# Gerald Joseph McAdams Kauffman, Jr., Ph.D. Director and Associate Professor

University of Delaware - Water Resources Center
Institute for Public Administration
Joseph R. Biden, Jr. School of Public Policy & Administration
Newark, DE 19716

302-893-1571 jerryk@udel.edu wrc.udel.edu

Biography: Gerald Kauffman is Director of the University of Delaware Water Resources Center (UDWRC), one of the 54 Congressionally-designated National Institutes for Water Resources (NIWR) supported by the Water Resources Research Act of 1984 through the U.S. Geological Survey at land grant universities in the fifty states, District of Columbia, and territories of Guam, Puerto Rico, and U.S. Virgin Islands. Dr. Kauffman holds a secondary faculty appointment as Associate Professor in the Biden School of Public Policy & Administration with joint appointments in the Department of Civil & Environmental Engineering and Department of Geography & Spatial Sciences and teaches graduate/undergraduate courses in watershed science and policy, hydrology, and environmental policy. Gerald serves on committees of the Interdisciplinary Graduate Program in Water Science and Policy and Environmental Academic Affairs Council that oversees undergraduate environmental science/studies majors. Jerry has authored dozens of publications including a book on water resources engineering with a colleague from the University of Wyoming and is writing a book about watershed management with John Wiley and Sons, Oxford, U.K.

Jerry holds a doctorate from the University of Delaware College of Earth, Ocean, and Environment with a dissertation in river basin governance and economics, a Master of Public Administration degree with specialization in water policy from the University of Delaware School of Urban Affairs and Public Policy, and a Bachelor of Science degree in Civil and Environmental Engineering with a concentration in water resources engineering from Rutgers University. Gerald is a Certified Public Manager (CPM) awarded by the Rutgers University Graduate Program in Public Administration. He is a member of the American Geophysical Union (AGU) and American Water Resources Association (AWRA) and serves on the boards of the National Institutes for Water Resources, Universities Council on Water Resources (UCOWR), Water Resources Association of the Delaware River Basin, and Partnership for the Delaware Estuary.

Dr. Kauffman provides water science and policy assistance to governments in Delaware and the Delaware Valley through the land-grant public service, education, and research role of the University of Delaware. Jerry serves as Delaware's first Water Coordinator appointed by the Delaware Water Supply Coordinating Council Act and co-chairs the Christina Basin Clean Water Partnership, an interstate effort between the EPA, Delaware River Basin Commission, Delaware, and Pennsylvania to restore the watershed that provides 60 percent of the First State's drinking water supply.

Jerry was named Employee of the Year in New Jersey for hydraulic research that prevented \$20 million in water damage to highway pavements and in 1992 was awarded a national floodplain fellowship from the Association of State Floodplain Managers for design of a greenway in the Flint Creek watershed northwest of Chicago, Illinois. In 2002 Jerry received a University of Delaware Merit Award for leading a state-wide water supply initiative in Delaware. In 2004, the Water Resources Association of the Delaware River Basin awarded Jerry the Samuel L. Baxter Memorial Award for contributions in water management as Delaware's first Water Coordinator. In 2009, Jerry received the Conservationist of the Year Award from the Delaware Nature Society for commitment in protecting Delaware's water resources. Jerry lives in Newark, Delaware near the White Clay Creek National Wild and Scenic River.

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## **EDUCATION**

Doctor of Philosophy (Ph.D.). Topic: River Basin Governance, Policy, and Economics University of Delaware, College of Earth, Ocean, and Environment, School of Marine Science and Policy. Newark, DE.	2014
Master of Public Administration (MPA). Specialization: Water Policy. University of Delaware, School of Urban Affairs and Public Policy. Newark, DE.	2003
Certified Public Manager (Level III). Rutgers University, Graduate Program in Public Administration. New Brunswick, NJ.	1988
Bachelor of Science, Civil and Environmental Engineering (BSCE), Concentration: Water Resources, Rutgers University, College of Engineering. New Brunswick, NJ.	1981

#### PROFESSIONAL AND ACADEMIC POSITIONS

Director, University of Delaware, Water Resources Center. Newark, DE.	2003-present
Associate Professor, University of Delaware. Newark, DE. Joseph R. Biden, Jr. School of Public Policy & Administration	2021-present
Assistant Professor, University of Delaware. Newark, DE.	2016
Department of Geography & Spatial Sciences	2016-present
Department of Civil & Environmental Engineering	2015-present
Joseph R. Biden Jr. School of Public Policy & Administration	2014-2021
Water Resources Agency for New Castle County. Newark, DE.	1993-2003
Donohue and Associates, Inc., Consulting Water Resources Engineers. Chicago, IL.	1989-1993
New Jersey Department of Transportation. Bureau of Hydraulic Research. Trenton, NJ.	1981-1989
Remington and Boyd, Consulting Municipal Engineers. Pennsauken, NJ.	1977-1981

#### **REGISTRATIONS**

Licensed Professional Engineer (PE): New Jersey, Wisconsin, Illinois, and Delaware

# **APPOINTMENTS**

Board Member, National Institutes for Water Resources (NIWR). Washington, D.C.	2021-present
Board Member, Universities Council on Water Resources (UCOWR). Southern Illinois University. Carbondale, IL	2019-present
Science Review Panel, Climate and Societal Interactions, Coastal and Oceans Climate Applications (COCA), National Oceanic and Atmospheric Administration (NOAA).	2019-present
Science Review Panel, U. S. Department of Agriculture, National Institute for Food and Agriculture (NIFA), Water and Food Production. Washington, DC.	2017-present
Admissions Committee, Graduate Program in Water Science and Policy. University of Delaware. Newark, DE.	2014-present
Clean Water and Flood Abatement Task Force, Delaware General Assembly, Senate Resolution 30. Dover, DE.	2015-Present
Delaware Climate Change Impact Assessment Steering Committee, Convened by the Secretary of the Delaware DNREC). Dover, DE.	2012-2015
Vice Chair, Water Supply Use Charge Committee, Delaware River Basin Commission. West Trenton, NJ.	2011-2014
Board Member, Partnership for the Delaware Estuary, Wilmington, Delaware.	2010-2015
Board Member, Partnership for the Delaware Estuary, Wilmington, Delaware.  Partnership for the Delaware Estuary, Science & Technical Advisory Committee (STAC).	
Partnership for the Delaware Estuary, Science & Technical Advisory Committee (STAC).	2010-2019
Partnership for the Delaware Estuary, Science & Technical Advisory Committee (STAC).  University of Delaware, Undergraduate Environmental Academic Affairs Council.  State Water Coordinator, appointed by the Governor and General Assembly,	2010-2019 2009-present
Partnership for the Delaware Estuary, Science & Technical Advisory Committee (STAC).  University of Delaware, Undergraduate Environmental Academic Affairs Council.  State Water Coordinator, appointed by the Governor and General Assembly, Delaware Water Supply Coordinating Council Act.  Co-chair, Christina Basin Clean Water Partnership, a program of the EPA,	2010-2019 2009-present 2000-present
Partnership for the Delaware Estuary, Science & Technical Advisory Committee (STAC).  University of Delaware, Undergraduate Environmental Academic Affairs Council.  State Water Coordinator, appointed by the Governor and General Assembly, Delaware Water Supply Coordinating Council Act.  Co-chair, Christina Basin Clean Water Partnership, a program of the EPA, Delaware River Basin Commission, Delaware, and Pennsylvania.  Resource Protection Area Technical Advisory Committee (RPATAC), appointed by	2010-2019 2009-present 2000-present 1995-present
Partnership for the Delaware Estuary, Science & Technical Advisory Committee (STAC).  University of Delaware, Undergraduate Environmental Academic Affairs Council.  State Water Coordinator, appointed by the Governor and General Assembly, Delaware Water Supply Coordinating Council Act.  Co-chair, Christina Basin Clean Water Partnership, a program of the EPA, Delaware River Basin Commission, Delaware, and Pennsylvania.  Resource Protection Area Technical Advisory Committee (RPATAC), appointed by the County Executive under the New Castle County Unified Development Code.  Co-chair, White Clay Creek National Wild & Scenic River Watershed Management	2010-2019 2009-present 2000-present 1995-present 1996-2021

Faculty Advisor, University of Delaware Club Baseball Team.	2004-2007
President, Newark American Little League, Newark, DE.	2001-2002
AWARDS	
Conservationist of the Year Award. Delaware Nature Society. Ashland, Delaware.	2009
Samuel L. Baxter Memorial Award. Water Resources Association for the Delaware River Basin. Philadelphia, Pennsylvania.	2004
University of Delaware Professional Merit Award. Newark, Delaware.	2002
Flood Hazard Fellowship Award, Flint Creek Greenway. Association of State Floodplain Managers. Barrington, Illinois.	1992
Employee of the Year. New Jersey Department of Transportation, Bureau of Hydraulic Research. Trenton, New Jersey.	1988
Performance Suggestion Award. New Jersey Department of Transportation, Bureau of Hydraulic Research. Trenton, New Jersey.	1988

#### **TEACHING**

CIEG 440 Water Resources Engineering (3 cr.). University of Delaware, Department of Civil & Environmental Engineering. 2001-present.

CIEG 443/643 Watershed Engineering, Planning, and Design (3 cr.). University of Delaware, Department of Civil & Environmental Engineering. 2004-2009.

GEOG 432/632 Environmental Hydrology (3 cr.), University of Delaware, Department of Geography and Spatial Sciences. 2016 and 2020.

LEAD 201 Introduction to Consumer Policy (3 cr.). University of Delaware, School of Urban Affairs and Public Policy. 2006.

UAPP 411/611 Regional Watershed Management (3 cr.). University of Delaware, Biden School of Public Policy & Administration. 1999-present.

UAPP 467/667 Environmental Resources and Public Policy (3 cr.). University of Delaware, School of Public Policy & Administration. 2011.

# **SELECTED GRANTS/EXTERNAL SUPPORT**

U. S. Fish and Wildlife Service, Delaware River Basin Conservation Act, Brandywine Shad 2020 Restoration, 2019 (\$241,000).

Delaware National Estuarine Reserve, Economic Value of Delaware Wetlands, 2017 (\$24,116).

U.S. Geological Survey, Water Resources Research Act, National Institutes for Water Resources, 2020 (\$125,000).

William Penn Foundation, Brandywine/Christina Healthy Watershed Fund, Water Fund, 2014-2019 (\$476,000

Delaware Center for Transportation, Worse Case Effects of Hurricanes and Severe Storms on Delaware Transportation Infrastructure, 2017.

American Rivers/National Oceanic and Atmospheric Administration, White Clay Creek Shad Restoration Project, 2013 (\$41,000).

New Castle County Department of Planning, 2018.

City of Wilmington, Department of Public Works, Water Department, 2018.

City of Newark, Department of Water and Public Works, 2018.

Delaware DNREC Division of Watershed Stewardship, Watershed Planning & Policy, 2018.

Partnership for the Delaware Estuary, State of the Delaware Estuary, 2011 (\$25,000).

National Park Service, White Clay Creek National Wild and Scenic River, 2011 (\$10,000)

FishAmerican Foundation/NOAA, White Clay Creek Shad Restoration Project, 2010 (\$39,000).

William Penn Foundation/Delaware River Basin Commission, State of Delaware Basin, 2005 (\$50,000).

Environmental Protection Agency, Christina Basin Targeted Watershed Grant, 2004 (\$1,000,000)

Environmental Protection Agency, New Castle County Watershed Plan, 2004 (\$25,000).

Environmental Protection Agency, Safe Drinking Water Act, 2003 (\$25,000).

Environmental Protection Agency, Christina Basin TMDL Monitoring, 2003 (\$37,000).

National Park Service, White Clay Creek National Wild & Scenic River, 2003 (\$21,000).

Delaware Water Supply Coordinating Council, 2000 (\$60,000).

Environmental Protection Agency, Christina Basin Clean Water Partnership, 1998 (\$45,000).

#### **MEMBERSHIPS**

American Geophysical Union (AGU)

American Water Resources Association (AWRA)

National Institutes for Water Resources (NIWR)

Universities Council on Water Resources (UCOWR)

# **BOOKS/CHAPTERS**

- 1. Kauffman, G. J., draft 2021. Invitation to Watershed Management. John Wiley and Sons. Oxford, U.K. 431 pp.
- 2. Kauffman, G. M., 2020. Chapter 3: Watershed Ecology. The Delaware Naturalist Handbook: Cultural Studies of Delaware and the Eastern Shore. Mckay Jenkins and Susan Barton, editors. University of Delaware Press. Distributed by the University of Virginia Press. Newark, Delaware. 59-82.
- 3. Kauffman, G. J. and M. R. Gallagher, 2013. The British Invasion of Delaware, 1777. Lulu Press. Newark, Delaware. 98 pp.
- 4. Brant, J. and G. J. Kauffman, 2011. Water Resources and Environmental Depth Reference Manual for the Civil PE Exam. Professional Publications, Inc. Belmont, California. 403 pp.
- 5. Kauffman, G. J., 2009. Water Supply: The History of Newark's Life Source. University of Delaware, Institute for Public Administration, College of Education and Public Policy. Contribution by Martin W. Wollaston. 38 pp.
- 6. Kauffman, G. J. and M. W. Wollaston, 2007. Along the Fall Line. Histories of Newark, 1758-2008. Wallflowers Press. Newark, Delaware. p. 137.
- 7. Kauffman, G. J., 1998. Chapter 16: Anatomy of a Drought. Watershed Management, Practice, Policies, and Coordination. R. J. Reimold, editor. McGraw Hill. 313-331.

#### **ARTICLES**

- 1. Kauffman, G. J., B. Diacopoulis, A. R. Homsey, and M. B. Narvaez, draft 2021. Water Resources Planning and Management in the National Park System. Journal of Contemporary Water Research and Education (JCWRE). Universities Council on Water Resources (UCOWR). 25 pp.
- 2. Kauffman, G. J., 2020. Benefit-Cost Analysis of Water Quality Policy and Criteria in the Delaware River. Water Policy. Journal of the World Water Council. 22:313-327.
- 3. Kauffman, G. J., 2019. Economic Benefits of Improved Water Quality in the Delaware River (USA). River Research and Applications. 35:1652-1665.
- 4. Kauffman, G. J. and C. Collier, 2018. The Great American Megabasin: Chesapeake and Delaware. Water Resources Impact. American Water Resources Association. 20(5):6-9.

- 5. Kauffman, G. J., 2018. The Cost of Clean Water in the Delaware River Basin (USA). Journal of Water. (10)2, 95:1-21. doi:10.3390/w10020095.
- 6. Kauffman, G. J., 2016. Economic Value of Nature and Ecosystems in the Delaware River Basin. Journal of Contemporary Water Research and Education (JCWRE). Universities Council on Water Resources (UCOWR). 158:98-119.
- 7. Kauffman, G. J., 2015. Governance, Policy, and Economics of Intergovernmental River Basin Management. Water Resources Management: 29(15): 5689-5712.
- 8. Kauffman, G. J. and A. R. Homsey, 2016. Economic Value of Marcellus Shale Gas in the Delaware Basin. Journal of Environmental Solutions for Oil, Gas, and Mining. 2(1):33-69.
- 9. Kauffman, G. J. and K. J. Vonck, 2011. Frequency and Intensity of Extreme Drought in the Delaware Basin, 1600 2002. Water Resources Research. 47:1-13.
- 10. Kauffman G. J., A. R. Homsey, A. C. Belden, and J. R. Sanchez, 2011. Water Quality Trends in the Delaware River Basin (USA) from 1980 to 2005. Environmental Monitoring and Assessment. 177:193-225.
- 11. Kauffman, G. J. and A. C. Belden, 2010. Water Quality Trends (1970 to 2005) along Delaware Streams in the Delaware and Chesapeake Bay Watersheds, USA. Journal of Water, Air, and Soil Pollution. 208:345-375.
- 12. Kauffman, G. J., 2010. The Delaware River Revival: Four Centuries of Historic Water Quality Change from Henry Hudson to Benjamin Franklin to JFK. Pennsylvania History, A Journal of Mid-Atlantic Studies. 77(4):432-465.
- 13. Kauffman, G. J., A. C. Belden, K. J. Vonck, and A. R. Homsey, 2009. Link between Impervious Cover and Base Flow in the White Clay Creek Wild and Scenic Watershed in Delaware. Journal of Hydrologic Engineering. American Society of Civil Engineers. Special Issue: Impervious Surfaces in Hydrologic Modeling and Monitoring. 14(4):324-334.
- 14. Grehl, E. and G. Kauffman, 2007. The University of Delaware Rain Garden: Environmental Mitigation of a Building Footprint. Journal of Green Building. 2(1):53-67.
- 15. Kauffman, G. J., 2007. Perspectives on Ethics and Water Policy in Delaware. Journal of Philosophical Research. Special issue: Ethics and the Life Sciences. 32:93-126.
- 16. Kauffman, G. J., M. B. Corrozi, and K. J. Vonck, 2006. Imperviousness: A Performance Measure of a Delaware Water Resource Protection Area Ordinance. Journal of the American Water Resources Association. 42(3):603 616.
- 17. Kauffman, G. J., 2003. Governance in Public Administration. Book Review: Public Performance and Management Review. 7:2.

- 18. Kauffman, G. J., 2002. What if ... the United States of America were based on Watersheds? Journal of Water Policy. 4:57-68.
- 19. Kauffman, G. J., 2001. The Ethical Dilemma of the Public Natural Resources Manager. Public Administration (PA) Times. American Society for Public Administration. 4(8).
- 20. Kauffman, G. J. and T. Brant, 2000. The Role of Impervious Cover as a Watershed-Based Zoning Tool to Protect Water Quality in the Christina River Basin of Delaware, Pennsylvania, and Maryland. Proceedings of the Water Environment Federation. Watershed Management 2000. 6:1656-1667.

## **REPORTS**

- 1. Kauffman, G. J., A. R. Homsey and K. Jacobs, draft 2021. Economic Value of the Delaware Inland Bays Watershed. Prepared for the Delaware Center for Inland Bays. Rehoboth, Delaware. 45 pp.
- 2. Kauffman, G. J., A. R. Homsey, and K. Jacobs, 2020. Economic Value of the Nanticoke River Watershed in Delaware and Maryland. Nanticoke Watershed Alliance. Vienna, Maryland. 46 pp.
- 3. Kauffman, G.J. and A. R. Homsey, 2020. White Paper-Southern New Castle County Wastewater Plan. New Castle County Department of Public Works. 36 pp.
- 4. Kauffman, G.J. and A. R. Homsey, 2018. Economic Value of the Maryland Coastal Bays Watershed in Delaware, Maryland, and Virginia. Prepared for the Maryland Coastal Bays Program. Berlin, Md. 55 pp.
- 5. Kauffman, G. J., 2018. Socioeconomic Value of Delaware Wetlands. Report to the Delaware National Estuarine Research Reserve. Dover, Del. 32 pp.
- 6. Kauffman, G. J., draft 2017. Governance and Financial Options Report, Brandywine Christina Healthy Water Fund. Report to the William Penn Foundation. 98 pp.
- 7. Kauffman, G., D. Racca, E. Best, R. King, A. Homsey, and J. Martin, 2017. Worst Case Effects of Hurricanes, Fluvial Flooding, High Tides, and Sea Level Rise on DelDOT Assets. DelDOT Project No. 1739-9. University of Delaware, Center for Applied Demography and Survey Research and Water Resources Center.
- 8. Kauffman, G. J. and A. R. Homsey, 2017. Thirteenth Report to the Governor and General Assembly Regarding the Progress of the Delaware Water Supply Coordinating Council, Estimates of Water Supply and Demand in Northern New Castle County through 2030. 12 pp.
- 9. Kauffman, G. J., 2015. Final Report White Clay Creek Wild and Scenic River Shad Restoration Project (Removal of Byrnes Dam No. 1). Prepared for American Rivers and National Oceanic and Atmospheric Administration (NOAA). 114 pp.
- 10. Narvaez, M., G. Kauffman, A. Homsey, E. Kohler, R. Jones, and B. Boutin, 2015. Brandywine Christina Healthy Water Fund, Preliminary Feasibility Study. Report to the William Penn Foundation. 209 pp.

- 11. Kauffman, G. J. and A. R. Homsey, 2013. Twelfth Report to the Governor and General Assembly Regarding the Progress of the Delaware Water Supply Coordinating Council, Estimates of Water Supply and Demand for Kent County and Sussex County through 2030. 62 pp.
- 12. Sanchez, J. R., G. J. Kauffman, K. Reavey, and A. Homsey, 2012. Chapter 1 Watersheds & Landscapes in the Technical Report for the Delaware Estuary & Basin. Partnership for the Delaware Estuary. PDE Report No. 12-01. 14-47.
- 13. Kauffman, G.J. and Catherine Cruz Ortiz, 2012. Economic Value of the Barnegat Bay Watershed. Prepared for the Barnegat Bay Partnership. 46 pp.
- 14. Kauffman, G. J. and A. R. Homsey, 2011. The Delaware Floodplain. 13 pp.
- 15. Kauffman, G. J., 2011. Socioeconomic Value of the Delaware River Basin in Delaware, New Jersey, New York, and Pennsylvania. 99 pp.
- 16. Kauffman, G. J., 2011. Project Report -White Clay Creek Wild and Scenic River Shad Restoration Project. (Removal of Dam No. 1). Prepared for Fish America Foundation. 107 pp.
- 17. Kauffman, G. J., draft 2011. Economic Value of Stormwater in Delaware. Prepared for Delaware Department of Natural Resources and Environmental Control. 60 pp.
- 18. Kauffman, G. J., A. Homsey, E. McVey, S. Mack, and S. Chatterson, 2011. Economic Value of the Delaware Estuary Watershed. Prepared for Partnership for the Delaware Estuary. 67 pp.
- 19. Kauffman, G. J., A. Homsey, E. McVey, S. Mack, and S. Chatterson, 2011. Socioeconomic Value of the Chesapeake Bay Watershed in Delaware. Prepared for Delaware Department of Natural Resources and Environmental Control, Division of Watershed Stewardship. 40 pp.
- 20. Kauffman, G. J., S. Lovell, J. Talley, and S. Baxter, 2011. Eleventh Report to the Governor and General Assembly Regarding the Progress of the Delaware Water Supply Coordinating Council, Estimates of Water Supply and Demand for Kent County and Sussex County through 2030. 12 pp.
- 21. Kauffman, G. J. and A. R. Homsey, 2011. Report on Water Resource Protection Areas in New Castle County, Delaware. Prepared for New Castle County Department of Planning and Department of Special Services, New Castle, Del. 143 pp.
- 22. Narvaez, M. C., G. J. Kauffman, R. Lonsdorf, and M. H. S. Nelson, 2010. Restoration of Shad and Anadromous Fish to the White Clay Creek National Wild and Scenic River: A Feasibility Report. Prepared for the National Fish and Wildlife Foundation. 101 pp.
- 23. Kauffman, G. J., A. Homsey, M. C. Narvaez, S. Chatterson, E. McVey, and S. Mack, 2010. Christina Basin Trends, 1995-2010. Prepared for the Christina Basin Clean Water Partnership. 47 pp.
- 24. Kauffman, G. J., 2010. City of Newark SWMM Sanitary Sewer Model. Prepared for City of Newark Water and Wastewater Department, Newark, Del. 32 pp.

- 25. Kauffman, G. J. and A. Homsey, 2009. Stormwater Utility Feasibility Report for City of Newark, Delaware: Stormwater is Drinking Water. 23 pp.
- 26. Kauffman, G. J., December 2009. Clean Water is Good Business in the Christina Basin A White Paper. For consideration by the Christina Basin Clean Water Partnership. 65 pp.
- 27. Kauffman, G., A. Belden, A. Homsey, M. Porter, A. Zarnadze, J. Ehrenfeld, S. Stanwood, L. Sherwin, J. Farrell, D. DeWalle, C. Cole, 2008. Technical Summary: State of the Delaware Basin Report. University of Delaware, Cornell University, Rutgers University, and Pennsylvania State University for the Delaware River Basin Commission and Partnership for the Delaware Estuary. 195 pp.
- 28. Corrozi, M. B., A. R. Homsey, and G. J. Kauffman, 2008. White Clay Creek State of the Watershed Report. Prepared for the White Clay Creek Wild and Scenic River Watershed Management Committee and U. S. National Park Service. 40 pp.
- 29. Kauffman, G. J., M. W. Wollaston, K. Donnelly, S. Lovell, J. Talley, and S. Baxter, 2008. Tenth Report to the Governor and General Assembly Regarding the Progress of the Delaware Water Supply Coordinating Council, Two Billion Gallons of Water Storage Implemented Since the Drought of 1999. 19 pp.
- 30. Kauffman, G. J., K. Campbell, and J. Trick, 2008. City of Newark Water Distribution Network Model. Prepared for City of Newark Water and Wastewater Department, Newark, Del. 46 pp.
- 31. Corrozi, M. B. and G. J. Kauffman, 2007. Christina Basin Pollution Control Strategy. Prepared for the Delaware Department of Natural Resources and Environmental Control on behalf of the Christina Basin Tributary Action Team. 212 pp.
- 32. Kauffman, G., A. Homsey, and L. Schnick, 2006. Southern New Castle County Priority Watershed Strategy. Prepared for New Castle County Department of Planning. 40 pp.
- 33. Kauffman, G. J., K. J. Vonck, and others, 2006. Ninth Report to the Governor and General Assembly Regarding the Progress of the Delaware Water Supply Coordinating Council, Estimates of Water Supply and Demand in Southern New Castle County through 2030.
- 34. Kauffman, G. J., K. J. Vonck, and others, 2006. Eighth Report to the Governor and General Assembly Regarding the Progress of the Delaware Water Supply Coordinating Council, Updated Water Supply and Demand Projections for Northern New Castle County.
- 35. Kauffman, G. J., K. J. Vonck, and others, 2005. Seventh Report to the Governor and General Assembly Regarding the Progress of the Delaware Water Supply Coordinating Council, Northern Delaware Drought Operating Plan.
- 36. Kauffman, G. J. and K. J. Vonck, 2005. Optimization of Minimum Instream Flow Needs along the White Clay Creek in Delaware. Delaware Water Supply Coordinating Council.
- 37. Kauffman, G. J., M. B. Corrozi, and M. Williams, 2004. Synthesis of Water Rates in Delaware and Contiguous States.

- 38. Kauffman, G. J., K. Sentoff, and K. J. Vonck, 2004. Annual Water Budget for the Cockeysville Formation: For the Hockessin Village Plan. Prepared for the New Castle County Department of Land Use. New Castle, Del.
- 39. Kauffman, G. J., K. J. Vonck, and others, 2004. Sixth Report to the Governor and General Assembly Regarding the Progress of the Delaware Water Supply Coordinating Council.
- 40. Kauffman, G. J., S. L. Wozniak, and K. J. Vonck, 2004. Delaware Ground-Water Recharge Design Manual. Delaware Department of Natural Resources and Environmental Control.
- 41. Kauffman, G. J., M. W. Wollaston, S. L. Wozniak, and K. J. Vonck, 2004. Source Water Protection Guidance Manual for the Local Governments of Delaware. Delaware Department of Natural Resources and Environmental Control and Delaware General Assembly.
- 42. Kauffman, G. J. (editor), 2003, Proceedings of Delaware Policy Forum: Land Use Change and Water Quality: Assessing the Impacts and Planning for the Future October 2, 2003. Sponsored by University of Delaware Institute for Public Administration, Delaware Department of Natural Resources and Environmental Control, Delaware Geological Survey and Delaware Water Resources Center.
- 43. Kauffman, G. J., S. L. Wozniak, and K. J. Vonck, 2003. A Watershed Restoration Action Strategy (WRAS) for the Delaware Portion of the Christina Basin. Prepared for Christina Basin Clean Water Partnership.
- 44. Kauffman, G. J., 2003. Development of a Dam Safety Program for the State of Delaware. Prepared for Federal Emergency Management Agency, Delaware Emergency Management Agency, and Delaware Department of Natural Resources and Environmental Control.
- 45. Donnelly, K., S. Lovell, S., J. H. Talley, S. Baxter, S. L. Wozniak, K. J. Vonck, and G. J. Kauffman, 2003. Fifth Report to the Governor and the General Assembly Regarding the Progress of the Delaware Water Supply Coordinating Council, the Drought of 2002.
- 46. Kauffman, G. J., M. B. Corrozi, and K. J. Vonck, 2002. A GIS Performance Evaluation of the New Castle County, Delaware Water Resource Protection Area Ordinance. Proceedings of the American Water Resources Association Specialty Conference, Keystone, CO, July 2002. 6 pp.
- 47. Kauffman, G. J. (editor), 2002. Proceedings of DROUGHT.02: A Debate and Panel Discussion Concerning Water Supply Policy in Delaware, A Delaware Public Policy Forum, October 9, 2002. Sponsored by University of Delaware, Institute for Public Administration in cooperation with the Delaware Department of Natural Resources and Environmental Control and Delaware Water Resources Center.
- 48. Kauffman, G. J., M. W. Wollaston, J. H. Talley, and S. Lovell, 2002. Fourth Report to the Governor and the State Legislature Regarding the Progress of the Delaware Water Supply Coordinating Council.

- 49. Kauffman, G. J. and M. W. Wollaston, 2002. Source Water Assessment of the City of Wilmington, Delaware Public Water Supply Intake Located on the Brandywine Creek. Delaware Source Water Assessment and Protection Program. Prepared for the Delaware Department of Environmental Protection & Environmental Control.
- 50. Kauffman, G. J. and M. W. Wollaston, 2002. Source Water Assessment of the United Water Delaware at Smalley's Pond Water Supply Intake Located on the Christina River. Delaware DNREC Source Water Assessment and Protection Program.
- 51. Kauffman, G. J. (editor), 2001. Proceedings of Drinking Water 2001: The Issues Concerning Delaware's Most Precious Natural Resource, A Delaware Public Policy Forum, October 11, 2001. Sponsored by: University of Delaware, Institute for Public Administration in cooperation with the Delaware Department of Natural Resources and Environmental Control.
- 52. Kauffman, G. J., M. Wollaston, J. H. Talley, and S. Lovell, 2001. Third Report to the Governor and the State Legislature Regarding the Progress of the Delaware Water Supply Coordinating Council.
- 53. Campagnini, J. and G. J. Kauffman, 2001. Development of the University of Delaware Experimental Watershed Project. Proceedings of the American Water Resources Association/Universities Council on Water Resources Conference, July 2001. Snowbird, UT. 81-86.
- 54. Kauffman, G.J., M. W. Wollaston, J. H. Talley, and S. Lovell, 2001. Second Report to the Governor and the State Legislature Regarding the Progress of the Delaware Water Supply Coordinating Council.
- 55. Talley, J. H., M. W. Wollaston, and G. J. Kauffman, 2000. The Drought of 1999: The Efforts of the Governor's Water Supply Task Force in Delaware, Proceedings of the American Water Resources Association Conference, Nov 2000. Miami, Fla. 249-253.
- 56. Kauffman, G. J. and K. Ali, 2000. Economic Synthesis of Water Rates in Delaware and Surrounding River Basins.
- 57. Brant, T. and G. J. Kauffman, 2000. The Role of Impervious Cover as a Watershed-based Zoning Tool to Protect Water Quality in the Christina Basin of Delaware, Pennsylvania, and Maryland. Proceedings of the Water Environment Federation, Watershed Management 2000 Conference, Jul 2000, Vancouver, B.C. 13 pp.
- 58. Kauffman, G. J., M. W. Wollaston, J. H. Talley, S. Lovell, and M. Headd, 2000. Report to the Governor and the State Legislature Regarding the Progress of the Delaware Water Supply Coordinating Council.
- 59. Kauffman, G. J., M. W. Wollaston, J. H. Talley, S. Lovell, and M. Headd. 1999. Final Report of the Governor's Water Supply Task Force (Drought of 1999).
- 60. Yaeck, D., S. Lovell, and G. J. Kauffman., 1999. Instream Flow Needs Analysis for Northern New Castle County, Delaware, Phase III: Water Supply Operating Plan Hoopes Reservoir, City of Wilmington, Del.

- 61. Greig, D., J. Bowers, and G. J. Kauffman., 1999. Phase III Report Christina Basin Water Quality Management Strategy. Prepared for Christina Basin Clean Water Partnrship.
- 62. Greig, D., J. Bowers, and G. J. Kauffman. 1998. Phase I and II Report Christina Basin Water Quality Management Strategy. Prepared for Christina Basin Clean Water Partnership.
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- 66. Kauffman, G. J., 1992. The Flint Creek Greenway Plan. Association of State Floodplain Managers Flood Hazard Fellowship, Barrington, Ill.
- 67. Kauffman, G. J. and V. Mottola, 1988. Eight-Year Performance Evaluation of Subsurface Drainage Research in New Jersey. Transportation Research Board.
- 68. Mottola, V. and G. J. Kauffman. 1986. Evaluation of Bridge Structural Coatings. Steel Structures Painting Council.
- 69. Ahmed, N. and G. J. Kauffman, 1983. New Jersey Flood Control Master Plan. New Jersey Department of Environmental Protection, Trenton, NJ.
- 70. Ahmed, N. and G. J. Kauffman, 1983. Technical Manual for Stream Encroachment in New Jersey. New Jersey Department of Environmental Protection, Trenton, NJ.

#### **COLUMNS**

- 1. Kauffman, G., July 14, 2017. Clean Water Keeps States Safe. The News Journal. Wilmington, Del.
- 2. Kauffman, J. and R. Jones, March 12, 2014. First State's Future Depends on Healthy Water. The News Journal. Wilmington, Del.
- 3. Kauffman, G., October 27, 2013. The Delaware is an Economic, Ecological Treasure. The Philadelphia Inquirer. Philadelphia, Pa.
- 4. Kauffman, G. J., September 4, 2012. The Beauty of the Historic Brandywine Valley. The News Journal, Wilmington, Del.

- 5. Kauffman, G. J., August 3, 2010. Delaware Estuary Needs Renewed Focus, Protection. The News Journal, Wilmington, Del.
- 6. Kauffman, G. J., April 3, 2009. Economics of Water in Delaware. The News Journal. Wilmington, Del.
- 7. Kauffman, G. J., December 20, 2007. Extreme Storms are call for Air Quality Improvement. The News Journal. Wilmington, Del.
- 8. Kauffman, G. J., July 18, 2004. Watershed Moments Continue: Christina Basin's Importance is Undeniable. The News Journal. Wilmington, Del.
- 9. Kauffman, G. J., March 17, 2002. Politics Muddies Water. The News Journal. Wilmington, Del.
- 10. Kauffman, G. J., June 3, 2001. Bank on Standards to Save Delaware's Gold Coast. The News Journal. Wilmington, Del.
- 11. Kauffman, G., January 20, 2001. Like the Teams, Cities Also Must Compete. Philadelphia Daily News. Philadelphia, Pa.
- 12. Kauffman, G. J. February 2000. Top 10 Environmental Predictions for Delaware. The News Journal. Wilmington, Del.
- 13. Kauffman, G. J. Oct/Nov 1996. Christina River Basin States Work Together to Solve Nonpoint Source Pollution. U.S. Environmental Protection Agency Nonpoint Source News-Notes. Issue No. 46.

# **SEMINARS/PRESENTATIONS**

- 1. Brandywine Shad 2020. December 15, 2020. Upstream Alliance Seminar. Philadelphia, PA.
- 2. Brandywine Christina State of the Watershed. December 4, 2020. Brandywine Christina Task Force. West Chester, PA.
- 3. Brandywine and the Piedmont: Restoration and Revival of America's Most Historic Small Watershed. June 11, 2019. Universities Council on Water Resources (UCOWR)/National Institutes for Water Resources (NIWR) Annual Water Resources Conference. Snowbird, UT.
- 4. Water Quality Trends in the Brandywine Christina Cluster along the Arc Boundary of Delaware. November 29, 2018. Delaware Watershed Research Conference. Academy of Natural Sciences. Philadelphia, PA.
- 5. Waters of the United States (WOTUS) and Supreme Court of the United States (SCOTUS). October 18, 2018. School of Public Policy & Administration (SPPA) Research Seminar. University of Delaware. Newark, DE.
- 6. River Basin Finance and Economics in a Mid-Atlantic Watershed. June 27 2018. Universities Council on Water Resources (UCOWR)/National Institutes for Water Resources (NIWR) Annual Water Resources Conference. Pittsburgh, PA.

- 7. Brandywine Christina: America's Most Historic Small Watershed. May 3, 2018. Clean Water: A Bi-State Solution. Sponsored by the Brandywine Conservancy, Brandywine Red Clay Alliance, Natural Lands, The Nature Conservancy, Stroud Water Research Center, University of Delaware Water Resources Center. Mendenhall, PA.
- 8. Hydropolitics: Challenges in Intergovernmental River Basin Management. March 5, 2018. Universities Council on Water Resources (UCOWR) Water Seminar. Southern Illinois University. Carbondale, IL.
- 9. Dam Buster: Restoration of Anadromous Fish to the White Clay Creek National Wild and Scenic River. November 29, 2017. NOAA Restoration Webinar Series.
- **10.** Catchments, Watersheds, and Basins: Global Governance and Policy of International River Science. November 19, 2017. Fifth Biennial Symposium of the International Society for River Science. Hamilton, New Zealand.
- 11. Governance, Policy, and Economics of Clean Water in the Delaware River Basin in Delaware, New Jersey, New York, and Pennsylvania. June 15, 2017. Proceedings of the 2017 UCOWR/NIWR Annual Conference "Water in a Changing Environment". Ft. Collins, CO.
- 12. Economics of a Megabasin: Delaware and Susquehanna. November 11, 2016. 11<sup>th</sup> Annual Susquehanna River Symposium. Bucknell University. Watershed Sciences and Engineering Program. Lewisburg, PA.
- 13. Delaware: The Water State. January 5, 2015. The Garden Club of Wilmington. Greenville, DE
- 14. White Clay Creek National Wild and Scenic River Shad Restoration Project. April 27, 2015. University of Delaware. Interdisciplinary Science and Engineering Laboratory Series. Earth, Equity, Environment Lecture. Newark, DE.
- 15. Benefit-Cost Analysis of Source Water Protection in the Brandywine Christina Watershed in Delaware and Pennsylvania. February 20, 2015. Department of Civil and Environmental Engineering Seminar. University of Delaware. Newark, DE.
- 16. Toward Innovative Approaches for Improving Water Quality: Linking Eco-Hydrology with Ecosystem Services at the Watershed Scale (with Luc Claessens). January 27, 2015. Delaware Estuary Science and Environmental Summit 2015. Partnership for the Delaware Estuary. Cape May, NJ.
- 17. The Brandywine-Christina Healthy Watershed Fund: Clean Water is Good Business. November 6, 2014. Annual Conference of the American Water Resources Association (AWRA). Vienna, VA.
- 18. Restoration of the American Shad on the White Clay Creek. October 16, 2014. Science Café. Center for Science, Ethics, and Public Policy. University of Delaware. Newark, DE.
- 19. Keynote Speaker. Water Infrastructure Investment: Science, Policy, and Economics. September 24, 2014. Mid-Atlantic Regional Water Conference. Sponsored by the Water Resources Institutes of

- Cornell, Rutgers, Penn State University, University of Delaware, University of Maryland, University of District of Columbia, Virginia Tech, and West Virginia University. Shepherdstown, WV.
- 20. Delaware River, Inc.: What if the Delaware River was Managed as a Business? September 9, 2014. Delaware River Watershed Initiative Seminar. Academy of Natural Sciences at Drexel University. Philadelphia. PA.
- 21. Keynote Speaker: What's a Watershed Worth? June 13, 2014. 6<sup>th</sup> Annual Sustainable Raritan River Conference. Valuing Natural Capital and Ecosystem Services. Cook College Student Center. Rutgers University. New Brunswick, NJ.
- 22. Keynote Speaker. The Economic Value of the Barnegat Bay. March 28, 2014. Barnegat Bay Business Forum. Organized by the Barnegat Bay Partnership. Ocean County College. Toms River, NJ.
- 23. Keynote Speaker. The Delaware River Redux. October 29, 2013. Accelerating Action: The Forum for the Delaware River Watershed. Academy of Natural Sciences and William Penn Foundation. Philadelphia, PA.
- 24. Keynote Speaker. Natural Economies Conference. May 14, 2013. Common Waters and the Pinchot Foundation. Matamoras, Pa.
- 25. Congressional Briefing. Delaware River Basin Conservation Act. December 6, 2012. Northeast-Midwest Institute. Washington, D.C.
- 26. Benefit-Cost Analysis of Improved Water Quality in the Delaware Basin. Nov 14, 2012 Annual Conference of the American Water Resources Association. Jacksonville, FLA.
- 27. Keynote Speaker. Economic Value of the Delaware River Basin. October 11, 2012. Common Waters Conference. Easton, PA.
- 28. Save the Shad. September 25, 2012. White Clay Creek National Wild and Scenic River Symposium. Avondale, PA.
- 29. Keynote Speaker. Delaware Source Water Protection Collaborative Webinar. May 10, 2012. U.S. Environmental Protection Agency, Region 3. Philadelphia, PA.
- 30. Keynote Speaker. Wetlands Are Green and Good as Gold. February 29, 2012. Delaware Wetlands Conference. Dover, DE.
- 31. Keynote Speaker. White Clay Creek Wild and Scenic River Shad Restoration. December 7, 2011. Friends of the White Clay Creek State Park. Annual Meeting. Milford Crossroads, DE.
- 32. Economic Value of the Delaware Estuary Watershed. November 17, 2011. Academy of Natural Sciences. Philadelphia, PA.
- 33. Estuaries as Economic Engines. November 1, 2011. New York-New Jersey Harbor Estuary Program. U.S. Environmental Protection Agency, Region 3. New York, NY.

- 34. Keynote Speaker. The Very Historic Brandywine Valley. October 20, 2011. Annual Meeting of the Brandywine Valley Association. Mendenhall, PA.
- 35. Economic Value of the Delaware River Basin. October 19, 2011. 50<sup>th</sup> Anniversary of the Delaware River Basin. Shawnee, PA.
- 36. Keynote Speaker. Water and the Economy. May 11, 2011. National Association of Water Companies Annual Conference. Dover, DE.
- 37. The Delaware Estuary, Economic Engine of the Delaware Valley. March 4, 2011. Congressional Briefing. Delaware River Basin Conservation Act. Washington, D.C.
- 38. Socioeconomic Value of the Delaware Estuary Watershed in Delaware, Pennsylvania, and New Jersey. Feb 2, 2011. Delaware Estuary Science and Environmental Summit 2011. Cape May, NJ.
- 39. Economic Value of Water in Delaware and around the Pacific Rim. July 29, 2010. 6<sup>th</sup> International Water Conference. University of Delaware. Newark, DE.
- 40. TMDL + H20 = \$GDP. May 20, 2010. Delaware State Chamber of Commerce, Environmental Committee. Wilmington, DE.
- 41. Water Quality Trends in the Delaware River Basin from 1980 to 2005. November 1, 2010. Annual Conference of the American Water Resources Association (AWRA). Philadelphia, PA.
- 42. Economics of Groundwater: Delaware's Diamond-Water Paradox. June 10, 2009. Focus on the Delaware Coast Groundwater: Our Hidden Resource. Delaware Sea Grant. Lewes, DE.
- 43. Green Streets, Blue Water, Clear Skies. Sustainable Delaware Conference. Oct. 15, 2009. American Institute of Architects (AIA). University of Delaware. Newark, DE.
- 44. Economic Value of the Christina Basin in Delaware and Pennsylvania. Nov. 18, 2007. Annual Conference of the American Water Resources Association (AWRA). Albuquerque, NM.
- 45. The Severity of the Drought of 2002 in the Brandywine Creek Watershed of Delaware and Pennsylvania Based on Tree Rings Dating to 367 A.D. Nov. 9, 2006. Annual Conference of the American Water Resources Association (AWRA). Baltimore, MD.
- 46. The Science of Measuring Change Assessing the State of the Delaware River Basin. November 7, 2006. Annual Conference of the American Water Resources Association (AWRA). Baltimore, MD.
- 47. Red Clay Rising. October 10, 2006. Delaware Nature Society Watershed Lecture Series: Red Clay Creek: Flood or Drought Where's the Balance. Ashland, DE.
- 48. Protecting Public Drinking Water in Delaware. October 5, 2006. Conference of the Delaware/Maryland Section of the American Planning Association (APA). Wilmington, DE.

- 49. The Historic Christina Basin: George Washington Slept Here. April 19, 2005. Annual Meeting of the Medical Society of Delaware. Wilmington, DE.
- 50. Demand Side Management during Delaware's 100-year Drought of 2002. November 3, 2004. Annual Conference of the American Water Resources Association (AWRA). Orlando, FLA.
- 51. Perspectives on Ethics and Water Policy in Delaware. Oct. 23, 2004. Ethics and the Life Sciences Conference. American Philosophical Association, University of Delaware Department of Philosophy, and National Science Foundation. University of Delaware. Newark, DE.
- 52. The Historic Christina Basin: George Washington Slept Here. October 6, 2004. The Historic Christina Basin: Delaware's First Watershed. Delaware Policy Forum Series. University of Delaware. Newark, DE.
- **53.** Christina Basin Clean Water Strategy. June 2, 2005. University of Wisconsin Water Outreach Symposium. Madison, WI.
- 54. Public Outreach for a Better World: Multi-Scale Approaches across Institutions around the Globe. March 18, 2005. Annual Meeting of the Association of American Geographers. Philadelphia, PA.
- **55.** The Watershed Management Approach: The Christina Basin Case Study. December. 11, 2003. Hearing of the International Joint Commission (IJC) between Canada and United States of America. Washington, D. C.
- 56. Hydropolitics and Drought in Delaware. November 12, 2003. University of Pennsylvania, Institute for Environmental Studies, Seminar Series. Philadelphia, PA.
- 57. Henri Visits Delaware: September 15, 2003 Floods in the Red Clay Creek Watershed. October 2, 2003. Land Use Change and Water Quality: Assessing the Impacts and Planning for the Future. Delaware Policy Forum Series. University of Delaware, Newark, DE.
- 58. University of Delaware Experimental Watershed. May 29, 2003. Watershed Management and the University: A Working Conference for Higher Education, Institutions, Watershed Managers and Other Watershed Stakeholders. New Jersey Water Resources Research Institute. Rutgers University. New Brunswick, NJ.
- 59. Water Supply Politics and Policy in Delaware. April 17, 2003. Meeting of the Philadelphia Metropolitan Area Section of the American Water Resources Association (AWRA). Philadelphia, PA.
- 60. Hydropolitics of Water Supply in Delaware. March 29, 2003. Responsible Water Use in the Garden. A Symposium at Winterthur, an American Country Estate. University of Delaware Longwood Graduate Program and Winterthur Garden Division. Chadds Ford, PA.
- 61. The Public Land Grant University as the Basis for a National Network of Experimental Watersheds: The Delaware Model. November 5, 2002. Annual Conference of the American Water Resources Association. Philadelphia, PA.

- 62. The Anatomy of a Drought. October 9, 2002. DROUGHT.02: A Debate and Panel Discussion Concerning Water Supply Policy in Delaware, A Delaware Public Policy Forum. University of Delaware, Newark, DE.
- 63. Urbanization in the Christina Basin of Delaware, Maryland, and Pennsylvania: Cause of More Droughts and Floods? July 2002. University Council of Water Resources Institutes Conference. Traverse City, MI.
- 64. Water as the Blue-Gold of the 21<sup>st</sup> Century: How Much Will There Be to Drink? October 11, 2001. Drinking Water 2001: The Issues Concerning Delaware's Most Precious Natural Resource. A Delaware Policy Forum. University of Delaware, Newark, DE.
- 65. The University of Delaware Experimental Watershed. May 20, 2001. Spring Conference of the American Geophysical Union. Boston, MA.
- 66. The University of Delaware Experimental Watershed Project. November 11, 2000. Delaware GIS 2000 Conference, Delaware Geographic Data Committee. Newark, DE.
- 67. Role of Impervious Cover as a Watershed Zoning Tool in the Christina Basin of Delaware. October 11, 2000. Delaware Urban Erosion, Sediment and Stormwater Conference 2000. University of Delaware. Newark, DE.
- 68. Clean Water Issues Affecting Delaware Municipalities. October 11, 2000. 12<sup>th</sup> Delaware Institute for Local Government Leaders. Rehoboth, DE.
- 69. Christina Basin Water Quality Management Strategy. September 21, 2000. Advances in Stream Ecology Conference. Mason Dixon Task Force. Stroud Water Research Center, Avondale, PA.
- 70. Naamans Creek Watershed: What are the Current Solutions? April 1, 2000. Looking at a Watershed through Community Eyes Conference. Naamans Creek Watershed Association. Wilmington, DE.
- 71. Interstate Approach to Protect and Restore Watersheds in the Christina Basin of Delaware, Maryland, and Pennsylvania. June 1999. Interstate Initiatives for Clean Water in the Christina Basin Conference. Delaware Nature Society. Ashland, DE.
- 72. Impervious Cover as a Land Planning Tool in the Christina Basin of Delaware, Pennsylvania, and Maryland. November 1999. Flowing Toward the Future: Visions for the Delaware River Basin in the 21<sup>st</sup> Century Conference. Philadelphia, PA.
- 73. Delaware Source Water Protection Program (SWAP). June 1999. American Water Works Association Conference. Chicago, IL.
- 74. Christina Clean Water Strategy. May 1999. Association of State Floodplain Managers Annual Conference. Portland, OR.

75. Importance of Land Use in Maintaining Biodiversity: Example of the Naamans Creek Watershed. March 1999. Managing Biodiversity in the Delaware Valley Region Seminar. Society for Conservation Biology, Delaware Valley Chapter. Rowan University. Glassboro, NJ.

#### THESIS COMMITTEES

# Professor in charge of thesis on behalf of the Advisory Committee

Slabicki, Kelly. Winter 2021. Seasonal Variations on the Brandywine River, Total Organic Carbon Removal and Disinfection Byproduct Presence in the City of Wilmington's Drinking Water. M.S. Water Science and Policy. Biden School of Public Policy & Administration.

Young, Jillian. Spring 2019. *Analysis of the Watershed Resources Registry Using GIS to Evaluate Stormwater Restoration Practices in the Christina River Watershed*. M.S. Water Science and Policy. Biden School of Public Policy & Administration. College of Arts and Sciences.

Ludington, Matthew D. Winter 2019. *Clean Water: A Long-Term Water Quality Monitoring Network to Evaluate Restoration of Hickory Run at the Mt. Cuba Center.* M.S. Water Science and Policy. Biden School of Public Policy & Administration. College of Arts and Sciences.

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Jackson, Frances. Summer 2016. How are Botanic Gardens in the Commonwealth of Australia and the United States of America Managing the Risk to Living Plant Collections in the Event of Water Shortage. M.S. Public Horticulture. Department of Plant and Soil Sciences. College of Agriculture and Natural Resources.

Miller, Kate E., Spring 2014. A Comparative Analysis of Source Water Protection Regulations of Local Governments in the Christina River Basin in Delaware and Pennsylvania. M.S. Water Science and Policy. School of Public Policy and Administration. College of Arts and Sciences.

Brown, Joseph D., Spring 2014. *Vulnerability Assessment of Hazardous Material Installation Subject to Sea Level Rise and Storm Surges in Coastal Delaware*. M.A. Urban Affairs and Public Policy. School of Public Policy and Administration. College of Arts and Sciences.

## **Faculty member on thesis Advisory Committee**

Lutgen, Alyssa N. Spring 2019. *Spatial and Temporal Variations of Nutrients and Heavy Metals in Legacy Sediments*. Master of Science in Water Science and Policy. College of Agriculture and Natural Resources.

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Chu, Chu. Summer 2017. Water-Energy Nexus in China and Its Implications for Regional Water and Energy Self-Sufficiency. Ph.D. Energy and Environmental Policy. Energy and Environmental Policy Program. School of Public Policy and Administration. College of Arts and Sciences.

Chatterjee, S. Winter 2017. River Basin Fragmentation, Climate Change and Perception of Surface Water Sustainability in the Central Great Plains of the United States. Ph.D. Geography. Department of Geography. College of Earth, Oceans, and Environment.

Deweese, Alexandra O. Summer 2016. *Urbanization of the Christina River Basin and Subsequent Urbanization*. M.S. Geography. Department of Geography. College of Earth, Oceans, and Environment.

Moxey, Kelsey A. Summer 2016. Estimating the Spatial Distribution of Field-Applied Mushroom Compost in the Brandywine-Christina River Basin Using Multispectral Remote Sensing. M.S. Water Science and Policy. Department of Geography. College of Earth, Oceans, and Environment.

Santangelo, Thomas. Spring 2016. *Development of a Spatially Distributed Model for Estimating Nitrogen Removal in Forested Riparian Buffers*. M.S. Water Science and Policy. Department of Geography. College of Earth, Oceans, and Environment.

Caldwell, Jennifer A. Spring 2015. A Policy and Impact Analysis of Hydraulic Fracturing in the Marcellus Shale Region: A Wildlife Perspective. Master of Energy and Environmental Policy. Center for Energy and Environmental Policy. College of Arts and Sciences.

Adkin, K. Spring 2013. *The Path to a Fair and Equitable Climate Change Policy: Addressing Climate Change in South Wilmington, Delaware.* Ph.D. Urban Affairs and Public Policy. School of Public Policy and Administration. College of Arts and Sciences.