

**SANTA
CLARA
LAW** est. 1911

**INTERNATIONAL
HUMAN RIGHTS
CLINIC**

**Gender Equity and the Full Realization of the Human Rights to Water and Sanitation
in the United States**

Written submission prepared by the

**International Human Rights Clinic
at Santa Clara University School of Law**

before the

UN SPECIAL RAPPORTEUR ON THE HUMAN RIGHT TO
SAFE DRINKING WATER AND SANITATION

for his

QUESTIONNAIRE FOR THE REPORT
ON GENDER EQUALITY

January 31, 2016

Clinic Director
Francisco J. Rivera Juaristi

Supervising Attorney
Britton Schwartz

The following Santa Clara Law students provided valuable research and editing for this submission: Courtney Kimmey and Timothy Cojocnean.

With the support and input of the US National Human Rights to Water and Sanitation Coalition, convened by the US Human Rights Network (USHRN).

**US HUMAN RIGHTS
NETWORK**
BUILDING A PEOPLE-CENTERED MOVEMENT

UN Special Rapporteur on the human right to safe drinking water and sanitation
Office of the High Commissioner for Human Rights
Special Procedures Branch, Palais Wilson
CH – 1211, Geneva
Switzerland

Submitted via email to: srwatsan@ohchr.org

CC: registry@ohchr.org

Dear Special Rapporteur Heller:

In response to the questionnaire circulated by your mandate soliciting information about the intersection between gender equality and the human rights to water and sanitation, the International Human Rights Clinic at Santa Clara University School of Law (the Clinic) and the US Human Rights Network (USHRN) welcome the opportunity to provide information on the gender dimensions of the U.S. government's failure to realize the human rights to water and sanitation in the United States. This submission does not answer each question individually but rather provides information that is responsive to the range of questions posed in the gender equality section of the questionnaire.

The Clinic and USHRN provide this information on behalf of the U.S. National Human Rights to Water and Sanitation Coalition. USHRN convenes this coalition, comprised of over 110 groups and individuals working on the human rights to water and sanitation throughout the United States. USHRN, as a whole, is a network of over 300 organizational members that builds and strengthens a human rights movement in the U.S., centered on those most directly affected by human rights violations. The coalition on the human rights to water and sanitation was formed a year ago, following several key national convenings of people struggling with similar violations of the human rights to water and sanitation in the U.S. We have come together to facilitate joint organizing and advocacy and share knowledge to create change.

The coalition includes national, local, grassroots, and faith-based organizations, as well as educational institutions and law schools. The members of the coalition and the issues they represent span across urban, rural, and indigenous communities from across the United States. The coalition includes grassroots activists and directly impacted people as well as lawyers, environmental science professionals, and experts on water policy, utilities, legislation, and human rights.

Some key accomplishments of coalition members include: coalition members organized the 2011 official U.S. country visit of the UN Special Rapporteur on the human right to safe drinking water and sanitation, and the 2014 site visit of the Special Rapporteur to investigate mass water shutoffs and home tax foreclosures due to water bill liens in Detroit. They also worked for the

passage of California's Human Right to Water Bill. More recently, coalition members successfully advocated for UN Universal Periodic Review (UPR) recommendations to the U.S. on the right to water and joined with groups across the Americas to contribute the U.S. perspective to a historic thematic hearing on the human right to water in the Americas before the Inter-American Commission on Human Rights in October 2015.¹ In January 2016, the coalition also provided a stakeholder submission to the U.S. National Action Plan on Responsible Business Conduct (NAP) regarding the human rights to water and sanitation.²

The diversity of the coalition and our expertise makes us well situated to provide information about the gender dimensions of the worsening water and sanitation crisis in the United States, address the urgent need for the U.S. government to take a leadership role in resolving this crisis, and explore emerging better practices to redress and prevent these ongoing violations.

In our submission, we have highlighted several cases that illustrate the gender dimensions of significant gaps that currently exist in the realization of the human rights to water and sanitation in the United States. This submission does not attempt to provide a comprehensive picture of the human rights violations experienced in the context of the U.S. water and sanitation crisis; rather, it highlights those facts that highlight the gendered impacts of these violations on women and girls. We would be happy to provide more detailed information on any of the cases discussed in this submission upon request.

Specifically, we provide information on low-income minority and indigenous communities that lack equal access to basic levels of safe and affordable drinking water in the U.S. jurisdictions of Detroit, Baltimore, Boston, California, Alabama, New Mexico, and Georgia. In many of these cases, communities lack access to safe drinking water despite paying high rates for water service. These cases illustrate the disparate impact of water access deficiencies on communities or groups who have historically suffered discrimination, as well as the particular challenges faced by women and children.

We also address the serious problem of water shutoffs currently taking place in multiple U.S. cities where low-income, minority residents have been unable to afford to pay for municipal water services and have been disproportionately targeted by agencies seeking to collect on past due accounts. We further provide preliminary information on the due process implications of these shutoffs. Finally, we include case studies that describe the problem of communities that

¹ For a video of the hearing, see Inter-American Commission on Human Rights, "Human Rights and Water in the Americas," Oct. 23, 2015, available at <https://www.youtube.com/watch?v=KJ9CoiyF6c4>. The Clinic also participated in a thematic hearing on the right of access to water for rural communities in Costa Rica before the Inter-American Commission in March 2015, video available at <https://www.youtube.com/watch?v=32yxFaJHil0>.

² Letter from USHRN National Human Rights to Water and Sanitation Coalition, to President Obama (Jan. 15, 2016), available at www.ushrnetwork.org/sites/ushrnetwork.org/files/ushrn_human_rights_to_water_and_sanitation_coalition_nap_submission_1_15_16.pdf.

lack a basic supply of drinking water or adequate sanitation due to the high cost of infrastructure improvements.

Finally, this submission attempts to highlight existing or proposed policy solutions that may provide possible positive approaches to the achievement of gender equity in access to water, sanitation, and hygiene. Specifically, the submission provides information about policy initiatives and proposals that address the gendered impacts of deficiencies in water and sanitation affordability, water quality, and access to adequate water and sanitation infrastructure in the U.S. Taken together, these cases provide insight into the different dimensions of ensuring gender equity in realization of the human rights to water and sanitation in a comprehensive way.

We hope that this submission may be helpful to the development of the Special Rapporteur's report on gender equality, and we welcome any opportunity to provide further information to the Special Rapporteur. Members of the coalition will continue to explore the insights offered in this submission on March 22, 2016, when they will present a panel on gender equity and the realization of the rights to water and sanitation as a side event to the 60th session of the UN Commission on the Status of Women in New York. The panel may provide a useful supplement to this submission. Please do not hesitate to contact us if we can provide any additional information or support.

Response to Questions for the Report on Gender Equality:

I. *Low-Income Minority and Indigenous Women in the United States Lack Equal Access to Basic Levels of Safe and Affordable Drinking Water*

1. In the United States, existing measures deprive groups who have historically suffered discrimination, including women and girls, of equal access to basic levels of safe and affordable drinking water.³ As the previous United Nations Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation noted after her country visit to the United States, “those who are facing obstacles in the enjoyment of the rights to water and sanitation are disproportionately Black, Latino, American Indian, homeless, or otherwise disadvantaged.”⁴ These communities lack access to water as a result of one or all of the following problems: they cannot afford a basic level of drinking water, available drinking water is not safe for human consumption, or they lack access to adequate water and sanitation infrastructure. Cutting across these violations of the human rights to water and sanitation are related violations of fundamental human rights principles including non-discrimination, transparency and access to information, and accountability, as well as related rights such as the rights to life, health, family life, and adequate housing.

2. Women and children experience a particular set of gender-specific harms as a result of this situation, as demonstrated in cases like the current crisis in Flint, Michigan, where children continue to suffer irreversible health and developmental harms and women face risks to their reproductive health as a result of city-wide lead poisoning from contaminated drinking water caused by government negligence, deliberate indifference, and callous disregard. Any understanding of these violations must be informed by an intersectional analysis that recognizes the ways multiple forms of discrimination burden low-income women, indigenous women, and women of color.

3. This submission will identify case studies that demonstrate the lack of equal access to water and sanitation faced by women and girls in low-income minority and indigenous communities in the U.S. First, this submission explores cases of communities that have lost access to water and sanitation where water is not affordable by providing information on urban low-income minority communities in Detroit, Baltimore, and Boston that have lost or risk losing

³ International Human Rights Clinic, Berkeley Law, “United States Government Consultation on Environmental Issues Relating to the Universal Periodic Review: A Summary. October 7, 2014, UC Berkeley School of Law,” p. 8, available at https://www.law.berkeley.edu/files/UPR_Enviro_Consultation_Outcome_Doc_141208.pdf.

⁴ Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶ 79, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque).

access to water due to water service shutoffs instituted when public utilities refuse to provide basic levels of drinking water to those who cannot afford to pay for water. The information provided on these cases also describes the lack of due process and other safeguards to ensure continuity of service, as well as risks faced by women and children. Second, it will describe the loss of access caused by unsafe drinking water, looking specifically at the situation of rural and urban low-income minority communities in California's Salinas and San Joaquin Valleys; Shell Bluff, Georgia; Flint, Michigan; and Washington, D.C.; as well as the particular impacts of uranium mining on indigenous communities in New Mexico. Finally, it will address the absence of infrastructure improvement and financial support measures to ensure access to adequate water and sanitation for low-income, homeless, and indigenous communities in Flint, Michigan; rural Alabama; and homeless communities in California and Kentucky.

4. These cases illustrate the ways that women and girls both face discrimination in their access to safe, affordable, and adequate water and sanitation in the U.S. and the disparate impacts of existing policies and practices on women's realization of the human rights to water and sanitation. For the three themes of access to adequate infrastructure, affordability, and quality, the submission also provides information on existing or proposed good practices to redress the gendered impacts of these violations. In particular, this submission seeks to emphasize the absolute necessity of including the voices of affected women in all policies and practices adopted to redress gender inequities in the realization of the human rights to water and sanitation. Finally, we also take this opportunity to reiterate the importance of crafting positive approaches that integrate an intersectional perspective recognizing the multiple forms of discrimination and disproportionate environmental, social, and economic burdens facing low income women of color, including indigenous women, and their communities.

II. In the United States, Women in Low-Income Urban Communities of Color Suffer Disproportionately From the Loss of Access to Basic Levels of Water Due to Unaffordable Water Rates and Service Disconnections for Unpaid Accounts

5. Lack of affordable water in the U.S. disproportionately impacts groups who have historically suffered discrimination, including women. In particular, low-income residents of color in cities like Detroit, Baltimore, Philadelphia and Boston have faced mass water shut-offs due to their inability to pay unaffordable water bills; thousands in these cities remain without water. This section provides information about the particular harms suffered by women and concludes by presenting information about a new program that will tie water rates to income in Philadelphia as a promising practice to address affordability challenges in the U.S.

6. In the United States, the affordability of water has become a serious problem for low-income minority communities, and the situation has only worsened since the previous UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation highlighted the

issue after her 2011 country visit.⁵ Such communities already struggle to afford basic necessities such as water, food, and housing, and the absence or insufficiency of social safety nets, rate programs that index utility rates to income, or free provision of minimum levels of water service for basic human needs exacerbate the risks these communities face.⁶ Against this backdrop, large cities facing difficult economic circumstances, such as Detroit and Baltimore, have increasingly turned to the collection of delinquent water bills as a means to improve municipal finances.⁷ However, although corporate entities represent the largest piece of the missing revenue represented by past-due accounts, utilities instead target thousands of low-income minority residents by threatening or carrying out service disconnections.⁸ As a result, it is primarily these residents who have been affected by mass water shutoffs due to unpaid bills.⁹

⁵ Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶¶ 47-54, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque); International Human Rights Clinic, Berkeley Law, “United States Government Consultation on Environmental Issues Relating to the Universal Periodic Review: A Summary. October 7, 2014, UC Berkeley School of Law,” p. 10, available at https://www.law.berkeley.edu/files/UPR_Enviro_Consultation_Outcome_Doc_141208.pdf; National Consumer Law Center, “Review and Recommendations for Implementing Water and Wastewater Affordability Programs in the United States,” (March 2014), available at <http://www.nclc.org/images/pdf/pr-reports/report-water-affordability.pdf>.

⁶ Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶¶ 47-54, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque); U.S. Human Rights Network, Thematic Hearing Request: Barriers to Access to Safe and Affordable Water in the United States, (July 28, 2015), p. 6, available at http://www.ushrnetwork.org/sites/ushrnetwork.org/files/unitedstates.ushrn_righttwater_1.pdf; National Consumer Law Center, “Review and Recommendations for Implementing Water and Wastewater Affordability Programs in the United States,” (March 2014), available at <http://www.nclc.org/images/pdf/pr-reports/report-water-affordability.pdf>; Georgetown Law Human Rights Institute, Tapped Out: Threats to the Human Right to Water in the Urban United States (April 2013), pp. 11-12, available at <http://www.law.georgetown.edu/academics/centers-institutes/human-rights-institute/upload/HumanRightsFinal2013.pdf>.

⁷ See e.g., Luke Broadwater, Baltimore to send water turn-off notices to 25,000 delinquent customers, BALTIMORE SUN, March 26, 2015, <http://www.baltimoresun.com/news/maryland/baltimore-city/bs-md-ci-water-bills-20150326-story.html>; Georgetown Law Human Rights Institute, Tapped Out: Threats to the Human Right to Water in the Urban United States (April 2013), pp. 22-23, available at <http://www.law.georgetown.edu/academics/centers-institutes/human-rights-institute/upload/HumanRightsFinal2013.pdf>.

⁸ U.S. Human Rights Network, Thematic Hearing Request: Barriers to Access to Safe and Affordable Water in the United States, (July 28, 2015), p. 4, available at http://www.ushrnetwork.org/sites/ushrnetwork.org/files/unitedstates.ushrn_righttwater_1.pdf; Luke Broadwater, Baltimore to send water turn-off notices to 25,000 delinquent customers, BALTIMORE SUN, March 26, 2015, <http://www.baltimoresun.com/news/maryland/baltimore-city/bs-md-ci-water-bills-20150326-story.html>; International Human Rights Clinic, Berkeley Law, “United States Government Consultation on Environmental Issues Relating to the Universal Periodic Review: A Summary. October 7, 2014, UC Berkeley School of Law,” p. 10, available at https://www.law.berkeley.edu/files/UPR_Enviro_Consultation_Outcome_Doc_141208.pdf; Sarah Lazare, Groups Appeal to UN for ‘Humanity’ as Detroit Shuts Water Off to Thousands,” (June 18, 2014), available at <http://www.commondreams.org/news/2014/06/18/groups-appeal-un-humanity-detroit-shuts-water-thousands>.

⁹ U.S. Human Rights Network, Thematic Hearing Request: Barriers to Access to Safe and Affordable Water in the United States, (July 28, 2015), p. 4, available at http://www.ushrnetwork.org/sites/ushrnetwork.org/files/unitedstates.ushrn_righttwater_1.pdf; National Law

These vulnerable families further risk the loss of housing when cities collect unpaid water bills through tax lien sales and home foreclosures. After a joint visit to investigate water shutoffs in Detroit, the UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation and the UN Special Rapporteur on the Right to Adequate Housing publicly condemned the United States for this practice, stating that “[d]isconnection of water services because of failure to pay due to lack of means constitutes a violation of the human right to water and other international human rights,”¹⁰ and noting that the shutoffs have “disproportionate effects on vulnerable people and low income African Americans.”¹¹ The following subsections provide a brief overview of the human rights violations associated with mass water shutoffs, the particular harms suffered by women and girls, and some emerging and proposed policy solutions.

A. Water and Sanitation Services Are Unaffordable and Mass Shutoffs Violate Human Rights

7. Public utilities subject low-income communities, particularly those of color, to unaffordable water and sanitation rates to subsidize crumbling infrastructure and delinquent corporate and government accounts. In **Baltimore**, water rates have nearly tripled since 2000, and another 11% increase was approved in July 2015; rates in **Detroit** continue to climb as well, rising 119% in the last decade.¹²

8. Rural communities face unaffordable water rate increases as well. For example, one of the poorest communities in the second poorest county in California, the community of **Lucerne in Lake County, CA**, has experienced a 50% water utility rate increase every year, since it was privatized by Cal Water – amounting to a 500% increase in 10 years.¹³ It has reached a tipping

Center on Homelessness and Poverty, et al., Housing and Homelessness in the United States of America, Submission to the Universal Periodic Review of the United States of America (September 15, 2014), para. 24, available at http://www.nlchp.org/documents/UPR_Housing_Report_2014.

¹⁰ Office of the UN High Commissioner for Human Rights, Detroit: Disconnecting water from people who cannot pay –an affront to human rights say UN experts, (Jun 25, 2014),

<http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=14777>.

¹¹ Office of the UN High Commissioner for Human Rights, Joint Press Statement by Special Rapporteur on adequate housing as a component of the right to an adequate standard of living and to right to non-discrimination in this context, and Special Rapporteur on the human right to safe drinking water and sanitation, Visit to city of Detroit (United States of America 18-20 October 2014) (October 20, 2014), available at <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=15188>; See also Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶ 50, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque).

¹² Blue Planet Project, Water Crisis in Detroit: Putting Corporate Profit Ahead of Human Rights. Submission to the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation (June 26, 2014), available at <http://www.globalresearch.ca/water-crisis-in-detroit-putting-corporate-profit-ahead-of-human-rights/5388726>.

¹³ Glenda Anderson, Tiny Lucerne faces huge water bills, The Press Democrat (Sept. 25, 2012), available at <http://www.pressdemocrat.com/news/2307387-181/tiny-lucerne-faces-huge-water>.

point where, like Detroit, many owe more in water bills than their home is worth, so people are fleeing, leaving fewer people behind to pay more and more per household.¹⁴

9. Rather than providing relief, public utilities in cities like **Detroit, Baltimore, and Boston** are engaging in mass water shutoffs against thousands of low-income households, particularly those of color, without regard for those who cannot afford service or elders, children, the chronically ill, or other vulnerable groups.

10. In **Flint, Michigan**, where the city is in crisis because of poisoned water, the utility continues to issue shutoff notices on past-due accounts, requiring residents to pay for contaminated water.¹⁵

11. Shutoffs have been conducted without notice or due process opportunities to challenge the decision to shut off a household's water. Utilities in these cities have failed to collect or make publicly available data about the number of shut-offs and the demographics of affected households.

12. Low-income communities of color are most affected and have been disproportionately targeted by utilities.

13. UN experts found that the **Detroit** mass water shutoffs violate human rights and noted that shutoffs posed multiple harms to victims, including health problems, threatened removal of children from homes, loss of housing through foreclosure, and other serious problems.¹⁶

14. In cities like **Detroit and Baltimore**, thousands of households have no water. It is estimated that dozens of Detroit area households have lived without residential water for over two years. Those who have reconnected themselves face criminal penalties.

B. Water Shutoffs Pose Additional Harms to Women and Girls

15. Water shutoffs cause additional, gender-specific harms to women and girls. Shutoffs pose health risks to vulnerable individuals including nursing or pregnant women and children, deprive women and girls of access to adequate hygiene, and they place mothers at risk of losing custody of their children.

¹⁴ Elizabeth Larson, Lucerne residents appeal to CPUC to deny Cal Water rate hike, Lake County News (Apr. 13, 2013), available at http://www.lakeconews.com/index.php?option=com_content&id=30695:lucerne-residents-appeal-to-cpuc-to-deny-cal-water-rate-hike&Itemid=197.

¹⁵ Gary Ridley, *Flint Restarts Water Shutoff Notices After Brief Holiday Reprieve*, MLive (Jan. 15, 2016), at www.mlive.com/news/flint/index.ssf/2016/01/city_to_restart_water_shutoff.html.

¹⁶ Office of the UN High Commissioner for Human Rights, Joint Press Statement by Special Rapporteur on adequate housing as a component of the right to an adequate standard of living and to right to non-discrimination in this context, and Special Rapporteur on the human right to safe drinking water and sanitation, Visit to city of Detroit (United States of America 18-20 October 2014) (October 20, 2014), available at <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=15188>.

16. Water shutoffs have severe economic consequences for women, particularly those who are head of household. Women are more likely to be caretakers of children so lack of water access has a greater impact.¹⁷ Single-female headed households that are no longer eligible for government assistance for needy children (due to five-year lifetime limits on the government assistance program for such families (TANF)) are disproportionately impacted by residential water shutoffs and unaffordable water bills.¹⁸ Families without clean, affordable water often have to travel significant distances to purchase heavy cases of bottled water and/or gallons of water; and at prices that are greater than equivalent units of gasoline.¹⁹

17. For those who still have water, women may face additional safety concerns as a result of shutoffs in surrounding neighborhoods. In Detroit, elderly women living alone report residential safety concerns and fears, of criminalization or other concerns, when water has been stolen from spigots on the side of their homes by desperate neighbors or strangers.²⁰

18. In addition to economic impacts, women are particularly vulnerable to the health risks of water shutoffs. Utilities in cities like Detroit do not provide special protections against shutoffs for households where vulnerable individuals such as pregnant women or children reside. Accordingly, they fail to take into account risks of special danger to vulnerable individuals like the disabled, elderly, children, and nursing or pregnant women, who may be residing in the home scheduled for shutoff.²¹ None of the cities described above have instituted mandatory reporting mechanisms to inquire about the presence of vulnerable individuals living in households scheduled for shutoff.²² This practice can severely exacerbate the health consequences of water shutoffs.

19. Families facing shutoffs are at risk of developing health problems - especially women - such as increased urinary tract infections, gastrointestinal problems, hepatitis A, influenza, and other diseases that are linked to unsafe water and poor sanitation.²³ For vulnerable residents such

¹⁷ Information provided by the Michigan Welfare Rights Organization (on file with authors).

¹⁸ Information provided by the Michigan Welfare Rights Organization (on file with authors).

¹⁹ Information provided by the Michigan Welfare Rights Organization (on file with authors).

²⁰ Information provided by the Michigan Welfare Rights Organization (on file with authors).

²¹ Alice Jennings, Lansing Water Hearings by Alice Jennings, The Boggs Blog (June 7, 2015), available at <https://conversationthatyouwillneverfinish.wordpress.com/2015/06/07/lansing-water-hearings-by-alice-jennings/>.

²² Office of the UN High Commissioner for Human Rights, Detroit's water shut-offs target the poor, vulnerable and African Americans (Oct. 20, 2014), available at <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=15190&LangID=E>; MintPress News Desk, Baltimore Shutting Off Water to Thousands of Households While Ignoring Corporate Debtors (April 15, 2015), available at <http://www.mintpressnews.com/baltimore-shutting-off-water-to-thousands-of-households-while-ignoring-corporate-debtors/204373/>.

²³ Martina Guzman, Exploring the public health consequences of Detroit's water shutoffs, Model D Media (Oct. 6, 2015), available at <http://www.modeldmedia.com/features/water-shut-offs-100615.aspx>; *Lyda et al v. City of Detroit*, Brief in Support of Plaintiffs' Motion for Temporary Restraining Order, U.S. Bankr. Ct. E.D. Mich. (Aug. 2014), page 16, accessed at: http://www.naacpldf.org/files/case_issue/LYDA,%20et%20al,%20v.%20Detroit-Brief%20in%20Support%20of%20Plaintiffs'%20Motion%20for%20Temporary%20Restraining%20Order.pdf

as children, pregnant women, the elderly, or the sick, the consequences can be even more severe.²⁴ For example, a human rights report investigating the effects of water shutoffs found that “elderly people are particularly harmed[,] and that “[c]hildren can develop conditions such as psoriasis and eczema due to a lack of clean water[.]”²⁵ Infants and small children are particularly vulnerable to dehydration, and experts fear the shutoffs will lead to an increase in infant mortality in cities like Detroit.²⁶ Water shutoffs may also have particularly negative health consequences for those suffering from illnesses where treatment requires access to water.²⁷ Likewise, pregnant or nursing women may be unable to fulfill their increased drinking water needs, and mothers of infants may be unable to provide safe water to prepare formula or other nutrition for their children.

20. Inability to maintain household cleanliness and personal hygiene (including menstruation and post sexual intercourse) as a result of water shutoffs impacts women and girls to a greater degree due to biology and gender-based divisions of labor (e.g., laundry, bathing, dish washing).²⁸ Water shutoffs deprive victims of access to adequate sanitation and hygiene; in the words of one Detroit resident, “we’re filling up our buckets to flush the toilet, to bathe with [...]. We can’t clean, we can’t wash ourselves, it’s really disgusting, and we need help. Half the people on my block have had their water turned off; we can’t pay our bills.”²⁹ For girls, water shutoffs cause a lack of access to adequate hygiene that they experience as humiliating and which may prevent them from attending school. One teenage girl whose family’s water had been shut off reported that “she often didn’t bathe before school, had body odor, and sometimes had to shower in the homes of neighbors, friends or family, an experience she says was degrading.”³⁰ Girls who are unable to bathe may either avoid school out of embarrassment or

(citing Exhibit 6-5, June 30, 2014 letter from G. Gaines, Former Deputy Director, Detroit Health Department, to V. Anthony, Director, Detroit Department of Health and Wellness Promotion).

²⁴ See Georgetown Law Human Rights Institute, Tapped Out: Threats to the Human Right to Water in the Urban United States (April 2013), pp. 31-32, available at <http://www.law.georgetown.edu/academics/centers-institutes/human-rights-institute/upload/HumanRightsFinal2013.pdf>; Sarah Lazare, Common Dreams. Brewing Human Rights Crisis in Baltimore as City Threatens Mass Water Shutoffs (April 7, 2015), available at <http://www.commondreams.org/news/2015/04/07/brewing-human-rights-crisis-baltimore-city-threatens-mass-water-shutoffs>.

²⁵ See Georgetown Law Human Rights Institute, Tapped Out: Threats to the Human Right to Water in the Urban United States (April 2013), pp. 31-32, available at <http://www.law.georgetown.edu/academics/centers-institutes/human-rights-institute/upload/HumanRightsFinal2013.pdf>.

²⁶ Commentary: Exploring the Public Health Consequences of Detroit’s Water Shutoffs (Oct. 13, 2015), available at http://www.mlive.com/news/detroit/index.ssf/2015/10/commentary_exploring_the_publi.html.

²⁷ Laura Gottesdiener, Al Jazeera. *UN officials “shocked” by Detroit’s mass water shutoffs* (Oct. 20, 2014), available at <http://america.aljazeera.com/articles/2014/10/20/detroit-water-un.html>.

²⁸ Information provided by the Michigan Welfare Rights Organization (on file with authors).

²⁹ USHRN, Testimonies of Human Rights at Home: Documenting Injustice in the United States (2015), p. 28, available at http://www.ushrnetwork.org/sites/ushrnetwork.org/files/testimonies_of_human_rights_at_home_-_documenting_injustice_in_the_united_states.pdf.

³⁰ Commentary: Exploring the Public Health Consequences of Detroit’s Water Shutoffs (Oct. 13, 2015), available at http://www.mlive.com/news/detroit/index.ssf/2015/10/commentary_exploring_the_publi.html.

risk anxiety, shame, and harassment when they do attend.³¹ This aspect of shutoffs may affect first responders and service providers as well: Detroit residents report that residential water shutoffs and unaffordable water rates impact teachers, nurse and social workers in women-dominated, service careers when confronted with moral, ethical and legal obligations to address the needs of children and families who lack adequate residential water service.³²

21. Water shutoffs may also place mothers at risk of losing custody of their children.³³ Low income families, often female-led, have additional challenges in that not having certain utilities at home can be deemed as neglect and lead to the removal of minor children by government agencies.³⁴ In Detroit, as in many jurisdictions in the U.S.,³⁵ including Baltimore,³⁶ “[n]ot having water service immediately makes a home uninhabitable under Detroit ordinances[,]”³⁷ which means that once a water shut-off takes place, “[c]hildren under State law can be immediately taken from their parents or family and placed under protective services.”³⁸ Alarming, the UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation received information that State agencies “separated [children] from parents and placed [them] into custodial care, based on applicable child protection laws that seek to safeguard the best interest of the child, because the household water supply was shut off.”³⁹

22. Residents of several U.S. jurisdictions where water shut-offs take place have reported incidents reflecting this problem. At a recent consultation between the U.S. government and civil society, a presenter provided information about “[a] single mother in Southern Illinois . . . [who] lost custody of her three children to state social services due to her inability to afford

³¹ Commentary: Exploring the Public Health Consequences of Detroit’s Water Shutoffs (Oct. 13, 2015), available at http://www.mlive.com/news/detroit/index.ssf/2015/10/commentary_exploring_the_publi.html.

³² Information provided by the Michigan Welfare Rights Organization (on file with authors).

³³ See Georgetown Law Human Rights Institute, Tapped Out: Threats to the Human Right to Water in the Urban United States (April 2013), pp. 33-34, available at <http://www.law.georgetown.edu/academics/centers-institutes/human-rights-institute/upload/HumanRightsFinal2013.pdf>.

³⁴ Information provided by the Michigan Welfare Rights Organization (on file with authors).

³⁵ Georgetown Law Human Rights Institute, Tapped Out: Threats to the Human Right to Water in the Urban United States (April 2013), p. 34, available at <http://www.law.georgetown.edu/academics/centers-institutes/human-rights-institute/upload/HumanRightsFinal2013.pdf> (reporting that “Twenty-one [U.S.] states define “child neglect” in a manner that may include a parent’s inability to provide water.”).

³⁶ Carl Gibson, Think Progress, “This City Could Become the Next Detroit,” (April 4, 2015), available at <http://thinkprogress.org/economy/2015/04/04/3642935/baltimore-water-shutoffs/>.

³⁷ Alice Jennings, Lansing Water Hearings by Alice Jennings, The Boggs Blog (June 7, 2015), available at <https://conversationsthatyouwillneverfinish.wordpress.com/2015/06/07/lansing-water-hearings-by-alice-jennings/>.

³⁸ Office of the UN High Commissioner for Human Rights, Detroit’s water shut-offs target the poor, vulnerable and African Americans (Oct. 20, 2014), available at <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=15190&LangID=E>.

³⁹ UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶51, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque).

running water in her home[.]”⁴⁰ A recent media investigation of child-removal cases in Michigan found “more than two dozen instances statewide in which utility shutoffs were a factor in the state’s decision to remove children[,] includ[ing] almost a dozen cases in which there were no allegations of abuse, and the lack of utilities was one of the main reasons for removal.”⁴¹ Observers of the Detroit water shutoffs, including the UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation and the UN Special Rapporteur on Adequate Housing, also reported that parents feared that their children would be placed in state custody after a shutoff.⁴² Parents facing shutoffs in Baltimore also fear that they will lose custody of their children as a result.⁴³

23. Both because of this threat and the inability to provide a sanitary home for their children, parents also reported that shut-offs caused them to send their children to live with friends and relatives.⁴⁴ For example, Detroit residents reported sending children to live with relatives so that the child welfare agency would not remove them from the home or so the children could have access to running water.⁴⁵ In one such case, an 8-year old girl sent to live with her extended family was found by a police officer on the streets of Detroit at 2am; she was trying to find her way home because she was afraid she would never see her mother again.⁴⁶ Detroit teachers, who are required by state law to report any violations of child welfare standards, reported that they tell their students not to talk about water shut-offs at home to avoid triggering this rule.⁴⁷

⁴⁰ International Human Rights Clinic, Berkeley Law, “United States Government Consultation on Environmental Issues Relating to the Universal Periodic Review: A Summary. October 7, 2014, UC Berkeley School of Law,” p. 10, available at https://www.law.berkeley.edu/files/UPR_Enviro_Consultation_Outcome_Doc_141208.pdf.

⁴¹ Laura Gottesdiener, *Detroit is Ground Zero in the New Fight for Water Rights*, The Nation, July 15, 2015, available at <http://www.thenation.com/article/detroit-is-ground-zero-in-the-new-fight-for-water-rights/>.

⁴² Joint Press Statement by United Nations Special Rapporteur on adequate housing as a component of the right to an adequate standard of living and to right to non-discrimination in this context, and Special Rapporteur on the human right to safe drinking water and sanitation, Visit to city of Detroit, United States of America (18-20 October 2014), available at <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=15188>; <http://america.aljazeera.com/articles/2014/10/20/detroit-water-un.html>; Dianne Feeley, *Detroit’s Crisis Deepens as Water Shutoffs Hit Thousands*, (Jul. 16, 2014), available at <https://solidarity-us.org/node/4218>; Food and Water Watch, *Congressional Representatives and 157,975 Concerned Americans Demand that President Obama and the Department of Health and Human Services Intervene in Detroit Water Crisis*, (Jul. 30, 2014), available at <http://www.foodandwaterwatch.org/pressreleases/congressional-representatives-and-157975-concerned-americans-demand-that-president-obama-and-the-department-of-health-and-human-services-intervene-in-detroit-water-crisis/>.

⁴³ Carl Gibson, Think Progress, “This City Could Become the Next Detroit,” (April 4, 2015), available at <http://thinkprogress.org/economy/2015/04/04/3642935/baltimore-water-shutoffs/>.

⁴⁴ Georgetown Law Human Rights Institute, Tapped Out: Threats to the Human Right to Water in the Urban United States (April 2013), p. 34, available at <http://www.law.georgetown.edu/academics/centers-institutes/human-rights-institute/upload/HumanRightsFinal2013.pdf>.

⁴⁵ Georgetown Law Human Rights Institute, Tapped Out: Threats to the Human Right to Water in the Urban United States (April 2013), p. 34, available at <http://www.law.georgetown.edu/academics/centers-institutes/human-rights-institute/upload/HumanRightsFinal2013.pdf>.

⁴⁶ Laura Gottesdiener, Al Jazeera. *UN officials “shocked” by Detroit’s mass water shutoffs* (Oct. 20, 2014), available at <http://america.aljazeera.com/articles/2014/10/20/detroit-water-un.html>.

⁴⁷ Laura Gottesdiener, Al Jazeera. *UN officials “shocked” by Detroit’s mass water shutoffs* (Oct. 20, 2014), available at <http://america.aljazeera.com/articles/2014/10/20/detroit-water-un.html>.

24. This aspect of the problem does not appear to have been resolved. At a June 2015 Michigan State Legislature hearing on the water shutoffs, several women whose water had been shut off testified to their fear that their children would be taken if child welfare authorities became aware of the situation.⁴⁸ For example, Detroit residents Nicole Hill⁴⁹ and Maurikia Lyda⁵⁰ testified that they were forced to make alternative living arrangements for their children during the shutoffs, partly due to the fact they were worried that the state child welfare agency would take custody of their children.⁵¹

25. This practice compounds the harm caused by the water shutoff and places children at risk of being separated from their families, compromising the State's obligation to act in the best interests of the child. In light of this information, the UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation "expresse[d] concern about the discriminatory impact of water shut-off policies, particularly for low-income children[.]"⁵² Advocates continue to push the federal and state governments to adopt stronger legal protections against shut-offs in homes where children are living⁵³ and to modify child welfare laws to require that water service be restored in lieu of removing children from the home.

C. Positive Approaches Exist to Redress and Prevent Gendered Impacts of Water Unaffordability and Mass Water Shutoffs

26. This subsection provides information on emerging and proposed positive approaches to remedying and preventing the gendered impacts of water unaffordability and mass water shutoffs, based on the experience of U.S. communities. In particular, it offers policy solutions proposed by communities facing mass water shutoffs as well as a description of proposed water affordability legislation in Michigan, shutoff protections under Massachusetts state law, and a

⁴⁸ Water Affordability Hearing at Michigan State Legislature, unedited video, available at <https://vimeo.com/129853822>.

⁴⁹ For more information about Ms. Hill's situation, see Laura Gottesdiener, Al Jazeera. *UN officials "shocked" by Detroit's mass water shutoffs* (Oct. 20, 2014), available at <http://america.aljazeera.com/articles/2014/10/20/detroit-water-un.html>.

⁵⁰ Ms. Lyda is the lead plaintiff in a class action suit against the City of Michigan for the mass water shutoffs, and Ms. Hill is also a plaintiff in the case. See *Lyda et al v. City of Detroit*, U.S. Bankr. Ct. E.D. Mich. (July 30, 2014), available at <http://www.aclumich.org/sites/default/files/DetroitWater-Lawsuit.pdf>.

⁵¹ *Lyda et al v. City of Detroit*, U.S. Bankr. Ct. E.D. Mich. (Aug. 2014), p. 16, available at http://www.naacpldf.org/files/case_issue/LYDA.%20et%20al.%20v.%20Detroit-Brief%20in%20Support%20of%20Plaintiffs%20Motion%20for%20Temporary%20Restraining%20Order.pdf

⁵² UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶51, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque).

⁵³ Massachusetts state law, for example, requires *private* water providers to refrain from service disconnections in homes where children under 12 months of age reside. 220 C.M.R. § 25.03(1)(a).

new water affordability program being developed by the city government of Philadelphia, Pennsylvania.

Proposed Policy Solutions from Affected Communities

27. Although the common response to mass water shutoffs is for charitable organizations to collect and distribute water to those experiencing shutoffs. The State needs to change the system that allows for no access to water as a common practice and to recognize the disparate impacts of water shutoffs on women and girls. Affected communities call for a moratorium on water shutoffs for inability to pay in the U.S.

28. States should establish national affordability standards mandating utilities to implement the human right to water by linking water rates to affordability, through, for example lifeline water rates and water shutoff protections extended to vulnerable groups. Residential water service for households of limited means must be based upon low income affordability for as long as the need exists. Programs to ensure affordability must be transparent, accessible, and provide due process guarantees; they must also include specific consideration for the particular needs of women and girls, particularly in the context of women-headed households. Additionally, such programs should assess water affordability in light of the additional financial demands placed on an individual household to access basic human needs in addition to water and sanitation, including heat, electricity, food, and housing.

29. If water shutoffs continue to be used as a means to enforce payment of water bills, the State must prevent utilities from denying residential water service based upon the inability to pay costs or rates to the most vulnerable residents, including infants, children, pregnant or nursing women, senior citizens, persons with disabilities, and chronically ill people.

30. Water delivery assistance must be granted equal or better State funding to match other existing human assistance and low income programs that subsidize access to services like medical care, home heating, supplemental food and nutrition, and housing and shelter. At present, the U.S. does not provide any nationwide residential water service assistance program for low income families.

31. Local governments, municipalities, and/or corporations that manage and/or own water and sanitation systems must not be allowed to deny affordable water service and/or rates to low income customers based upon fiscal constraints. Additional protections should be applied to women-headed households, households with children, and households with other vulnerable residents.

32. Local governments and non-profit service providers must make available emergency water supplies to no- or low-income families that cannot afford water payments and rates, and whose water has been shut off.

33. Child welfare laws should not result in loss of custody due solely to a water shutoff. State laws requiring removal of children from the home on the sole basis of a water shutoff should be amended to require the local utility to restore water service rather than removing children from the home.

Proposed Legislation on the Human Right to Water in Michigan

19. In response to the mass water shut-off crisis in Detroit and Highland Park, Michigan, as well as the lead poisoning catastrophe in Flint, Michigan, the Michigan state legislature has, at the behest of members of civil society, begun to develop a set of legislative proposals aimed at improving the state's record on this issue. Specifically, Michigan State Representative Stephanie Chang (D - Detroit), and a bi-partisan group of Michigan state legislators have submitted a human right to water package of bills that will establish 1) the human right to water in state law (H.B. 5105 - Plawecki), 2) a water affordability program (H.B. 5097 - Chang), 3) protections against water shut offs for children, seniors, persons with disabilities and other vulnerable populations (H.B. 5122 - Chang), 4) transparency in reporting by utilities (H.B. 5093 - Plawecki), 5) decriminalization of lack of access to water and sanitation (H.B. 5095/5096 - Change/Garrett), and 6) a 72-hour notice requirement for drinking water quality violations like the Flint crisis (H.B. 5120 - Neely). However, until these reforms become law, their potential to remedy and prevent violations of the human rights to water and sanitation remains unfulfilled.

Water Shutoff Protections and the Right of Service in Massachusetts

20. Massachusetts state law prevents private utilities from conducting water shutoffs under certain circumstances, and the public utility Boston Water and Sewer Commission (BWSC) has adopted a "right of service" policy that mirrors these regulations. Under the state law, private utilities cannot shut off water service to low-income households that can demonstrate financial hardship where either an infant under the age of 12 months resides, or when someone in a household is seriously or chronically ill.⁵⁴ Private utilities also cannot shut off water service to a household where all members are over the age of 65 without written permission from the state's Department of Public Utilities.⁵⁵ However, the procedure to demonstrate illness and financial hardship can be burdensome for low-income families, and these protections do not generally extend to the public utilities that provide water service to the majority of MA households.

⁵⁴ MassLegalHelp, Special Protections Against Shut-Offs, available at <http://www.masslegalhelp.org/special-protections-against-shut-offs>.

⁵⁵ *Id.*

21. The BWSC “right to service” policy is a welcome exception. The policy provides that BWSC will not shut off water service to households with persons with serious illness, nor low-income seniors.⁵⁶ Further strengthening water affordability protections in Boston, in January 2015, Boston’s Mayor Walsh announced a 30% rate discount for low income seniors and person with disabilities.⁵⁷ Protections against water shutoffs like Massachusetts’s right of service represent an emerging better practice that needs to be strengthened and adopted much more broadly to prevent mass water shutoffs like those being experienced in Detroit and Baltimore, and particularly to ensure that utilities cannot deprive low-income vulnerable individuals like children, the elderly, the disabled, and the chronically ill of access to basic levels of water service, regardless of their ability to pay.

Philadelphia’s New Income-Based Water Rate Affordability Program

22. In the midst of the crisis described in the previous section, a small number of U.S. jurisdictions have begun developing local water affordability measures that carry some promise for better practices on this issue.⁵⁸ Specifically, in December 2015, the City of Philadelphia, Pennsylvania took an important step to address water affordability, adopting an ordinance, which requires the Philadelphia Water Department (PWD)⁵⁹ to create an Income-Based Water Rate Affordability Program (IWRAP) that restructures residential water billing to better account for income inequality. Much about this ordinance is very encouraging. If properly implemented, it will result in greater realization of Philadelphians’ rights to water and sanitation. The new ordinance establishes a tiered approach to water affordability, with those in the lower income tiers being eligible for greater discounts on their water bills.⁶⁰ Additionally, customers who are enrolled in IWRAP will not be required to pay pre-IWRAP arrears to maintain service.⁶¹ Some customers may be eligible for forgiveness of arrears, but the terms and conditions of such forgiveness are to be set by future regulation. This approach has the potential to bring

⁵⁶ BWSC right of service, available at http://www.bwsc.org/SERVICES/billing_assistance/rights.asp.

⁵⁷ State of the City Address, Mayor Walsh, Boston, January 2015, available at www.cityofboston.gov/news/uploads/12672_37_13_45.pdf.

⁵⁸ U.S. jurisdictions that currently offer some form of income-based water affordability programs include Chicago, St. Louis, and Cleveland. Cassie Owens, Next City. *Philly City Council Helps with Water Shutoffs and Blight Prevention* (June 25, 2015), available at <https://nextcity.org/daily/entry/philadelphia-water-bills-low-income-payment-plans>.

⁵⁹ Billing, collections, and certain customer service functions, including payment agreements, low income bill assistance, and the administration of informal dispute processes, are handled by the Water Revenue Bureau, a division of the Philadelphia Revenue Department. As used here, PWD refers to both the Water Department and the Water Revenue Bureau.

⁶⁰ City of Philadelphia, Bill No. 140607-AA, *Amending Title 19 of The Philadelphia Code (Finance, Taxes, and Collections), Chapter 1600 (Water and Sewer Rents), by providing for installment payment agreements, all under certain terms and conditions*, passed by City Council on Nov. 19, 2015 and signed by Mayor Nutter on Dec. 2, 2015. (“Monthly IWRAP bills shall be affordable for low-income households, based on a percentage of the household’s income and a schedule of different percentage rates for (i) households with income up to fifty percent (50%) of FPL, (ii) households with income from fifty percent (50%) to (100%) of FPL, and (iii) households with income from one hundred percent (100%) to one hundred fifty percent (150%) of FPL, and shall be charged in lieu of the Department’s service, usage, and stormwater charges.”)

⁶¹ *Id.* City of Philadelphia, Bill No. 140607-AA.

Philadelphia into greater compliance with the human right to water and could potentially be replicated in other jurisdictions.⁶²

23. While the new affordability bill is a significant step toward ensuring Philadelphians' right to water, its effect on the ground remains uncertain because the implementation of the new bill rests with PWD and the Water, Sewer, Storm Water Rate Board (Water Rate Board) who will determine what discounts apply to each income tier and when arrears will be forgiven. In addition, the new ordinance only addresses affordability, but not the problems with access to water, poor customer service, and the fundamentally broken appeals process documented by Community Legal Services, the legal aid organization designated as the Public Advocate on water for residential water customers. Indeed, the Community Lawyering Clinic at Drexel University has documented numerous stories of low-income Philadelphians who have gone for years purchasing jugs of water in order to satisfy their basic human need for water.⁶³ Although many of them have tried to negotiate with PWD for access to water, they have been turned away because they could not provide PWD with the extensive documentation required for water service. These individuals would remain unaffected by the new IWRAP, which addresses affordability but not accessibility.

IV. *Low-Income Communities of Color and Indigenous Communities in the U.S. Disproportionately Lack Access to Clean and Safe Drinking Water*

34. Although quality is an essential component of the human right to water, thousands of low-income, minority, and indigenous people in the U.S. lack access to clean and safe drinking water every year. In addition to posing a serious public health and safety problem, this disproportionate lack of access to safe water reveals structural discrimination faced by the most vulnerable communities in the U.S. Weak and inconsistent enforcement of U.S. water quality standards and gaps in these standards result in U.S. failure to ensure that all residents can equally rely on consistent access to water that will not harm their health or the health of their families. This problem also disproportionately affects rural communities, although as outlined above, devastating incidents of water contamination affect urban communities like Flint, Michigan as well. Low-income minority and indigenous communities in California's Salinas and San Joaquin Valleys and the indigenous Navajo Nation in northwestern New Mexico face severe exposure to toxic drinking water contamination allowed by the State. In all of these cases, women and girls experience gendered impacts of this contamination. This section provides a

⁶² See Christine Ferretti, The Detroit News, *Advocates seek income-based water bills for Detroiters* (July 29, 2015), available at www.detroitnews.com/story/news/local/detroit-city/2015/07/29/water/30830703/. The Philadelphia affordability plan is relatively similar to the water affordability plan presented by Detroit civil society in 2006 that the city refused to implement, and both plans were designed with the input of the same economist, Roger Colton.

⁶³ See *Needless Drought: The Water Deficit for Low Income Philadelphians*, the Community Lawyering Clinic at Drexel's Kline School of Law, Dec. 17, 2015.

brief overview of these cases, description of the gendered impacts on women and girls, and information about existing and proposed policy solutions.

A. Contamination Deprives Communities of Safe Water

35. Millions of people in the U.S. lack safe drinking water due to contamination by agriculture, mining, and other activities.

36. In **Flint, Michigan**, this low-income community has a majority of residents of color who are facing a public health crisis as a result of lead contamination of public drinking water and now a potential outbreak of Legionnaire's disease.⁶⁴ This crisis was caused by the Michigan state government's decision to save money by changing Flint's water supply to the contaminated Flint River in 2014.⁶⁵ Children and women have suffered the worst effects.

37. In 2015, testing revealed toxic lead levels in the bloodstreams of Flint's children, with drinking water contamination as the only plausible explanation.⁶⁶ On January 5th, 2016, the effects of the lead in Flint's public water system were finally acknowledged, after massive public pressure, when Michigan's governor declared a state of emergency.⁶⁷ Lead is a neurotoxin that can cause miscarriages and irreversible developmental damage to children's brains.⁶⁸ Studies showed that after a similar incident in **Washington, D.C.** – which also has a majority of residents of color – the number of children with unsafe lead levels doubled⁶⁹ and pregnant women experienced a subsequent increase in miscarriages and stillbirths,⁷⁰ despite government attempts to cover up the public health impacts of lead contamination of drinking water.⁷¹

38. The U.S. Department of Justice has also opened an investigation into the Flint crisis, and reportedly the U.S. Attorney's Office for the Eastern District of Michigan is working closely

⁶⁴ Dylan Sevett, U.S. Uncut, People Are Dying in Flint and All Signs Point to the Water, Jan. 14, 2016, available at <http://usuncut.com/class-war/people-are-dying-in-flint-all-signs-point-to-water/>.

⁶⁵ Arthur Delaney and Philip Lewis, *How the Federal Government Botched Flint's Water Crisis*, HUFFPOST (Jan. 12, 2016), available at http://www.huffingtonpost.com/entry/flint-lead-water-epa_us_569522a8e4b086bc1cd5373c.

⁶⁶ Sarah Hulett, National Public Radio, High Lead Levels in Michigan Kids After City Switches Water Source (Oct. 5, 2015), available at <http://www.npr.org/2015/09/29/444497051/high-lead-levels-in-michigan-kids-after-city-switches-water-source>. For official Michigan state data on the lead poisoning, see Michigan State Government, Taking Action on Flint Water, available at <http://www.michigan.gov/flintwater>.

⁶⁷ Michigan State Governor's Office, Press Release, Gov. Snyder declares emergency for Genesee County, (Jan. 5, 2016), available at http://www.michigan.gov/snyder/0,4668,7-277-57577_57657-372653--,00.html.

⁶⁸ Sarah Hulett, National Public Radio, High Lead Levels in Michigan Kids After City Switches Water Source (Oct. 5, 2015), available at <http://www.npr.org/2015/09/29/444497051/high-lead-levels-in-michigan-kids-after-city-switches-water-source>.

⁶⁹ Carol D. Leonnig, High Lead Levels Found in D.C. Kids, Washington Post (Jan. 27, 2009), available at www.washingtonpost.com/wp-dyn/content/article/2009/01/26/AR2009012602402.html?sid=ST2010120107897.

⁷⁰ Lead in Washington, D.C. Drinking Water May Have Caused More Stillbirths And Miscarriages, HUFFPOST (Jan. 23, 2014), available at http://www.huffingtonpost.com/2013/12/27/lead-washington-dc-drinking-water_n_4508163.html.

⁷¹ *Id.*

with the U.S. Environmental Protection Agency on this investigation.⁷² According to reports, the Michigan state government “continued to deny a lead poisoning problem even as evidence mounted [in 2014]”⁷³ On January 16, 2016, President Obama declared a federal state of emergency in Flint, providing up to \$5 million in assistance with possible Congressional renewal.⁷⁴

39. In **California**, approximately one million people must drink and bathe with water that fails to meet national quality standards, yet they must pay high rates for this contaminated water. Contamination disproportionately affects rural, low-income communities of color.

40. In **New Mexico**, government refusal to clean up uranium mine and mill contamination forces **indigenous Navajo communities** to choose between exposure to radiation and access to safe drinking water. The Navajo Nation is home to more than 500 abandoned uranium mines and 1,100 individual uranium waste sites, the vast majority of them unremediated.⁷⁵ At least 15 to 20 percent of all drinking water sources on the Navajo Nation test for uranium concentrations above government-set safety limits.⁷⁶ The United Nations Committee on the Elimination of Racial Discrimination recently called upon the United States to redress the disparate impact of environmental pollution on indigenous peoples and specifically recommended that the U.S. clean up radioactive waste affecting indigenous peoples “as a matter of urgency.”⁷⁷

41. In the Navajo Chapter of Churchrock, located in northwestern New Mexico, Federal and state regulators issued permits for a new uranium mine to develop uranium in an underground source of drinking water. Federal regulatory agencies concede that if uranium mining occurs, the underground source of drinking water will be irrevocably contaminated. Although mining has not yet occurred, the threat is ever present because regulatory agencies have determined that mineral extraction should take precedence over every other use, including drinking water.

42. Indigenous Navajo farming communities in Shiprock, New Mexico also have dealt with the contamination of their water source – the San Juan River – from a toxic mining waste spill

⁷² Arthur Delaney, *Justice Department Investigating Toxic Tap Water In Flint*, HUFFPOST (Jan. 5, 2016), available at www.huffingtonpost.com/entry/flint-michigan-water-lead_us_568be5abe4b014efe0dbb159.

⁷³ *Id.*

⁷⁴ Joe Barrett, *Obama Declares Emergency in Flint*, THE WALL STREET JOURNAL, (Jan. 16, 2016), available at www.wsj.com/articles/obama-declares-emergency-in-flint-1452982835.

⁷⁵ Chris Shuey, Preliminary Results of the Navajo Birth Cohort Study and Selected Case Studies of Exposures to Uranium in Mining Wastes and Drinking Water (Dec. 3, 2015), pp. 3-4 available at http://www.sric.org/nbcs/docs/NDOH_CHR_conf_presentation_120315.pdf.

⁷⁶ Chris Shuey, Preliminary Results of the Navajo Birth Cohort Study and Selected Case Studies of Exposures to Uranium in Mining Wastes and Drinking Water (Dec. 3, 2015), pp. 3-4 available at http://www.sric.org/nbcs/docs/NDOH_CHR_conf_presentation_120315.pdf.

⁷⁷ U.N. Committee on the Elimination of Racial Discrimination, Concluding observations on the combined seventh to ninth periodic reports of United States of America, CERD/C/USA/CO/7-9 (August 29, 2014), ¶10, available at http://tbinternet.ohchr.org/Treaties/CERD/Shared%20Documents/USA/CERD_C_USA_CO_7-9_18102_E.pdf.

caused by a government contractor (the King Gold Mine disaster), with devastating effects on their cultural practices and subsistence agricultural activities. It is incumbent on the US to develop an alternative water source for the Navajo farming communities. The New Mexico Environment Department said it filed a notice of its intention to sue the U.S. Environmental Protection Agency (EPA) over the King Gold Mine spill clean-up.⁷⁸

43. In **Shell Bluff, Georgia**, a rural low-income community of color located between two nuclear facilities, radiological contaminants have been found in increasing levels in the community's water supply,⁷⁹ and the community's cancer rates have increased since the facilities began operations.⁸⁰ Additionally, the community sits next to what recent reports have identified as the nation's third most contaminated river, the Savannah River, which 1.4 million people rely on for drinking water.⁸¹ The U.S. Department of Energy has failed to monitor radiation in the community, leaving residents without necessary information to understand the linkages between high cancer rates and contamination caused by the nuclear facilities.⁸²

44. Following its country visit to the U.S., the UN Working Group on the issue of human rights and transnational corporations and other business enterprises expressed concern regarding allegations that inadequate regulation of surface coal mining in **West Virginia** had resulted in a number of "significant adverse human rights impacts . . . most notably related to physical and mental health, including cancer and birth defects, and access to clean water."⁸³

B. Contamination Poses Additional Harms to Women and Girls

45. As is the case in most parts of the world, women and girls are disproportionately affected by water contamination. Women and girls face gender-specific health concerns, particularly with respect to reproductive health, associated with exposure to drinking water contamination. At the same time, they are also the most likely persons within a household to bear the burden of

⁷⁸ Russell Contreras and Susan Montoya Bryan, *New Mexico Is 1st to Issue Plans to Sue EPA Over Mine Spill*, ABC News (Jan. 14, 2016), available at <http://abcnews.go.com/Technology/wireStory/apnewsbreak-mexico-sue-epa-mine-spill-36293032>.

⁷⁹ Georgia Women's Action for New Directions, "No New Nuclear Speak-Out!" (Dec. 4, 2015), available at <http://gawand.org/no-nukes-speak-out/> (citing to environmental monitoring results from the Georgia Environmental Protection Division).

⁸⁰ Bruce A. Dixon, The Griot, "Environmental racism: Is nuclear plant causing cancer for poor black residents of Shell Bluff, Ga.?" (Jan. 25, 2012), available at <http://thegriot.com/2012/01/25/nuclear-plants-and-cancer-epidemics-in-a-poor-black-georgia-town-environmental-racism-in-the-21st-ce/>.

⁸¹ Dash Coleman, *Savannah River nation's third most toxic, study shows*, Florida Times-Union, (June 27, 2014), <http://jacksonville.com/news/georgia/2014-06-27/story/savannah-river-nations-third-most-toxic-study-shows>.

⁸² Bruce A. Dixon, The Griot, "Environmental racism: Is nuclear plant causing cancer for poor black residents of Shell Bluff, Ga.?" (Jan. 25, 2012), available at <http://thegriot.com/2012/01/25/nuclear-plants-and-cancer-epidemics-in-a-poor-black-georgia-town-environmental-racism-in-the-21st-ce/>.

⁸³ UN Working Group on the issue of human rights and transnational corporations and other business enterprises, *Report on Visit to the United States of America*, paras. 69, 72, May 6, 2014, available at www.ohchr.org/EN/Issues/Business/Pages/Reports.aspx.

caring for other family members with health problems caused by contaminated water. Similarly, women are more likely than men to be responsible for ensuring that their family has access to a safe source of water for drinking, cooking, and bathing. This subsection provides specific details to illustrate the gendered impacts of water contamination in the cases described above.

46. In addition to the concerns raised by specific contaminants discussed below, scientists have recently begun to explore the reproductive health consequences of contaminant exposure from an epigenetic standpoint. Women are particularly vulnerable to pollution and poverty related illness due to the new findings on how epigenetics modifies the genetic makeup of the eggs in ways that can precipitate illness in future offspring. As a result of this research, scientists advocate for the need to include epigenetic effects in programming to address women's health.⁸⁴ In particular, scientists suggest that a comprehensive approach to women's rights should recognize this generational effect of exposure to contamination. The epigenetic research now shows that DNA alteration in females can produce multigenerational effects that are passed down through the females, even if the next generations are not exposed to the same contaminants.⁸⁵ Priority for monitoring needs to be given to pollutants that are endocrine disruptors and pollution molecules that induce negative epigenetic changes.⁸⁶

California's Salinas and San Joaquin Valleys: Nitrates and Arsenic Contamination

47. The United States' failure to protect the drinking water supply of communities in California's Salinas and San Joaquin Valleys has endangered their residents' health, in addition to depriving them of equal access to safe drinking water. These communities already suffer from other serious threats to their health in addition to drinking water contamination; multiple studies recognize that California's Central Valley residents suffer from high rates of asthma, diabetes, malnutrition, and pesticide exposure.⁸⁷ The most prevalent contaminants found in the drinking water systems of these communities – arsenic and nitrates – compound these burdens and pose particularly serious risks for pregnant and nursing women, children, and the elderly.⁸⁸

⁸⁴ See, e.g., <http://www.futuremedicine.com/doi/abs/10.2217/epi.11.22>;
<http://onlinelibrary.wiley.com/doi/10.1002/jat.2904/abstract?userIsAuthenticated=false&deniedAccessCustomisedMessage=>
https://books.google.com/books?id=jIe0jW4S95AC&pg=PA122&lpg=PA122&dq=water+quality+and+epigenetics&source=bl&ots=3W_ELiFjjj&sig=APcImHUfRqCV4h7MABfOB39bmQM&hl=en&sa=X&ved=0ahUKewiX2Hk1MbKAhXKnIMKHVa4Bc8Q6AEIPDAF#v=onepage&q=water%20quality%20and%20epigenetics&f=false
(Page 122); <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3035853/>;
<http://m.ije.oxfordjournals.org/content/early/2011/12/12/ije.dyr154.full>.

⁸⁵ Comments provided by Dr. Brian Shmaefsky, Professor of Biology, Lone Star College – Kingwood.

⁸⁶ <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2726844/>.

⁸⁷ Camille Pannu, Drinking Water and Exclusion: A Case Study from California's Central Valley, 100 Cal. L. Rev. 223, 228-229 (2012), available at: <http://scholarship.law.berkeley.edu/californialawreview/vol100/iss1/5>

⁸⁸ Safe Water Alliance, Environmental Justice Coalition for Water, and the International Human Rights Law Clinic, University of California, Berkeley, School of Law, "Racial Discrimination and Access to Safe, Affordable Water for Communities of Color in California," Shadow Report to the UN Committee on the Elimination of Racial Discrimination (August 2014), pp. 11-12, available at http://tbinternet.ohchr.org/Treaties/CERD/Shared%20Documents/USA/INT_CERD_NGO_USA_17884_E.pdf.

48. Nitrate can cause serious health problems,⁸⁹ such as gastrointestinal diseases and a range of long-term illnesses, including various cancers, digestive tract impairments, thyroid conditions, and nervous system disabilities.⁹⁰ It can also have immediate toxic effects on vulnerable individuals such as babies and pregnant women.⁹¹ If an infant drinks water containing too much nitrate, it may suffocate and die without treatment, as the nitrate decreases the ability of blood to carry oxygen (“Blue Baby Syndrome”).⁹² Pregnant women exposed to nitrate contamination can be affected with reduced cognitive functioning, miscarriage, stillbirth, premature birth and maternal reproductive complications.⁹³ New studies demonstrate a strong correlation between nitrate exposure *in utero* as a result of drinking water contamination and severe birth defects such as spina bifida and missing limbs.⁹⁴

49. While the deadly effects of exposure to large quantities of arsenic are well-known, new research has demonstrated that continuous exposure to low levels of arsenic, including through

⁸⁹ For medical studies on the health impacts of nitrate contamination, see Gupta, Sunil Kumar et al. “Recurrent acute respiratory tract infections in areas with high nitrate concentrations in drinking water.” *Environmental Health Perspectives*, Vol. 108, Iss. 4. April 2000 at 363 to 366; Ward, Mary H. et al. “Workgroup report: Drinking water nitrate and health – recent findings and research needs.” *Environmental Health Perspectives*, Vol. 113, Iss. 11. November 2005 at 1607 to 1614; Manassaram, Deana M. et al. “A Review of Nitrates in Drinking Water: Maternal Exposure and Adverse Reproductive and Developmental Outcomes.” *Environmental Health Perspectives*, Vol. 114, Iss. 3. March 2006 at 320 to 327; Weyer, Peter J. et al. “Municipal drinking water nitrate level and cancer risk in older women: the Iowa Women’s Health Study.” *Epidemiology*, Vol. 11, Iss. 3. May 2001 at 327 to 338.

⁹⁰ Community Water Center, *Water And Health In The Valley: Nitrate Contamination Of Drinking Water And The Health Of San Joaquin Valley Residents*, (2011), pp. 8-9, available at http://www.communitywatercenter.org/water_and_health_in_the_valley.

⁹¹ Safe Water Alliance, Environmental Justice Coalition for Water, and the International Human Rights Law Clinic, University of California, Berkeley, School of Law, “Racial Discrimination and Access to Safe, Affordable Water for Communities of Color in California,” Shadow Report to the UN Committee on the Elimination of Racial Discrimination (August 2014), p. 11, available at http://tbinternet.ohchr.org/Treaties/CERD/Shared%20Documents/USA/INT_CERD_NGO_USA_17884_E.pdf; Community Water Center, *Water And Health In The Valley: Nitrate Contamination Of Drinking Water And The Health Of San Joaquin Valley Residents*, (2011), p. 4, available at http://www.communitywatercenter.org/water_and_health_in_the_valley.

⁹² Carolina Balazs et al., *Social Disparities in Nitrate-Contaminated Drinking Water in California’s San Joaquin Valley*, 119 ENVTL. HEALTH PERSP. 1272 (2011); U.C. Davis California Nitrate Project, *Addressing Nitrate in California’s Drinking Water*, (Jan. 2012), p. 9 [right column], available at <http://groundwaternitrate.ucdavis.edu/files/138956.pdf>.

⁹³ Carolina Balazs et al., *Social Disparities in Nitrate-Contaminated Drinking Water in California’s San Joaquin Valley*, 119 ENVTL. HEALTH PERSP. 1272 (2011); U.C. Davis California Nitrate Project, *Addressing Nitrate in California’s Drinking Water*, (Jan. 2012), p. 9 [right column], available at <http://groundwaternitrate.ucdavis.edu/files/138956.pdf>; US Human Rights Network, Thematic Hearing Request: Barriers to Access to Safe and Affordable Water in the United States, (July 28, 2015), p. 7, available at http://www.ushrnetwork.org/sites/ushrnetwork.org/files/unitedstates.ushrn_righttowater_1.pdf.

⁹⁴ Mark Grossi, Fresno Bee. Birth Defects Linked to Bad Water in California’s San Joaquin Valley (July 15, 2013), available at <http://www.mcclatchydc.com/news/nation-world/national/article24751075.html>.

drinking water, causes a range of serious health problems.⁹⁵ These negative health effects include chronic respiratory ailments in children and adults; cardiovascular disease; diabetes; and skin, lung, and bladder cancers.⁹⁶ One new study found that even for low levels of arsenic, as maternal exposure to arsenic increased, their children suffered from higher numbers of respiratory infections.⁹⁷

50. Accordingly, nitrate and arsenic contamination of groundwater in the Salinas and San Joaquin Valleys deprives low-income minority communities of equal access to clean and safe drinking water and particularly endangers the health and personal integrity of women and children.⁹⁸

Navajo Communities Affected by Uranium Mining: Uranium Contamination

51. Uranium contamination, including the kind of continuous exposure to low levels of uranium suffered by Navajo communities in northwestern New Mexico, causes serious health consequences that can be particularly severe for women and children. Lack of government response to this contamination and its health consequences also reflects discrimination against indigenous women. According to the Multicultural Alliance for a Safe Environment, “[t]he unequal speed at which uranium mining and processing waste is remediated in minority compared to non-minority communities, results in minority communities suffering significantly higher risks of death and disease attributable to exposure to uranium mining and processing wastes.”⁹⁹

52. While exposure to high levels of uranium results in health problems associated with radioactivity, such as lung and brain cancer, health studies have demonstrated a connection between exposure to low levels of uranium and increases in the incidence of kidney disease,

⁹⁵ Deborah Blum, New York Times Blog. The Arsenic in Our Drinking Water (Sept. 20, 2013), available at http://well.blogs.nytimes.com/2013/09/20/the-arsenic-in-our-drinking-water/?_r=0.

⁹⁶ Deborah Blum, New York Times Blog. The Arsenic in Our Drinking Water (Sept. 20, 2013), available at http://well.blogs.nytimes.com/2013/09/20/the-arsenic-in-our-drinking-water/?_r=0.

⁹⁷ Shohreh F. Farzan, et al., *In utero* arsenic exposure and infant infection in a United States cohort: A prospective study. *Environmental Research*, Vol. 126, Oct. 2013, pp. 24-30, available at <http://www.sciencedirect.com/science/article/pii/S0013935113000856>.

⁹⁸ Carolina Balazs et al., *Social Disparities in Nitrate-Contaminated Drinking Water in California's San Joaquin Valley*, 119 ENVTL. HEALTH PERSP. 1272 (2011); U.C. Davis California Nitrate Project, *Addressing Nitrate in California's Drinking Water*, (Jan. 2012), p. 9 [right column], available at <http://groundwaternitrate.ucdavis.edu/files/138956.pdf>; U.S. Human Rights Network, Thematic Hearing Request: Barriers to Access to Safe and Affordable Water in the United States, (July 28, 2015), p. 7, available at http://www.ushrnetwork.org/sites/ushrnetwork.org/files/unitedstates.ushrn_righttowater_1.pdf.

⁹⁹ Multicultural Alliance for a Safe Environment (MASE), RESPONSE TO THE PERIODIC REPORT OF THE UNITED STATES OF AMERICA TO THE UNITED NATIONS COMMITTEE ON THE ELIMINATION OF RACIAL DISCRIMINATION (July 1, 2014), para. 13, available at <http://masecoalition.org/wp-content/uploads/2015/05/MASE-CERD-Shadow-Report-FINAL.pdf>.

autoimmune diseases, heart disease, and hypertension.¹⁰⁰ Scientific studies have also linked uranium exposure through drinking water contamination to increased rates of cancers, particularly breast cancer.¹⁰¹ A 2008 study by a Navajo researcher found that Navajo women exposed to uranium had very high rates of breast cancer; this study was the first to reveal that uranium exposure is particularly dangerous for women because uranium acts as an estrogen mimic and can disrupt hormonal function leading to cancer.¹⁰² For pregnant women and children, uranium exposure appears to be associated with higher rates of infertility, miscarriages, stillbirths, birth defects, and maternal complications. A recent study of Navajo births found “that children of women who lived near abandoned uranium sites were 1.83 times more likely to have 1 of 33 selected defects.”¹⁰³ The ongoing Navajo Birth Cohort Study has found that Navajo babies are 2.5 times more likely than the average U.S. resident to be born with cleft palate,¹⁰⁴ and it detected uranium levels in newborns exceeding the levels for 95% of the U.S. population.¹⁰⁵

53. U.S. standards to determine the legal limits for exposure to uranium also have a disparate impact on women and girls. Rather than taking into account the fact that the safe amount of exposure for women, men, children, and the elderly likely differs, the same federal standard applies to all individuals and is based on the average male – “reference man.”¹⁰⁶ This failure to account for gender disparities in physical tolerance for exposure to substances like uranium that are toxic even in very small quantities results in a standard that dangerously underestimates the health impacts of uranium exposure for women. According to a Navajo expert on this issue,

¹⁰⁰ Carrie Arnold, *Once Upon a Mine: The Legacy of Uranium on the Navajo Nation*, 122 *Environmental Health Perspectives* (Feb. 2014), available at <http://ehp.niehs.nih.gov/122-a44/>; Multicultural Alliance for a Safe Environment (MASE), *RESPONSE TO THE PERIODIC REPORT OF THE UNITED STATES OF AMERICA TO THE UNITED NATIONS COMMITTEE ON THE ELIMINATION OF RACIAL DISCRIMINATION* (July 1, 2014), available at <http://masecoalition.org/wp-content/uploads/2015/05/MASE-CERD-Shadow-Report-FINAL.pdf>.

¹⁰¹ Sara E. Wagner, et al. Groundwater uranium and cancer incidence in South Carolina. *Cancer Causes Control* (Jan. 22, 2011), pp. 41-50, available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3383652/>.

¹⁰² Lucinda Marshall, *Alternet*. The Biggest Breast Cancer Risk Factor No One is Talking About (Oct. 23, 2008), available at http://www.alternet.org/story/104014/the_biggest_breast_cancer_risk_factor_that_no_one_is_talking_about (citing Leuren Moret, Namaste, "Populations Exposed to Environmental Uranium: Increased Risk of Infertility and Reproductive Cancers," (2008)). See also Stephanie Raymond-Whish, et al., Drinking Water with Uranium below the U.S. EPA Water Standard Causes Estrogen Receptor-Dependent Responses in Female Mice, *Environ Health Perspect.* 2007 Dec; 115(12): 1711-1716, available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2137136/> (showing higher levels of breast cancer in mice exposed to uranium).

¹⁰³ Carrie Arnold, *Once Upon a Mine: The Legacy of Uranium on the Navajo Nation*, 122 *Environmental Health Perspectives* (Feb. 2014) A49, available at <http://ehp.niehs.nih.gov/122-a44/>.

¹⁰⁴ Chris Shuey, et al., *Overview of the Navajo Birth Cohort Study* (June 2014), available at http://www.sric.org/nbcs/docs/NBCS_overview_063014.pdf.

¹⁰⁵ Chris Shuey, *Preliminary Results of the Navajo Birth Cohort Study and Selected Case Studies of Exposures to Uranium in Mining Wastes and Drinking Water* (Dec. 3, 2015), pp. 16, 31, available at http://www.sric.org/nbcs/docs/NDOH_CHR_conf_presentation_120315.pdf.

¹⁰⁶ United States Nuclear Regulatory Commission (U.S. NRC), *Glossary, Reference man*, available at <http://www.nrc.gov/reading-rm/basic-ref/glossary/reference-man.html>.

There is such a thing as allowable limits [of exposure to nuclear waste] so the government says, well this is what's allowable for waste and what we can expose people to. And one of those allowable limits is based on reference man. So a reference man is – so they look at this and say well, what is this substance or what is this exposure going to do to a reference man. So that's a 155.54 pound white male and how it might impact that model, that 'person.' And it doesn't take into account women and women of childbearing age and it doesn't take into account elderly.¹⁰⁷

*Rural Georgia Women Affected by Radiation Contamination: Shell Bluff, Georgia*¹⁰⁸

54. Women and girls are disproportionately affected by radiological contamination. Shell Bluff, in Burke County, Georgia, USA, is unique because it is the only community in the country that has a nuclear weapons plant and a nuclear power plant in such close proximity. Tritium is a major radiological contaminant in the Central Savannah River Area, especially in Shell Bluff. This is because both nuclear weapons and nuclear power plants emit Tritium. Tritium is dangerous because it is difficult to contain and remediate – it is not possible to clean Tritium out of water. In fact, it is alarming that there are high levels of Tritium in GA. According to a 2012 study, higher levels of Tritium are “indicative of rapid downward migration of pollutants; a result indicating that the groundwater in a particular locale merits additional protective measures.”

55. Tritium contamination, and other radiological contaminants, is a women and family health issue. Dosage levels are currently based on a 170-pound, healthy male body (also known as “Reference Man”) and do not take into account those with smaller body mass, like women, those who are sick, elderly, or people who rely on local vegetation, fish, and water for their life sources.

56. Tritiated water is far more dangerous to women, but also to children and developing fetuses. Radionuclide regulations do not take into consideration a woman's unique metabolism, children's needs, or the ability to pass environmental toxins through the placenta to the fetus of a pregnant woman, potentially causing fetal anomalies and early pregnancy failures. For example, because Tritium is not regulated for these or other non-cancer effects, the federal limit for tritium contamination in drinking water is inadequately protective.

57. Research from the National Academy of Sciences shows that women have a 40-60% greater chance of getting cancer than men from being exposed to the same level of radiation.

¹⁰⁷ USHRN, Testimonies of Human Rights at Home: Documenting Injustice in the United States (2015), p. 27, available at http://www.ushrnetwork.org/sites/ushrnetwork.org/files/testimonies_of_human_rights_at_home_-_documenting_injustice_in_the_united_states.pdf.

¹⁰⁸ Information provided by Georgia Women's Action for New Directions.

Children face even greater risks. Numerous studies have documented elevated childhood cancer rates among children living near nuclear power plants.

58. One study by Joe Mangano demonstrates that before Plant Vogtle Units 1 & 2 came online between 1987 and 1989, cancers in Burke County were 11% below the national average; and after Units 1 & 2 came online, the cancer rate was reported as being 15% above the national average – an increase of 26 percentage points.

B. Positive Approaches Exist to Redress and Prevent Gendered Impacts of Water Contamination

California’s Recognition of the Human Right to Water: AB 685 and Its Implementation

59. With passage of AB 685, California took a critical first step toward achieving full realization of the human right to water by recognizing the right under state law and directing relevant state agencies to consider this recognition in carrying out their functions.¹⁰⁹ The law declares “the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.”¹¹⁰ It establishes that “[a]ll relevant state agencies . . . shall consider this state policy when revising, adopting, or establishing policies, regulations, and grant criteria when . . . [they] are pertinent to the uses of water . . .”¹¹¹ Although AB 685 passed into law on September 25, 2012, much work remains to ensure its effective implementation within California.¹¹²

60. Although this law represents an important advance for the human right to water in California, certain structural flaws weaken its potential. First, the law requires only that the policy be “considered” when state agencies are “revising, adopting, or establishing policies, regulations, and grant criteria when those policies, regulations, and grant criteria are pertinent to [human consumption, cooking, and sanitary purposes].”¹¹³ Second, the law does not give individuals the ability to sue the state for violations of their human right to water, and it states

¹⁰⁹ For a detailed analysis of AB 685 and guidelines for its implementation, see *The Human Right to Water Bill in California: An Implementation Framework for State Agencies*, International Human Rights Law Clinic, UC Berkeley School of Law (May 2013), pp. 3-4, available at https://www.law.berkeley.edu/files/Water_Report_2013_Interactive_FINAL.pdf. Through a consultation with government officials and civil society, the Berkeley clinic has also developed an implementation tool that provides useful guidance on better practices for implementing the human right to water. (on file with authors).

¹¹⁰ CA. ASSEMB. BILL 685 available at http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0651-0700/ab_685_bill_20120925_chaptered.pdf.

¹¹¹ CA. ASSEMB. BILL 685 available at http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0651-0700/ab_685_bill_20120925_chaptered.pdf; CA. WATER CODE § 106.3(b) available at http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0651-0700/ab_685_bill_20120925_chaptered.pdf.

¹¹² CA. ASSEMB. BILL 685 available at http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0651-0700/ab_685_bill_20120925_chaptered.pdf.

¹¹³ CA. ASSEMB. BILL 685 available at http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0651-0700/ab_685_bill_20120925_chaptered.pdf; CA. WATER CODE § 106.3(b) available at http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0651-0700/ab_685_bill_20120925_chaptered.pdf.

that the right is not enforceable.¹¹⁴ Similarly, while the law designates certain key state agencies for implementation,¹¹⁵ it leaves out a large set of entities with significant power over the realization of the human rights to water and sanitation in California, including water and sanitation providers like irrigation districts and municipal utility districts.¹¹⁶ Finally, the law fails to require state agencies to dedicate funding to secure the human right to water; instead it explicitly states that it “does not expand any obligation of the state to provide water or to require the expenditure of additional resources to develop water infrastructure beyond the” requirement noted above to consider the human right to water.¹¹⁷

61. However, California has begun to take some promising measures toward meaningful implementation of the law. A number of state water planning documents now include elements relevant to the human right to water, including: 1) the California Water Action Plan includes an action to provide safe water for all communities;¹¹⁸ and 2) the State Water Plan 2013 Update, includes an objective to “ensure equitable distribution of benefits,” which places particular emphasis on implementation of the human right to water policy.¹¹⁹ Likewise, on February 16, 2016, the California State Water Resources Control Board will consider for adoption a resolution which would instruct State Board staff to apply consideration of the human right to water policy to “all activities” of the Board, including quasi-adjudicatory decisions.¹²⁰

62. California has also adopted structural changes and funding programs that facilitate implementation of AB 685. In 2014-2015, the Governor's office moved the Drinking Water Program, which had languished within the California Department of Public Health (CDPH), to the State Water Board.¹²¹ In November 2014, California voters passed Proposition 1, which dedicates an unprecedented amount of money and attention to the water and sanitation needs of

¹¹⁴ CA. ASSEMB. BILL 685 available at http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0651-0700/ab_685_bill_20120925_chaptered.pdf; Santa Clara IHRC Interview of Colin Bailey (Nov. 4, 2015).

¹¹⁵ CA. ASSEMB. BILL 685 available at http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0651-0700/ab_685_bill_20120925_chaptered.pdf; CA. WATER CODE § 106.3(b) available at http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0651-0700/ab_685_bill_20120925_chaptered.pdf.

¹¹⁶ Santa Clara IHRC Interview of Colin Bailey (Nov. 4, 2015). Municipal utility districts tend to be the primary providers of municipal drinking water supply in California, so this gap in the law is significant.

¹¹⁷ CA. ASSEMB. BILL 685 available at http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0651-0700/ab_685_bill_20120925_chaptered.pdf; CA. WATER CODE § 106.3(b) available at http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0651-0700/ab_685_bill_20120925_chaptered.pdf.

¹¹⁸ California Environmental Protection Agency, California Water Action Plan 2016 Update, available at http://resources.ca.gov/docs/california_water_action_plan/Final_California_Water_Action_Plan.pdf.

¹¹⁹ California State Water Plan 2013 Update, available at https://cwc.ca.gov/Documents/2014/04_April/April2014_Agenda_Item_9_Attachment_1_Objective13_4-3-14.pdf. (Note that the State Water Plan is generally considered a recommendation to State agencies and is, as such, also generally considered unenforceable and persuasive only.)

¹²⁰ California State Water Resources Control Board, Calendar, available at www.waterboards.ca.gov/board_info/calendar/index.shtml#feb2016 (agenda pending).

¹²¹ California State Water Resources Control Board, Drinking Water Reorganization Plan, available at www.waterboards.ca.gov/drinkingwater/docs/dwreorg_wp072413.pdf. While not contemplated at this time, civil society advocates recommend additional consolidation of the otherwise fractured regulatory authority over water in the state.

small and Disadvantaged Communities,¹²² including resources for the provision of technical assistance, needs assessment, and engagement, though it does not include money for ongoing operations and maintenance and other sustainability challenges faced by water-disadvantaged communities.¹²³ The Department of Water Resources is poised to release its draft guidelines for implementation of this program,¹²⁴ and the State Water Board has just opened its solicitation for applications for Proposition 1 funding.¹²⁵

63. Yet the state has failed to take several key actions to implement the law, which has resulted in weak responses by some key state agencies. Significantly, the Governor's Office has not yet issued statewide guidance to the State agencies subject to the human right to water policy. The Department of Water Resources' Proposition 84 Integrated Regional Water Management Program Proposal Solicitation Package makes only passing reference to the human right to water policy (AB 685 or California Water Code section 106.3).¹²⁶ The State Water Resources Control Board adopted an order which expressly held that California's Human Right to Water policy "does not apply to the issuance of a water quality order."¹²⁷

64. Beyond AB 685, the California State Legislature continues to be very active in advancing new laws relevant to the human right to water. Though these legislative measures do not always support the human right to water policy of the state, the following list provides selected examples of recent California legislation that has the potential to advance the human right to water policy:

- **AB 92:** Following the reorganization of the Drinking Water Program into the State Water Board, Assembly Bill 92 established the Office of Sustainable Water Solutions "to promote permanent and sustainable drinking water and wastewater treatment solutions to

¹²² "Disadvantaged Communities" is a technical term used in California to denote communities with a median household income (MHI) that is 80% or less of the statewide MHI. See http://www.water.ca.gov/irwm/grants/resources_dac.cfm. It also often refers to communities that experience a disproportionate concentration of environmental harms. See <http://www.calepa.ca.gov/EnvJustice/GHGInvest/Documents/SB535DesCom.pdf>.

¹²³ California Proposition 1, 2014 Water Bond, available at [https://ballotpedia.org/California_Proposition_1,_Water_Bond_\(2014\)](https://ballotpedia.org/California_Proposition_1,_Water_Bond_(2014)).

¹²⁴ California Department of Water Resources, Proposition 1 Integrated Water Resources Management Grant Program Guidelines, available at http://www.water.ca.gov/irwm/grants/docs/P1Index/Proposition1IRWMGrantProgramPublicScopingMeeting_Final.pdf.

¹²⁵ California State Water Resources Control Board, Proposition 1 Funding Proposal Guidelines, available at http://www.waterboards.ca.gov/board_info/agendas/2015/nov/110415_2_prop1fndpln.pdf. There are \$51 million available for involvement/engagement on a non-competitive basis and another \$51 million in competitive funding for implementation of the projects developed for funding proposals out of the initial involvement/engagement phase. These projects could also compete for the broader pot of over \$500 million available through the Integrated Regional Water Management Program.

¹²⁶ California Department of Water Resources, Integrated Regional Water Management Implementation Grant Program, 2015 Proposal Solicitation Package, available at www.water.ca.gov/irwm/grants/docs/p84_implementation/P84_IRWM_PSP_2015_Draft_2015_0312_Public.pdf.

¹²⁷ California State Water Resources Control Board, Order WQ 2013-0101 (Central Coast Ag Order), p. 67, available at http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2013/wqo2013_0101.pdf.

ensure effective and efficient provision of safe, clean, affordable, and reliable drinking water and wastewater treatment services, focusing on addressing financial and technical assistance needs, particularly for small disadvantaged communities."¹²⁸

- **SB 244:** Requires that local municipalities and counties integrate an assessment of and plan to meet the needs of rural, unincorporated, water-disadvantaged communities in their main land use planning document, the general plan.¹²⁹
- **AB 1249:** In order to receive State funding, AB 1249 requires every Integrated Regional Water Plan, where nitrate, arsenic, perchlorate, or hexavalent chromium contamination exists, to identify where the impacts are experienced and the extent to which the Plan addresses those impacts.¹³⁰
- **AB 401:** Requires the State Water Board, no later than January 1, 2018, in collaboration with the State Board of Equalization and relevant stakeholders, to develop a plan for the funding and implementation of the Low-Income Water Rate Assistance Program and report its findings back to the Legislature.¹³¹
- **SB 88:** The State Water Board was granted new and additional authority to force consolidation of water and wastewater systems, where negotiations between stakeholders to do just that had advanced to a mature point, but may have stalled.¹³²

65. Ultimately, California's recognition of the human right to water represents an important first step towards more full realization of the right and may provide a helpful model for better practices that other U.S. states should consider adopting. By requiring state agencies to consider the human right to water when making decisions about how water is used in California, the law promotes a greater attention to the needs of disadvantaged communities that lack equal access to safe affordable water. California civil society continues to monitor implementation of the law to evaluate its strengths and weaknesses as an approach that might be replicated in other parts of the U.S. At this time, however, the law contains no specific provision for consideration of gender and intersectionality, and low-income people, people of color, and indigenous communities throughout the U.S., including in California, continue to suffer violations of the human rights to water and sanitation, as noted above, and woman are particularly vulnerable.

¹²⁸California State Water Resources Control Board, Sustainable Water Solutions, available at http://www.swrcb.ca.gov/water_issues/programs/grants_loans/sustainable_water_solutions/index.shtml.

¹²⁹California Governor's Office of Planning and Research, Technical Advisory on Senate Bill 244, available at https://www.opr.ca.gov/docs/SB244_Technical_Advisory.pdf.

¹³⁰California State Legislature, Bill Draft, available at http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201320140AB1249.

¹³¹California State Legislature, Bill Draft, available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB401.

¹³²California State Legislature, Bill Draft, available at http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB88.

Navajo Nation and Colorado State Laws to Prevent Uranium Contamination of Drinking Water

66. In recognition of the enduring harms caused by uranium mining in the southwest U.S., local government entities have begun to adopt laws to prevent further contamination. In 2005, the indigenous government of the Navajo Nation passed the Dine Natural Resources Protection Act, which bans any new uranium mining within Navajo Indian Country until existing contamination is remediated.¹³³ Similarly, the state of Colorado has passed legislation to regulate a new form of uranium mining known as in situ leach mining, which involves the injection of chemicals into aquifers to leach uranium out of the bedrock into the water, from which it is removed and processed.¹³⁴ The law provides that before Colorado administrative agencies can approve a permit for uranium ISL operations, the operator must provide 5 examples of instances where it has restored a mine aquifer to pre-mining quality.¹³⁵ No ISL operator, either in the U.S. or abroad, has ever restored a mined aquifer to pre-mining conditions. However, without federal leadership on this issue, other states like New Mexico continue to prioritize mining over safe drinking water, and the relevant federal agencies continue to grant permits for new mining operations that threaten drinking water supplies. Permitting processes should, but do not, take into account the potential harms the proposed activity could impose specifically upon women. Likewise, we are unaware of any existing state or federal programs to provide culturally-appropriate education, prevention, and health services to Navajo women suffering from breast cancer or other reproductive health problems as a result of uranium exposure, but these would constitute positive approaches. However, the federally-funded Navajo Birth Cohort Study, to measure the effects of uranium exposure on 1500 mother-child pairs on the Navajo Nation, presents a promising practice to establish baseline data on the non-occupational health effects of uranium exposure on women and children.¹³⁶

*Better Practices to Redress Gendered Impacts of Radiation Exposure in Rural Georgia*¹³⁷

67. A good practice is to conduct independent radiological monitoring. In Georgia, advocacy group Georgia Women's Action for New Directions (Georgia WAND) is working to reinstate funding for independent monitoring. The last time the Georgia Environmental Protection Division (GA EPD) collected and analyzed data in Shell Bluff, GA (2000-2002), they found the Shell Bluff area to have elevated levels of contaminants, Tritium being the worst offender. Tritium is in virtually all media: air, groundwater, surface water, rain, milk, green leafy vegetation, fish, etc. In fact, Tritium measured well over 100% of the EPA's Drinking Water Maximum Contaminant Level (MCL) at the mouths of site streams.

¹³³ Copy on file with authors.

¹³⁴ Colo. Rev. Stat. sec. 34-32-112.5(5). The regulations can be found at 2 CCR 407-1.

¹³⁵ *Id.*

¹³⁶ Chris Shuey, et al., Overview of the Navajo Birth Cohort Study (June 2014), available at http://www.sric.org/nbcs/docs/NBCS_overview_063014.pdf.

¹³⁷ Information provided by Georgia Women's Action for New Directions.

68. Monitoring by the companies operating the nuclear facilities gives results that are lower than those from government testing. SRS does limited monitoring in Georgia, as does Plant Vogtle. However, there have been discrepancies in the data. In 2002, GA EPD Data found close to 20,000 picocuries per kilogram of Tritium in bottom breeder fish at Four Mile Creek – whereas data from SRS showed lower than 1,000. This is why it is critical that Georgia have its own radiological environmental monitoring program.

69. Another best practice is to pass and enforce laws that protect groundwater quality. In Georgia, Georgia WAND is focusing on a bill that would require the GA EPD to establish rulemaking around the protection of Georgia’s groundwater and to demand, once the bill passes, that Georgia EPD to request that they include radiological contaminants in their rulemaking.

70. Overall, without reliable monitoring of Tritium levels, there are important health effects that will remain unmeasured. Until Georgia can sustain a comprehensive environmental monitoring program for communities affected by nuclear facilities, Shell Bluff residents, especially women and children, will continue to be left in the dark about their environment and health.

Federal Emergency Action and Investigations in Flint, Michigan

71. Although the violations described above demand long-term solutions to remedy and prevent current and future crisis situations as to the human rights to water and sanitation in the United States; the current crisis in Flint, Michigan calls for immediate, emergency measures. During the October 2015 IACHR thematic hearing on the right to water, and related meetings with the U.S. government, we called for emergency measures to protect the fundamental human rights to an adequate standard of living and life, without discrimination based on race, gender, age, economic status, or ability, as they apply to the human rights to water and sanitation.¹³⁸ With respect to the current crisis in Flint, the Executive Branch of the federal government has begun to take some promising, though incomplete, steps towards recognizing the need for emergency measures. As noted above, President Obama recently took executive action by issuing a federal state of emergency in Flint, and the Department of Justice has opened an investigation into the crisis.

72. On January 16, 2016, in response to a request for assistance from Michigan’s governor, President Obama declared a state of emergency in Flint. According to the White House, “[t]he President’s action authorizes the Department of Homeland Security, Federal Emergency Management Agency (FEMA), to coordinate all disaster relief efforts which have the purpose of alleviating the hardship and suffering caused by the emergency on the local population, and

¹³⁸ USHRN Human Rights to Water and Sanitation Coalition, *Violations of the Human Right to Water in the United States – Recommendations and Calls to Action* (p. 2), available at www.ushrnetwork.org/sites/ushrnetwork.org/files/right_to_water_long_fact_sheets.pdf.

to provide appropriate assistance for required emergency measures, [], to save lives and to protect property and public health and safety, and to lessen or avert the threat of a catastrophe in Genesee County.”¹³⁹ The White House statement on the measure specifies that “[t]his emergency assistance is to provide water, water filters, water filter cartridges, water test kits, and other necessary related items for a period of no more than 90 days.”¹⁴⁰

73. While this assistance will provide much-needed temporary relief to Flint residents, it does not begin to heal the damage that has already been caused. In addition to adoption of measures to prevent the repetition of this kind of crisis as a matter of urgency, the U.S. government should: 1) fully and fairly compensate the victims who have suffered severe and life-long injuries to their health and well-being, as well as extensive property damage, as a direct result of the deliberate actions to provide toxic water to an entire community and a callous disregard for the health and well-being of the residents of that community; 2) provide the requisite funding for necessary **health and public services for those affected by contaminated water**, including both emergency and long-term services to ensure adequate health care, community services, and nutrition to at least reduce the irreversible effects of lead poisoning on children; and 3) guarantee funding for removal and replacement of all lead water distribution pipelines in Flint.

74. In addition to providing emergency relief, the federal government has also taken steps to investigate the crisis in Flint. The U.S. Environmental Protection Agency opened an investigation in November 2015, and the Department of Justice initiated its own investigation in January 2016.¹⁴¹ Flint residents and advocates are urging the federal government to ensure that these investigations:

- a. **Hold accountable those public officials responsible** for the decisions to prioritize economics over people in situations that lead to contaminated drinking water, such as that in Flint, MI, where the decision was made for the local utility to deliver corrosive, untreated river water to the homes of the people, when it would have cost less than \$100 a day to properly treat this water and where it has resulted in the irreversible lead poisoning of the city’s children.
- b. Incorporate the relevant human rights frameworks in determining both civil and criminal responsibility for this crisis.
- c. Broaden federal attention to the U.S. water and sanitation crisis to offer emergency assistance to all communities without access to safe, affordable water and sanitation.

¹³⁹ White House Press Release, President Obama Signs Michigan Emergency Declaration, Jan. 16, 2016, available at <https://www.whitehouse.gov/the-press-office/2016/01/16/president-obama-signs-michigan-emergency-declaration>.

¹⁴⁰ *Id.*

¹⁴¹ Arthur Delaney, *Justice Department Investigating Toxic Tap Water In Flint*, HUFFPOST (Jan. 5, 2016), available at www.huffingtonpost.com/entry/flint-michigan-water-lead_us_568be5abe4b014efe0dbb159.

- d. Finally, we also recommend that the Department of Justice open other investigations in relation to the violations of the human rights to water and sanitation, including a Civil Rights Division of the Department of Justice investigation into the discriminatory impact of current water and sanitation services and the violations of the human rights to life, adequate water and sanitation, an adequate standard of living, non-discrimination, and equal protection.

75. These examples demonstrate the need for a gender-sensitive approach to drinking water contamination and its aftermath in the U.S. The process for permitting activities which have the potential to contaminate drinking water supplies should be transparent and accessible and should explicitly consider the specific harms faced by women, with their input. Similarly, the monitoring and notice process for drinking water quality should take into account the particular risks faced by women. These processes should be transparent and timely, especially when exposure to a contaminant has occurred; individuals potentially exposed to contamination should receive testing, accessible notice, and emergency assistance coupled with training and tools on how to minimize the health impacts for their families. The State should provide short- and long-term support that recognizes the specific needs of women, including a sustainable source of safe drinking water, nutrition (including special dietary needs to manage adverse health outcomes from exposure to contamination), and developmental and educational services for children poisoned by lead and other neurotoxins. In cases like Flint, Michigan, where poor infrastructure may facilitate contamination, the State should implement infrastructure improvements prospectively to prevent contamination (or its recurrence) without passing these costs on to the affected community.¹⁴²

V. *In the United States, Low-Income Communities of Color and Homeless Populations Cannot Access Safe, Affordable Drinking Water and Adequate Sanitation Due to Infrastructure Deficits*

76. Rising costs and infrastructure deficits in the water and sanitation sector exacerbate access gaps and disproportionately impact groups who have historically suffered discrimination, including women. At a recent consultation with the U.S. government on environmental issues, experts presented “statistical evidence based on U.S. Census data indicating that communities of color are much more likely to lack infrastructure and adequate facilities than are white populations.”¹⁴³ Rising costs and infrastructure deficits exacerbate this problem. As the UN

¹⁴² For more specific suggested positive approaches to this type of violation, see <http://www.epa.gov/sites/production/files/2015-11/documents/ndwacelerstatementofdissent.pdf>.

¹⁴³ International Human Rights Clinic, Berkeley Law, “United States Government Consultation on Environmental Issues Relating to the Universal Periodic Review: A Summary. October 7, 2014, UC Berkeley School of Law,” p. 8, available at https://www.law.berkeley.edu/files/UPR_Enviro_Consultation_Outcome_Doc_141208.pdf. For example, studies show that “African Americans in the United States were more than twice as likely and Hispanics were more than three times as likely as non-Hispanic whites to live in homes with incomplete plumbing.” National

Special Rapporteur on the Human Right to Water and Sanitation observed, “[t]he United States has aging water and wastewater systems, with decreasing investment in research and development, coupled with an increase in the population.”¹⁴⁴ Through water and sewer rates, consumers pay 90% of the cost to maintain and operate current water and sanitation infrastructure in the U.S.¹⁴⁵ However, consumers cannot afford needed infrastructure improvements through rate increases alone; the U.S. Environmental Protection Agency “estimates that over the next 20 years, \$200 to \$400 billion [dollars] will be required to ensure the sustainability of water and wastewater systems.”¹⁴⁶ Without targeted government efforts to fill the funding gap, an increasing number of consumers will be unable to access basic water and sanitation service due to rising rates or lack of adequate infrastructure.¹⁴⁷ In Flint, Michigan, rural Alabama, and homeless communities throughout the U.S., low-income women, particularly women of color and indigenous women, lack adequate infrastructure for water and sewer service, with resulting public health problems and other related rights violations. This section provides a brief overview of these cases, description of the gendered impacts on women and girls, and information about existing and proposed policy solutions.

Law Center on Homelessness and Poverty, “Simply Unacceptable”: Homelessness and the Human Right to Housing in the United States in 2011 (2011), pp. 48-49, available at http://www.nlchp.org/documents/Simply_Unacceptable.

¹⁴⁴ Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶16, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque).

¹⁴⁵ Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶17, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque).

¹⁴⁶ Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶17, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque); see also Claudia Copeland and Mary Tiemann, Congressional Research Service, “Water Infrastructure Needs and Investment: Review and Analysis of Key Issues,” (December 21, 2010), available at <https://www.fas.org/sgp/crs/homesecc/RL31116.pdf>; Georgetown Law Human Rights Institute, Tapped Out: Threats to the Human Right to Water in the Urban United States (April 2013), pp. 20-21, available at <http://www.law.georgetown.edu/academics/centers-institutes/human-rights-institute/upload/HumanRightsFinal2013.pdf> (noting that other estimates range into the trillions); Food and Water Watch, Our Right to Water (May 2012), p. 3, available at <http://documents.foodandwaterwatch.org/doc/OurRighttoWater.pdf>.

¹⁴⁷ Georgetown Law Human Rights Institute, Tapped Out: Threats to the Human Right to Water in the Urban United States (April 2013), pp. 16-22, available at <http://www.law.georgetown.edu/academics/centers-institutes/human-rights-institute/upload/HumanRightsFinal2013.pdf>; Food and Water Watch, Our Right to Water (May 2012), p. 3, available at <http://documents.foodandwaterwatch.org/doc/OurRighttoWater.pdf>.

A. Low-Income Communities of Color in the U.S. Lack Adequate and Reliable Infrastructure for Water and Sanitation

77. In 2013, the American Society of Civil Engineers gave the U.S. a water infrastructure grade of “D+,” yet consumers bear more than 90% of the costs for infrastructure improvements. Many of the country’s 1.5 million miles of pipes—some of which are more than a century old—are approaching a desperate need for replacement.¹⁴⁸

78. In cities like **Flint, Michigan** and **Washington, D.C.**, low-income residents of the country’s aging affordable housing stock live with the economic and health consequences of these infrastructure deficits, including higher water bills due to leaking pipes and contamination caused by lead or other toxic materials in old water distribution systems. Similarly, as wealthier residents leave cities like **Detroit and Baltimore**, the burden of paying for repairs to deteriorating water and sanitation infrastructure increasingly falls on the poor that remain.

79. African-American communities in **Alabama’s** poorest counties - the **Black Belt** region - have no access to public sanitation and are forced to pay the high cost for on-site septic systems. Within the Black Belt, the situation of Lowndes County illustrates the problem. In Lowndes County, one of the poorest counties in Alabama, 72.9%¹⁴⁹ of the population is African-American and over 26.7%¹⁵⁰ lives below the poverty line. According to the previous UN Special Rapporteur on the human right to safe drinking water and sanitation, over 80% of county households are not “served by conventional municipal sewer systems” and instead must finance their own “on-site wastewater systems, typically septic tanks and in-ground dispersal fields (trenches).”¹⁵¹ By failing to provide a public sanitation system, the government effectively pushes the cost of sanitation infrastructure onto the county’s poorest residents. Because poor Lowndes County households cannot afford sanitation infrastructure, approximately “40 to 90% of households have either inadequate or no septic system,”¹⁵² and half of the county’s septic

¹⁴⁸ Laura Bliss, *Poor Customers Pay the Price for America's Crumbling Water Infrastructure*, CITYLAB (July 13, 2015), available at www.citylab.com/tech/2015/07/poor-customers-pay-the-price-for-americas-crumbling-water-infrastructure/398228.

¹⁴⁹ United States Census Bureau, Lowndes County, Alabama, State & County Quick Facts, available at <http://quickfacts.census.gov/qfd/states/01/01085.html>.

¹⁵⁰ United States Census Bureau, Lowndes County, Alabama, State & County Quick Facts, available at <http://quickfacts.census.gov/qfd/states/01/01085.html>.

¹⁵¹ UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶ 20, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque); United States Census Bureau, Lowndes County, Alabama, State & County Quick Facts, 4 November 2010, available at <http://quickfacts.census.gov/qfd/states/01/01085.html>.

¹⁵² Ashley Cleek, Filthy water and shoddy sewers plague poor Black Belt counties, Al Jazeera (June 3, 2015), available at <http://america.aljazeera.com/articles/2015/6/3/filthy-water-and-poor-sewers-plague-poor-black-belt-counties.html>.

systems are failing or in poor condition.¹⁵³ In addition to being forced to live among raw sewage, those who cannot pay are subject to criminal penalties, risk losing custody of children, and are exposed to diseases formerly eradicated in the U.S. like hookworm. Children suffer the worst effects, particularly from diseases related to poor sanitation that cause developmental problems.

80. Local governments deprive homeless individuals of access to public water and sanitation services and criminalize them for exercising basic human functions. After her visit to a homeless encampment in **Sacramento, California**, the former UN Special Rapporteur on the human right to safe drinking water and sanitation noted that the “denial of opportunities to [exercise basic bodily functions] in a lawful and dignified manner can both compromise human dignity and cause suffering,” even rising to the level of “cruel, inhumane or degrading treatment.”¹⁵⁴

B. Inadequate Infrastructure Poses Additional Harms to Women and Girls

81. As with water affordability and contamination, women and girls are disproportionately affected by water and sanitation infrastructure deficits.¹⁵⁵ Women and girls face gender-specific personal safety and health concerns associated with lack of access to adequate water and sanitation. At the same time, they are also the most likely persons within a household to bear the burden of caring for other family members with health problems caused by lack of access to water and sanitation caused by infrastructure deficits. Similarly, women are more likely than men to be responsible for ensuring that their family has access to a safe source of water for drinking, cooking, cleaning, and bathing. This subsection provides specific details to illustrate the gendered impacts of infrastructure deficits in the cases described above.

Flint, Michigan: Lead Pipes in Public Water Systems

82. As described above, the Flint lead poisoning tragedy was caused by a combination of deliberate government negligence and poor infrastructure. Women and children suffer the most severe effects of lead poisoning, as the previous section details. Accordingly, where inadequate infrastructure poses the risk of exposing communities to contaminants that have particularly adverse effects on women and children, the inadequate infrastructure itself causes gendered harms that must be addressed. As the Flint crisis unfolds, research reveals that many

¹⁵³ UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶ 20, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque).

¹⁵⁴ UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶ 56, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf.

¹⁵⁵ These harms are particularly severe for immigrant women and women living in colonia communities along the U.S.-Mexico border that lack basic water and sanitation infrastructure. The Clinic can provide more information on these situations upon request.

communities in the U.S. face the risk of a similar lead poisoning incident due to infrastructure deficits in the form of lead pipes in their water systems.¹⁵⁶ According to a water safety expert who studies lead drinking water contamination from lead pipes, “[t]here is nothing a water utility can do to completely prevent lead leaching from a lead service line.”¹⁵⁷ Despite increasing recognition that lead exposure has grave health consequences for women and children even at very low levels, the U.S. lacks any plan to remove these lead pipes, and no government actor appears to be considering the gender dimensions of this incipient public health disaster.¹⁵⁸

Black Belt Region, Alabama: Living Amongst Raw Sewage

83. Women and girls are disproportionately affected by the lack of sanitation in the Black Belt region of Alabama. A recent visit from the UN Working Group on the issue of discrimination against women in law and practice highlighted the particular harms suffered by women and children.¹⁵⁹ 52% of the households in Lowndes County, AL are headed by women. As a result most of the households where people are living amongst raw sewage are headed by women.

84. Lack of access to adequate sanitation infrastructure also has negative health consequences for these communities, particularly women and children. In Alabama, the affected population suffers from serious health problems caused by inadequate sanitation, including parasites, gastrointestinal symptoms and other diseases associated with inadequate sanitation, including “diseases long thought eradicated in the U.S.”¹⁶⁰ The hot tropical conditions combined with the raw sewage facilitate the development of bacteria and parasites - a dangerous trend, since the local doctors in the area are not trained to test for or treat tropical illnesses they assume do not exist in the U.S.¹⁶¹ A 2013 water quality study of the Black Belt found high rates of water contamination related to inadequate sanitation infrastructure, with a corresponding increase in

¹⁵⁶ Arthur Delaney, The Huffington Post, Lots Of Cities Have The Same Lead Pipes That Poisoned Flint: And there’s no plan to dig them up, (Jan. 28, 2016), available at http://www.huffingtonpost.com/entry/lead-pipes-everywhere_us_56a8e916e4b0f71799288f54.

¹⁵⁷ Arthur Delaney, The Huffington Post, Lots Of Cities Have The Same Lead Pipes That Poisoned Flint: And there’s no plan to dig them up, (Jan. 28, 2016), available at http://www.huffingtonpost.com/entry/lead-pipes-everywhere_us_56a8e916e4b0f71799288f54.

¹⁵⁸ Arthur Delaney, The Huffington Post, Lots Of Cities Have The Same Lead Pipes That Poisoned Flint: And there’s no plan to dig them up, (Jan. 28, 2016), available at http://www.huffingtonpost.com/entry/lead-pipes-everywhere_us_56a8e916e4b0f71799288f54.

¹⁵⁹ Lindsey Rogers, UN experts tour Lowndes Co. in fact-finding mission, Alabama Channel 6 News WBRC (Dec. 4, 2015), available at <http://www.wbrc.com/story/30665189/un-experts-tour-lowndes-co-in-fact-finding-mission>;

¹⁶⁰ Ashley Cleek, Filthy water and shoddy sewers plague poor Black Belt counties, Al Jazeera (June 3, 2015), available at <http://america.aljazeera.com/articles/2015/6/3/filthy-water-and-poor-sewers-plague-poor-black-beltcounties.html>; US Human Rights Network, Thematic Hearing Request: Barriers to Access to Safe and Affordable Water in the United States, (July 28, 2015), p. 9, available at http://www.ushrnetwork.org/sites/ushrnetwork.org/files/unitedstates.ushrn_righttowater_1.pdf.

¹⁶¹ Catherine Coleman Flowers, Founder and Director Alabama Center for Rural Enterprise, America’s Dirty Secret: Living amongst Raw Sewage, Duke Franklin Humanities Institute (Dec. 9, 2014), recording available at <https://www.youtube.com/watch?v=5d-d0Pa1AF8>.

gastrointestinal illness.¹⁶² Doctors in the area also report observing a high incidence of gastrointestinal illnesses and rare parasitic diseases.¹⁶³ Recent studies suggest that women are more impacted than men by these parasitic infections caused by exposure to raw sewage.

- i. According to reports, “Alabama’s Black Belt has long been plagued with diseases related to poor sewage, like hookworm, a tiny parasite that enters the body often through bare feet and sucks blood from the lining of the intestines.”¹⁶⁴ Although hookworm infection is not fatal, it can cause serious health problems such as anemia, or in children, stunted growth or intellectual delays.¹⁶⁵ Black Belt children are particularly susceptible to hookworm infection because they play outside in areas where raw sewage is present.¹⁶⁶ A 1993 health study found that in one small clinic in the Black Belt, 34% of children under 10 were infected with hookworm.¹⁶⁷ The most recent health study, based on 2013 testing by Baylor University’s National School for Tropical Medicine,¹⁶⁸ discovered hookworm eggs in every patient (56 individuals aged between 8 and 60 living in poor sanitation areas in Lowndes County) they studied.¹⁶⁹ They also found

¹⁶² Jessica Cook Wedgworth, Joe Brown; Water Quality, Exposure and Health; “Limited Access to Safe Drinking Water and Sanitation in Alabama’s Black Belt: A Cross-Sectional Case Study,” June 2013, Vol. 5, Issue 2, pp. 69-74, available at

http://www.researchgate.net/publication/257781005_Limited_Access_to_Safe_Drinking_Water_and_Sanitation_in_Alabamas_Black_Belt_A_Cross-Sectional_Case_Study.

¹⁶³ Ashley Cleek, Filthy water and shoddy sewers plague poor Black Belt counties, Al Jazeera (June 3, 2015), available at <http://america.aljazeera.com/articles/2015/6/3/filthy-water-and-poor-sewers-plague-poor-black-beltcounties.html>.

¹⁶⁴ Ashley Cleek, Filthy water and shoddy sewers plague poor Black Belt counties, Al Jazeera (June 3, 2015), available at <http://america.aljazeera.com/articles/2015/6/3/filthy-water-and-poor-sewers-plague-poor-blackbelt-counties.html>.

¹⁶⁵ U.S. Centers for Disease Control and Prevention, Parasites – Hookworm, available at http://www.cdc.gov/parasites/hookworm/gen_info/faqs.html; Ashley Cleek, Filthy water and shoddy sewers plague poor Black Belt counties, Al Jazeera (June 3, 2015), available at <http://america.aljazeera.com/articles/2015/6/3/filthy-water-and-poor-sewers-plague-poor-blackbelt-counties.html>.

¹⁶⁶ Ashley Cleek, Filthy water and shoddy sewers plague poor Black Belt counties, Al Jazeera (June 3, 2015), available at <http://america.aljazeera.com/articles/2015/6/3/filthy-water-and-poor-sewers-plague-poor-blackbelt-counties.html>.

¹⁶⁷ Ashley Cleek, Filthy water and shoddy sewers plague poor Black Belt counties, Al Jazeera (June 3, 2015), available at <http://america.aljazeera.com/articles/2015/6/3/filthy-water-and-poor-sewers-plague-poor-blackbelt-counties.html>.

¹⁶⁸ Lindsey Rogers, Fight continues to tackle sewage problems across Black Belt, Alabama Channel 12 WSFA (Nov. 24, 2015), available at <http://www.wsfa.com/story/30533411/fight-continues-to-tackle-black-belt-raw-sewage-problems>.

¹⁶⁹ Megan McKenna, Rojelio Mejia, Tabitha Ward, Catherine Flowers, Identification of Human Intestinal Parasites in Rural Alabama, United States of America, about to be released, abstract available at <http://www.abstractsonline.com/Plan/ViewAbstract.aspx?sKey=a072e15a-59ff-43c8-99e4-52ebb7ad635b&cKey=672600d8-5c21-4b39-9f36-66e6d2410c44&mKey=%7bAB652FDF-0111-45C7-A5E5-0BA9D4AF5E12%7d>.

evidence of gastrointestinal parasites that are endemic to less developed countries.¹⁷⁰ In addition to diseases caused directly by living amongst raw sewage, women are disproportionately impacted by health conditions that are exacerbated by this situation. For example, since 2010, Lowndes County has had the highest incidence rate of HIV in the state of Alabama (53.1 per 100,000), more than triple the national average (15.8)¹⁷¹ and higher than counties with 60 times the population.¹⁷² Without adequate sanitation, women in Lowndes County live in the midst of an unending public health crisis.

85. State officials place the burden of alleviating this crisis on individual households. Alabama law requires that homes have a working septic system, but many residents cannot afford to purchase or maintain a septic tank.¹⁷³ The level of poverty in Lowndes County is among the highest in the U.S., but Alabama does not provide financial assistance for low-income households to meet this requirement.¹⁷⁴ Instead, Alabama criminalizes the inability to afford adequate sanitation by imposing criminal charges against homeowners who do not have septic systems that conform with state health and safety requirements.¹⁷⁵ This policy not only criminalizes them for their lack of access to adequate sanitation (including the career consequences of having a criminal record) but also places mothers at risk of losing custody of their children.¹⁷⁶ The previous UN Special Rapporteur on the Human Right to Water and Sanitation received information on the case of “a 27-year-old woman with an autistic child, living on \$12,000 a year of disability income, whom law enforcement officials threatened to

¹⁷⁰ Megan McKenna, Rojelio Mejia, Tabitha Ward, Catherine Flowers, Identification of Human Intestinal Parasites in Rural Alabama, United States of America, about to be released, abstract available at <http://www.abstractsonline.com/Plan/ViewAbstract.aspx?sKey=a072e15a-59ff-43c8-99e4-52ebb7ad635b&cKey=672600d8-5c21-4b39-9f36-66e6d2410c44&mKey=%7bAB652FDF-0111-45C7-A5E5-0BA9D4AF5E12%7d>.

¹⁷¹ <http://www.cdc.gov/nchhstp/healthdisparities/AfricanAmericans.html>.

¹⁷² http://adph.org/aids/assets/HIVEpiProfile2011_Revised_5.pdf.

¹⁷³ Lindsey Rogers, Fight continues to tackle sewage problems across Black Belt, Alabama Channel 12 WSFA (Nov. 24, 2015), available at <http://www.wsfa.com/story/30533411/fight-continues-to-tackle-black-belt-raw-sewage-problems>; Ashley Cleek, Filthy water and shoddy sewers plague poor Black Belt counties, Al Jazeera (June 3, 2015), available at <http://america.aljazeera.com/articles/2015/6/3/filthy-water-and-poor-sewers-plague-poor-black-belt-counties.html>.

¹⁷⁴ Ashley Cleek, Filthy water and shoddy sewers plague poor Black Belt counties, Al Jazeera (June 3, 2015), available at <http://america.aljazeera.com/articles/2015/6/3/filthy-water-and-poor-sewers-plague-poor-black-belt-counties.html>.

¹⁷⁵ Lindsey Rogers, Fight continues to tackle sewage problems across Black Belt, Alabama Channel 12 WSFA (Nov. 24, 2015), available at <http://www.wsfa.com/story/30533411/fight-continues-to-tackle-black-belt-raw-sewage-problems>.

¹⁷⁶ UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶ 21, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque); Ashley Cleek, Filthy water and shoddy sewers plague poor Black Belt counties, Al Jazeera (June 3, 2015), available at <http://america.aljazeera.com/articles/2015/6/3/filthy-water-and-poor-sewers-plague-poor-black-belt-counties.html>.

arrest and separate from her child because she has not been able to install a septic system that would have cost half her annual income.”¹⁷⁷

Homeless Populations: Nowhere to Go

86. Homeless women in the U.S. face particularly stark gendered impacts of the lack of access to water and sanitation that frequently accompanies homelessness in the U.S. Not only do homeless women suffer from dehydration and the inability to maintain hygiene, they also risk criminal charges and sexual violence when forced by the lack of public restrooms to relieve themselves in public. They also face gender-based discrimination in accessing services.

87. Women without access to proper sanitation facilities, including homeless women in the U.S., are often forced to go without relieving themselves at night for fear of being arrested. According to a California water justice expert, at a water management convening last year, a homeless organizer highlighted that the closure of public restrooms because of California’s drought would affect access for many homeless people, more so for women and children, who find it more difficult to defecate outdoors than men do, particularly for women that are large or have some form of disability. He noted that it is also much more risky for them to do this at night because of safety concerns, so many of them do not drink water at all to avoid going to the bathroom. Public restrooms all over the North, East and South Bay Area, California have been closed indefinitely since spring of 2015. Similarly, a recent report by the National Law Center on Homelessness and Poverty notes the harsh effects of lack of access to water and sanitation on homeless women, citing the example of Jo Anne Reynords, a homeless woman in St. Petersburg, Florida, with “kidney problems that also made it difficult to get through the night. As a result, she refrained from drinking water in the evenings because it was the only way she could ensure she would avoid arrest for public urination.”¹⁷⁸

88. A Christian homeless center in Kentucky recently adopted a policy banning women and children in order to avoid any sexual conduct with the shelter’s majority male patrons, which the shelter’s director claims has become a problem.¹⁷⁹ The shelter, which is the only one in

¹⁷⁷ Equal Justice Initiative, *Alabama Rural Poverty and the Basic Human Right to Water and Sanitation Is Subject of United Nations Inquiry* (March 3, 2011), available at <http://www.eji.org/node/510>; UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, *Mission to the United States of America*, ¶ 21, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/AHRC-18-33-Add4_en.pdf (by Catarina de Albuquerque).

¹⁷⁸ National Law Center for Homelessness and Poverty, *Cruel, Inhuman, and Degrading: Homelessness in the United States under the International Covenant on Civil and Political Rights*, (Aug. 23, 2013), p. 8, available at http://www.nlchp.org/Cruel_Inhuman_and_Degrading.

¹⁷⁹ See Jon Livesey, *The Mirror*, *Christian homeless shelter bans women after “sex problem” emerges at facility*, (Dec. 14, 2015), available at <http://www.mirror.co.uk/news/world-news/christian-homeless-shelter-bans-women-7010472>; David Edwards, *Raw Story*, *Kentucky shelter tosses out all women days before holidays because they tempt men with ‘ungodly’ sex*, (Dec. 14, 2015), available at <http://www.rawstory.com/2015/12/kentucky-shelter-tosses-out-all-women-days-before-holidays-because-they-tempt-men-with-ungodly-sex/>.

Williamsburg, Kentucky, forced 12 women to leave when it put the policy in place.¹⁸⁰ Women who are turned away are forced to seek shelter at another facility for women, thirty minutes away by car, or remain on the street in harsh winter conditions.¹⁸¹ The change in policy affects roughly ten to twelve women per week.¹⁸² This type of policy has an obvious disparate impact on women's access to shelter, but it further impacts their access to water and sanitation as well, in that most women go to shelters to find a place to bathe, drink water, and rest.¹⁸³ Some homeless women find refuge in emergency medical facilities that may give them food and water, but typically health facilities will refer homeless women back to shelters that may not necessarily accept them pursuant to this kind of discriminatory policy, leaving them without access to water, sanitation, or hygiene.

C. Positive Approaches Exist to Redress and Prevent Gendered Impacts of Water and Sanitation Infrastructure Deficits

89. In the U.S., it is very difficult to obtain nationwide data about individuals who lack access to water and sanitation, including their gender. States and the federal government should assess water and sanitation infrastructure deficits to collect demographic data about individuals who lack access to adequate infrastructure, including information about their gender, age, race, ethnicity, disability status, family size, head of household status, and income level. Infrastructure deficits that disproportionately impact women and other disadvantaged groups should be given priority for resource allocation and repair.

90. States should establish and fund a program of public funding for adequate, safe water and sanitation, including dedicated funding to repair and replace aging water and sewage infrastructure. This funding should prioritize construction of community-wide rather than

¹⁸⁰ See Jon Livesey, The Mirror, Christian homeless shelter bans women after “sex problem” emerges at facility,” (Dec. 14, 2015), available at <http://www.mirror.co.uk/news/world-news/christian-homeless-shelter-bans-women-7010472>; David Edwards, Raw Story, Kentucky shelter tosses out all women days before holidays because they tempt men with ‘ungodly’ sex, (Dec. 14, 2015), available at <http://www.rawstory.com/2015/12/kentucky-shelter-tosses-out-all-women-days-before-holidays-because-they-tempt-men-with-ungodly-sex/>.

¹⁸¹ See Jon Livesey, The Mirror, Christian homeless shelter bans women after “sex problem” emerges at facility,” (Dec. 14, 2015), available at <http://www.mirror.co.uk/news/world-news/christian-homeless-shelter-bans-women-7010472>; David Edwards, Raw Story, Kentucky shelter tosses out all women days before holidays because they tempt men with ‘ungodly’ sex, (Dec. 14, 2015), available at <http://www.rawstory.com/2015/12/kentucky-shelter-tosses-out-all-women-days-before-holidays-because-they-tempt-men-with-ungodly-sex/>.

¹⁸² See Jon Livesey, The Mirror, Christian homeless shelter bans women after “sex problem” emerges at facility,” (Dec. 14, 2015), available at <http://www.mirror.co.uk/news/world-news/christian-homeless-shelter-bans-women-7010472>; David Edwards, Raw Story, Kentucky shelter tosses out all women days before holidays because they tempt men with ‘ungodly’ sex, (Dec. 14, 2015), available at <http://www.rawstory.com/2015/12/kentucky-shelter-tosses-out-all-women-days-before-holidays-because-they-tempt-men-with-ungodly-sex/>.

¹⁸³ See Jon Livesey, The Mirror, Christian homeless shelter bans women after “sex problem” emerges at facility,” (Dec. 14, 2015), available at <http://www.mirror.co.uk/news/world-news/christian-homeless-shelter-bans-women-7010472>; David Edwards, Raw Story, Kentucky shelter tosses out all women days before holidays because they tempt men with ‘ungodly’ sex, (Dec. 14, 2015), available at <http://www.rawstory.com/2015/12/kentucky-shelter-tosses-out-all-women-days-before-holidays-because-they-tempt-men-with-ungodly-sex/>.

decentralized wastewater systems. Such funding should also include funding specifically designated to ameliorate the gendered impacts of water and sanitation infrastructure deficits.

91. States should repeal all laws leading to criminal charges against individuals on the basis of their inability to pay for water and sanitation due to lack of access to affordable options, and expunge the criminal records of all individuals previously convicted for said reasons.

92. States should develop and maintain strong monitoring and notice programs for water contaminants known to pose a serious risk to human health, including those with particularly grave consequences for women and children, like lead. In the U.S., the Lead and Copper Rule program for testing public drinking water systems for these dangerous contaminants has failed to prevent city-wide lead poisoning tragedies like the one currently happening in Flint, Michigan. The agency is currently considering amendments to strengthen the program that represent promising approaches. These amendments include requirements for public water systems to engage in proactive and full replacement of lead service lines without delay, provide public education on the hazards posed by lead in drinking water and the limitations of existing testing programs, implement improved and mandatory corrosion control treatment where lead service lines remain, and adhere to enhanced monitoring and reporting requirements.¹⁸⁴

93. In cases where people lack access to basic sanitation, as in the Black Belt region of Alabama, the State should provide emergency assistance, including healthcare for individuals affected by exposure to raw sewage, and develop a long-term plan to ensure adequate sanitation as a matter of urgency. It should also amend any state law that uses the inability to afford sanitation as a basis for removing children from the home.

94. States should recognize criminalization of homelessness as a human rights violation and provide technical and financial assistance to promote the repeal of local laws and policies that criminalize homelessness and the fulfillment of basic human needs by the homeless. Additionally, they should ensure that homeless populations have 24-hour access to adequate safe drinking water and sanitation in the short-term and promote a housing-first approach to ending homelessness and guarantee that all housing provided to formerly homeless individuals includes gender-sensitive access to adequate safe drinking water and sanitation in the medium- and long-term. All such programs should recognize the disparate impact that lack of access to water and sanitation has on homeless women and provide gender-sensitive responses.

95. States should set aside a dedicated funding source to ensure community access to funding for water quality and infrastructure projects that in turn substantially impact the affordability of

¹⁸⁴ For more detail, see <http://www.epa.gov/sites/production/files/2015-11/documents/ndwaclcrstatementofdissent.pdf>.

water services in the community. Such projects should include a gender-sensitive analysis of community needs and the proposed projects' impacts on women and girls.

VI. *These Case Studies Illustrate the Ways in Which Low-Income Women, Women of Color, and Indigenous Women in the United States Lack Equal Access to Safe, Affordable Drinking Water and Adequate Sanitation*

96. As these case studies indicate, low-income women and girls, particularly those from communities of color, in the United States lack equal access to safe, affordable water and adequate sanitation. The State has failed to adopt adequate safeguards to ensure affordability of basic levels of drinking water and sanitation, and it has failed to provide reliable infrastructure for the delivery of these essential services. It has also failed to prevent contamination of drinking water sources or provide adequate alternative sources. Low-income women of color and indigenous women disproportionately bear the burden of these failures. As the previous UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation noted at the conclusion of her country visit, the United States “must . . . do more to ensure that not only de jure but also de facto discrimination is eliminated regarding access to water and sanitation.”¹⁸⁵ Although she also recommended that the United States adopt federal water affordability standards and “a national water policy and plan of action guided by the normative content of the rights to water and sanitation[,]”¹⁸⁶ the State does not appear to have made meaningful progress towards implementing these recommendations.

¹⁸⁵ United Nations, Press Release: “Catarina de Albuquerque, 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&LangID=E>.

¹⁸⁶ Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, ¶¶ 88, 92, U.N. Doc. A/HRC/18/33/Add.4 (Aug. 2, 2011), available at http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf (by Catarina de Albuquerque).