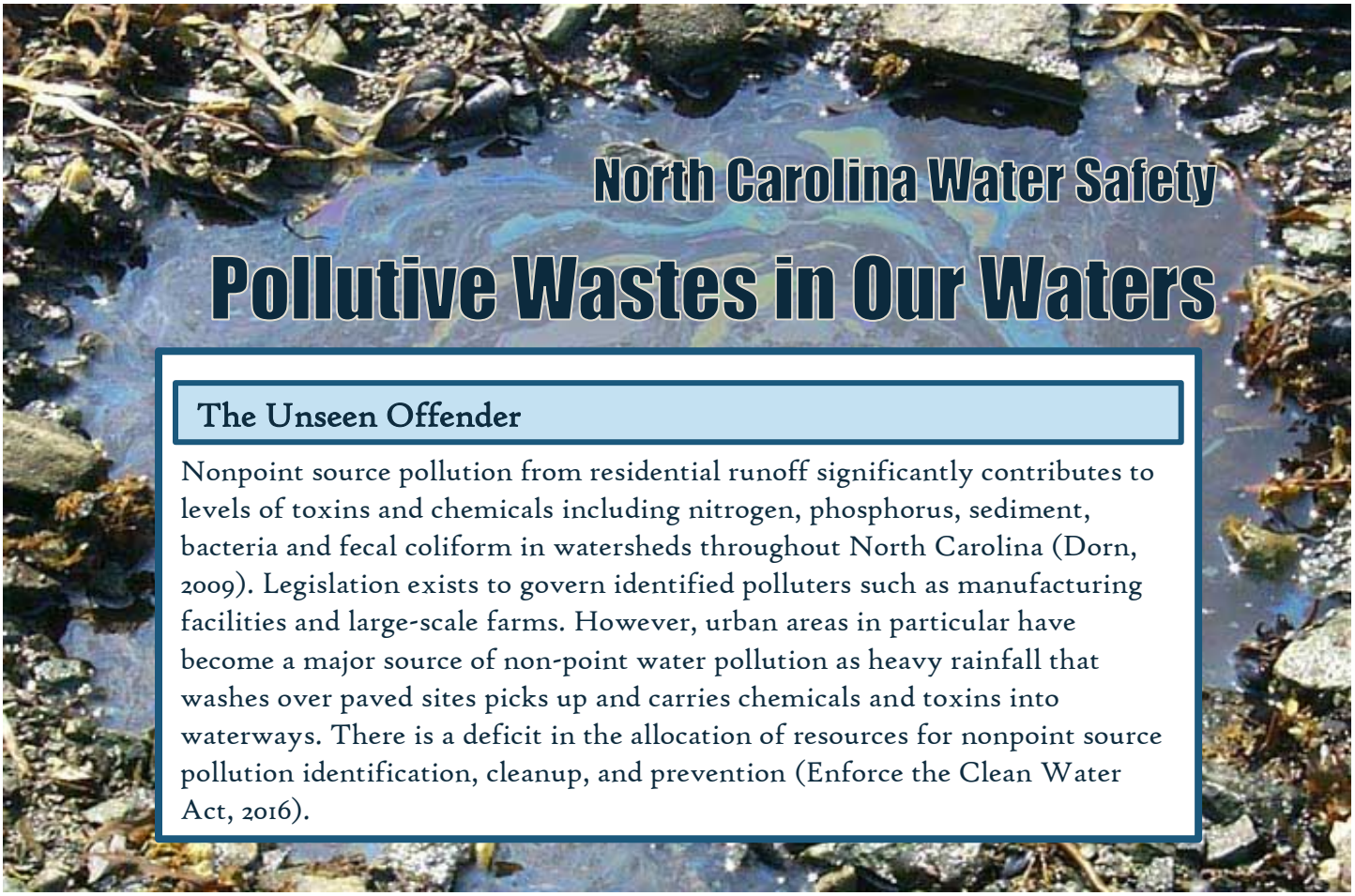

# North Carolina Water Safety

# Pollutive Wastes in Our Waters

## The Unseen Offender

Nonpoint source pollution from residential runoff significantly contributes to levels of toxins and chemicals including nitrogen, phosphorus, sediment, bacteria and fecal coliform in watersheds throughout North Carolina (Dorn, 2009). Legislation exists to govern identified polluters such as manufacturing facilities and large-scale farms. However, urban areas in particular have become a major source of non-point water pollution as heavy rainfall that washes over paved sites picks up and carries chemicals and toxins into waterways. There is a deficit in the allocation of resources for nonpoint source pollution identification, cleanup, and prevention (Enforce the Clean Water Act, 2016).

**Between 2007 and 2009,**

**116 counties in NC having between 3 and 38 water pollution violations each all paid $0 in fines**

From these counties, over $200,000 in fines were not paid to clean up pollution that occurred beyond what was permitted.

(Bloch, 2018)

## Regulating Water Pollution

The water pollution caused by large scale industry and agriculture in North Carolina is regulated under the National Pollution Discharge System. Producers and manufacturers are allotted permits and are responsible for cleaning up any pollution beyond their pollution budget or else they will face fines. Water quality standards are measured and enforced by street-level bureaucrats working for organizations such as the NCDEQ and NPDS. There is an "implementation deficit" where policy goals and criteria are not put fully into practice because employees face a dilemma between negotiating future compliance or enforcing standards against companies in violation of their pollution budgets (Weale, 1993). Throughout the nation, freshwater pollution increases the costs of accessing safe, drinkable water. Chemical pollution from runoff toxins can result in a large loss of biodiversity in rivers, lakes, and streams (Freshwater Pollution Costs, 2008). Saltwater pollution impacts ocean wildlife similarly and bacteria carried into oceans from raw sewage and storm water runoff cause illness for over 3.5 million beachgoers annually (Improve Beach Water Quality, 2018).

- **Industries dump an estimated 300-400MT of polluted waste directly into waterways each year**
- **1.2 trillion gallons of untreated sewage, storm water, and industrial waste are discharged into US waters annually**
- **Nitrate from agriculture is the most common contaminant in the world's groundwater aquifers**

Source: http://pravaha.org/

It is estimated that freshwater pollution by nitrogen and phosphorus alone costs over $4.3 billion to the nation annually. This cost is distributed between facilities that must treat the water and the individual American who must buy it bottled when it becomes unsafe to drink from the tap. The multi-billion dollar cost is in addition to the loss in property values or water-front tourism and harm to the viability of biodiversity within ecosystems (Freshwater Pollution costs, 2008). The North Carolina Water Safety Act proposes a one-time 2.4 million dollar endowment in part to establish teams of faculty from the UNC public university system to measure and report levels of pollutants in local watersheds. The remainder of the budget will be allocated to clean-up and prevention of nonpoint source pollution in problem areas. The one-time proposed budget is arguably less than the combined reoccurring costs of unpaid fines for pollution violations, harm to health and wellbeing of individuals and ecosystems, and internalized costs of making water we pollute drinkable again (Water Safety Act, 2017-2018).

## Small-Scale Solutions

Legislating pollution increasingly is opposed by large corporations who argue that the criminalization and over exaggeration of pollution can create undue public concern and harm business. The counter to this is that underselling the risks or prevalence of local pollution can lend to under-prescription of regulations and allow offending parties to continue detrimental actions that harm the community as a whole (Williamson, 2018). Small-scale policy solutions to pollution caused largely by nonpoint sources include installing permeable pavement or grassy areas on traffic medians, in small spaces between buildings, or even on roofs to capture rainwater and return it to the ground rather than sewage systems and waterways (Improve beach Water Quality, 2018).

**Citations**

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