

Violations of the Right to Access Clean Water and Sanitation in Belize

A Stakeholder Coalition Submission

By the International Human Rights Clinic Willamette University College of Law Salem, Oregon, U.S.A.

Adjunct Professor Karen Barnett
Professor Gwynne Skinner
Legal Interns Keith Kueny, Emily Guildner and McKenzie Harker

March 2013

Submitted during the Seventeenth periodic report to the U.N. Human Rights Council (2013)

NGO Coalition Submission to Universal Periodic Review of Belize – March 2013

- 1. The International Human Rights Clinic at Willamette University in Salem, OR, USA regularly engages in international human rights advocacy. The Clinic and its Director, Professor Gwynne Skinner, regularly engage in Human Rights fact-finding and reporting. The Clinic has worked for several years in the area of the Right to Food, and Professor Skinner has been involved in academic conferences regarding the Right to Water. The Clinic is not affiliated with any organization other than Willamette University and its College of Law, both of which value service to the World. However, for this report, the Clinic was sponsored by the First Congregational United Church of Christ and their Drink Water for Life Program. Through their sponsorship, the Clinic was able to receive a grant from Willamette's Center for Religion, Law and Democracy.
- 2. Water Missions International-Belize is a nonprofit, Christian engineering organization serving the water and sanitation needs of people in remote areas of Belize using low-maintenance, sustainable technologies for drinking water treatment and distribution, wastewater management, and storm water control. Water Missions' goal is to empower the Belizean people by developing sustainable, clean water and hygiene systems, while promoting self-sufficient local micro-enterprises.

Executive Summary

3. This submission focuses on Belize's international obligations to provide access to clean water and basic sanitation services. Belize has ratified two treaties, and signed another, which create these obligations. In addition, Belize's own laws provide for, but have not protected, the right to access proper sanitation and drinking water that is clean and safe. Lack of government oversight, limitations on access, and inadequate water quality are the primary areas of concern regarding access to clean and safe water. For Belize to comply with its international obligations the central government must provide increased support, clarity in regulations, stronger violation and enforcement provisions, and increased availability of information.

Methodology

4. The population of Belize is small—approximately 325,000. Over a third of Belizeans are under 14; the median age is 21. There are four major ethnic groups, the largest being mestizo, followed by Creole, Maya and Garifuna; other groups comprise 10% of the population. English is the official language; however, a large portion of the population speaks Spanish and other

languages. Roughly 43% of the population lives below the poverty level. The Belize dollar (BZ) is tied to the US dollar at a rate of two dollars Belize to one US dollar.

The authors of this report traveled to Belize in August 2012 and conducted research through a series of interviews with community leaders and local residents in the communities of Punta Gorda, Bella Vista, Hopkins, San Ignacio, Benque Viejo, Cristo Rey and San Mateo. These communities are diverse in both geography and population size. They range in location from the coast to the mountains and encompass both rural areas and urban centers.² During the trip, the authors encountered many problems with water quality first hand. In many of the communities, trash was present on the sides of roads, in streams, or a large collections on the edge of town. In Hopkins, one of the residents showed us the trash pile that her neighbors burn on the edge of her property and described the ongoing problem of trash disposal. This same resident also showed us her buckets of water that could only be stored for a short period of time, for fear of contamination, but had to be filled continually in the event her piped water was shut off. It has also been reported that in Hopkins the water pump has been moved to a new source, and after the move the water quality has decreased.³ In San Mateo, with the exception of a few roads, most of the community is under a foot of water and densely littered with trash. Smalldiameter, plastic pipes run through the murky water. Many of the pumps used to pump water to individual homes were barely visible over the water line. Septic tanks could be seen discharging human waste into the standing water. In order to interview some of the residents, the authors had to wade through this sewage-filled water. Rising sea levels are exacerbating these problems on the cayes and in coastal areas.

A. International Obligations

6. Belize signed the International Convention of Economic, Social and Cultural Rights (ICESCR) in September 2000. Belize joined the Convention on the Elimination of Discrimination against Women (CEDAW) in May 1990 and the Convention of the Rights of the Child (CRC) in May 1990. According to these conventions, access to clean and safe drinking water is a basic human right. Comment 15 of ICESCR explains that Articles 11 and 12 of the ICESCR include a right to water among the guarantees for an adequate standard of living.⁴ Article 14(2) of CEDAW mandates access to water supply and sanitation as part of adequate living conditions.⁵ Article 24 of the CRC requires signatory states to take appropriate measures to provide access to clean drinking water.⁶

B. Constitutional and Legislative Framework

7. Belize's Constitution and domestic laws provide for, or imply, a right to clean and safe water. Part II, section 3 of the Constitution recognizes the right to life, protection of the law, and recognition of human dignity. Water is essential to life, and is thus an implied element of these

rights. Environmental Protection Act Revised Edition 2003 provides for regulation and monitoring of pollutants; Part IX specifically mandates the protection of water sources.⁸

C. Promotion and Protection of Human Rights on the Ground

8. Belize is in direct violation of Article 14, paragraph 2 of CEDAW and Article 24, paragraph 1 and paragraph 2 of CRC. Under these provisions, women and children have the right to enjoy clean drinking water and adequate sanitation; states have an affirmative duty to provide access to those services. Women and children in Belize are disproportionately affected by the lack of access to clean and safe water throughout the country. They often bear the burden of water collection and treatment when necessary. As a signatory to the ICESCR, Belize has an obligation to refrain from engaging in acts that directly conflict with the purpose of that treaty. As stated in general comment 15 regarding Articles 11 and 12 of the Convention, the ICESCR provides for the right to water as a fundamental requirement for life and health. The misappropriation of government funds within the Belizean water system is contrary to the purpose of ICESCR.

a. General Areas in Need of Improvement.

- 9. The Belize Water System. In Belize water delivery and sanitation systems are decentralized and locally controlled. In much of the country, including most small to mid-sized towns, local water systems consist of a pump and a water tower to collect and store nearby ground or spring water. Each town has its own water board to manage the water system and collect payment. The water systems are inspected periodically by government health workers. In rural areas households and communities use satellite water wells and rainwater collection systems. In the more populated areas of the country, Belize Water Services (BWS) manages and controls water resources and delivery systems. BWS is a joint public-private venture with the government of Belize holding a majority of shares. Over 60% of the water BWS supplies is produced using conventional water treatment processes with rivers and wells as the main sources.
- 10. The central government lacks coordinated, comprehensive policies and institutions to deliver water and provide sanitation services. In most cases, local communities manage their own water systems. While this lack of central control is not inherently problematic, the system as it is currently structured often leaves too much control in the hands of local water board members who may lack the education and formal training necessary to run a water delivery system. Selection of water board members varies by community: in some areas it is by election and some by appointment. Some communities have little turnover, while others hold elections every two years. The water boards manage billing, infrastructure development, and maintenance using funds collected from local community members. In Bella Vista, a small village in Southern Belize populated predominantly by Guatemalan and Honduran migrant plantation workers, a

water board member estimates the monthly cost of running the system at between \$4,000 and \$5,000 BZ. In San Mateo, a village on Ambergris Caye, cost estimates were much higher. There is little uniformity in the amounts billed by water boards throughout the country, since each board operates on separate budgets and allocates resources differently.

- 11. Accessibility. Access to clean drinking water in Belize is limited by high prices and lack of adequate infrastructure for water delivery. These two limiting factors vary in their extent from one region to the next, yet were seen to be a significant factor in preventing community members from accessing enough water to meet their basic household needs.
- 12. *High Prices*. The cost of water in Belize varies from one community to the next. Community members often pay a flat fee for a fixed usage amount, and then pay an additional per gallon rate for any usage beyond the established minimum. Prices are set by BWS in the communities it serves and are otherwise set by the local water board. Meter systems are often used to determine household usage.
- 13. A number of communities report that their water prices are reasonable, and that costs are not a significant barrier to access. In Bella Vista, community members pay \$10.00 BZ for 1,000 gallons of water. For consumption above that amount residents pay \$10.00 BZ for each additional 1,000 gallons. Of the community members interviewed, none reported ever having to pay more than the flat fee. All community members interviewed reported that this is a reasonable portion of their budget. In the communities of Benque Viejo and Cristo Rey, both located inland near the Guatemalan border, residents reported paying anywhere from \$15 BZ to \$50 BZ per month for water. Again, all community members interviewed stated that the amounts they pay for water are reasonable and are not of great concern for their families.
- 14. Other communities reported much higher prices. In the town of San Mateo, on Ambergris Caye off the coast of mainland Belize, residents reported paying anywhere from \$200 to \$400 BZ per month for water. Many residents, unable to afford these bills, stopped paying altogether and now rely solely upon rainwater collection. However, many of the members of the community are unable to afford traditional rainwater collection tanks and have had to resort to their own collection methods. One homeowner captures rainwater in two old refrigerators that she stores behind her home. Others keep buckets or other reusable tanks outside their homes. It is unclear why the price of water is so much higher in San Mateo than elsewhere in Belize. BWS pipes the water into San Mateo from neighboring San Pedro through a central meter, where it is then distributed to homes. The San Pedro town council pays BWS for the water based on the consumption indicated by that central meter. Residents of San Mateo then pay the town council for their individual usage. When asked about the unusually high prices in San Mateo, the town council members we interviewed were unable to provide an explanation, stating that they were operating the system at a loss. 13 Community members have suspicions that there are numerous leaks throughout the system, leading to higher prices. A community health worker in

neighboring San Pedro reported that water theft is prevalent in San Mateo, driving up prices for residents whose pipes are tapped into.¹⁴

- 15. In the community of Hopkins, a small coastal village located on the Southern Coast, the flat rate for water is comparable to that of other communities, but residents are frequently charged multiple times for the same month, making what appears to be affordable water increasingly costly. Residents reported having their water shut off under allegations that they had not paid, when in reality they were current on all water bills. According to community members, an investigation was launched after a woman in Hopkins reported having her water shut off even though she had already paid her monthly bill. As a result of the investigation, the woman was provided with free water for a period of time. However, according to residents, the practice of double billing persists, often leaving households without water, either because they cannot afford the additional charges or because they chose to fight the billing. ¹⁵
- 16. *Infrastructure*. Most communities in Belize have a basic water delivery system which pumps water from groundwater sources into a central holding tank, where the water is treated and then pumped to individual households. However, these systems are often underfunded and overused, resulting in reduced access throughout the communities they serve. In the town of Cristo Rey community members were recently without water for over three months due to a broken water pump. At the end of April 2012 the community's pump stopped working, cutting off all household access to treated water. Instead, community members were forced to use water from the nearby Macal River for their cooking and cleaning needs, despite reports that the river has abnormally high mercury levels and large posters throughout the area warning residents not to eat its fish. The burden of collecting this water fell primarily upon women and children. Community members reported rashes and gastrointestinal infections during this time period. One woman reported that the river water had given her a rash that took over a month to heal. The pump was eventually repaired in late July 2012 when the community water board obtained a loan allowing them to purchase the necessary parts.
- 17. Inadequate piping has also reduced access to clean water throughout Belize. Central PVC pipes are often as small as two inches, are occasionally not buried, and tend to break easily. When the pipes break, they cause floods, causing individual households to lose their access to water. The pipes also develop cracks over time creating slow leaks, which are difficult to detect and lead to increased prices for consumers. In the community of Hopkins, when connecting to the community water system, a person must dig his/her own trench to access the piping. The pipes are often buried no more than two feet underground and are easily broken during road construction and other projects. There are a number of leaks of this nature within the existing piping system, which reduce both water pressure and availability. Community members reported seeing clear water bubbling up from the ground outside the water board's offices, yet the water board has failed to deal with the leak and its members are reportedly unresponsive to an individuals' complaint.¹⁸

- 18. Water Quality. Water quality in Belize is adversely impacted by inadequacies in water treatment and the presence of various contaminants, including but not limited to, industrial pollutants, solid waste, and human waste.
- 19. Treatment of Water. Water treatment methods vary among communities. Chlorine is the primary disinfectant used throughout the country. There are wide discrepancies in chlorination practices including the amounts used, the stage at which it is added, and by whom. In Bella Vista some citizens reported adding additional chlorine to the already treated water. In other parts of the country, such as San Ignacio, the water piped into homes seems to residents to be overchlorinated: some have reported strong chlorine smells when taps are turned on. In the larger water systems chlorine is added manually to the tanks. In some areas overworked health care officials are responsible for ensuring the chlorine is added. ¹⁹ In other areas local water board officials are responsible for chlorination.²⁰ An assessment prepared for the Ministry of Education and UNICEF Water, Sanitation and Hygiene (WASH) of Belizean schools found that although 58% of communities reported that school water supplies were chlorinated, it was only found to be present in 10% of schools. 21 This report also noted that chloroform bacteria were found in all non-chlorinated samples and that fecal contamination was present in 27% of samples. In Hopkins, parents interviewed expressed concern over contaminated drinking water in schools. These parents reported that the town water tanks are uncovered, leaving them vulnerable to insects, animal feces and other contaminates. They were unsure if chlorine was used to treat the water. They also reported that de-worming pills are handed out on a regular basis at primary schools because worms are very common in children in the area. ²²These parents believed the worms may have originated in part from school water.
- 20. *Industrial Pollutants*. Contamination comes from a variety of sources, including dams and industrial projects, and inadequate sewage and sanitation systems. One major source of contamination in the Cayo district comes from the Chalillo Dam on the Macal River. The dam has been linked to a mercury increases in local fish. Mercury is a serious neurotoxin that is likely to cause problems with the neurological development of infants and children. Symptoms of mercury poisoning include impaired vision, lack of coordination, memory problems, and disturbances in sensations, such as feeling "pins and needles." Mercury is especially dangerous because it builds up within a person's system. ²³ As recently as June 2012 the government released reports that indicate mercury levels in fish were still too high, and as of August 2012, there were still large billboards advising citizens not to eat any fish from the Macal River. ²⁴
- 21. Solid Waste. The lack of proper waste disposal facilities impacts the supply of clean drinking water throughout Belize. Increased waste generation and inadequate waste management are a major national problem. Belize produces an estimated 112,000 tons of municipal solid waste annually with a per capita generation of 1.32 kg/day. Waste generated by the major industries (citrus, banana, sugar, and shrimp) for the period 1995-2000, ranged from 400 to 650

thousand metric tons. The garbage in many communities is left on properties, in waterways or is buried or burned. Garbage piles are left on the edges of people's property and often encroach on the neighbor's property. A community member in Hopkins stated that it was common practice for residents to bury garbage, specifically diapers, on the beach. This resident also mentioned that garbage frequently washes ashore, most likely from a town on the peninsula or from the offshore Cayes. When garbage is allowed to decompose near water sources, it has potential to seep into the ground and can thus affect existing water tables. Belize faces significant challenges to ensure improved sanitation coverage, particularly in rural areas, as proper facilities to dispose of solid waste do not exist countrywide. ²⁶

- 22. Human Waste. Water quality in Belize is impacted by a lack of adequate sanitation facilities. In San Mateo, most people built their own septic tanks, which leads to inadequate disposal of wastes. Faulty connections between home-made septic tanks and sewage pipes also lead to breakages in the sewage system that can leak contaminants into standing water. Piped water contamination from sewage is prevalent. Small, plastic pipes run through brackish standing water contaminated with both garbage and sewage runoff. When the pipes break, which they do easily, the entire system can become flooded with contaminated water. Community members report that people in town often become sick after drinking the water. Vomiting, diarrhea, rashes and boils are all common among community members in San Mateo.²⁷ Villagers reported receiving little to no education about the dangers of sewage too close to drinking water, although signs at local health centers explaining proper waste disposal and hand washing procedures do exist. Several interviewees stated that the only education the government provided was after an outbreak of dysentery.²⁸
- Transparency/corruption. Government corruption was mentioned frequently by 23. interviewees as an issue in Belize. A strong perception of significant government waste pervades discussions with residents throughout the country. Belize is the only Central American nation that has not signed the United Nations Convention against Corruption. The government is opaque when providing information regarding its expenditures and practices. A 2010 report by the Auditor General claims that three high-ranking Belize City Council members resigned due to allegations of misconduct.²⁹ They were charged with the failure to account for millions of dollars allocated for infrastructure development in municipalities. Citizens in San Ignacio report that they have applied several times for the release of theoretically public environmental reports, only to be denied them.³⁰ They state that it is difficult to get a government official to reply to inquiries on water quality. According to these citizens, the government does not provide adequate information regarding water and sanitation infrastructure development or current expenditures. These citizens in San Ignacio stated there have been threats of intimidation aimed at people who challenge the government regarding environmental issues. They report that parents risk losing scholarships for their children's college education, and in extreme cases, there have even been gunshots outside the homes of those that have made corruption allegations.

- 24. The perception of corruption also extends to towns and municipalities. Many residents in towns and villages across the country spoke of corruption within local water boards. Two homeowners in Hopkins reported being billed multiple times for one month's usage. When questioned by the homeowners, water board members were unable to produce records of past payments. This lack of transparency, combined with the water boards' exclusive control over the collection of funds, creates a potential for mismanagement and abuse of authority.
- 25. Legal Enforcement. Belize has enacted laws to prevent or minimize pollution. However, these laws are ineffective and are not thoroughly enforced. Fines are arbitrarily imposed upon companies that violate environmental laws. While the government has imposed a \$5000 BZ fine for dumping on land, the largest fine for dumping toxic waste into a waterway is \$500 BZ, an amount so slight that it is unlikely to deter most violators. Additionally, the government lacks the capacity to effectively enforce the law. According to a local human rights activist, the agencies that oversee health and environmental regulations are underfunded and understaffed. These agencies struggle to cover small villages, and other rural parts of the country. Health workers are assigned large areas, which limits their ability to conduct regular water and health testing. Some of the smaller villages see government health workers infrequently. The perception among villagers in Belize is that health workers are not proactive and do not regularly test watersheds for pollution.
- 26. Lack of long term planning and development. Belize lacks comprehensive long-term planning and development with respect to the management of water resources and access to them. The efficiency of water delivery systems varies from community to community, based on disparities in water board competency. ³³The central government provides for local development, in part with funds secured from the Social Investment Fund (SIF). SIF is supported by the International Monetary Fund and the World Bank and prioritizes localized projects in municipalities.³⁴ While these projects have produced some benefit, problems have emerged when local governments mismanage funds or are unable to effectively implement strategies for future management of those funds. Each community's access to water is dependent on the ability of its water board members to oversee the implementation and development of long term planning. In the community of Bella Vista, residents have elected water board members that have used funds to improve water access to the town. Before the current water board was elected, Bella Vista's water was piped into homes only during limited hours. The current board has focused on sustainable future planning and managed to expand daily access. However, as stated above, there are reports in other areas of the country of mismanagement of fees and development funds.³⁵ A local shop owner in Cristo Rey believes that deficiencies in long-term planning can be attributed to a lack of education and training on the part of water board members. These water board members struggle to keep detailed accounting records and manage funds. When the community water pump broke, there was insufficient money to fix it because the water board had failed to maintain contingency funds. The pump was eventually replaced with funding from an outside

source rather than via local water board funds. It took more than two months for repairs to be made leaving residents without clean water during that time.

D. Possible Solutions and Remedies

- 27. Enforcement of Water-related Regulations. To protect watersheds and human health, Belize needs to enact and enforce legislation that establishes clear parameters for dumping and removing waste. Comprehensive regulations that direct municipalities on removing waste and providing sanitation are needed. For the government to effectively control pollution, Belize must have regular watershed testing by independent regulators. The data from this testing must be made public. Violators should be prosecuted uniformly. To deter illegal discharging, fines should reflect the damage caused by such discharging.
- 28. Increased Investment in Water Infrastructure. Reliable water infrastructure is vital to maintain consistent water flow to communities. This includes improving the systems by which water is piped into homes, increasing the availability of clean water to the rural population, creating basic treatment facilities, establishing treatment protocols within those facilities, and establishing a uniform policy for water quality testing. With these systems in place, water-borne illnesses will be avoided and health care costs will decrease, improving the overall physical and economic health of Belize's citizens.
- 29. Increased Government Accountability. Government accountability and transparency are critical elements of a functioning water delivery system. At the local level, residents need to know where they can obtain information about their community's water system and how they can file complaints relating about water quality or access, should such complaints arise. Belize needs to ensure that local water boards are free of corruption, are staffed by well-trained elected or appointed members of the community, and that such elections or appointments re-occur at determined intervals. Belize must also ensure that community water boards are proactive in explaining their functioning to community members while also providing adequate solutions for community members when issues with access to clean water arise.
- 30. Increased Community Involvement and Access to Information. Community involvement in and increased access to water education is essential. Increased information would empower community members to make more informed decisions regarding impacts of contaminated water. The information would also allow for improved awareness of health effects and actions to mitigate those effects. Increased community involvement can be accomplished through translation of documents into local languages, refraining from technical language except when absolutely necessary, and broadcasting important information over the radio. Increased information could be disseminated through schools and community health clinics in instructional lectures and in written materials.

The Committee on the Elimination of Discrimination against Women considered that this article obliges States parties to take all appropriate measures to ensure adequate living conditions in relation to water and sanitation, which are critical for the prevention of diseases and the promotion of good health care. (Committee on the Elimination of Discrimination against Women, general recommendation No. 24 (1999) on article 12 of the Convention (women and health), para. 28).

- ⁶ UN General Assembly, Convention on the Rights of the Child, 20 November 1989, United Nations, Treaty Series, vol. 1577, p. 3, available at: http://www.unhcr.org/refworld/docid/3ae6b38f0.html [accessed 26 February 2012].
- 1. States parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health (...)
- 2. States parties shall pursue full implementation of this right and, in particular, shall take appropriate measures:
- (c) To combat disease and malnutrition, including within the framework of primary health care, through, *inter alia*, (...) the provision of adequate nutritious foods and clean drinking water (...) The United Nation Committee on the
- Rights of the Child underlined that under article 24 States have a responsibility to ensure access to clean drinking water and that such access is particularly essential for young children's health. (Committee on the Rights of the Child, general comment No. 7 (2006) on implementing child rights in early childhood, para. 27).

http://www.unhcr.org/refworld/docid/3ae6b36c0.html (last visited Oct.30 2012); UN General Assembly, Convention on the Elimination of All Forms of Discrimination Against Women, article 14 para. 2, 18 December 1979, United Nations, Treaty Series, vol. 1249, p. 13, available at: http://www.unhcr.org/refworld/docid/3ae6b3970.html (last visited Oct. 30 2012); UN General Assembly, Convention on the Rights of the Child, article 24 para. 2, 20 November 1989, United Nations, Treaty Series, vol. 1577, p. 3, available at:

http://www.unhcr.org/refworld/docid/3ae6b38f0.html [accessed 29 February 2012]. Article 24 (2) of CRC states that Parties shall provide, as they consider appropriate, co-operation in any efforts by the United Nations and other competent intergovernmental organizations or non-governmental organizations co-operating with the United Nations to protect and assist such a child and to trace the parents or other members of the family of any refugee child in order to obtain information necessary for reunification with his or her family. In cases where no parents or other members of the family can be found, the child shall be accorded the same protection as any other child permanently or temporarily deprived of his or her family environment for any reason, as set forth in the present Convention. Article 14 (2) of Elimination of All Forms of Discrimination Against Women states that Parties shall take all appropriate measures to eliminate discrimination against women in rural areas in order to ensure, on a basis of equality of men and women.

¹ CIA - The World Factbook, CIA, https://www.cia.gov/library/publications/the-world-factbook/geos/bh.html (last visited Oct. 29, 2012).

²Unfortunately the authors were not able to interview residents of Belize City and cannot comment on water or sanitation access issues there.

³ The names of the interviewees and interview notes are on file with the author.

⁴ UN Committee on Economic, Social and Cultural Rights (CESCR), General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant), 20 January 2003, E/C.12/2002/11, available at: http://www.unhcr.org/refworld/docid/4538838d11.html (last visited Oct. 29 2012).

⁵ UN General Assembly, Convention on the Elimination of All Forms of Discrimination against Women, 18 December 1979, United Nations, Treaty Series, vol. 1249, p. 13, available at: http://www.unhcr.org/refworld/docid/3ae6b3970.html (last visited Oct. 29 2012). U.N. Convention on the Elimination of All Forms of Discrimination against Women Article 14 (2) states that States parties shall take all appropriate measures to eliminate discrimination against women in rural areas in order to ensure, on a basis of equality of men and women, that they participate in and benefit from rural development and, in particular shall ensure to women the right: (h) To enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport and communications.

⁷ THE CONSTITUTION OF BELIZE Sept. 21, 1981, Part II, § 3.

⁸ Belize Environmental Protection Act, 2003, Part IX.

⁹ UN General Assembly, International Covenant on Economic, Social and Cultural Rights, article 2 para. 2, 16 December 1966, United Nations, Treaty Series, vol. 993, p. 3, available at:

¹⁰ Corporate Profile, Belize Water Services, http://www.bws.bz/about-us/ (last visited Nov. 10, 2012).

¹¹ The names of the interviewees and interview notes are on file with the author.

¹² The names of the interviewees and interview notes are on file with the author.

¹³ The names of the interviewees and interview notes are on file with the author.

¹⁴ The names of the interviewees and interview notes are on file with the author.

http://www.unhcr.org/refworld/docid/4dcbf523c.html (last visited October 12, 2012).

¹⁵ The names of the interviewees and interview notes are on file with the author.

¹⁶ The names of the interviewees and interview notes are on file with the author.

¹⁷ Mary Susan Loan, *Will Cristo Rey Village Ever Get Water Again?* THE STAR, July 8, 2012, http://belizenews.com/thestar/cayostar316.pdf.

The names of the interviewees and interview notes are on file with the author.

¹⁹ The name of the interviewee and interview notes are on file with the author.

²⁰ The names of the interviewees and interview notes are on file with the author.

²¹ Christie Chatterly, National Assessment of WASH in Schools - Belize (2011), available at http://dbzchild.org/uploads/docs/final_wash_assessment.pdf (last visited Oct. 30 2012).

The names of the interviewees and interview notes are on file with the author.

²³ Health Effects, Mercury, US EPA, http://www.epa.gov/hg/effects.htm (last visited Oct. 29, 2012).

²⁴ Belize Press Office, Mercury in Fish from the Macal River, SAN PEDRO SUN, June 21, 2012, http://www.sanpedrosun.com/health/2012/06/22/mercury-fish-macal-river/ (last visited Oct. 30 2012).

²⁵ The names of the interviewees and interview notes are on file with the author.

²⁶ Pan American Health Organization/World Health Organization, Health Systems Profile Belize (2009), available at http://www2.paho.org/hq/dmdocuments/2010/Health_System_Profile-Belize_2009.pdf.

The names of the interviewees and interview notes are on file with the author.

²⁸ The names of the interviewees and interview notes are on file with the author.

²⁹ Freedom in the World 2011 - Belize, FREEDOMHOUSE.ORG,

The names of the interviewees and interview notes are on file with the author.

³¹ Belize Environmental Protection Act, 2003 Part II, § 7.

³² The names of the interviewees and interview notes are on file with the author.

³³ The names of the interviewees and interview notes are on file with the author.

³⁴ Projects: Social Investment Fund, THE WORLD BANK, http://www.worldbank.org/projects/P039292/social-investment-fund?lang=en (last visited Oct. 30 2012).

The names of the interviewees and interview notes are on file with the author.