

H O N O R A B L E M E N T I O N

THE IMPACT OF CITIZEN ENVIRONMENTAL SCIENCE IN THE UNITED STATES

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An increasingly sophisticated public, rapid changes in monitoring technology, the ability to process large volumes of data, and social media are increasing the capacity for members of the public and advocacy groups to gather, interpret, and exchange environmental data. This development has the potential to alter the government-centric approach to environmental governance; however, citizen science has had a mixed record in influencing government decisions and actions. This Article reviews the rapid changes that are going on in the field of citizen science and examines what makes citizen science initiatives impactful, as well as the barriers to greater impact. It reports on 10 case studies, and evaluates these to provide findings about the state of citizen science and recommendations on what might be done to increase its influence on environmental decisionmaking. The Article specifically recommends that: (1) agencies take specific steps to encourage the use of citizen science; (2) citizen scientists learn from others' successes; (3) air programs use citizen-generated data to address pollution in low-income and minority communities; (4) unnecessary legal barriers be removed; and (5) a centralized process for the validation of emerging technologies be implemented.

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