among all partner utilities, service area residents and organizational partners.

### Key Resources

- Lower Rio Grande Public Water Works Authority: A Water System Partnership Case Study ([https://www.epa.gov/sites/production/files/2017-12/documents/case\\_study\\_-\\_lower\\_rio\\_grande\\_2017\\_final\\_508.pdf](https://www.epa.gov/sites/production/files/2017-12/documents/case_study_-_lower_rio_grande_2017_final_508.pdf)). U.S. EPA, 2017.
- Lower Rio Grande Public Water Works Authority Success Story (<https://www.rcac.org/videos/lower-rio-grande-public-water-works-authority/>). Rural Community Assistance Corporation, 2012.
- Lower Rio Grande Public Water Works Authority Website (<http://www.lrgauthority.org/home.html>). LRGPWWA, 2018.



# Social Equity Program

## Seattle Public Utilities, Seattle, Washington

The City of Seattle's Race and Social Justice Initiative (RSJI) was created in 2004 to address institutional racism in the functioning of municipal government. One of the first of its kind in the United States, this program seeks to address inequity in the city by focusing on internal governmental operations. As a component of this city-wide effort, the Seattle Public Utilities (SPU) created the Environmental Justice and Service Equity (EJSE) division to support the utility in realizing its RSJI goals and to strengthen and irreversibly embed racial equity, inclusion and diversity across the utility, in all its functions, operations, and interactions. The program provides training and tools to help staff look comprehensively at how they can deliver utility services equitably and carefully scrutinize their policies and projects to assess how they may be creating problems for some of their customers.

For the EJSE division, environmental justice is a fundamental component of equity. Measuring who is burdened by, or who benefits from, their efforts is a core value set of EJSE's approach. It also factors in health considerations for both the people it serves and the natural resources it stewards. It recognizes that not all communities in Seattle have equal access to government and decision-makers. It works to make sure that issues of age, disability, economic status, ethnicity and race, or limited English proficiency do not limit the public's ability to connect with the utility. Following these guiding principles ensures that EJSE plays an important role in delivering SPU's promise to customers that it is constantly working to implement Seattle's Race and Social Justice Initiative.

Three goals guide the EJSE Division's equity work. The are:

1. Embed race and social justice and service equity across SPU.
2. Work to include under-represented groups when working with communities.
3. Continue to align equity efforts within SPU with city, county, and community efforts.

SPU's ESJE Division has created several initiatives to address inequity in public utility services. The utility defines service equity as providing "inclusive and equitable service to all customers" and recognizing that utility systems "carry important and documented inequities based on race, income, and gender". SPU incorporates environmental justice and service equity into a variety of program areas, including mandatory staff trainings, community partnerships, the Women and Minority Business Enterprise program, Branch Equity Teams, equity planning and analysis, and its Local Hazardous Waste Management Program. The Branch Equity Teams provide a venue to coordinate work across the utility to create service equity. SPU is working to ensure all its customers have equitable opportunities, access and results. Achieving this requires an awareness that some individuals or communities will need a greater level of support to receive equitable treatment.

## Tools and Strategies

### Equity Planning and Analysis

The most important area to redress longstanding inequities is in the project or program planning, analysis and design phase. It is here that institutional inequities are often repeated, discounted or dismissed. SPU addresses equity at the earliest stages of planning, which allows it to avoid unintended impacts on low-income and communities of color. It accomplishes this by:

- Working with staff to study their systems, processes, and data to learn if inequities are occurring.
- Training teams to design policies, programs, and services that are equitable.
- Encouraging project teams to adopt [Inclusive Outreach and Public Engagement](#) practices.
- Helping staff take corrective actions and track progress.
- Partnering with local, regional, and national agencies to support similar work.

SPU also developed its own Equity Planning Toolkit to integrate social equity considerations in SPU's projects, decisions and business practices.

### Community Partnerships<sup>23</sup>

Under its Community Partnerships program, SPU contracts with community-based organizations to create a better line of communication between partners and SPU. The purpose is to better support people of color, immigrant, refugee and low-income customers. To do this, Community Partnerships funds multi-year contracts with trusted organizations and leaders that serve a variety of ethnic and language groups. As a result, SPU is better able to reach community members when important issues emerge and build lasting relationships.

### Improving the Customer Damage Claims Process<sup>24</sup>

ESJE applied SPU's Racial Equity Toolkit to identify and address inequities in the utility's customer damage claims process. Damage claims can result from damage or loss of personal property caused by SPU system failures. By applying the toolkit to its own work, ESJE was able to identify and address inconsistencies in how the claims process was described and promoted, how access and language barriers impacted filing the form, and the benefit of staff training to better share information with communities about the process. As a result, staff were able to improve awareness and access to the damage claims process.

### Key Resources

- Inclusive Outreach and Public Engagement Guide ([https://www.seattle.gov/Documents/Departments/ParksAndRecreation/Business/RFPs/Attachment5%20\\_InclusiveOutreachandPublicEngagement.pdf](https://www.seattle.gov/Documents/Departments/ParksAndRecreation/Business/RFPs/Attachment5%20_InclusiveOutreachandPublicEngagement.pdf)). Seattle Racial and Social Justice Initiative, 2012.
- Equity Planning Toolkit ([https://www.seattle.gov/Util/cs/groups/public/@spu/@diroff/documents/webcontent/3\\_036351.pdf](https://www.seattle.gov/Util/cs/groups/public/@spu/@diroff/documents/webcontent/3_036351.pdf)). Seattle Public Utility.

<sup>23</sup> <https://www.seattle.gov/Util/AboutUs/SPUandtheCommunity/ServiceEquity/CommunityPartnerships/index.htm>

<sup>24</sup> <http://www.seattle.gov/util/AboutUs/SPUandtheCommunity/ServiceEquity/PlanningAnalysis/CustomerDamageClaims/index.htm>

# Community Stewardship Partnerships

## Camden County Municipal Utilities Authority, Camden, New Jersey

The Camden County Municipal Utilities Authority (CCMUA) provides water and sewer services in a distressed area challenged by the legacy of an industrial past: poverty, environmental degradation, low-income, declining population and crime. The utility shows leadership in promoting equity by integrating community revitalization efforts with water quality improvement and infrastructure projects. CCMUA's partnerships with the City of Camden, local non-profits and community organizations and government agencies expand the reach and increase the results of CCMUA's efforts.

In one example of CCMUA's commitment to environmental justice, the utility took a two-prong approach to address odors associated with a wastewater treatment plant located in the Waterfront South neighborhood. CCMUA invested \$50 million in new odor control equipment and secured grant funds to purchase an adjacent property and develop a riverfront park. CCMUA worked with the city, community organizations, residents, businesses and other stakeholders to design the park for the environmentally impacted adjacent neighborhood, which provides recreation and waterfront access. Phoenix Park (named for rising from the ashes of former industrial neglect) also plays an important role in water quality by utilizing best storm water management practices that reduce contamination to the Delaware River, capturing up to five million gallons of stormwater and limiting local flooding.

CCMUA has also prioritized green infrastructure and innovative stormwater management approaches as a founding member of the Camden Stormwater Management and Resource Training Initiative (Camden SMART), a collaboration with the community to improve the quality of life and environmental and economic health across the city. Camden SMART focuses on developing stormwater management policy, installing neighborhood-scale green and gray infrastructure projects, and developing green infrastructure training programs. Camden SMART, has now greened over 100 acres in Camden, resulting in capture of over 100 million gallons of stormwater, thereby reducing the potential for combined sewage flooding and overflows, with more projects currently in the planning and design phase.

Through its partnership with the Camden Collaborative Initiative (CCI), a collaborative comprised of over 50 local and national organizations including National Park Service, Nature Conservancy, and the Trust for Public Land, CCMUA plays an important role in many projects across Camden to address environmental issues, revitalize communities and improve public health. Since 2013, the collaborative has worked together to implement 50 green infrastructure projects and five waterfront parks. The collaborative has also worked to establish sustainability and water conservation ordinances and is involved in a planning effort to transform two Superfund sites and 114 contaminated sites into community assets.

CCMUA also invests in Camden's economy and youth through its green jobs programs, PowerCorps Camden and Green Ambassadors. PowerCorps provides pre-employment training for at-risk young adults who work on storm sewers, rain gardens, vacant lots and parks. The PowerCorps program now has provided jobs, environmental training and life skills training for 240 at-risk young men and women in Camden. Green Ambassadors hires 10–20 high school students for summer internships working on CCI projects. Forty-five students have completed the program, which has increased interest in environmental science among Camden youth.



The CCMUA is in the process of designing and developing a microgrid to provide green, resilient energy to critical infrastructure in Camden City, like hospitals, schools, and drinking water plant in order to reduce the City's vulnerability to power outages and climate change. Camden was also chosen by the US Water Alliance as one of six cities to launch a nationwide water equity initiative, which is focusing on safe drinking water, combined sewage flooding issues, affordability, and water workforce opportunities.

**Key Resources**

- Camden Collaborative Initiative: <http://www.ccmua.org/index.php/green-initiatives/camden-collaborative-initiative/>
- Phoenix Park: <http://www.ccmua.org/index.php/green-initiatives/phoenix-park/>
- Environmental Stewardship and Community Service Leadership: Essential Best Practices for the Clean Water Utility of the Future (<http://urbanwaters.skeo.com/wp-content/uploads/2016/07/Environmental-Stewardship-Community-Service-Leadership-essential-best-practice-for-Clean-Water-UOTF-Washington-DC-101818.pdf>), CCMUA, 2018.

# Customer Affordability Program<sup>25</sup>

## San Antonio Water System (SAWS) San Antonio, Texas

The San Antonio Water System (SAWS) in San Antonio, Texas, has provided municipal water and sewage services to surrounding residents and communities in Bexar County since 1992. It is a public utility owned by the City of San Antonio and serves more than 1.8 million people. SAWS has committed to the well-being of area communities by making sure water services are affordable for everyone. After several years of operation, SAWS identified a recurring issue—some customers were not able to pay their full water bill month to month. Recognizing that water is an essential service for everyday life, SAWS established its Uplift Assistance Program in 2000. The program's goal is to make sure no family is disconnected from municipal water and sewer services because it cannot pay its bills.

Initially, the Uplift Assistance Program started small, with a few benefits for low-income families. Today, the program includes 14 different initiatives that make it easier for low-income families to pay their monthly water bills. To be eligible, a family must be a SAWS residential account holder, meet income requirements (125% of the annual U.S. Health and Human Service poverty guidelines based on family size and gross family income) and fill out an Uplift application. Income requirements are varied based on family size—for a traditional four-person family, annual income must be at or below \$31,375. The program has enrolled over 30,000 families since its inception and will continue to help hundreds more in the future.

The Uplift Assistance Program has resulted in easier affordability and access for low-income families across San Antonio communities. Current initiatives include:

- Affordability discount—reduced monthly water bill based on household size, household income and type of service.
- Project Agua—emergency payment assistance up to four times a year.
- Plumbers to People—assistance to help residential customers repair leaking plumbing fixtures in their homes.
- Leak Adjustments—removal of charges for water lost because of a leak.
- Disability Billing/Disabled Veterans Initiative—payment extensions to residential customers who receive disability income.
- WaterSmart—online tool to help save water and money.
- Courtesy Hold—prevention of water service shutoff during Uplift application processing.
- Reduced Deposit—lower security deposit amount for qualifying customers.
- Reduced Meter Service Fee—lowers amount charged to send a technician to disconnect water service due to non-payment.
- SAWS Payment Agreements—payment plan for past-due account balance.
- Agency Referrals—connects customer with local agencies to provide additional assistance. Some of the partner programs include: Dress for Success, pet assistance (free food if spayed/neutered), tuition and book assistance for job training.

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*“Since water is an essential part of life, we want to make sure no family ever has to be disconnected because they can’t pay their bills.”*

Uplift  
Assistance Program

<sup>25</sup> Information gathered from <https://uplift.saws.org/>

- Senior Citizen Billing—waives late payment penalties for customers age 60 and older.
- Domestic Violence Deposit Waiver—allows victims to open a new service account without paying a security deposit.
- Laterals to People—assistance to repair sewer lateral from home exterior to property line.
- Disability Billing/Disabled Veterans Initiative—payment extension to residential customers on disability income.

#### **Implementation Tips**

- Establish initiatives and programs to reduce costs for low-income families.
- Make it as easy and accessible for low-income families to apply for these programs and initiatives.
- Consider a range of solutions to meet differing community needs and circumstances.
- Attend community events to connect with community partners.
- Work through the schools to notify parents about programs to avoid water disconnects.
- Forge partnerships with local agencies and organizations to provide additional support for struggling families.
- Streamline the process so the same application may qualify for multiple programs as well as similar programs at other local utilities such as gas and power.

#### **Key Resources**

- SAWS website: <https://www.saws.org/Service/>.
- Uplift website: <https://uplift.saws.org/>.



# Customer Assistance Program

## Philadelphia Water Department, Philadelphia, Pennsylvania

Philadelphia's Water Department provides drinking water to the City of Philadelphia and parts of Bucks County and wastewater service to the City of Philadelphia and 10 municipalities and authorities in Montgomery, Delaware and Bucks counties. The Philadelphia Water Department serves around 1.7 million people and the wastewater system serves about 2.2 million people.

Water affordability is a significant challenge for many low-income residents in Philadelphia. The city has the highest poverty rate of the 10 biggest cities in the United States, with 25 percent of adults and 38 percent of children living in poverty, and almost half of its households earning less than \$35,000 a year. Additionally, communities of color are [disproportionately more affected](#): while 22 percent of low-income families are white, 58 percent are African American. According to Philadelphia Water Department figures, some 86,000 household accounts—one in five in the city—have had water shut off at least once.

Philadelphia's Water Department expanded its assistance programs by launching an income-based rate structure in July 2017. Legislation was approved in 2015 to create the Income-Based Water Revenue Assistance Program (IWRAP), now known as the Tiered Assistance Program (TAP). The program offers low-income customers payment plans based on a percentage of their incomes, with lower rates available for households at or below 50 percent[confirm] of the federal poverty line. Seniors are offered the program that provides the lowest monthly bill. Additionally, the program connects struggling ratepayers to housing advocates who can help ensure that they avoid foreclosure over unpaid bills. Once customers are enrolled in a payment plan, they are eligible for forgiveness of penalties and protections from shutoffs with consistent monthly payments. The Philadelphia Water Department estimates that about 60,000 customers will be eligible for assistance under TAP. The program is the first in the nation to tie water rates to income.

As of 2018, the program has more than 11,000 enrollees. Looking forward, by connecting homeowners at risk of foreclosure to resources and support, the program has the potential to stabilize families, reduce displacement, and prevent vacancy and blight. Additionally, it can encourage the utility to refocus its efforts and budget on improving infrastructure, rather than collecting unpaid bills and reacting to crises. By easing the burden of water bills for the most vulnerable communities, the utility is helping to build stability and economic prosperity.

### Implementation Tips

- Build partnerships with community organizations to provide customers with links to additional resources.
- Consider innovative financing approaches such as tying water rates to income.

### Key Resources

- Philadelphia Water Department Strategic Plan (no explicit EJ references—"customer service, outreach, and assistance" is the focus): <https://www.phila.gov/water/rateboard/PDF/PWDEExhibit2.pdf>
- Philadelphia Water Department Newsletter: <https://public.govdelivery.com/accounts/PAPHILAWATER/subscriber/new>
- Customer Assistance Program application: <https://cap.phila.gov/static/index.html>

*"If we want to maintain our high home-ownership rate, this is one of those things that is hugely important. [...] It's the right thing to do."*

Maria Quiñones-Sánchez,  
Philadelphia City  
Councilwoman

# Disadvantaged Business Contracting

## D.C. Water's Values

**Respectful**—serve with a positive attitude, courtesy and respect that engender collaboration and trust.

**Ethical**—maintain high ethical standards, accountability and honesty as we advance the greater good.

**Vigilant**—attend to public health, the environment, quality, efficiency and sustainability of our enterprise.

**Accountable**—address challenges promptly, implement effective solutions and provide excellent service as a committed team.

## D.C. Water and Sewer Authority, District of Columbia

The Washington D.C. Water and Sewer Authority (DC Water) provides municipal water services, wastewater collection and treatment services, and maintains the city's fire hydrants for its customers. The demographics of the service area are some of the most diverse in the country. While the District has experienced sustained economic growth, its benefits have been uneven; poverty rates remain high among people of color and female-headed households. While only 7 percent of white, non-Hispanic residents lived below the poverty line in 2014, 26 percent of African American residents and 22 percent of Hispanic residents lived in poverty. Over 32 percent of female-headed households lived below the poverty line.<sup>26</sup>

To help address economic inequities among its customers, the utility finalized a Business Development Plan in 2009 that outlines a framework to improve participation of traditionally underrepresented populations in its work around the city. The plan provided goals for certified local business enterprises (LBEs), local small business enterprises (LSBEs), minority business enterprises (MBEs) and women-owned business enterprises (WBEs) to participate as vendors, prime contractors, subcontractors and joint ventures for the utility's many contracts. The plan also includes a Fair Share Program that encourages and facilitates participation by MBEs and WBEs in federally funded work.

DC Water's Business Plan identified multiple avenues to include the disadvantaged enterprises in contracting and procurement opportunities with the District government's water agency, including:

- Established overall local and small business participation goals
- Established procurement regulations for non-federally assisted projects in areas of goods, services and architectural and engineering construction
- Large purchases LBE/LBSE preference program
- Preferred points for proposals submitted
- Preference price reduction for bids submitted
- Small business LBE/LSBE utilization for contracts under \$100,000
- Waiving bonding and other requirements for projects under \$250,000 at the general manager's discretion to enable LBE/LSBE's to participate in DC Water procurement and contracting activities
- Outreach efforts including advertising solicitations in ethnic press and hosting procurement fairs and conferences
- Project specific workshops
- Prime Contractor outreach
- Varied capacity building activities to expand the pool of qualified LSBEs, MBEs and WBEs

<sup>26</sup> <https://www.dcfpi.org/wp-content/uploads/2009/03/DC-Poverty-Demographics.pdf>.



DC Water's 2009 Business Development Plan has utilized multiple strategies which have resulted in significant gains for minority and women-owned businesses. These benefits include:

- As of September 2016, 15 DC Water construction projects were supported by federal grants totaling \$280 million with 35.5 percent of those contracts awarded to MBE firms (about \$99.6 million) and 6.13 percent awarded to WBE firms (about \$17.2 million).<sup>27</sup>

DC Water holds up to 10 sessions annually around the District to share upcoming contract opportunities with certified MBE and WBE businesses.

- DC Water partners with the University of the District of Columbia and Washington Parks and People to train and prepare District residents for Green Infrastructure (GI) job opportunities, including certification via the National Green Infrastructure Program (NGICP) exam. These job opportunities include construction, inspection and maintenance of GI facilities.

The District of Columbia is very diverse, including a significant multi-generational African-American population which until recently comprised the majority of the population. However, as the nation's capital continues to grow, requiring expansion and modernization of its water delivery and storm water infrastructure, economic opportunity resulting from the city's rapid growth and development has not been broad based. These efforts by DC Water to drive economic opportunity to local, small, minority, and women-owned businesses have had positive impacts.

#### **Implementation Tips**

Employing SBEs, MBEs and WBEs through direct policy action allows these businesses to compete with larger, more-established contractors and can help keep costs down for utilities, while growing the local economy.

#### **Key Resources**

- D.C. Water: <https://www.dewater.com>
- D.C. Water Business Development Plan: [https://www.dewater.com/sites/default/files/DC\\_Water\\_Business\\_Development\\_Plan.pdf](https://www.dewater.com/sites/default/files/DC_Water_Business_Development_Plan.pdf)
- US Water Alliance profile on D.C. Water: <http://uswateralliance.org/organization/dc-water>

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<sup>27</sup> <http://uswateralliance.org/organization/dc-water>.

# Community Benefits Program

## San Francisco Public Utility Commission, San Francisco, California

The San Francisco Public Utilities Commission (SFPUC) has provided water, power and wastewater services to area communities for decades. Since 2009, SFPUC has demonstrated how public water and wastewater utilities can serve as catalysts for expanding economic inclusion by creating job opportunities, revitalizing low-income neighborhoods and building community resilience. As part of its operations, the SFPUC recognizes the importance of working with area communities and stewarding the area's natural resources. The SFPUC also recognized that its operations can have impacts as well benefits and can disproportionately affect disadvantaged neighborhoods. For example, the SFPUC's main sewage treatment facility, which treats 80 percent of the city's sewage, is located in the Bayview/Hunter's Point neighborhood, one of the most disadvantaged neighborhoods in San Francisco.<sup>28</sup>

To start addressing these inequities and engage consistently with all communities in the service area, SFPUC became the first public utility in the nation to adopt Environmental Justice and Community Benefits policies in 2009 and 2011 respectively and have developed robust programs to implement the policy goals. The SFPUC also advises local governments across the country that are interested in developing their own Community Benefits and Environmental Justice programs.

The Community Benefits and Environmental Justice programs seek to better serve and cultivate partnerships with communities in all service areas, ensure that public benefits are shared across all communities, and prevent, mitigate and lessen disproportionate environmental impacts. To date, the Commission has invested in over 80 initiatives and programs to enhance the social, economic and environmental well-being of SFPUC-served communities. These initiatives and programs cover workforce development, education, art, environmental justice/land use, neighborhood partnerships and small-business opportunities resulting in substantial benefits for communities and neighborhoods across San Francisco.

### Workforce Development<sup>29</sup>

Recognizing the need for a robust, diverse and skilled workforce, the SFPUC emphasizes workforce investment strategies as one of its core initiatives, particularly for jobs related to SFPUC's core functions. Programs provide career exploration and summer internships for high school seniors and local college students, work with local workforce and youth development agencies to develop training materials for entry-level jobs, and provide job placement assistance and support programs that remove barriers to employment, such as access to affordable childcare, so that local residents are job ready. To date, the SFPUC has provided over 1,400 area youth with internship and job opportunities.

### Economic Development

The SFPUC focuses on economic development strategies that incorporate public-private-community partnerships and contracts with area small businesses that hire workers from neighborhoods affected by particular projects.

<sup>28</sup> [https://irle.ucla.edu/wp-content/uploads/2016/03/ResearchBrief\\_Tsai34\\_000.pdf](https://irle.ucla.edu/wp-content/uploads/2016/03/ResearchBrief_Tsai34_000.pdf), pdf pg. 5

<sup>29</sup> <https://sfwater.org/Modules/ShowDocument.aspx?documentid=11622>.

## Education

SFPUC emphasizes that students are the long-term guardians and stewards of the SFPUC water, power and wastewater systems, and so supports educational programs and activities. Programs support the advancement of engineering and science education in disadvantaged communities, fund the development of eco-literacy curricula, provide scholarship awards for college and learning experiences for area youth and provide building design and energy-efficiency services to public school districts to support sustainability efforts. To date, over 11,000 students have participated in SFPUC-funded eco-literacy programs.<sup>30</sup>

## Environmental Justice

The SFPUC defines environmental justice “as the fair treatment of people of all races, cultures and incomes”<sup>31</sup> and believes that no group of people should take on an unfair share of environmental consequences related to its operations. The SFPUC works to lessen these impacts through programs and communities across all of its service areas. Programs support land use and urban agriculture initiatives that educate residents about sustainability practices, help with access to wellness services and healthy food, and provide technical assistance to organizations that build and renovate community housing, stores and other community assets.

## Social Impact Partnership Program

SFPUC leverages ratepayer investments with its Social Impact Partnership Program. All proposals for Commission contracts worth \$5 million or above must include a Community Benefits component. Contract bids are evaluated for their voluntary contributions to workforce development, economic development, education and environmental justice. Successful contractor proposals ensure that local businesses and workers receive economic benefits from a project. Examples of successful contractor-sponsored projects include trainings for area small businesses and nonprofits and mentoring partnerships with local businesses and nonprofits to help them develop business plans and diversify funding sources. “To date SFPUC has 58 contracts that include \$15.5 million in commitments to local nonprofits and schools in the form of direct financial contributions, volunteer hours, and in-kind donations throughout the life of the contract.”<sup>32</sup> These commitments are included in the contract with the rest of the billable scope of work.

## Bayview Hunters Point Neighborhood Revitalization

The Bayview Hunters Point Neighborhood is located next to the Southeast Water Pollution Control Plant, which manages 80% of the city’s wastewater. SFPUC developed an agreement with the Bayview community to lessen the environmental and social impacts of the plant and provide residents with educational and job opportunities through the Southeast Community Facility and Greenhouses. The Southeast Community Facility and Greenhouses provides programs, college courses, job training and career opportunities and access to recreational activities. SFPUC has supported the community directly through 1,400 annual youth internships, the citywide Drink Tap stations that provide access to clean drinking water, and a Contractors Assistance Center which builds capacity and provides technical/administrative assistance to local small businesses to make them competitive candidates for contracting opportunities around the city and on capital projects

<sup>30</sup> <https://sfwater.org/modules/showimage.aspx?imageid=5874>.

<sup>31</sup> <https://sfwater.org/Modules/ShowDocument.aspx?documentid=11622>.

<sup>32</sup> *An Equitable Water Future* ([http://uswateralliance.org/sites/uswateralliance.org/files/publications/uswa\\_waterequity\\_FINAL.pdf](http://uswateralliance.org/sites/uswateralliance.org/files/publications/uswa_waterequity_FINAL.pdf)). US Water Alliance, 2017.

### **Implementation Tips**

- Enlist the private sector to help leverage investments in community programs and initiatives.
- Consider supporting a variety of programs and initiatives across key priority focus areas.
- Implement programs that provide support for local youth, as they are the ultimate long-term “caretakers” of the utility and its service area.
- Work first with neighborhoods that face negative impacts from the utility’s operations.

### **Key Resources**

- *Community Benefits Policy* (<https://sfwater.org/modules/showdocument.aspx?documentid=3676>). San Francisco Public Utilities Commission. 2011.
- *Community Benefits Program Brochure* (<https://sfwater.org/modules/showdocument.aspx?documentid=3678>). San Francisco Public Utilities Commission. 2013.
- *Community Benefits Program Social Impact Partnerships* (<https://sfwater.org/Modules/ShowDocument.aspx?documentid=13304>). San Francisco Public Utilities Commission. 2018

# 5. Resources and Tools

This chapter provides a resources and tools grouped by functional area.

## A. Capital Planning

What is Service Equity? <http://www.seattle.gov/util/AboutUs/SPUandtheCommunity/ServiceEquity/ServiceEquity/index.htm> Seattle Public Utilities Race and Social Justice Initiative

Environmental Justice & Service Equity Division Strategic Framework [https://www.seattle.gov/util/cs/groups/public/@spu/@diroff/documents/webcontent/3\\_036352.pdf](https://www.seattle.gov/util/cs/groups/public/@spu/@diroff/documents/webcontent/3_036352.pdf)

US EPA Building the Capacity of Drinking Water Systems: Capacity Development Resources for States and Small Systems—a resource list of the many organizations across the country providing technical and financial assistance to public water systems

<https://www.epa.gov/dwcapacity/capacity-development-resources-states-and-small-systems>

EPA'S Role in Addressing the Urgent Water Infrastructure Needs of Environmental Justice Communities [https://www.circleofblue.org/wp-content/uploads/2018/03/NEJAC\\_WaterInfrastructureFinancingDraft.pdf](https://www.circleofblue.org/wp-content/uploads/2018/03/NEJAC_WaterInfrastructureFinancingDraft.pdf)

## B. Project Design

Seattle Public Utilities Equity Tool Checklist (<http://www.seattle.gov/util/AboutUs/SPUandtheCommunity/ServiceEquity/PlanningAnalysis/index.htm>), Seattle Public Utilities.

DC Water Business Development Plan ([https://www.dcwater.com/sites/default/files/DC\\_Water\\_Business\\_Development\\_Plan.pdf](https://www.dcwater.com/sites/default/files/DC_Water_Business_Development_Plan.pdf)). District of Columbia Water and Sewer Authority, 2009.

Community Benefits Policy (<https://sfwater.org/modules/showdocument.aspx?documentid=3676>). San Francisco Public Utilities Commission. 2011.

Community Benefits Program Brochure (<https://sfwater.org/modules/showdocument.aspx?documentid=3678>). San Francisco Public Utilities Commission. 2013.

## C. Construction & Maintenance

Minimizing Construction Impacts on the Community, Vancouver Community Fact Sheet for the Capilano Water Main Project ([http://www.metrovancouver.org/services/water/construction-maintenance/ConstructionProjectPublications/CWMP\\_MinimizingTrafficImpactsFactSheet.pdf](http://www.metrovancouver.org/services/water/construction-maintenance/ConstructionProjectPublications/CWMP_MinimizingTrafficImpactsFactSheet.pdf)). August 2015.

City of Seattle Project Construction Coordination Office (<http://www.seattle.gov/transportation/projects-and-programs/programs/project-and-construction-coordination-office>)

- Project Coordination Groups (<http://www.seattle.gov/transportation/projects-and-programs/programs/project-and-construction-coordination-office/project-coordination-groups>)
- Access Seattle Hub Coordination (<http://www.seattle.gov/transportation/projects-and-programs/programs/project-and-construction-coordination-office/construction-hub-coordination>)
- East Baltimore Development Initiative Demolition Protocol (<http://www.ebdi.org/uploads/pdfs/EBDIDemolitionProtocol.pdf>). East Baltimore Development, Inc. 2010.

## D. Finance

*Drinking Water and Wastewater Utility Customer Assistance Programs* ([https://www.epa.gov/sites/production/files/2016-04/documents/dw-ww\\_utilities\\_cap\\_combined\\_508.pdf](https://www.epa.gov/sites/production/files/2016-04/documents/dw-ww_utilities_cap_combined_508.pdf)). EPA, April 2016

*Water and Wastewater Residential Rates Affordability Assessment Tool* (<https://efc.sog.unc.edu/resource/water-and-wastewater-residential-rates-affordability-assessment-tool>). UNC School of Government Environmental Finance Center

*Addressing Affordability as a Necessary Element of Full-Cost Pricing* (<https://awwa.onlinelibrary.wiley.com/doi/full/10.5942/jawwa.2017.109.0132>). Journal American Water Works Association, 2017.

*Navigating Legal Pathways to Rate-Funding Customer Assistance Programs* (<https://efc.sog.unc.edu/project/navigating-legal-pathways-rate-funded-customer-assistance-programs>). Environmental Finance Center at the University of North Carolina at Chapel Hill, 2017.

*Customer Assistance Programs for Multi-Family Residential and Other Hard-to-Reach Customers* by Water Research Foundation <https://www.waterrf.org/research/projects/customer-assistance-programs-multi-family-residential-and-other-hard-reach>

*Measuring Household Affordability for Water and Sewer Utilities* (<https://pacinst.org/wp-content/uploads/2013/01/water-rates-affordability.pdf>). Manuel P. Teodoro, *Journal AWWA*. January 2018

## E. Contracting and Procurement

DC Works Business Development Plan <https://www.dewater.com/business-development-plan>

SFPUC Social Impacts Program <https://sfwater.org/Modules/ShowDocument.aspx?documentid=11622>

## F. Customer Service & Communications

*Terminology Guidance for Water Professionals* (<https://www.waterrf.org/resource/terminology-guidance-water-professionals-or-what-you-say-not-what-people-hear>). Water Research Foundation, 2017.

*Website Strategies for Water Professionals (or, What You See Is Not What Google Sees...)*. (<https://www.waterrf.org/resource/website-strategies-water-professionals-or-what-you-see-not-what-google-sees>). Water Research Foundation, 2017.

## G. Environmental Stewardship

*1.6 million Americans don't have indoor plumbing. Here's where they live.* ([https://www.washingtonpost.com/news/wonk/wp/2014/04/23/1-6-million-americans-dont-have-indoor-plumbing-heres-where-they-live/?utm\\_term=.57b97f8ae657](https://www.washingtonpost.com/news/wonk/wp/2014/04/23/1-6-million-americans-dont-have-indoor-plumbing-heres-where-they-live/?utm_term=.57b97f8ae657)) Ingraham, 2014.

*City of Los Angeles Bureau of Sanitation Efforts to Advance Water Equity* (<http://uswateralliance.org/organization/city-los-angeles-bureau-sanitation>). US Water Alliance, 2015.

*East Side Revitalization: Reducing the Impacts of Flooding and Floodway Regulations.* (<https://semspub.epa.gov/work/07/30296056.pdf>) U.S. EPA Region 5, 2013.

*Free Toilet Programs for Income-Qualified Customers* (<http://www.seattle.gov/util/EnvironmentConservation/MyHome/ReduceWaterUse/LowIncomeToiletOffer/index.htm>) . Seattle Public Utilities, 2018.

*Freeport Forward! Riverfront Enterprise Area Plan.* (<http://projects.skeo.com/wp-content/uploads/2017/05/Freeport-Riverfront-Enterprise-Area-Plan.pdf>) Fehr Graham and Skeo Solutions, 2016.

*Indoor Plumbing Needs on the Eastern Shore of Virginia.* ([http://www.a-npdc.org/wp-content/uploads/2016/03/Eastern-Shore-IPR-Report\\_DRAFT-FINAL\\_2015.11.03b\\_2-up.pdf](http://www.a-npdc.org/wp-content/uploads/2016/03/Eastern-Shore-IPR-Report_DRAFT-FINAL_2015.11.03b_2-up.pdf)). Skeo Solutions, 2015.

*The Avalon Green Alley Network Demonstration Project: Lessons Learned from Previous Projects for Green Alley Development in Los Angeles and Beyond* ([https://www.tpl.org/sites/default/files/files\\_upload/ca-green-alley-avalon-green-alleys-demo-project.pdf](https://www.tpl.org/sites/default/files/files_upload/ca-green-alley-avalon-green-alleys-demo-project.pdf)). Trust for Public Land and UCLA Luskin Center for Innovation, 2015.

*Inclusive Outreach and Public Engagement Guide* (<https://www.seattle.gov/Documents/Departments/ParksAndRecreation/Business/RFPs/Attachment5%20InclusiveOutreachandPublicEngagement.pdf>). Seattle Racial and Social Justice Initiative, 2012.



## H. Human Resources

*Achieving World Class: DC Water Human Capital Management Program* (weblink). Clifford Mustaaafa Dozier, 2018.

*EPA'S Role in Addressing the Urgent Water Infrastructure Needs of Environmental Justice Communities* ([https://www.circleofblue.org/wp-content/uploads/2018/03/NEJAC\\_WaterInfrastructureFinancingDraft.pdf](https://www.circleofblue.org/wp-content/uploads/2018/03/NEJAC_WaterInfrastructureFinancingDraft.pdf)). National Environmental Justice Advisory Coalition, 2018. page 36

*Renewing the water-workforce: Improving water infrastructure and creating a pipeline to opportunity.* Brookings, 2018: <https://www.brookings.edu/research/water-workforce/> (retrieved from the web on 2/12/19)

## I. History of Equity in Community Planning and Action

[CREATING EQUITABLE, HEALTHY, AND SUSTAINABLE COMMUNITIES: Strategies for Advancing Smart Growth, Environmental Justice, and Equitable Development](#), EPA 231-K-10-005, 2013





**American Water Works  
Association**