CCA – Environmental Protection

Sectoral coverage

The Environmental Protection Sector of this LTSP encompasses: Waste management; Wastewater management; Pollution abatement; and Protection of biodiversity and landscape (these subsectors are not rank ordered). Here, environmental protection is concerned with ensuring that life for Black Americans can proceed smoothly in the absence of injurious/harmful effects from the environment.

The following is the long-term overarching 100-year goal of the Environmental Protection sector:

Black Americans residing in distributed and self-determined areas of influence across the US indicate through quality of life (well-being) assessments that they experience an environment that is pollution-free and protected against the vagaries of Climate Change. Also, existing environmental protection and Climate Change measures are sufficient to sustain a safe and healthy environment.

Status of Black America's Environmental Protection

This subsection of the Environmental Protection Common Country Analysis (CCA) includes important statistics that facilitate an assessment of the status of environmental protection—or the lack thereof—for Black Americans. Given the essentiality of potable water, the *Pollution abatement* component of environmental protection related to water is prioritized. It is common knowledge that the majority of Black Americans reside in urban areas. Because many of these urban areas are aging, significant attention will be directed to the status of *Waste management* and *Waste-water management*. Also, because the large urban Black American population does not own/control expansive tracts of land, almost no attention will be given to the *Protection of biodiversity and landscape*. Importantly, it is imperative that we consider the ongoing effects of Climate Change on the environment.

When water is considered broadly in a Black American context, Flint, Michigan and Jackson, Mississippi come readily to mind. In the Flint case, 2014 municipal cost-cutting measures caused lead contaminated water to flow into household, which had a horrendous impact on the city's residents. The problem continues to be resolved at this writing. The Jackson case came to a head in 2022, when water quality, and the absence thereof, motivated the city's residents to file complaints with the US Environmental Protection Agency (EPA) demanding that action be taken to restore clean water. Unfortunately, the lack of access to clean drinking water is more prevalent in the US than one might imagine. Below, statistics are provided that highlight these types of water problems and problems associated with *Waste management* and *Waste-water management*.

 According to Allaire, Wu, and Lall (2018), 21 million US residents relied on community water systems that violated EPA health-based quality standards during 2015.⁵ This finding

- does not account for persons who drink unsafe water from private sources that are not connected to community water systems.
- If carbon emissions are not constrained out to the year 2100, then the average global temperature is expected to rise more than the two-degree Celsius limit established by climate experts. Consequently, sea-level rise may reach seven feet along US coastal areas and sea flooding inland will affect adversely currently available fresh water sources.⁶
- Given the importance of water and sewerage (waste treatment/management) systems in the US, it is imperative that the related infrastructure be maintained well and kept up to date. According to the US. Department of Commerce, Bureau of Economic Analysis (BEA), State and local governments operated \$1,029.1 billion in sewer system and \$771.2 billion in water system infrastructure in 2021. The BEA indicated that the average age of the sewer system infrastructure was 29.3 years, and the water system infrastructure was 31.4 years. Consequently, if the useful life of this infrastructure is about 100 years, and it is already about 30 years old, then it must be replaced over the next 70 years. Given a 70-year window to replace the existing infrastructure, about \$14.7 billion in sewer system infrastructure and about \$11.0 billion in water system infrastructure on average should be replaced each year on a constant-dollar basis. However, the BEA reported that, for 2021, only \$20.1 billion of new sewer system infrastructure and only \$17.6 billion in new water system infrastructure were added to the stock of infrastructures during the year. This implies that after accounting for expected replacements, only \$5.4 billion and \$6.6 billion of new sewer system and water system infrastructure, respectively, was installed. These estimates (\$5.4) and \$6.6 billion) of implied new sewer and water system infrastructure would account for less than one percent nominal growth in this infrastructure, which is inconsistent with 2021 nominal economic growth for the US economy broadly (10.7 percent) and for State and local governments (5.9 percent) specifically.⁸ All of this infers that currently available statistics do not indicate that sufficient expenditures are being made to ensure that very important sewer (Waste management) and water system infrastructure is being maintained and updated appropriately. Therefore, in the near term, Black Americans must press State and local governments to accelerate investment in this infrastructure for our areas of influence to ensure that Flint and Jackson-type scenarios do not become even more commonplace.
- Of the world's three (Amazon River Basin, Southeast Asia, and the Congo River Basin) largest tropical rainforests, only the Congo River Basin remains a strong net carbon sink; i.e., it absorbs significantly more carbon than it emits. Therefore, Black Americans should be keen to contribute to "saving the planet" by planting trees in the slices of urban areas that we occupy, and to perform other actions that will mitigate Climate Change. This will help maintain the planet's important biodiversity.

Sectoral needs and rationale

This section outlines the factors that must exist for Black Americans to live safely in self-determined and distributed locations all around the US.

- All Black American areas of influence should initiate efforts to assess and monitor the current and future availability of water and to ensure that the water that is available now and in the future is of sufficient quality.
- If there are past, current, or likely future occurrences of water supply shortages or water quality problems, then Black Americans should formulate a plan to address these problems. These plans should include, but not be limited to, developing own sources of water for our areas of influence, development of water conservation and recycling strategies, and mounting persistent campaigns to ensure that Black American households adopt methods for guaranteeing that clean water is available for our use.
- Given the foregoing, Black Americans should individually, and/or collaboratively across areas of influence, develop the expertise and capacity to assess and monitor the environment to prevent pollution before it occurs and to abate pollution that may exist. This includes the abatement of pollution in water, air, buildings, land. One aspect of this requirement is to search historical records that may reflect the existence of past structures/facilities and operations that could have generated harmful impacts on the environment. Important polluting or contaminating elements about which we should be concerned include, but may not be limited to, petroleum and derivative products that have seeped into the subsoil from fuel storage facilities and that permeate ground water; (forever) chemicals that were disposed of improperly; and lead that may be present in the paint of aged structures or that may have otherwise entered the soil during the demolition of aged structures. Because they obscure clarity about potential pollution problems, it is important that Black Americans systematically clear areas within our areas of influence that serve essentially as waste dumps. Also, Black Americans should be certain to ensure that waste treatment plants located in or near our areas of influence are operating at or above established standards and are not polluting.
- It is important for Black Americans to ensure that current and future plans for growth and development in and around our areas of influence exclude pollution generating operations. This includes power generation plants, waste treatment plants, and commercial enterprises that create pollution as a by-product of their production processes.
- Black Americans should conduct environmental enhancement efforts to include, but not necessarily be limited to, tree planting programs and creating (through cleanups) and conserving green spaces.
- To the extent that efforts are required to mitigate the impact of Climate Change, Black American areas of influence should be quick to rally to perform and support these efforts in and around our areas of influence.
- Black Americans should view all the foregoing not only as an opportunity to ensure environmental protection, but also as economic opportunities. Consequently, Black American youth should be encouraged to obtain the requisite training and skills to perform environmental protection work.

Suggested Responsible Parties

The Responsible Parties recommended to take on the work highlighted in the Environmental Protection sector of this LTSP should, at a minimum, include:

- African American Environmentalist Association
- National Black Environmental Justice Network
- Hip Hop Caucus
- Generation Green
- Black Dirt Farm Collective

Environmental Protection overarching goal and objectives

Following the overarching goal and selected supporting goals of the coordinated and integrated phased 100-year LTSP, Table 5 presents the phased 100-year overarching goal and selected objectives for the Environmental Protection sector.

Table 5. Environmental Protection Phased 100-Year Overarching Goal and Selected Objectives

No.	Phases	Goals and Subgoals
1	Years 1-5 objectives	Identify all relevant environmental protection Responsible Parties; ensure that the Responsible Parties are represented on the National Black Planning Council (NBPC); charge Responsible Parties jointly with developing an organizational structure across all sizeable areas of influence that can provide oversight for environmental protection training for Black Americans and can provide implementing guidance for required environmental protection actions in Black areas of influence; ensure that capacity is developed by the end of this phase to perform a general assessment of, and to conduct monitoring functions for, Black areas of influence for the abatement of pollution in the water, air, and land; formulate and begin to implement water conservation and water recycling efforts; begin to recruit Black American youth and "infect" them with the desire to pursue environmental protection careers; initiate efforts to assess through surveys the quality of life derived from the environment; also, monitor existing clean water supplies and ensure the availability of future water supplies.
2	Year 6-10 objectives	Continue relevant operations and activities from phase 1; initiate efforts across all sizeable areas of influence to perform research to identify and eliminate/abate legacy pollution sites (including waste dumps) and to replace them with functional and/or green spaces; coordinate efforts in all sizeable areas of influence to ensure that internal and external growth and development plans exclude pollution generating operations; and begin to explore prospects for transforming all aspects of Black American environmental protection efforts into commercial enterprises.
3	Year 11-15 objectives	Continue relevant operations and activities from previous phases; begin to welcome Black American youth who have been trained in the environmental protection field and employ them in our areas of influence; begin to analyze Climate Change for its likely impacts on our areas of influence; and develop and execute plans to mitigate the effects of Climate Change to include potential relocation of all or portions of our areas of influence.

No.	Phases	Goals and Subgoals
4	Year 16-20 objectives	Continue relevant operations and activities from previous phases; perform a comparative analysis of environmental conditions (including the quality of life) at the 20-year mark using the assessment that was performed during phase 1; develop and execute a new 20-year plan for ensuring high-quality environmental protection and for mitigating Climate Change for Black areas of influence; and urge Black Americans in the environmental protection field to leverage their training and expertise to develop environmental protection and Climate Change mitigation methods that are marketable/exportable.
5	Year 21-40 objectives	Continue relevant operations and activities from previous phases; perform a comparative analysis of environmental conditions (including the quality of life) at the 40-year mark using the assessment that was performed during phase 4; develop and execute a new 20-year plan for ensuring high-quality environmental protection and for mitigating Climate Change for Black areas of influence to include potential relocations; expand environmental protection and Climate Change entrepreneurship; and collaborate with relevant NBPC representatives to assess prospects for developing new areas of influence and/or more unified areas of influence that reflect high-quality environmental protection and that are fortified against Climate Change.
6	Year 41-60 objectives	Continue relevant operations and activities from previous phases; perform a comparative analysis of environmental conditions (including the quality of life) at the 60-year mark using the assessment that was performed during phase 5; develop and execute a new 20-year plan for ensuring high-quality environmental protection and for mitigating Climate Change for Black areas of influence to include potential relocations; and expand environmental protection and Climate Change entrepreneurship.
7	Year 61-80 objectives	Continue relevant operations and activities from previous phases; perform a comparative analysis of environmental conditions (including the quality of life) at the 80-year mark using the assessment that was performed during phase 6; develop and execute a new 20-year plan for ensuring high-quality environmental protection and for mitigating Climate Change for Black areas of influence to include potential relocations; and expand environmental protection and Climate Change entrepreneurship.
8	Year 81-100 objectives OVER ARCHING GOAL	Update as required and continue operations and activities outlined in phase 7; and develop a new 100-Year Environmental Protection LTSP. Black Americans residing in distributed and self-determined areas of influence across the US indicate through quality of life (well-being) assessments that they experience an environment that is pollution-free and protected against the
	UUAL	vagaries of Climate Change. Also, existing environmental protection and Climate Change measures are sufficient to sustain a safe and healthy environment.

¹ Melissa Denchak (2018). "Flint Water Crisis: Everything You Need to Know." Natural Resources Defense Council. https://www.nrdc.org/stories/flint-water-crisis-everything-you-need-know (Ret. 100322).

² The fight is ongoing to make those who caused water problems in Flint to pay. However, Michigan courts continue to take unfavorable actions toward Black Americans. Ed White (2022). "Flint water crisis charges dropped for 7 former officials." *The Washington Post*, October 4th. https://www.washingtonpost.com/politics/judge-tosses-charges-against-7-people-in-flint-water-crisis/2022/10/04/e99a869c-4407-11ed-be17-89cbe6b8c0a5_story.html (Ret. 100522).

³ Edwin Rios (2022). "Jackson water crisis: Mississippi accused of 'intolerable' racial discrimination." *The Guardian*. https://www.theguardian.com/us-news/2022/sep/29/naacp-racial-discrimination-complaint-jackson-water-crisis (Ret. 1002322).

⁴ Maura Allaire, Haowei Wu, and Upmanu Lall (2018). "National Trends in Drinking Water Quality Violations." *Proceedings of the National Academy of Science*. https://www.pnas.org/doi/abs/10.1073/pnas.1719805115 (Ret. 100322).

⁵ *Ibid*.

⁶ US Department of Commerce, National Oceanic and Atmospheric Administration (2022). "2022 Sea Level Rise Technical Report." https://oceanservice.noaa.gov/hazards/sealevelrise/sealevelrise-tech-report.html (Ret. 100322).
⁷ All these statistics are available from BEA's National Fixed Assets Accounts Tables: Table 7.1 provides estimates of the net stock of infrastructure; Table 7.7 provides estimates of the average age of infrastructure; and Table 7.5 provides estimates of investment in infrastructure. https://apps.bea.gov/iTable/?ReqID=10&step=2 (Ret. 100322).
⁸ Estimates of national and state and local government nominal economic growth for 2021 are derived from: US Department of Commerce, Bureau of Economic Analysis (2022). "Table 1.1.5 Gross Domestic Product." National Income and Product Accounts, https://apps.bea.gov/iTable/?reqid=19&step=2&isuri=1&categories=survey (Ret.

<sup>100322).

9</sup> Nancy Harris and David Gibbs (2021). "Forests Absorb Twice As Much Carbon As They Emit Each Year." World Resources Institute. https://www.wri.org/insights/forests-absorb-twice-much-carbon-they-emit-each-year (Ret. 100322).