

Supplementary Material

1 SUPPLEMENTARY TABLES AND FIGURES

Newspaper Name	Headquarters (City)	USEPA Headquarters	Article Count for 5 SDWA Rules	Article Count for all SDWA Rules
Bangor Daily News	Bangor, ME	Region 1	410	706
Chicago Daily Herald	Chicago, IL	Region 5	740	1110
Daily News	New York City, NY	Region 2	93	235
Dayton Daily News	Dayton, OH	Region 5	1073	1273
Lincoln Journal Star	Lincoln, NE	Region 7	41	85
Marin Independent Journal	San Rafael, CA	Region 9	135	280
Providence Journal	Providence, RI	Region 1	263	383
Richmond Times Dispatch	Richmond, VA	Region 3	235	403
San Bernardino Sun	San Bernardino, CA	Region 9	162	320
South Bend Tribune	South Bend, IN	Region 5	110	193
Star Tribune	Minneapolis, MN	Region 5	447	733
Telegram & Gazette	Worcester, MA	Region 1	398	567
Telegraph Herald	Dubuque, IA	Region 7	413	620
The Atlanta Journal-Constitution	Atlanta, GA	Region 4	214	461
The Austin Statesman	Austin, TX	Region 6	197	341
The Baltimore Sun	Baltimore, MD	Region 3	352	588
The Bismarck Tribune	Bismarck, ND	Region 8	399	655
The Capital Times	Madison, WV	Region 3	59	106
The Columbian	Vancouver, WA	Region 10	12	20
The Daily Oklahoman	Oklahoma City, OK	Region 6	238	447
The Denver Post	Denver, CO	Region 8	582	741
The Hartford Courant	Hartford, CT	Region 1	256	381
The Morning Call	Allentown, PA	Region 3	227	332
The Santa Fe New Mexican	Santa Fe, NM	Region 6	165	207
The Tampa Tribune	Tampa, FL	Region 4	190	375

Table S1. Newspaper Name, Headquarters, USEPA region, Article count for five SDWA rules and total water-related article counts for newspapers in analyses. News coverage in this dataset represented all ten USEPA regions, with variable frequency of water-related news.

SDWA Rule	Rule History	Regulated Contaminants
Lead and Copper Rule (LCR)	1991. Revised in 2007 to augment monitoring, treatment, communication, and LSL replacement.	Lead and Copper
Disinfection Byproducts (DBPs) Rule	1998. Revised in 2006 to include stage 2 DBPs.	Stage 1: Chlorine, chloramine, chlorine dioxide, chlorite, bromate, total haloacetic acids (HAA5), total carbon, trihalomethanes (TTHM) Stage 2: HAA5, TTHM
Radionuclides Rule	1989. Additional contaminants listed in 1992 and 1994.	Gross alpha, uranium, radium (-226 and 228), gross beta particle activity, manmade beta particle and photon emitter, tritium, 38-strontium-90, 53-iodine-131
Volatile Organic Chemicals (VOCs) Rule	1977. Revised in 2000 to strengthen monitoring for CWSs, establish a uranium standard, and includes 3 new analytical methods.	1,2,4-Trichlorobenzene, cis-1,2-dichloroethylene, total xylenes, dichloromethane, o-dichlorobenzene, p-dichlorobenzene, vinyl chloride, 1,1-dichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, 1,2-dichloropropane, trichloroethylene, chlorobenzene, benzene, toluene, ethylbenzene, styrene
Total Coliform Rule	1989. Revised Total Coliform Rule (RTCR) was published in 2013. All PWSs must comply with the RTCR before 2016. Until then, PWSs must continue complying with the 1989 TCR.	Total Coliform

Table S2. SDWA Rule, history, and regulated contaminants. Rules were introduced and revised at variable times throughout 1977 - 2016.

SDWA Rule	Slope	p-value
LCR	0.146	0.101
DBP	0.04	0.01
RN	-0.02	0.007
VOC	-0.01	0.07
TCR	-0.001	0.05

Table S3. Slope and p-values of annual SDWA rule coverage from 2009 - 2017. There was a rise in LCR and DBP coverage and decline in RN, VOC, and TCR

Parameter	LCR Beta	95 % CI	DBP Beta	95% CI	RN Beta	95% CI	VOC Beta	95% CI	TCR Beta	95% CI
Total Violations	-0.04	-0.10 - 0.48	-4.4 x E-3	-9.86 xE-3 - 2.20 xE-3	-1.2 x E-3	-0.04 - 0.16	-5.4 xE-4	-4.1 xE-3 - 5.7 xE-3	-1.9 x E-3	-6.21 xE-3 - 1.4 xE-2
Non-Hispanic White	2.24	0.53 - 5.17	0.68	-0.86 - 1.63	-0.29	-0.56 - 0.19	0.08	-0.19 - 0.27	0.16	0.05 - 0.25
Black	-2.01	-18.8 - 7.42	-0.86	-4.33 - 0.99	0.84	-0.84 - 3.67	-0.18	-0.45 - 1.68	-0.32	-0.89 - 0.04
Hispanic	-1.22	-6.58 - -0.41	-0.25	-1.77 - 0.85	0.30	-0.22 - 0.43	-0.07	-0.35 - 0.23	-0.16	-0.30 - 0.40
American Indian	-5.00	-154 - 42.9	7.81	-53.2 - 20.5	-0.43	-20.3 - 33.4	1.88	-101 - 19.9	-0.64	-12.5 - 2.7
Spanish-Speaking Households	-6.65	-39.5 - 46.6	-2.55	-5.74 - 10.9	-0.48	-1.10 - 5.26	0.70	-3.99 - 1.56	-0.61	-1.65 - 1.76
Industrial Employment	8.56	-56.1 - 43.0	2.87	-3.58 - 16.1	5.94	-7.83 - 10.1	3.03	-2.84 - 3.55	0.20	-3.33 - 1.73
Republican Voters	-0.48	-2.64 - 2.42	0.59	0.33 - 1.03	0.14	-0.18 - 0.51	0.13	-0.10 - 0.26	0	-0.26 - 0.08

Table S4. Univariate quantile regression results from sociodemographic parameters on SDWA Rule coverage. Generally, news coverage in more non-Hispanic white regions had a positive direction, while more Black and Hispanic populations had negative directionality. The proportion of American Indian populations had variable direction. Total violations had no effect on news coverage of SDWA rules.

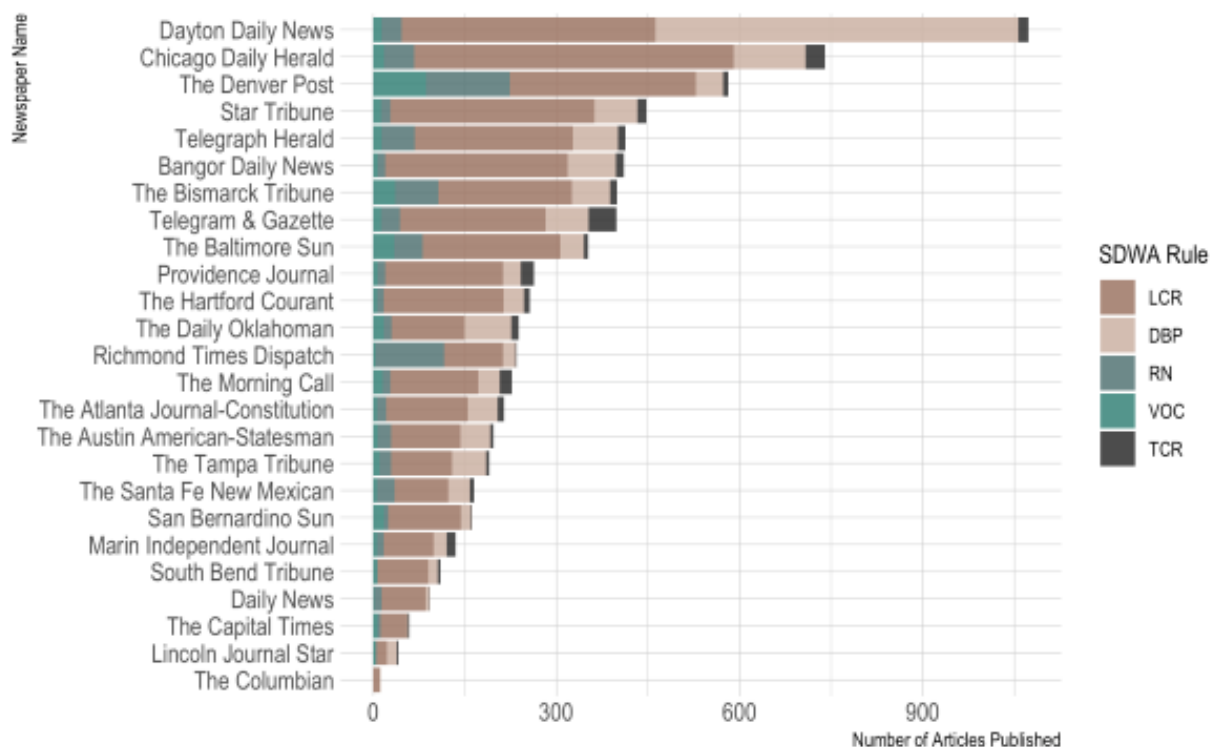


Figure S1. Number of Article publications by newspaper outlet and SDWA Rule mentioned. LCR was covered most frequently among nearly all newspapers, except for the Richmond Times Dispatch, Lincoln Journal Star, and Dayton Daily News.