M Todd Walter

List of Publications by Year in Descending Order

139 papers	4,161 citations	35 h-index	58 g-index
142 ext. papers	4,732 ext. citations	4.7 avg, IF	5.58 L-index

#	Paper	IF	Citations
139	Reducing adverse impacts of Amazon hydropower expansion.. *Science*, **2022**, 375, 753-760	33.3	4
138	A whole-ecosystem experiment reveals flow-induced shifts in a stream community.. *Communications Biology*, **2022**, 5, 420	6.7	0
137	Farmer perceptions of dairy farm antibiotic use and transport pathways as determinants of contaminant loads to the environment. *Journal of Environmental Management*, **2021**, 281, 111880	7.9	3
136	Dairy farmer perceptions of antibiotic transport and usage in animal agriculture dataset. *Data in Brief*, **2021**, 35, 106785	1.2	
135	Critical Review of Polyphosphate and Polyphosphate Accumulating Organisms for Agricultural Water Quality Management. *Environmental Science & Technology*, **2021**, 55, 2722-2742	10.3	6
134	What You Net Depends on if You Grab: A Meta-analysis of Sampling Method's Impact on Measured Aquatic Microplastic Concentration. *Environmental Science & Technology*, **2021**, 55, 12930-12942	10.3	0
133	Roadside ditch macroplastic and other litter dataset in the Finger lakes region across land uses and COVID-19 pandemic. *Data in Brief*, **2021**, 38, 107425	1.2	
132	Macroplastic accumulation in roadside ditches of New York State's Finger Lakes region (USA) across land uses and the COVID-19 pandemic. *Journal of Environmental Management*, **2021**, 298, 113524	7.9	3
131	Rapid Remote Assessment of Culvert Flooding Risk. *Journal of Sustainable Water in the Built Environment*, **2020**, 6, 06020001	2.4	3
130	Simulation and statistical modelling approaches to investigate hydrologic regime transformations following Eastern hemlock decline. *Hydrological Processes*, **2020**, 34, 1198-1212	3.3	1
129	Impacts of Coal Resource Development on Surface Water Quality in a Multi-jurisdictional Watershed in the Western United States. *Journal of Contemporary Water Research and Education*, **2020**, 169, 79-91	1.2	3
128	Hammond Hill Research Catchment: Supporting hydrologic investigations of rooting zone and vegetation water dynamics under climate change. *Hydrological Processes*, **2020**, 34, 4755-4758	3.3	
127	Compost Quality Recommendations for Remediating Urban Soils. *International Journal of Environmental Research and Public Health*, **2019**, 16,	4.6	9
126	A case study investigating temporal factors that influence microplastic concentration in streams under different treatment regimes. *Environmental Science and Pollution Research*, **2019**, 26, 21797-21807	5.1	18
125	Possible Increases in Flood Frequency Due to the Loss of Eastern Hemlock in the Northeastern United States: Observational Insights and Predicted Impacts. *Water Resources Research*, **2019**, 55, 5342-5359	5.4	14
124	Streamlined eco-engineering approach helps define environmental flows for tropical Andean headwaters. *Freshwater Biology*, **2019**, 64, 1315-1325	3.1	11
123	Potential Predictability of Regional Precipitation and Discharge Extremes Using Synoptic-Scale Climate Information via Machine Learning: An Evaluation for the Eastern Continental United States. *Journal of Hydrometeorology*, **2019**, 20, 883-900	3.7	7

122	Characteristics of impervious surface and its effect on direct runoff: a case study in a rapidly urbanized area. *Water Science and Technology: Water Supply*, **2019**, 19, 1885-1891	1.4	7
121	Seasonal dynamics and exports of elements from a first-order stream to a large inland lake in Michigan. *Hydrological Processes*, **2019**, 33, 1476-1491	3.3	0
120	Metagenomic analysis reveals distinct patterns of denitrification gene abundance across soil moisture, nitrate gradients. *Environmental Microbiology*, **2019**, 21, 1255-1266	5.2	26
119	Designing Eco-Friendly Water Intake Portfolios in a Tropical Andean Stream Network. *Water Resources Research*, **2019**, 55, 6946-6967	5.4	5
118	Seasonal and Topographic Variations in Ecohydrological Separation Within a Small, Temperate, Snow-Influenced Catchment. *Water Resources Research*, **2019**, 55, 6417-6435	5.4	18
117	Hudson River juvenile Blueback herring avoid ingesting microplastics. *Marine Pollution Bulletin*, **2019**, 146, 935-939	6.7	11
116	Tracing Septic Pollution Sources Using Synthetic DNA Tracers: Proof of Concept. *Air, Soil and Water Research*, **2019**, 12, 117862211986379	3.3	3
115	Comparing Watershed Scale P Losses from Manure Spreading in Temperate Climates across Mechanistic Soil P Models. *Journal of Hydrologic Engineering - ASCE*, **2019**, 24, 04019009	1.8	3
114	The effect of dams on river transport of microplastic pollution. *Science of the Total Environment*, **2019**, 664, 834-840	10.2	76
113	Particle tracer transport in a sloping soil lysimeter under periodic, steady state conditions. *Journal of Hydrology*, **2019**, 569, 61-76	6	10
112	Denitrifying bioreactor response during storm events. *Agricultural Water Management*, **2019**, 213, 1109-1115	3.3	7
111	The heavy metal budget of an urban rooftop farm. *Science of the Total Environment*, **2019**, 660, 115-125	10.2	8
110	Comparing Greenhouse Gas Fluxes from Passive Urban Stormwater Management to Conventional Wastewater Treatment. *Journal of Sustainable Water in the Built Environment*, **2019**, 5, 04018017	2.4	0
109	Reassessing the relationship between landscape alteration and aquatic ecosystem degradation from a hydrologically sensitive area perspective. *Science of the Total Environment*, **2019**, 650, 2850-2862	10.2	11
108	Fabrication, detection, and analysis of DNA-labeled PLGA particles for environmental transport studies. *Journal of Colloid and Interface Science*, **2018**, 526, 207-219	9.3	12
107	Hydrology of the Brooklyn Grange, an urban rooftop farm. *Urban Ecosystems*, **2018**, 21, 673-689	2.8	11
106	Perennial Grass Bioenergy Cropping on Wet Marginal Land: Impacts on Soil Properties, Soil Organic Carbon, and Biomass During Initial Establishment. *Bioenergy Research*, **2018**, 11, 262-276	3.1	8
105	Explaining and modeling the concentration and loading of Escherichia coli in a stream-A case study. *Science of the Total Environment*, **2018**, 635, 1426-1435	10.2	12

104	Plant-Microbe Interactions Drive Denitrification Rates, Dissolved Nitrogen Removal, and the Abundance of Denitrification Genes in Stormwater Control Measures. *Environmental Science & Technology*, **2018**, 52, 9320-9329	10.3	34
103	Assessing the Impact of Urbanization on Direct Runoff Using Improved Composite CN Method in a Large Urban Area. *International Journal of Environmental Research and Public Health*, **2018**, 15,	4.6	33
102	Methane and nitrous oxide cycling microbial communities in soils above septic leach fields: Abundances with depth and correlations with net surface emissions. *Science of the Total Environment*, **2018**, 640-641, 429-441	10.2	15
101	Release of Escherichia coli under raindrop impact: The role of clay. *Advances in Water Resources*, **2018**, 111, 1-5	4.7	10
100	Absence of genetic selection in a pathogenic Escherichia coli strain exposed to the manure-amended soil environment. *PLoS ONE*, **2018**, 13, e0208346	3.7	1
99	Temperature dependence of daily respiration and reaeration rates during baseflow conditions in a northeastern U.S. stream. *Journal of Hydrology: Regional Studies*, **2018**, 19, 250-264	3.6	1
98	Estimating dominant runoff modes across the conterminous United States. *Hydrological Processes*, **2018**, 32, 3881-3890	3.3	10
97	Reducing Stormwater Nitrogen with Denitrifying Bioreactors: Florida Case Study. *Journal of Sustainable Water in the Built Environment*, **2018**, 4, 06018002	2.4	2
96	Effects of urbanization on direct runoff characteristics in urban functional zones. *Science of the Total Environment*, **2018**, 643, 301-311	10.2	66
95	Modeling the release of Escherichia coli from soil into overland flow under raindrop impact. *Advances in Water Resources*, **2017**, 106, 144-153	4.7	8
94	Environmental flows in the context of unconventional natural gas development in the Marcellus Shale. *Ecological Applications*, **2017**, 27, 37-55	4.9	17
93	Ecohydrologic considerations for modeling of stable water isotopes in a small intermittent watershed. *Hydrological Processes*, **2017**, 31, 2438-2452	3.3	34
92	Short-term Forecasting Tools for Agricultural Nutrient Management. *Journal of Environmental Quality*, **2017**, 46, 1257-1269	3.4	10
91	The Role of Denitrification in Stormwater Detention Basin Treatment of Nitrogen. *Environmental Science & Technology*, **2017**, 51, 7928-7935	10.3	39
90	Hydrologic State Influence on Riverine Flood Discharge for a Small Temperate Watershed (Fall Creek, United States): Negative Feedbacks on the Effects of Climate Change. *Journal of Hydrometeorology*, **2017**, 18, 431-449	3.7	11
89	A Vulnerability-Based, Bottom-up Assessment of Future Riverine Flood Risk Using a Modified Peaks-Over-Threshold Approach and a Physically Based Hydrologic Model. *Water Resources Research*, **2017**, 53, 10043-10064	5.4	32
88	Comment on Beyond the SCS-CN method: A theoretical framework for spatially lumped rainfall-runoff response by M. S. Bartlett et al.. *Water Resources Research*, **2017**, 53, 6345-6350	5.4	19
87	N2O emissions from grain cropping systems: a meta-analysis of the impacts of fertilizer-based and ecologically-based nutrient management strategies. *Nutrient Cycling in Agroecosystems*, **2017**, 107, 335-355	3.3	51

86	Topographic wetness guided dairy manure applications to reduce stream nutrient loads in Central New York, USA. *Journal of Hydrology: Regional Studies*, **2017**, 14, 67-82	3.6	8
85	Does Population Affect the Location of Flash Flood Reports?. *Journal of Applied Meteorology and Climatology*, **2016**, 55, 1953-1963	2.7	6
84	Evaluating weather observations and the Climate Forecast System Reanalysis as inputs for hydrologic modelling in the tropics. *Hydrological Processes*, **2016**, 30, 3466-3477	3.3	22
83	Roadside soils show low plant available zinc and copper concentrations. *Environmental Pollution*, **2016**, 209, 30-7	9.3	22
82	Controls Influencing the Treatment of Excess Agricultural Nitrate with Denitrifying Bioreactors. *Journal of Environmental Quality*, **2016**, 45, 772-8	3.4	22
81	Nutrient Cycling in Grassed Roadside Ditches and Lawns in a Suburban Watershed. *Journal of Environmental Quality*, **2016**, 45, 1901-1909	3.4	24
80	Critical rainfall statistics for predicting watershed flood responses: rethinking the design storm concept. *Hydrological Processes*, **2016**, 30, 3788-3803	3.3	14
79	Influence of transient flooding on methane fluxes from subtropical pastures. *Journal of Geophysical Research G: Biogeosciences*, **2016**, 121, 965-977	3.7	23
78	Apportionment of bioavailable phosphorus loads entering Cayuga Lake, New York. *Journal of the American Water Resources Association*, **2016**, 52, 31-47	2.1	17
77	Modeling denitrification in a changing climate. *Sustainability of Water Quality and Ecology*, **2015**, 5, 64-76		5
76	Modeling denitrification in an agricultural catchment in Central New York. *Sustainability of Water Quality and Ecology*, **2015**, 5, 49-63		1
75	Hydrologic and Biogeochemical Drivers of Riparian Denitrification in an Agricultural Watershed. *Water, Air, and Soil Pollution*, **2015**, 226, 1	2.6	20
74	Modeling Potential Water Resource Impacts of Mediterranean Tourism in a Changing Climate. *Environmental Modeling and Assessment*, **2015**, 20, 117-128	2	11
73	Terrestrial pyrogenic carbon export to fluvial ecosystems: Lessons learned from the White Nile watershed of East Africa. *Global Biogeochemical Cycles*, **2015**, 29, 1911-1928	5.9	25
72	Using concurrent DNA tracer injections to infer glacial flow pathways. *Hydrological Processes*, **2015**, 29, 5257-5274	3.3	28
71	Assessing the impact of drought and forestry on streamflows in south-eastern Australia using a physically based hydrological model. *Environmental Earth Sciences*, **2015**, 74, 6047-6063	2.9	30
70	Modeling climate change impacts on the thermal dynamics of polymictic Oneida Lake, New York, United States. *Ecological Modelling*, **2015**, 300, 1-11	3	20
69	Methane Emission in a Specific Riparian-Zone Sediment Decreased with Bioelectrochemical Manipulation and Corresponded to the Microbial Community Dynamics. *Frontiers in Microbiology*, **2015**, 6, 1523	5.7	9

68	Using the Climate Forecast System Reanalysis as weather input data for watershed models. *Hydrological Processes*, **2014**, 28, 5613-5623	3.3	229
67	Estimating long-term changes in actual evapotranspiration and water storage using a one-parameter model. *Journal of Hydrology*, **2014**, 519, 2312-2317	6	7
66	SWATmodel: A Multi-Operating System, Multi-Platform SWAT Model Package in R. *Journal of the American Water Resources Association*, **2014**, 50, 1349-1353	2.1	13
65	Improving risk estimates of runoff producing areas: formulating variable source areas as a bivariate process. *Journal of Environmental Management*, **2014**, 137, 146-56	7.9	12
64	Atrazine leaching from biochar-amended soils. *Chemosphere*, **2014**, 95, 346-52	8.4	67
63	Shallow groundwater denitrification in riparian zones of a headwater agricultural landscape. *Journal of Environmental Quality*, **2014**, 43, 732-44	3.4	35
62	Do Energy-Based PET Models Require More Input Data than Temperature-Based Models? An Evaluation at Four Humid FluxNet Sites. *Journal of the American Water Resources Association*, **2014**, 50, 497-508	2.1	18
61	Assessing denitrification from seasonally saturated soils in an agricultural landscape: A farm-scale mass-balance approach. *Agriculture, Ecosystems and Environment*, **2014**, 189, 60-69	5.7	18
60	Hydrological impact of roadside ditches in an agricultural watershed in Central New York: implications for non-point source pollutant transport. *Hydrological Processes*, **2013**, 27, 2422-2437	3.3	46
59	Modeling the hydrologic effects of roadside ditch networks on receiving waters. *Journal of Hydrology*, **2013**, 486, 293-305	6	20
58	Stream water nutrient and organic carbon exports from tropical headwater catchments at a soil degradation gradient. *Nutrient Cycling in Agroecosystems*, **2013**, 95, 145-158	3.3	22
57	Roadside ditches as conduits of fecal indicator organisms and sediment: implications for water quality management. *Journal of Environmental Management*, **2013**, 128, 1050-9	7.9	24
56	A phosphorus index that combines critical source areas and transport pathways using a travel time approach. *Journal of Hydrology*, **2013**, 486, 123-135	6	51
55	Comment on Shaw SB, Riha S. 2011. Assessing temperature-based PET equations under a changing climate in temperate, deciduous forests. Hydrological Processes 25: 1466–1478. *Hydrological Processes*, **2013**, 27, 3511-3515	3.3	4
54	Real-Time Forecast of Hydrologically Sensitive Areas in the Salmon Creek Watershed, New York State, Using an Online Prediction Tool. *Water (Switzerland)*, **2013**, 5, 917-944	3	9
53	Dissecting the variable source area concept – subsurface flow pathways and water mixing processes in a hillslope. *Journal of Hydrology*, **2012**, 420-421, 125-141	6	48
52	A Simple Process-Based Snowmelt Routine to Model Spatially Distributed Snow Depth and Snowmelt in the SWAT Model1. *Journal of the American Water Resources Association*, **2012**, 48, 1151-1161	2.1	18
51	Hydrological tracers using nanobiotechnology: proof of concept. *Environmental Science & Technology*, **2012**, 46, 8928-36	10.3	36

50	Field Test of the Variable Source Area Interpretation of the Curve Number Rainfall-Runoff Equation. *Journal of Irrigation and Drainage Engineering - ASCE*, **2012**, 138, 235-244	1.1	17
49	Landscape Scale Variation in Nitrous Oxide Flux Along a Typical Northeastern US Topographic Gradient in the Early Summer. *Water, Air, and Soil Pollution*, **2012**, 223, 1571-1580	2.6	8
48	Incorporating Variable Source Area Hydrology into a Spatially Distributed Direct Runoff Model1. *Journal of the American Water Resources Association*, **2012**, 48, 43-60	2.1	12
47	Simple Model of Changes in Stream Chloride Levels Attributable to Road Salt Applications. *Journal of Environmental Engineering, ASCE*, **2012**, 138, 112-118	2	18
46	Stream Discharge in Tropical Headwater Catchments as a Result of Forest Clearing and Soil Degradation. *Earth Interactions*, **2012**, 16, 1-18	1.5	41
45	A simple concept for calibrating runoff thresholds in quasi-distributed variable source area watershed models. *Hydrological Processes*, **2011**, 25, 3131-3143	3.3	18
44	A simple metric to predict stream water quality from storm runoff in an urban watershed. *Journal of Environmental Quality*, **2010**, 39, 1338-48	3.4	1
43	Relating hydrogeomorphic properties to stream buffering chemistry in the Neversink River watershed, New York State, USA. *Hydrological Processes*, **2010**, 24, 3759-3771	3.3	8
42	Including Source-Specific Phosphorus Mobility in a Nonpoint Source Pollution Model for Agricultural Watersheds. *Journal of Environmental Engineering, ASCE*, **2009**, 135, 25-35	2	13
41	New Paradigm for Sizing Riparian Buffers to Reduce Risks of Polluted Storm Water: Practical Synthesis. *Journal of Irrigation and Drainage Engineering - ASCE*, **2009**, 135, 200-209	1.1	23
40	Unusual seasonal patterns and inferred processes of nitrogen retention in forested headwaters of the Upper Susquehanna River. *Biogeochemistry*, **2009**, 93, 197-218	3.8	62
39	Improving runoff risk estimates: Formulating runoff as a bivariate process using the SCS curve number method. *Water Resources Research*, **2009**, 45,	5.4	26
38	Re-conceptualizing the soil and water assessment tool (SWAT) model to predict runoff from variable source areas. *Journal of Hydrology*, **2008**, 348, 279-291	6	200
37	Investigating a high resolution, stream chloride time series from the Biscuit Brook catchment, Catskills, NY. *Journal of Hydrology*, **2008**, 348, 245-256	6	35
36	Pore-scale quantification of colloid transport in saturated porous media. *Environmental Science & Technology*, **2008**, 42, 517-23	10.3	28
35	Combined monitoring and modeling indicate the most effective agricultural best management practices. *Journal of Environmental Quality*, **2008**, 37, 1798-809	3.4	42
34	Ecosystem impacts of disturbance in a dry tropical forest in southern India. *Ecohydrology*, **2008**, 1, 149-160	2.5	16
33	Impacts of disturbance on soil properties in a dry tropical forest in Southern India. *Ecohydrology*, **2008**, 1, 161-175	2.5	23

32	Reduced raindrop-impact driven soil erosion by infiltration. *Journal of Hydrology*, **2007**, 342, 331-335	6	34
31	Modeling soil solute release into runoff with infiltration. *Journal of Hydrology*, **2007**, 347, 430-437	6	46
30	Hydrologic assessment of an urban variable source watershed in the northeast United States. *Water Resources Research*, **2007**, 43,	5.4	48
29	Identifying dissolved phosphorus source areas and predicting transport from an urban watershed using distributed hydrologic modeling. *Water Resources Research*, **2007**, 43,	5.4	24
28	Incorporating variable source area hydrology into a curve-number-based watershed model. *Hydrological Processes*, **2007**, 21, 3420-3430	3.3	128
27	Vadose zone dynamics and the legacy of Wilford R. Gardner. *Transport in Porous Media*, **2007**, 68, 1-4	3.1	
26	Identifying hydrologically sensitive areas: bridging the gap between science and application. *Journal of Environmental Management*, **2006**, 78, 63-76	7.9	87
25	Internet mapping tools make scientific applications easy. *Eos*, **2006**, 87, 386	1.5	3
24	A physical model of particulate wash-off from rough impervious surfaces. *Journal of Hydrology*, **2006**, 327, 618-626	6	37
23	THE IMPACT OF RUNOFF GENERATION MECHANISMS ON THE LOCATION OF CRITICAL SOURCE AREAS1. *Journal of the American Water Resources Association*, **2006**, 42, 793-804	2.1	35
22	Defining probability of saturation with indicator kriging on hard and soft data. *Advances in Water Resources*, **2006**, 29, 181-193	4.7	43
21	Enhancement of seepage and lateral preferential flow by biopores on hillslopes. *Biologia (Poland)*, **2006**, 61, S225-S228	1.5	20
20	Process-based snowmelt modeling: does it require more input data than temperature-index modeling?. *Journal of Hydrology*, **2005**, 300, 65-75	6	116
19	Investigating raindrop effects on transport of sediment and non-sorbed chemicals from soil to surface runoff. *Journal of Hydrology*, **2005**, 308, 313-320	6	77
18	Closure to Simple Estimation of Prevalence of Hortonian Flow in New York City Watersheds by M. Todd Walter, Vishal K. Mehta, Alexis M. Marrone, Jan Boll, Pierre Gérard-Marchant, Tammo S. Steenhuis, and Michael F. Walter. *Journal of Hydrologic Engineering - ASCE*, **2005**, 10, 169-170	1.8	10
17	Closure to Simple Snowdrift Model for Distributed Hydrological Modeling by M. Todd Walter, Donald K. McCool, Larry G. King, Myron Molnau, and Gaylon S. Campbell. *Journal of Hydrologic Engineering - ASCE*, **2005**, 10, 524-525	1.8	
16	Transport of lead and diesel fuel through a peat soil near Juneau, AK: a pilot study. *Journal of Contaminant Hydrology*, **2004**, 74, 1-18	3.9	13
15	Application of SMR to Modeling Watersheds in the Catskill Mountains. *Environmental Modeling and Assessment*, **2004**, 9, 77-89	2	44

14	Using a topographic index to distribute variable source area runoff predicted with the SCS curve-number equation. *Hydrological Processes*, **2004**, 18, 2757-2771	3.3	119
13	Rainfall induced chemical transport from soil to runoff: theory and experiments. *Journal of Hydrology*, **2004**, 295, 291-291	6	0
12	Rainfall induced chemical transport from soil to runoff: theory and experiments. *Journal of Hydrology*, **2004**, 295, 291-304	6	87
11	Increasing Evapotranspiration from the Conterminous United States. *Journal of Hydrometeorology*, **2004**, 5, 405-408	3.7	115
10	A soil-water-balance approach to quantify groundwater recharge from irrigated cropland in the North China Plain. *Hydrological Processes*, **2003**, 17, 2011-2031	3.3	183
9	Estimating basin-wide hydraulic parameters of a semi-arid mountainous watershed by recession-flow analysis. *Journal of Hydrology*, **2003**, 279, 57-69	6	84
8	Funneled flow mechanisms in layered soil: field investigations. *Journal of Hydrology*, **2003**, 279, 210-223	6	27
7	Simple Estimation of Prevalence of Hortonian Flow in New York City Watersheds. *Journal of Hydrologic Engineering - ASCE*, **2003**, 8, 214-218	1.8	59
6	Refined conceptualization of TOPMODEL for shallow subsurface flows. *Hydrological Processes*, **2002**, 16, 2041-2046	3.3	67
5	Linking the pacific decadal oscillation to seasonal stream discharge patterns in Southeast Alaska. *Journal of Hydrology*, **2002**, 263, 188-197	6	87
4	Residual phosphorus in runoff from successional forest on abandoned agricultural land: 1. Biogeochemical and hydrological processes. *Biogeochemistry*, **2001**, 55, 293-310	3.8	11
3	Modeling pollutant release from a surface source during rainfall runoff. *Journal of Environmental Quality*, **2001**, 30, 151-9	3.4	9
2	PHOSPHORUS TRANSPORT INTO SUBSURFACE DRAINS BY MACROPORES AFTER MANURE APPLICATIONS: IMPLICATIONS FOR BEST MANURE MANAGEMENT PRACTICES. *Soil Science*, **2001**, 166, 896-909	0.9	94
1	A GIS-based variable source area hydrology model. *Hydrological Processes*, **1999**, 13, 805-822	3.3	153