The New York City Department of Education Office of Sustainability requires that every New York City school appoint a Sustainability Coordinator to integrate environmental sustainability themes into classroom and school-wide programming, yet environmental sustainability remains underexplored in many school communities. Although the Office of Sustainability has active partnerships with dozens of environmental and environmental sustainability educational organizations in order to connect schools with resources for implementing environmental sustainability programming, few schools take advantage of these opportunities. This study investigates barriers to establishing long-term environmental sustainability practices in New York City public elementary schools by analyzing the experiences of three case study schools in New York City. Findings indicate that integrating environmental sustainability themes into school operations and behavior is most successful when programming engages all actors within a school community, contributing to a “culture of sustainability.” Results of this study suggest strategies to support the Sustainability Coordinator role as well as illuminate pathways toward building school communities who are willing to invest time and energy into adopting values of sustainability.