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Protecting Aquatic Life and Human Health From Chemicals and Microbes in Water

From EPA

Guidance for Building Field Capabilities to Respond to Drinking Water Contamination. U.S. EPA, 2017. EPA-817-R-16-001. Plan for, implement field sampling and analysis in response to drinking water contamination emergencies.

Go to [Report](#) or epa.gov/waterqualitysurveillance

Subject Matter Expert Workshop to Identify Cybersecurity Research Gaps and Needs of the Nation's Water and Wastewater Systems Sector. U.S. EPA, 2017. EPA-600-R-17-109. Identifies research gaps in cybersecurity and cyber management challenges facing the water sector.

Go to [Report](#) or cfpub.epa.gov/si/index.cfm

From Collaborators

CDC — Vital Signs: Health Care – Associated Legionnaires' Disease Surveillance Data From 20 States and a Large Metropolitan Area – United States, 2017. Soda, E.A., et al., 2017. *Morbidity and Mortality Weekly Report (MMWR)*, 66, 584–589. Highlights importance of case prevention, response activities, and effective water management programs.

Go to [Report](#) or cdc.gov/mmwr

WE&RF — Potential for Exposure to Ebola Virus Surrogates Aerosolized From Wastewater Systems. Marr, L.C., et al., 2017. Project Number: WERF2C15. Methods to evaluate aerosolization of viruses in wastewater systems.

Go to [Report](#) or werf.org

WRF — Sources, Chemistry, Fate, and Transport of Chromium in Drinking Water Treatment Plants and Distribution Systems. Brandhuber, P., et al., 2017. Project Number: 4497. Sampling from multiple drinking water systems tracks changes in chromium speciation.

Go to [Report](#) or waterrf.org

WE&RF — Risk-Based Framework for the Development of Public Health Guidance for Decentralized Non-Potable Water Systems. Mosher, J.J., et al., 2017. Project Number: SIWM10C15. Pathogen targets; monitoring regimes; management considerations; strategies for permitting; applications, and end uses of treated alternate water sources.

Go to [Report](#) or werf.org

WRF — Impact of Filtration Media Type/Age on Nitrosamine Precursors. Bukhari, Z., et al., 2017. Project Number: 4532. Evaluates GAC, sand/anthracite on removal of nitrosamines and their precursors.

Go to [Report](#) or waterrf.org

From Journals

Bladder Cancer and Water Disinfection By-Product Exposures Through Multiple Routes: A Population-Based Case – Control Study (New England, USA).

Beane Freeman, L.E., et al., 2017. *Environmental Health Perspectives*, 125(6).

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Estimating Inorganic Arsenic Exposure From U.S. Rice and Total Water Intakes.

Mantha, M., E. Yeary, J. Trent, P.A. Creed, K. Kubachka, T. Hanley, N. Shockey, D. Heitkemper, J. Caruso, J. Xue, G. Rice, L. Wymer, J.T. Creed, 2017. *Environmental Health Perspectives*, 125(5).

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Risks From *Ebola* virus Discharge From Hospitals to Sewer Workers.

Haas, C.N., et al., 2017. *Water Environment Research*, 89(4), 357-368.

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Nationwide Reconnaissance of Contaminants of Emerging Concern in Source and Treated Drinking Waters of the United States: Pharmaceuticals.

Furlong, E.T., A.L. Batt, S.T. Glassmeyer, M.C. Noriega, D.W. Kolpin, H. Mash, and K.M. Schenck, 2017. *Science of the Total Environment*, 579, 1629-1642.

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Predicting Cyanobacterial Abundance, Microcystin, and Geosmin in a Eutrophic Drinking-Water Reservoir Using a 14-Year Dataset.

Harris, T.D. and J.L. Graham, 2017. *Lake and Reservoir Management*, 33, 32-48.

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Modeling Soluble and Particulate Lead Release Into Drinking Water From Full and Partially Replaced Lead Service Lines.

Abokifa, A.A. and P. Biswas, 2017. *Environmental Science & Technology*, 51(6), 3318-3326.

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The Drinking Water Contamination Crisis in Flint: Modeling Temporal Trends of Lead Level Since Returning to Detroit Water System.

Goovaerts, P., 2017. *Science of the Total Environment*, 581, 66-79.

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Widespread, Routine Occurrence of Pharmaceuticals in Sewage Effluent, Combined Sewer Overflows and Receiving Waters.

Kay, P., et al., 2017. *Environmental Pollution*, 220, 1447-1455.

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***Cryptosporidium* Attenuation Across the Wastewater Treatment Train: Recycled Water Fit for Purpose.**

King, B., et al., 2017. *Applied and Environmental Microbiology*, 85(4).

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Hydrologic, Land Cover, and Seasonal Patterns of Waterborne Pathogens in Great Lakes Tributaries.

Lenaker, P.L., et al., 2017. *Water Research*, 113, 11-21.

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***Microcystis* Rising: Why Phosphorus Reduction Isn't Enough to Stop CyanoHABs.**

Levy, S., 2017. *Environmental Health Perspectives*, 125(2), A34-A39.

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Lead Water Service Lines: Extensive Sampling and Field Protocol Protect Public Health.

Lewis, C.M., et al., 2017. *Journal American Water Works Association*, 109(1), 34-41.

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Social and Built Environmental Correlates of Predicted Blood Lead Levels in the Flint Water Crisis.

Sadler, R.C., et al., 2017. *American Journal of Public Health*, 107(5), 763-769.

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A Never-Ending Story of Per- and Polyfluoroalkyl Substances (PFASs)?

Wang, Z., et al., 2017. *Environmental Science & Technology*, 51(5), 2508-2518.

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Recent Water Research

Contrasting Cyanobacterial Communities and Microcystin Concentrations in Summers With Extreme Weather Events: Insights Into Potential Effects of Climate Change. Wood, S.A., et al., 2017. *Hydrobiologia*, 785(1), 71-89.

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Mortality From Selected Diseases that Can Be Transmitted by Water – United States, 2003-2009. Gargano, J.W., et al., 2017. *Journal of Water and Health*, 15(3), 438-450.

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Protecting Drinking Water at the Source: Lessons From U.S. Watershed Investment Programs. Gartner, T., et al., 2017. *Journal American Water Works Association*, 109(4), 30-41.

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Comparing Water Source Knowledge in Cities That Exceed the Lead Action Level. Harnish, L., et al., 2017. *Journal American Water Works Association*, 109(3), E61-E72.

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Removal of Intermediate Aromatic Halogenated DBPs by Activated Carbon Adsorption: A New Approach to Controlling Halogenated DBPs in Chlorinated Drinking Water. Jiang, J.Y., et al., 2017. *Environmental Science & Technology*, 51(6), 3435-3444.

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Phosphorus Availability in Western Lake Erie Basin Drainage Waters: Legacy Evidence Across Spatial Scales. King, K.W., et al., 2017. *Journal of Environmental Quality*, 46(2), 466-469.

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The Essential Value of Long-Term Experimental Data for Hydrology and Water Management. Tetzlaff, D., et al., 2017. *Water Resources Research*, 53(4), 2598-2604.

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The Prevalence of Antibiotic-Resistant Bacteria (ARB) in Waters of the Lower Ballona Creek Watershed, Los Angeles County, California. Kawecki, S., et al., 2017. *Environmental Monitoring and Assessment*, 189(6).

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Triclosan Alterations of Estuarine Phytoplankton Community Structure. Pinckney, J.L., et al., 2017. *Marine Pollution Bulletin*, 119(1), 162-168.

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Using National-Scale Data to Develop Nutrient-Microcystin Relationships That Guide Management Decisions. Yuan, L.L. and A.I. Pollard, 2017. *Environmental Science & Technology*, 51(12), 6972-6980.

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Manganese in Drinking Water and Cognitive Abilities and Behavior at 10 Years of Age: A Prospective Cohort Study. Rahman, S.M., et al., 2017. *Environmental Health Perspectives*, 125(5).

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Comparison of *in vitro* Estrogenic Activity and Estrogen Concentrations Insource and Treated Waters From 25 U.S. Drinking Water Treatment Plants. Conley, J.M., N. Evans, H. Mash, L. Rosenblum, K. Schenck, S. Glassmeyer, E.T. Furlong, D.W. Kolpin, and V.S. Wilson, 2017. *Science of the Total Environment*, 579, 1610-1617.

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Arsenite in Drinking Water Produces Glucose Intolerance in Pregnant Rats and Their Female Offspring. Bonaventura, M.M., et al., 2017. *Food and Chemical Toxicology*, 100, 207-216.

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Production of Trihalomethanes, Haloacetaldehydes and Haloacetonitriles During Chlorination of Microcystin-LR and Impacts of Pre-Oxidation on Their Formation. Chu, W.H., et al., 2017. *Journal of Hazardous Materials*, 327, 153-160.

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Occurrence and *in vitro* Bioactivity of Estrogen, Androgen, and Glucocorticoid Compounds in a Nationwide Screen of United States Stream Waters. Conley, J.M., N. Evans, M.C. Cardon, L. Rosenblum, L.R. Iwanowicz, P.C. Hartig, K.M. Schenck, P.M. Bradley, and V.S. Wilson, 2017. *Environmental Science & Technology*, 51(9), 4781-4791.

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Increase of Cytotoxicity During Wastewater Chlorination: Impact Factors and Surrogates. Du, Y., et al., 2017. *Journal of Hazardous Materials*, 324, 681-690.

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Are Fish Consumption Advisories for the Great Lakes Adequately Protective Against Chemical Mixtures? Gandhi, N., et al., 2017. *Environmental Health Perspectives*, 125(4), 586-593.

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Fate and Mass Balance of Triclosan and Its Degradation Products: Comparison of Three Different Types of Wastewater Treatments and Aerobic/Anaerobic Sludge Digestion. Tohidi, F. and Z.W. Cai, 2017. *Journal of Hazardous Materials*, 323, 329-340.

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Complex Mixtures of Pesticides in Midwest U.S. Streams Indicated by POCIS Time-Integrating Samplers. Van Metre, P.C., et al., 2017. *Environmental Pollution*, 220, 431-440.

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3D Hierarchical Flower-Like Nickel Ferrite/Manganese Dioxide Toward Lead (II) Removal From Aqueous Water. Xiang, B., et al., 2017. *Journal of Hazardous Materials*, 325, 178-188.

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Formation and Occurrence of N-Chloro-2,2-dichloroacetamide, a Previously Overlooked Nitrogenous Disinfection Byproduct in Chlorinated Drinking Waters. Yu, Y. and D.A. Reckhow, 2017. *Environmental Science & Technology*, 51(3), 1488-1497.

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Policy Utopias for Nutrient Credit Trading Programs With Nonpoint Sources. Hoag, D.L.K., et al., 2017. *Journal of the American Water Resources Association*, 53(3), 514-520.

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Farm-Level Economic and Water Quality Impacts of Comprehensive Nutrient Management Plan Implementation in the Ohio River Basin. Osei, E., et al., 2017. *Journal of the American Water Resources Association*, 53(3), 641-654.

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Strategies to Improve Private-Well Water Quality: A North Carolina Perspective. MacDonald Gibson, J. and K.J. Pieper, 2017. *Environmental Health Perspectives*, 125(7).

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Developing an Integrated Modeling Tool for River Water Quality Index Assessment. Lai, Y.C., et al., 2017. *Water Environment Research*, 89(3), 260-273.

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Modernizing Water Quality Criteria in the United States: A Need to Expand the Definition of Acceptable Data. Buchwalter, D.B., et al., 2017. *Environmental Toxicology and Chemistry*, 36(2), 285-291.

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Evaluating the Efficacy of PAC and Water Parameters to Remove Trace Organics. Valcarce, C.O., et al., 2017. *Journal American Water Works Association*, 109(3), E50-E60.

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Sea Level Rise Induced Arsenic Release From Historically Contaminated Coastal Soils. LeMonte, J.J., et al., 2017. *Environmental Science & Technology*, 51(11), 5913-5922.

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Fate of Selected Pharmaceutically Active Compounds in the Integrated Fixed Film Activated Sludge Process. Murray, K.J., et al., 2017. *Water Science and Technology*, 75(11), 2680-2691.

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Sublethal and Reproductive Effects of Acute and Chronic Exposure to Flowback and Produced Water From Hydraulic Fracturing on the Water Flea *Daphnia magna*. Blewett, T.A., et al., 2017. *Environmental Science & Technology*, 51(5), 3032-3039.

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Estimated Costs of Sporadic Gastrointestinal Illness Associated With Surface Water Recreation: A Combined Analysis of Data From NEEAR and CHEERS Studies. DeFlorio-Barker, S., T.J. Wade, R.M. Jones, L.S. Friedman, C. Wing, and S. Dorevitch, 2017. *Environmental Health Perspectives*, 125(2), 215-222.

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Variability of Disinfection By-Products at a Full-Scale Treatment Plant Following Rainfall Events. Delpla, I. and M.J. Rodriguez, 2017. *Chemosphere*, 166, 453-462.

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Predictive Power of Clean Bed Filtration Theory for Fecal Indicator Bacteria Removal in Stormwater Biofilters. Parker, E.A., et al., 2017. *Environmental Science & Technology*, 51(10), 5703-5712.

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Characteristics of Water Obtained by Dewatering Cyanobacteria-Containing Sludge Formed During Drinking Water Treatment, Including C-, N-Disinfection Byproduct Formation. Xu, H., et al., 2017. *Water Research*, 111, 382-392.

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Study on Method and Mechanism of Deep Well Circulation for the Growth Control of *Microcystis* in Aquaculture Pond. Cong, H., et al., 2017. *Water Science and Technology*, 75(11), 2692-2701.

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Recent and Upcoming Meetings

RECENT:

WaterPro Conference. September 18-20, 2017 in Reno, NV.

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GWPC 2017 in Annual Forum. September 27-29, 2017 in Boston, MA.

Go to [Meeting Page](#) or gwpc.org

UPCOMING:

SEJ's 27th Annual Conference. October 4-8, 2017 in Pittsburgh, PA.

Go to [Meeting Page](#) or sej.org

2017 in NAWC Water Summit. October 15-17, 2017 in Seattle, WA.

Go to [Meeting Page](#) or nawc.org

2017 in AMWA Executive Management Conference. October 15-18, 2017 in St. Simons, GA.

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ASDWA Annual Conference. October 17-20, 2017 in Norfolk, VA.

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Navigating the Future of Water. October 18-20, 2017 in Milwaukee, WI.

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Recent Water Research

SETAC North America 38th Annual Meeting.

November 12-16, 2017 in Minneapolis, MN.

Go to [Meeting Page](#) or setac.org

The International Water Conference. November 12-16 2017 in Orlando, FL.

Go to [Meeting Page](#) or eswp.com

NWRA Annual Conference. November 15-17, 2017 in Tucson, AZ.

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American Water Summit 2017. November 29-30, 2017 in Austin, TX.

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North American Water Loss Conference. December 3-5, 2017 in San Diego, CA.

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NGWA Groundwater Summit 2017. December 4-7, 2017 in Nashville, TN.

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Innovative and Affordable Tools and Technologies for Sustainable Public Health Protection

From Collaborators

WRF — Evaluation of Lead Service Line Lining and Coating Technologies. Randtke, S.J., et al., 2017. Project Number: 4351. Documentation on effectiveness of lining and coating technologies to inform decisions regarding replacement of lead and copper service lines.

Go to [Report](#) or waterrf.org

WRF — Treatment of Cyanotoxins in Rivers and River Influenced Groundwater Under Ambient and Softened pH Conditions. Neemann, J.J., 2017. Project Number: 4526. Effectiveness of cyanotoxin drinking water treatment processes; cost evaluation; applicability of the results.

Go to [Report](#) or waterrf.org

WRF — Evaluation of Innovative Reflectance Based UV for Enhanced Disinfection and Advanced Oxidation. Wright, H. et al., 2017. Project Number: 4568. Shows promise for energy efficient disinfection, need for rigorous testing and uniform equipment standards.

Go to [Report](#) or waterrf.org

WE&RF — A Framework for the Successful Implementation of On-Site Industrial Water Reuse. Moore, B., et al., 2017. Project Number: Reuse-14-04. Common barriers and how to overcome them; assistance with cost estimation; how to develop and present a favorable ROI to business-minded leadership.

Go to [Report](#) or werf.org

WE&RF — Simple and Fast Detection of *Escherichia coli* in Recreational Waters. Cademartiri, R., et al., 2017. Project Number: U4R13. Describes low-cost test strip for *E. coli* and a pre-concentration device to improve test sensitivity.

Go to [Report](#) or werf.org

Algae: From Resource Depletion to Resource Recovery. Liner, B. and N. Mundt, 2017. Current state of algae-based tertiary wastewater treatment systems to remove nutrients.

Go to [Report](#) or wef.org

WE&RF — Controlling Trace Organic Contaminants Using Alternative, Non-FAT Technology for Potable Water Reuse. Stanford, B., 2017. Project Number: Reuse-13-10. Treatment guidelines, approaches for assessing need for additional testing; and operational modifications to improve process performance.

Go to [Report](#) or werf.org

Economic Recovery and Reuse of Nutrients From Wastewater. Kadossov, E., 2017. EPA Contract Number EPD17009. Successful bench test to passively remove ammonium, nitrate, urea, and phosphate from wastewater using sorbents that can be on-sold as low dose, slow release fertilizers.

Go to [Report](#) or cfpub.epa.gov/si/index.cfm

From Journals

Decontamination of *Bacillus* Spores Adhered to Iron and Cement-Mortar Drinking Water Infrastructure in a Model System Using Disinfectants. Szabo, J., G. Meiners, L. Heckman, E.W. Rice, and J. Hall, 2017. *Journal of Environmental Management*, 187, 1-7.

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Nanophotonics-Enabled Solar Membrane Distillation for Off-Grid Water Purification. Dongare, P.D., et al., 2017. *Proceedings of the National Academy of Sciences of the United States of America*, 114(27), 6936-6941.

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A Cost-Effective Treatment Process for Producing High-Quality Drinking Water. Schneider, O.D. and M.W. Lechevallier, 2017. *Journal American Water Works Association*, 109(3), 39-47.

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Effect of Disinfectant Exposure on *Legionella pneumophila* Associated With Simulated Drinking Water Biofilms: Release, Inactivation, and Infectivity. Shen, Y., et al., 2017. *Environmental Science & Technology*, 51(4), 2087-2095.

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β -Cyclodextrin Polymer Network Sequesters Perfluorooctanoic Acid at Environmentally Relevant Concentrations. Xiao, L. et al., 2017. *Journal of the American Chemical Society*, 139(23), 7689-7692.

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Zero-Valent Iron for the Abatement of Arsenate and Selenate From Flowback Water of Hydraulic Fracturing. Sun, Y.Q., et al., 2017. *Chemosphere*, 167, 163-170.

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Development of Passive Samplers for *in situ* Measurement of Pyrethroid Insecticides in Surface Water. Xue, J.Y., et al., 2017. *Environmental Pollution*, 224, 516-523.

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Replacement of Alum and PolyDADMAC With Natural Polymers-Turbidity Removal and Residuals Reduction Impacts. Cornwell, D.A. and R.A. Brown, 2017. *Journal American Water Works Association*, 109(6), E252-E264.

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A Complementary Isothermal Amplification Method to the U.S. EPA Quantitative Polymerase Chain Reaction Approach for the Detection of *Enterococci* in Environmental Waters. Kolm, C., et al., 2017. *Environmental Science & Technology*, 51(12), 7028-7035.

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Synthesis of Public Water Supply Use in the U.S.: Spatio-Temporal Patterns and Socio-Economic Controls. Sankarasubramanian, A., et al., 2017. *Earth's Future*, 5(7), 771-788.

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Optimal Scheduling of Pipe Replacement. Boulos, P.F., 2017. *Journal American Water Works Association*, 109(1), 42-46.

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Complete Nutrient Removal Coupled to Nitrous Oxide Production as a Bioenergy Source by Denitrifying Polyphosphate-Accumulating Organisms. Gao, H., et al., 2017. *Environmental Science & Technology*, 51(8), 4531-4540.

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A Promising Application of Chitosan Quaternary Ammonium Salt to Removal of *Microcystis aeruginosa* Cells From Drinking Water. Jin, Y., et al., 2017. *Science of the Total Environment*, 583, 496-504.

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Removal of Artificial Sweetener Aspartame From Aqueous Media by Electrochemical Advanced Oxidation Processes. Lin, H., et al., 2017. *Chemosphere*, 167, 220-227.

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Oxidation of Substituted Catechols at the Air-Water Interface: Production of Carboxylic Acids, Quinones, and Polyphenols. Pillar, E.A. and M.I. Guzman, 2017. *Environmental Science & Technology*, 51(9), 4951-4959.

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An Ultra-Sensitive Method for the Analysis of Perfluorinated Alkyl Acids in Drinking Water Using a Column Switching High-Performance Liquid Chromatography Tandem Mass Spectrometry. Dasu, K., S. Nakayama, M. Yoshikane, M.A. Mills, J.M. Wright, and S. Ehrlich, 2017. *Journal of Chromatography*, 1494, 46-54.

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Amine Functionalized Magnetic Nanoparticles for Removal of Oil Droplets From Produced Water and Accelerated Magnetic Separation. Ko, S., et al., 2017. *Journal of Nanoparticle Research*, 19, 132.

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Flow Cytometric Bacterial Cell Counts Challenge Conventional Heterotrophic Plate Counts for Routine Microbiological Drinking Water Monitoring. Van Nevel, S., et al., 2017. *Water Research*, 113, 191-206.

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Evaluation of *Legionella* Real-Time PCR Against Traditional Culture for Routine and Public Health Testing of Water Samples. Collins, S., et al., 2017. *Journal of Applied Microbiology*, 122(6), 1692-1703.

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Comparison of MI, Chromocult® Coliform, and Compass CC Chromogenic Culture-Based Methods to Detect *Escherichia coli* and Total Coliforms in Water Using 16S RRNA Sequencing for Colony Identification. Maheux, A.F., et al., 2017. *Journal of Water and Health*, 15(3), 353-359.

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On the Capacity of Ozonation to Remove Antimicrobial Compounds, Resistant Bacteria and Toxicity From Urban Wastewater Effluents. Michael-Kordatou, I., et al., 2017. *Journal of Hazardous Materials*, 323, 414-425.

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An Overview of Advanced Reduction Processes for Bromate Removal From Drinking Water: Reducing Agents, Activation Methods, Applications and Mechanisms. Xiao, Q., et al., 2017. *Journal of Hazardous Materials*, 324, 230-240.

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Ozone Regeneration of Granular Activated Carbon for Trihalomethane Control. He, X., et al., 2017. *Journal of Hazardous Materials*, 326, 101-109.

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Recent and Upcoming Meetings

RECENT:

11th IWA International Conference on Water Reclamation and Reuse. July 23-27, 2017 in Long Beach, CA.

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Intensification of Resource Recovery (IR²) Forum 2017. August 10-12, 2017 in Riverdale, NY.

Go to [Meeting Page](#) or wef.org/events/conferences

WEFTEC 2017. September 30-October 4, 2017 in Chicago, IL.

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UPCOMING:

WaterSmart Innovations Conference. October 4-6, 2017 in Las Vegas, NV.

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ASCE 2017 Convention. October 8-11, 2017 in New Orleans, LA.

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International Conference on Sustainable Infrastructure 2017. October 26-28, 2017 in Brooklyn, NY.

Go to [Meeting Page](#) or collaborate.asce.org

2017 in CIFA SRF Workshop. October 30-31, 2017 in Indianapolis, IN.

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Water Infrastructure Conference. October 30-November 2, 2017 in Houston, TX.

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Water Quality Technology Conference® & Exposition. November 12-16 2017 in Portland, OR.

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Ecological Systems Approach to Protect and Restore Sustainable Water Quality and Water Quantity on a Watershed Basis

From Collaborators

NOAA — Global and Regional Sea Level Rise Scenarios for the United States. Sweet, W.V., R.E. Kopp, **C.P. Weaver**, J. Obeysekera, R.M. Horton, E.R. Thieler, and C. Zervas, 2017. Technical Report NOS CO-OPS 083. Updated scenarios of sea level rise by 2100 with specific predictions for the entire U.S. coastline and guidance for how to use the predictions in a risk-based planning context.

Go to [Report](#)

Effective Monitoring to Evaluate Ecological Restoration in the Gulf of Mexico. National Academies of Sciences, Engineering, and Medicine, 2017. Identifies best practices for monitoring and evaluating restoration activities to improve the performance of restoration programs and increase the effectiveness and longevity of restoration projects.

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NOAA — Monitoring Salmon Habitat Status and Trends in Puget Sound: Development of Sample Designs, Monitoring Metrics, and Sampling Protocols for Large River, Floodplain, Delta, and Nearshore Environments. Beechie, T.J. et al., 2017. Technical Memorandum NMFS-NWFSC-137. Development of a habitat monitoring program for the four distinct salmon and steelhead spawning and rearing environments of Puget Sound that assesses habitat changes across each Evolutionarily Significant Units and determines whether habitat conditions are improving, static, or declining.

Go to [Report](#) or nwfs.noaa.gov/index.cfm

From Journals

Phytoplankton Blooms in Lake Erie Impacted by Both Long-Term and Springtime Phosphorus Loading. Ho, J.C. and A.M. Michalak. 2017. *Journal of Great Lakes Research*, 43(3), 221-228.

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Depletion and Response of Deep Groundwater to Climate-Induced Pumping Variability. Russo, T. and L. Upmanu, 2017. *Nature Geoscience*, 10, 105-108.

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Expanded Target-Chemical Analysis Reveals Extensive Mixed-Organic-Contaminant Exposure in USA Streams. Bradley, P.M., C. Journey, K. Romanok, L. Barber, H.T. Buxton, W. Foreman, E.T. Furlong, **S.T. Glassmeyer**, M. Hladik, L.R. Iwanowicz, D.K. Jones, D.W. Kolpin, K.M. Kuivila, K.A. Loftin, M.A. Mills, M.T. Meyer, J.L. Orlando, T.J. Reilly, K.L. Smalling, and **D.L. Villeneuve**, 2017. *Environmental Science & Technology*, 4792-4802.

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Environmental Flows in the Context of Unconventional Natural Gas Development in the Marcellus Shale. Buchanan, B.P., et al., 2017. *Ecological Applications*, 27(1), 37-55.

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The Influence of Storms on Water Quality and Phytoplankton Dynamics in the Tidal James River. Filippino, K.C., et al., 2017. *Estuaries and Coasts*, 40(1), 80-94.

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Increased Soluble Phosphorus Loads to Lake Erie: Unintended Consequences of Conservation Practices? Jarvie, H.P., et al., 2017. *Journal of Environmental Quality*, 46(1), 123-132.

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Recent Water Research

Comparing Costs of Onsite Best Management Practices to Nutrient Credits for Stormwater Management: A Case Study in Virginia. Nobles, A.L., et al., 2017. *Journal of the American Water Resources Association*, 53(1), 131-143.

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Projected Climate Change Effects on Subsurface Drainage and the Performance of Controlled Drainage in the Western Lake Erie Basin. Pease, L.A., et al., 2017. *Journal of Soil and Water Conservation*, 72(3), 240-250.

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Climate Warming and Changes in *Cyclotella sensu lato* in the Laurentian Great Lakes. Reavie, E.D., et al., 2017. *Limnology and Oceanography*, 62(2), 768-783.

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Effects of Urbanization on Flow Duration and Stream Flashiness: A Case Study of Puget Sound Streams, Western Washington, USA. Rosburg, T.T., et al., 2017. *Journal of the American Water Resources Association*, 53(2), 493-507.

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Interactive Effects of Phosphorus and Zooplankton Grazing on Cyanobacterial Blooms in a Shallow Temperate Lake. Rose, V., et al., 2017. *Hydrobiologia*, 788(1), 345-359.

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