

Student's Name

Professor's Name

Course Name/Code

Date

Graduate School Essay Example for Duke: Environmental Science and Policy

The water in the creek behind my grandmother's house in eastern North Carolina runs the color of rust in late summer. I asked about it once and was told the hogs at the nearby concentrated animal feeding operation had a lagoon that overflowed sometimes. I was fourteen. I filed it in the category of things I did not know how to think about.

I found the framework in environmental science during my second year at NC State, in a course on agricultural pollution and water quality. The creek I had grown up beside had a name in the literature: surface water impairment from swine CAFO effluent. The problem was documented. The regulatory response was inadequate. That gap between what we know and what we regulate became the question that organized the rest of my undergraduate training.

I worked with Professor James Holloway for two years on a project assessing nitrate loading in shallow groundwater near CAFO sites in Duplin County, using sensor networks and GIS analysis to map contamination patterns at a spatial resolution the existing monitoring infrastructure could not provide. Our findings contributed to an ongoing state-level review of buffer zone requirements.

I am applying to Duke's Environmental Science and Policy program because of the program's integration of ecological science with regulatory analysis, and because Professor Nia Okafor's work on regulatory design for nonpoint source pollution addresses the policy side of the problem I have been studying. I want to develop the skills to translate contamination science into enforceable regulatory frameworks.