

Consequences of the Clean Water Act and the Demand for Water Quality

[Get access >](#)

David A Keiser, Joseph S Shapiro

The Quarterly Journal of Economics, Volume 134, Issue 1, February 2019, Pages 349–396, <https://doi.org/10.1093/qje/qjy019>

Published: 07 September 2018

Abstract

Since the 1972 U.S. Clean Water Act, government and industry have invested over \$1 trillion to abate water pollution, or \$100 per person-year. Over half of U.S. stream and river miles, however, still violate pollution standards. We use the most comprehensive set of files ever compiled on water pollution and its determinants, including 50 million pollution readings from 240,000 monitoring sites and a network model of all U.S. rivers, to study water pollution's trends, causes, and welfare consequences. We have three main findings. First, water pollution concentrations have fallen substantially. Between 1972 and 2001, for example, the share of waters safe for fishing grew by 12 percentage points. Second, the Clean Water Act's grants to municipal wastewater treatment plants, which account for \$650 billion in expenditure, caused some of these declines. Through these grants, it cost around \$1.5 million (2014 dollars) to make one river-mile fishable for a year. We find little displacement of municipal expenditure due to a federal grant. Third, the grants' estimated effects on housing values are smaller than the grants' costs; we carefully discuss welfare implications.

© The Author(s) 2018. Published by Oxford University Press on behalf of the President and Fellows of Harvard College.

This article is published and distributed under the terms of the Oxford University Press, Standard Journals Publication Model (https://academic.oup.com/journals/pages/open_access/funder_policies/chorus/standard_publication_model)

JEL: H23 - Externalities; Redistributive Effects; Environmental Taxes and Subsidies, H54 - Infrastructures; Other Public Investment and Capital Stock, H70 - General, Q50 - General, R31 - Housing Supply and Markets

Issue Section: [Article](#)

You do not currently have access to this article.

Sign in

 [Get help with access](#)

Personal account


- Sign in with email/username & password
- Get email alerts
- Save searches
- Purchase content
- Activate your purchase/trial code
- Add your ORCID iD

[Sign in >](#)

[Register](#)

Institutional access

 [Sign in through your institution](#)

 [Sign in through your institution >](#)

[Sign in with a library card](#)

[Sign in with username/password](#)

[Recommend to your librarian](#)

Institutional account management

[Sign in as administrator](#)

Purchase

[Subscription prices and ordering for this journal](#)

[Purchasing options for books and journals across Oxford Academic](#)

Short-term Access

To purchase short-term access, please sign in to your personal account above.

Don't already have a personal account? [Register](#)

Consequences of the Clean Water Act and the Demand for Water Quality* - 24 Hours access

EUR €39.00

GBP £33.00

USD \$43.00

Rental



This article is also available for rental through DeepDyve.