# **Our Right to Water**

A People's Guide to Implementing the United Nations' Recognition of the Right to Safe Drinking Water and Sanitation in the United States



### About Food & Water Watch



Food & Water Watch works to ensure the food, water and fish we consume is safe, accessible and sustainable. So we can all enjoy and trust in what we eat and drink, we help people take charge of where their food comes from, keep clean, affordable, public tap water flowing freely to our homes, protect the environmental quality of oceans, force government to do its job protecting citizens, and educate about the importance of keeping shared resources under public control.

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#### Introduction

The United Nations General Assembly declared in July 2010 that access to clean water and sanitation is an essential human right, calling on countries and organizations to help provide access for the 884 million people currently without safe drinking water and the more than 2.6 billion people without basic sanitation.<sup>1</sup>

The United States can be considered largely water rich relative to many other countries, and its citizens enjoy near-universal access to safe water and sanitation. Yet some U.S. communities continue to face systemic violations of this human right – often those in poor, minority or rural locations. In recent years, new threats have emerged, particularly in communities where the oil and gas industry is using the process of hydraulic fracturing to extract natural gas deposits, and in communities where groundwater is being mined for bottling, which can lead to shortages in household water supplies.

In February 2011, the UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque, officially visited the United States to examine the extent to which the federal government met its obligations to respect, protect and fulfill the right to safe drinking water and sanitation. Her investigation focused on nondiscrimination and equality and identified several populations that continue to face discrimination, including homeless people, Native Americans and other marginalized groups.<sup>2</sup>

As stressed in the Special Rapporteur's investigation, the U.S. government should focus on the process and not just the outcome of the right to safe drinking water and sanitation by targeting obligations to respect, protect and fulfill.<sup>3</sup> This helps to prioritize accountability and reduce gray areas where vulnerable populations are denied rights.

#### Violations of the Human Right to Water and Sanitation

Water scarcity often is not simply a lack of physical access to water sources; it also includes the lack of financial resources and political influence.<sup>4</sup> The right to safe drinking water requires communities and governments to think of water as more than just a physical object and to consider the social, ecological and political relationships that underscore the availability, accessibility and affordability of the resource.

#### Household Shut-offs Due to Inability to Pay

Access to safe water and sanitation is intrinsically linked to affordability. The price of water service must not force households to sacrifice other essential needs such as food, housing, education and health care. Under a human rights framework, the extent to which suppliers of water and sanitation services may raise revenues from tariffs should be dependent on what is affordable for the user.<sup>5</sup>

Although many factors have contributed to recent failures in U.S. water and sewer systems, financing is central to the problem.

When the U.S. government passed the Clean Water Act of 1972, it provided federal grant funding for publicly owned treatment works along with the new mandate to limit water pollution, thus recognizing the serious costs associated with treating wastewater to protect public health and the environment. In 1978, the federal government funded approximately 78 percent of municipal sewer infrastructure. More recently, however, this share has dropped to less than 5 percent,<sup>6</sup> contributing to extensive deterioration of wastewater infrastructure. The steady cutback in federal funding has resulted in unfunded mandates placed upon water and sewer utilities.<sup>7</sup>

As federal infrastructure funding has dwindled, entities such as the U.S. Environmental Protection Agency and water and sewer associations, among others, have advocated for "full-cost pricing," or charging prices that recover the entire cost of building, operating and maintaining a system. Support for this concept comes from engineering firms, private water utilities and others<sup>8</sup> who stand to gain from higher water rates in the public sector and public utilities' increased reliance on ratepayers to fund infrastructure improvements.

This approach to funding infrastructure presents a threat to the human right to water in both urban and rural communities. In urban communities, income inequality results in poor households and communities of color bearing a disproportionate burden for funding infrastructure – as is illustrated by the example of the nation's capital, Washington, D.C. Over the next 10 years, Washington, D.C., plans to make \$3.8 billion in water infrastructure improvements, more than half of which are federally mandated.<sup>9</sup> With federal assistance dwindling, the city water department has adopted an aggressive rate-increase strategy. In the last five years, DC Water has hiked water rates by 58 percent, which added \$288 to the typical household's annual water bill, bringing it to \$787.<sup>10</sup> Water bills can be a considerable financial burden for the city's least well-off. With 19 percent of D.C. residents living in poverty in 2010,<sup>11</sup> escalating water rates could restrict people's access to safe drinking water.

Because of income disparity in the city, high water rates will also disproportionately affect people of color. White households in D.C. have a median income nearly three times that of black households,<sup>12</sup> even though white households are smaller on average.<sup>13</sup> Larger households generally use more water and have higher water bills. For one in ten households, the average DC Water bill of \$787 a year<sup>14</sup> would consume at least 8 percent of their total income. People of color are members of 80 percent of these households.<sup>15</sup>

For about a quarter of black households, the typical water bill will consume at least 5 cents of every dollar in income.<sup>16</sup> According to the U.S. Environmental Protection Agency's affordability guidelines, water and sewer bills should not constitute more than 4 percent of median household income, but this does not take into consideration areas with high income inequality. The poorest people could eventually become unable to pay their bills, which can result in water shut-offs. This would be a violation of the human right to water and would pose a risk to public health.

As government funding for water and sanitation has decreased, we have seen more violations and public health disasters that have eroded people's trust in the safety and quality of municipal water. Companies that sell bottled water seem to encourage this distrust in order to boost sales – sales that climbed astronomically until recently, when they dipped due to a combination of the economic slowdown and rising consumer awareness of the problems with bottled water. Upstream bottled water extraction can overtap water supplies, and in several locations, rural residents have found their wells dry.



#### Contamination: Nitrates, Arsenic and Natural Gas Fracking

The Clean Water Act and Safe Drinking Water Act regulate water quality in the United States. Since its passage in 1972, and subsequent amendments in 1977, the Clean Water Act has regulated the discharge of pollutants from point sources (identified, localized sources) into surface water.<sup>17</sup> However, the Clean Water Act does not regulate groundwater contamination, which is covered under other laws, nor many non-point sources of water pollution. The U.S. Environmental Protection Agency sets minimum water quality standards and monitors and enforces these standards in the waters of the United States. States can adopt their own regulations provided they meet the minimum federal standards.

Urbanization, mining, energy production, agriculture and many other factors can impair water quality. Sprawling development increases the area of impervious surfaces and disrupts the flow of water that is needed to recharge groundwater aquifers and rivers. Once water is contaminated, it is more expensive to treat to safe drinking water standards. Nitrate contamination has been a recurring issue in California's San Joaquin Valley, where 92 local drinking water systems exceeded the standard for nitrates, threatening the health of 1.3 million people.<sup>18</sup> The health risks associated with nitrate pollution include blue baby syndrome, respiratory tract infections in children, thyroid disruption, pancreatitis and various cancers.<sup>19</sup> The causes of nitrate pollution are often non-point sources, which means it is difficult to identify and hold the polluter accountable. Nitrate pollution can occur naturally and when there are high levels of manure or pesticide contamination from agriculture.<sup>20</sup>

To avoid the health risks associated with nitrate pollution, households typically respond with two approaches: filtering their water or seeking alternatives such as bottled water or water trucks. Studies in the San Joaquin Valley found that these avoidance costs raised household water expenditures to nearly three times what the EPA considers affordable.<sup>21</sup> Most of the affected populations are small Latino communities, and like other small communities, they face difficulties in being able to raise the revenue necessary to more fully mitigate the effects of nitrate contamination.<sup>22</sup> Even more distressing, in many small, rural communities, households get their drinking water from unregulated private wells, and thus it is unlikely that they are aware of any degradation in water quality.

The United States has made progress since the 1950s in extending access to water and sanitation to rural communities.<sup>23</sup> However, there remain pockets of communities without secure access. A rural resident is twice as likely as an urban resident to lack complete plumbing facilities.<sup>24</sup> Extending these services and meeting quality regulations are the two main challenges facing most rural community water systems.

Especially during difficult economic times, water quality regulations are often viewed as barriers to economic development. As water quality deteriorates, health and environmental violations rise and the quantity of safe water available for communities decreases, further threatening their access to clean water and sanitation. Solutions for improving and protecting water quality include preventing pollution at the source, treating polluted water, and protecting wetlands and ecosystems that provide important natural water treatment services.

Arsenic is another threat to water quality, particularly in small communities that rely on groundwater as their main source of drinking water. Approximately 1.1 million people in the United States are affected by arsenic contamination. Of the estimated 1,000 water systems affected, 914 are unable to afford the costs of mitigation efforts to meet the arsenic standard. For example, arsenic levels in Andrews, Texas, are three times the national legal limit, but it is far too costly to build the necessary treatment plant. This exemplifies the difficult choices facing both local water managers and national decision makers.<sup>25</sup> The current "two-tiered" system of differing federal requirements on large and small public water systems violates the United States' obligations to protect and fulfill the human right to safe water; all U.S. communities should have equivalent standards.

Over the past decade, there has been a rush for new natural gas across the United States using a controversial, and often polluting, drilling method. Hydraulic fracturing, known as fracking, injects a mixture of water, sand and chemicals, many of them toxic, under high pressure into compact rock formations – shale, tight sandstone or coal beds – to crack the rock and release natural gas. Fracking has been around for decades, but the techniques, technologies and chemicals used to reach new, remote gas reserves are more intensive and riskier than conventional gas drilling.

The rapid expansion of this new form of fracking has brought rampant environmental and economic problems to rural communities. Accidents and leaks have polluted rivers, streams and drinking water supplies. Regions peppered with drilling rigs have high levels of smog as well as other airborne pollutants, including potential carcinogens. Rural communities often face an onslaught of heavy truck traffic as well as declining property values. The "bridge fuel" produced by fracking could well be a bridge to nowhere.<sup>26</sup>

Many residents exposed to toxic air and water pollution from gas drilling feel a sense of injustice because of their poor treatment at the hands of the industry and lack of protection from the government. In 2009, methane had so polluted wells in Dimock, Pennsylvania, that some families could no longer drink from their taps.<sup>27</sup> An Ohio house exploded in 2007 after a fracked gas well leaked large volumes of methane into the home's water supply.<sup>28</sup> And Texas households near fracked gas wells have high reported levels of cancer-causing benzene in the air.<sup>29</sup>

Today, the oil and gas industry is loudly promoting natural gas production as a means of increasing U.S. energy independence and national energy security.<sup>30</sup> Industry representatives have specifically used this argument to lobby against government regulation and taxation.<sup>31</sup> Already, in 2005, Congress exempted fracking from regulation under the Safe Drinking Water Act, giving the industry the unique unchecked authority to inject toxic chemicals (other than diesel fuels) into the ground near water sources.<sup>32</sup> Between 2005 and 2010, the 10 largest natural gas producers and two trade associations spent more than \$370 million lobbying for their interests.<sup>33</sup> The EPA is not set to release its full assessment of fracking's impact on water resources until 2014.<sup>34</sup>

#### **Vulnerable Populations and Discrimination**

An analysis using 2000 U.S. census data identified segments of the U.S. population living without secure access to water and sanitation services. Native Americans, Hispanics and African Americans all disproportionately lack access to complete plumbing facilities.<sup>35</sup>

#### Native American Communities

More than 4 percent of American Indian and Alaska Native households lacked complete plumbing facilities. They were nearly 10 times more likely than white households to be without water and sanitation service. Access to affordable water is inadequate on many Native American reservations.<sup>36</sup> Reservation residents often use the least amount of water in a given region,<sup>37</sup> work the hardest to get it and pay the most to use it.<sup>38</sup> In some places, the sanitation situation resembles that of low-income rural areas during the early 20th century.<sup>39</sup>

About 40 percent of the Navajo Nation lacks piped water service and has to spend two hours a day hauling water to their homes. According to a 2006 study, the total economic cost of hauling water was \$113 per 1,000 gallons, compared to the \$3.50 on average that residents with piped service paid for the same amount of water from the tap.<sup>40</sup> Nearly 70,000 Navajo live without water infrastructure and sometimes resort to non-potable water sources. This increases the prevalence of waterborne diseases, which has the subsidiary effect of increasing health costs.<sup>41</sup>

#### Latinos and Immigrants

Latinos represent the second largest racial and ethnic group – after Native Americans – in the United States without safe water access, accounting for roughly 135,000 households, predominantly in Puerto Rico, California and Texas.<sup>42</sup> Issues of property rights and citizenship threaten this group's access to water and sanitation. The right to safe water and sanitation is violated not just because of the lack of extended services; there are basic communications concerns as well. If the water quality of an immigrant community deteriorates and residents are not properly notified of the health violations in an appropriate language, then this is a violation of the obligation to protect.



Other violations are more explicit in their discrimination. For example, in 2011, the Alabama state legislature passed a draconian anti-immigration law (House Bill 56) that, among other measures,<sup>43</sup> forbids undocumented immigrants from engaging in a business transaction with the state or local governments.44 However, the definition of business transaction is vague and allows utilities like the Allgood Water Works company to post signs telling residents they must have a valid Alabama driver's license or identification card, or else services will be cut.<sup>45</sup> The U.S. Department of Justice is challenging the law, but as arguments continue to be made, many people are leaving the state.<sup>46</sup> Clearly, Alabama is violating the human right to water by denying basic access to service to certain populations in a discriminatory way.

#### **Rural Areas**

A rural household in the United States is twice as likely as an urban one to have inadequate plumbing facilities. More than 600,000 rural residents lack adequate water and sewer access nationwide,<sup>47</sup> and 38 percent of rural households without proper plumbing were below the poverty line.<sup>48</sup>

The experience in Lowndes County, Alabama, is representative of many rural communities across the country with high poverty levels. With a mean household income of \$30,225, 82 percent of residents rely on on-site wastewater systems, the majority of which reportedly are failing or expected to fail in the future.<sup>49</sup> Alternatives to on-site sanitation range in

	1950	1960	1970	1980	1990	2000
Rural	56%	31.5%	14.5%	4.5%	1.9%	1.0%
Urban	11%	8.3%	3.1%	2.2%	0.5%	0.5%
Total	27%	14.7%	5.9%	2.7%	0.8%	0.6%

#### Table 1: Portion of U.S. Households Without Complete Plumbing

Source: Source: Gasteyer, Stephen and Rahul T. Vaswani. Rural Community Assistance Partnership. "Still Living Without the Basics in the 21st Century: Analyzing the Availability of Water an Sanitation Services in the United States." 2004 at 11.

price from \$6,000 to \$30,000. Consequently, what is available is not always affordable, and the right to sanitation is violated.<sup>50</sup>

#### **Homeless People**

In 2010, approximately 1.6 million people experienced homelessness in shelters in the United States, an increase of 2.2 percent from 2009. The number of homeless families increased 20 percent between 2007 and 2010.<sup>51</sup> Meanwhile, almost 4 percent of the U.S. adult population in shelters has tested positive for HIV/AIDS, significantly higher than the 0.5 percent portion of the total adult population, indicating that people with HIV/AIDS have a higher probability of being homeless.<sup>52</sup> Access to safe water and sanitation is crucial for people living with HIV/AIDS, which compromises immune systems leaving people even more susceptible to waterborne and other pathogens.

The homeless population has its access to water and sanitation threatened in numerous ways. The urban homeless do not have ready access to drinking water or toilets if public water fountains are shut off or public toilets are locked for weather, safety or financial reasons.<sup>53</sup> The short-term solution is safe access to public restrooms, and the long-term solution is promotion of affordable housing. Unfortunately, the homeless are rarely able to gather the political power to achieve these goals.

#### U.S. Foreign Aid and U.S. Engagement in International Financial Institutions

U.S. foreign assistance should support progressive realization of the human right to water and sanitation. Greater transparency and disclosure, as well as greater involvement from civil society, are needed when setting priorities for foreign aid. This can help to ensure that projects supported by the U.S. Agency for International Development target areas of greatest need, emphasize community ownership and management, ensure non-profit structures and use locally sourced technologies.

U.S. engagement with international financial institutions should be designed to promote and support the human right to water and sanitation. The United States is the largest single donor country to the World Bank Group, which remains the largest external source of financing for water management in developing countries. However, the Bank continues to push water privatization and corporatization on governments through advisory and technical services, direct investments that empower transnational water corporations, the restructuring of public utilities, and even the use of donor conditionalities. Restructuring often means forcing borrowing countries to adopt cost-recovery regulations that increase household tariffs and lay the groundwork for privatization.

Currently, many countries lack the capacity to adequately protect and fulfill the human right to water and sanitation, making it both easier and more dangerous for them to succumb to the pressures of transnational corporations, international financial institutions and donors, by delegating their key duties to the private sector.

#### Conclusion: Implementing a National Plan of Action on the Right to Water and Sanitation in the United States

In order to fully realize and sustain the human right to water and sanitation, it is essential that the United States engage in a process of policy reform to put human rights first; address gaps in regulation, implementation and funding; minimize inequality and *de facto* discrimination; protect water resources; and bolster data collection and rural oversight.

As the UN Special Rapporteur recommended, the right to water should be applied holistically by factoring it into policies that affect water quality, including agriculture, chemical use in products and energy production. Putting human rights at the center of national planning and policy will help ensure that basic needs and ecosystem protections are prioritized when balancing competing demands on water.

Identifying and securing the financial and technical capacity to upgrade infrastructure amid difficult economic conditions, growing inequality and competing interests is a consistent challenge to local municipalities.

A better understanding of the current use and availability of water resources is necessary for the U.S. government to meet its obligation to fulfill and protect this human right. Data and information about water supply should be widely available, should integrate the physical and social sciences, and should be relevant to all parties, from the individual homeowner to regional water managers.

Improved understanding at different spatial scales could provide opportunities to communicate to policymakers about how to apply Clean Water Act standards to groundwater to protect the water supplies that many vulnerable communities rely on. Federal agencies such as the U.S. Geological Survey have done good work to increase understanding of the hydrologic status of groundwater resources, but more needs to be done to inform local decisionmaking. Minnesota's Water Sustainability Framework is a good example that uses a systems approach and outlines data collection on groundwater availability and usage.

#### Recommendations

- Commit the necessary resources, financial and otherwise, to create and implement a National Plan for Water Management to respect, protect and fulfill the human right to water and sanitation in the United States. The plan should:
  - Center around human rights, prioritizing basic needs and ecological integrity;
  - Incorporate the forthcoming results of U.S.
    Geological Survey surface and groundwater mapping statistics;
  - Include affordability standards, effective remedies for discrimination, and accountability mechanisms;
  - Be based on a participatory, inclusive and transparent process; and
  - Safeguard against corporate interference in the planning and implementation process.
- Address water holistically by including other sectors with impacts on water in policy reform.
- Adopt effective regulations to prevent harm to water resources through contamination and overuse, and provide accountability.
- Bolster support for public, non-profit water systems through programs and policies that boost public funding.
- Take measures to increase public confidence in public water systems by phasing out governmental spending on bottled water.
- Take steps through Congressional action to improve regulation and accountability of the bottled water industry.
- Ensure that foreign aid targets those with greatest need by using a human rights framework.

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