Education & Employment

| Education & Employment | |
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| University of Alabama, Tuscaloosa, AL | |
| Global Water Security Center https://ua-gwsc.org/ | |
| Associate Director, Analysis and Communications | 2021 - present |
| AAAS Science Technology Policy Fellow, Washington, DC | |
| US Department of Defense | |
| Climate and Water Resilience Fellow | 2020 - 2021 |
| University of Minnesota, Minneapolis-St Paul MN | |
| Institute on the Environment | |
| Lead Scientist, Global Water Initiative | 2014 - 2021 |
| Global Landscapes Initiative Postdoctoral Fellow | 2010-2014 |
| Stanford University, Stanford, CA | Ph.D. 2010 |
| Emmett Interdisciplinary Program in Environment and Resources | |
| Emphasis in Hydrologic Ecosystem Services | |
| Natural Resources Defense Council, New York, NY | 2001 - 2004 |
| Membership and Public Education Senior Associate | |
| Developed NRDC's Public Education program, focus on online activism, membersh | hip grew to 550,000 |
| Columbia University, New York, NY | B.A. 2000 |
| Independent Major in Science and Religion | |
| Honors: Summa Cum Laude, Phi Beta Kappa | |
| National & International Assessments | |

Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)

2021 Scoping Expert, Business and Biodiversity Assessment

United Nations Environment Programme (UNEP)

2020-2021 Chapter Lead, Making Peace with Nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies, a Global Synthesis Report on the State of the Environment

Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)

2016-2019 Coordinating Lead Author of the Global Assessment

United States National Climate Assessment

2011-2012 Ecosystems and Ecosystem Services Working Group Member

Awards

| 2021 | Clarivate. Highly Cited Researcher. |
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| 2020 | AAAS. Science Policy Technology Fellowship. |
| 2020 | University of Vermont. Gund Institute Fellow. |
| 2018 | AAAS. Leshner Leadership Institute Public Engagement Fellow. |
| 2018 | UMN Institute on the Environment Fellow |
| 2017 | National Academies Keck Futures Initiative NAKFI. Beyond Boundaries. Selected to att |
| | NAKFI's final conference and to give a keynote talk, Irvine, CA, 8-11 November. |

- 2017 Impact Design Hub. "Twin Cities Wheel: An Infographic of Impact Design." 6 April.
 2015 Center for the Study of Politics and Government, University of Minnesota. Policy Fellow.
 Minneapolis, MN. 2015-2016.

 2014 Future Earth Young Scientists Networking Conference on Ecosystems and human wellbeing in the green economy. Future Earth Fellow. Villa Vigoni, IT. 26-30 May.
- Planet Under Pressure. *Best Early Career Researcher Poster*. "Water Wise: Are we getting enough crop per drop?" London, UK. 18-22 March.
- 2011 Dissertations Initiative for the Advancement of Climate Change Research (DISCCRS) IV *Scholar*. Colorado Springs, CO. 23-29 October.
- 2011 Gordon Research Conference on Catchment Science: *Gordon Research Seminar Rising Star*. "Changing Land Use and Changing Climate: effects on ecosystem services provided by tropical watersheds." Lewiston, ME. 9-15 July.
- 2010 Latsis International Symposium on Ecohydrology: *Outstanding Poster Presentation*. "Water as a Link between Land Cover and Human Wellbeing: A Hydrologic Ecosystem Services Case Study in Hawai'i." Lausanne, Switzerland. 17-20 October.
- American Geophysical Union: *Outstanding Student Presentation*. Poster: "The Value of Forest and Pasture to Water Supply in Kona, HI." San Francisco, CA. 10-14 December.

Grants, Fellowships, Scholarships

| 2020 | Forest Trends USAID Natural Infrastructure for Water Security (NIWS) "Informing Natural Infrastructure Investment Decisions with Hydrological Modelling: Lessons Learned from a Case |
|------|---|
| | Study in Chancay-Lambayeque Watershed, Peru" (Lead-PI) |
| 2018 | The Nature Conservancy California "Identifying, Measuring, and Mapping Ecosystem Services from Groundwater Dependent Ecosystems in California." (Lead-PI) |
| 2017 | NASA/Earth Science Applications: Ecological Forecasting "Workshops to connect ecosystem services model developers with earth observation producers." (Lead-PI) |
| 2017 | USDA/AFRI "Understanding and building capacity to address changing water availability in the upper Corn Belt." (Co-PI) |
| 2017 | Legislative-Citizen Commission on Minnesota Resources 2017 Environment and Natural |
| | Resources Trust Fund. "Minnesota Water Stories Told in Digital Planetariums" (co-Pl) |
| 2017 | University of Minnesota Institute on the Environment <i>MiniGrant</i> . "One Water Connections" (Lead-PI) |
| 2016 | Belmont Forum/NSF "ClimateWise: Climate-Smart Watershed Investments in Montane Tropics of South America." (Lead-PI) |
| 2016 | University of Minnesota <i>On the Horizon</i> "The Food/Energy/Water Nexus in Large Lake Systems." (co-PI) |
| 2016 | University of Minnesota Institute on the Environment <i>MiniGrant</i> . "Community Water Workshops with Water Bar" (Lead-PI) |
| 2016 | University of Minnesota Institute on the Environment <i>MiniGrant</i> . "Quantifying Water Savings from Drip Irrigation" (Lead-PI) |
| 2015 | Legislative-Citizen Commission on Minnesota Resources 2015 Environment and Natural |
| | Resources Trust Fund . "Informed Water Management: Mapping Scarcity, Threats, and Values." (co-PI) |
| 2015 | Rockefeller Foundation <i>Freshwater Competition</i> . "Re-Allocating Water: A Prototype Proposal to the Rockefeller Foundation." (Collaborating Scientist) |
| 2015 | CGIAR Research Program on Water, Land and Ecosystems <i>INNOV Innovation Fund Grant</i> . "Targeting agricultural innovation and ecosystem service management in the Northern Volta." (Collaborating Scientist) |
| 2015 | University of Minnesota Institute on the Environment <i>MiniGrant</i> . "Does smallholder use of improved irrigation save water?" (Lead PI) |
| 2013 | University of Minnesota Institute on the Environment <i>MiniGrant</i> . "Twin Cities Tropical Environments Network" (Co-PI) |

| 2012 | National Academies Keck Futures Initiative (NAKFI) <i>Ecosystem Services Grant</i> . "Healthy |
|---------|---|
| | ecosystems and healthy people: Bridging disciplines to understand health impacts of |
| | environmental change." (Lead PI) |
| 2012 | University of Minnesota Institute on the Environment MiniGrant. "Web Interactive Water |
| | Quality Valuation Resource" (Lead PI) |
| 2009 | Stanford University Mel Lane Student Program Grant from the Woods Institute for the |
| | Environment for the Bay Area Tropical Forest Network (Lead PI) |
| 2006-08 | Stanford University IPER Rudolf <i>Summer Research Grant</i> (Lead PI) |
| 2005/06 | Stanford University McGee School of Earth Sciences <i>Research Grant</i> (Lead PI) |
| 2007-09 | William and Jeanne Landreth IPER <i>Graduate Fellowship</i> |
| 2004-07 | David and Lucille Packard Stanford <i>Graduate Fellowship</i> |
| 2004-07 | National Science Foundation Graduate Research Fellowship |

Publications

Peer reviewed

- R Chaplin-Kramer, KA Brauman, J Cavender-Bares, S Diaz, G Duarte, B Enquist, L Garibaldi, J Geldmann, B Halpern, T Hertel, C Khoury, J Krieger, S Lavorel, T Mueller, R Neugarten, J Pinto-Ledezma, S Polasky, A Purvis, V Reyes-Garcia, P Roehrdanz, L Shannon, M Shaw, B Strassburg, J Tylianakis, P Verburg, P Visconti, N Zafra-Calvo. (2021). Conservation needs to integrate knowledge across scales. Nature Ecology and Evolution. (in press)
- Mulligan M, B Lehner, C Zarfl, M Thieme, P Beames, A van Soesbergen, J Higgins, SR Januchowski-Hartley, KA Brauman, L De Felice, Q Wen, C Garcia de Leaniz, B Belletti, L Mandle, X Yang, J Wang, N Mazany-Wright. (2021). "Global Dam Watch: Curated data and tools for management and decision making" *Environmental Research: Infrastructure and Sustainability* DOI: https://doi.org/10.1088/2634-4505/ac333a
- Brauman KA, LL Bremer, P Hamel, BF Ochoa Tocachi, F Roman-Dañobeytia, V Bonnesoeur, E Arapa, G Gammie. (2021). "Producing valuable information from hydrologic models of nature-based solutions for water." *Integrated Environmental Assessment and Management*. DOI: https://doi.org/10.1002/ieam.4511
- Ristaino JB, PK Anderson, DP Bebber, KA Brauman, NJ Cunniffe, NV Fedoroff, C Finegold, KA Garrett, CA Gilligan, CM Jones, MD Martin, GK MacDonald, P Neenan, A Records, DG Schmale, L Tateosian and Q Wei (2021). "The persistent threat of emerging plant disease pandemics to global food security."
 PNAS 118(23): e2022239118. DOI: 10.1073/pnas.2022239118
- Brauman KA, LA Garibaldi, S Polasky, Y Aumeeruddy-Thomas, PHS Brancalion, F DeClerck, U Jacob, ME Mastrangelo, NV Nkongolo, H Palang, N Pérez-Méndez, LJ Shannon, UB Shrestha, E Strombom, M Verma. 2020. "Global trends in nature's contributions to people." *PNAS* 202010473. DOI: https://doi.org/10.1073/pnas.2010473117
- 6. **Brauman KA**, AL Goodkind, T Kim, R Pelton, J Schmitt, T Smith. 2020. "Unique water scarcity footprints and water risks in US meat and ethanol supply chains identified via subnational commodity flows." *Environmental Research Letters*. 15(105018). DOI https://doi.org/10.1088/1748-9326/ab9a6a
- 7. Díaz, S, J Settele, E Brondizio, HT Ngo, A Pfaff, S Polasky, J Agard, A Arneth, P Balvanera, **KA Brauman**, SHM Butchart, KMA Chan, LA Garibaldi, K Ichii, J Liu, SM Subramanian, GF Midgley, P Miloslavich, Z Molnár, D Obura, A Purvis, J Razzaque, B Reyers, RR Chowdhury, Y-J Shin, I Visseren-Hamakers, KJ Willis and CN Zayas 2020. "Investments' role in ecosystem degradation—Response." *Science* 368(6489): 377.
- 8. Gleeson T, L Wang-Erlandsson, SC Zipper, M Porkka, F Jaramillo, D Gerten, I Fetzer, S Cornell, L Piemontese, L Gordon, J Rockström, T Oki, M Sivapalan, Y Wada, **KA Brauman**, M Flörke, MFP

Bierkens, B Lehner, P Keys, M Kummu, T Wagener, S Dadson, T Troy, W Steffen, M Falkenmark, JFamiglietti. 2020. "The water planetary boundary: interrogation and revision" *One Earth* 2(3). DOI: https://doi.org/10.1016/j.oneear.2020.02.009

- 9. Bremer, LB, P Hamel, A Ponette-Gonzalez, P Vieira Pompeu, S Saad, **KA Brauman**. "Who are we measuring and modeling for? Supporting multi-level decision-making in watershed management". 2020. *Water Resources Research*. 56(1). DOI: 10.1029/2019WR026011
- Rocha JC, K Malmborg, L Gordon, KA Brauman, F DeClerck. 2020. "Mapping Social Ecological Systems Archetypes." *Environmental Research Letters*. 15(034017). DOI: https://doi.org/10.1088/1748-9326/ab666e
- 11. Gleeson T, LW Erlandsson, SC Zipper, M Porkka, F Jaramillo, D Gerten, I Fetzer, S Cornell, L Piemontese, L Gordon, J Rockström, T Oki, M Sivapalan, Y Wada, KA Brauman, M Flörke, MFP Bierkens, B Lehner, P Keys, M Kummu, T Wagener, S Dadson, T Troy, W Steffen, M Falkenmark, JFamiglietti. 2020. "Illuminating water cycle modifications and Earth System resilience in the Anthropocene." Water Resources Research. DOI: 10.1029/2019WR024957
- Hamel P, LL Bremer, AG Ponette-González, E Acosta, JRB Fisher, B Steele; AT Cavassani, C Klemz, E Blainski, KA Brauman. 2020. "The value of hydrologic information for watershed management programs: The case of Camboriú, Brazil." Science of The Total Environment. 705. DOI: https://doi.org/10.1016/j.scitotenv.2019.135871
- 13. Nelson S, LL Bremer, K Meza Prado, **KA Brauman**. 2020. "The Political Life of Natural Infrastructure: Water Funds and Alternative Histories of Payments for Ecosystem Services in Valle del Cauca, Colombia" *Development and Change*. 51(1). DOI: 10.1111/dech.12544
- 14. S Díaz, Settele J, Brondízio ES, Ngo HT, Agard J, Arneth A, Balvanera P, **Brauman KA**, Butchart SHM, Chan KMA, Garibaldi LA, Ichii K, Liu J, Subramanian SM, Midgley GF, Miloslavich P, Molnár Z, Obura D, Pfaff A, Polasky S, Purvis A, Razzaque J, Reyers B, Chowdhury RR, Shin Y, Visseren-Hamakers I, Willis K, Zayas CN. 2019. Pervasive human-driven decline of life on Earth points to the need for transformative change. *Science*. 366(6471). DOI: 10.1126/science.aax3100
- Chaplin-Kramer R, RP Sharp, C Weil, EM Bennett, U Pascual, AL Vogl, KK Arkema, KA Brauman, AD Guerry, NM Haddad, M Hamann, P Hamel, JA Johnson, L Mandle, H Pereira, S Polasky, M Ruckelshaus, MR Shaw, JM Silver, GC Daily. 2019. "Global Modeling of Nature's Contributions to People." Science. 366(6462). DOI: 10.1126/science.aaw3372
- 16. C Ramirez-Reyes, KA Brauman*, R Chaplin-Kramer, GL Galford, SB Adamo, CB Anderson, C Anderson, GRH Allington, KJ Bagstad, MT Coe, AF Cord, LE. Dee, RK Gould, M Jain, VA Kowal, F Muller-Karger, J Norriss, P Potapov, J Qiu, JT Rieb, BE Robinson, LH Samberg, N Singh, SH Szeto, B Voigt, K Watson, and TM Wright. 2019. "Reimagining the Potential of Earth Observations for Ecosystem Services Assessments." Science of the Total Environment. 665. https://doi.org/10.1016/j.scitotenv.2019.02.150
- Keeler, BL, P Hamel, T McPhearson, MH Hamann, ML Donahue, K Meza Prado, K Arkema, GN Bratman, KA Brauman, JC. Finlay, AD Guerry, SE Hobbie, JA Johnson, GK MacDonald, RI McDonald, N Neverisky, SA Wood. 2019. "Social-ecological and technical factors moderate the value of urban nature." *Nature Sustainability*. 2(1): 29-38. DOI: 10.1038/s41893-018-0202-1
- Smith, WK, E Nelson, JA Johnson, S Polasky, JC Milder, JS Gerber, PC West, S Siebert, KA Brauman, KM Carlson, M Arbuthnot, JP Rozza, DN Pennington. 2019. "Voluntary sustainability standards could significantly reduce global impacts of global agriculture." *Proceedings of the National Academy of Sciences*. 116(6). DOI: 10.1073/pnas.1707812116

- Bremer LL, KA Brauman, S Nelson, K Meza Prado, ACO Fiorini, E Wilburn. 2018. "Relational values in evaluations of upstream social outcomes of watershed Payment for Ecosystem Services: a review." *Current Opinion in Environment and Sustainability.* 35: 116-123. https://doi.org/10.1016/j.cosust.2018.10.024
- Zuo L, Z Zhang, KM Carlson, GK MacDonald, KA Brauman, Y Liu, W Zhang, H Zhang, W Wu, X Zhao, X Wang, B Liu, L Yi, Q Wen, F Liu, J Xu, S Hu, JS Gerber, PC West. 2018. "Progress towards sustainable intensification in China challenged by land-use change" *Nature Sustainability*. 1(6): 304-313. DOI: 10.1038/s41893-018-0076-2
- 21. Díaz S, U Pascual, M Stenseke, B Martín-López, RT Watson, Z Molnár, R Hill, KMA Chan, I Baste, KA Brauman, S Polasky, A Church, M Lonsdale, APE van Oudenhoven, Fvd Plaat, M Schröter, Y Aumeeruddy-Thomas, E Bukvareva, K Davies, G Erpul, P Failler, CA Guerra, CL Hewitt, H Keune, A Larigauderie, S Lavorel, PW Leadley, S Lindley, S Demissew, Y Shirayama. 2018. "Assessing nature's contributions to people." Science. 359(6373). DOI: 10.1126/science.aap8826
- 22. Wood, SLR, SK Jones, JA Johnson, **KA Brauman**, R Chaplin-Kramer, A Fremier, E Girvitz, L Gordon, C Kappel, L Mandle, M Mulligan, P O'Farrell, WK Smith, L Willemen, W Zhang, and FA DeClerck. 2017. "Distilling the role of ecosystem services in the Sustainable Development Goals" *Ecosystem Services* 29A. DOI: https://doi.org/10.1016/j.ecoser.2017.10.010
- 23. AD Steinman, BJ Cardinale, WR Munns Jr, ME Ogdahl, JD Allan, T Angadi, S Bartlett, K Brauman, M Byappanahall, M Doss, D Dupont, A Johns, D Kashian, F Lupi, P McIntyre, T Miller, M Moore, RL Muenich, R Poudel, J Price, B Provencher, A Rea, J Read, S Renzetti, B Sohngen, E Washburn. 2017. "Ecosystem services in the Great Lakes." *Journal of Great Lakes Research* 43(3): 161-168. DOI: 10.1016/j.iglr.2017.02.004
- 24. Cord AF, **KA Brauman**, R Chaplin-Kramer, A Huth, W Turner, G Ziv, R Seppelt. 2017. "Priorities to advance monitoring of ecosystem services using satellite Earth observation" *Trends in Ecology and Evolution*. 32(6): 416-428. DOI: 10.1016/j.tree.2017.03.003
- Carlson, KM, JS Gerber, ND Mueller, M Herrero, GK MacDonald, KA Brauman, P Havlik, CS O'Connell, JA Johnson, S Saatchi, PC West. 2017. "Greenhouse gas emissions intensity of global cropland agriculture." Nature Climate Change 7(1). DOI: 10.1038/nclimate3158
- Brett R Bayles, KA Brauman, J Adkins, B Allan, C Golden, A Ellis, T Goldberg, DS Grigsby, S Myers, S Osofsky, T Ricketts, J Ristaino. 2016. "Ecosystem services connect environmental change to human health outcomes." *EcoHealth* 13(3). DOI: 10.1007/s10393-016-1137-5
- 27. **Brauman, KA**, B Richter, S Postel, M Malby, M Flörke. 2016. "Water Depletion: An improved metric for incorporating seasonal and dry-year water scarcity into water risk assessments." *Elementa: Science of the Anthropocene* 4:000083. DOI: 10.12952/journal.elementa.000083
- 28. Brauman, KA, N Viart. 2016. "Development of a regionally sensitive water-productivity indicator to identify sustainable practices for sugarcane growers." Integrated Environmental Assessment and Management (IEAM) 12(4). DOI: 10.1002/ieam.1744
- 29. Weathers KC, PM. Groffman, E Van Dolah, E. Bernhardt, NB Grimm, K McMahon, J Schimel, M Paolisso, R Maranger, S Baer, **K Brauman**, E Hinckley. 2016. "Frontiers in Ecosystem Ecology from a Community Perspective: The Future is Boundless and Bright" *Ecosystems*. 19(5). DOI: 10.1007/s10021-016-9967-0
- **30.** Brauman, KA. 2015. "Hydrologic ecosystem services: Linking ecohydrologic processes to human well-being in water research and watershed management." *Wiley Interdisciplinary Reviews: Water* 2(4): 345-358. DOI: 10.1002/wat2.1081

- 31. **Brauman, KA**, GC Daily, DL Freyberg. 2015. "Impacts of Land-Use Change on Groundwater Supply: An ecosystem services assessment in Kona, Hawai'i." *Journal of Water Resources Planning and Management (ASCE)* 141(12): A4014001. DOI:10.1061/(ASCE)WR.1943-5452.0000495
- 32. G K MacDonald, **KA Brauman**, S Sun, KM Carlson, ES Cassidy, JS Gerber, PC West. 2015. "Rethinking agricultural trade relationships in an era of globalization." *BioScience* 65(3): 275-289. DOI: 10.1093/biosci/biu225
- 33. Carlson, Kimberly M, LM Curran, A Ponette-González, D Ratnasari, P Ruspita, N Lisnawati, Y Purwanto, KA Brauman, PA Raymond. 2015. "Consistent results in stream hydrology across multiple watersheds: A reply to Chew and Goh" *Journal of Geophysical Research: Biogeosciences* 120(4):812-817. DOI: 10.1002/2014JG002834
- Ponette-González, AG*, KA Brauman*, E Marin-Spiotta, KR Young, K Farley. 2015. "Water services and hydrologic fluxes in tropical regions: Conceptual framework for effective water management" AMBIO 44(5) DOI: 10.1007/s13280-014-0578-8
- 35. H Tallis, J Lubchenco, et al. 2014. "Working Together: A call for inclusive conservation (Commentary)." *Nature*, 515(7525): 27-28, DOI:10.1038/515027a
- West PC, JS Gerber, ND Mueller, KA Brauman, KM Carlson, ES Cassidy, PM Engstrom, M Johnston, GK MacDonald, DK Ray, S Siebert. 2014. "Leverage points for improving food security and the environment." Science, 345(6194): 325:328 DOI: 10.1126/science.1246067
- 37. Guswa, AJ, **KA Brauman**, C Brown, P Hamel, BL Keeler, SS Sayre. 2014. "Ecosystem services: Challenges and opportunities for hydrologic modeling to support decision making." *Water Resources Research*, 50(5), 4535-4544, DOI:10.1002/2014WR015497
- 38. Carlson, Kimberly M, LM Curran, A Ponette-González, D Ratnasari, P Ruspita, N Lisnawati, Y Purwanto, KA Brauman, PA Raymond. 2014. "Watershed-climate interactions influence stream temperature, sediment yield, and metabolism along a land-use intensity gradient in Indonesian Borneo" *Journal of Geophysical Research: Biogeosciences*, 119(6): 1110-1128, DOI:10.1002/2013JG002516
- 39. Ponette-González, AG, E Marin-Spiotta, **KA Brauman**, KR Young, K Farley. 2014. "Hydrologic Connectivity in the High-Elevation Tropics: Heterogeneous Responses to Land Change." *BioScience* 64(2): 92-104. DOI: 10.1093/biosci/bit013
- Staudt, A, AK Leidner, J Howard, KA Brauman, J Dukes, L Hansen, C Paukert, J Sabo, LA Solórzano.
 2013. "The added complications of climate change: understanding and managing biodiversity and ecosystems." Frontiers in Ecology and the Environment 11(9): 494–501. DOI: 10.1890/120275
- 41. **Brauman, KA**, S Seibert, JA Foley. 2013. "Improving crop water productivity increases water sustainability and food security—a global analysis." *Environmental Research Letters* 8(2): 024030. DOI: 10.1088/1748-9326/8/2/024030
- 42. Richter BD, D Abell, E Bacha, **KA Brauman**, S Calos, A Cohn, C Disla, S Friedlander O'Brien, D Hodges, S Kaiser, M Loughran, C Mestre, M Reardon, and E Siegfried. 2013. "Tapped Out: How can cities secure their water future?" *Water Policy Journal* 15(3): 335-363 DOI: 10.2166/wp.2013.105
- 43. Keeler, B, S Polasky, KA Brauman, K Johnson, J Finlay, A O'Neill, K Kovacs, B Dalzel. 2012. "Linking water quality and well-being for improved assessment and valuation of ecosystem services." Proceedings of the National Academy of Sciences. 109(45): 18619-18624. DOI: 10.1073/pnas.1215991109

- 44. **Brauman, KA**, DL Freyberg, GC Daily. 2012. "Land Cover Effects on Groundwater in the Tropics: Ecohydrologic Mechanisms." *Ecohydrology*. 5: 435-444 (published online June 2011). DOI: 10.1002/eco.236
- 45. **Brauman, KA**, DL Freyberg, GC Daily. 2012. "Potential Evapotranspiration from Forest and Pasture in the Tropics: A Case Study in Kona, Hawai'i." *Journal of Hydrology*. 440-441: 52-61. DOI: 10.1016/j.jhydrol.2012.03.014
- 46. Staudt, A, AK Leidner, J Howard, KA Brauman, J Dukes, L Hansen, C Paukert, J Sabo, LA Solórzano, K Johnson. 2012 "Chapter 5: Climate Change Effects on Already Stressed Biodiversity, Ecosystems, and Ecosystem Services" in Climate Change Impacts on Biodiversity, Ecosystems, and Ecosystem Services: Technical Input to the National Climate Assessment. Eds. S Carter, FS Chapin III, N Grimm, P Kareiva, M Ruckelshaus, M Staudinger, A Staudt, B Stein. USGS: Reston, VA.
- 47. Foley, Jonathan A, N Ramankutty, **KA Brauman**, et al. 2011. "Solutions for a Cultivated Planet" **Nature**. 478(7369): 337-342. DOI: 10.1038/nature10452
- Khagram S, KN Cahill, DP MacMynowski, J Warren, E Richards, K Oleson, J Kitzes, R Katz, R Hwang, R Goldman, J Funk, and KA Brauman. 2010. "Thinking about Knowing: Intellectual Foundations for Interdisciplinary Environmental Research." *Environmental Conservation*. 37(4): 388-397. DOI: 10.1017/S0376892910000809
- 49. **Brauman, KA**, DL Freyberg, GC Daily. 2010. "Forest structure influences on rainfall partitioning and cloud interception: A comparison of native forest sites in Kona, Hawai'i." *Agricultural and Forest Meteorology*. 150(2): 265-275. DOI: 10.1016/j.agrformet.2009.11.011
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Book chapters, reports, reviews, other academic writing

- Vigerstol K, A Vogl, R Abell, K Brauman, W Buytaert. (2021) "Addressing Water Security through Nature-based Solutions" in *Nature-Based Solutions and Water Security*. 1st Edition. Eds J Cassin, J Matthews, E Gunn. ISBN: 9780128198711.
- United Nations Environment Programme (2021). Making Peace with Nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies. Nairobi. (Chapter Lead) https://www.unep.org/resources/making-peace-nature
- 3. **KA Brauman** and R Watson. (2020) "Agriculture and Biodiversity: Findings from the IPBES Global Assessment." In *Transformation of our Food Systems*. HR Herren, B Haerlin, IAASTD+10 Advisory Group (eds.) Zukunftsstiftung Landwirtschaft/Biovision: Berlin/Zurich.
- Dooley, Kathy; Brauman, Kate. (2020). Ecosystem Services from Groundwater Dependent Ecosystems

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 Digital Conservancy, http://hdl.handle.net/11299/213889.
- Brauman, KA (2020) "Rethinking water on a hungry planet" in *Population, Agriculture, and Biodiversity*. P Guatafson, P Raven, P Ehrlich, eds. University of Missouri Press. ISBN 0826274404, 9780826274403
- 6. Noe, Ryan R; Keeler, Bonnie L; Twine, Tracy E; **Brauman, Kate A**; Mayer, Terin; Rogers, Maggie. (2019). Climate change projections for improved management of infrastructure, industry, and water resources in Minnesota. Report to the Legislative-Citizen Commission on Minnesota Resources

(LCCMR). Retrieved from the University of Minnesota Digital Conservancy, http://hdl.handle.net/11299/209130.

- 7. **Brauman** (2019). "Visions for a Positive Future." *One Earth*. 1(1) https://doi.org/10.1016/j.oneear.2019.08.016
- 8. **Brauman, KA**, R Benner, S Benitez, L Bremer, K Vigerstol. (2019). "Water Funds" in *Green Growth that Works: Natural Capital Policy and Finance Mechanisms around the World*. L Mandle, GC Daily, J Salzman, eds. Island Press.
- 9. IPBES (2019). "Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services." Díaz, S., J Settele, E Brondízio, H Ngo, M Guèze, J Agard, A Arneth, P Balvanera, KA Brauman, S Butchart, K Chan, L Garibaldi, K Ichii, J Liu, S Subrmanian, G Midgley, P Miloslavich, Z Molnár, D Obura, A Pfaff, S Polasky, A Purvis, J Razzaque, B Reyers, R Chowdhury, Y Shin, I Visseren-Hamakers, K Wilis, C Zayas (eds). IPBES Secretariat. Bonn, Germany
- Hails, RS, R Chaplin-Kramer, E Bennett, BE Robinson, GC Daily, KA Brauman, PC West. 2019.
 "Determining the value of ecosystem services in agriculture" in Agricultural resilience: perspectives from ecology and economics. R Hails, S Ramsden, S Gardner, eds. Ecological Reviews. Cambridge University Press https://doi.org/10.1017/9781107705555
- 11. Brauman, KA, R Benner, S Benitez, L Bremer, K Vigerstol. (2018). "Water Funds: Coordinating Resources and Action for Watershed Improvement" in International Case Studies on Mainstreaming the Value of Natural Capital into Policy and Finance. GC Daily, J Salzman, eds. Chinese National Development and Reform Commission (NDRC) (in Mandarin)
- 12. Tallis HM, P Hawthorne, S Polasky, JP Reid, MW Beck, K Brauman, JM Bielicki, S Binder, M Burgess, E Cassidy, A Clark, C Costello, J Fargione, ET Game, J Gerber, F Isbell, J Kiesecker, R McDonald, JL Molnar, N Mueller, D Ovando, T Boucher, B McPeek. 2018. "An Attainable Global Vision for Conservation and Human Well-Being" Frontiers in Ecology and the Environment. 16(10): 563-570. DOI: 10.1002/fee.1965
- 13. Apitz, S et al. 2015. "Environmental policy recommendations for the new US President (editorial)." Integrated Environmental Assessment and Management 13(1):7
- 14. **Brauman, KA.** 2016. "Global Water Data: We'll Show You the World, Sort Of." *Open Rivers: Rethinking The Mississippi* 2: http://editions.lib.umn.edu/openrivers/article/global-water-data-well-show-you-the-world-sort-of/
- Brauman, KA. 2016. "Freshwater." In Routledge Handbook on Ecosystem Services. M Potschin, R Haines-Young, R Fish, RK Turner, eds. Routledge: London and New York, pp 374-382. ISBN 978-1-138-02508-0
- 16. **Brauman, KA**. 2015. "Water Availability" in *Oxford Bibliographies in Environmental Science*. Ed. Ellen Wohl. New York: Oxford University Press
- 17. Brauman, KA, S Fury, H Kulkarni, H Manthrithilake, M McCartney, S Verma and Karen G. Villholth. 2015.Groundwater and ecosystem services: a framework for managing smallholder groundwater-dependent agrarian socio-ecologies - applying an ecosystem services and resilience approach. Colombo, Sri Lanka: *International Water Management Institute (IWMI). CGIAR Research Program on Water, Land and Ecosystems (WLE)*. 25p. doi: 10.5337/2015.208
- 18. **Brauman, KA**. 2015. "Get on the Ecosystem Services Bandwagon (editorial)." *Integrated Environmental Assessment and Management* 11(3):343:344

- 19. **Brauman, KA**, N Viart. The development of a regionally-sensitive water-usage indicator to identify sustainable practices for sugarcane growers. (conference presentation at Sugar Industry Technologist Presentations and Technical Papers Toronto 2014)
- Brauman, KA and GC Daily. 2014 (update). "Ecosystem Services." In Reference Module in Earth Systems and Environmental Sciences. SA Elias ed. Oxford, UK: Elsevier. doi.org/10.1016/B978-0-12-409548-9.09453-7
- 21. Brauman, KA, S van der Meulen and J Brils. 2014. "Ecosystem Services and River Basin Management." In Towards Risk-Based Management of River Basins. W Brack, J Brils, D Muller, P Negrel, J Vermaat, eds. Handbook of Environmental Chemistry, Springer. Heidelberg, Germany.
- 22. **Brauman, KA** 2008. "Book Review: The Promise and Perils of Ecosystem Service Case Studies." *Ecology*. 89(9):2667-2668
- 23. **Brauman, KA**. and GC Daily. 2008. (updated 2014) "Human Ecology: Ecosystem Services." In *Encyclopedia of Ecology*, ed. S.E. Jorgensen and Brian Fath. Oxford, UK: Elsevier. ISBN: 0-444-52033-3

Teaching, Advising, and Curriculum Development

- 2015-16 **Developer and Instructor,** *GCC 3009: Rivers and Cities,* U. Minnesota Grand Challenge Course Co-Instructors: Patrick Nunnally, Jennifer Gunn, Jay Bell *Co-designed seminar and led hydrology portions of hydrology and history of river cities.*
- Associate Teacher, *HSEM 3039: Sustainability and Planning on the Great River*, U. Minnesota Honors Seminar Instructor: Patrick Nunnally *Designed and led science portions of science, policy, and engagement on the Mississippi River course.*
- Teaching Assistant, CEE 166A/266A: Wetlands and Watersheds, Stanford University, CA

 Dept of Civil & Environmental Engineering Instructor: David Freyberg

 Taught weekly discussion sections focused on understanding and applying concepts from this senior-level undergraduate and masters-level course in basic hydrology. Developed and graded exam questions.
- 2005-06 Course Development & Teaching Assistant, GeoPhys 104: The Water Course, Stanford, CA
 Dept of Geophysics Instructor: Rosemary Knight
 Gave three lectures, designed and ran computer lab sections, held office hours, and designed
 and graded reports for an interdisciplinary, watershed-focused undergraduate class targeted at
 non-science majors.
- 2006 **Student Organizer, IPER/CEE 333: California Water Policy Colloquium,** Stanford University, CA Co-organized an entirely student-run weekly invited speaker series with an enrollment of 35 students and an average attendance of 50. Designed curriculum, identified outside speakers, handled logistics.

Guest Lectures

- 2021 Grand Challenges 1907: Environmental Grand Challenges, UMN. "Water Security"
- 2021 Grand Challenges 1909: Intro to Ecosystem Health, UMN. "Water Security"
- 2020 **Sustainability 315/GEO 305: Water and Society**, U Hawai'i. "Ecosystem Services and IPBES"
- 2020 Advanced Academic Programs AS.420.679: Water Security, Johns Hopkins Univ. "Water Funds"
- 2020 Enviro Health 440/545: Water, Wastewater, And Health, U Washington. "Water and Climate"
- 2020 **Sustainability 3480/5480: COVID-19 & UN Sustainable Development Goals**, UMN. Water Panelist
- 2020 Enviro Science Policy Management 3131: Environmental Biophysics, UMN. "Ecosystem Services"
- 2020 Grand Challenges 5008: Global Change, UMN. "Water and Climate Change"
- 2019 *Biology Seminar*, Macalester College. "Life on the Science-Policy Precipice"
- 2019 Veterinary Population Medicine 3850W: Biodiversity & Health, UMN. "Ecosystem Services"
- 2019 Environmental Science 351: Hydrology, Colorado College. "Water and Ecosystem Services"

| 2021-22 2021 | Program Committee, Water Availability, AGU Chapman Conference Panelist Fellowship Impact Plan Workshop, AAAS STPF |
|-----------------|---|
| Acader | nic Service |
| 2006-08 | Student advisor for IPER First-Year doctoral students, Stanford University, CA |
| 2006-07 | Participant, Interdisciplinary Working Group for Program and Curriculum, Stanford University, CA |
| 2005-10 | Student Representative to the University iEarth Committee, Stanford University, CA |
| 2012-13 | Participant, Course Development Workshop, Center for Teaching and Learning, U. Minnesota |
| Developm | |
| ZU1Z-14 | i ostudetoral supervisor to brett it. bayles, Filb, Willie |
| 2014 | Postdoctoral supervisor to Brett R. Bayles, PhD, MHP |
| 2015 | Supervisor to visiting his student Marie-Theres Wariai (Oniversity of Vienna) Supervisor to visiting postdoctoral fellow Tuck Fatt Siew, PhD (University of Frankfurt) |
| 2015 | Torres Supervisor to visiting MS student Marie-Theres Wandl (University of Vienna) |
| 2015 | Supervisor to Brazilian Scientific Mobility Program undergraduate Luiza Nascimento Dias |
| 2015-16 | Advisor to MyRain research assistants Rachel Brown (undergraduate), Adam Iverson (MS) |
| 2016 | Examiner, PhD Thesis, Stellenbosch University, South Africa |
| 2016-17 | Co-supervisor to Stockholm Resilience Center MS student Julius Froehlich |
| 2017 | Examiner, PhD Thesis, McGill University |
| 2017-19 | Mentor to IPBES fellow Uttam Shrestha, PhD |
| 2018-19 | Postdoctoral supervisor to Carlos Ramirez Reyes, PhD |
| 2019 | Examiner, PhD Thesis, The University of Queensland |
| | Scientists Mentoring Programme |
| 2017-19 | Mentor to Boku University PhD Student Marie-Theres Wandl through the Austrian Young |
| 2017-19 | Committee member, UMN Masters Thesis, Orli Handmaker |
| 2018-20 | Advisor to Margaret Rogers (MS) and Terin Mayer (PhD) on MN Water project |
| 2020 | Advisor/Mentor – Water Innovator Accelerator program |
| Advising | |
| 2006 | Environmental Science 15: Restoration Ecology. Santa Clara University. "Dams and Dam Removal" |
| 2012 | Ecology and Evolutionary Behavior 3001: Ecology & Society, UMN. "Ecosystem Services in Action" |
| 2012 | Environ Studies 137: Intro to Environmental Studies, St Olaf College. "Water use, water abuse" |
| 2012 | Veterinary Population Medicine 2850: Health and Biodiversity, UMN. "Ecosystem Services" |
| 2013 | Building Better Presentations, Boreas Leadership Program, UMN IonE. Presenter |
| 2014 | Enviro Studies 381B: Environmental Modeling, St Olaf College. "Modeling Ecosystem Services" |
| 2014 | Integrated Leadership, Boreas Leadership Program, UMN IonE. Grand Challenges Presenter |
| 2014 | Building Better Presentations, Boreas Leadership Program, UMN IonE. Presenter |
| 2014 | Ecology 5146: Science and Policy of Global Environmental Change, UMN. "Water Sustainability" |
| 2015 | Integrated Leadership, Boreas Leadership Program, UMN IonE. Grand Challenges Presenter |
| 2015 | Ecology 5146: Science and Policy of Global Environmental Change, UMN. "Water Sustainability" |
| 2015 | Political Science 3317: Food Politics, UMN. "Agriculture, Water, and the Environment" |
| 2016 | Environment 211: Human Impact on Biogeochemical Cycles, Colorado College. "Crop per Drop" |
| 2016 | Sustainable Systems Management 3301: Global Water Sustainability, UMN. "Water Scarcity" |
| 2016 | Enviro Science 320: Watershed Biogeochemistry, Colorado College. "Water and Agriculture" |
| 2016 | Geography 441: Introduction to Watershed Systems, University of North Carolina. "Global Water" |
| 2016 | Environment 211: Human Impact on Biogeochemical Cycles, Colorado College. "Crop per Drop" |
| 2017 | Enviro Science 320: Watershed Biogeochemistry, Colorado College. "Water and Agriculture" |
| 2018 | Ecology Evolution & Behavior 3603: Scienec & Management of Aquatic Environment, UMN. |
| 2018 | Apparel Design 4215: Product Development: Softlines, UMN. "Water in textile production" |
| 2018 | Veterinary Medicine 38050W: Health and Biodiversity, UMN. "Ecosystem Services" |
| 2018 | Sustainability 3003: Sustainable People, Sustainable Planet, UMN. "Global Water" |
| 2019 | Chemistry 4094: Chemistry in the Field, UMN. "Water in Latin America" |
| 2019 | Ecology 5146: Science & Policy Global Environmental Change, UMN. "Global Water Sustainability" |
| | |

Organizer and Host, DoD Fellows Orientation, AAAS STPF

2021

Advisory Council Member, U-Spatial, UMN 2019-20 2019-20 Advisory Board, Open Rivers Journal, UMN 2015-21 Senior Editor, Integrated Environmental Assessment and Management (SETAC) 2014/16 Convener and Chair, American Geophysical Union Session: Ecosystem Services. 2013 Convener and Moderator, Ecological Society of America Symposium: Agroecology Across Scales. 2013 Reviewer, DISCCRS VIII Symposium 2011-13 Chair, Gordon Research Seminar on Catchment Science, 2013. 2012 Convener and Chair, American Geophysical Union Session: Hydrologic Ecosystem Services. 2012 **Convener and Chair**, American Geophysical Union Session: Environmental Hotspots. 2011-12 Working Group Member, 2012 United States National Climate Assessment Ecosystems and Ecosystem Services Working Group. 2011-12 Convener and Chair, American Geophysical Union Session: Ecosystem Services. 2010 Postdoctoral Representative, Selection Committee, UMN Global Environmental Leadership Postdoctoral Fellows. 2009 Student Leaders Forum with Stanford President Hennessey at Leading Matters (SF). 2007-08 Student Representative to the Stanford Ecohydrology Faculty Hiring Committee. 2006-07 **Student Representative** to the Executive Committee for IPER. Student Organizer, Ecohydrology Working Group, Stanford University, CA 2007-10 2006 Student Representative to the IPER Associate Director hiring committee.

Grant Review

| 2019/20 | Biodiversa BiodivClim Evaluation Committee |
|---------|---|
| 2018 | Inter-American Institute for Global Change Research |
| 2017 | National Academy of Science Gulf Research Program |
| 2017 | NASA Applied Sciences |
| 2017/18 | NSF Hydrology |
| 2017 | USDA ARS Water Availability & Watershed Management National Program |
| 2016/17 | Swiss National Science Foundation (SNSF) |
| 2015 | German-Israeli Foundation for Scientific Research and Development (GIF) |
| 2014 | Centres of Research Excellence (CoREs) Fund, Royal Society of New Zealand |
| 2013 | NASA Interdisciplinary Research in Earth Science (IDS) Climate Extremes: Drought and Flooding |
| 2012 | Inter-American Institute for Global Change Research (IAI), Third Collaborative Research |
| | Network (CRN3), Integrated Research on Ecosystem Services |
| 2012 | COST (European Co-operation in the Field of Science and Technology), EURO-AGRIWAT Action |
| | ES1106: Assessment of European Agriculture Water use and trade under climate change |
| 2012 | NSF Science, Engineering, and Education for Sustainability (NSF SEES) Fellows program |

Journal Peer Review

Advances in Water Resources, Agricultural and Forest Meteorology, Applied Geography, Earth System Dynamics, Ecological Economics, Ecological Processes, Ecology, Ecology and Society, Ecosystem Services, Ecosystems, Environmental Management, Environmental Monitoring and Assessment, Environmental Research Letters, Frontiers in Ecology and the Environment, Global Environmental Change, Integrated Environmental Assessment and Management, Land, Landscape and Urban Planning, Mitigation and Adaptation of Strategies for Global Change, Nature, Nature Communications, New Phytologist, Proceedings of the National Academy of Sciences, Science, Science of the Total Environment

Outreach

| 2021 | Stanford University, Rising Environmental Leaders Program. Science-policy experiences. |
|------|---|
| 2021 | Farmcraft – Department of State and North America ESports Federation. Irrigation education |
| | outreach. https://www.youtube.com/watch?v=LfAAzLkTeTA |
| 2020 | Nature for Life Hub –Nature for Water. Keynote. 24 Sept. |
| | https://www.learningfornature.org/en/nature-for-life-hub/ |

| 2019 | Congressional Testimony: House Space, Science and Technology Committee. "Nature in Crisis |
|-----------|---|
| 2019 | Biodiversity Loss and Its Causes." 4 June. Washington, DC. |
| | https://science.house.gov/hearings/nature-in-crisis-biodiversity-loss-and-its-causes |
| 2019 | Featured in the WWF IPBES package: https://www.youtube.com/watch?v=VIWorLv0cS0 |
| 2019 | Representative, Water Working Group, Sustainable Growth Coalition. Minneapolis, MN |
| 2019 | Steering Committee Member, Source Water Protection Consortium. MN Department of |
| 2010-13 | Health and Environmental Initiative. St Paul, MN |
| 2016-19 | Coordinating Lead Author, Intergovernmental Science Policy Platform on Biodiversity and |
| 2010-19 | Ecosystem Services (IPBES) Global Assessment |
| 2017 | Irrigation presentation to Somali Agribusiness Professionals USAID group. St Paul, MN |
| 2016 | Expert Resource, MinneMUDAC Dive Into Water Data competition. St Paul, MN |
| 2016 | Technical Advisor, WWF Water Risk Filter. WWF Germany, Berlin |
| 2016 | Judge, World of 7 Billion video contest. Population Connection, Washington, DC |
| 2014 | City Arts Collaboratory STEM Fellow. Public Art St Paul. |
| 2013-14 | Founding Member, Twin Cities Tropical Environments Network. Minneapolis, MN |
| 2009-10 | Board of Directors, Bay Area Tropical Forest Network. Stanford, CA |
| 2003 10 | Double of Bridgesto, Buy Fried Fropical Forest Notification and Control of Control |
| Press App | earances |
| 2021 | River Radio. The state of the world's water supply. |
| | https://marinecommunitylibrary.org/event/river-radio-110521/ . 5 Nov. |
| 2021 | BBC World Service: The Inquiry. Are we running out of water. |
| | https://www.bbc.co.uk/programmes/w3ct1z2n . 21 Oct. |
| 2020 | Minnesota Women's Press. The Simplicity of our Complex Ecosystem. |
| | https://www.womenspress.com/the-simplicity-of-our-complex-ecosystem/. 4 April. |
| 2019 | Al Jazeera English. Planet SOS. https://www.aljazeera.com/programmes/planet-sos/. 5 Oct. |
| 2019 | Minneapolis Star Tribune. Dire climate warnings are adding up. 9 Aug. |
| | http://www.startribune.com/dire-climate-warnings-are-adding-up/531037882/ |
| 2019 | China Global Television Network – Global Business. The Global Water Crisis. 6 Aug. |
| | https://videonews.today/environmental-scientist-kate-brauman-discusses-the-global-water- |
| | <u>crisis-64841</u> |
| 2019 | Multiple international press appearances related to the IPBES Global Assessment, including: |
| | BBC News (7 outlets, including TV, radio, and print): https://www.bbc.com/news/science- |
| | environment-48169783 |
| | France24 – The Debate: https://www.france24.com/en/20190506-debate-environment- |
| | <u>carbon-emissions-biodiversity-animals</u> |
| | Sky News - https://twitter.com/SkyNews/status/1125365349891887105 |
| | Twin Cities Public Television, Almanac: https://www.tpt.org/almanac/video/challenging- |
| | united-nations-biodiversity-report-35384/, https://www.tpt.org/almanac/video/the- |
| | wrap-kate-brauman-35392/ |
| | Democracy Now!: |
| | https://www.democracynow.org/2019/5/9/shocking un report warns up to |
| | Cleveland Public Radio, Sound of Ideas: https://www.ideastream.org/programs/sound-of- |
| | ideas/1m-species-facing-extinction-cleveland-baseball-book |
| | KCRW To the Point Climate Change Update: https://www.kcrw.com/news/shows/to-the- |
| | point/climate-change-and-species-extinction |
| | Minneapolis Star Tribune (Sunday cover): http://www.startribune.com/people-really-do- |
| | <u>care-says-minnesota-researcher-who-helped-write-u-n-report-on-species-</u> |
| | extinction/509801932/ |
| | MinnPost: https://www.minnpost.com/environment/2019/05/amid-a-million-coming- |
| | extinctions-some-reasons-for-hope-a-qa-with-the-u-of-ms-kate-brauman/ |
| | China Global Television Network – The Heat: https://america.cgtn.com/2019/06/03/the- |
| | heat-human-impact-in-the-world |
| | Also: talkRADIO London – the Paul Ross Show, Swiss Public Radio, Fox 5 News NY, Daily |

Mail UK, UK's Geographical Magazine, WCMU Michigan Public Radio

| 2019 | MPR Climate Cast: "Climate Change and Minnesota's Lakes and Rivers" 10 April. |
|-----------|--|
| 2040 | https://www.mprnews.org/story/2019/04/10/climate cast with paul huttner |
| 2019 | American Geophysical Union 3 rd Pod from the Sun: "Hawaii's Volcano's, Water, and Vog." 22 March. https://thirdpodfromthesun.com/2019/03/22/special-release-hawaiis-volcanoes- |
| 2019 | water-andvog/ Wisconsin Public Radio "Route 51: Ecology and Economy of our Lakes." 15 March. |
| 2019 | https://www.wpr.org/shows/march-14-ecology-and-economy-our-lakes |
| 2019 | J. Selby's Podcast. "Animal Agriculture and Water." 23 Feb. |
| 2015 | https://itunes.apple.com/us/podcast/id1452366031 |
| 2018 | Minnesota Public Radio. "Peter Gleick on 'The World's Freshwater: From Conflict to Peace'." |
| 2010 | 10 Oct. https://www.mprnews.org/story/2018/10/10/water and world peace |
| 2018 | The Minnesota Daily. "New exhibit at UMN highlights impact of water in Minnesota." 19 Oct |
| 2017 | The Minneapolis Star Tribune. "Ecolab has tool to help companies conserve water, meet |
| 2017 | environmental goals." 17 June. http://www.startribune.com/ecolab-has-tool-to-help- |
| | companies-conserve-water-meet-environmental-goals/428932123/ |
| 2016 | The Matt Townsend Show on BYU Radio. "We are not running out of water" 15 Sept. |
| | http://byuradiostage.byu.edu/episode/c91d2801-27e3-46b7-ae3e-4ead7d25e7c3/the-matt- |
| | townsend-show-measuring-water-scarcity-emotional-agility-rescuing- |
| | relationships?playhead=953&autoplay=true |
| 2016 | The Roadhouse on WTIP North Shore Community Radio. "Water shortages" 2 Sept. |
| | http://www.wtip.org/earth-really-running-out-water-better-way-measure-water-scarcity |
| 2016 | deVerdieping Trouw. "De Mississippi als het afvoerputje van de VS (The Mississippi is an ugly |
| | drain pipe)" 12 Aug. (in Dutch). https://www.trouw.nl/home/de-mississippi-als-het- |
| | afvoerputje-van-de-vs~ae6b818c/ |
| 2016 | Minnesota Daily. "Researchers release new water conservation tool" 2 Feb |
| 2015 | The Bat of Minerva with Peter Shea |
| 2015 | Almanac: At the Capitol on Twin Cities Public Television (TPT). St Paul, MN 6 May. Segment or |
| | water quality in Minnesota. http://z.umn.edu/tptmnwq |
| 2013 | The Western Producer. "Experts focus on water use." 4 October |
| 2013 | Environmental Research Web. "Boosting 'crop per drop' could cut water usage." 22 Aug |
| 2013 | Minnesota Daily. "U research measures 'crop per drop'" 12 June |
| 2013 | AgWeb. "Which Crops are the thirstiest?" 3 June |
| 2013 | Yale Environment 360. "Getting more 'crop per drop' in driest agricultural regions." 31 May |
| 2011 | Momentum Magazine (now Ensia). "Making the Most of Water" |
| Public Le | ectures |
| 2020 | LimnoSeminar: Invited Panelist, Water Ecosystem Services. Remote. 10 Nov. |
| 2020 | Minnesota Stormwater Seminar Series: Panelist, Bioretention. Remote. 7 May. |
| 2020 | Field Museum A. Watson Armour III Research Seminar Series. Quantifying the benefits of |
| | nature - the science and policy of the IPBES global report. Chicago, IL. 29 April. Cancelled. |
| 2020 | Senior College of West Central Minnesota Spring Season Kick-Off keynote: Beyond Extinction: |
| | On Nature's Value and Causes for Hope. Alexandria, MN. 12 March. Cancelled |
| 2020 | Freshwater Society: The Future of Minnesota's Freshwater in a Changing Climate. St Paul, MN. |
| | 13 Jan. |
| 2019 | Minnesota Climate Adaptation Conference: The Future of Minnesota's Clean Water in a |
| | Changing Climate. St Paul, MN. 22 January. |
| 2019 | UMN Learning Life Headliners: Beyond Extinction: On Nature's Value, Biodiversity Trends, and |
| | Causes for Hope. St Paul, MN. 5 Dec. (Keynote) |
| 2019 | Minnesota Environmental Congress: Climate Change in Minnesota. Mankato, MN. 3 Dec. |
| | (Keynote) |
| 2019 | Convention on Biological Diversity Subsidiary Body on Scientific, Technical and Technological |
| | Advice (CBD SBSTTA). Nature's Contributions to People. Montreal. 23 November. |
| 2019 | American Association of University Women: Nature and its contributions to people are in |
| | decline: The IPBES report and how we respond. Minneapolis, MN. 15 Sept. (Keynote) |

- *Minnesota Pollution Control Agency:* Ecosystem services from the global UN report to managing our Minnesota backyard. St Paul, MN. 12 Sept.
- 2019 Ag Innovation Showcase: Regeneration and the Power of Convergence The Global Imperative to Improve Agriculture (panel organizer and moderator w Neal Gutterson, CTO Corteva Agriscience, Matt Carstens, SVP Land O'Lakes SUSTAIN, Adam Chambers, USDA NRCS).

 Minneapolis, MN. 9 Sept.
- **USAID Forum on Gender Equity and Water Security.** Lima, Peru. 16-18 June. "Nature, Water Security, and Gender Equality: Findings from the Global Assessment Report on Biodiversity and Ecosystem Services." (Keynote)
- *Metropolitan Council:* Water and Ecosystem Services (with Bonnie Keeler). St Paul, MN. 22 May
- *Wisconsin Lakes Partnership Convention* "Valuing Ecological Services to Make Smarter Water Decisions" Stevens Point, WI. 11 April. (Keynote)
- **Committee on Foreign Relations Minnesota**. The Global Geopolitics of Water: Are we running out, and who's fighting for it?. Edina, MN. 27 February. (Keynote)
- *MN Department of Natural Resources Stakeholder Roundtable*. Alternative financing for conservation. Bloomington, MN. 11 January.
- **Environmental Initiative**: Collaborating on Source Water Protection, featured speaker: Economics and the value of water protection. Plymouth, MN. 18 December.
- *Minnesota Council for Economic Education EconFest, Ecosystem Services: Nature's Contributions to People.* St Paul, MN. 26 October. (Keynote)
- Nobel Peace Prize Forum, panelist: The World's Freshwater: From Conflict to Peace.

 Minneapolis, MN. 15 September.
- 2018 Climate Connections, Center for Changing Landscapes, speaker: The Mississippi in St Paul: Climate change impacts on planning and community engagement. St Paul, MN. 20 September.
- **College of St Scholastica** College of Science Seminar, inaugural speaker. Duluth, MN. 7 March. "Global Water Matters"
- *Uponor North America Sustainability Series Kick-Off keynote*. Apple Valley, MN. 2 March. "Are We Running out of Water?: Trends in Water Scarcity and What We Can Do About It"
- *Mississippi Water Forum*. St Paul, MN. 14 October. "Putting people and land into water management" Featured speaker
- **YES! Youth Energy Summit.** Collegeville, MN. 12 October. "Water and Energy" Keynote speaker
- 2016 MN Water Technology Summit. Minneapolis, MN. 20 Sept. "Local water, global context"
- **Senior College of West Central Minnesota** Fall Season Kick-Off keynote. Alexandria, MN. 8 Sept. "Global Water Matters: Trends in Water Scarcity and What We Can Do About It"
- *MSU Fate of the Earth Symposium*. East Lansing, MI. 6 April. "Water Matters: Scarcity, Productivity, and Management in a Changing World"
- *Minnesota Pollution Control Agency*. St Paul, MN 11 Feb. "Hydrologic Ecosystem Services: Not just a fancy new name for water management"
- *Mindstretch*. St Paul, MN 28 October. "Food, Water, and the Future: Feeding a warming planet"
- *Frontiers in the Environment: Big Questions*. University of Minnesota, MN. 4 March. "Is drawing down our aquifers really so bad?" Convener and panelist.
- *The New Century Club*. St Paul, MN 3 February. "Five Steps to Feed the World: Where Will we Find Enough Food for 9 Billion?"
- The World Wildlife Foundation's Fuller Symposium: Whole Planet, Full Plate. Washington, DC
 November. Rethinking Food Panelist.
- *The Nature Conservancy's Global Water Summit*. Chicago, IL 18-20 November. "Water Supply, Demand, and Risk."
- *Minnesota Zoo Our World Speaker Series*. Apple Valley, MN 15 October. Agriculture and Water Panelist.
- 2014 Great Decisions Speakers Bureau, Minnesota International Center. Food and Climate.
- *The 6th Annual Great Decisions Conference on Global Food Security*. Minneapolis, MN 11 Oct. Minnesota International Center. Speaker on Sustainable Agriculture and Water Security.

Live Q&A: Water in agriculture. The Guardian UK Global Development Professionals Network. 2013 Panelist. gu.com/p/3tnym/tw Panel discussant for The Freshwater Society. Minneapolis, MN 12 Feb. The Moos Family 2013 lecture series featuring Sandra Postel. 2012 Sip of Science. National Center for Earth Surface Dynamics, Minneapolis, MN 14 Nov. "Hawai'i to Hurricane Sandy: Can Ecosystem Management Affect Water Resources?" 2012 Frontiers in the Environment. University of Minnesota, MN. 22 Feb. "Are we getting enough crop per Drop? Global Trends in Agricultural Water Use" 2008 Kona Water Roundtable. Kailua-Kona, HI, 3 Nov. "Land Management and Groundwater Resources in Kona, HI." 2008 First Nations Futures Institute. Stanford, CA. 16 October. "Assessing and Valuing Land Cover Change in Kona, HI." 2008 Breath! California Biannual Statewide Conference. Tiburon, CA. 3 May. "Global Warming and Water Resources in California."

Presentations and Publications

Opheim, T, D Snyder, KA Brauman, and V Were. 2021. "Creating Our Water Futures." *Open Rivers:**Rethinking Water, Place & Community, no. 18. DOI: https://doi.org/10.24926/2471190X.8041

Brauman, Kate A. 2019. "Dispatch from Paris: A global assessment of biodiversity and ecosystem services, three years in the making." **IonE News**. Published online.

http://environment.umn.edu/news/dispatch-from-paris-a-global-assessment-of-biodiversity-and-ecosystem-services-three-years-in-the-making/

Brauman, Kate A. 2016. "We're (not) running out of water – a better way to measure water scarcity." *The Conversation*. Published online: https://theconversation.com/were-not-running-out-of-water-a-better-way-to-measure-water-scarcity-58699

Brauman, Kate A. 2015. "Investing in Watersheds: Back to Basics." *IonE News*. Published online: http://environment.umn.edu/water/investing-in-watersheds-back-to-basics/

"Eating Water." Narrator and collaborative writer for a **Science Museum of Minnesota** Science on a Sphere movie. Available at: http://sos.noaa.gov/Datasets/dataset.php?id=481

Brauman, Kate A. "DIY Video Abstracts: Lessons from an Ultimately Successful Experience" (poster) 2013. *American Geophysical Union.* San Francisco, CA

Cynthia Barnett. 2013 "Groundwater Wake-Up." Ensia. http://ensia.com/features/groundwater-wake-up/
KAB developed groundwater map design

Brauman, Kate A, GC Daily, DL Freyberg. 2009. "Synergies and tradeoffs: Managing land to improve water supply in Kona, Hawai'i." Video for *Water-Ecosystem Services, Drought, and Environmental Justice:* the First Millennium Conference of the **Ecological Society of America**.

Published online: http://www.youtube.com/watch?v=EMN5iSoK-hI

Brauman, Kate A. 2006. "Napa River Flood Project Put to the Test." *The Katoomba Group's Ecosystem Marketplace*. 3 February. www.ecosystemmarketplace.com

Brauman, Kate. "Poster: Light Switches." 1998. This Old House Magazine. 23 (November)

Brauman, Kate. "On the Ball." 1998. This Old House Magazine. 16 (February)

Workshops/Education

| 2015 | Co-Creator and Presenter, Water, Health, and the World's Cities, K-College educators UMN |
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| | Institute for Global Studies, MN |
| 2014 | Presenter, Food! In a Global Classroom, K-College educators (invited), UMN Institute for Global |
| | Studies, MN |
| 2009 | Presenter, Geoscape Bay Area for 6th Grade Earth Science Teachers (invited), Stanford University |
| 2008 | Presenter/Workshop Leader, Sally Ride Science Festival (invited), NASA Ames Research Center |

Invited Talks

2021 **3M Tech Forum Climate Chapter.** St Paul, MN. 22 July. "Are we destined to dry up? Water Management in a changing world." 150 attendees. Virtual.

| 2020 | <i>University of Wisconsin Climate, People, and Environment Program Seminar</i> . Madison, WI. 14 April. "Nature's Contributions to People." Cancelled. |
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| 2019 | University of Vermont. Burlington, VT. 4 October. "ClimateWIse: Investigating Watershed Management Programs in South America" |
| 2019 | Chinese Academy of Sciences. Beijing, China. 16 September. "Using Ecosystem Services for Watershed Management" |
| 2019 | World Water Week. Stockholm, Sweden. 25-30 August. Panelist. "Towards a working market for green infrastructure" & "Connecting impact investor goals with evidence for sustainable water management" |
| 2019 | Gordon Conference on Catchment Sciences. Andover, NH. 23-28 June. Discussion leader: People and watersheds |
| 2019 | WWF Global Dam Watch Workshop. Zeist, Netherlands. 11-13 May. "Rivers and Ecosystem Services" |
| 2018 | NAS Sackler Forum on Climate Change and Ecosystems. Washington, DC. 8-9 Oct. Moderator and invited participant |
| 2018 | The Nature Conservancy NatureNet Symposium. St Paul, MN. 26 Oct. "ClimateWise: illuminating landscape hydrology in the montane tropics in partnership with Water Funds" |
| 2018 | World Water Week. Stockholm, Sweden. 30 Aug. "ClimateWlse: Assessing program needs and potential impact of Investments in Watershed Services projects in the montane tropics of South America" in Green Landscapes for Water Security: Measuring and Modeling Hydrologic Benefits |
| 2018 | UMN Water Resources Assembly and Research Symposium. St Paul, MN. 19 Jan. "Perspectives on Water Resources Research at UMN" panelist |
| 2017 | Ecological Society of America . Portland, OR. 7 Aug. "Linking ecohydrologic processes to local watershed management and global assessment" in Symposium 1: Aquatic Ecosystem Services in a Changing World |
| 2017 | Ecological Society of America . Portland, OR. 7 Aug. "What should we measure? Remote sensing for monitoring biodiversity with Essential Biodiversity Variables" Panelist |
| 2017 | AAAS Ecosystem Services Symposium. Washington DC. 19 May. ES Tools Panel Moderator |
| 2017 | North Carolina State University. Raleigh, NC. 20 April. "Water and Food: The Inseparables" |
| 2017 | Boise State University . Boise, ID. 13 April. "Going Global? Hydrologic Ecosystem Services for Local Management and Global Assessment." |
| 2016 | Global Land Project Open Science Meeting. Beijing. 26 Oct. "Water sustainability in sugarcane production: creating an adoptable standard" |
| 2016 | <i>UMN Water Supply Convergence Colloquium</i> . Minneapolis, MN. 19 Feb. "Getting more 'bang' for our water 'buck': Water and what it can do for us" |
| 2015 | ATREE Ashoka Trust for Research in Ecology and the Environment. Bangalore, India. 4 Dec. "Hydrologic ecosystem services in Hawai'i: quantifying locally and extrapolating globally" |
| 2015 | UMN Water Resources Center Seminar Series . Minneapolis, MN 16 October. "IonE's Global Water Initiative: Linking Research to Action" |
| 2015 | UMN St. Anthony Falls Laboratory Seminar . Minneapolis, MN 29 April. "Water at the UMN Institute on the Environment: Research to Action for Sustainability" |
| 2015 | UMN Sawyer Symposium: Imagining the Mississippi in an Era of Climate Change. Minneapolis, MN 10 April. River as Future Panelist. |
| 2015 | USDA-ERS Conference on Agricultural Productivity and the Environment . Washington, DC. 11-12 March. "Crop Water Productivity and Water Gaps – quantifying the benefits of increasing crop per drop in global agriculture" |
| 2014 | American Geophysical Union. San Francisco, CA. 16 December. "Water Depletion Threatens Agriculture" |
| 2014 | CGIAR-IWMI Water, Lands and Ecosystems workshop on Managing Smallholder Groundwater-dependent Agrarian Socio-Ecologies using an Ecosystem Services and |

Resilience Based Approach. Colombo, Sri Lanka. 4-7 November. "Groundwater and Ecosystem

Services: Vulnerability and Resilience"

Emerging Infectious Plant Diseases of Africa in the Context of Ecosystem Services. Bellagio 2014 Center, Italy. 10 April. "Ecosystem Services: A framework for linking biophysical processes to human needs" 2014 Crop Sciences Bonn Departmental Seminar. University of Bonn. 26 March. "Water Depletion and Global Agriculture: Taking stock of global water resources" 2014 Center for Environmental Systems Research Departmental Seminar. University of Kassel. 24 March. "Water Depletion and Agriculture: Taking stock of global water resources" 2014 URPP Global Change and Biodiversity Seminar Series. University of Zurich. 17 March. "Hydrologic Ecosystem Services: Managing Landscapes for Water, Nature, and People" 2014 Meeting Global Food Security Challenges: Efficient Nutrients Provision, Technology & Knowledge Transfer. Grand Water Research Institute, Technion-IIT, Haifa. 25 February. "Closing yield gaps: global benchmarks for improving water and nutrient management" 2013 Agrimonde-Terra. CIRAD, Paris. 11 November "Water cycle and availability as a driver of cropping system evolution" 2013 Agricultural Society of America, Crop Science Society of America, Soil Science Society of America. Annual Meeting, Tampa. 5 November. "Hydrologic ecosystem services in agricultural systems" 2013 School for the Environment Seminar Series. University of Massachusetts, Boston. 23 October "Getting more food bang for our water buck: putting water efficiency into water sustainability" 2012 Geological Sciences Seminar. University of Minnesota, Duluth, MN. 4 May "Water sustainability and food security: win-win solutions for a thirsty planet" 2012 Natural Resource Ecology and Management Seminar. Iowa State University, IA. 6 April. "Assessing Watershed Ecosystem Services: Land Use Change Effects on Groundwater Recharge and Other Services in Hawai'i" 2011 American Geophysical Union. San Francisco, CA. 7 December. "Land Use Change Affects Groundwater Recharge: Hydrologic Services in Tropical Watersheds" 2011 Water Resources Science Seminar. University of Minnesota, St Paul, MN. 25 March. "Land Management Affects Water Supply: Assessing the Costs and Benefits of Delivering Hydrologic Ecosystem Services in Kona, Hawai'i" 2010 Lund University Center for Sustainability Studies. Lund, Sweden. 21 October. "Water Links Land Cover to Human Wellbeing: Investigating Hydrologic Ecosystem Services in Hawai'i" 2010 Climate, People, and the Environment Program, University of Wisconsin, Madison. 3 December. "Land Management for Water Supply: Hydrologic Ecosystem Services in Kona, HI" 2010 American Association of Geographers. Washington, DC. 14-18 April. "Montane Land Cover Effects on Water Supply in Coastal Hawai'i" 2009 Final Conference RISKBASE: towards risk-based river basin management. Belgium. 16-18 November. "Ecosystem Services as a core element in risk-based river management" 2009 RISKBASE Workshop: WP5 "Risk management, preventive approaches & policies": Ecosystem Services and Adaptive Management. Venice, Italy. 25-26 June. "Ecosystem Services for Watershed Management – Connecting hydrologic science to watershed policy" 2007 Stanford Hydrogeology Seminar Series. Stanford, CA. 31 October. "The Nature and Value of Ecosystem Services: Managing Land Cover to Increase Water Supply in Hawai'i"

Selected Conference Presentations

| 2018 | American Geophysical Union. Washington, DC. 10 December. "ClimateWise: illuminating |
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| | landscape hydrology in the montane tropics through interviews, data analysis, and multi-scale |
| | modeling" (poster) |
| 2016 | American Geophysical Union. San Francisco, CA. 13 December. "Investment in Watershed |
| | Services projects: the ClimateWIse project" (poster) |
| 2015 | American Geophysical Union. San Francisco, CA. 17 December. "Identifying high-value regions |
| | for hydrologic ecosystem services around the globe" (poster) |
| 2014 | American Geophysical Union. San Francisco, CA. 15 December. "Manage hydrologic fluxes |
| | instead of land cover in watershed service projects " (poster) |

Sugar Industry Technologists 2014 Meeting. Toronto. 20 May. "The Development of a 2014 Regionally-Sensitive Water Usage Indicator to Identify Sustainable Practices for Sugarcane Growers " (talk – presented by N Viart, conference paper) 2014 Global Land Project Open Science Meeting. Berlin. 19 March. "Water Depletion of Watersheds Worldwide: Local drivers and global connections " (talk) 2013 American Geophysical Union. San Francisco, CA. 12 December. "Food vs. water: the magnitude and range of global tradeoffs in agricultural production and impact " (talk) 2012 American Geophysical Union. San Francisco, CA. 3 December. "Where the water is: Mapping global drivers of water scarcity" (talk) Planet Under Pressure. London, UK. 18-22 March. "Solutions for a cultivated planet" (talk) 2012 2012 Planet Under Pressure. London, UK. 18-22 March. "Water Wise: Are we getting enough crop per drop" (poster, best early career researcher poster award) American Geophysical Union. San Francisco, CA. 5 December. "Worldwide trends in 2011 agricultural water use" (talk) 2011 National Academies Keck Futures Initiative: Ecosystem Services. Irvine, CA. 11-13 November. "Hydrologic Services in Tropical Watersheds" (poster) Ecological Society of America. Austin, TX. 8-12 August. "Assessing local benefits and impacts 2011 from global patterns in agricultural water use" (talk) 2011 Gordon Research Seminar and Conference. Lewiston, ME. 9-15 July. "Changing Land Use and Changing Climate: Effects on ecosystem services provided by tropical watersheds" (talk, rising star award) 2011 American Association for the Advancement of Science. Washington, DC. 18-21 February. "Global Distribution of Agricultural Water Use" (poster) 2010 American Geophysical Union. San Francisco. 13-17 December. "Managing Land to Enhance Water Resources: A Hydrologic Ecosystem Services Case Study in Kona, Hawai'i" (poster) 2010 Latsis International Symposium on Ecohydrology. Lasuanne, Switzerland. 17-20 October. "Water as a Link between Land Cover and Human Wellbeing: A Hydrologic Ecosystem Services Case Study in Hawai'i" (outstanding poster award) 2009 2nd International Conference on Forests and Water in a Changing Environment. Raleigh, NC. 14-16 September. "The importance of forest structure to rainfall partitioning and cloud interception: A comparison of native forest sites in Kona, Hawai'i " 2009 Ecological Society of America. Albuquerque, NM. 2-7 August. "The importance of forest structure to rainfall partitioning and cloud interception in native forest in Kona, Hawai'i " 2009 Hawai'i Conservation Conference. Honolulu, HI. 28-30 July. "The Effects of Native Forest and Working Pasture on Rainfall Partitioning and Groundwater Recharge in Kona, Hawai'i " 2009 Bay Area Conservation Biology Symposium. Stanford, CA. 31 January. "Comparative Ecohydrologic Effects of Forest and Pasture on Water Balances in Kona, HI" 2008 American Geophysical Union. San Francisco, CA. 15-19 December. "Comparative Ecohydrologic Effects of Forest and Pasture on Water Balances in Kona, HI" (poster) 2008 Young Environmental Scholars Workshop. Stanford, CA. 4-5 March. Water Panel. (moderator and presenter) 2007 American Geophysical Union. San Francisco, CA. 10-14 December. "The Value of Forest and Pasture to Water Supply in Kona, HI." (poster, Outstanding Student Presentation award) 2007 Stanford School of Earth Sciences Research Review. Stanford, CA. 11 April. "The Nature and Value of Ecosystem Services: How Land Cover Affects Water Resources in Hawai'i"

Memberships and Professional Affiliations

| 2005 – present | American Geophysical Union Member |
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| 2008 – present | Ecological Society of America Member |
| 2015 – present | Society of Environmental Toxicology and Chemistry Member (SETAC) |
| 2017 – present | American Association for the Advancement of Science Member(AAAS) |