

**Michael S. Elovitz, Supervisory Physical Scientist in EPA's National Risk Management Research Laboratory**

Water Systems Division

[Mailing Address](#)

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**Area of Expertise:** My research primarily focuses on lab- and field-scale investigations of disinfection and disinfection byproduct formation control strategies. My primary sub-discipline is in the area of environmental redox chemistry and chemical reaction kinetics greatly reflects my formal education focusing on chemical engineering and environmental aquatic chemistry. Current research projects are focusing on the elucidation and modeling of ozone- and chlorine-based disinfection processes as they relate to drinking water treatment. These research efforts are closely aligned with *the Safe Drinking Water Act*, and more specifically directly supporting the Office of Water in developing and reviewing the *Stage 1 and Stage 2 Disinfectant/Disinfection Byproducts Rule*, *Enhanced Surface Water Treatment Rules*, the *Six-Year Review 3* of the same rules, and *CCL Rule*.

**Select Publications:**

Regli, S., J. Chen, M. Messner, M. S. Elovitz, F. J. Letkiewicz, R. A. Pegram, T. J. Pepping, S. D. Richardson and J. M. Wright. [Estimating potential increased bladder cancer risk due to increased bromide concentrations in sources of disinfected drinking waters.](#) *Environmental Science & Technology* **49**(22): 13094-13102 (2015).

Heberling, M. T., C. T. Nietch, H. W. Thurston, M. Elovitz, K. H. Birkenhauer, S. Panguluri, B. Ramakrishnan, E. Heiser, T. Neyer. [Comparing drinking water treatment costs to source water protection costs using time series analysis.](#) *Water Resources Research* **51**(11): 8741-8756 (2015).

Beaulieu, J. K., R.L. Smolenski, C. T. Nietch, A. Townsend-Small, and M. S. Elovitz. [High methane emissions from a midlatitude reservoir draining an agricultural watershed.](#) *Environmental Science & Technology* **48**(19): 11100-11108 (2014).

Beaulieu, J. K., R.L. Smolenski, C. T. Nietch, A. Townsend-Small, M. S. Elovitz, and J. P. Schubauer-Berigan. [Denitrification alternates between a source and sink of nitrous oxide in the hypolimnion of a thermally stratified reservoir.](#) *Limnol. Oceanogr.* **59**(2): 495-506 (2014).

Chang, N.-B., B. W. Vannah, Y. J. Yang, and M. Elovitz. [Integrated data fusion and mining techniques for monitoring total organic carbon concentrations in a lake.](#) *International Journal of Remote Sensing.* **35**(3): 1064-1093 (2014).

View more research publications by [Michael Elovitz](#).

**Education:**

- Postdoctoral Research Associate, Swiss Federal Institute of Environmental Science and Technology/EAWAG, Dübendorf, Switzerland. 1995-1997
- National Research Council (NRC) Postdoctoral Fellow, U.S.EPA, Athens, GA. 1993-1995.
- Ph.D., Oregon Health & Science University, Portland, OR; Environmental Science and Engineering, 1993.
- B.S., Columbia University, New York, NY; Chemical Engineering, 1987.

**Professional Experience:**Current EPA Committees/Workgroups:

- Writing-team member for SSWR RAP-II Chemicals focus group. Task Lead for SSWR 6.01C.
- Member of the *Office of Water/Cross-Office Bromide Workgroup* (assess recent trends of increased brominated disinfection byproduct (Br-DBP) formation in Public Water Systems).
- Member of the *OSP Steam Electric Effluent Discharge Guidelines Workgroup* (OSP/OW/OAR led workgroup examining the potential new impacts on ambient and drinking water sources posed by effluents from the Steam Electric Power Generating category).
- Technical advisor to Office of Water with respect to Six-Year Review 3 of the D/DBP Rule, and Enhanced Surface Water Treatment Rules

Selected Current and Recent Appointments:

- Editorial board member, journal *Ozone: Science & Engineering*, 2001 - present.
- Member of the *Joint Task Group* for ozone measurement methods for the Standard Methods Committee (*Standard Methods for the Examination of Water and Wastewater*).
- Member of the American Water Works Association (AWWA) *Organic Contaminants Control Committee* (Water Quality and Technology Division).
- Editorial board member, journal *Environmental Science: Water Research & Technology*, 2014 - 2017.
- Water Research Foundation Focus-area committee member for nitrosamines and DBPs.

Honors/Major Recent Awards:

- 2018. U.S. EPA Level II 2017 STAA award (Scientific and Technological Achievement Award).
- 2018. Third and 8<sup>th</sup> most highly cited articles published in *Ozone: Science & Engineering*, (as of 2018, Thomson Reuters, ISI – Web of Science).
- 2018. 2016 Office of Water Achievement in Science and Technology Award: The *Legionella* Control Technologies Team
- 2017. ORD Award - OSP Bronze Medal: Cross Media Bromine Team
- 2017. ORD Sustainability Award.