



MULTIPLE STUDIES CONFIRM SUPERIOR WATER QUALITY RECORD OF WATER COMPANIES

Water quality standards established through the Safe Drinking Water Act (SDWA) provide critical performance metrics for every water utility across the country.

Water companies are proud of their strong water quality record. In fact, EPA data has repeatedly shown that water systems owned and operated by water companies are significantly less likely to violate the SDWA than water systems owned and operated by local governments.

Indeed, all four studies analyzing SDWA compliance data agree: water companies have a superior water quality record.

PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES (2018)

A landmark 2018 study published in the Proceedings of the National Academy of Sciences (PNAS) found that water companies are far less likely to have health-based drinking water quality violations than utilities owned and operated by local governments. The study analyzed EPA data on health-related violations of the SDWA for 17,900 communities over a 34-year period (1982 to 2015), making it the largest and most comprehensive review of SDWA water compliance data ever conducted. According to the study authors: “Privately owned utilities are found to be less vulnerable to violations than government ownership. In particular, large private firms are associated with lower likelihood of violation.” (Allaire, Wu and Lall in the Proceedings of the National Academy of Sciences, [“National Trends in Drinking Water Quality Violations”](#) February 2018)

STATE ANALYSES OF PNAS DATA (2018)

Because the PNAS study authors published their dataset, other researchers have been able to conduct further analyses of SDWA compliance based on the PNAS study. In a 2018 analysis conducted by Encina Advisors, researchers used the PNAS dataset to analyze SDWA compliance records at the state level in Pennsylvania, New Jersey, Texas, and California.¹ This is the first analysis ever conducted that compared water quality records for municipalities and water companies in individual states.

Applying the PNAS study models to state-level datasets, the analysis found strong statistical evidence that water company ownership is associated with stronger water quality:

- **CALIFORNIA:** Systems owned and operated by water companies are 16.8 percent less likely to have a health-based SDWA violation.
- **NEW JERSEY:** Systems owned and operated by water companies are 58.9 percent less likely to have a health-based SDWA violation.

- **PENNSYLVANIA:** Systems owned and operated by water companies are 37.4 percent less likely to have a health-based SDWA violation.
- **TEXAS:** Systems owned and operated by water companies are 28.4 percent less likely to have a health-based SDWA violation.

(Encina Advisors, "[Analysis of Privately Owned Water Utilities and Drinking Water Quality in Selected States](#)" December 2018)

¹The Encina Advisors state analyses utilized the same dataset as the PNAS study (2018). The state analyses were commissioned by the National Association of Water Companies (NAWC).

GEORGETOWN UNIVERSITY AND TEXAS A&M UNIVERSITY (2014)

A 2014 study by researchers at Georgetown University and Texas A&M University examined EPA data between 2010 and 2013. Their analysis found that water systems owned and operated by water companies are 24% less likely to incur health violations of the SDWA than government-operated water systems. In their discussion, the authors stated that their analysis found "consistent evidence that publicly-owned facilities are more likely to violate regulatory requirements" of the SDWA. (David Konisky, Georgetown University, and Manny Teodoro, Texas A&M University, "[When Governments Regulate Governments](#)" November 2014)

AMERICAN WATER INTELLIGENCE (2011)

An American Water Intelligence analysis of EPA data from 2001-2011 revealed that major private utilities have fewer EPA violations, fines, or work orders under the SDWA. The study found that NAWC members had 0.09 EPA enforcement actions per 1 million customers, while all other water operators had 30.03 EPA enforcement actions per 1 million customers. (American Water Intelligence, "[Investor-Owned Water Firms Boast Sterling SDWA Record](#)" October 2011)

Taken together, these studies confirm that superior water quality is a key benefit that water companies bring to their customers. The data is clear: systems owned and operated by water companies have a stronger water quality record than systems owned and operated by local governments.