Poor sanitation is associated with Monrovia, a city with sprawling neighborhoods hosting people from the countryside, most of whom were displaced during the civil crisis. As a city grappling with surge in population of over one million people, it is also seriously overwhelmed with the problem of stuffy, clogged and leaking sewage lines.

The blockade of the stem drainage, the secondary sewage collection facility that receives primary sewage from homes and businesses, has not only caused the pouring of feces along Benson Street and UN Drive in the Buzi Quarter community, but subjected the city to constant outflow of sewage. This is simply because all the primary lines connected to the main line running south along the coast of the Atlantic Ocean to the Fiamah waste collection facilities have depreciated.

As a result, oozing tons of feces is causing unbearable pollution to communities to the displeasure of residents, who largely contribute to the wastage.

Without any sense of responsibility, residents of affected communities habitually throw dirt, plastics saturated with feces (do-do birds) from low and high buildings.

Founded in 1822 and located on the Atlantic Coast, Monrovia is currently the most populated city in Liberia. As it developed over the past centuries, it was divided into two sections; one for the returning African-Americans and the other for the existing local population that resides in. A sprawling city with sprawling neighborhoods, Monrovia is generally poor with intermittent electricity.

As little background shows that the city continued to grow as more people moved into Monrovia from the countryside, and back in the late 1970s, Monrovia’s public housing and education system saw significant improvements. Unfortunately this came to a dead halt in 1980, when Samuel Doe led a military coup and Liberia was caught in two consecutive civil wars, infamous for their destructive violence which left no stone unturned, looting the water pipes under the ground and sold.

Sanitation Status

Taking a close look today at sanitation provision in Monrovia, it is grossly deficient as compared to most cities in sub-Saharan Africa: most people do not have access to a hygienic toilet; large amounts of faecal waste are discharged to the environment without adequate treatment; this is likely to have major impacts on infectious disease burden and quality of life (Hutton et al. 2007). This seems to be the current sanitation situation in Monrovia.

Monrovia is an urban agglomeration with a population of about 1.1 million people (Brinkhoff 2010). It is a coastal city at the mouth of the

The New Republic Liberia (Monrovia)

Liberia: Poor Sanitation Overwhelms Monrovia

22 APRIL 2014
Mesurado River, extending over a number of peninsulas and small islands separated by lagoons. Climate is tropical monsoon (Köppen classification Am). Flooding is frequent and severe, and some low-income settlements are flooded for several months of the year (IRIN 2009). Pollutant industrial activities include petroleum refining, cement manufacture, food processing and chemical industries. We do not currently have any information on agricultural activity within the city. A large proportion of the population lives in low-income settlements, including very poor informal settlements. The city was severely impacted by the Liberian Civil War, which ended in 2003.

The dumping of waste coupled with discharging of sewage by thousands of residents along Soniwien Creek (approximately two miles) emptying in the Atlantic Ocean at South Beach; with its source from the cliff of Mamba Point, continues to pose unsanitary condition for homes and business including communities along the stream; oozing out pungent and unpleasant odor as there is no plan put in place by the government to remedy the condition.

The connection between the capillary lines from homes and businesses down town Monrovia and stem drainage which is the temporary reservoir is totally blocked as a result of the construction of other facilities hampers the smooth flow of sewage from Monrovia to the suburb in Fiamah, where the waste treatment plant is built.

**Water resources and supply**

With the cessation of violence in the country since 2003, despite several interventions by donor agencies and development partners to restore water supply to Monrovia through the Liberia Water and Sewer Corporation; "water boys" push wheels (carts) loaded with unwashed containers of unsafe water collected from drains and untreated water wells, is sold on the sidewalks for LD$20.00 and to residents at the upper deck(upstairs) for LD$25.00 and LD$30 respectively during the peak of the dry season (February-May) every year.

Study showed that the case of typhoid which is a water borne disease is prevalent in Monrovia alone as a result of the supply of unsafe water by "water boys" on wheels.

Considering water resources and supply, the formal water system draws water from the Saint Paul River. Prior to the Civil War, the average water production for Monrovia was about 68,000 m3/day, but this has now dropped to about 10,000 m3/day (AWF 2007). Only small parts of Monrovia currently have direct access to the piped water supply; most areas depend on trucked water delivered to community collection points or household tanks, and/or on water from unprotected water wells, streams or springs (AWF 2007, IRIN 2009); we have no data on the proportion of the population using untreated water. Where there is piped supply, this suffers frequent interruptions. Unaccounted-for water is reported to be very high (65-75%), due largely to leakage, though also to illegal connections (AWF 2007)

**Sanitation access**

Sanitation access is quite a serious challenge. Detailed quantitative data are not available. An IRIN report (IRIN 2009) suggests that only about one third of the population has access to clean toilets. A sewerage system exists but is practically non-operational (see below). Most people in low-income settlements are reported to use very low-grade latrines that often collapse during the 7-month rainy season; public latrines are also present, but these are typically unhygienic and severely over-used; open defecation (within settlements, on the beach, or in plastic bags thrown onto waste tips) is reported to be frequent (AWF 2007, IRIN 2009). In low-income informal settlements, shortage of land for toilet construction is reported to be a serious concern. Cholera is reported to be endemic (IRIN 2009).

**Sewerage system**

With emphasis on the sewerage system, Monrovia previously had a waterborne sewerage system, built in the 1950s, covering the central part of the city (including Bushrod Island and Sinkor), with a 61 km of sewer mains and 4 pumping stations; however, the system is now entirely non-operational (AFW 2007). The network discharged to a waste stabilization pond which discharged to the sea via concrete
outfalls; the pond is now filled with sludge and overgrown with vegetation, and the outfalls are damaged (AFW 2007).

**Sewage treatment (sewage-sewered wastes and/or septage)**

As far as we are aware, and except for the non-operational stabilization pond mentioned above, Monrovia has no major facilities for treatment/disposal of wastewater or sludge.

**Sanitation in low-income districts**

Low-income informal settlements include Buzzi Quarter, Clara Town, Sawmill and West Point. Some districts, including Clara Town, are under threat of demolition and relocation. IRIN (2009) reports that the existence of the "Montserrado Slum-Dwellers Association", representing slum communities throughout the capital, but we do not have any further information on this. We are not aware of any detailed mapping of high-sanitation-need districts, or of any specific policy for sanitation improvement in informal settlements.

**Responsibility**

Institutional structure and capacity is poor at all levels: see AWF (2007) for further information. The Liberia Water and Sewerage Corporation (LWSC) is responsible for water supply and sewerage nationwide, but currently provides rudimentary services in Monrovia alone. Staffing levels are very low (see AWF 2007).

**Sanitation master plan?**

As far as we are aware, Monrovia has neither a sanitation master plan nor any more general strategic planning document. The Japanese aid agency JICA has prepared a "Master Plan Study on Urban Facilities Restoration and Improvement in Monrovia" (2009), but we have not been able to access this document. The National Poverty Reduction Strategy (PRS) aims, by 2012, to increase access to safe drinking water from 25 to 50% of the population; to increase access to excreta collection and disposal facilities from 15 to 40%; and to ensure that 90% water and sanitation facilities are functional.

**Sanitation financing**

According to donors and development partners, there is no specific information for Monrovia. At the national level, a recent report by the Liberia WASH Consortium (see Seeton 2010), for example, indicates that only 37% of the estimated 143.5m US$ required to meet the water and sanitation goals laid out in the PRS.

**Major investments and donor interventions**

The 1.2m € African Water Facility "Monrovia Expansion and Rehabilitation of Three County Capitals Water Supply and Sanitation Project" involves feasibility studies and initial institutional strengthening, mostly related to water supply rehabilitation in Monrovia and three other Liberian cities (AWF 2007).