

Report on Cumulative Impacts in Robeson County, NC

Cumulative Impact Summary

Cumulative impacts are the combined effects of multiple activities on a community or a landscape. Activities can take place over a wide area, or they can occur at a single place over the course of time. As individual effects add up through time and/or across an area, they may result in an overall impact that is larger than (or different from) the impact of any single activity. The severity of cumulative impacts often depends on the timing and location of individual activities; cumulative impacts of activities clustered in one area or timed in rapid sequence can be more severe than activities spread out over a large region or a long time span.

These activities have individual environmental and human effects, but they also have cumulative impacts because they take place in the same area and at the same time. Understanding the cumulative impacts of these activities requires documenting their additive effects on the environment (e.g., air and water quality) and people (e.g., individual health, community wellbeing). In general, public policies dealing with cumulative impacts (e.g., State 401 Water Quality Certification, 15A NCAC 02H .0506) are unconcerned with motives or intentions behind activities that create cumulative impacts. Only the effects matter.

I. Sample Cumulative Impact Indicators in Robeson County

A. **Natural Gas Infrastructure:** Natural gas infrastructure including the proposed Robeson Liquefied Natural Gas facility, existing gas transmission pipelines and a compressor station, combined with the the Atlantic Coast Pipeline and additional natural gas related projects, are concentrated in an 8-mile radius in the heart of the American Indian community. Installation of this infrastructure disturbs unknown amounts of land, potentially pollutes groundwater, and can be dangerous, even deadly, in the event of leaks or explosions.

B. **Concentrated Animal Feeding Operations (CAFO's) and Processing Facilities:** Robeson County hosts two large poultry processing plants, both of which dispose of partially-treated wastewater via irrigation of former cropland. Sixteen new poultry CAFOs with 316 barns have been constructed or are currently under construction in the Lumber River watershed since 2018, resulting in 9.9 million total birds per flock with an average of five flocks per year and a total litter/manure output of over 69 thousand tons.

C. **Climate Change:** Climate Change impacts phenomena including hurricanes (Matthew and Florence), droughts, heat-related illness, and loss of affordable housing and population (climate gentrification). Low income families and the elderly are particularly vulnerable. Small farmers are also some of the most under-served members of impacted communities, suffering from all three catastrophic conditions.

D. **Deforestation:** 277,679 dry tons of wood are removed annually from Robeson County, equivalent to 84,000 acres, leading to a decrease in 29% of tree cover since 2000. The timber industry, CAFO's, pipelines, and biomass industry all impact massive tree removal which also contributes to increased flooding in low-lying areas of the county.

E. **Coal Ash:** Recognized as leaking, Duke Energy is removing all coal ash from the former Weatherspoon Plant. and transporting it to South Carolina. Although the Weatherspoon plant site is not being used for electric production, in Robeson County three biogas/biomass facilities are operational or announced. These will produce biomass fly ash waste with components that include contaminants such as Arsenic and Copper.

F. **Additional Impacts:** There are additional factors in Robeson County that increase toxicity in Robeson County in ways that we are still learning about. These include: Gen X groundwater and possible surface water contamination, and multiple brownfield sites.

II. Compounding Factors: The cumulative impact indicators (listed above) are magnified by *compounding factors* that create the conditions for human illness and environmental degradation in Robeson County. These *compounding factors* can be described within these five categories:

A. **Environmental Justice:** *disproportionate impact of environmental and economic harm on indigenous peoples, people of color, and low-income families and communities.* Robeson County is the most racially diverse rural county in the United States (with significant Native American, African American, and Latino populations). The majority of industrial sites with potential environmental harm are located in or near these communities.

B. **EcoJustice:** *the forested wetlands have important ecological functions and are culturally significant to Indigenous people of the region.* Wetlands make up approximately one third of Robeson County. Most of the county's wetlands are swamp forests located adjacent to the Lumber River (a National Wild and Scenic River) or its tributaries. These forested wetlands have important ecological functions and are culturally significant to indigenous peoples of the region. They are most vulnerable to environmental harm and the most vulnerable part of our ecosystem.

C. **Economic Justice:** *decrease in property values and rising poverty due to massive job loss.* Robeson County is home to an economically vulnerable population characterized by high poverty, unemployment, and poor public health metrics related to access to healthcare. Robeson County is the most racially diverse rural county in the United States (with significant Native American, African American, and Latino populations). The United States Department of Agriculture lists Robeson County as a "Persistent Poverty County".

D. **Human Health:** *Robeson County is a public health "hot spot".* Public health research in Robeson County has observed rising rates of chronic conditions and illnesses, including violence, asthma, mental illness, substance abuse, heart disease, diabetes, cancer, heat-related illnesses, infant mortality, and vehicular mortality. A nationally circulated JAMA article in 2017 counted Robeson County among a few cancer "hot spots" in the United States.

E. **Culture:** *Robeson County is traditional homeland to the largest American Indian population in the eastern United States, the majority of whom are members of the Lumbee Tribe.* Robeson County contains sacred sources of life and lifeways (including land, water, air, plants, animals, subsistence, family, and community) that are under threat of additional and significant injury and harm with little or no recognition from developers of the central role of American Indian culture in determining the quality of life in natural and fostered systems.

Submitted 8/21/19 by: Robeson County Community Organizing and Outreach Committee,

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