



TAPPED OUT

Threats to the Human Right to Water in the Urban United States

A PROJECT OF THE
GEORGETOWN LAW HUMAN RIGHTS INSTITUTE FACT-FINDING PRACTICUM

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Tapped Out: Threats to the Human Right to Water in the Urban United States

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PROLOGUE: RESILIENCE

“There is a profound human interest story in Detroit. And there are many frames to that story. One of those frames is the untold story of resiliency. How do you live without water?”

Charity Hicks, Researcher and Organizer, Detroit Food Justice Taskforce¹

“I’ve worked with consumers who have lived without water—get this—for years. . . . [One of my clients] used to work in the medical field, she got sick, now she can’t get herself back together. . . . She had a pretty big [electric] bill, and she didn’t have enough money coming in to make the bill payments. . . . I asked if she had any other concerns and she said, ‘well my water’s shut off but I know you can’t help me.’ And I couldn’t. I said, ‘what do you do?’ She said, ‘I buy water to drink and cook with. My neighbors help me out.’ She showers at her sister’s house. And that was her way of life. She was not bent out of shape about it anymore. It was what she had to do. The sad thing is, she had children. She had been doing it for almost two years, and as far as I know—unless she met a rich uncle—she still is. . . .

It’s a testament to all of us, when we walk in and we share with others. It doesn’t matter if they hear us, because we were surviving before we walked in and we’ll go on when we walk out. And that’s resilience.

But if they hear us, we’d love some help.”

Candace Morgan, Social Worker, Salvation Army²

1 Interview with Charity Hicks, Researcher and Organizer, Detroit Food Justice Taskforce, in Detroit, Mich. (Jan. 9, 2013).

2 Interview with Candace Morgan, Housing Programs Coordinator, Salvation Army, Eastern Michigan Division, in Southfield, Mich. (Jan. 10, 2013).

FOREWORD

“People take profound license on the stories of people. They truncate them, they filter them, put together a statement. People take our story and it’s their currency.”

Charity Hicks, Researcher and Organizer, Detroit Food Justice Taskforce³

Fact-finding is about human experiences and the stories people tell about them. The people we spoke to in Detroit and Boston have trusted us with some of the most intimate details of their lives. From this trust arises an obligation we do not take lightly. In this report we have sought to accurately portray the struggles of those who are unable to afford their water bills and the ways the utility companies do—or, as is often the case, do not—respond to their needs. Our goal is to tell these stories to compel policymakers to pay attention to the serious problems high water rates create for many people. Using these stories as our currency, we have tried to make invisible people visible. We hope that we have spent that currency well.

Our hope is that this report will demonstrate to policymakers and industry leaders not only the urgent need for change, but also that fulfilling core human rights and achieving the progressive realization of the right to water are attainable and realistic goals in the United States. Many of the solutions that can make water more affordable are already being used by some utilities and merely await widespread implementation.

We are deeply grateful for the assistance and support of all the institutions and people who made this report possible. We would like to thank all of the practitioners, advocates, aid workers, professors, utility employees, public officials, and others who generously opened their doors to us to share their time, thoughts, experiences, and insights.

In particular we would like to express our gratitude for the extra time the following people took to help us understand this topic: Pastors Toni and Ray Anderson of House of Help; Dr. Janice Beecher; Peter Cavanaugh; Roger Colton; Melissa Damaschke; Stephen Gasteyer; Patricia Jones of the Unitarian Universalist Service Committee; Susan McCormick and the Detroit Water and Sewerage Department; Liz Miller; Suren Moodliar and Kim Foltz of Massachusetts Global Action; Ann Rall and the People’s Water Board; Keith Schneider and Circle of Blue; Paul Schwartz; Curtis Smith; Maureen Taylor and Marian Kramer of Michigan Welfare Rights Organization; and Inga Winkler, Legal Adviser to the U.N. Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation.

3 Interview with Charity Hicks, *supra* note 1.

We would also like to thank Georgetown Law and its Human Rights Institute, whose ongoing commitment and support for this and projects like it made this report possible. For providing us with this opportunity and for their invaluable guidance, we would like to thank our professor Rachel Taylor and post-graduate fellow Katharine Nylund. We also thank the Georgetown Human Rights Action–Amnesty International Fact–Finding Committee, a student group, for selecting this topic one year ago for our study after an extensive proposal vetting process. Without their work and passion, this project quite literally would never have happened.

But most of all, we thank those who shared their personal stories. Without their voices, without the courage to openly share difficult experiences with us, this project could not have succeeded.

This project began as a law school course, but that is not how it has ended. The stories we heard over the past months are not stories we will quickly forget. And for none of us will this project end with the closing of the semester.

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EXECUTIVE SUMMARY

In the United States today, the goal of universal water service is slipping out of reach. Water costs are rising across the country, forcing many individuals to forgo running water or sanitation, or to sacrifice other essential human rights. The fixed costs of water systems have increased in recent years, driven in part by underinvestment in infrastructure. In many cities, this has been exacerbated by population shifts and the economic downturn. In this era of increasing costs and limited financial resources, water providers struggle to balance the competing priorities of modernization and universal access.

This report, researched and written by students of Georgetown Law's Human Rights Institute in the winter of 2013, details the causes, effects, and solutions to the affordability crisis affecting water in the urban United States. During our investigation, which we carried out in Detroit and Boston, we found that:

- The human right to water and other essential human rights are threatened by rising water rates;
- The overuse of water shutoffs as a means to enforce bill payments comes with little economic justification and leads to individuals losing the only legal source of running water in their homes;
- Water rate structures often focus on water as a commodity and in doing so neglect opportunities to optimize access, affordability, and maximum cost recovery;
- Water utility billing practices are sometimes difficult to understand and contribute to water shutoffs and inaccessibility in marginalized communities; and
- Some residents feel discriminated against with respect to water access; statistical studies confirm a discriminatory impact.

However, workable solutions exist. Informed by consultations with water practitioners and policymakers in the field, we suggest high-impact, low-burden measures targeted toward federal, state, and local actors, including:

- A general prohibition against water shutoffs for the most vulnerable populations, based on age and disability;
- Clear and legally enforceable water affordability standards;
- Progressive rate structures that facilitate greater access and cost recovery; and
- Expanded and more flexible water assistance plans to maintain continual service.

The problem of water affordability, access, and availability is a growing concern for many in the United States. Using the international human rights framework on the right to water as articulated by the United Nations Committee on Economic, Social and Cultural Rights (CESCR) in 2002, our report tells the stories of those affected by the rising cost of water in Detroit and Boston.

Every person deserves access to water regardless of income, location, or race. With a little effort, this right is realizable in the United States.

METHODOLOGY

Although many advocates work internationally on the human right to water and sanitation, a significant information gap exists regarding how these issues affect urban populations in the United States. Our project sought to fill that gap. Our aim was to provide a generalizable picture of how water policies affect affordability in the urban United States and these policies' impact on the human right to water. We did this by focusing on the following interrelated questions:

- What are the underlying causes of the increasingly steep water service rates in many U.S. cities?
- What trade-offs do individuals make to pay their water bills or prevent their water service from being shut off? How do these trade-offs adversely affect other internationally protected human rights?
- What events, in practice, precipitate a water shutoff? What do people do when their water service is completely shut off?
- What policies exist—in practice or in theory—to improve water affordability? What could be done to remedy this problem?

We selected two locations for our study: Detroit, Michigan, and Boston, Massachusetts. Both cities are located in regions with abundant freshwater supplies. By avoiding cities with problems related to water scarcity, we hoped to better isolate the causes of water unaffordability for individuals.

Our research team was comprised of nine Georgetown Law students, a post-graduate human rights fellow, and a human rights professor. The students participated in a human rights fact-finding practicum throughout academic year 2012-2013. Our team visited Detroit from January 6 to 12, 2013, and Boston on January 23, 2013. During that time, we interviewed more than seventy people, including affected individuals (people with firsthand experience of water shutoffs or the threat of shutoffs); social service providers; policymakers involved in water ratemaking, payments, or affordability standards; utility company representatives; and other practitioners directly involved with the issue of water affordability. In many instances, members of local community organizations working on economic and social justice issues introduced our team to interview subjects, which allowed us to establish a basic level of trust before initiating interviews.

To protect the privacy and confidentiality of interviewees who recounted personal events or experiences, we have used pseudonyms (unless they explicitly requested otherwise) in this report. When permitted, we have used the names of professionals, their job titles, and the names of their organizations in this report.

BACKGROUND

“It’s like we’re all on the SS Titanic and there aren’t lifeboats for everyone.”

Irene, Detroit Resident⁴

In line for donated food at the House of Help, a community church located in a converted elementary school, longtime Detroit resident Irene reflected upon the home she has owned for twenty-six years. “One of my struggles in the past years has been to keep my house,” Irene said.⁵ “I am sixty and I’m really tired. Every day it’s something new, but what can you do?”⁶ She continued, “What money do I have to buy food? I have no money to buy food after all my bills.”⁷

Irene has tried hard to pay her bills. Although she worked full-time for a social service provider, “It became harder and harder to make ends meet,” she said.⁸ “As the bills would come in, things would fall behind. You steal from Peter to pay Paul. You neglect the water bill because you’ve got a gas bill, and you pay the gas bill. The water bill is the smallest, so you let that one go.”⁹ She continued, “If you don’t have water, you can’t cook, but if you let your gas go off, your pipes will bust. It’s a cycle. . . . It gets to where even working, you can’t afford to live anymore.”¹⁰

“I’m outside, and they pull up in two water trucks,” Irene told us. “And all the neighbors are out, all my neighbors saw. This is the most degrading thing, and this woman told me they were here to shut off my water unless I had \$600 to pay them right now. I didn’t have the money. . . . I never ever got a shutoff notice before these two trucks came. They turned my water off. That was just horrendous. You can’t wash, you can’t cook, you can’t use the toilet at all, you can’t do anything. Can’t do your laundry. I had to resort to sneaking my laundry to work.”¹¹

In addition, Irene felt powerless when trying to deal with the water company. She explained, “I went up to the department of social services. I filled out an emergency form with the city to turn my water on. The welfare department found out that I hadn’t paid my water in a couple years, so they gave me nothing. They told me it was my fault it was off.”¹²

4 Interview with Irene, Detroit Resident, in Detroit, Mich. (Jan. 10, 2013).

5 *Id.*

6 *Id.*

7 *Id.*

8 *Id.*

9 *Id.*

10 *Id.*

11 *Id.*

12 *Id.*

Irene's story is not unique. Water rates are rising nationwide and, given the substantial upgrades and repairs needed by many water systems in the United States, show no signs of slowing down.¹³ Ray Solomon, a longtime social services worker in Detroit, explained the situation facing many residents: "A lot of people are working, but may still not be able to make it. For a lot of people now, their income may be \$700 a month, but their rent is \$500 a month. You can do the math."¹⁴

The rising cost of water service has left some in the United States living without the basic necessity of water. As water bills approach levels that are unaffordable for many individuals, they threaten what has come to be recognized internationally—and by many in the United States—as the human right to water.

THE INTERNATIONAL HUMAN RIGHT TO WATER AND SANITATION: AN EMERGING NORM

"Water is a human right. It should not be abridged by any man or woman. It has always been, and will always be."

JoAnn Watson, Detroit City Council Member¹⁵

The human right to safe drinking water and sanitation is mentioned explicitly in a number of human rights instruments,¹⁶ and discussed at length in the United Nations Committee on Economic, Social and Cultural Rights' (CESCR) General Comment 15 of 2002.¹⁷ It is further recognized in resolutions of the UN General Assembly in 2010¹⁸ and the UN Human Rights Council

13 Kevin McCoy, *Water Costs Getting More Expensive*, USA TODAY, Sept. 29, 2012, *available at* <http://www.usatoday.com/story/money/business/2012/09/27/rising-water-rates/1595651/>; *see* discussion *infra* Aging Infrastructure and Rising Rates.

14 Interview with Ray Solomon, former employee of Detroit Human Services, in Detroit, Mich. (Jan. 9, 2013).

15 Interview with JoAnn Watson, Detroit City Council Member, in Detroit, Mich. (Jan. 9, 2013).

16 *See, e.g.*, Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), art. 14(2)(h), Dec. 18, 1979, 1249 U.N.T.S. 13 (1980) (women's right to "adequate living conditions," including water supply), *available at* <http://www.un.org/womenwatch/daw/cedaw/text/econvention.htm>.

17 U.N. Econ. & Soc. Council, Comm. on Econ., Soc. & Cultural Rights, General Comment No. 15, U.N. Doc. E/C.12/2002/11 (Jan. 20, 2003) [hereinafter General Comment 15], *available at* [http://www.unhcr.ch/tbs/doc.nsf/0/a5458d1d1bbd713fc1256cc400389e94/\\$FILE/G0340229.pdf](http://www.unhcr.ch/tbs/doc.nsf/0/a5458d1d1bbd713fc1256cc400389e94/$FILE/G0340229.pdf).

18 The Human Right to Water and Sanitation, G.A. Res. 64/292, U.N. Doc. A/RES/64/292 (July 28, 2010).

in 2010¹⁹ and 2011.²⁰ While legal recognition of this human right may be fairly recent, the right itself—derived from undeniable human need—is anything but novel.²¹

General Comment 15 makes clear that: “The human right to water is indispensable for leading a life in human dignity [and] is a prerequisite for the realization of other human rights.”²² International law does not create these rights, but merely recognizes them and legally guarantees them.²³ Nation states (States) have an obligation under international law to (A) respect, (B) protect, and (C) fulfill all human rights,²⁴ including the right to water. More specifically:

- (A) The obligation to respect requires State parties to refrain from interfering directly or indirectly with the enjoyment of the right to water.²⁵ Violations of the obligation to respect may consist of, among other things, “(i) arbitrary or unjustified disconnection or exclusion from water services and facilities; [or] (ii) discriminatory or unaffordable increases in the price of water.”²⁶
- (B) The obligation to protect requires State parties to prevent third parties from interfering in any way with the enjoyment of the right to water.²⁷ Violations of the obligation to protect may include, among other things, “failure to effectively regulate and control water services providers.”²⁸
- (C) The obligation to fulfill includes “the obligations to facilitate, promote, and provide.”²⁹ State parties must take action to help secure the right to water for individuals and communities, but when people are unable to enjoy the right for themselves “for reasons beyond their control . . . by the means at their disposal,” the State must provide that right.³⁰ Violations of the obligation to fulfill may consist of, but are not limited to, a “(i) failure to adopt or implement

19 U.N. Human Rights Council Res. 15/9, in U.N. Human Rights Council, Report of the Human Rights Council on its Fifteenth Session, U.N. Doc. A/HRC/RES/15/9 (Sept. 30, 2010), *available at* http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/64/292.

20 U.N. Human Rights Council Res. 18/1, in U.N. Human Rights Council, Report of the Human Rights Council on its Eighteenth Session, U.N. Doc. A/HRC/RES/18/1 (Sept. 28, 2011), *available at* http://www.worldwatercouncil.org/fileadmin/wwwc/Right_to_Water/Human_Rights_Council_Resolution_cotobre_2011.pdf.

21 *See* INGA T. WINKLER, THE HUMAN RIGHT TO WATER: SIGNIFICANCE, LEGAL STATUS AND IMPLICATIONS FOR WATER ALLOCATION 9 (2012).

22 General Comment 15, *supra* note 17, at ¶ 1.

23 *See* OFFICE OF THE HIGH COMMISSIONER FOR HUMAN RIGHTS, HUMAN RIGHTS: A BASIC HANDBOOK FOR UN STAFF 3, *available at* <http://www.ohchr.org/Documents/Publications/HRhandbooken.pdf>.

24 General Comment 15, *supra* note 17, at ¶ 20.

25 *Id.* at ¶ 21.

26 *Id.* at ¶ 44(a).

27 *Id.* at ¶ 23.

28 *Id.* at ¶ 44(b).

29 *Id.* at ¶ 25.

30 *Id.*

a national water policy designed to ensure the right to water for everyone; (ii) insufficient expenditure or misallocation of public resources which results in the non-enjoyment of the right to water by individuals or groups, particularly the vulnerable or marginalized; (iii) failure to monitor the realization of the right to water at the national level . . . (v) failure to adopt mechanisms for emergency relief; [or] (vi) failure to ensure that the minimum essential level of the right is enjoyed by everyone.”³¹

According to the CESCR, water must be (A) available, (B) acceptable, and (C) accessible.³² Availability requires that the water supply for each person be sufficient and continuous for personal and domestic uses (including drinking, personal sanitation, washing of clothes, food preparation, and personal and household hygiene); according to World Health Organization (WHO) guidelines, between 50 and 100 liters of water are needed per person, per day, to meet these basic needs.³³ Acceptability means that water must be of an acceptable color, odor, and taste.³⁴ Accessibility is the element of the right to water most directly related to our project. It includes the following dimensions:

- Physical accessibility means that “water, and adequate water facilities and services, must be within safe physical reach for all sections of the population. Sufficient, safe and acceptable water must be accessible within, or in the immediate vicinity, of each household, educational institution and workplace. All water facilities and services must be of sufficient quality, culturally appropriate and sensitive to gender, life cycle and privacy requirements. Physical security should not be threatened during access to water facilities and services.”³⁵
- Economic accessibility means that “water, and water facilities and services must be affordable for all. The direct and indirect costs and charges associated with securing water must be affordable, and must not compromise or threaten the realization of other Covenant rights.”³⁶
- Information accessibility means that people have “the right to seek, receive and impart information concerning water issues.”³⁷
- Non-discrimination means that “water and water facilities and services must be accessible to all, including the most vulnerable or marginalized sections of the population, in law and fact, without discrimination on any of the prohibited grounds.”³⁸

31 *Id.* at ¶ 44.

32 *Id.*

33 *Id.* at ¶ 12(a).

34 *Id.* at ¶ 12(b).

35 *Id.* at ¶ 12(c)(i).

36 *Id.* at ¶ 12(c)(ii).

37 *Id.* at ¶ 12(c)(iv).

38 *Id.* at ¶ 12(c)(iii).

While State parties to the International Covenant on Economic, Social and Cultural Rights (ICESCR) are allowed to progressively realize the achievement of economic, social, and cultural rights, such as the right to water, they must immediately meet certain core obligations to ensure minimum essential levels of each right.³⁹ Additionally, States are obligated to take steps to progressively realize economic, social, and cultural rights and to articulate how these steps are appropriate, given their existing circumstances.⁴⁰ Moreover, General Comment 15 lays out due process requirements that must be followed before a State shuts off or otherwise interferes with an individual's right to water.⁴¹ Although the United States has not yet ratified the ICESCR, as a signatory it agrees to act in good faith "not to defeat the object and purpose" of this instrument.⁴²

39 U.N. Econ. & Soc. Council, Comm. on Econ., Soc. & Cultural Rights, General Comment 3: The Nature of States Parties' Obligations ¶ 10, U.N. Doc. E/1991/23 (Dec. 14, 1990) [hereinafter General Comment 3], *available at* <http://www.unhcr.org/refworld/docid/4538838e10.html>.

40 *Id.* at ¶¶ 2, 4. Progressive realization is flexible but not to the point of being meaningless, and "retrogressive measures" require heightened scrutiny and justification. *Id.* at ¶ 9 ("It is on the one hand a necessary flexibility device, reflecting the realities of the real world and the difficulties involved for any country. . . . [But] the phrase must be read in the light of the overall objective, indeed the *raison d'être*, of the Covenant which is to establish clear obligations for States parties in respect of the full realization of the rights in question. It thus imposes an obligation to move as expeditiously and effectively as possible towards that goal.").

41 General Comment 15, *supra* note 17, at ¶ 56.

42 *See* Vienna Convention on the Law of Treaties, art. 18, *opened for signature* May 23, 1969, 1155 U.N.T.S. 331, 8 I.L.M. 679 (1969). The International Covenant on Economic, Social, and Cultural Rights, G.A. Res. 2200A (XXI), Art. 2 ¶ 2, 21 U.N. GAOR Supp. (No. 16) at 49, U.N. Doc. A/6316 (1966), 993 U.N.T.S. 3, (Jan. 3, 1976) [hereinafter ICESCR] has 160 parties and 70 signatories. *See United Nations Treaty Collection*, U.N., http://treaties.un.org/pages/viewdetails.aspx?chapter=4&lang=en&mtdsg_no=iv-3&src=treaty (last visited Mar. 24, 2013).

WATER AFFORDABILITY IN THE UNITED STATES

“I don’t think people get what it means in the context of the United States when you don’t have water.”

Stephen Gasteyer, Assistant Professor of Sociology, Michigan State University⁴³

The Federal Framework

Water policies and pricing are largely determined on a local level.⁴⁴ The federal regulations, statutes, and programs that do exist are designed to ensure water quality, and where federal funding has been involved, it has only comprised a fraction of overall water infrastructure expenditures. This has primarily promoted solvency for water providers, rather than increasing affordability for individuals.⁴⁵ A pair of federally funded revolving loan programs has had some success, and the Environmental Protection Agency (EPA) has developed voluntary water affordability guidelines based on median community income. However, there are no mandatory guidelines requiring water to be affordable for individual ratepayers, nor is there a federal assistance program specifically dedicated to subsidizing water bills for low-income households.

The first set of statutes to effectively address water issues on a broad scale were the 1972 amendments to the Federal Water Pollution Control Act, which dealt primarily with water quality and became known as the Clean Water Act.⁴⁶ The Clean Water Act applies to all waterways with a significant nexus to “navigable waters,”⁴⁷ largely surface water. Two years later, Congress passed the Safe Drinking Water Act to apply health and safety standards to drinking water, including both surface water and groundwater.⁴⁸ Both of these statutes prompted the federal government to take a role in financing water utilities.

43 Videoconference Interview with Stephen Gasteyer, Assistant Professor of Sociology, Mich. St. Univ., in Washington, D.C. (Oct. 26, 2012).

44 See Rachel Butts & Steven Gasteyer, *More Cost per Drop: Water Rates, Structural Inequality, and Race in the United States – The Case of Michigan*, 13 *Envtl. Prac.* 386, 391 (2011).

45 CLAUDIA COPELAND ET AL., CONG. RESEARCH SERV., R40216, WATER INFRASTRUCTURE FUNDING IN THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 1 (2010), *available at* <http://www.nationalaglawcenter.org/assets/crs/R40216.pdf>.

46 See *National Pollutions Discharge Elimination System: Clean Water Act*, EPA, http://cfpub.epa.gov/npdes/cwa.cfm?program_id=6 (last updated Dec. 17, 2011).

47 33 U.S.C. § 1251 (2006).

48 42 U.S.C. §§ 300f to 300j-26 (2006). Among community water systems in the United States, 210.7 million people were served by systems that rely on surface water and 89.4 million people were served by systems that rely on groundwater in 2010. See *Water: Public Drinking Water Systems: Facts and Figures*, EPA, <http://water.epa.gov/infrastructure/drinkingwater/pws/factoids.cfm> (last updated April 2, 2012).

The Clean Water Act has been used to encourage the cleanup of major bodies of water.⁴⁹ Because of the potential financial burden on water systems from these regulations, Congress amended the Act in 1987 to create the Clean Water State Revolving Loan Fund, which provides assistance for a variety of restoration and treatment projects.⁵⁰ Acknowledging the success of the Clean Water State Revolving Loan Fund and recognizing the rising costs facing water providers,⁵¹ Congress created the Drinking Water State Revolving Loan Fund in 1996.⁵² These loans assist public water systems in complying with the Safe Drinking Water Act.⁵³ Each of the programs makes available federal funds to capitalize state loan pools at below-market rates for local projects and requires at least a twenty percent state match.⁵⁴ While funding for these programs have been significantly greater than funding for some of the grant-based programs, funding needs still far outweigh availability.⁵⁵

49 Both Detroit and Boston wastewater costs have been impacted by requirements to upgrade systems after Combined Sewer Overflow events (where storm water inundation causes wastewater systems to overflow and contaminate water sources). *See* Interview with James Goldstein, Sustainable Communities Program Director, Tellus Institute, in Boston, Mass. (Jan. 23, 2013); Interview with Nick Schroeck, Attorney, Great Lakes Environmental Center, in Detroit, Mich. (Jan. 10, 2013).

50 33 U.S.C. § 1383 (2006).

51 H.R. Rep. No. 104-741, at 3 (“The Congress finds that – (1) safe drinking water is essential to the protection of public health; (2) because the requirements of the Safe Drinking Water Act now exceed the financial and technical capacity of some public water systems, especially many small public water systems, the Federal Government needs to provide assistance to communities to help the communities meet Federal drinking water requirements”) (citation omitted).

52 42 U.S.C. § 300j-12 (2006).

53 *Id.*

54 *Id.*; EPA, DRINKING WATER STATE REVOLVING FUND (DWSRF) PROGRAM QUESTIONS AND ANSWERS (2001), *available at* <http://www.epa.gov/ogwdw/dwsrf/pdfs/qaset2.pdf>; *Water: How the CWSRF Program Works*, EPA, http://water.epa.gov/grants_funding/cwsrf/basics.cfm (last updated Mar. 6, 2012).

55 In the 2010 federal budget, the Clean Water and Drinking Water State Revolving Loan Funds received \$2.1 billion and \$1.387 billion, respectively. BETSY A. CODY ET AL., CONG. RESEARCH SERV., RL30478, FEDERALLY SUPPORTED WATER SUPPLY AND WASTEWATER TREATMENT PROGRAMS 4 (2010), *available at* <http://www.nationalaglawcenter.org/assets/crs/RL30478.pdf>. Federal water and wastewater project funding was supplanted in 2009 by the American Recovery and Reinvestment Act (the “stimulus”) by \$13.5 billion, \$6.0 billion of which was used to capitalize state revolving loan programs. COPELAND ET AL., *supra* note 45.

FOCUS EPA Voluntary Affordability Guidelines

Affordability under the Safe Drinking Water Act of 1974 applies to public water systems,⁵⁶ and it only indirectly takes individual affordability into account. If the EPA deems a specific provision of the Safe Drinking Water Act unaffordable for a specific water provider, it can grant permission to implement a less costly and effective solution.⁵⁷ Additionally, small water providers that cannot afford to comply with the cumulative impact of health and safety regulations can be exempted from some regulations.⁵⁸

In doing so, the EPA has developed a voluntary affordability guideline based on marginal expenditures: If a new regulation can be implemented, and the cost shared among the utility's customers would not exceed 2.5 percent of median household income, it is deemed affordable.⁵⁹ This voluntary guideline is based on the income of a local median household, which typically earns around four times as much as households that qualify for public assistance.⁶⁰ However, the United Nations Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (UN Special Rapporteur) has stressed the importance of focusing on the most marginalized,⁶¹ and the World Bank suggests an individual affordability guideline between three to five percent of household income.⁶²

56 42 U.S.C. § 300g-4 (2006).

57 *Id.*

58 *Id.*; see also NATIONAL DRINKING WATER ADVISORY COUNCIL, RECOMMENDATIONS OF THE NATIONAL DRINKING WATER ADVISORY COUNCIL TO U.S. EPA ON ITS NATIONAL SMALL SYSTEMS AFFORDABILITY CRITERIA XI (2003), available at http://www.epa.gov/safewater/ndwac/pdfs/report_ndwac_affordabilitywg_final_08-0803.pdf.

59 *Id.*

60 See WATER RESEARCH FOUNDATION, BEST PRACTICES IN CUSTOMER PAYMENT ASSISTANCE PROGRAMS 49 (2010).

61 Catarina de Albuquerque, United Nations Special Rapporteur of the Human Rights Council on the Human Right to Safe Drinking Water and Sanitation, *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Addendum, Mission to the United States of America*, Int'l Law Comm'n, ¶ 17, U.N. Doc. A/HRC/18/33/Add.4, (Aug. 2, 2011) [hereinafter Special Rapporteur, *United States Mission Report Addendum*] ("By its nature, a human rights analysis focuses on the situation of the most marginalized and excluded. . . . [w]hile these groups comprise a small proportion of the population, . . . they require priority attention.").

62 This standard is based on each household's expenditure on an individual basis. ANTOINE FRÉROT, WATER: TOWARDS A CULTURE OF RESPONSIBILITY 77 (2011) ("According to public authorities or international organisations . . . households should not spend more than 3 % to 5 % of their income on a water and sanitation service."). The EPA's guideline, on the other hand, is based on median household income. See *id.*

Rising water costs—and the increasing proportion of those costs borne by ratepayers—starkly highlight the lack of a national program to ensure low-income individuals’ access to water. Although the federal government has stepped in to help struggling households with other utility bills through programs such as the Low-Income Home Energy Assistance Program (LIHEAP),⁶³ this has not been expanded to help keep water flowing to those same economically constrained households. Meanwhile, the National Drinking Water Advisory Council—a federal advisory committee created by the Safe Drinking Water Act—has proposed a nationwide Low-Income Water Assistance Program (LIWAP) to the Environmental Protection Agency.⁶⁴ Over the past decade, non-governmental consumer advocacy organizations such as the National Consumer Law Center and the Utility Reform Network have increasingly drawn attention to impending infrastructure and regulatory costs in proceedings before various state public utility commissions.⁶⁵

FOCUS State Regulatory Structures

Whether households struggling to pay their water bills receive any assistance varies by state. State regulation of water providers typically depends on whether the provider is publicly or privately owned. More than eighty-five percent of water providers are publicly owned,⁶⁶ serving approximately the same proportion of the general population.⁶⁷ Publicly owned water providers generally set their own rates and are not beholden to state ratemaking organizations or statewide shutoff regulations,⁶⁸ under the assumption that the political process provides the necessary accountability to ensure just and reasonable rates.⁶⁹ With a few exceptions, most state utility commissions regulate privately owned water providers to help protect ratepayers from price gouging and other monopolistic effects.⁷⁰

63 *About LIHEAP*, U.S. DEPT. OF HEALTH & HUMAN SERVICES, <http://www.acf.hhs.gov/programs/ocs/programs/liheap/about> (last visited Mar. 29, 2013).

64 NATIONAL DRINKING WATER ADVISORY COUNCIL, *supra* note 58, at 35.

65 Darlene R. Wong & Christine Mailloux, *Comments of the National Consumer Law Center and The Utility Reform Network*, R.11-11-009 C.P.U.C. 3–4 (March 1, 2012).

66 Jennifer Baumert & Laura Bloodgood, *Private Sector Participation in the Water and Wastewater Services Industry*, U.S. INT’L TRADE COMM’N. 33 (2004).

67 NATIONAL RESEARCH COUNCIL, *PRIVATIZATION OF WATER SERVICES IN THE UNITED STATES: AN ASSESSMENT OF ISSUES AND EXPERIENCE* 15 (2002).

68 JANICE A. BEECHER, *PRIMER ON WATER PRICING* 3 (Institute of Public Utilities 2011).

69 As a notable exception, Wisconsin, which has comprehensive regulation, is “very, very good, and provides a lot of uniformity.” Interview with Janice Beecher, Director of the Institute of Public Utilities at Michigan State University, in Detroit, Mich. (Jan. 11, 2013).

70 BEECHER, *supra* note 68, at 3.

Aging Infrastructure and Rising Rates

“A previous generation of utility staff said we are simply in the business of selling water. It’s not that simple anymore.”

Roger Colton, author of the *Detroit Water Affordability Plan*⁷¹

Water and sanitation services in the United States have traditionally been inexpensive for the consumer in part because utility providers have not sufficiently recouped the full costs of developing and operating these systems through retail rates.⁷² According to James Goldstein, Director of the Sustainable Communities Program at the Tellus Institute, “Americans have had a very nice ride for decades with low-cost water and sewer costs, but we’re starting to see that change, and there are signs that it’s going to be a permanent change.”⁷³

Because the United States used materials of diminishing quality in each subsequent expansion of its water systems,⁷⁴ much of the nation’s water infrastructure is simultaneously coming to the end of its lifespan. Detroit has “crumbling, outdated, outmoded infrastructure,” said Charity Hicks of the Detroit Food Justice Taskforce.⁷⁵ In 2013, the American Society of Civil Engineers gave the United States’ water infrastructure a grade of D.⁷⁶ And estimates for replacing and upgrading the nation’s water and wastewater infrastructure over the next twenty to twenty-five years range from

71 Interview with Roger Colton, attorney and economist specializing in utility regulation, in Boston, Mass. (Jan. 23, 2013). The *Detroit Water Affordability Plan*, also known as the Michigan Welfare Rights Organization Water Affordability Plan, was a proposal to implement a rate structure based on affordability. *See infra* note 119 and accompanying text.

72 Sheila M. Olmstead et al., *Water Demand Under Alternative Price Structures*, 54 J. ENVTL. ECON. & MGMT. 181, 183 (2007).

73 Interview with James Goldstein, *supra* note 49.

74 The infrastructure that makes up the water systems throughout the country, which includes pipes and treatment facilities, was installed for the most part in three major waves: The first major infrastructure project occurred in the mid to late 1800s; the second arose as part of the New Deal in the 1930s; and the third took place between the 1950s and 1970s. The materials used during each of these eras was of diminishing quality—the pipes during the first wave were expected to last more than 100 years; the New Deal workmanship was given about 70 years; and the plastic piping of the late twentieth century was predicted to last about 25 years. Interview with Steven Gasteyer, *supra* note 43.

75 Interview with Charity Hicks, *supra* note 1, at 93.

76 *2013 Report Card for America’s Infrastructure: Drinking Water*, AMERICAN SOCIETY OF CIVIL ENGINEERS, <http://www.infrastructurereportcard.org/a/#p/drinking-water/overview> (last visited Mar. 29, 2013).

the hundreds of billions⁷⁷ to the low trillions.⁷⁸ These concerns have received some attention from members of Congress,⁷⁹ but action is needed.⁸⁰

As infrastructure costs rise, changes in water and wastewater infrastructure financing have contributed to the problem of unaffordable rate increases.⁸¹ Historically, federal and state governments would cover some long-term costs in the form of infrastructure grants.⁸² Since the 1980s, however, these grants have given way to infrastructure loans,⁸³ pushing water systems to charge their customers full-cost, or near full-cost, rates.⁸⁴ As James Fausone, Chairman of the Board of Water Commissioners at the Detroit Water and Sewerage Department, explained, “There’s an absolute lack of national and state planning on water infrastructure except on the backs of individual users.”⁸⁵

With fewer national and state funding resources, water utilities must find a way to finance their long-term costs entirely locally. To do this, they raise rates and borrow against future revenue. A 2012 survey of 100 municipalities showed water prices doubling in more than a quarter of those cities, and even tripling in a few, since 2000.⁸⁶ Increases in the cost of water are outpacing those for other utilities, rising thirty-four percent over the past twelve years, compared to a seven percent increase in electricity costs over the same time period.⁸⁷ The Congressional Budget Office

77 Butts & Gasteyer, *supra* note 44, at 386.

78 See Angela Godwin, *Show Me the Money: Options for Meeting Water Infrastructure Funding Needs*, WATERWORLD, <http://www.waterworld.com/articles/print/volume-28/issue-10/editorial-features/show-me-the-money-options-infrastructure-funding.html> (last visited Mar. 29, 2013).

79 See Patrick Crow, *Affordability and Innovation: Emerging Water Themes as Congress Commences*, WATERWORLD, <http://www.waterworld.com/articles/print/volume-29/issue-3/departments/washington-update/affordability-and-innovation-emerging-water-themes-as-congress.html> (last visited Mar. 29, 2013). See *infra* Appendix A for examples of Congressional proposals.

80 See *infra* Recommendations.

81 Environmental regulations drive costs for some systems, but rising infrastructure costs are widespread. Interview with Nick Schroeck, *supra* note 49 (“By and large the [federal environmental] laws aren’t the driving force behind costs. But it can be for some specific communities.”).

82 Interview with James Goldstein, *supra* note 49.

83 Interview with Daryl Latimer, Deputy Director, Detroit Water and Sewerage Department, in Detroit, Mich. (Jan. 11, 2013).

84 Interview with Janice Beecher, *supra* note 69. Full-cost ratemaking suggests that “burdens should follow benefits” and “argues for eliminating inefficient subsidies and transfers involving water-system financial resources,” which militates against the subsidization of low-income customers. See BEECHER, *supra* note 68, at 4–5.

85 Interview with James Fausone, Chairman of the Board of Water Commissioners at the Detroit Water and Sewerage Department, in Detroit, Mich. (Jan. 9, 2013).

86 See McCoy, *supra* note 13.

87 *Id.* Both numbers have been adjusted for inflation.

estimates that by 2019, between ten and twenty percent of households will spend more than four percent of their incomes on water; an additional nineteen to twenty-three percent of households might be spending more than two percent.⁸⁸

Many citizens who are accustomed to below-cost rates use their political power to fight these rate increases.⁸⁹ As a result, rate increases fall on those with the least political influence; as large fixed costs such as debt service are shifted to the customer base, low-income customers are hit hardest.⁹⁰ The UN Special Rapporteur noted during her 2011 visit to the United States that ninety percent of water and wastewater investments over the last twenty years were financed by consumers⁹¹ and that the United States should prioritize funding for those who are most vulnerable.⁹² She also pointed out that increased costs from infrastructure replacement and environmental regulations impose burdens on lower-income households severe enough to create the kinds of difficult financial choices the right to water forbids.⁹³

Detroit, Michigan

Detroit is home to the third-largest municipal water system in the United States.⁹⁴ The Detroit Water and Sewerage Department (DWSD) operates the system, which also serves the suburbs in its surrounding metropolitan area.⁹⁵ The system was built in the nineteenth century and expanded significantly during the postwar boom of the 1950s and 1960s.⁹⁶ In the past decade, however, the city's population has fallen by 25 percent and large areas lie vacant.⁹⁷ With fewer ratepayers

88 U.S. CONG. BUDGET OFFICE, *FUTURE INVESTMENT IN DRINKING WATER AND WASTEWATER INFRASTRUCTURE* XVII (2002).

89 See Olmstead, *supra* note 72, at 183 n.2 ("In our experience, most of the citizen involvement in water rate setting has been aimed at preventing price increases, rather than promoting them.")

90 Interview with Janice Beecher, *supra* note 69.

91 Special Rapporteur, *United States Mission Report Addendum*, *supra* note 61, ¶ 17.

92 *Id.* ¶ 80.

93 *Id.* ¶¶ 48–49.

94 *The History of DWSD*, DETROIT WATER AND SEWERAGE DEPARTMENT, http://www.dwsd.org/pages_n/history.html (last visited Mar. 29, 2013).

95 *DWSD Water Supply Map*, DETROIT WATER AND SEWERAGE DEPARTMENT, http://www.dwsd.org/pages_n/map_water_supply.html (last updated Sept. 20, 2012). This arrangement is typical of large metropolitan areas. See ALAN BERUBE ET AL., *STATE OF METROPOLITAN AMERICA: ON THE FRONT LINES OF DEMOGRAPHIC TRANSITION* 16 (2010).

96 Russ Bellant, *Water Wars*, DETROIT METRO TIMES, Nov. 13, 2002, available at <http://www2.metrotimes.com/editorial/story.asp?id=4268>.

97 Steven Gray, *Vanishing City: The Story Behind Detroit's Shocking Population Decline*, TIME NEWSFEED (Mar. 24, 2001), <http://newsfeed.time.com/2011/03/24/vanishing-city-the-story-behind-detroit%E2%80%99s-shocking-population-decline/>.

contributing to maintain water infrastructure, DWSD has increased rates to compensate for lost revenue.⁹⁸ The result has been an acute affordability crisis with tens of thousands of Detroit residents experiencing water shutoffs for inability to pay.⁹⁹

FOCUS Highland Park, Michigan

Highland Park is a small city surrounded by Detroit and home to several of our interviewees. It has its own water department but has historically relied on the Detroit Water and Sewerage Department for its sewer services.¹⁰⁰ This arrangement changed in late 2012, when Highland Park began purchasing water from Detroit after its own water treatment plant was closed for repairs.¹⁰¹ In recent years, Highland Park has struggled with problems of post-industrialization and depopulation, similarly to Detroit.¹⁰²

Highland Park's water policies are in flux. From 2001 to 2009, the city and its water system were under the jurisdiction of an emergency financial manager who exercised unilateral authority.¹⁰³ Today's mayor was elected on a platform that included substantial reform of the water department.¹⁰⁴ The city has recently created a Water Affordability Commission tasked with researching options for improving the city's water plant, infrastructure, and billing system.¹⁰⁵

98 Brett Walton, *In Detroit: No Money, No Water*, CIRCLE OF BLUE, (April, 19, 2010), <http://www.circleofblue.org/waternews/2010/world/in-detroit-no-money-no-water/>.

99 *Id.*

100 Interview with Juan Shannon, Highland Park Water Advisory Board Member, in Highland Park, Mich. (Jan. 11, 2013).

101 Interview with DeAndre Windom, Mayor of Highland Park, in Highland Park, Mich. (Jan. 9, 2013).

102 *See, e.g.*, Press Release, State of Michigan, Governor Granholm Announces New Grants to Support Renovation of Historic McGregor Public Library in Highland Park (Dec. 6, 2010), *available at* http://www.michigan.gov/granholm/0,4587,7-168-23442_21974-248034--,00.html ("hard times in the auto industry resulted in Highland Park suffering job losses, depopulation and reduced tax revenue").

103 Press Release, Michigan Department of Treasury, Highland Park Returned to Local Control, *available at* <http://www.michigan.gov/treasury/0,4679,7-121-218376--,00.html>.

104 Interview with DeAndre Windom, *supra* note 101.

105 Interview with Juan Shannon, *supra* note 100.

The latticework of water policies in Detroit exacerbates the dire effects of the economic situation for water affordability. In Michigan, unlike most states, both publicly owned water providers such as DWSD and privately owned water providers are exempt from regulation by Michigan's Public Service Commission.¹⁰⁶ Michigan law imposes a duty on municipalities to prevent water utilities from setting "undue or excessive" rates, but simultaneously forbids them from restricting the ability of private water providers to realize a return on investment.¹⁰⁷

Affordability concerns, therefore, fall upon Detroit's seven-member Board of Water Commissioners. The Board is appointed by Detroit's Mayor, and has the authority to set water and sewer rates, subject to the approval of the City Council. As the result of a judicially managed negotiation between Detroit and the suburban counties served by DWSD, four members of the Board come from the city while the remaining three are nominated by Michigan's Wayne, Macomb, and Oakland counties.¹⁰⁸ A vote of at least five Board members is required to set retail water and sewer rates.¹⁰⁹

Affordability for individuals is not a factor in DWSD's rate-setting process,¹¹⁰ and the city's recent measures to address affordability after ratepayers have accumulated significant arrearages have been insufficient to resolve Detroit's water affordability problem.¹¹¹ Since Detroit's affordability crisis began in the early 2000s,¹¹² two local programs were created to assist individuals unable

106 MICH. COMP. LAWS § 460.6 (2012). Jurisdiction over water utilities, originally created by Public Act 19 of 1967, was repealed by Public Act 246 of 1995. *See History of Commission*, MICH. PUB. SERV. COMM'N., <http://www.michigan.gov/mpsc/0,4639,7-159-16400-40512--,00.html> (last visited Mar. 25, 2013).

107 MICH. COMP. LAWS § 486.315 (2012).

108 Stipulated Order of Feb. 11, 2011, Document 2334, in re U.S. v. Detroit, No. 77-71100, 2011 WL 3515887 (Aug. 11, 2011).

109 *See* Charter of the City of Detroit, art. 7 § 1202, 20, Nov. 8, 2011, *available at* https://www.detroitmi.gov/Portals/0/docs/legislative/cityclerk/calendar_2011/Charter%20Commission/Charter%20Word%20ver%20in%20pdf%20file_%2012_1Word.pdf; Bylaws for the Detroit Water and Sewerage Department Board of Water Commissioners, art. 10 § 8, *available at* http://www.dwsd.org/downloads_n/about_dwsd/bowc/bylaws/bowc_bylaws_amended_LH3164_012512.pdf.

110 Water and sewer rates are set for neighborhoods and suburbs based on concrete, measureable variables: (1) the amount of water used in the prior year, (2) the average daily usage, (3) the amount of water used in peak demand times in prior years, (4) a fixed measurement of the average distance from the five water plants to the community, (5) fixed measurements of the elevation average differential between a community and the water plants, (6) costs for providing customer service, and (7) meter maintenance costs. DETROIT WATER AND SEWERAGE DEPARTMENT, UNDERSTANDING DWSD WATER RATES 4 (Jan. 2006), *available at* http://www.dwsd.org/downloads_n/customer_service/rate_schedules/understanding_rates_101_03-06.pdf.

111 Matthew Clark, Water Affordability in Detroit: A Legal Analysis (Jan. 9, 2012) (unpublished student paper, Wayne State University Law School), *available at* http://www.greatlakeslaw.org/files/clark_water_affordability_in_detroit.pdf.

112 *See* Jesu Estrada, *The Struggle for Water in Detroit: An Interview with Marian Kramer*, PEOPLE'S TRIBUNE (Mar. 6, 2009), <http://www.peoplestribune.org/PT.2009.03/PT.2009.03.06.html>.

to pay their water bills. The first, established in 2003, was the Water Access Volunteer Effort (WAVE), an independent non-profit organization.¹¹³ DWSD partnered with WAVE to implement a \$0.50 opt-out surcharge on water bills. WAVE then distributed the proceeds to individuals unable to pay their water bills.¹¹⁴

The second initiative, the Detroit Residential Water Assistance Program (DRWAP), was implemented in 2007 by DWSD in response to the Detroit City Council's 2006 passage of a more comprehensive Water Affordability Plan.¹¹⁵ The voluntary funds formerly distributed through WAVE are now administered by DRWAP, and they have been its exclusive source of funding since 2010.¹¹⁶ DRWAP funds single-family households at or below 200% of the federal poverty level where water has been shut off or where a shutoff is pending.¹¹⁷ Funding is capped at \$175 per household annually.¹¹⁸ Although the earlier Water Affordability Plan was not adopted, it would have more proactively addressed water rate affordability by subsidizing all households meeting certain economic hardship criteria, rather than providing financial assistance only after a household has been pushed into crisis.¹¹⁹

Boston, Massachusetts

Like Detroit, Boston is graced with natural freshwater resources and a favorable location on a natural harbor. Unlike Detroit, Boston faces neither harsh economic decline nor recent population loss; the per capita yearly income in Boston is \$33,158,¹²⁰ significantly higher than the U.S. average of \$27,915.¹²¹ In addition to the comparatively bright economic situation of the city, there are some indications that political and regulatory bodies in Boston and across Massachusetts have dedicated time and resources to addressing issues surrounding the accessibility and af-

113 Clark, *supra* note 111, at 3–4.

114 Interview with Carla Walker-Miller, WAVE Executive Director and former Commissioner, Board of Water Commissioners at the Detroit Water and Sewerage Department, in Detroit, Mich. (Jan 11, 2013).

115 Clark, *supra* note 111, at 5.

116 *Id.* at 4.

117 *Id.*

118 Flyer, Detroit Water and Sewerage Dept., Can't Pay Your Water Bills?, *available at* http://www.dwsd.org/downloads_n/customer_service/customer_information/DRWAP_flyer.pdf.

119 ROGER COLTON, A WATER AFFORDABILITY PLAN FOR THE DETROIT WATER AND SEWERAGE DEPARTMENT 36 (2005).

120 *State and County QuickFacts: Boston, Massachusetts*, U.S. CENSUS BUREAU, <http://quickfacts.census.gov/qfd/states/25/2507000.html> (last visited Mar. 25, 2013) (all figures in 2011 dollars).

121 *State and County QuickFacts: USA*, U.S. CENSUS BUREAU, <http://quickfacts.census.gov/qfd/states/00000.html> (last visited Mar. 25, 2013) (all figures in 2011 dollars).

fordability of water for their residents. The Massachusetts constitution protects a “right to clean air and water,”¹²² and the state has enacted regulations on private water companies that Boston’s public water service has largely followed.

Massachusetts state law only regulates water shutoff procedures for private companies and municipal gas and electric departments,¹²³ leaving public water utilities such as the Boston Water and Sewer Commission (BWSC) free to establish their own policies. These state-level regulations on shutoffs are relatively robust: Private water companies are prohibited from shutting off or refusing to restore service to the home of a customer experiencing “financial hardship” who certifies one of the following to the company: (1) someone in the home has a serious illness, (2) there is a child under twelve months of age living in the home, or (3) all adults in a home are aged sixty-five or older, whether or not any minors live in the home as well.¹²⁴ Heating utilities are prevented from discontinuing service for nonpayment between November 15 and March 15, and this provision can extend to water services if water is used to operate the household’s heating system.¹²⁵ In addition, residential tenants of a multi-unit building have a right to continued service if water to the building is scheduled for shutoff due to a landlord’s overdue payments, provided they can make a monthly payment towards the utility company’s estimate of their water usage.¹²⁶

The BWSC has several other policies that go beyond state level regulations for private utilities. Service may not be shut off for an arrearage less than \$250.¹²⁷ The BWSC offers discounts for senior citizens and persons with disabilities, which allow homeowners sixty-five years of age or older as well as those who are fully disabled living in one- to four-family homes, to qualify for a twenty-five percent discount on their water bill (sewer charges are not discounted).¹²⁸ The

122 The Massachusetts Constitution acknowledges a “right to clean air and water ... and the natural, scenic, historic, and esthetic qualities of their environment” as well as the “right to the conservation, development, and utilization of the agricultural, mineral, forest, water, air, and other natural resources.” Mass. Const. art. of amend. XCVII (1972) (amending Mass. Const. art. of amend. XLIX). While this provision has not yet been interpreted to guarantee the accessibility and affordability of water, it demonstrates political bodies’ longstanding concern over water issues in Massachusetts.

123 220 C.M.R. § 25.01(1).

124 220 C.M.R. § 25.03(1)(a).

125 *Id.* A family qualifies for protection due to financial hardship if their income is at or below 200% of the Federal Poverty Level. See HARAK, UTILITIES ADVOCACY FOR LOW-INCOME HOUSEHOLDS IN MASSACHUSETTS 26 (2007).

126 220 C.M.R. § 25.04(7).

127 BOSTON WATER AND SEWER COMM’N, BILLING, TERMINATION, AND APPEAL REGULATIONS 12, *available at* <http://www.bwsc.org/REGULATIONS/BTA.pdf> [hereinafter Boston Billing Regs.].

128 *Discounts for Senior Citizens and Disabled Persons*, Boston Water and Sewer Comm’n, http://www.bwsc.org/SERVICES/billing_assistance/discounts.asp (last visited Mar. 25, 2013).

BWSC also has a “Sewer Lateral Financial Assistance Program” that provides up to \$4,000 for repairs to sewer pipes that connect buildings to the main line under the street, for which property owners would otherwise be responsible.¹²⁹

Despite these efforts, however, there are indications that many Boston residents cannot afford their water bills. Although Boston’s average household income is significantly higher than the U.S. average, so too is its percentage of low-income households. More than seventeen percent of households in Boston earn less than \$15,000 annually, compared with less than twelve percent nationally.¹³⁰ Even without a major increase in water rates, the number of shutoffs in Boston nearly tripled between 2003 and 2006.¹³¹

The substantial inequality in the socioeconomic status of Bostonians results in vastly different experiences with regards to water. For example, in low income and predominantly minority neighborhoods, such as Roxbury and Mattapan, Massachusetts Global Action estimates that there are forty-two water shutoff notices for every thousand residents, with sixteen percent of the population affected. In wealthier neighborhoods such as Beacon Hill and the Back Bay, shutoffs only threaten five residents per thousand, or just two percent of the population.¹³² Massachusetts Global Action has also demonstrated that for every one percent increase in minority population of a ward, there was a 3.67 percent increase in threatened shutoffs.¹³³

129 *The Sewer Lateral Financial Assistance Program*, BOSTON WATER AND SEWER COMM’N, <http://www.bwsc.org/SERVICES/Programs/programs.asp> (last visited Mar. 25, 2013).

130 *2010 Household Income Statistics for Boston, MA*, CLRSEARCH.COM, <http://www.clrsearch.com/Boston-Demographics/MA/Household-Income> (last visited Mar. 25, 2013) (based on 2010 US Census data).

131 MASSACHUSETTS GLOBAL ACTION, *THE COLOR OF WATER: GETTING BOSTON TO RECOGNIZE THE HUMAN RIGHT TO WATER* (2007). Over the past decade, Boston’s rates have risen 119%. McCoy, *supra* note 13.

132 MASSACHUSETTS GLOBAL ACTION, *supra* note 131.

133 Massachusetts Global Action, *The Color of Water in Boston 3* (2007) (unpublished draft) (on file with author).

FINDINGS

In the course of our research, we found that there are still people in the United States who live without running water in their homes. They simply cannot afford to pay their water bills. Moreover, the inability to access sufficient water endangers other human rights, such as the rights to health, education, and dignity. Compounding the problems caused by lack of access to water, many people do not have the information they need in order to address their situation. Finally, it also appears that water shutoff policies do not treat all consumers equally. Many aspects of these findings are interrelated, and, although we discuss them according to the CESCR's criteria for accessible water,¹³⁴ the stories we heard transcend these categories.

PHYSICAL ACCESSIBILITY

“The problem is you may have at any given point 100,000 customers in shutoff status.”

Daryl Latimer, Detroit Water and Sewerage Department Deputy Director¹³⁵

Under human rights law, states have an obligation to ensure water, water facilities, and water services are physically accessible to all members of the community. This means that (a) “water, and adequate water facilities and services, must be within safe physical reach for all sections of the population;” (b) “Sufficient, safe and acceptable water must be accessible within, or in the immediate vicinity of, each household . . . ;” (c) “All water facilities and services must be of sufficient quality, culturally appropriate and sensitive to gender, life cycle and privacy requirements;” and (d) “Physical security should not be threatened during access to water facilities and services.”¹³⁶

In a nation that delivers water services year round into the homes of 268 million people through public community water systems,¹³⁷ we found that there are still individuals who live without access to water in their homes. In fact, practitioners in Detroit estimate that between 2003 and

134 See discussion *supra* The International Human Right to Water and Sanitation: An Emerging Norm, at 12-15.

135 Interview with Daryl Latimer, *supra* note 83. “Shutoff status” refers to households that have received a notice informing them that their water will be shut off as a penalty for unpaid bills. Many homes in shutoff status still have running water, mostly because of the water utility’s logistical difficulties shutting off so many properties with their limited resources.

136 General Comment 15, *supra* note 17, at ¶ 12(c)(i).

137 Special Rapporteur, *United States Mission Report Addendum*, *supra* note 61, at ¶ 14.

2004, as many as 32,000 households lacked access to water as a result of shutoffs.¹³⁸ According to General Comment 15 of the CESCR, “the water supply for each person must be sufficient and continuous for personal and domestic uses. These uses ordinarily include drinking, personal sanitation, washing of clothes, food preparation, personal and household hygiene.”¹³⁹ When a person’s water is shut off for any reason, he or she does not have access to water within the home. The relative ubiquity of and reliance on indoor plumbing in the United States means that households where water has been shut off are left with few viable outside alternatives for acceptable, sufficient, and safe water access.

According to the Environmental Protection Agency, “an entire school of thought” holds that the threat of water disconnections is the most effective means of preventing individuals from “gam[ing] the system.”¹⁴⁰ Although shutoffs are not categorically prohibited by prevailing international standards and are widely employed as a bill collection device in the United States, General Comment 15 holds that “arbitrary or unjustified” shutoffs are violations of a State’s obligation to ensure adequate access to water.¹⁴¹ This report and the recommendations that follow suggest that in most cases shutoffs are neither the most effective nor the most humane way to collect water bills.¹⁴²

People whose water has been shut off must find alternative sources of water or suffer serious consequences to their wellbeing. “I had one lady who was going to her neighbor’s and using their water hose to get water,” Janeen Smith of the Salvation Army told us. “Another got gallons of water from the store to bathe and use the toilet. In the summertime, if you can’t flush the toilet, that’s horrendous.”¹⁴³ Another aid provider told us that she received a call from one woman whose water had been shut off who had been bathing with her children at the local pool for three months.¹⁴⁴ Irene filled up jugs of water from her workplace after her water was shut off,¹⁴⁵ Connie showered at her church and brought water home from there,¹⁴⁶ and another couple made trips to their parents’ houses to get water while they worked out a billing issue with the water utility.¹⁴⁷ “I thought of things I had seen on the survival channel,” Detroit resident Mark

138 Interview with Maureen Taylor, Chair, Michigan Welfare Rights Organization, in Detroit, Mich. (Jan. 7, 2013).

139 General Comment 15, *supra* note 17, ¶ 12(a).

140 JOHN E. CROMWELL III ET AL., EPA, BEST PRACTICES IN CUSTOMER PAYMENT ASSISTANCE PROGRAMS 8 (2010).

141 General Comment 15, *supra* note 17, ¶ 44(a).

142 *See* discussion *infra* Economic Accessibility, at 31-39.

143 Interview with Janeen Smith, Caseworker, Salvation Army, in Detroit, Mich. (Jan. 8, 2013).

144 Interview with Carla Walker-Miller, *supra* note 114.

145 Interview with Irene, *supra* note 4.

146 Interview with Connie, Detroit Resident, in Detroit, Mich. (Jan. 9, 2013).

147 Interview with Andrea Maloy, Caseworker, Salvation Army, in Detroit, Mich. (Jan. 10, 2013).

Williams said after his water was shut off. “I got water out of the back of the toilet.”¹⁴⁸ Irene also described how she was forced to sneak into the nursing home where she worked to wash her clothes.¹⁴⁹

Some individuals experience life without water for only a matter of days while they find the means to pay their bills, while others have had to adapt to living without water for extended periods of time. Candace Morgan of the Salvation Army said she has “worked with consumers who have lived without water—get this—*for years*. [The client] said, ‘I buy water to drink and cook with. My neighbors help me out.’ She showers at her sister’s house. And that was her way of life. She was not bent out of shape about it anymore. It was what she had to do. The sad thing is, she had children. She had been doing it for almost two years, and as far as I know . . . she still is.”¹⁵⁰

While being forced to get water from work or a relative may seem a mere inconvenience to some, for those who are already living in or close to poverty this can be a serious problem. Individuals spend time collecting water from friends and family that they could otherwise have spent working. People may purchase bottled water to maintain access without addressing their arrearage with the water utility, but the cost of buying water is nonetheless an added expense to the tight budgets impoverished individuals must already divide between too many needs. And while completing personal chores at work may be a person’s only option, it may also violate workplace policies. Those employees then run the risk that they will be fired because they lack access to water at home.

Some individuals unable to afford their water bills ultimately resort to stealing water or illegally reconnecting their homes.¹⁵¹ Utilities stiffly penalize customers who reconnect their service without authorization,¹⁵² and taking water from another house or building without the owner’s permission is illegal. Several interviewees described observing people using hoses to connect water to neighboring houses.¹⁵³ As Don Czaplicki of the Salvation Army said, “When you’re dealing with people in poverty, you don’t want to be too judgmental, because what they’re doing may not seem ethical or moral, but it is just a moral conundrum about ethics. Do you steal bread for your child to eat?”¹⁵⁴

148 Interview with Mark Williams, Detroit Resident, in Detroit, Mich. (Jan. 10, 2013).

149 Interview with Irene, *supra* note 4.

150 Interview with Candace Morgan, *supra* note 2.

151 Interview with Nick Schroeck, *supra* note 49.

152 *See, e.g.*, Detroit Water and Sewerage Department Fees Schedule (Aug. 22, 2012), *available at* http://www.dwsd.org/downloads_n/customer_service/customer_information/dwsd_fees_charges.pdf.

153 Interview with Dorotea Manuala, Co-Chair, Rosa Parks Human Rights Day Coalition, in Boston, Mass. (Jan. 23, 2013). *See also* Interview with Robert, City Employee, in Detroit, Mich. (Jan. 7, 2013).

154 Interview with Don Czaplicki, Director of Social Services, Salvation Army, Eastern Michigan Division, in Southfield, Mich. (Jan. 10, 2013).

ECONOMIC ACCESSIBILITY

“Water should not be free, but it should be affordable.”

James Tate, Detroit City Council Member¹⁵⁵

Access to affordable water is an internationally recognized human right.¹⁵⁶ According to the CESCR, “The direct and indirect costs and charges associated with securing water must be affordable, and must not compromise or threaten the realization of other Covenant rights.”¹⁵⁷ The UN Special Rapporteur has interpreted this to mean that “direct and indirect costs and charges associated with securing water and sanitation must not compromise the ability to pay for other essential needs guaranteed by other human rights such as the rights to food, housing, education and health.”¹⁵⁸ In Detroit and Boston, we found many instances where the cost of water was so high that residents were forced to sacrifice other protected human rights.

Unaffordable Pricing

Our research found examples of violations of individual rights—such as health, housing, and education—as a result of unaffordable water costs. We also documented cases where the cost of water undermines human dignity—the core value behind human rights law.

Threats to Health

The right to the highest attainable standard of health is a fundamental human right.¹⁵⁹ When a person’s water is shut off because of an inability to pay, their physical health is put at risk. “You just can’t live without water,” said Theresa, a Detroit resident, “It’s affecting people’s health.”¹⁶⁰ At the most basic level, people may suffer dehydration because they cannot get enough water. Sewage can build up after water is disconnected, creating unsanitary conditions.¹⁶¹ Children can develop conditions such as psoriasis and eczema due to a lack of clean water,¹⁶² and people

155 Interview with James Tate, Detroit City Council Member, in Detroit, Mich. (Jan. 9, 2013).

156 Catarina de Albuquerque, United Nations Special Rapporteur of the Human Rights Council on the Human Right to Safe Drinking Water and Sanitation, *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America*, Int’l Law Comm’n, ¶ 35, U.N. Doc. A/HRC/18/33, (July 4, 2011) [hereinafter Special Rapporteur, *United States Mission Report*].

157 General Comment 15, *supra* note 17, ¶ 12(c)(iii).

158 Special Rapporteur, *United States Mission Report Addendum*, *supra* note 61, ¶ 47.

159 U.N. Econ. & Soc. Council, Comm. on Econ., Soc., & Cultural Rights, General Comment No. 14 ¶ 1, U.N. Doc E/C.12/2000/4 (Aug. 11, 2000). The right itself is grounded in ICESCR. *See* ICESCR, *supra* note 42, Art. 12.

160 Interview with Theresa, Detroit Resident, in Detroit, Mich. (Jan. 10, 2013).

161 Interview with Candace Morgan, *supra* note 2.

162 *Id.*

of all ages require water to take medicine.¹⁶³ For some people, a lack of affordable water means that they are forced to choose between paying for medical costs, medicine, food, or water; elderly individuals may be particularly harmed by such trade-offs.¹⁶⁴

One Detroit resident reported that she was frequently unable to attend her recommended therapy sessions for depression in order to try to pay her water bill.¹⁶⁵ Another Detroit resident, Janelle, said she decided to risk losing her water access in order to ensure that she could continue taking her prescribed medications, which she said she considered her top priority. A single mother with a variety of health concerns, including a severe back injury, Janelle told us she was forced to make a difficult trade-off. At the time we met Janelle, she was three months behind on her water bill.¹⁶⁶ These decisions come with steep costs on both sides. When people do not have access to water in their homes, the result is often unsanitary and may threaten their right to health.

Threats to Adequate Housing

The right to adequate housing¹⁶⁷ may also be implicated by a person's inability to pay for water. In some jurisdictions, water providers attach liens to a homeowner's property taxes if the water bill is not paid after a certain period of time.¹⁶⁸ If the homeowner cannot pay their resulting property tax, they can lose their home altogether. Detroit resident Theresa said that because some city residents have been unable to pay their property taxes, "many have had to move out of the city of Detroit."¹⁶⁹ This threat to housing is so onerous that for some it looms even larger than the threat to water access. "I'd rather that they cut [my water] off than add it to the tax bill," Theresa told us.¹⁷⁰

The right to adequate housing is threatened not only when overdue water bills are attached to a residence's property taxes, but also when water service is shut off for non-payment. The CESCR has interpreted adequate housing as incorporating sufficient facilities and resources for essential needs—including access to safe drinking water and sanitation.¹⁷¹ People who live in their homes without water do not enjoy housing considered adequate under human rights law. In the United States, public health inspectors can condemn a house that does not have running water, a tacit

163 Interview with JoAnn Watson, *supra* note 15.

164 Interview with Shirley, Detroit Resident, in Detroit, Mich. (Jan. 11, 2013).

165 Interview with Affected Individual, in Detroit, Mich. (Jan. 9, 2013).

166 Interview with Janelle, Detroit Resident, in Detroit, Mich. (Jan. 10, 2013).

167 ICESCR, *supra* note 42, Art. 11 ¶ 1.

168 Interview with Curtis Smith, Community Planner, and Associate Producer of *The Waterfront*, in Detroit, Mich. (Jan. 7, 2013).

169 Interview with Theresa, *supra* note 160.

170 *Id.*

171 U.N. Econ. & Soc. Council, Comm. on Econ., Soc. & Cultural Rights, General Comment No. 4 ¶8(b), U.N. Doc. E/1992/23 (Dec. 13, 1991).

acknowledgement that access to water is required for adequate housing.¹⁷² In Michigan, houses are considered “unfit for human habitation” if they lack “plumbing,” which is further explained as lacking “running water furnished in sufficient quantity at all times.”¹⁷³ Residents of homes found in violation of this provision are given anywhere from one to ten days to vacate the premises.¹⁷⁴ We spoke to one woman who had experienced this process; after a massive water leak, her home was condemned and she ended up in a homeless shelter.¹⁷⁵

Even for people who keep their homes, the problem is grave. “My husband is a [public health] inspector,” said Candace Morgan, a Salvation Army Housing Programs Coordinator. “He says there are homes he can’t get through the front door because of the sewage, but [the homeowners] can’t do anything about it. When you don’t have water, you’re going to have a sewage problem. He comes home and says, ‘Candace, I don’t know how people are living there.’”¹⁷⁶

Water shutoffs affect housing rights for not only the residents of the household, but for others in the neighborhood as well. In Detroit and other cities experiencing population decline, homes put up for auction often remain vacant and blighted, repelling neighbors and degrading the overall quality of the community.¹⁷⁷ Detroit City Council Member James Tate observed that just a couple of shutoffs on a single block could result in blight that spurs the decline of a whole neighborhood.¹⁷⁸

Threats to Family Unity

The right of a parent to care for children within the family is given the “[t]he widest possible protection and assistance” under human rights law.¹⁷⁹ In addition, the Convention on the Rights of the Child requires States parties to “recognize the right of the child to the enjoyment of the highest attainable standard of health.”¹⁸⁰ To fulfill this right, States must provide adequate clean

172 See ICC Int’l. Prop. Maint. Code §§ 501-507. The International Code Council’s Property Maintenance Code (model legislation widely adopted by local governments) maintains as a basic principle that all occupied premises shall be provided with adequate, potable water supplied by a public water supply and sewer service. See generally ICC Int’l. Prop. Maint. Code Ch. 5 General Comment & Purpose; Additionally, the Second Restatement of Landlord-Tenant Law considers significant violations of building or sanitary codes which have a substantial impact on safety or health conclusive proof that a property is unsuitable for residential purposes. RESTATEMENT (SECOND) OF PROP.: LANDLORD-TENANT §§ 5.1–.6 (1977).

173 MICH. COMP. LAWS §§ 125.485, 125.472 (2012).

174 MICH. COMP. LAWS § 125.485 (2012).

175 Interview with Ashley, Detroit Resident, in Detroit, Mich. (Jan. 10, 2013).

176 Interview with Candace Morgan, *supra* note 2.

177 Interview with Curtis Smith, *supra* note 168.

178 Interview with James Tate, *supra* note 155. According to Curtis Smith, attaching liens on homes with arrears does not guarantee payment, but rather contributes to population loss and blight. See Interview with Curtis Smith, *supra* note 168 (“To me, it was a crime to put those water bills on the property taxes.”).

179 ICESCR, *supra* note 42, Art. 10 ¶ 1.

180 Convention on the Rights of the Child, art. 24(1), Nov. 20, 1989, 1577 U.N.T.S. 3.

drinking water.¹⁸¹ However, this right may be compromised when access to water in the home is unaffordable. Twenty-one states define “child neglect” in a manner that may include a parent’s inability to provide water.¹⁸² Under Michigan state guidelines, for instance, the lack of running water in a home can be a factor when considering whether parents are providing a suitable living environment for minors.¹⁸³

The UN Special Rapporteur received reports of children being taken from homes under child protective laws after water shutoffs.¹⁸⁴ Many practitioners expressed their concern about this possibility,¹⁸⁵ including some who have encountered it directly.¹⁸⁶ In other instances, individuals are forced to send their children to live with friends and family. Without running water, Connie, a Detroit resident, said she felt that her home was not sanitary enough for her eleven-year-old daughter. She sent her daughter to stay with her brother and grandmother.¹⁸⁷ Another woman reported that she, like others, had tried to survive without water in the home, but that was impossible to do with her children.¹⁸⁸ Unable to afford reconnecting her water service, the woman moved to a shelter and sent her daughter to live with the woman’s mother.¹⁸⁹

Threats to Education

The right to education¹⁹⁰ can also be impaired by lack of access to water. Children without access to water are at risk in educational settings because poor hygiene appears to be associated with an increased likelihood of bullying.¹⁹¹ Social workers said parents may keep their children

181 *Id.*, art. 24(2)(c).

182 *State Statutes Search*, U.S. DEPT. OF HEALTH AND HUMAN SERV. https://www.childwelfare.gov/systemwide/laws_policies/state/index.cfm (last visited Mar.29, 2013) (Search for “All States” and “Definitions of Child Abuse and Neglect”). All states were searched for definitions of child abuse and neglect. Statutes were construed liberally; states with express exceptions for parents’ lack of financial means, such as Rhode Island Gen. Laws § 40-11-2, and states that stipulate neglect occur “by reason of the fault or habits of the parent,” such as Utah, Utah Ann. Code § 78A-6-105, were excluded. Some states may have judicial exceptions for financially-related neglect not represented by the statutory search (*see, e.g.*, Etowah County Dept of Human Resources, 26 So. 3d 436 (Ala. Civ. App. 2009) (lack of running water due to disconnection alone not sufficient for neglect)).

183 *See, e.g.*, STATE OF MICH. DEP’T OF HUMAN SERVS., MANDATED REPORTER’S RES. GUIDE 14 (DHS Pub. 112, Rev. 10-11), *available at* http://www.michigan.gov/documents/dhs/Pub-112_179456_7.pdf.

184 Special Rapporteur, *United States Mission Report Addendum*, *supra* note 61, ¶ 51.

185 *See* Interview with Janeen Smith, *supra* note 143; *see also* interview with Curtis Smith, *supra* note 168.

186 Interview with Maureen Taylor, *supra* note 138.

187 Interview with Connie, *supra* note 146.

188 Interview with Ashley, *supra* note 175.

189 *Id.*

190 ICESCR, *supra* note 42, Art. 13.

191 *See, e.g.*, Jamie Alison O’Connor, An Examination of Bullying Within Middle School Physical Education 66 (2012) (unpublished dissertation) (on file with Graduate College of the University of Illinois at Urbana-Champaign), *available at* https://www.ideals.illinois.edu/bitstream/handle/2142/31044/OConnor_Jamie.pdf?sequence=1. *But see* Joseph A. Dake, James H. Price, & Susan K. Telljohann, *The Nature and Extent of*

home to prevent them from being picked on for being unkempt.¹⁹² For example, Detroit resident Mark explained that after his water was shut off, “I had my kids stay home. I didn’t want them to have to go to school like that.”¹⁹³

Others chose to prioritize education at the expense of procuring water. For example, Connie said she lives fairly close to her daughter’s school and that bus service is not provided.¹⁹⁴ However, their home is located on the opposite side of a very busy street with no crosswalk. For her daughter’s safety, Connie insists upon driving her daughter to school.¹⁹⁵ “There’s really nothing we can cut back on. I have to buy gas,” she said.¹⁹⁶ “Telegraph [Road] is terrible to cross, six lanes long. In the past year, there’s been so many people hit crossing.”¹⁹⁷ By allocating resources to ensure that her daughter has a safe ride to and from school, Connie said she is falling further behind on water bills.¹⁹⁸

Threats to Human Dignity

If people lose access to the water that they need to drink, cook, and bathe, their dignity suffers as well. Inherent human dignity is at the core of human rights law,¹⁹⁹ the protection of which constitutes the “ultimate value” of the human rights framework.²⁰⁰ We found that people often experience a profound sense of shame surrounding the disconnection of their water and their inability to pay.²⁰¹

When Connie had her water shut off, she said she felt ashamed to leave the house while menstruating because she feared she smelled bad and was unable to wash.²⁰² Irene said she resorted to sneaking laundry, filling jugs, and taking a shower at her workplace.²⁰³ Some children report-

Bullying at School, 73 J. Sch. Health 173, 174 (2003), *available at* <http://www2.gsu.edu/~wwwche/The%20Nature%20and%20Extent%20of%20Bullying%20at%20School.pdf>.

192 Interview with Janeen Smith, *supra* note 143; *See also* Interview with Dorotea Manuala, *supra* note 153.

193 Interview with Mark Williams, *supra* note 148.

194 Interview with Connie, *supra* note 146.

195 *Id.*

196 *Id.*

197 *Id.*

198 *Id.*

199 International Covenant on Civil and Political Rights, G.A. Res. 2200A (XXI), 21 U.N. GAOR Supp. (No. 16) at 52, art. 2 ¶ 1, U.N. Doc. A/6316 (1966), 99 U.N.T.S. 171 (Mar. 23, 1976) [hereinafter ICCPR]; ICESCR, *supra* note 42, Preamble ¶ 3.

200 Kevin J. Hasson, *Religious Liberty and Human Dignity: A Tale of Two Declarations*, 27 Harvard J.L. & Pub. Pol’y 81 (2004).

201 Interview with Connie, *supra* note 146; *see also* interview with Irene, *supra* note 4.

202 Interview with Connie, *supra* note 146.

203 Interview with Irene, *supra* note 4.

edly have been forced to shower at school because their water was shut off at home.²⁰⁴ Parents described being unable to buy their children clothes or shoes because they had to save their money to pay their water bill.²⁰⁵

For those who ultimately keep the water on by abandoning other crucial goods and services, the high cost can take a toll. After Detroit resident Theresa described all the trade-offs she was forced to make to pay for water, she explained, “There’s a ripple effect, mentally and physically.”²⁰⁶ As Connie told us, she was “just feeling so disappointed with myself. When things go wrong, I tend to blame myself.”²⁰⁷ In the words of Boston resident Dorotea Manuala, “People have been convinced that poverty is a crime and something to be ashamed of.”²⁰⁸

Lack of Affordability Standards

While States are given wide latitude to determine how to ensure water is economically accessible,²⁰⁹ international law expects any chosen standard to be defensible as “appropriate.”²¹⁰ While States’ responsibility for economic accessibility is subject to progressive realization,²¹¹ they also have an immediate obligation to adopt “a national water strategy and plan of action” to realize the right to water.²¹² In their national plans, the UN Special Rapporteur has explained

204 Interview with Diane L. Crawford, Food and Water Watch, in Detroit, Mich., (Jan. 8, 2013) (“You live hand to mouth. A student was an eighth grader; the school worked out to allow her to come early to shower. You’re embarrassed, ashamed, shunned And schools are not open on the weekend. It’s a matter of dignity.”).

205 Interview with Ashley, *supra* note 175, at 136. The human right to an adequate standard of living includes sufficient food, housing, and clothing. ICESCR, *supra* note 42, Art. 11 ¶ 1.

206 Interview with Theresa, *supra* note 160.

207 Interview with Connie, *supra* note 146.

208 Interview with Dorotea Manuala, *supra* note 153.

209 General Comment 3, *supra* note 39, ¶ 4.

210 *See* Vienna Convention on the Law of Treaties, *supra* note 42. While the standard of “appropriateness” is vague, to demonstrate appropriateness, the authority in question must have chosen a standard with the specific intention of meeting its human rights obligations. This requirement is implicit in States’ responsibility to “take steps” to fulfill economic social and cultural rights, *see* General Comment 3, *supra* note 39, ¶ 2, and explicit in States’ obligation to “adopt[] a national water strategy and plan of action to realize [the right to water].” General Comment 15, *supra* note 17, ¶ 26. However, no procedure exists to enforce or mandate this suggestion. Referencing this inadequacy, the Special Rapporteur stated following a mission to the United States, “From my observations, the guidelines are not being adhered to and I call on the Government to adopt a mandatory federal standard on affordability in conformity with human rights.” Press Release, UN Independent Expert on the Right to Water and Sanitation, Mission to the United States of America from 22 February to 4 March 2011 (March 4, 2011), *available at* <http://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=10807>.

211 ICESCR, *supra* note 42, Art. 2; General Comment 15, *supra* note 17, ¶ 7.

212 General Comment 15, *supra* note 17, ¶ 26.

that States must “design a tariff structure that considers the needs of all people, including those in poverty,” as well as monitor affordability and “set standards and safeguards for disconnections due to non-payment.”²¹³

When the Special Rapporteur visited the United States, she noted that no federal statute or regulation currently mandates affordability standards for water and sanitation.²¹⁴ In its response to her report, the United States implicitly addressed this point by stating “a number of the issues [the report] raised may be most feasibly handled at the state or local level rather than through federal action.”²¹⁵ Nevertheless, water law experts have stressed for some time that water—is an inherently multi-jurisdictional resource—is generally in need of more comprehensive national attention.²¹⁶

Our research suggests that in the absence of national involvement in water affordability, local governments have been unable to create systems capable of delivering universal affordability, progressively or otherwise. Moreover, the patchwork of both public and private assistance programs attempting to address affordability suffers from the lack of federal attention to water affordability, hindering the ability to assist individuals and leaving people with nowhere to turn for help in securing this basic right.

Local Authorities: New Paradigms Needed

“Historically, water bills were 100% collectible . . . That’s just not true anymore, in Detroit and in other communities.”

Sue McCormick, Detroit Water and Sewerage Department CEO²¹⁷

Water utilities can no longer afford to chase every dollar of every bill. “When low-income folks can’t afford to pay their bills, that’s a problem for the customer, but it’s also a problem for the utility,” said Roger Colton, architect of the Detroit Water Affordability Plan. In these cases, Colton told us that the utility “is put in the position of spending a lot of money to try and collect the bill, probably unsuccessfully.”²¹⁸

213 Special Rapporteur, *United States Mission Report*, *supra* note 156, ¶ 35.

214 Special Rapporteur, *United States Mission Report Addendum*, *supra* note 61, ¶ 53.

215 U.S. Statement at the HRC Dialogue on the Right to Drinking Water and Sanitation, UN Human Rights Council, 18th Sess., Geneva (15 Sept. 2011), *available at* <http://geneva.usmission.gov/2011/09/15/u-s-statement-at-the-hrc-dialogue-on-the-right-to-drinking-water-and-sanitation/>.

216 *See generally* Janet C. Neuman, *Federal Water Policy: An Idea Whose Time Will (Finally) Come*, 20 VA. ENVTL. L.J. 107, 108 (2001) (“The calls for a coherent federal water policy echo from the 1920s to the 1990s.”). *See also* Peter H. Gleick, et. al., *A TWENTY-FIRST CENTURY U.S. WATER POLICY* (2012).

217 Interview with Sue McCormick, Director, Detroit Water and Sewerage Department, in Detroit, Mich. (Jan. 11, 2013).

218 Interview with Roger Colton, *supra* note 71, at 233.

Disconnecting water service is not costless. Utilities may spend as little as fifteen or as much as several hundred dollars on a shutoff, depending on who conducts the shutoff, the physical state of a property's shutoff valve, and the relative ease with which the valve can be located and accessed.²¹⁹ Furthermore, when ratepayers are unable—rather than merely unwilling—to pay their arrearages, the cost of both the disconnection and the original bill is borne by the utility, which ultimately passes it on to its paying customers.²²⁰ It is possible that the cost of disconnection and reconnection might be more expensive than simply letting customers pay what they can afford, even if only a minimal amount.²²¹

Even when local actors recognize this reality, they may lack adequate authority to pursue new rate-setting or collection policies. Sue McCormick, Detroit Water and Sewer Department CEO, said she would like to see Detroit implement “lifeline rates,”²²² and Daryl Latimer, Detroit Water and Sewer Department Deputy Director, said he would like to regionalize the rate structure, spreading costs between urban and suburban customers.²²³ They said they felt stymied by local politics,²²⁴ regional disputes,²²⁵ and federal regulatory structures.²²⁶ They are left in the unenviable position of attempting to make the current system viable, generally by increasing water rates,²²⁷ while attempting to make existing disconnection practices as efficient and humane as possible.²²⁸

219 For example, one contractor in Detroit charges at least \$85 to turn water on and off. Interview with Chuck Smith, CPI Contracting, in Detroit, Mich., (Jan. 11, 2013). If service is disconnected by an in-house employee, it can cost approximately \$15 to \$30. If the utility “stop box” is broken, however, it can cost up to a couple of hundred dollars. Interview with Daryl Latimer, *supra* note 83. Stop boxes can be full of dirt and mud, often added by the utility to prevent individuals from illegally turning their water back on, which adds time and expense to the shutoff procedure. Interview with Robert, *supra* note 153.

220 Interview with Roger Colton, *supra* note 71.

221 Interview with Nick Schroeck, *supra* note 49.

222 Interview with Sue McCormick, *supra* note 217. The term “lifeline rates” is used in a variety of contexts. McCormick was in favor of charging low fees for the small quantities of water consistent with domestic use and subsidizing those users with increased fees for larger quantities. Elsewhere, this method is referred to as “increasing block pricing.” *See generally* Olmstead, *supra* note 72.

223 Interview with Daryl Latimer, *supra* note 83.

224 Interview with Sue McCormick, *supra* note 217.

225 Interview with Daryl Latimer, *supra* note 83.

226 Interview with Sue McCormick, *supra* note 217. The Federal District Court for the Eastern District of Michigan has overseen DWSD for decades because of ongoing litigation under the Clean Water Act. While the court has used its federal authority to implement labor reforms at DWSD which otherwise would violate the Detroit City Charter, its ordinances, and existing contracts, E.D. Mich, Civ-No. 77-71100, Doc #2410, 3 (Nov. 4, 2011).

227 Interview with Daryl Latimer, *supra* note 83.

228 Interview with Sue McCormick, *supra* note 217.

Social Services: Drowning in Demand

Where utilities are unable to implement rate structures capable of achieving universal affordability, social service agencies attempt to protect individuals' right to water through assistance programs designed to prevent shutoffs, when possible. While the federal government provides funding for assistance with heating and electricity bills, there is no federal funding available for assistance with water.²²⁹ Given the unmet need for water assistance, social service agencies are often forced to operate in a state of perpetual triage.

Connie, from Detroit, has struggled with the conflicting policies of aid agencies run by state and local governments and those that are privately operated. She told us, "I went down to social services to seek some help, but they could only pay \$450. I had to pay the whole bill by myself and then they'd give me the \$450. I needed \$2100 in order for them to give me \$450."²³⁰ Although Connie's lack of resources was a barrier for some organizations, her income and residence were a problem for others: "I called WAVE [Water Access Volunteer Effort] downtown, and she said, 'You don't qualify. You have too much money coming in.' And I called 211, United Way, but they couldn't help and told me that maybe I should move somewhere where it is cheaper to live."²³¹

Katherine Bruner of the Royal Oak Salvation Army, located in a suburb outside of Detroit, pointed out that even when residents know they are unable to afford their water bill, they must face the threat of shutoff before they can receive assistance.²³² Then, they must travel from one agency to another, assembling their assistance: each agency can help with some portion of the bill (typically several hundred dollars), but none will contribute unless they are confident an individual has enough funds overall to solve the immediate crisis.²³³

For many residents who do not have access to water or are fighting to pay for their water, these procedural obstacles can prove insurmountable, leaving other ratepayers to shoulder an ever-increasing share of the burden as their neighbors fall off the grid.

229 Interview with Katherine Bruner, Director of Community Ministries, Salvation Army, in Detroit, Mich. (Jan. 8, 2013).

230 Interview with Connie, *supra* note 146.

231 *Id.*

232 Interview with Katherine Bruner, *supra* note 229.

233 *Id.*

INFORMATION ACCESSIBILITY

“[Utility employees] speak another language from another planet.”

Janelle, Detroit Resident²³⁴

According to the CESCR’s General Comment 15, information accessibility has three components: the right to (1) receive, (2) seek, and (3) impart information concerning water issues.²³⁵ More broadly, information accessibility is related to international due process norms of adequate notice and opportunity to be heard.²³⁶ The UN Special Rapporteur has defined this right to include “transparency and access to information” and “opportunities for meaningful participation in decision-making.”²³⁷

Our research showed that, rather than operating with transparency, water utilities frequently fail to communicate with consumers in an understandable way, obstructing individuals’ attempts to seek out information and discouraging public input regarding water policy.

Barriers to Receiving Information

In the course of our research, we found several barriers that prevent individuals from receiving adequate information about water issues. First, individuals we spoke with said they experienced difficulty understanding how water rates were set. Second, they expressed confusion about water companies’ billing practices. And third, many people said that they never received notice before their water was shut off.

Unclear rate-setting policies

Many of the individuals we spoke with said they did not know how their water rates had been set or why the rates were increasing.²³⁸ Residents and the advocates who help them navigate the water utilities’ bureaucracy expressed frustration at the difference between the information available to employees of the water departments and the information shared with consumers.²³⁹ “There’s

234 Interview with Janelle, *supra* note 166.

235 General Comment 15, *supra* note 17, ¶ 12(c)(iv).

236 See Louise Doswald-Beck, *Fair Trial, Right to, International Protection*, in R Wolfrum (ed), *MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW*, Oxford University Press, 2008-9 online edition, www.mpepil.com (last visited on Mar. 25, 2013).

237 Special Rapporteur, *United States Mission Report Addendum*, *supra* note 61, ¶ 6.

238 See, e.g. interview with William, Detroit Resident, in Detroit, Mich., (Jan. 10, 2013).

239 A social service employee said residents come for help with understanding their bills, yet the employee often has trouble understanding what the bill itself is saying. Interview with Catholic Charities Basic Needs Employee, in Boston, Mass., (Jan. 23, 2013).

a lack of understanding,” said Jim Fausone, Wayne County Representative on the Detroit Water Board. “DWSD probably does a good job of explaining to those who are actively involved—the engineers, mayors. But less so the city councils, and for the citizens it gets fuzzier.”²⁴⁰ Detroit Water and Sewerage Department Deputy Director Daryl Latimer explained that rate increases are “difficult for folks to understand, because from their perspective, nothing has changed. The water is still coming out of the faucet. They can’t see what has changed, EPA regulations, sewer overflows, etc.”²⁴¹ This incongruence essentially undermines the ability of individuals to participate in the political ratemaking processes that ultimately affect how much people pay for water.

Unpredictable and incomprehensible bills

Many consumers with whom we spoke said that their water bills were sent at irregular intervals and were difficult to understand. During our visit to Highland Park, Michigan, residents had just received their water bills—their first in thirteen months. According to one Highland Park resident, each new city administration implemented different billing methods.²⁴² For some Boston residents, their bills did not arrive consistently or in a timely manner—sometimes they would receive their bill every six months and at other times they would receive them after just three months.²⁴³ Although some officials suggested that individuals could continue paying their water bill even if their bill had not been mailed or received,²⁴⁴ this may be difficult for individuals to do. Inconsistencies in billing methods and schedules make it more likely that individuals will miss a payment, running the risk of late fees or having their water shut off. According to Detroit City Council Member Ken Cockrel Jr., “It seems there must also be some duty on the utility, or collector, to provide a process that is easy for people to navigate, and that informs them fairly what they are supposed to pay. . . . It’s definitely a two-way street.”²⁴⁵

In Highland Park, bills are calculated by the number of cubic feet of water used, a measurement that may be difficult to comprehend. “Most folks just look at the number,” said Curtis Smith, a community planner and associate producer for *The Waterfront*, a documentary about Highland Park’s water struggles. “It’s calculated in cubic feet. What’s a cubic foot of water? . . . The average consumer can’t read it.”²⁴⁶ Yet individuals, water utilities, and conservationists all have an interest in ensuring that consumers are able to respond to the amount of water they are using. As Highland Park City Council Member Chris Woodard pointed out, “it’s important that people

240 Interview with James Fausone, *supra* note 85.

241 Interview with Daryl Latimer, *supra* note 83.

242 Interview with Emma, Highland Park Resident, in Detroit, Mich., (Jan 11, 2013).

243 Interview with Dorotea Manuela, *supra* note 153.

244 Interview with Ken Cockrel, Jr., Detroit City Council Member, in Detroit, Mich., (Jan 11, 2013).

245 *Id.*

246 Interview with Curtis Smith, *supra* note 169.

understand what their water usage is on a personal level. Because otherwise we're just being billed, and we don't know what it's for."²⁴⁷ In particular, bills that are easily understood help those consumers with few resources save money by closely monitoring how much water they use, which could prevent them from falling behind on their bill.

Inadequate notice of shutoffs and property liens

According to the United Nations High Commissioner for Human Rights, procedures for disconnections must include "timely and full disclosure of information on the proposed measures" and "reasonable notice of the proposed action."²⁴⁸ Although water providers in both Detroit and Boston have policies regulating shutoff notices,²⁴⁹ several individuals reported that they had not received notice before their water was shut off.²⁵⁰ In cases where no notice was given, residents had no opportunity to prevent the shutoff by finding assistance to pay the bill. Nor were they afforded the opportunity to make other arrangements so they would not have to go without a basic supply of water after the shutoff. Even where shutoff notices are served, they may be incomprehensible to some people because of language barriers or, in the case of one Boston family, illiteracy.²⁵¹

"I never got a notice, never got anything. They never, ever, ever sent me any warning. They sent bills over and over, but I swear to God, I never ever got a shutoff notice before these two trucks came [to shut off the water]."²⁵²

"I came home and the water was completely off. I called the company. There had been no notice and they told me that they didn't have to."²⁵³

247 Interview with Chris Woodard, Highland Park City Council Member, in Detroit, Mich., (Jan 7, 2013).

248 U.N. High Comm'r for Human Rights, *Report on the Scope and Content of the Relevant Human Rights Obligations Related to Equitable Access to Safe Drinking Water and Sanitation Under International Human Rights Instruments*, 6th Sess., ¶ 57, A/HRC/6/3, (Aug. 16, 2007).

249 DWSD CEO Sue McCormick said the department provides a past due notice, a shutoff notice, and physical tags on doors of residents before shutting off their water. "There's a big investment in notifying people," McCormick said. "Frankly, I'm in favor of streamlining that, because those costs get passed on to all customers." Interview with Sue McCormick, *supra* note 217. *See also* Boston Billing Regs., *supra* note 127, at Ch. 3 § 1.

250 *See*, e.g. interview with Dorotea Manuela, *supra* note 153; Irene, *supra* note 4.

251 *Id.*

252 Interview with Irene, *supra* note 4.

253 Interview with Mark Williams, *supra* note 148.

In some cities, water departments do not turn off the water. Instead, they attach unpaid water bills to property taxes. In those instances, the individual frequently does not receive notice that they now have a lien on their property.²⁵⁴ For example, according to a caseworker for the Salvation Army, residents of Madison Heights and Royal Oak, Michigan, do not receive shutoff notices. Instead, the amount that is past due is added to the individual's property taxes.²⁵⁵ Detroit resident Ashley explained that after a pipe in her home burst and she was unable to afford the bill, the charges were "tacked on my taxes. There was no notice ahead of time. They just did it."²⁵⁶ Additionally, this practice is worrisome because many aid organizations require documentation that a resident is facing a shutoff before they will help with the bill.²⁵⁷

Barriers to Seeking Information

Many individual water customers expressed frustration with their inability to seek information about water-related problems and assistance programs. As Detroit resident Theresa explained, "When you go out to talk to [the water company], they treat you like you aren't worth much. . . . You feel very belittled when you leave there."²⁵⁸ Dorotea Manuela told of having her water shut off by mistake and how hard it was getting the Boston Water and Sewer Commission to address the problem. Explaining that she came home to find a large sign nailed to her front door, Dorotea said: "There were a bunch of numbers on the sign, but no phone number. . . . I called [information], and they said the utility office was closed, and I had to wait until the next day to talk to someone." When she called the Water Commission, "they didn't even ask me for my name, they started right out by saying, 'you can't have your water back until you've paid your full bill. You've had plenty of opportunities to pay your bill.' I asked how they knew I hadn't paid my bill, when they didn't even have my name yet. [The employee] told me she knew because my water was shut off. They gave me a lot of attitude. They eventually hung up on me."²⁵⁹

Language barriers prevent some people from understanding their bills or the customer assistance programs offered by their water providers.²⁶⁰ An employee of a Boston aid organization explained that, "A lot of [my] clients only speak Spanish or Haitian Creole. The bills can come in Spanish, but there is very bad customer service for Spanish speakers. People will pay if they can because they recognize it's a bill, but they don't understand why the costs are what they are."²⁶¹

254 Interview with Katherine Bruner, *supra* note 229.
 255 Interview with Janeen Smith, *supra* note 143.
 256 Interview with Ashley, *supra* note 175.
 257 Interview with Katherine Bruner, *supra* note 229.
 258 Interview with Theresa, *supra* note 160.
 259 Interview with Dorotea Manuela, *supra* note 153.
 260 *Id.*
 261 Interview with Catholic Charities Basic Needs Employee, *supra* note 239.

In addition, many individuals said they had difficulty finding information about available assistance programs. Some explained that they were bounced from aid agency to aid agency, each of which had distinct criteria that individuals had to meet before they could qualify for help. Often they said asking for help from social service providers was “more of a headache than a solution.”²⁶² Even service providers frequently had trouble getting information about aid programs; one said that she had only recently heard of Detroit’s WAVE program. “We’ve been trying to find out [about WAVE],” said Jamie, a social service provider in Detroit. “We just found out about the name of the agency. . . . How long has this been in existence with people experiencing such need?”²⁶³ The founder of WAVE, Carla Walker-Miller, explained to us that the program simply does not have the resources to do any outreach. “We’ve been around for ten years, and most people haven’t heard of us at all.”²⁶⁴

FOCUS Improved Communication: A Step in the Right Direction

When asked what she would like to see changed, one social service provider said, “communication with the water company.”²⁶⁵ Another aid worker suggested that the water department employ a community liaison to work with agencies that are trying to help their customers.²⁶⁶

Although not a comprehensive solution, Detroit’s electricity provider, DTE Energy, allows the Salvation Army to directly access its billing system to immediately pay clients’ bills, helping to avert last-minute electricity shutoffs.²⁶⁷ However, DWSD does not offer the same service.²⁶⁸ Instead, consumers must call the water department each day for verification that their payment has been received and to avoid having their water shutoff.²⁶⁹ A Salvation Army employee compared her experiences with the energy and water utilities in Detroit:

The Water Department doesn’t even let us into their system, whereas DTE does. We can look into the DTE system and explain it to customers from here. Water makes us come to them. . . . There were times I had to go down to the department to write checks or to advocate for consumers. You just couldn’t do it over the phone. I don’t know what the difference is between water and other utilities. DTE works with you. With Water, they feel like they don’t have to play ball. . . . The Water Department does zip, zilch.²⁷⁰

262 Interview with William, *supra* note 238.

263 Interview with Jamie, Social Service Provider, in Detroit, Mich., (Jan. 10, 2013).

264 Interview with Carla Walker-Miller, *supra* note 114.

265 Interview with Andrea Maloy, *supra* note 147.

266 Interview with Candace Morgan, *supra* note 2.

267 Interview with Andrea Maloy, *supra* note 147.

268 *Id.*

269 *Id.*

270 Interview with Candace Morgan, *supra* note 2.

Barriers to Imparting Information

According to the CESCR's General Comment 15:

The right of individuals and groups to participate in decision-making processes that may affect their exercise of the right to water must be an integral part of any policy, programme or strategy concerning water. Individuals and groups should be given full and equal access to information concerning water, water services and the environment, held by public authorities or third parties.²⁷¹

Despite this requirement under international human rights law, most individuals have no opportunity to participate in policy-making with regard to water issues.

One barrier to participation is simply logistical. In Detroit, the Municipal Water Board meets at 2:00 pm on Wednesdays. For many individuals, this could present an opportunity to contribute to the dialogue about rates and services and to resolve problems with their water bills. However, weekday afternoon meetings can be logistically inaccessible for people who work during regular business hours.²⁷²

A second barrier is that the appeals process for those consumers who have issues with their bills is difficult for consumers to navigate. An attorney with the Detroit City Council explained that “it’s difficult to fight a water bill. [The water department] give[s] you an opportunity for a hearing, but there is no way you can fight a meter that you can’t determine or test its accuracy. Once the bill gets excessive, you can challenge it but you are outmatched in every way.”²⁷³

Both of these barriers contribute to a lack of input from residents about water policies and impede their ability to participate in decisions that affect their enjoyment of the right to water.

271 General Comment 15, *supra* note 17, ¶ 48.

272 Interview with Priscilla Dziubek, People’s Water Board, in Detroit, Mich., (Jan. 7, 2013).

273 Interview with Thomas Stephens, attorney, Detroit City Council Legal Department, in Detroit, Mich., (Jan. 11, 2013).

NON-DISCRIMINATION

Under human rights law, States have an obligation to ensure that water, water facilities, and water services are “accessible to all, including the most vulnerable or marginalized sections of the population, in law and in fact, without discrimination on any prohibited grounds.”²⁷⁴ Non-discrimination is not specific to the right to water but is a basic principle relating to the protection of human rights²⁷⁵ contained in an overwhelming majority of human rights instruments.²⁷⁶ States have an immediate obligation to guarantee the right to water without discrimination, meaning that progressive realization of the principle of non-discrimination is not sufficient to meet human rights obligations.²⁷⁷

Under international law, non-discrimination prohibits laws and practices that have either a discriminatory intent or a discriminatory effect.²⁷⁸ States are prohibited from discriminating against individuals on the basis of a variety of personal characteristics.²⁷⁹ The United States ratified the International Convention on the Elimination of All Forms of Racial Discrimination (CERD) in 1994,²⁸⁰ thus accepting particular responsibilities regarding racial discrimination. Under CERD, the United States has an obligation to “eliminate racial discrimination in all its forms,” including in the realization of economic social and cultural rights.²⁸¹ In multiple interviews in a variety of settings, affected individuals, social service providers, and policy experts expressed their convictions that water policies in their cities reflected racial discrimination.²⁸²

274 General Comment 15, *supra* note 17, ¶ 12(c)(3).

275 U.N. Human Rights Comm., General Comment 18 Non-discrimination, 37th Sess., ¶ 1, U.N. Doc. HRI/GEN/Rev.9 (Vol. 1) (Oct. 11, 1989) [hereinafter General Comment 18].

276 In addition to the ICESCR, *supra* note 42, the principle of non-discrimination appears in the United Nations Charter, Preamble, art. 1, para. 3, art. 55; the Universal Declaration of Human Rights, G.A. Res. 217 A (III), art. 2 ¶ 1, A U.N. Doc. A/RES/217(III) (Dec. 10, 1948); and the ICCPR, *supra* note 198, as well as most international human rights instruments related to specific groups of people. The United States Constitution also provides a minimal level of protection against discrimination along the lines specified in the ICCPR. *See* U.S. Reservations, Understandings, and Declarations upon Ratifying the ICCPR, 138 Cong. Rec. S4781-01, §II, ¶1.

277 General Comment 15, *supra* note 17, ¶ 17.

278 *See* U.N. Econ. & Soc. Council, Comm. on Econ., Soc., and Cultural Rights, General Comment No. 20, ¶7, E/C. 12/GC/20 (July 2, 2009); General Comment 18, *supra* note 275, ¶ 7.

279 ICESCR, *supra* note 42, art. 2, ¶ 2.

280 *United Nations Treaty Collection*, U.N., http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-2&chapter=4&lang=en (last visited Mar. 25, 2013).

281 International Convention on the Elimination of All Forms of Racial Discrimination, art. 5(e), 660 U.N.T.S. 195, (Jan. 4, 1969) [hereinafter CERD]. *See United Nations Treaty Collection*, U.N., http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-2&chapter=4&lang=en (last visited Mar. 25, 2013).

282 *See, e.g.*, interview with Melissa Damaschke, Sierra Club, in Detroit, Mich. (Jan. 7, 2013). *See also* interview with Michell Rycus, Professor of Urban Planning, University of Michigan, in Detroit, Mich. At 127 (Jan. 10, 2013); interview with Pastor Toni, House of Help, in Detroit, Mich. (Jan. 8, 2013); interview with Dorotea Manuela, *supra* note 153.

Our research methodology poses some limitations with regard to this subject, however. The method we used—interviewing people about their lives—was not designed to provide a comprehensive picture of what discrimination in these cities looks like in regards to water. Our interviews provided personal opinions and anecdotal evidence, and the extent to which those anecdotes reflect the experiences of other residents is not something our research readily tells us.

However, the personal stories we heard corroborate statistical studies done on both Detroit and Boston that found positive correlations between race and adverse water policies. A study of Detroit’s U.S. Census data revealed that areas with greater racial minority populations have higher water costs per household—even controlling for urban location and relative income—demonstrating “a disturbing racial effect to the cost of water.”²⁸³ An ongoing study of municipal datasets in Boston provides another stark statistic: for every one percent increase in minority population in a given city ward, the number of shutoff threats rises by 3.67 percent.²⁸⁴

The Detroit study is careful to note the effect of race is partly historical: Non-White urban residents, as the last and least beneficiaries of America’s post-war industrial boom, were subjected to longstanding racial discrimination in lending and housing policies that prevented them from leaving industrial urban areas.²⁸⁵ As the country has transitioned to a post-industrial service economy, the effects of past discriminatory practices have persisted in the form of higher rates for urban water users.²⁸⁶

Despite the historical origins of these disparities, the United States is responsible for curbing present practices that perpetuate these lingering inequalities. When commenting on other countries’ practices, the Committee on Racial Discrimination has relied on statistical and qualitative demographic information as evidence of “deep structural inequalities” affecting economic, social and cultural rights. The Committee has also required States to take measures to effectively address such disparities.²⁸⁷

283 Butts & Gasteyer, *supra* note 44, at 392.

284 Massachusetts Global Action, *supra* note 133, at 3.

285 *See* THOMAS J. SUGRUE, *THE ORIGINS OF THE URBAN CRISIS: RACE AND INEQUALITY IN POSTWAR DETROIT* 9 (Princeton University Press 2005).

286 Butts & Gasteyer, *supra* note 44, at 392–93.

287 *See, e.g.*, U.N. Comm. on the Elimination of Racial Discrimination, Concluding Observations: Brazil, ¶ 8, U.N. CERD/C/304/Add.11 (27 Sept. 1996).

CONCLUSION

For too many people in the 21st century urban United States, access to safe, affordable water is out of reach. Thousands of people have had their water shut off in the home, simply because they could not pay their bills. Without the running water needed to drink, cook, bathe, or even use the toilet, daily life becomes a struggle. Basic health and sanitation are put in jeopardy. Some people feel too ashamed to leave the house and some parents keep their kids home from school. Others send their children away to stay with relatives or live in fear that the state will take their kids away. Many of these people say they never even received notice that their water would be shut off.

Others in this country do ultimately manage to pay their water bill, but at a significant cost. They may be forced to forego essential needs, such as medical treatment, medicines, and even food in order to afford water. Some people eventually lose their homes when their water bills are attached to their property taxes; others can have their homes condemned if their water is shut off for inability to pay. And water bills may be opaque, or sent at irregular and unpredictable intervals, making it even harder to keep on top of the required payments. Racial minorities are affected by these steep prices, and shutoffs, at disproportionate rates.

Across the United States, few programs or policies are in place to ensure water is affordable for all. The federal government has not developed any overarching affordability plan, and local actors too often feel stymied in their ability to impose such measures. At the same time, those social service providers that aim to provide aid to people unable to pay their water bills are hampered by a lack of coordination and funding.

This must not go on. Water is a fundamental human right, essential for life itself. The recommendations that follow address some of the changes that are needed to remedy this problem.

RECOMMENDATIONS

These recommendations seek to increase water access by emphasizing affordability, expanding the reach of assistance programs, improving access to information, and working to end discriminatory outcomes. They are intended to foster stronger partnerships between federal, state, and local leaders and to promote greater enjoyment of the human right to water.

TO THE FEDERAL GOVERNMENT

- To ensure the United States is fulfilling its obligations under international law, the Department of State should track human rights obligations in relation to water and sanitation and provide yearly updates to Congress.
- To address the finding that there is fragmentation within the realm of assistance programs, Congress should expand the Low-Income Home Energy Assistance Program (LIHEAP) to include spending authority for individual water assistance, in addition to energy assistance, and allocate additional funds to the program.²⁸⁸ Such authority would build upon an already existing administrative framework to support low-income ratepayers and their water providers, helping to ensure universal water accessibility.
- Alternatively, fragmentation within the current assistance framework could also be addressed by creating a new program—a Low-Income Water Assistance Program (LIWAP)—focused solely on providing assistance to individuals for water bills.²⁸⁹ Such a program could be modeled after and connected with the federal LIHEAP program to reduce administrative costs; for example, the same eligibility standards and disbursement mechanisms could be used.²⁹⁰
- In response to the finding that rising infrastructure costs are adding to the lack of water affordability, Congress should pass legislation to increase infrastructure investments.²⁹¹ As

288 To accomplish this, Congress should authorize the Secretary of the Department of Health and Human Services to distribute funds to assist low-income individuals with their water bills in addition to energy bills by amending 42 U.S.C. § 8621(a) (2006). For example, the statute could be amended as follows: The Secretary is authorized to make grants, in accordance with the provisions of this subchapter, to States to assist low-income households, particularly those with the lowest incomes, that pay a high proportion of household income for home energy *and water*, primarily in meeting their immediate home energy *and water* needs.

289 Although a separate LIWAP program would mean increased administrative costs, it could also give greater flexibility to states to address local water related concerns. For instance, authority could be given to the states to utilize a portion of the funding for more permanent assistance measures, such as leak repair.

290 NATIONAL DRINKING WATER ADVISORY COUNCIL, RECOMMENDATIONS OF THE NATIONAL DRINKING WATER ADVISORY COUNCIL TO U.S. EPA ON ITS NATIONAL SMALL SYSTEMS AFFORDABILITY CRITERIA 37 (2003), *available at* http://www.epa.gov/safewater/ndwac/pdfs/report_ndwac_affordabilitywg_final_08-0803.pdf.

291 A variety of water infrastructure investment programs have been proposed during the past few

part of such legislation, Congress should authorize the Administrator of the Environmental Protection Agency to require states, municipalities, and water providers receiving funds under the legislation to develop appropriate water affordability standards, including:

- (a) State-run payment assistance programs for households falling below a certain income threshold;
 - (b) Progressive rate structures;
 - (c) Transparent and fair billing practices;
 - (d) Due process for shutoffs and service denial; and
 - (e) Additional safeguards for the economically vulnerable: rates should be further reduced for households with children, senior citizens, persons with disabilities, or the chronically ill, and shutoffs should not be allowed barring extraordinary circumstances.
- To ensure that utilities are kept up-to-date and are employing the most effective affordability programs, Congress should delegate to the Environmental Protection Agency the task of surveying, assembling, and disseminating “best practices” for water shutoff procedures, rate structures, and low-income subsidization.
 - In an effort to develop and implement programs and practices that would reduce the cost of water service, Congress should authorize the Administrator of the Environmental Protection Agency to work with the National Health and Environmental Effects Research Laboratory and other scientific partners to invent new technology to reduce water treatment costs.
 - To address the finding that discriminatory effects in the context of water access have been recorded in some water systems, the Administrator of the Environmental Protection Agency should require states, municipalities, and water providers that receive federal infrastructure funds to develop effective information gathering systems that would securely collect demographic user information to monitor the potentially discriminatory effects of water policies and practices.

congressional sessions, including the Water Protection and Reinvestment Act of 2012 (H.R. 6249), the National Infrastructure Development Bank Act of 2011 (H.R. 402), Building and Upgrading Infrastructure for Long-Term Investment (S. 652), the Water Quality Protection and Job Creation Act of 2011 (H.R. 3145), and the Sustainable Water Infrastructure Act of 2010 (S. 3262). These bills include plans to create an infrastructure finance plan modeled after the Transportation Infrastructure and Finance Innovation Act (TIFIA), a national infrastructure bank, a federal water infrastructure trust fund, and the removal of the cap on private investment bonds. Additionally, this recommendation could be achieved by increasing funding to the already existing Clean Water Act and Safe Drinking Water Act loan funds.

TO STATE AND LOCAL GOVERNMENTS

- To address the finding that shutoffs and threatened shutoffs disproportionately affect marginalized communities and force individuals to make trade-offs with other human rights, state and local governments should pass legislation restricting the use of shutoffs for vulnerable populations.
- In response to the finding that there are too few water assistance programs, as well as a lack of coordination between existing programs, state and local governments should create and allocate funds to public water assistance programs.
- To ensure that needed infrastructure investment projects do not disproportionately affect low-income populations, state regulatory commissions and local governments should adopt appropriate water affordability standards and water shutoff prohibitions for publicly funded water infrastructure projects.²⁹²
- In response to the concern that instead of shutoffs, water utilities will seek to recoup losses through taxes and liens, state and local governments should ensure that unpaid balances are not added to property taxes or property titles in a way that precludes use of the property.
- To ensure that due process concerns are adequately addressed, states should require that water utilities are under the purview of the state's public utility regulatory body.

TO WATER PROVIDERS

- Even if legislation does not require it, water providers should avoid water shutoffs, particularly for vulnerable populations.²⁹³
- To ensure that water is affordable to all, water providers should implement progressive rate structures via one or more of the following mechanisms:
 - (a) Lifeline rates: A limited allocation of water should be provided to households at little or no cost to meet essential human needs;
 - (b) Financial needs testing: Lower rates should be available for those whose income falls below an affordability threshold; and
 - (c) Increasing (graduated) block rates: A tiered unit price for water should increase as the volume consumed increases, so customers who use significantly higher volumes pay a higher price per unit. This should be implemented in conjunction with an income-based assistance program.

292 For example, legislation could be modeled after Delaware statute, 29 Del.C. § 6102A(g)(3). “The Clean Water Advisory Council shall set affordability standards for wastewater projects under the direction of the Secretary of Natural Resources and Environmental Control for the use of these moneys and establish an appropriate review and approval process.”).

293 For example, a utility could include within its operating protocol, the provision: “Under no circumstances should water service be disconnected to households with seniors over 65-years-old, children under 4 years old, the mentally ill, the disabled, or the chronically sick.”

- To address concerns about a lack of assistance programs, water providers should implement programs for consumers facing economic hardship. Such assistance plans could encompass one or more of the following policies:
 - (a) Eliminate penalties: Avoid disconnection and reconnection fees for water shutoffs beyond what is necessary for actual cost recovery;
 - (b) Lower initial payments: Provide a more attainable foothold to reinstate water service for those who have fallen behind in their payments, so that they are able to resume paying into the system and restore their access to water;
 - (c) Affordable installment plans: Offer those who are behind in their payments with an incentive to continue paying into the system while maintaining access to water; and
 - (d) Debt forgiveness: Establish debt management plans that reward customers for consistent and timely payments by partially forgiving old debt.
- In order to address concerns about information accessibility, water providers should implement transparent and effective billing policies that include:
 - (a) Advance notice: Giving ample warning to customers who are experiencing higher than normal water usage, have missed a payment, or are in danger of a water shutoff to promote preventative measures and help avoid further escalation of usage problems;
 - (b) Customer assistance: Partner specially-trained personnel with customers who are facing financial difficulties, have missed payments, or are facing a water shutoff to craft effective payment solutions and ensure continued service;
 - (c) Abuse reporting systems: Offer customers an outlet for concerns about the water provider's policies and procedures;
 - (d) Monthly billing: Enable customers to keep up with their payments on a more frequent, lower-impact schedule, as opposed to quarterly billing;
 - (e) Budget billing: Provide customers with a consistent monthly bill based on average household usage, thereby reducing the impact of seasonal fluctuations and facilitating predictable budgeting; and
 - (f) Due date flexibility: Allow customers to select a preferred payment schedule that more closely aligns with their flow of household income, particularly for those on fixed incomes.

APPENDIX: BEST PRACTICES AND ADDITIONAL RESOURCES FOR WATER UTILITY PROVIDERS RELATING TO RATE-MAKING

Below, we describe several techniques of ratemaking that can create affordable rate structures while supporting and solidifying water utility providers' business objectives. As regulatory structures and environments differ, actual implementation may be situation-specific.

NET BACK: COST-EFFECTIVE BUSINESS PLAN FOR AFFORDABLE RATES

"Net back" measures how a utility can maximize net income by considering the percentage of outstanding arrears actually collected along with the expenses involved in the collection. This means that the level of billings is less important than the amount of money netted back to the water provider through collections. Utility companies that have implemented measures to offer their low-income customers an affordable rate have observed an increase in timely, regular, and complete bill payments from those participating in their affordability programs.²⁹⁴ Furthermore, utilities also benefited from spending less on working capital, bad debt expenses, credit and collection expenses, and regulatory expenses.²⁹⁵ Empirically, this means that rather than affecting revenue negatively, affordability programs targeted at low-income customers can be revenue positive.²⁹⁶

Below, we provide an overview of cost-effective net back best practices to help maximize the recovery of a utility's cost while minimizing the expense involved in collection, resulting in increased net gain. Examples include: 1) Rate Affordability; 2) Bill and Arrearage Management; and 3) Alternative Rate Structures.

294 For example, the impact evaluation of the affordability program by Columbia Gas Company (Pennsylvania) found that the company had 61% fewer disputes, 53% fewer new payment agreements, and 67% fewer credit hold requests. Additionally, for customers in the program, there was a 69% reduction in cancellation of payment plans, a 48% reduction in termination notices declined, and a 74% reduction in shutoff orders printed. Transcript of Direct Testimony of Roger Colton on Behalf of the New Jersey Division of the Ratepayer Advocate at 42, I/M/O The Petition of Public Service Electric & Gas Company For Approval of an Increase in Gas Rates and for Charges in the Tariff for Gas Service & for Authority to Revise Its Gas Property Depreciation Rates, BPU Docket No. GR01050328 OAL Docket No. PUC-5052-01 & GR01050297 OAL Docket No. PUC-5016-01, *available at* <http://www.rpa.state.nj.us/coltonfinal.PDF>

295 For example, Equitable Gas (Pennsylvania) found that while in its first year, there was a net administrative costs to the implementation of the affordability program, by the third year the total savings received from the program had completely paid off the costs from the first year and yielded a total net advantage of \$10.61 per customer. These savings would increment over future years for those customers who remain in the program. *Id.*

296 *Id.* at 116.

Rate Affordability: Targeting the Causes of Non-Payment

Surveys of households that have experienced disconnections show that the causes of financial hardship are both chronic and episodic. Reported factors include unusually high utility bills prior to disconnection, loss of work, illnesses or injury, and family relationship breakdown.²⁹⁷ Conventional collection methods might include issuing a late notice, charging a late fee, and then issuing a shutoff notice, contacting the customer, and finally implementing the shutoff. This process treats every case as one of poor money management that requires the threat of disconnection. However, this cycle is likely to repeat again after the service is reconnected because the cause of nonpayment remains unaddressed.

Therefore, rather than attempting to recover costs by charging customers increasingly unaffordable amounts, utility providers should identify the causative factor and address it with an appropriate targeted assistance programs. The four major categories of causative factors are:²⁹⁸

- Crisis conditions, which require financial assistance and a longer bill payment period;
- Affordability and/or money management problems, which require bill or money management assistance discounts to make the bill affordable;
- Elderly or disabled limitations, which may require bill discounts, financial assistance, and other modes of payment methods; and
- Leakage problems, which may require home audit and conservation retrofit programs.

By deliberately addressing the causes of nonpayment, utility providers may benefit economically in the short-term and in the long-term.²⁹⁹

Additional Resource: See Table 6.1, “Mapping causes of non-payment to elements of assistance programs” in Best Practices in Customer Payment Assistance Programs.³⁰⁰

297 GAVIN DUFTY, COMMITTEE OF INQUIRY INTO FINANCIAL HARDSHIP OF ENERGY CONSUMERS, (2005), *available at* <http://www.vinnies.org.au/files/VIC/SocialJustice/Reports/2005/2005%20June%20-%20Committee%20of%20Inquiry%20into%20Financial%20all%20back%20.pdf>.

298 JOHN E. CROMWELL, III et. al., *supra* note 140.

299 Roger Colton, *A Cost-Based Response to Low-Income Energy Problems*, PUBLIC UTILITIES FORT-NIGHTLY, Mar. 1, 1991, at 127(5).

300 JOHN E. CROMWELL, III et. al., *supra* note 140, at 38.

Bill and Arrearage Management: Bill Discounts and Percentage of Income Plan Programs

An alternative strategy is to target low-income households that are at risk or in a cycle of non-payment by providing a bill discount. The two main types of bill discounts are a percentage discount on the total bill of the customer and a discount on a particular portion of the bill, such as a discount on or waiver of the fixed customer charge.³⁰¹ Any lost revenue can be offset to some degree by the reduced need for perpetual customer service costs related to this cycle. Determining eligibility for the discount may be done by cross-referencing customer account data with federal low-income assistance programs or proof of qualification for other income-based assistance programs.³⁰² A third bill discount approach would be a percentage of income payment plan (PIPP) approach, which sets the amount of the total bill for low-income customers at a percentage of the customer's income.

Additionally, water utility providers should adopt an arrearage forgiveness component to reduce pre-program arrears to a manageable level. Through an arrearage management program, customers may earn credits monthly to reduce their household's arrears to \$0. This write-off is seen as an incentive for customers to improve their payment records, and allows the utility to turn what appears to be a liability into an asset.³⁰³

Additional Resources:

- For an economic analysis of bill discounts and arrearage forgiveness, *see*: Roger D. Colton & Adrienne Quinn, *The ABC's of Arrearage Forgiveness*, available at: http://fsconline.com/05_FSCLibrary/lib2.htm.
- For a substantive evaluation of the implemented PIPP program in Colorado, known as the "PSCo Energy Assistance Pilot" (PEAP), *see Direct Testimony and Exhibit of Roger D. Colton on Behalf of the Public Service Company of Colorado, Before the Public Utilities Commission of the State of Colorado*, April 18, 2012, Docket No. 12A-XXXEG.
- For an analysis of the Massachusetts Arrearage Management program, *see* Fisher, Sheehan & Colton, *Massachusetts Arrearage Management Plans Offer Low-Income Payment Assistance But Frequently Fall Short in Collections Outcomes*, FSC's Law & Economics Insights, Issue 12-1, Jan/Feb 2012, available at: http://www.fsconline.com/downloads/FSC%20Newsletter/news2012/n2012_0102.pdf

301 *Id.* at 51–52.

302 *Id.* at 49–52.

303 *Id.* at 78–80.

Alternative Rate Structures

As certain municipal or state laws may prevent utility providers from employing low-income discount strategies, alternative methods are available for utilities to vary their rate structure without targeting specific customers.³⁰⁴ These strategies include: 1) decreasing the fixed charge amount and 2) implementing lifeline rates.

Fixed Charge, Minimum Bill, or Minimum Usage Allowance

Many utilities' rate structures include a fixed charge, which is usually a customer charge or a meter charge. Alternatively, some utilities use a minimum bill charge or minimum usage allowance instead of a customer charge. A minimum bill charge is for an amount of water which is considered by the utility provider as the typical consumption rate. A minimum usage allowance is a charge that includes a certain amount of water. From the perspective of a low-income customer, there is very little difference between these three kinds of charges—they cannot be avoided regardless of conservation or other water-saving techniques.³⁰⁵

Fixed charges may seem a prudent means of ensuring stable cash flow. Variable charges, however, are more favorable to low-income households. At the same time, it has been found that the cost is still recovered by other users in a justifiable tradeoff.³⁰⁶

Lifeline Rates

Setting lifeline rates means providing, at no cost, an initial block of water consumption that is deemed essential for human needs. Thereafter, the price of water per unit increases to recover the cost of the provided service. Before implementation, utility providers should study the characteristics of its low-income consumers to determine if a utility's low-income population consists of one- or two-person households, or primarily large families with children or other family members at home much of the day. If it is the latter, then a lifeline rate may not result in a meaningful reduction of a low-income customer's bill.³⁰⁷

304 *Id.* at 91.

305 *Id.* at 54–55.

306 *Id.*

307 *Id.* at 55–56.

BEST PRACTICES TO ENCOURAGE PAYMENT

Water and wastewater costs will likely take an increasing share of all households' budgets.³⁰⁸ Both low-income and many higher-income households may face difficulties in being able to afford water and wastewater bills, which can have a direct impact on the public health of the community.³⁰⁹ To minimize water-related public health issues and refrain from having to spend considerable amounts of revenue in debt-collection methods, several methods may be employed to encourage prompt payment and help minimize the expense involved in collection. Examples include: 1) Responsible Collection Practices; and 2) Greater Information Accessibility.

Responsible Collection Practices

Consistent metering and billing practices are particularly helpful in recovering costs from low-income customers. Although more frequent billings may add administrative costs, researchers indicate that the frequency may ease affordability and encourage prompt payments.³¹⁰ By contrast, longer or unpredictable billing cycles are likely to be counter-productive and require additional customer service expenses.

Greater Information Accessibility

When customers clearly understand the basis for the rate structure and what fixed or variable charges are included in their bills, they respond more effectively to bill payments. Therefore, it is suggested that a sample bill should be provided on utility providers' websites with key elements highlighted, defined, and explained clearly. This would allow an average customer to calculate their bill³¹¹ and would help utility providers save some customer service costs.

Additionally, when defaulting customers owe money to the utility, it makes sense to connect them with various public assistance programs to facilitate bill payments. Programs can include those that directly support bill payments (e.g. LIHEAP), to those that supplement overall household income (e.g. food stamps). Collaborating with assistance programs can allow an exchange of information, such as a relational database, that may help water utility companies overcome administrative costs of having to investigate the eligibility of customers for an internal affordability program.³¹²

308 *Id.* at Figure 5.5 (showing water and wastewater costs increased significantly faster than a typical household's income between 1990 to 2006).

309 *Id.* at 29–32.

310 BEECHER, *supra* note 68, at 8.

311 *Id.* at 12.

312 For example, the Philadelphia Water Services Department works in collaboration with the Energy Coordinating Agency (ECA), which in turns works through a citywide network of Neighborhood Energy Centers. A relational database is created that contains a cross-section of services at the same delivery site, which

Water utility providers may independently create a crisis intervention fund to deliver assistance to customers beset with temporary financial crises stemming from illness, job loss, or family distress. Opt-in or opt-out fundraising programs may be employed for the fund. Grants can be distributed based on various factors including income, the amount outstanding, and the ability to resolve the outstanding amount.³¹³ Adopting such practices would not only have a positive social impact, but can enhance the utility's image and instill customer loyalty and trust.

Resources: For more information on crisis intervention, *see*: John E. Cromwell, III, Roger D. Colton, Scott J. Rubin, et al, *Best Practices in Customer Payment Assistance Programs*, Ch. 13.

assists a coordinated entry for applicants that are accepted into any Federal/State funding program. The ECA believes this has overcome administrative constraints and alleviates bill payment problems. John E. Cromwell, III et. al., *supra* note 140, at 59.

313 John E. Cromwell, III et. al., *supra* note 140, 96.

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