

David A. Kaplan

Engineering School of Sustainable Infrastructure and the Environment
Environmental Engineering Sciences, University of Florida, Gainesville, FL 32601
(352) 392-8439 • dkaplan@ufl.edu • www.watershedecology.org

EDUCATION

Ph.D. in Agricultural and Biological Engineering

University of Florida Gainesville, FL May 2010

B.S. in Agricultural and Biological Engineering

Cornell University (*cum laude*) Ithaca, NY May 2000

RESEARCH AND PROFESSIONAL EXPERIENCE

Associate Professor, Dept. of Environmental Engineering Sciences, University of Florida 2018 – Present

- Director, Howard T. Odum Center for Wetlands 2016 – Present
- Assistant Director, Howard T. Odum Center for Wetlands 2012 – 2016
- Affiliated Faculty, UF Water Institute, UF School of Natural Resources & Environment, UF Tropical Conservation and Development Program, UF Center for Latin American Studies

Assistant Professor, Dept. of Environmental Engineering Sciences, University of Florida 2012 – 2018

Adjunct Lecturer, Dept. of Agricultural and Biological Engineering, University of Florida 2012

Postdoctoral Research Associate, School of Forest Resources and Conservation, Ecohydrology Laboratory, University of Florida 2010 - 2012

Graduate/Postgraduate Research Assistant, Dept. of Agricultural and Biological Engineering, University of Florida 2005 - 2010

Natural Resources Project Manager, New York City Dept. of Parks and Recreation 2001 - 2005

National Science Foundation Fellow, Department of Biological Systems Engineering, Virginia Tech State University 1999

PUBLICATIONS (**Key:** Underline –principal author; Bold – self; ^FResearch Fellow; ^PPostdoc Researcher; ^GGrad Student; ^UUndergraduate Student; ^AAlumni)

A. Refereed Publications

1. Alonso, A., R. Muñoz-Carpena, and **D. Kaplan**. *In press*. Coupling high-resolution water level sensors and MODIS for mapping wetland historical hydroperiod at high temporal frequency. *Remote Sensing of Environment* MS# RSE_111807 (accepted 30 March 2020).
2. Reaver, N.G.F.^P, **D. Kaplan**, H. Klammler, and J. Jawitz. *In review*. Extending the Budyko Hypothesis to the Intra-Annual Scale. *Water Resources Research* MS# 2019WR026218 (submitted 22 Aug 2019).
3. Acharya, S.^P, D. McLaughlin, **D. Kaplan**, and M. Cohen. 2020. Estimating interception from near-surface soil moisture response. *Hydrology and Earth System Sciences* 24:1859–1870. <https://doi.org/10.5194/hess-24-1859-2020>.

4. Osland, M., R. Day, C. Hall, L. Feher, A. Armitgae, J. Cebrian, K. Dunton, R. Hughes, **D. Kaplan**, A. Langston*, A. Macy, C. Weaver, G. Anderson, K. Cummins, I. Feller, and C. Snyder. 2019. Temperature thresholds for black mangrove freeze damage, mortality, and recovery: refining tipping points for range expansion in a warming climate. *Journal of Ecology* 108(2): 654-665. <https://doi.org/10.1111/1365-2745.13285>.
5. Athayde, S., M. Mathews, S. Bohlman, W. Brasil, C.R.C. Doria, J. Dutka-Gianelli, P.M. Fearnside, B. Loiselle, E.M. Marques, T.S. Melis, B. Millikan, E.M. Moretto, A. Rossete, R. Vacca, A. Oliver-Smith, and **D. Kaplan**. 2019. Mapping Research on Hydropower and Sustainability in the Brazilian Amazon: Advances, Gaps in Knowledge and Future Directions. *Current Opinion in Environmental Sustainability* 2019(37):50–69. <https://doi.org/10.1016/j.cosust.2019.06.004>.
6. Reaver, N.G.F^P., **D. Kaplan**, R.A. Mattson, E. Carter, P.V. Sucusy, and T.K. Frazer. 2019. Hydrodynamic controls on primary producer communities in spring-fed rivers. *Geophysical Research Letters* 46(9):4715-4725. <https://doi.org/10.1029/2019GL082571>.
7. Valle, D. and **D. Kaplan**. 2019. Quantifying the Impact of Dams on Riverine Hydrology under Non-stationary Conditions using Incomplete Data. *Science of the Total Environment* 677(2019):599–611. <https://doi.org/10.1016/j.scitotenv.2019.04.377>.
8. Henson, K.A.^G., J.W. Campbell, and **D. Kaplan**. 2019. Range extension of *Megachile lanata* (Hymenoptera: Megachilidae), a non-native sunn hemp pollinator, in Florida. *Florida Entomologist* 102(1):259-261. <https://doi.org/10.1653/024.102.0148>.
9. Southworth, J. E. Bunting, L. Zhu, S. Ryan, H. Herrero, P. Waylen, R. Muñoz-Carpena, M. Campo-Bescós, and **D. Kaplan**. 2019. Using a coupled dynamic factor–random forest analysis (DFRFA) to reveal drivers of spatiotemporal heterogeneity in the Semi-Arid Regions of Southern Africa. *PLOS ONE* 13(12), p.e0208400. DOI: 10.1371/journal.pone.0208400.
10. Nelson, N., R. Muñoz-Carpena, E. Phlips, **D. Kaplan**, P. Sucusy, and J. Hendrickson. 2018. Revealing biotic and abiotic controls of harmful algal blooms in a shallow subtropical lake through statistical machine learning. *Environmental Science & Technology* 52(6): 3527-3535. DOI:10.1021/acs.est.7b05884.
11. Jones, C., D. McLaughlin, K. Henson^G, C. Haas, and **D. Kaplan**. 2018. From Salamanders to Greenhouse Gases: Does upland management affect wetland function. *Frontiers in Ecology and the Environment* 16(1):14-19. DOI:10.1002/fee.1744.
12. Weinkam, G., Brown, M.T., **Kaplan, D.**, Clark, M., and M. Cohen. 2018. Fate and Transport Potential of Phosphorus in Sandy Soils Under Long-Term Municipal Wastewater Irrigation. *Florida Water Resources Journal* Jan 2018:22-30.
13. Doria, C.R.C., S. Athayde, E.E. Marques, M.A.L. Lima, J. Dutka-Gianelli, M.L. Ruffino, **D. Kaplan**, C. Freitas, and V. Isaac. 2017. The invisibility of fisheries in the process of hydropower development across the Amazon. *Ambio* 2017:1-13. DOI:10.1007/s13280-017-0994-7.
14. Larsen, L., J. Ma, and **D. Kaplan**. 2017. How important is connectivity for surface-water fluxes? A generalized expression for flow through heterogeneous landscapes. *Geophysical Research Letters* 44(20):10349-10358. DOI:10.1002/2017GL075432.
15. Timpe, K.^G and **D. Kaplan**. 2017. The changing hydrology of a dammed Amazon. *Science Advances* 3(11):e1700611. DOI:10.1126/sciadv.1700611.
16. Benjamin, J.^U and **D. Kaplan**. 2017. Development of a Fine-scale Laser-based Water Level Sensor. *Journal of Undergraduate Research* 18(3):1-6.
17. Lima, M.A.L.^G, **D. Kaplan**, and C. Doria. 2017. Hydrological controls of fisheries production in a major Amazonian tributary. *Ecohydrology* 2017(10):e1899. DOI:10.1002/eco.1899.

18. Langston, A.^G, **D. Kaplan**, and F. Putz. 2017. A casualty of climate change? Loss of freshwater forest islands on Florida's Gulf Coast. *Global Change Biology* 2017(00): 1–14. DOI:10.1111/gcb.13805.
19. Acharya, S.^P, **D. Kaplan**, J. Jawitz, and M. Cohen. 2017. Doing Ecohydrology Backward: Inferring Historical Everglades Flow from Landscape Patterns. *Water Resources Research* 53, DOI:10.1002/2017WR020516.
20. Langston, A.^G, **D. Kaplan**, and C. Angelini. 2017. Predation restricts black mangrove (*Avicennia germinans*) colonization at its northern range limit along Florida's Gulf Coast. *Hydrobiologia* DOI:10.1007/s10750-017-3197-0.
21. Su, F.^F, **D. Kaplan**, L. Li, H. Li, F. Song, and H. Liu. 2017. Identifying and classifying pollution hotspots to guide watershed management in a large multiuse watershed. *International Journal of Environmental Research and Public Health (MDPI)* 14(3): 260. DOI:10.3390/ijerph14030260.
22. White, E.^G and **D. Kaplan**. 2017. Restore or Retreat? Saltwater Intrusion and Water Management in Coastal Wetlands. *Ecosystem Health and Sustainability* 3(1):e01258. DOI:10.1002/ehs2.1258.
23. **Kaplan, D.**, M. Olabarrieta, P. Frederick, and A. Valle-Levinson. 2016. Freshwater Detention by Oyster Reefs: Quantifying a keystone ecosystem service. *PLOS ONE* 11(12): e0167694. DOI:10.1371/journal.pone.0167694.
24. Casey, S., M.J. Cohen, S. Acharya^P, **D. Kaplan**, and J. Jawitz. 2016. On the spatial organization of the Ridge-Slough Patterned Landscape, *Hydrology and Earth System Sciences* 20, 4457-4467. DOI:10.5194/hess-20-4457-2016.
25. Johnson, A.^U, N. Reaver^G, and **D. Kaplan**. 2016. Evaluating the Raz-Rru tracer system for use in Florida Springs. *Journal of Undergraduate Research* 17(3)1-6.
26. Tucker Lima, J.M., D. Valle, E. Mateus Moretto, L.E. Cordeiro Beduschi, E. Albiach Branco, V.L. da Silva Carvalhaes, C.P. Franco Okamoto, A. Salles Praia, S.M. Paiva Pulice, D. Rondinelli Roquetti, N. Lucia Zuca, B. Barbezani^U, E. Labandera^U, K. Timpe^G, and **D. Kaplan**. 2016. A social-ecological database to advance research on infrastructure development impacts in the Brazilian Amazon. *Nature – Scientific Data* 3:160071. DOI:10.1038/sdata.2016.71.
27. Palacio, D.^G, **D. Kaplan**, and J. Mossa. 2016. A synthesis of stream restoration efforts in Florida (USA). *River Research and Applications* 32(7):1555-565. DOI:10.1002/rra.3014.
28. Watts, A., C. Schmidt, D. McLaughlin, and **D. Kaplan**. 2015. Hydrologic implications of smoldering fires in wetland landscapes. *Freshwater Science* 34(4). DOI:10.1086/683484.
29. Yuan, J., M. Cohen, **D. Kaplan**, S. Acharya^P, L. Larsen, and M. Nungesser. 2015. Linking metrics of landscape pattern to hydrological process in a lotic wetland. *Landscape Ecology* 219:1-20. DOI:10.1007/s10980-015-0219-z.
30. Acharya, S.^P, **D. Kaplan**, S. Casey, M.J. Cohen, and J. Jawitz. 2015. Coupled local facilitation and global hydrologic inhibition drive landscape geometry in a patterned peatland, *Hydrology and Earth System Sciences* 19, 2133-2144. DOI:10.5194/hess-19-2133-2015.
31. Zhang, Y.^F, R. Wang, **D. Kaplan**, and J. Liu. 2015. Which components of plant diversity are most correlated with ecosystem properties? A case study in a restored wetland in northern China. *Ecological Indicators* 49:228-236. DOI:10.1016/j.ecolind.2014.10.001.
32. McLaughlin, D., **D. Kaplan**, and M.J. Cohen. 2014. A Significant Nexus: Geographically Isolated Wetlands Influence Landscape Hydrology. *Water Resources Research* 50:7153–7166. DOI:10.1002/2013WR015002.
33. **Kaplan, D.**, M. Bachelin, C. Yu, R. Muñoz-Carpena, T. Potter, and W. Rodríguez Chacón. 2014. A hydrologic tracer study in a small, natural wetland in the humid tropics of Costa Rica. *Wetlands Ecology and Management* 23(2): 167-182. DOI:10.1007/s11273-014-9367-1.

34. McLaughlin, D., M. Carlson Mazur, **D. Kaplan**, and M. Cohen. 2014. Estimating effective specific yield in inundated conditions: a comment on a recent application. *Ecohydrology*. DOI:10.1002/eco.1522.
35. Watts, A., D. Watts, M. Cohen, J. Heffernan, D. McLaughlin, J. Martin, **D. Kaplan**, A. Murray, T. Osborne, and L. Kobziar. 2014. Evidence of biogeomorphic patterning in a low-relief karst landscape. *Earth Surface Processes and Landforms*. DOI:10.1002/esp.3597.
36. **Kaplan, D.** and R. Muñoz-Carpena. 2014. Groundwater salinity in a floodplain forest impacted by saltwater intrusion. *Journal of Contaminant Hydrology* 169:19-36. DOI:10.1016/j.jconhyd.2014.04.005.
37. Campo-Bescos, M., R. Muñoz-Carpena, **D. Kaplan**, J. Southworth, L. Zhu, and P. Waylen. 2013. Beyond precipitation: Physiographic thresholds dictate the relative importance of environmental drivers on savanna vegetation. *PLOS ONE* 8(8):e72348. DOI:10.1371/pone.0072348.
38. McLaughlin, D.L., **D. Kaplan**, and M.J. Cohen. 2013. Managing Forests for Increased Regional Water Yield. *Journal of the American Water Resources Association* 49(4):953-965. DOI:10.1111/jawr.12073.
39. **Kaplan, D.**, R. Paudel, M. Cohen, and J. Jawitz. 2012. Orientation matters: Patch anisotropy controls discharge competence and hydroperiod in a patterned peatland. *Geophysical Research Letters* 39, L17401. DOI:10.1029/2012GL052754.
40. **Kaplan, D.**, M. Bachelin, R. Muñoz-Carpena, and W. Rodríguez Chacón. 2011. Hydrological importance and water quality treatment potential of a small freshwater wetland in the humid tropics of Costa Rica. *Wetlands* 31(6):117-1130. DOI:10.1007/s13157-011-0222-3.
41. **Kaplan, D.** and R. Muñoz-Carpena. 2011. Complementary effects of surface water and groundwater on soil moisture dynamics in a degraded coastal floodplain forest. *Journal of Hydrology* 398(3-4):221-234. DOI:10.1016/j.jhydrol.2010.12.019.
42. Mortl, A., R. Muñoz-Carpena, and **D. Kaplan**. 2011. Calibration of a combined dielectric probe for soil moisture and porewater salinity measurement in three southeastern (USA) coastal floodplain soils. *Geoderma* 161(1-2):50-62. DOI:10.1016/j.geoderma.2010.12.007.
43. **Kaplan, D.**, R. Muñoz-Carpena, and A. Ritter. 2010. Untangling complex shallow groundwater dynamics in the floodplain wetlands of a southeastern U.S. coastal river. *Water Resources Research* 46, W08528. DOI:10.1029/2009WR009038.
44. **Kaplan, D.**, R. Muñoz-Carpena, Y. Wan, M. Hedgepeth, F. Zheng, R. Roberts, and R. Rossmanith. 2010. Linking river, floodplain, and vadose zone hydrology to improve restoration of a coastal river impacted by saltwater intrusion. *Journal of Environmental Quality* 39(5):1570-1584. DOI:10.2134/jeq2009.0375.

B. Refereed Proceedings¹:

1. Benjamin, J.^U and **D. Kaplan**. 2017. Development of a Laser-Based Water Level Sensor for Fine-Scale Ecohydrological Measurements. *In: Proceedings of the 5th IEEE Conference on Technologies for Sustainability (SusTech)*, Phoenix, AZ, November 2017.
2. **Kaplan, D.**, R. Muñoz-Carpena, Y.C. Li, Y. Wan, M. Hedgepeth, R. Roberts. 2008. Altered Hydroperiod and Saltwater Intrusion in the Bald Cypress Swamps of the Loxahatchee River. *In: Proceedings of the 20th Salt Water Intrusion Meeting*, Naples, Florida, June 2008. pp. 109-112.

¹Reviewed by panel of ≥ 3 and included as short papers in conference proceedings.

3. **Kaplan, D.**, R. Muñoz-Carpena, A. Mortl, Y.C. Li. 2007. Humedad y salinidad del suelo en un pantano de ciprés calvo (*Taxodium distichum*) impactado por intrusión de agua salina. *In*: J.V. Giráldez Cervera and F.J. Jiménez Hornero (eds.) Estudios de la Zona No Saturada del Suelo Vol. VIII, pp. 257-266. Cordoba (Spain). ISBN: 84-690-7893-8.
4. **Masters, A.**, K.A. Flahive, S. Mostaghimi, D.H. Vaughan, A. Mendez, M. Peterie, S. Radke, A. Davisson, M. Hunter, and **D. Kaplan**. 2000. A comparative investigation of the effectiveness of polyacrylamide (PAM) for erosion control in urban areas. *In*: Proceedings of the 2000 ASAE Annual International Meeting, Milwaukee, WI, July 2000.

C. Non-Refereed Publications²:

1. **Kaplan, D.**, M Rains, T. Harter, A. Reeve, Association for the Sciences of Limnology and Oceanography, Coastal and Estuarine Research Federation, Freshwater Mollusk Conservation Society, International Association for Great Lakes Research, Phycological Society of America, Society for Freshwater Science, and Society of Wetland Scientists. 2019. BRIEF FOR AQUATIC SCIENTISTS AND SCIENTIFIC SOCIETIES AS *AMICI CURIAE* IN SUPPORT OF RESPONDENTS, **On Writ of Certiorari yo The United States Court Of Appeals For The Ninth Circuit, In The Supreme Court of the United States: COUNTY OF MAUI, Petitioner, v. HAWAI’I WILDLIFE FUND; SIERRA CLUB – MAUI GROUP; SURFRIDER FOUNDATION; WEST MAUI PRESERVATION ASSOCIATION, Respondents.**
2. **Blair, S.**, C. Adams, T. Ankersen, M. McGuire, and **D. Kaplan**. 2015. Ecosystem services valuation for estuarine and coastal restoration in Florida. Florida Sea Grant /IFAS Publication TP-204. University of Florida, Gainesville. <http://edis.ifas.ufl.edu/sg134>.

D. Books, Contributor of Chapter(s)

1. **Kaplan, D.** 2012. “What is the structure of water?” In M. Lamothe, J. Rothman, J. Volvovski (Eds.): *The Where, The Why and The How: 75 Artists Illustrate Wondrous Mysteries of the Universe*. Chronicle Books, San Francisco, pp. 15-16.
2. **Kaplan, D.** 2012. “Why do whales sing?” In M. Lamothe, J. Rothman, J. Volvovski (Eds.): *The Where, The Why and The How: 75 Artists Illustrate Wondrous Mysteries of the Universe*. Chronicle Books, San Francisco, pp. 24-25.

LECTURES, SPEECHES, POSTERS PRESENTED AT PROFESSIONAL CONFERENCES

(Key: Underline –principal author; Bold – self; ^FResearch Fellow; ^PPostdoc Researcher; ^GGrad Student; ^UUndergraduate Student; ^AAlumni; Bold and in Brackets – Invited Talk)

A. International Professional Meeting Presentations:

1. **Kaplan, D.** and A. Al-Quarishi^G. 2019. How Much is Enough? Setting Euphrates River Flow Targets to Restore the Western Mesopotamian Marshes. American Geophysical Union Fall Meeting, December 2019, San Francisco, CA. [Poster]
2. **Kaplan, D.** and D. Valle. 2018. A Novel Method for Quantifying Human-Induced Changes in Riverine Hydrology under Nonstationary Climate Conditions using Incomplete Data. American Geophysical Union Fall Meeting, December 2018, Washington, DC.
3. **[Kaplan, D.]** and K. Timpe^G. 2018. The Changing Ecohydrology of a Dammed Amazon. *Invited talk at the Society for Freshwater Science Annual Meeting, May 2018, Detroit, MI.*

²As noted in the 2017-2018 T&P Guidelines, **EDIS publications are peer-reviewed.**

4. **Kaplan, D.**, A. Livino, M. Arias, T. Crouch, E. Anderson, E. Marques, and J. Dutka-Gianelli. 2017. Integrating Disciplines, Sectors, and Societies to Improve Environmental Flows Definition and Implementation for Dammed Amazonian Rivers. American Geophysical Union Fall Meeting, December 2017, New Orleans, LA. [Poster]
5. **Kaplan, D.**, N. Reaver^G, R. Hensley, and M. Cohen. 2017. Quantifying and Predicting Three-Dimensional Heterogeneity in Transient Storage Using Roving Profiling. American Geophysical Union Fall Meeting, December 2017, New Orleans, LA. [Poster]
6. **[D. Kaplan]**, K. Timpe, M. Lima, and C. Doria. 2017. The Changing Ecohydrology of a Dammed Amazon. *Invited* talk at the 147th Annual Meeting of the American Fisheries Society, August 2017, Tampa, FL
7. **[Kaplan, D.]**, M. Olabarrieta, P. Frederick, and A. Valle-Levinson 2016. Freshwater detention by oyster reefs: Quantifying a keystone ecosystem service. *Invited* talk at the Annual International Meeting of the American Society of Agriculture and Biological Engineers, July 2016, Orlando, FL.
8. **Kaplan, D.**, M. Olabarrieta, P. Frederick, and A. Valle-Levinson 2016. Oyster Reefs Support Coastal Resilience by Altering Nearshore Salinity: An Observational and Modeling Study to Quantify a "Keystone" Ecosystem Service. Poster at the American Geophysical Union Fall Meeting, December 2016, San Francisco, CA.
9. **Kaplan, D.**, J.M. Tucker Lima, D. Valle, E. Mateus Moretto, L.E. Cordeiro Beduschi, E. Albiach Branco, V.L. da Silva Carvalhaes, C.P. Franco Okamoto, A. Salles Praia, S.M. Paiva Pulice, D. Rondinelli Roquetti, N. Lucia Zuca, B. Barbezani^U, E. Labandera^U, and K. Timpe^G. 2016. A social-ecological database to advance research on the effects of infrastructure development in the Brazilian Amazon. American Association of Geographers Annual Meeting, March 2016, San Francisco, CA.
10. **[Kaplan, D.]** 2015. Restore or Retreat? Saltwater Intrusion and Water Management in Coastal Wetlands. *Invited* talk at the 2015 Society of Wetland Scientists Annual Meeting, June 2015, Providence RI.
11. **Kaplan, D.**, S. Acharya^P, D. McLaughlin, M. Cohen. 2014. Looking for Water in the Woods: Quantifying the Potential for Forest Management to Increase Regional Water Yield. American Geophysical Union Fall Meeting, December 2014, San Francisco, CA.
12. **Kaplan, D.**, M. Olabarrieta, P. Frederick, A. Valle-Levinson, J. Seavey. 2014. Estuarine Freshwater Entrainment by Oyster Reefs: Quantifying A Keystone Ecosystem Service. Poster at the American Geophysical Union Fall Meeting, December 2014, San Francisco, CA.
13. **Kaplan, D.**, C. Schmidt, D. McLaughlin, A. Watts. 2014. "Pyro-eco-hydro-geomorphology": Implications of organic soil combustion on the hydrology and ecology of peat wetlands. International Conference on Ecological and Ecosystem Restoration: Elevating the Science and Practice of Restoration, July 2014, New Orleans, LA.
14. **Kaplan, D.**, D. McLaughlin, and M. Cohen. 2014. Low-budget, high-resolution: coupling soil moisture and shallow water table monitoring to quantify water use in southeastern (US) pine forests under varying land management. American Society of Agricultural and Biological Engineers International Conference, Evapotranspiration: Challenges in Measurement and Modeling from Leaf to the Landscape Scale and Beyond, April 2014, Raleigh, NC.
15. **[Kaplan D.]**, D. Watts, J. Yuan, M. Cohen, and J. Heffernan. 2012. Hydrologic Processes in a Patterned Peatland. *Invited* talk at the 9th annual INTECOL Meeting, Wetlands in a Complex World, July 2012, Orlando, FL.

16. **Kaplan, D.**, M. Bachelin, R. Muñoz-Carpena, T. Potter, and W. Rodríguez Chacón. 2012. Multiple tracer study in a small, natural wetland in the humid tropics of Costa Rica. Poster presentation at the 9th annual INTECOL Meeting, Wetlands in a Complex World, July 2012, Orlando, FL.

B. International Professional Meeting Presentations (Students & Collaborators):

1. **Metadjer, P.^U**, A. Gilman, C. Soto, S. Siddiqui^G, and **D. Kaplan**. 2020 Cambio de Uso de la Tierra y Calidad de Agua en el Río San Francisco. V Congreso Latinoamericano de Macroinvertebrados Acuáticos, May 2020, Panama.
2. **Spellman, P.^P**, R. De Rooij, S. Rath^G, N. Reaver^P, W. Graham, and **D. Kaplan**. 2019. The importance of process representation for simulating coupled surface-groundwater flow in karst watersheds: a comparison of SWAT, SWAT-MODFLOW and DisCo. American Geophysical Union Fall Meeting, December 2019, San Francisco, CA.
3. **Siddiqui, S.^G**, X. Zapata-Rios, S. Torres-Paguay, A. Encalada, E. Anderson, M. Allaire^U, and **D. Kaplan**. 2019. Flow Regimes of the Amazon. American Geophysical Union Fall Meeting, December 2019, San Francisco, CA.
4. **Swanson, C.^G**, S. Bohlman, J. Judge, and **D. Kaplan**. 2019. Measuring Changes to Floodplains After Serial Damming of the Tocantins River in the Eastern Amazon. American Geophysical Union Fall Meeting, December 2019, San Francisco, CA. [Poster]
5. **Reaver, N.^P**, **D. Kaplan**, H. Klammler, and J. Jawitz. 2019. Deducing Dominant Drivers of Discharge Dynamics: A Mechanistic Modeling Framework to Simultaneously Test Multiple Hypotheses. American Geophysical Union Fall Meeting, December 2019, San Francisco, CA. [Poster]
6. **Rath, S.^G**, P. Spellman^P, N. Reaver^P, D. Lee, W. Graham, and **D. Kaplan**. 2019. Quantifying the Effects of Land Use and Management on Receiving Water Quantity, Quality, and Ecosystem Health in a Karst Watershed. American Geophysical Union Fall Meeting, December 2019, San Francisco, CA.
7. **White Jr. E.^G** and **D. Kaplan**. 2019. Remotely Sensed Early Warning of Saltwater Intrusion in Coastal Freshwater Swamps. Society of Wetland Scientists Annual Meeting, May 2019, Baltimore, MD.
8. **Cruz, R.E.A.^G**, **D. Kaplan**, E. Marques, A. Silva, P.Santos, and V. Isaac. 2019. Impacto Ambiental Global E Regional Sobre A Pesca De Grandes Bagres Na Amazônia. Encontro Brasileiro De Ictiologia, 2019, Belém-PA, Brazil.
9. **Nelson, N.**, A. Alonso, and **D. Kaplan**. 2018. Observing Oyster-Driven Freshwater Detention at the Estuary-Scale from Space. American Geophysical Union Fall Meeting, December 2018, Washington, DC.
10. **Graham, W.**, **D. Kaplan**, D. Adams, T. Borisova, W.L. Bartels, M. Dukes, C. Barrett, L. Staal, K. Athearn, M. Monroe, K. Rowles, M. Masters, A. Smith, P. Dwivedi, G. Velidis, W. Porter, and P. Srivastava. 2018. Stakeholder-Driven Modeling in Support of Groundwater Sustainability: the Floridan Aquifer Collaborative Engagement for Sustainability (FACETS) Project. American Geophysical Union Fall Meeting, December 2018, Washington, DC.
11. **Crouch, T.^G**, **D. Kaplan**, E. Latrubesse, and L. Santos. 2018. Five Years of Sedimentation Behind Two "Run-of-River" Dams in the Brazilian Amazon. American Geophysical Union Fall Meeting, December 2018. Washington DC.
12. **Spellman P.^P**, **D. Kaplan**, and W. Graham, and S. Rath. 2018. Documenting the development and use of coupled surface and groundwater models to determine the fate of nutrients in a karst aquifer. American Geophysical Union Fall Meeting, December 2018. Washington DC.

13. Rath, S.^G, W. Graham, and **D. Kaplan**. 2018. Quantifying nitrate leaching to groundwater under a variety of water and nutrient management practices, soil types and climate conditions in the Suwannee River Basin, Florida. American Geophysical Union Fall Meeting, December 2018. Washington DC. [Poster]
14. Spellman P.^P, **D. Kaplan**, W. Graham, R. W. de Rooij. 2018. Impacts of land use and climate change on groundwater quality and quantity in a karst watershed. International Environmental Modeling and Software (IEMSS).
15. Crouch, T.^G, **Kaplan, D.** 2018. A Framework for Assessing the Cumulative Effects of Climate Change and Anthropogenic Activities on Madeira Watershed Hydrosedimentology. XIII Brazilian Meeting of Sediment Engineering, I Particles in the Americas Proceedings. September 24th -28th, 2018 Vitoria, ET, Brazil.
16. White Jr., E.^G, **D. Kaplan**, and B. Middleton. 2018. Contrasting trajectories of floodplain forest demography along a salinization gradient. Society of Wetland Scientists Annual Meeting, May 2018, Denver, CO.
17. Reaver, N.^G, **D. Kaplan**, H. Klammer, and J. Jawitz. 2018. Reinterpreting the Budyko Framework: Quantifying the Relative Roles of Climate and Landscape Biophysical Features in Driving Rainfall Partitioning. American Geophysical Union Fall Meeting, December 2018, Washington D.C.
18. Reaver, N.^G, **D. Kaplan**, R. Hensley, and M. Cohen. 2018. Calibrated model parameters - identifiability and equifinality. American Geophysical Union Fall Meeting, December 2018, Washington D.C.
19. Al-Quraishi, A.^G and **D. Kaplan**. 2018. Effects of Brackish Water Irrigation in the Restoration of the Western Al-Hammar Marsh, Iraq. Society of Wetland Scientists Annual Meeting, May 29-Jun 1. Denver, CO.
20. Henson, K.^G, **D. Kaplan**, M. Cohen, D. McLaughlin, S. Acharya. 2018. The Effects of Forest Management on the Hydrology of Isolated Wetlands in North Central Florida Pine Flatwoods. Society of Wetland Scientists Annual Meeting, May 2018, Denver, Colorado.
21. Reaver, N.^G, **D. Kaplan**, and J. Jawitz. 2018. Development of an analytical solution for the Budyko watershed parameter in terms of catchment physical features. 2018 International Synthesis Workshop on Network Dynamics: Structure and Function, February 2018, University of Florida, Gainesville, FL.
22. Spellman P.^P, **D. Kaplan**, W. Graham, R. W. de Rooij. 2018. Impacts of land use and climate change on groundwater quality and quantity in a karst watershed. International Environmental Modeling and Software (IEMSS).
23. Crouch, T.^G, **D. Kaplan**, E. Latrubesse, and L. Santos. 2018. Five Years of Sedimentation Behind Two “Run-of-River” Dams in the Brazilian Amazon. American Geophysical Union Fall Meeting, December 2018. Washington DC.
24. White Jr., E.^G, **D. Kaplan**, and B. Middleton. 2018. Contrasting trajectories of floodplain forest demography along a salinization gradient. Society of Wetland Scientists Annual Meeting, May 2018, Denver, CO.
25. Al-Quraishi, A.^G and **D. Kaplan**. 2018. Effects of Brackish Water Irrigation in the Restoration of the Western Al-Hammar Marsh, Iraq. Society of Wetland Scientists Annual Meeting, May 29-Jun 1. Denver, CO.
26. Henson, K.^G, **D. Kaplan**, M. Cohen, D. McLaughlin, S. Acharya. 2018. The Effects of Forest Management on the Hydrology of Isolated Wetlands in North Central Florida Pine Flatwoods. Society of Wetland Scientists Annual Meeting, May 2018, Denver, Colorado.

27. Reaver, N.^G, **D. Kaplan**, H. Klammer, and J. Jawitz. 2018. Reinterpreting the Budyko Framework: Quantifying the Relative Roles of Climate and Landscape Biophysical Features in Driving Rainfall Partitioning. American Geophysical Union Fall Meeting, December 2018, Washington D.C.
28. Reaver, N.^G, **D. Kaplan**, R. Hensley, and M. Cohen. 2018. Calibrated model parameters - identifiability and equifinality. American Geophysical Union Fall Meeting, December 2018, Washington D.C.
29. Reaver, N.^G, **D. Kaplan**, and J. Jawitz. 2017. Development of an analytical solution for the Budyko watershed parameter in terms of catchment physical features. American Geophysical Union Fall Meeting, December 2017, New Orleans, LA.
30. Glodzik, K.^G, **D. Kaplan**, and G. Klarenberg. 2017. Untangling trends and drivers of changing river discharge along Florida's Gulf Coast. American Geophysical Union Fall Meeting, December 2017, New Orleans, LA.
31. Acharya, S.^P, M.J. Cohen, **D. Kaplan** and D. McLaughlin. 2017. Managing southeastern forests for increased water yield. American Geophysical Union Fall Meeting, December 2017. New Orleans, LA. [Poster]
32. Alonso, A.^G, R. Muñoz-Carpena, and **D. Kaplan**. 2017. Combining Field Monitoring with Remote Sensing to Reconstruct Historical Hydroperiod: a Case Study in a Degrading Tropical Wetland. American Geophysical Union Fall Meeting, December 2017. New Orleans, LA. [Poster]
33. Benjamin, J.^U and **D. Kaplan**. 2017. Development of a Laser-Based Water Level Sensor for Fine-Scale Ecohydrological Measurements. IEEE Conference on Technologies for Sustainability (SusTech), November 2017, Phoenix, AZ.
34. A. Livino, **D. Kaplan**, M. Arias, T. Crouch, E. Anderson, E. Marques, and J. Dutka-Gianelli. 2017. Integração de disciplinas e setores para a definição e gerenciamento das vazões ambientais no planejamento e operação de usinas hidrelétricas nos rios Amazônicos. 40th Annual Meeting of the Brazilian Hydrologic Resources Association, July 2017, Florianópolis, Brazil.
35. Hahus, I., K. Migliaccio, R. Muñoz-Carpena, **D. Kaplan**, and M. Cohen. Does Size Matter? Balancing Spatial Resolution and Hydrologic Model Performance. International meeting of the American Society of Agricultural and Biological Engineers, July 2017, Spokane, WA.
36. White Jr. E.^G, **D. Kaplan**, and B. Middleton. 2017. Stochastic Weather and Climate Impacts on Groundwater Salinity in Coastal Baldcypress Swamps. Society of Wetland Scientists Annual Meeting, June 2017, San Juan, Puerto Rico.
37. Langston, A.^G and **D. Kaplan**. 2017. Propagule density threshold for overcoming predation pressure in areas of black mangrove (*Avicennia germinans*) expansion. Society of Wetland Scientists Annual Meeting, June 2017, San Juan, Puerto Rico.
38. Glodzik, K.^G and **D. Kaplan**. 2017. Untangling trends and drivers of changing river discharge along Florida's gulf coast. Society of Wetland Scientists Annual Meeting, June 2017, San Juan, Puerto Rico.
39. White Jr. E.^G, **D. Kaplan**, and B. Middleton. 2017. Stochastic Weather and Climate Impacts on Groundwater Salinity in Coastal Baldcypress Swamps. Society of Wetland Scientists Annual Meeting, June 2017, San Juan, Puerto Rico.
40. Langston, A.^G and **D. Kaplan**. 2017. Propagule density threshold for overcoming predation pressure in areas of black mangrove (*Avicennia germinans*) expansion. Society of Wetland Scientists Annual Meeting, June 2017, San Juan, Puerto Rico.

41. Glodzik, K.^G and **D. Kaplan**. 2017. Untangling trends and drivers of changing river discharge along Florida's gulf coast. Society of Wetland Scientists Annual Meeting, June 2017, San Juan, Puerto Rico.
42. Casey, S., M. Cohen, S. Acharya^P, **D. Kaplan**, and J. Jawitz. 2016. Power Law Patch Scaling and Lack of Characteristic Wavelength Suggest "Scale-Free" Processes Drive Pattern in the Florida Everglades. Poster at the American Geophysical Union Fall Meeting, December 2016, San Francisco, CA.
43. [Larsen, L.], J. Ma, **D. Kaplan**, J. Harvey, S. Newman, C. Saunders, and J. Choi. 2016. Role of structural and functional connectivity in wetland ecogeomorphic feedbacks. *Invited* talk at the American Geophysical Union Fall Meeting, December 2016, San Francisco, CA.
44. Timpe, K.^G and **D. Kaplan**. 2016. Ecohydrology of a dammed Amazon. Poster at the American Geophysical Union Fall Meeting, December 2016, San Francisco, CA.
45. Lima, M.A.L.^G, **D. Kaplan**, and C. Doria. 2016. Temporal Trends and Hydrological Controls of Fisheries Production in the Madeira River (Brazil). Poster at the American Geophysical Union Fall Meeting, December 2016, San Francisco, CA.
46. McLaughlin, D., N. Jones, K. Henson^G, and **D. Kaplan**. 2016. From Salamanders to Greenhouse Gas Emissions: Effects of Upland Management on Wetland Functions. Poster at the American Geophysical Union Fall Meeting, December 2016, San Francisco, CA.
47. Nelson, N., R. Muñoz-Carpena, **D. Kaplan**, and E. Phlips. 2016. Uncovering cyanobacteria ecological networks from long-term monitoring data using Granger causality analysis. Poster at the American Geophysical Union Fall Meeting, December 2016, San Francisco, CA.
48. Acharya, S.^P, M. Cohen, **D. Kaplan**, and D. McLaughlin. 2016. Evapotranspiration Estimation from Soil Profile Moisture Data: Potential Pitfalls and Solutions. Annual International Meeting of the American Society of Agricultural and Biological Engineers, July 2016, Orlando, FL.
49. Nelson, N., R. Munoz-Carpena, **D. Kaplan**, and E. Phlips. 2016. Making sense of freshwater cyanobacteria monitoring data using a time-varying Granger causality approach. Annual International Meeting of the American Society of Agricultural and Biological Engineers, July 2016, Orlando, FL.
50. Langston, A.^G and **D. Kaplan**. 2016. Investigating top-down and bottom-up influences on black mangrove (*Avicennia germinans*) encroachment in forested freshwater islands along the Big Bend coast of Florida. 4th Mangrove & Macrobenthos Meeting, July 2016, St. Augustine, FL.
51. Langston, A.^G and **D. Kaplan**. 2016. Patterns of Coastal Forest Decline and Expansion Along the Big Bend Coast of Florida. Society of Wetland Scientists Annual Meeting, June 2016, Corpus Christi, TX.
52. White, E.^G, **D. Kaplan**, and B. Middleton. 2016. Investigating the Impacts of Chronic Low-level Salinity on the Productivity and Resilience of Coastal Baldcypress (*Taxodium distichum*) Swamps. Poster at the Society of Wetland Scientists Annual Meeting, June 2016, Corpus Christi, TX.
53. McLaughlin, D., **D. Kaplan**, N. Jones, C. Schmidt, A. Watts, K. Henson^G. 2016. Feeling the Burn: Hydrologic Impacts of Fire in Wetlands and their Surrounding Uplands. Society of Wetland Scientists Annual Meeting, June 2016, Corpus Christi, TX.
54. Nelson, N., R. Muñoz-Carpena, **D. Kaplan**, and E. Phlips. 2016. Managing Cyanobacteria In The Subtropics: Causal Analysis Of Temporal Shifts In Cyanobacteria Driver Importance. Association for the Sciences of Limnology and Oceanography Summer Meeting, June 2016, Santa Fe, NM.

55. Timpe, K.^G and D. Kaplan. 2016. Quantifying the hydrological impacts of damming the Amazon. American Association of Geographers Annual Meeting, March 2016, San Francisco, CA.
56. Glodzik, K.^G and **D. Kaplan**. 2016. Forecasting coastal forest die-off in the Lower Suwannee Refuge: Influence of Climate Drivers. Annual Meeting of the American Water Resources Association, November 2016, Orlando, FL.
57. Langston, A.^G and **D. Kaplan**. 2016. Top-down ecological controls limit climate change induced expansion of black mangroves (*Avicennia germinans*). Ecological Society of America Annual Meeting, August 2016, Fort Lauderdale, FL.
58. Timpe, K.^G and **D. Kaplan**. 2016. Quantifying the hydrological impacts of damming the Amazon. American Association of Geographers Annual Meeting, March 2016, San Francisco, CA.
59. [Larsen, L.], J. Ma, and **D. Kaplan**. 2016. The role of vegetation patch spatial configuration in landscape-scale flow-vegetation-sediment feedbacks. *Invited* talk at the 2015 American Geophysical Union Fall Meeting, December 2015, San Francisco, CA.
60. Langston, A.^G and **D. Kaplan**. 2015. A casualty of climate change: Long-term vegetation trends in a patchy coastal wetland. Society of Wetland Scientists Annual Meeting, June 2015, Providence, RI.
61. Larsen, L., **D. Kaplan**, J. Yuan, J. Choi, J. Mia, J. Harvey. 2014. Directional landscape connectivity as a predictor of water and material fluxes and indicator of system dynamics in both aquatic and terrestrial landscapes. *Invited* poster at the American Geophysical Union Fall Meeting, December 2014, San Francisco, CA.
62. McLaughlin, D., **D. Kaplan**, M. Cohen. 2014. A Hydraulic Nexus between Geographically Isolated Wetlands and Downstream Water Bodies. *Invited* talk at the American Geophysical Union Fall Meeting, December 2014, San Francisco, CA.
63. Watts, A., D. Watts, **D. Kaplan**, D. McLaughlin, J. Heffernan, J. Martin, A. Murray, T. Osborne, M. Cohen, and L. Kobziar. 2012. Landform elevation suggests ecohydrologic footprints in subsurface geomorphology. Poster presentation at the American Geophysical Union Fall Meeting, December 2012, San Francisco, CA.

C International Seminars and Lectures:

1. [**Kaplan, D.**] and K. Timpe. 2019. How have Dams Changed the Hydrology of Amazonian Rivers? III International Workshop of the Amazon Dams Research Network, April 2020, Virtual.
2. [**Kaplan, D.**], K. Timpe^G, M.A. Lima^G, and C. Doria. 2018. Os Efeitos das Barragens na Hidrologia dos Rios Amazônicos/The Changing Hydrology of a Dammed Amazon. Seminário Internacional Brasil, Bolívia e Peru: Desafios Nacionais e Internacionais de Gestão Dos Recursos Pesqueiros na Bacia do Rio Madeira. May 2018, Porto Velho, RO, Brazil.
3. **Kaplan, D.** and S. Athayde. 2018. Exercício transdisciplinar: valores e objetivos para o uso dos rios/Transdisciplinary exercise: values and objectives for river use. NSF-CNH-RCN: Rede Barragens Amazônicas: Avançando a Pesquisa Integrativa e a Gestão Adaptativa de Sistemas Socioecológicos Transformados por Barragens Hidrelétricas/NSF-CNH-RCN: Amazon Dams Network: Advancing Integrative Research and Adaptive Management of Social-ecological Systems Transformed by Hydroelectric Dams
4. **Kaplan, D.**, S. Athayde, E. M. Moretto, D.V.R. Júnior. 2018. Mesa Redonda: Conhecimentos e Políticas Públicas: Desafios e oportunidades para melhorar a tomada de decisão e a governança socioambiental na Amazônia. Knowledge and Policy Roundtable: Challenges and opportunities for improving social-environmental decision-making and governance in the AmazonNSF-CNH-RCN: Rede Barragens Amazônicas: Avançando a Pesquisa Integrativa e a Gestão Adaptativa de Sistemas Socioecológicos Transformados por Barragens

Hidrelétricas/NSF-CNH-RCN: Amazon Dams Network: Advancing Integrative Research and Adaptive Management of Social-ecological Systems Transformed by Hydroelectric Dams.

5. **Kaplan, D.** 2016. A Rede de Barragens Amazônicas, e O programa da “Fellows” de Instituto do Água na Universidade do Florida. Interdisciplinary Research Workshop, May 23-24, 2016, Porto Velho, Rondônia, Brazil.
6. **Kaplan, D.** and K. Timpe^G. 2014. Watershed Connections: Conexões de Bacias Hidrográficas. International Workshop: Integrating knowledge on hydroelectric dams in the Amazon: learning from the experiences of the Colorado, Madeira, and Tocantins Rivers, May 2014, Palmas, TO, Brazil.
7. **Kaplan, D.** 2014. Introduction to Dynamic Factor Analysis and Fish Population Modeling. International Workshop: Integrating knowledge on hydroelectric dams in the Amazon: learning from the experiences of the Colorado, Madeira, and Tocantins Rivers, May 2014, Porto Velho, RO, Brazil.

D. National Professional Meeting Presentations:

1. **Kaplan, D.**, S. Acharya^P, D. McLaughlin, and M. Cohen. 2017. Continuous soil moisture monitoring to quantify the impacts of forest management on regional water yield. 2017 Unsaturated Zone Working Group Meeting, April 2017, Gainesville, FL.
2. **[Kaplan, D.]**, M. Cohen, S. Acharya^P, S. Casey, J. Heffernan, J. Jawitz, J. Yuan, and D. Watts. 2015. Pattern and Process in the Everglades Ridge-Slough Landscape. *Invited* talk at the Greater Everglades Ecosystem Restoration Conference, April 2015, Coral Springs, FL.
3. **[Kaplan, D.]**, D. McLaughlin, and M. Cohen. 2014. Wood, Wildlife, and Water: Managing Forests for Multiple Benefits. *Invited* talk at the Environment, Engineering, and Landscapes Colloquium, Harvard University, Graduate School of Design, April 2014, Cambridge, MA.
4. **Kaplan, D.**, D. McLaughlin, and M. Cohen. 2012. Managing Forests for Increased Water Yield in Florida. American Water Resources Association Annual Conference, November 2012, Jacksonville, FL.

E. National Professional Meeting Presentations (Students & Collaborators):

1. **Crouch, T.^G, D. Kaplan**, E. Latrubesse, L. Santos. 2019. Uncertainty of Sediment Transport through two ‘Run-of-the-River’ Mega-dams on the Madeira River. 15th Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region, September 12, Flagstaff, AZ.
2. **Crouch, T.^G, D. Kaplan**, E. Latrubesse, L. Santos. 2019. Sedimentation Behind two ‘Run-of-the-River’ Dams. Joint 11th Federal Interagency Sedimentation Conference and 6th Federal Interagency Hydrologic Modeling Conference (SEDHYD), June 24-28, Reno, NV. [Poster]
3. **Crouch, T.^G and D. Kaplan**, 2018. A Framework for Assessing the Cumulative Effects of Climate Change and Anthropogenic Activities on Madeira Watershed Hydrosedimentology. XIII Brazilian Meeting of Sediment Engineering, I Particles in the Americas Proceedings. September 24th -28th, 2018 Vitoria, ET, Brazil.
4. **[Benjamin, J.^U] and D. Kaplan**. 2017. Laser-based Water Level Sensing: Seeing the Unseen. Invited talk at the Annual Meeting of the American Water Resources Association, November 2017, Portland, OR.
5. **Benjamin, J.^U and D. Kaplan**. 2017. Development of a Laser-Based Water Level Sensor for Fine-Scale Ecohydrological Measurements. Annual Meeting of the American Water Resources Association, November 2017, Portland, OR.

6. Crouch, T.^G and **D. Kaplan**. 2017. Dams and Sediment in the Amazon Basin: a Review of Standard Practices for Environmental Impact Assessments and Mitigation/Monitoring Plans. 2017 American Water Resource Association annual conference. Nov, 5-9, 2017. Portland, OR. [Poster]
7. Acharya, S.^P, M.J. Cohen, **D. Kaplan** and D. McLaughlin. 2017. Water use by Forests: Determination of interception losses using near-surface soil-moisture data. Unsaturated Zone Interest Group Workshop 2017, Apr 04-06, Gainesville Florida, USA.
8. Acharya, S.^P, M.J. Cohen, **D. Kaplan** and D. McLaughlin. Water use by Forests: Determination of interception losses using near-surface soil-moisture data. Unsaturated Zone Interest Group Workshop 2017, Apr 04-06, Gainesville Florida, USA.
9. Glodzik, K.^G and **D. Kaplan**. 2016. Forecasting coastal forest die-off in the Lower Suwannee Refuge: Influence of Climate Drivers. Annual Meeting of the American Water Resources Association, November 2016, Orlando, FL.
10. Benjamin, J.^U and **D. Kaplan**. 2016. Development of a Laser-Based Water Level Sensor for Fine-Scale Ecohydrological Measurements. Poster at the Annual Meeting of the American Water Resources Association, November 2016, Orlando, FL.
11. Langston, A.^G, T. Ankersen, and **D. Kaplan**. 2016. Natural Resource Adaptation Action Areas: A planning framework for restoration. National Conference on Ecosystem Restoration, April 2016, Coral Springs, FL.
12. Acharya, S.^P, **D. Kaplan**, M. Cohen, and J. Jawitz. 2015. Simulating the effects of ridge elevation and geometry on ridge-slough landscape hydrology. Greater Everglades Ecosystem Restoration Conference, April 2015, Coral Springs, FL.
13. Langston, A.^G, **D. Kaplan**, T. Ankersen, N. Barshel, S. Fida, and G. Davison. 2014. Using blue infrastructure, adaptation science, and education-based tourism to develop adaptation planning in rural coastal communities. NOAA Social Coasts Forum, February 2014, Charleston, SC.

F. National and Regional Seminars and Lectures:

1. **[Kaplan, D.]** 2016. Socio-ecohydrology of a dammed Amazon. *Invited* talk at the University of South Florida Geoscience Colloquium, September 2016, Tampa, FL.
2. **[Kaplan, D.]** 2016. Ecohydrology of a dammed Amazon. *Invited* talk at the University of Florida Biocomplexity Seminar, October 2016, Gainesville, FL.
3. **[Kaplan, D.]** 2016. Upland-Wetland Connections. *Invited* talk at the 2016 Wetland Reserve Easement Partners Planning Workshop, October 2016, Gainesville, FL.

G. National Short Courses and Professional Enrichment Presentations:

1. **[Kaplan, D.]**, 2018. Hydrology 101. *Invited* presentation at the National Social-Ecological Synthesis Center (SESYNC) Immersion Workshop People and Water: Hydrology and Water Governance for Social-Ecological Systems November 15-16, 2018, Annapolis, MD.
2. **[Kaplan, D.]**, 2018. Methods in practice: quantifying flow and mixing using tracers. *Invited* presentation at the National Social-Ecological Synthesis Center (SESYNC) Immersion Workshop People and Water: Hydrology and Water Governance for Social-Ecological Systems November 15-16, 2018, Annapolis, MD.
3. **[Kaplan, D.]**, 2018. An integrated, transdisciplinary assessment of the economic and environmental sustainability of the Floridan aquifer. *Invited* presentation at the National Social-Ecological Synthesis Center (SESYNC) Immersion Workshop People and Water: Hydrology and Water Governance for Social-Ecological Systems November 15-16, 2018, Annapolis, MD.

H. Regional Professional Meeting Presentations:

1. Reaver, N.G.F.^P, Haas, H., **Kaplan, D.A.**, Kalin, L., Graham, W.D. (2020) Implementing Pine Plantation Silvicultural Production and Management Practices into the Soil and Water Assessment Tool (SWAT). 7th UF Water Institute Symposium: Complex Challenges, Integrated Solutions, February 2020, Gainesville, FL.
2. Reaver, N. G. F., **Kaplan, D. A.**, Klammler, H., and Jawitz, J. W. (2020) Deducing Dominant Drivers of Discharge Dynamics: A Mechanistic Modeling Framework to Simultaneously Test Multiple Hypotheses. 7th UF Water Institute Symposium: Complex Challenges, Integrated Solutions, February 2020, Gainesville, FL.
3. Spellman, P., De Rooij, R., Rath, S., Reaver, N. G. F., Graham, W. D., and **Kaplan, D. A.** (2020) The Importance of Process Representation for Simulating Coupled Surface-Groundwater Flow in Karst Watersheds: A Comparison of SWAT, SWAT-MODFLOW, and DISCO. 7th UF Water Institute Symposium: Complex Challenges, Integrated Solutions, February 2020, Gainesville, FL.
4. White Jr., E^G and **D. Kaplan**. 2020. Before the Ghosts Appear: Identifying the Effects of Chronic Saltwater Intrusion on Coastal Floodplain Swamps Using Remote Sensing. 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
5. Siddiqui, S.^G, X. Zapata-Rios, S. Torres-Paguay, A. Encalada, E. Anderson, M. Allaire^U, and **D. Kaplan**. 2020. Flow Regimes of the Amazon. 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
6. Crouch, T.^G, and **D. Kaplan**. 2020. Sediment Transport through Two Run-of-River Mega-dams on the Madeira River. 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
7. Al-Quarishi, A.^G and **D. Kaplan**. Spatial and Seasonal Variations of The Mesopotamian Marshes Hydro-Pattern Under Natural and Regulated Flow Conditions. 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
8. **D. Kaplan**, T. Osborne, Nicole Dix Pangle, Christine Angelini, Thomas Bianchi, John Bowden, Alberto Canestrelli, Nancy Denslow, Hugh Fan, Peter Ifju, Jeffery Johnson, Jimmy Liao, Maitane Olabarietta, Arnolde Valle-Levinson. 2020. iCOAST: A 21st Century Coastal Monitoring Network and Forecasting System. 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
9. Henson, K.^G and **D. Kaplan**. 2020. Quantifying the Effects of Upland Prescribed Burns on the Hydrology of Geographically Isolated Wetlands in Florida Pine Flatwoods. 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
10. Cuevas, C.^U and **D. Kaplan**. 2020. Public Perceptions of Harmful Algal Blooms in Florida. 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
11. Rath, S.^G, W. Graham, and **D. Kaplan**. 2020. Impact of land use change and different management practices on nitrate loading to groundwater in Santa Fe river basin. 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
12. Reaver, NGF^P, H. Haas, **D. Kaplan**, L. Kalin, and W. Graham. 2020. Implementing Pine Plantation Silvicultural Production and Management Practices Into The Soil and Water Assessment Tool

- (SWAT). 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
13. Shi, L., D. Pinton, A. Canestrelli, M. Olabarrieta, and **D. Kaplan**. iCoast-Forecast: Coastal Hazard Forecast System. 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
 14. Swanson, C.^G, S. Bohlman, J. Judge, and **D. Kaplan**. 2019. Measuring Changes to Floodplains After Serial Damming of the Tocantins River in the Eastern Amazon. 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
 15. Spellman, P., De Rooij, R., Rath, S., Reaver, N. G. F., Graham, W. D., and **Kaplan, D. A.** (2020) The Importance of Process Representation for Simulating Coupled Surface-Groundwater Flow in Karst Watersheds: A Comparison of SWAT, SWAT-MODFLOW, and DISCO. 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
 16. White Jr., E.^G and **D. Kaplan**. 2020. Identifying the Effects of Chronic Saltwater Intrusion on Coastal Floodplain Swamps Using Remote Sensing. 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
 17. Zacharias, Q. and **D. Kaplan**. 2020. Phosphorus Management in The Everglades Watershed: Time For a Change in Paradigm? 7th University of Florida Water Institute Symposium: Sustainable Water Resources, February 2020, Gainesville, FL.
 18. White Jr., E.^G and **D. Kaplan**. 2018. Hurricane Impacts on Coastal Baldcypress Swamps are Storm Dependent and Temporally and Spatially Variable. 6th University of Florida Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL.
 19. Spellman P.^P, and **D. Kaplan**. 2018. The efficacy of different gridded climate datasets in simulating hydrological output in the Santa Fe River Basin, FL. University of Florida Water Symposium.
 20. Crouch, T.^G and **D. Kaplan**. 2018. Comparing Climate Change and Anthropogenic Activity Effects on Madeira River Watershed Hydrosedimentology. 6th UF Water Institute Symposium: Shaping our Water Future, February 2018, Gainesville, FL.
 21. Henson, K.^G and **D. Kaplan**. 2018. The Effects of Forest Management on the Hydrology of Isolated Wetlands in North Central Florida Pine Flatwoods. 7th UF Water Institute Symposium, February 2018, Gainesville, FL.
 22. Reaver, N.^G, R. Hensley, M. Cohen, and **D. Kaplan**. 2018. Quantifying and Predicting Three-Dimensional Heterogeneity in Transient Storage Using Roving Profiling. 6th UF Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL.
 23. Reaver, N.^G and **D. Kaplan**. 2018. Swept Away: Interactions between hydrology and primary producers in Florida Springs. 6th UF Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL.
 24. Al-Quraishi, A.^G and **D. Kaplan**. 2018. Reducing the Accumulated Salt Concentration by Changing the Water Hydrodynamic of the Western Al-Hammar Marsh. Water institute Symposium, University of Florida, April 2018, Gainesville, FL.
 25. White Jr., E.^G, **D. Kaplan**, and B. Middleton. 2018. Salinity as a Driver of Community Structure: A 20 Year Case Study on Coastal Floodplain Forests. Ecolunch Seminar, February 2018, Tulane University, New Orleans, LA.
 26. [Glodzik, K.^G] and **D. Kaplan**. 2017. Mapping ghost forests and identifying geographical predictors of salinity stress. *Invited* talk at the Southern Group of State Foresters GIS Committee Annual Meeting, February 2017, Raleigh, NC.

27. Langston, A.^G, **D. Kaplan**, and C. Angelini. 2017. Biotic and abiotic controls on the northern range expansion of black mangroves (*Avicennia germinans*). UF/IFAS Nature Coast Biological Station Big Bend Science Symposium, February 2017, Cedar Key, FL.
28. Langston, A.^G, T. Ankersen, and **D. Kaplan**. 2017. Preparing for the Future: Integrating Science into Rural Coastal Community Comprehensive Planning. Poster at the UF/IFAS Nature Coast Biological Station Big Bend Science Symposium, February 2017, Cedar Key, FL.
29. Glodzik, K.^G and **D. Kaplan**. 2017. Understanding coastal forest die-off in the Lower Suwannee NWR: Influence of geographical characteristics. Poster at the Big Bend Science Symposium, February 2017, Cedar Key, FL.
30. **Kaplan, D.**, M. Olabarrieta, P. Frederick, and A. Valle-Levinson. 2017. Freshwater Detention by Oyster Reefs: Quantifying a keystone ecosystem service. Big Bend Science Symposium, February 2017, Cedar Key, FL.
31. Glodzik, K.^G and **D. Kaplan**. 2016. Forecasting coastal forest die-off in the Lower Suwannee Refuge: Influence of Climate Drivers. Joint Meeting of the Gulf Estuarine Research Society and Society of Wetland Scientists South Atlantic Chapter, November 2016, Pensacola Beach, FL.
32. Langston, A.^G and **D. Kaplan**. 2016. Planning for the future: Climate-change induced reassembly trajectories along the Big Bend coast of Florida. Society of Ecological Restoration Southeast Chapter Annual Symposium, October 2016, Quincy, FL.
33. **Kaplan D.**, P. Sucsy, and N. Reaver^G. 2016. Collaborative Research Initiative on Sustainability and Protection of Springs: Quantifying Silver River Hydraulics and Hydrodynamics. 5th UF Water Institute Symposium: Trends, Cycles and Extreme Events, February 2016, Gainesville, FL.
34. **Kaplan, D.**, M. Olabarrieta, P. Frederick, and A. Valle-Levinson. 2016. Oyster Reefs Impact Estuarine Salinity Over Large Spatial Scales. 5th UF Water Institute Symposium: Trends, Cycles and Extreme Events, February 2016, Gainesville, FL.
35. Acharya, S.^P **D. Kaplan**, D. McLaughlin, and M. Cohen. 2015. Estimating water yield from pine forests with different understory management strategies. The 5th University of Florida Water Institute Symposium: Trends, Cycle and Extreme Events, February 2016, Gainesville, FL.
36. Benjamin, J.^U and **D. Kaplan**. 2016. Development of a Fine-scale Laser-based Water Level Sensor. 5th UF Water Institute Symposium: Trends, Cycles, and Extreme Events, February 2016, Gainesville, FL. [Poster]
37. Timpe, K.^G, and **D. Kaplan**. 2016. Quantifying the hydrologic impacts of Damming the Amazon. 5th UF Water Institute Symposium: Trends, Cycles, and Extreme Events, February 2016, Gainesville, FL. [Poster]
38. Reaver, N.^G and **D. Kaplan**. 2016. How do spring run physical and transport properties vary under different flow conditions? 5th UF Water Institute Symposium: Trends, Cycles and Extreme Events, February 2016, Gainesville, FL. [Poster]
39. White Jr., E.^G, **D. Kaplan**, and B. Middleton. 2016. Investigating the Impacts of Chronic Low-level Salinity on the Productivity and Resilience of Coastal Baldcypress (*Taxodium distichum*) Swamps. 5th University of Florida Water Institute Symposium: Trends, Cycles, and Extreme Events, February 2016, Gainesville, FL. [Poster]
40. Henson, K.^G, **D. Kaplan**, D. McLaughlin, N. Jones. 2016. The Effect of Different Management Techniques on the Hydrology, Flora, Fauna of Geographically Isolated Wetlands in Florida Pine Systems. 5th UF Water Institute Symposium: Trends, Cycles and Extreme Events, February 2016, Gainesville, FL. [Poster]

41. Langston, A.^G and **D. Kaplan**. 2016. Sea Level Rise and the Future of Florida's Forested Freshwater Islands. 5th UF Water Institute Symposium: Trends, Cycles and Extreme Events, February 2016, Gainesville, FL. [Poster]
42. Glodzik, K.^G, B. Pine, C. Reinhardt Adams, and **D. Kaplan**. 2016. Road impacts to salt marsh salinity and vegetation via interrupted surface flow: observations from two Big Bend sites. 5th University of Florida Water Institute Symposium, February 2016, Gainesville, FL. [Poster]
43. Crouch, T.^G, S. Marconi, and **D. Kaplan**. 2016. Use of MODIS Data for a Water Balance of a Large Sub-catchment of the Tapajós Basin. 5th UF Water Institute Symposium: Trends, Cycles and Extreme Events, February 2016, Gainesville, FL.
44. **Kaplan, D.**, D. McLaughlin, and M. Cohen. 2015. Geographically Isolated Wetlands Buffer Regional Water Table and Streamflow Variation. Society of Wetland Scientists South Atlantic Chapter Meeting, October 2015, Athens, GA.
45. Langston, A.^G and **D. Kaplan**. 2015. A Casualty of Climate Change: Long-term Vegetation Trends in a Patchy Coastal Wetland. Society of Wetland Scientists South Atlantic Chapter Meeting, October 2015, Athens, GA. [Poster]
46. Henson, K.^G, **D. Kaplan**, M. Cohen, D. McLaughlin, S. Acharya^P. 2015. Quantifying Water Yield in Florida Pine Systems. Society of Wetland Scientists South Eastern Conference, October 2015, Athens, GA. [Poster]
47. White Jr., E.^G, **D. Kaplan**, and B. Middleton. 2015. Investigating the Impacts of Chronic Low-level Salinity on the Productivity and Resilience of Coastal Baldcypress (*Taxodium distichum*) Swamps. Poster at the Society of Wetland Scientist South Atlantic Chapter Meeting, October 2015, Athens, GA. [Poster]
48. Crouch, T.^G, T. Melis, and **D. Kaplan**. 2015. Applying Lessons from Adaptive Science and Management of Dams in the Arid Western U.S. to New Dams in the Amazonian Lowlands. Society of Wetland Scientists South Atlantic Chapter Meeting, October 26, Athens, GA. [Poster]
49. [**Kaplan, D.**], S. Blair, C. Adams, T. Ankersen, M. McGuire. 2014. Valuation of ecosystem services provided by coastal ecosystem restoration. *Invited* talk at the Workshop: Plant selection for coastal restoration in the era of climate change, August 2014, Marineland, FL.
50. [**Kaplan, D.**] 2015. Best Practices for BioBlitzes. *Invited* talk at the Workshop: FL SeaGrant Estuarine and Coastal Health Initiative to Promote Community Environmental Stewardship. January 2015, Marineland, FL.
51. [**Kaplan, D.**] 2012. Linking river, floodplain, and vadose zone hydrology to improve restoration of a coastal river impacted by saltwater intrusion. *Invited* talk at the 1st Annual Coastal Environmental Soil Science Conference, Florida Association of Environmental Soil Scientists. November 2012, St. Augustine, FL.

I. Local Seminars and Lectures:

1. **Kaplan, D.** 2020. Going Dry in the Land of Water? Florida's Hydrological History & Ideas for Avoiding a Future Water Crisis. Museum of Arts & Sciences – Natural History Festival, September 2019, Daytona Beach, FL.
2. Rezek, K.^U, **D. Kaplan**, K. Henson^G, and J. Benjamin^G. 2019. Laser-Based Water Level Sensor for Ecohydrological Measurement. University of Florida Undergraduate Research Symposium, April 2019. Gainesville, FL. [Poster]
3. **Kaplan, D.** 2018. Socio-ecohydrology of a dammed Amazon. UF Water Institute Faculty Fellow Seminar, March 2018, Gainesville, FL.

4. Reaver, N.^G and **D. Kaplan**. 2018. Quantifying and predicting three-dimensional heterogeneity in river transient storage using roving profiling. Howard T. Odum Center for Wetlands Water, Wetlands, and Watersheds Seminar, November 2018, Gainesville, FL.
5. Reaver, N.^G and **D. Kaplan**. 2018. Swept Away: Interactions between hydrology and primary producers in Florida Springs. 2018 ESSIE Poster Symposium, February 2018, Gainesville, FL.
6. [White Jr., E.^G], **D. Kaplan**, and B. Middleton. 2018. Salinity as a Driver of Community Structure: A 20 Year Case Study on Coastal Floodplain Forests. Ecolunch Seminar, February 2018, Tulane University, New Orleans, LA. *Invited*.
7. **Kaplan, D.** 2018. Hydrologic Transformation in the Amazon Basin: Reconciling economy, society, and the environment in the world's largest watershed. UF Water Institute Graduate Fellows Lecture Series at Oak Hammock, March 2018, Gainesville, FL.
8. White Jr., E.^G and **D. Kaplan**. 2018. Restore or Retreat? Saltwater Intrusion and Water Management in Coastal Wetlands. June 2018. Invited presentation for Saving Earth's Environment through Education (SEEK), June 2018, Crystal River, FL.
9. White Jr., E.^G, **D. Kaplan**, and B. Middleton. 2018. Salinity as A Driver of Community Structure: A 20 Year Case Study on Coastal Floodplain Forests. 2018 ESSIE Poster Symposium, February 2018, Gainesville, FL.
10. White Jr., E.^G, **D. Kaplan**, and B. Middleton. 2018. Salinity as a Driver of Community Structure: A 20 Year Case Study on Coastal Floodplain Forests. *Invited*. Ecolunch Seminar, February 2018, Tulane University, New Orleans, LA.
11. Reaver, N.^G and **D. Kaplan**. 2018. Swept Away: Interactions between hydrology and primary producers in Florida Springs. 2018 ESSIE Poster Symposium, February 2018, Gainesville, FL.
12. Reaver, N.^G and **D. Kaplan**. 2018. Quantifying and predicting three-dimensional heterogeneity in river transient storage using roving profiling. Howard T. Odum Center for Wetlands Water, Wetlands, and Watersheds Seminar, November 2018, Gainesville, FL
13. Reaver, N.^G, **D. Kaplan**, H. Klammer, and J. Jawitz. 2018. Development of an analytical solution for the Budyko watershed parameter in terms of catchment physical features. 2018 Synthesis Workshop on Network Dynamics: Structure and Function, February 2018, Gainesville, FL.
14. **Kaplan, D.** 2018. Socio-ecohydrology of a dammed Amazon. UF Water Institute Early Career Faculty Fellow Seminar, March 2018, Gainesville, FL.
15. **Kaplan, D.** 2018. Hydrologic Transformation in the Amazon Basin: Reconciling economy, society, and the environment in the world's largest watershed. UF Water Institute Graduate Fellows Lecture Series at Oak Hammock, March 2018, Gainesville, FL.
16. Reaver, N.^G and **D. Kaplan**. 2017. Collaborative Research Initiative on Sustainability and Protection of Springs (CRISPS). Guest lecture in the course Springs of Florida. March 2017, University of Florida, Gainesville, FL.
17. **D. Kaplan** and K. Timpe^G. 2018. The Changing Ecohydrology of a Dammed Amazon. 6th University of Florida Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL.
18. **D. Kaplan** and K. Timpe^G. 2018. The Changing Ecohydrology of a Dammed Amazon. 6th University of Florida Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL.
19. Reaver, N.^G and **D. Kaplan**. 2018. Swept Away: Interactions between hydrology and primary producers in Florida Springs. 6th UF Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL.

20. Reaver, N.^G, **D. Kaplan**, R. Hensley, and M. Cohen. 2018. Quantifying and Predicting Three-Dimensional Heterogeneity in Transient Storage Using Roving Profiling. 6th UF Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL.
21. Acharya, S.^P, D. McLaughlin, **D. Kaplan**, and M. Cohen. 2018. Forest Management for Water Conservation: Drivers of forest water use and yield. 6th University of Florida Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL.
22. **D. Kaplan**, P. Sucsy, E. Carter, N. Reaver, J. Slater, J. Stewart, and Y. Zhang. Connecting Spring Run Hydraulics and Ecosystem Structure in the Silver River. 6th University of Florida Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL.
23. Crouch, T.^G, **D. Kaplan**. 2018. Comparing Climate Change and Anthropogenic Activity Effects on Madeira River Watershed Hydrosedimentology. 6th UF Water Institute Symposium: Shaping our Water Future, February 2018, Gainesville, FL. [Poster]
24. Henson, K.^G and **D. Kaplan**. The Effects of Forest Management on the Hydrology of Isolated Wetlands in North Central Florida Pine Flatwoods. 6th UF Water Institute Symposium: Shaping our Water Future, February 2018, Gainesville, FL. [Poster]
25. Glodzik, K.^G, **D. Kaplan**, and A. Abd-Ehrahman. 2018. Geographic drivers of coastal forest die-off and change since 1984 in the Lower Suwannee NWR. 6th University of Florida Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL.
26. Langston, A.^G and **D. Kaplan**. 2018. Modeling the Effects of Climate Change and Predation on Northward Expansion of Black Mangroves (*Avicennia germinans*) into Temperate Salt Marsh. 6th University of Florida Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL. [Poster]
27. Reaver, N.^G and **D. Kaplan**. 2018. Swept Away: Interactions between hydrology and primary producers in Florida Springs. 2018 ESSIE Poster Symposium, February 2018, Gainesville, FL. [Poster]
28. White Jr., E.^G, and **D. Kaplan**. 2018. Hurricane Impacts on Coastal Baldcypress Swamps are Storm Dependent and Temporally and Spatially Variable. 6th University of Florida Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL. [Poster]
29. Al-Quraishi, A.^G and **D. Kaplan**. 2018. Reducing the Accumulated Salt Concentration by Changing the Water Hydrodynamic of the Western Al-Hammar Marsh. 6th University of Florida Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL. [Poster]
30. Spellman P.^P and **D. Kaplan**. 2018. The efficacy of different gridded climate datasets in simulating hydrological output in the Santa Fe River Basin, FL. 6th University of Florida Water Institute Symposium: Shaping Our Water Future, February 2018, Gainesville, FL. [Poster]
31. **Kaplan, D.** 2018. Going dry in the land of water? Florida's hydrological past, present and future. Florida Water Lecture Series at Oak Hammock, January 2018, Gainesville, FL.
32. **Kaplan, D.**, A. Lima, and C. Doria. 2017. Hydrological controls of fisheries production in a major Amazonian tributary. University of Florida Fisheries & Aquatic Sciences Seminar, December 2017, Gainesville, FL.
33. **Kaplan, D.** 2018. Going Dry in the Land of Water? Florida's Hydrological History & Ideas for Avoiding a Future Water Crisis. UF Environmental and Global Health Seminar Series. October, 2017, Gainesville, FL.
34. Reaver, N.^G and **D. Kaplan**. 2017. Swept Away: Interactions between hydrology and primary producers in Florida Springs. Water, Wetlands, and Watersheds Seminar, Center for Wetlands, University of Florida, October 2017, Gainesville, FL.

35. Reaver, N.^G and **D. Kaplan**. 2017. Swept Away: Interactions between hydrology and primary producers in Florida Springs. Guest lecture in the Howard T. Odum Florida Springs Institute's Springs Field School. August 2017, Ocala National Forest, FL.
36. **Kaplan D.**, P. Sucsy, E. Carter, N. Reaver^G, J. Stewart, and Y. Zhang. 2017. Quantifying Silver River Hydraulics and Hydrodynamics. Year 3 Spring Meeting of the SJRWMD-UF Springs Protection Initiative Science/Collaborative Research Initiative on Sustainability and Protection of Springs, March 2017, Palatka, FL.
37. Langston, A.^G and **D. Kaplan**. 2017. Effects of climate change and crabs on mangrove colonization along the Nature Coast. Friends of the Withlacoochee Gulf Preserve Talk Series, March 2017, Yankeetown, FL.
38. **Kaplan D.**, P. Sucsy, E. Carter, N. Reaver^G, J. Stewart, and Y. Zhang. 2017. Quantifying Silver River Hydraulics and Hydrodynamics. Year 3 Spring Meeting of the SJRWMD-UF Springs Protection Initiative Science/Collaborative Research Initiative on Sustainability and Protection of Springs, March 2017, Palatka, FL.
39. Langston, A.^G and **D. Kaplan**. 2017. Effects of climate change and crabs on mangrove colonization along the Nature Coast. Friends of the Withlacoochee Gulf Preserve Talk Series, March 2017, Yankeetown, FL.
40. Langston, A.^G, T. Ankersen, and **D. Kaplan**. 2017. Natural Resource Adaptation Action Areas: Incorporating sea level rise adaptation into rural coastal community comprehensive planning. UF Levin College of Law 23rd Annual Public Interest Environmental Conference, February 2017, Gainesville, FL.
41. Glodzik, K.^G and **D. Kaplan**. 2017. Understanding coastal forest die-off in the Lower Suwannee NWR: Influence of geographical characteristics. Poster at the University of Florida Engineering School of Sustainable Infrastructure and Environment Annual Poster Symposium, February 2017, Gainesville, FL.
42. Al-Quraishi, A.^G and **D. Kaplan**. 2017. Ecohydrological Degradation and Restoration of the Western Mesopotamian Marshlands. Poster at the University of Florida Engineering School of Sustainable Infrastructure and Environment Annual Poster Symposium, February 2017, Gainesville, FL.
43. Benjamin, J.^U and **D. Kaplan**. 2017. Development of a Laser-Based Water Level Sensor for Fine-Scale Ecohydrological Measurements. Poster at the Florida Undergraduate Research Conference, February 2017, Boca Raton, FL.
44. **Kaplan D.**, P. Sucsy, E. Carter, N. Reaver^G, J. Stewart, and Y. Zhang. 2016. Quantifying Silver River Hydraulics and Hydrodynamics. Year 2 Fall Meeting of the SJRWMD-UF Springs Protection Initiative Science/Collaborative Research Initiative on Sustainability and Protection of Springs, September 2016, Gainesville, FL.
45. Reaver, N.^G and **D. Kaplan**. 2016. Measuring changes in spring run reach-scale transport properties under different flow conditions. Poster at the 2nd Annual Meeting of the SJRWMD/UF Collaborative Research Initiative on Springs Protection and Sustainability (CRISPS) Program, September 2016, Gainesville, FL.
46. Reaver, N.^G and **D. Kaplan**. 2016. Measuring changes in spring run reach-scale transport properties under different flow conditions. Poster at the AEESP Distinguished Lecture/Poster Session, September 2016, Gainesville, FL.
47. Langston, A.^G and **D. Kaplan**. 2016. Investigating Top-down and Bottom-up Influences on Black Mangrove (*Avicennia germinans*) Encroachment in Forested Freshwater Islands Along the Big Bend Coast of Florida. Poster at the Association of Environmental Engineering & Science Professors Distinguished Lecture & Poster Session, September 2016, Gainesville, FL.

48. Benjamin, J.^U and **D. Kaplan**. 2016. Development of a Laser-Based Water Level Sensor for Fine-Scale Ecohydrological Measurements. Poster at the AEESP Distinguished Lectureship Workshop, September 2016, Gainesville, FL.
49. Benjamin, J.^U and **D. Kaplan**. 2016. Development of a Laser-Based Water Level Sensor for Fine-Scale Ecohydrological Measurements. UF Ronald E. McNair Scholars Summer Research Symposium, August 2016, Gainesville, FL.
50. Benjamin, J.^U and **D. Kaplan**. 2016. Development of a Fine-Scale Laser-Based Water Level Sensor. Poster at the 2016 SAEOPP McNair/SSS Scholars Research Conference, June 2016, Atlanta, Ga.
51. **Kaplan D.**, P. Sucsy, and N. Reaver^G. 2016. Collaborative Research Initiative on Sustainability and Protection of Springs: Quantifying Silver River Hydraulics and Hydrodynamics. Year 2 Spring Meeting of the SJRWMD-UF Springs Protection Initiative Science/Collaborative Research Initiative on Sustainability and Protection of Springs (SPIS-CRISPS), March 2016, Palatka, FL.
52. **Kaplan, D.**, M. Olabarrieta, P. Frederick, and A. Valle-Levinson. 2016. Restored oyster reefs enhance estuarine ecosystem services by altering nearshore salinity. *Invited* talk at the UF Department of Fisheries and Aquatic Science, March 2016, Gainesville FL.
53. **Kaplan D.**, P. Sucsy, and N. Reaver^G. 2016. Collaborative Research Initiative on Sustainability and Protection of Springs: Quantifying Silver River Hydraulics and Hydrodynamics. Year 2 Spring Meeting of the SJRWMD-UF Springs Protection Initiative Science/Collaborative Research Initiative on Sustainability and Protection of Springs (SPIS-CRISPS), March 2016, Palatka, FL.
54. **[Kaplan, D.]**, M. Olabarrieta, P. Frederick, and A. Valle-Levinson. 2016. Restored oyster reefs enhance estuarine ecosystem services by altering nearshore salinity. *Invited* talk at the UF Department of Fisheries and Aquatic Science, March 2016, Gainesville FL.
55. White Jr., E.^G, **D. Kaplan**, and B. Middleton. 2016. Crisis on the Coast: Will Baldcypress Swamps Live into the Next Century? Cedar Key Library Speaker Series, February 2016, Cedar Key, FL.
56. Benjamin, J.^U and **D. Kaplan**. 2016. Development of a Fine-scale Laser-based Water Level Sensor. Florida Undergraduate Research Conference, February 2016, Tampa, FL. [Poster]
57. Langston, A.^G and **D. Kaplan**. 2016. Climate Change and the Future of Coastal Forests Along the Big Bend Coast of Florida. University of Florida Engineering School of Sustainable Infrastructure and Environment Annual Poster Symposium, February 2016, Gainesville, FL. [Poster]
58. Reaver, N.^G and **D. Kaplan**. 2016. How do stream physical and transport properties vary under different flow conditions? 18th Annual UF ESSIE Research Symposium: Trends, February 2016, Gainesville, FL. [Poster]
59. White Jr., E.^G, **D. Kaplan**, and B. Middleton. 2016. Investigating the Impacts of Chronic Low-level Salinity on the Productivity and Resilience of Coastal Baldcypress (*Taxodium distichum*) Swamps. 18th Annual UF ESSIE Poster Symposium, February 2016, Gainesville, FL. [Poster]
60. Langston, A.^G and **D. Kaplan**. 2016. Investigating top-down and bottom-up influences on black mangrove (*Avicennia germinans*) encroachment in forested freshwater islands along the Big Bend coast of Florida. Big Bend Science Symposium, January 2016, Cedar Key, FL.
61. Glodzik, K.^G, B. Pine, C. Reinhardt Adams, and **D. Kaplan**. 2016. Road impacts to salt marsh salinity and vegetation via interrupted surface flow: observations from two Big Bend sites. Big Bend Science Symposium, February 2016, Gainesville, FL. [Poster]

62. White Jr., E.^G, **D. Kaplan**, and B. Middleton. 2016. Investigating the Impacts of Chronic Low-level Salinity on the Productivity and Resilience of Coastal Baldcypress (*Taxodium distichum*) Swamps. Big Bend Science Symposium/North Florida Marine Science Symposium, Jan. 2016, Cedar Key, FL. [Poster]
63. **[Kaplan, D.]** and S. Athayde. 2015. Hydroelectric Dam Development in the Amazon: National and international contexts. University of Florida Amazon Seminar, October 2015, Gainesville, FL.
64. Langston, A.^G and **D. Kaplan**. 2015. Climate change effects in the Big Bend region. Alachua Conservation Trust Speaker Series, October 2015, Gainesville, FL.
65. **Kaplan, D.** 2015. Going Dry in the Land of Water? Florida's Hydrological History and Looming Water Crisis. University of Florida Wetlands Club, October 2015, Gainesville FL.
66. **Kaplan D.**, P. Sucsy, and N. Reaver^G. 2015. Springs Ecosystems Hydraulics and Hydrodynamics. Year 1 Annual Report and Public Meeting of the SJRWMD-UF Springs Protection Initiative Science/Collaborative Research Initiative on Sustainability and Protection of Springs (SPIS-CRISPS), September 2015, Gainesville, FL.
67. Reaver, N.^G and **D. Kaplan**. 2015. Hydraulic controls on algal cover and distribution in spring-fed rivers. 1st Annual Meeting of the SJRWMD/UF Collaborative Research Initiative on Springs Protection and Sustainability (CRISPS) Program, September 2015, Gainesville, FL. [Poster]
68. Johnson, A.^U, N. Reaver^G and **D. Kaplan**. 2015. Evaluating the Raz-Rru system for use in identifying biogeochemical hotspots in spring-fed rivers. 1st Annual Meeting of the SJRWMD/UF Collaborative Research Initiative on Springs Protection and Sustainability (CRISPS) Program, September 2015, Gainesville, FL. [Poster]
69. Reaver, N.^G and **D. Kaplan**. 2015. Measuring changes in spring run reach-scale transport properties under different flow conditions. 1st Annual Meeting of the SJRWMD/UF Collaborative Research Initiative on Springs Protection and Sustainability (CRISPS) Program, September 2015, Gainesville, FL. [Poster]
70. **Kaplan, D.** 2015. Restore or Retreat? Saltwater Intrusion and Water Management in Coastal Ecosystems. Water, Wetlands, and Watersheds Seminar, Center for Wetlands, University of Florida, October 2015, Gainesville, FL.
71. **Kaplan, D.** 2015. Agricultural Water Security and Upper Floridan Aquifer Sustainability: Incompatible Goals or Opportunities for Compromise? Case study presentation in the course Interdisciplinary Research and Practice. March 2015, University of Florida, Gainesville, FL.
72. Langston, A.^G and **D. Kaplan**. 2015. A casualty of climate change: Long-term vegetation trends in a patchy coastal wetland. University of Florida Engineering School of Sustainable Infrastructure & Environment Research Symposium, March 2015, Gainesville, FL. [Poster]
73. Reaver, N.^G and **D. Kaplan**. 2015. Hydraulic controls on algal cover and distribution in spring-fed rivers. Poster at the 17th Annual UF ESSIE Research Symposium, March 2015, Gainesville, FL.
74. Johnson, A.^U, N. Reaver^G, and **D. Kaplan**. 2015. Evaluating the Raz-Rru system for use in identifying biogeochemical hotspots in spring-fed rivers. Poster at the 17th Annual UF ESSIE Research Symposium, March 2015, Gainesville, FL. [Poster]
75. Henson, K.^G, **D. Kaplan**, M. Cohen, D. McLaughlin, S. Acharya^P. 2015. Quantifying Water Yield in Florida Pine Systems. Poster at the 17th Annual UF ESSIE Research Symposium, March 2015, Gainesville, FL. [Poster]
76. **Kaplan, D.** 2015. The Universal Soil Loss Equation. Guest lecture in the course Advanced Landscape Architectural Design. March 2015, University of Florida, Gainesville, FL.

77. **Kaplan, D.** 2015. Agricultural Water Security and Upper Floridan Aquifer Sustainability: Incompatible Goals or Opportunities for Compromise? Case study presentation in the course Interdisciplinary Research and Practice. March 2015, University of Florida, Gainesville, FL.
78. **Kaplan, D.** 2015. The Universal Soil Loss Equation. Guest lecture in the course Advanced Landscape Architectural Design. March 2015, University of Florida, Gainesville, FL.
79. **Kaplan, D.**, D. McLaughlin, and M. Cohen. 2014. Trading Wood for Water: Managing Forests for Increased Regional Water Availability. UF School of Natural Resources and Environment Seminar, March 2013, Gainesville, FL.
80. **Kaplan, D.** 2012. Flow rating curves in the Everglades ridge and slough mosaic: exploring landscape-scale hydraulic geometry. Water, Wetlands, and Watersheds Seminar, Center for Wetlands, University of Florida, October 2012, Gainesville, FL.

EDUCATION/OUTREACH PUBLICATIONS AND WORKSHOPS

1. **White Jr., E.^G** and **D. Kaplan**. 2018. Restore or Retreat? Saltwater Intrusion and Water Management in Coastal Wetlands. June 2018. *Invited* presentation for Saving Earth's Environment through Education (SEEK), June 2018, Crystal River, FL.
2. **Kaplan, D.** Going Dry in the Land of Plenty? Florida's Hydrological History and Looming Water Crisis. *Invited* talk at the Friendship Fellowship at Pineda (Unitarian Universalist Church), September 2015, Rockledge, FL.
3. **Kaplan, D.** and S. Arden. 2015. Past, Present, and Future: Using Climate Data and Models to Inform Lake Management in Florida? *Invited* workshop at the Florida Lake Management Society, 24th Annual Conference & Symposium, June 2015, Naples, FL.
4. Atahyde, S., J. Dutka-Gianelli, **D. Kaplan**, and S. Bohlman. 2014. Engineered Landscapes: Society, the Environment, and Shifting Values in Brazil and the United States. October 2014, Gainesville, FL.
5. **Kaplan, D.** 2013. How Do Watersheds Dictate the Ecological Integrity of Florida Lakes? *Invited* workshop at the Florida Lake Management Society, 24th Annual Conference & Symposium: Integrating Lake and Watershed Management, June 2013, Daytona Beach, FL.
6. **Kaplan, D.** 2012. "What is the structure of water?" In M. Lamothe, J. Rothman, J. Volvovski (Eds.): *The Where, The Why and The How: 75 Artists Illustrate Wondrous Mysteries of the Universe*. Chronicle Books, San Francisco.
7. **Kaplan, D.** 2012. "Why do whales sing?" In M. Lamothe, J. Rothman, J. Volvovski (Eds.): *The Where, The Why and The How: 75 Artists Illustrate Wondrous Mysteries of the Universe*. Chronicle Books, San Francisco.
8. Vardi, T. and **D. Kaplan**. 2005. Forever Wild: Nature in New York City. Website, brochure, map, and database of New York City natural areas. www.nycgovparks.org/greening/nature-preserves.

Research Reports

1. **Kaplan, D.** and E. White^G. 2016. Nature Coast Biological Station Project Status Report. September, 2016, Gainesville, FL.
2. **Kaplan, D.**, P. Sucsy, N. Reaver^G, A. Johnson^U, E. Carter, J. Stewart, and Y. Zhang. 2016. Hydraulics and Hydrodynamics: Velocity and residence time distributions and transient storage. Annual Report for the SJRWMD-UF Springs Protection Initiative Science/Collaborative Research

- Initiative on Sustainability and Protection of Springs (SPIS-CRISPS). September, 2016, Gainesville, FL.
3. Cohen, M., D. McLaughlin, and **D. Kaplan**. 2016. Managing Forests for Increased Regional Water Availability. Year 2 Annual Report to the Florida Department of Agriculture and Consumer Services. March 2016, Gainesville, FL.
 4. **Kaplan, D.** Predicting the effects of water use, climate change, and sea-level rise on saline and freshwater communities of the Lower Suwannee and Cedar Keys National Wildlife Refuges, FL. Final report the US Department of the Interior, Fish and Wildlife Service. December 2015, Gainesville, FL.
 5. **Kaplan, D.**, P. Sucsy, N. Reaver^G, A. Johnson^U, E. Carter, J. Stewart, and Y. Zhang. 2015. Hydraulics and Hydrodynamics: Velocity and residence time distributions and transient storage. Annual Report for the SJRWMD-UF Springs Protection Initiative Science/Collaborative Research Initiative on Sustainability and Protection of Springs (SPIS-CRISPS). September, 2015, Gainesville, FL.
 6. Langston A.^G and **D. Kaplan**. 2015. Interim Summary of Findings Along Turtle Creek: Long-term Vegetation Trends in Coastal Hydric Hammock. Report to the Florida Department of Environmental Protection. University of Florida, Gainesville.
 7. Atahyde, S., J. Dutka-Gianelli, **D. Kaplan**, and S. Bohlman. 2014. Technical Report: Engineered Landscapes: Society, the Environment, and Shifting Values in Brazil and the United States Post-Symposium Summary and Report. University of Florida, Gainesville.
 8. Langston, A.* and **D. Kaplan**. 2014. Science Plan and Rapid Ecological Assessment for Natural Resource-Based Sea-Level Rise Adaptation Strategy in Yankeetown, FL. University of Florida, Gainesville.
 9. Acharya, S.^P, **D. Kaplan**, M. Cohen, and J. Jawitz. 2014. Anisotropic local interaction coupled with hydrologic feedback generate elongated ridge-slough patterning in the Everglades. Systems Status Report to the Army Corps of Engineers. University of Florida, Gainesville.
 10. Watts, D., M. Cohen, **D. Kaplan**, and D. McLaughlin. 2013. Evaporation-Driven Phosphorus Transport from Sloughs to Ridges as a Mechanism for Phosphorus Enrichment on Ridges. Systems Status Report to the Army Corps of Engineers. University of Florida, Gainesville.
 11. Cohen, M., D. Watts, **D. Kaplan**, Y. Jing, J. Heffernan, T. Osborne, M. Clark, and T. Oh. 2012. Mechanisms of Ridge-Slough Maintenance and Degradation across the Greater Everglades. Final report to the Army Corps of Engineers. University of Florida, Gainesville.
 12. Cohen, M., D. Watts, **D. Kaplan**, Y. Jing, J. Heffernan, T. Osborne, M. Clark, and T. Oh. 2011. Mechanisms of Ridge-Slough Maintenance and Degradation across the Greater Everglades. Annual report to the Army Corps of Engineers. University of Florida, Gainesville.
 13. **Kaplan, D.**, R. Paudel, J. Jawitz, and M. Cohen. 2011. Application of the Regional Simulation Model (RSM) to Test the Effects of Landscape Orientation on Flow through the Everglades Ridge-Slough Mosaic. Report to the South Florida Water Management District. University of Florida, Gainesville.
 14. Muñoz-Carpena, R., **D. Kaplan**, and F.J. Gonzalez. 2009. Advanced Data Analysis of Shallow Groundwater Dynamics in the Loxahatchee River Floodplain. Final Project Report to the South Florida Water Management District-Coastal Ecosystems Division. University of Florida, Gainesville.
 15. Jawitz, J., J. Bhadha, M. Brenner, G. Brown, A. Bunch, and **D. Kaplan**. 2009. A Sustainable Approach to Preserve the Choctawhatchee Coastal Dune Lakes of Florida. Final Report to the US Environmental Protection Agency. University of Florida, Gainesville.

16. Muñoz-Carpena, R., **D. Kaplan** and F.J. Gonzalez. 2008. Groundwater Data Processing and Analysis for the Loxahatchee River Basin. Final Project Report to the South Florida Water Management District-Coastal Ecosystems Division. University of Florida, Gainesville.

FUNDED RESEARCH

1. 2021 National Wetlands Condition Assessment (PI), \$450,000, US Environmental Protection Agency, *pending*.
2. NEHAR: The Nearshore and Estuary HAzaRd Forecasting System (co-PI), **\$729,541**, SECOORA, *pending*.
3. Assessing Ecological and Economic Impacts of Human Disturbances on Coastal Food Webs and Fisheries (co-PI), \$1,100,000, National Academies of Sciences (7/2020 – 6/2023), *provisionally funded as of 6/2020*.
4. Water Quantity and Quality Monitoring in the GTM-NERR, **\$114,111**, FL Department of Environmental Protection.
5. Quantifying variation in coastal wetland structure and function across a winter temperature gradient (PI), **\$70,000**, USGS.
6. A framework for modeling flow over flexible submerged aquatic vegetation (co-PI), **\$498,824**, National Science Foundation (3/2020 – 2/2023).
7. Planning Grant: Engineering Research Center for Intelligent Sensing, Mapping, and Forecasting of Water Quality for Sustainable Coastal Ecosystems (iCoast) (co-PI), **\$100,000**, National Science Foundation (9/2019 – 8/2020).
8. iCoast: a 21st Century Coastal Monitoring Network (PI), **\$750,000**, University of Florida "Moonshot" program (1/2019 – 12/2020).
9. SWS Student Research Grant for Elliott White (PI), **\$1026**, Society of Wetland Scientists 5/2018 – 6/2019).
10. Why is flow in Silver Springs is declining? (PI), **\$49,369**, Florida Fish and Wildlife Foundation (1/2018 – 9/2019).
11. Agricultural Water Security for the Floridan Aquifer: An Integrated Assessment of Economic and Environmental Impacts (Co-Project Director), **\$4,918,922**, USDA Agriculture and Food Research Initiative - Water for Agriculture Challenge Area (3/2017 – 6/2022).
12. Rapid, low-cost nanobiosensors for developing risk assessment decision analytics in rural Colombia (Co-PI), **\$4,800**, University of Florida Center for Latin American Studies International Working Group (4/2017 – 4/2018).
13. CNH-RCN: Amazon Dams Network: advancing integrative research and adaptive management of social-ecological systems transformed by hydroelectric dams (Senior Personnel), **\$498,997**, National Science Foundation (9/2016 - 8/2021).
14. Agricultural Water Security Through Sustainable Use of the Floridan Aquifer: An Integrated Assessment of Economic and Environmental Impacts (PI), **\$80,000** USGS (3/2016 – 3/2018).
15. Technical Assistance for Research and Monitoring of Selected Biological Resources within Florida's Nature Coast (co-PI), **\$150,000**, USGS (3/2016 – 9/2019).
16. Long-term trends in floodplain forest tree growth across salinity gradients in along Florida's Big Bend coastline (PI), **\$64,625**, USGS (5/2016 – 5/2018).
17. National Wetlands Condition Assessment (PI), **\$414,225**, US Environmental Protection Agency (4/2016 – 9/2019).
18. Data Collection for Improvement of the Florida Wetland Condition Index (FWCI) in Conjunction with the Environmental Protection Agency's (EPA) National Wetland Condition Assessment (NWCA) (PI), **\$179,669**, US Environmental Protection Agency (7/2016 – 6/2020).
19. Supplemental National Wetlands Condition Assessment Contract, (PI), **\$111,788**, FL Department of

- Environmental Protection (4/2016 – 3/2019).
20. Hydrologic transformation in the Amazon basin: reconciling economy, society, and the environment in the world’s largest watershed (PI), **\$1,082,402**, UF Water Institute (8/2015 – 8/2019).
 21. Modeling the connections between hydrology, water quality, and ecosystem health to support coastal preservation efforts across the Northern Gulf Coast (PI), **\$300,000**, National Park Service/United States Geological Survey Water Quality Partnership (6/2015 – 5/2018).
 22. Collaborative Research Initiative on Sustainability and Protection of Springs (Co-PI), **\$3,000,000**, St. Johns River Water Management District (4/2014 – 7/2017).
 23. Quantifying a novel ecosystem service of oyster reefs: estuarine freshwater entrainment (Co-PI), **\$10,000**, Florida SeaGrant (9/2013 – 9/2014).
 24. Managing forests for increased regional water availability (Co-PI), **\$637,725**, Suwanee and St. Johns River Water Management Districts/Florida Division of Agricultural and Consumer Services/Florida Department of Environmental Protection (3/2014 – 3/2018).
 25. Establishing a Natural Resources-Based “Adaptation Action Area” for the town of Yankeetown, FL (PI), **\$25,000**, Florida Department of Economic Opportunity (6/2013 – 6/2014).
 26. Predicting the effects of water use, climate change, and sea-level rise on saline and freshwater communities of the Lower Suwannee and Cedar Keys National Wildlife Refuges, FL (PI), **\$39,314** US Fish and Wildlife Service. (9/2013 – 9/2015).
 27. Establishing ecological observatory networks in Southeastern barrier island forests (Co-PI), **\$21,500**, USDA McIntire Stennis Program.
 28. Quantifying water yield from upland habitat restoration and management: benefits to wetlands, watersheds, and aquifers (Co-PI), **\$10,470**, USDA, McIntire Stennis Program.

TEACHING AND MENTORSHIP ACTIVITIES

- Visiting Scholar Host:
 - Yordany Sidey Guimac de Vela, Universidad Nacional Toribio Rodríguez de Mendoza, Peru (2018-2019)
 - Pamela Senesi, Universidad EARTH, Costa Rica (2018)
 - Edipo Araujo, Federal University of Pará, Brazil (2016-2107)
 - Victoria Isaac, Federal University of Pará, Brazil (2016-2107)
 - Ji Wenyan and Ma Xiaohui, Chinese State Forestry Administration (2016-2017)
 - Fangli Su, Associate Professor and Academic Leader, Department of Soil and Water Conservation, Shenyang Agricultural University, China (2014-2015)
- Thesis Advisor/Postdoctoral Sponsor:
 - Total number of postdoctoral scholars mentored (3): *Subodh Acharya* (past); *Patricia Spellman* (past) and *Nathan Reaver* (current)
 - Total number of graduate students mentored (16): *Kevin Henson*, (PhD, 2019), *Elliott White* (PhD 2019), *Nathan Reaver* (PhD, 2018), *Amy Langston* (PhD, 2018), *Katie Glodzik* (PhD, 2018), *Darina Palacio* (PhD, 2013); *Javier Gomez* (MS, 2019); *Alexa Mainella* (MS, 2019); *Kelsie Timpe* (MS, 2016); *Alexis Johnson* (MS, 2016); *Peiling Yu* (MS, current); *Ali Al-Quraishi*, *Trey Crouch*, *Sagarika Rath*, *Sharmin Siddiqui*, *Renee Price*, (PhD, current).
- Undergraduate Research Advisor:
 - Total number of undergraduate students mentored since 2012: 14
 - *Robert Taylor*, Hydrodynamics of submerged aquatic vegetation (2019-present); *Christopher Cuevas*, Public perceptions of Florida algal blooms (2018 – 2020); *Quinn Zacharias*, Scientific basis for the Everglades phosphorous standard (2018 – present); *Monica Schott*, Floodplain

groundcover vegetation affected by saltwater intrusion (2018 – 2019); *Kyle Rezek*, Novel sensors for ecohydrological measurement (2018 – 2019); *Tristen Townsend*, Nature Coast Biological Station intern: performing field and lab experiments to understand the effects of Periwinkle snail (*Littorina littorea*) on black mangrove (*Avicennia germinans*) seedlings (2017-2018); *Joshua Benjamin*, UF University Scholar: Novel sensors for ecohydrological measurement (2015-2017); *Samantha Schreiner*, 4/1 Program: Wetland treatment system design for a rural Costa Rican Community (2015-2017); *Bruna Barbezani*, Brazilian Scientific Mobility Program: Amazon basin hydrological data analysis and modeling (summer 2015); *Alexis Johnson*, UF University Scholar: Hydraulics and nutrient uptake in flowing waters (2013-2015); *Samantha Kufrin*: Groundwater use and wetland ecological integrity (2012-2013); *Alicia Mata*, UF Honors Thesis: Watershed hydrology and erosion potential in Panama (2013-2014); *Julianne Chechanover*: Erosion control materials (2014-2015); *Emily Labandera*: Amazon hydrology (2014-2015)

- Additional student mentorship:
 - Society of Wetland Scientists Annual Meeting undergraduate student mentor (2015)
 - Brazilian Science Without Borders Program Fellow Mentor (2014-present)
- New course development (University of Florida):
 - Environmental Resources Management (2020)
 - Wetland Restoration and Design (2016)
 - Ecological Engineering (2017)
 - UnCommon Reads: A Prosperous Way Down (2015)
 - Wetland Restoration and Management (2013)
- Courses taught 2012 – 2020: Environmental Resources Management; Wetland Hydrology; Systems Ecology Seminar; Water, Wetlands, and Watersheds Seminar; Ecological Engineering; Wetland Design and Restoration; Wetland Ecology; UnCommon Reads: A Prosperous Way Down; Applied Ecology; Wetland Treatment Systems; Wetland Restoration and Management
- Graduate, University of Florida College of Agricultural and Life Sciences Teacher’s College, 2011
- Teaching Assistant and Lab Instructor, Land and Water Resources Engineering, 2007
- Instructor, Introduction to Engineering, 2006 – 2010
- Mentored undergraduate students from Brazil, Guatemala, and Costa Rica during four-month internships at the University of Florida, 2007-2018
- Led hands-on worker training programs and volunteer workshops on bioengineering techniques, salt marsh ecology and restoration, water quality monitoring, and invasive plant identification and management for the New York City Department of Parks & Recreation, 2001-2005

HONORS AND AWARDS

- Haskell Faculty Research Award Winner (2018-2019)
- University of Florida Agricultural and Biological Engineering Young Alumnus Award (2018)
- University of Florida Water Institute Early Career Faculty Fellow (2017-2020)
- University of Florida Term Professorship (2017-2023)
- UF International Center and College of Engineering, International Educator of the Year (2016)
- Center for Latin American Studies Faculty Travel Award (2016)
- 2010 Best Dissertation Award, UF Department of Agricultural and Biological Engineering (2010)
- Graduate Student Award of Merit, Gamma Sigma Delta (Agricultural Honor Society) (2010)
- Student Speaker Award, FL Section, Amer. Soc. of Agricultural and Biological Engineers (2009)

- McNair Bostick Scholarship for Research in Agricultural and Natural Resource Systems (2009)
- University of Florida Alumni Fellowship (2005 – 2009)

SERVICE AND PROFESSIONAL AFFILIATIONS

- External Reviewer (~8 per year): Ecosphere; Journal of Vegetation Science; Natural Hazards; Nature Sustainability; Frontiers in Ecology and the Environment; Science of the Total Environment; Environmental Science and Technology; Journal of Hydrology; Ecological Engineering; Journal of Environmental Management; Journal of Sustainable Watershed Science and Management; Stochastic Environmental Research and Risk Assessment; Journal of Environmental Quality; Ecological Applications; Journal of Contaminant Hydrology; Journal of the American Water Resources Association; Environmental Research Letters; Wetlands, Institute of Electrical and Electronics Engineers (IEEE) Sensors Journal, Sustainability, African Journal of Environmental Science and Technology, Urban Forestry and Urban Greening, Water Resources Research, PLOS ONE, River Research and Applications, Ecohydrology, Restoration Ecology
- Author, friend-of-the-court briefing for Supreme Court case(s) on Waters of the United States, which was just decided in April 2020 and has fundamentally shifted the scope of Federal water regulations to include the potential for groundwater contamination to be regulated by the Clean Water Act. Notably, the science brief was cited from the bench by Justice Breyer during oral arguments and referred to directly in the 6-3 decision
- Pro-bono consultant on wetland restoration projects for Yankeetown, FL, in coordination with the UF Levin College of Law's Conservation Clinic (2019-2020)
- Co-Organizer, III International Workshop of the Amazon Dams Research Network, February – June 2020, Virtual
- Special Issue Editor, *Frontiers in Forests and Global Change: Balancing Hydropower and Freshwater Environments in the Global South*, 2020
- Review Editor, Forest Hydrology, *Frontiers in Forests and Global Change*; Guest Associate Editor for Special Issue: Ecohydrological Interactions in Forested Wetlands, 2019
- Session organizer, Managing and Modeling Tradeoffs and Challenges of Environmental and Low Flows in the 21st Century, American Geophysical Union Fall Meeting, December 2019, San Francisco, CA
- Judge, Outstanding student poster award (OSPA), American Geophysical Union annual meeting (2015-present)
- Participating faculty, Society of Wetland Scientist's International Wetlands Ambassador Program (2016-present)
- Science Fair Judge, Howard Bishop Middle School (2013 – present)
- Mentor, ExploraVision (national scientific contest for middle schoolers) (2019-present)
- Panel Reviewer: Pacific Islands Regional Climate Assessment (PIRCA) (2012); National Science Foundation, Division of Earth Sciences and Division of Environmental Biology (2013-2016); National Institutes for Water Research National Competitive Grants Program (2014); Technology Foundation STW (Dutch funding agency for academic research in the field of applied technology) (2015); USDA ARS Southeast Watershed Research Unit 211 Plan (2016)
- Coordinator, 2014 Withlacoochee Gulf Preserve BioBlitz (rapid ecological inventory and public outreach event): organized over 100 citizen and professional scientist participants in the documentation of over 200 new species at the WGP

- Session convener, “Damming Tropical Rivers: Quantifying hydrological, ecological, and socioeconomic impacts at local to global scales” 2016 AGU Meeting, San Francisco, CA
- Session and panel organizer, Society and Environment in the Amazon (1-4), American Association of Geographers Annual Meeting, March 2016, San Francisco, CA
- Workshop organizer and presenter (Invited), Florida Lake Management Society, 26th Annual Conference & Symposium, June 2015, Naples, FL
- Symposium organizer and panel moderator, “Engineered Landscapes: Society, the Environment, and Shifting Values in Brazil and the U.S.”, UF Amazon Dams Network, October 2014, Gainesville, FL
- Workshop organizer and presenter (Invited), Florida Lake Management Society, 24th Annual Conference & Symposium: Integrating Lake and Watershed Management, June 2013, Daytona Beach, FL.
- Workshop Facilitator, “Tools and Strategies for Conservation and Development in the Amazon: Lessons Learned and Future Pathways”, 3-5 October 2017, University of Florida, Gainesville
- Founding member and vice-chair (2014-present), Environmental and Water Resource Institute, Gainesville Chapter
- University Service: Developer and co-leader (Executive Team Member), iCoast initiative, 2019-present; Panel Judge, Student Artist in Residence Program (2012); Panelist, Governmental Career Roundtable (2013); Co-Advisor EPA Rainworks Challenge (2013 and 2014 National Award-Winning Team); UF Water Institute Faculty Advisory Committee (2015-present), UF Water Institute Hydrologic Sciences Academic Cluster Academic Committee Chair (2015-2016), Hydrologic Biology representative (2014-2017), Surface Water representative (2018-2021); Florida Climate Institute Faculty Advisory Committee (2015-present); Judge, UF Water Institute Symposium Poster Contest (2016-present); Organizing member, UF Amazon Dams Network (2013 – present), University Scholars Program Mentor (2015 – present), Panelist, Global Fellows Program, UF International Center (2018), UF Water Institute Biennial Symposium Planning Committee (2017-2018), Peer teaching evaluator for IFAS faculty Todd Osborne and Patrick Inglett (2018) and William Pelletier (2019), Tropical Conservation and Development Program Fellowship Review Panel (2018)
- Departmental Service: Graduate Mentoring, External Communications, and Awards Committees (2012-2015); Curriculum Committee (2015-present); ESSIE-Wide Faculty Search Committee (2016-present); Coastal Ecosystem Dynamics Search Committee (2016-present); Graduation Marshall (2012-2015); Center Director, H.T. Odum Center for Wetlands (2016 – present); Assistant Center Director (2013 – present); Chair, Computational Sustainability Search Committee (2018 – present); Faculty mentor, Andreia Fonseca de Faria
- Member, American Society of Agricultural and Biological Engineers (ASABE) and co-editor, special collection from 21st Century Watershed Technology Conference (Costa Rica) *in*: Trans. ASABE; Member: American Geophysical Union, American Water Resources Association, North American Colleges and Teachers of Agriculture, Society for Ecological Restoration, Society of Wetland Scientists
- Board Member and Ecology Team Chair, Bronx River Alliance (2003-2005)
- Organizer, local chapter of the Environmental & Water Resources Institute (EWRI, a branch of the American Society of Civil Engineers, ASCE; 2013 – present); 1st Annual Withlacoochee Gulf Preserve BioBlitz (2013-2014)