

CURRICULUM VITAE

Tiffany G. Troxler, Ph.D., CFM

Associate Professor, Department of Earth and Environment &
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EDUCATION

Doctor of Philosophy	Florida International University	Biological Sciences	2001-2005
Master of Science	Florida International University	Biological Sciences	1998-2001
Bachelor of Science	Florida International University	Biological Sciences	1995-1997
Bachelor of Arts	Tulane University	Anthropology	1989-1993

FULL-TIME ACADEMIC EXPERIENCE

Associate Professor Florida International University, Earth and Environment Department	2020-present
Director of Science Florida International University, Institute of Environment, Sea Level Solutions Center	2018-present
Research Associate Professor Florida International University, Institute of Environment and Department of Biological Sciences	2018-2020
Director Florida International University, Institute of Environment, Sea Level Solutions Center	2015-2018
Assistant Research Faculty Florida International University, Southeast Environmental Research Center	2010-2018
Graduate Faculty Florida International University	2010-present
Visiting Research Faculty Florida International University, Southeast Environmental Research Center	2006-2010

Postdoctoral Associate 2006-2010
Florida International University, Department of Biological Sciences

PART-TIME ACADEMIC EXPERIENCE

Adjunct Instructor (Fall Terms) 2002-2004
Florida International University, Environmental Studies Department

Teaching Assistant 1998-2003
Florida International University, Department of Biological Sciences

Research Assistant 1997-1998
Florida International University, Southeast Environmental Research Center

NON-ACADEMIC EXPERIENCE

Continuing Education Instructor 2020-present
Florida Floodplain Managers Association

Mentor 2018-2020
American Society of Adaptation Professionals Mentorship Program

Program Officer (Wetland Expert) and Visiting Researcher 2011- 2013
Intergovernmental Panel on Climate Change (IPCC)
Task Force on National Greenhouse Gas Inventories Technical Support Unit,
Institute for Global Environmental Strategies, Hayama, Japan

Research Scientist 2006-2008
Institute for Regional Conservation

Restoration Practitioner and Volunteer Coordinator 1996-1997
Bill Baggs Cape Florida State Park

PUBLICATIONS IN DISCIPLINE (*papers led by FIU students or postdoctoral associates under my advisement)

Books

Windham-Myers, L, S Crooks, **TG Troxler** (Eds). 2019. A Blue Carbon Primer: The State of Coastal Wetlands Carbon Science, Practice and Policy. Press, Boca Raton, FL. 480p.

Articles

- Feher, L.C., M.J. Osland, K.L. McKee, K.R.T. Whelan, C. Coronado-Molina, F.H. Sklar, K.W. Krauss, R.J. Howard, D.R. Cahoon, J.C. Lynch, L. Lamb-Wotton*, **T.G. Troxler**, J.R. Conrad, G.H. Anderson, W.C. Vervaeke, T.J. Smith III. 2022. Soil elevation change in mangrove forests and marshes of the Greater Everglades: a regional synthesis of surface elevation table-marker horizon (SET-MH) data. *Estuaries and Coasts*. *Accepted*.
- *Lamb-Wotton, L, D. Gann, J. Velazquez, and **T.G. Troxler**. 2022. Detecting vegetation loss in Florida Coastal Everglades wetland land-cover from multi-spectral satellite imagery and historical panchromatic aerial photography. *Remote Sensing*. <https://doi.org/10.3390/rs14163976>.
- *Ishtiaq, K.S., **T. G. Troxler**, L. Lamb-Wotton*, B. J. Wilson, S.P. Charles, S.E. Davis, J.S. Kominoski, D.T. Rudnick, and F.H. Sklar. 2022. Modeling Net Ecosystem Carbon Balance and Loss in Coastal Wetlands Exposed to Sea-Level Rise and Saltwater Intrusion. *Ecological Applications*. <https://esajournals.onlinelibrary.wiley.com/doi/10.1002/eap.2702>
- McPhearson, T., E.M. Cook, M. Berbes-Blazquez, C. Cheng, N.B. Grimm, E. Andersson, O. Barbosa, D.G Chandler, H. Chang, M. Chester, D. Childers, S. Elser, N. Frantzekaki, Z. Grabowski, P. Groffman, R. L. Hale, D.M. Iwaniec, N. Kabisch, C. Kennedy, S.A. Markolf, M. Matsler, L.E. McPhillips, T. R. Miller, T.A. Munoz-Erickson, E. Rosi, **T.G. Troxler**. 2022. A social-ecological-technological systems approach to urban ecosystem services. *One Earth*. DOI 10.1016/j.oneear.2022.04.007.
- Hogan, JA, E Castaneda-Moya, L Lamb-Wotton, **T. Troxler**, C. Baraloto. 2021 Water levels primarily drive variation in photosynthesis and nutrient use of scrub red mangroves in the southeastern Florida Everglades. *Tree Physiology*. <https://doi.org/10.1093/treephys/tpab151>
- Troxler, T.G.**, A.C. Clement, Y. Arditi-Rocha, G. Beesing, M. Bhat, J. Bolson, C. Cabán-Alemán, K. Castillo, O. Collins, M. Cruz, A. Dodd, S.D. Evans, A.L. Fleming, C. Genatios, J. Gilbert, A. Hernandez, C. Holder, M. Ilcheva, E. Kelly, A. Leon, J. Lombard, K.J. Mach, D. Moanga, J.F. Murley, A. Knowles, J. Obeysekera, L. Parra, J. Posner, A. Sarwat, R. Silverstein, J.A. Stuart, M.C. Sukop, S. Wdowinski, and E. Wheaton. 2021. A System for Resilience Learning: Developing a community-driven, multi-sector research approach for greater preparedness and resilience to long-term climate stressors and extreme events in the Miami metropolitan region. *Journal of Extreme Events* 8. <http://dx.doi.org/10.1142/S2345737621500196>
- *Smith, M.A., J.S. Kominoski, E.E. Gaiser, R.M. Price, **T.G. Troxler**. 2021. Stormwater runoff and tidal flooding transform dissolved organic matter composition and increase bioavailability in urban coastal ecosystems. *Journal of Geophysical Research: Biogeosciences* 126. <https://doi.org/10.1029/2020JG006146>
- Chang, H., A. Pallathadka, J. Sauer, N.B. Grimm, R. Zimmerman, C. Cheng, D.M. Iwaniec, Y. Kim, R. Lloyd, T. McPhearson, B. Rosenzweig, **T.G. Troxler**, C. Welty, R. Brenner, P. Herreros-Cantis. 2021. Assessment of urban flood vulnerability using the social-ecological-technological systems framework in six cities. *Sustainable Cities and Society* 68. <https://doi.org/10.1016/j.scs.2021.102786>
- Prevéy, J.S., S.C. Elmendorf, A. Bjorkman, J. Alatalo, I. Ashton, J. Assman, J. Björk, M. Bjorkman, A.D. Björkman, M. Carbognani, C. Chisholm, I.W. Ashton, N. Cannone, C. Chisholm, E.J. Cooper, B. Elberling, E. Frei, G. Henry, B. Hollister, T. Høye, I.S. Jónsdóttir, J. Kerby, K. Klanderud, C.W. Kopp, E. Levesque, M. Mauritz, U. Molau, I. Myers-Smith, S. Natali, S. Oberbauer, Z. Panchen, A. Petraglia, E Post, C Rixen, H Rodenhizer, S.B. Rumpf, N. Martin, N.M. Schmidt, E. Schuur, P. Semenchuk, J.G. Smith, K.N. Suding, Ø. Totland, **T. Troxler**, C.-H. Wahren, J. Welker, S. Wipf, Y. Yang. 2021. The tundra phenology database: More than two decades of tundra phenology responses to climate change. *Arctic Science*. <https://doi.org/10.1139/AS-2020-0041>

- Servais, S., J.S. Kominoski, C. Coronado-Molina, L. Bauman, S.E. Davis, E.E. Gaiser, S. Kelly, C. J. Madden, V. Mazzei, D. T. Rudnick, F. Santamaria, F.H. Sklar, Joseph Stachelek, **T.G. Troxler**, and B Wilson. 2020. Effects of Saltwater Pulses on Soil Microbial Enzymes and Organic Matter Breakdown in Freshwater and Brackish Coastal Wetlands. *Estuaries and Coasts* 43: 814-830.
- Castaneda, E., V.H. Rivera-Monroy, R. Chambers, X. Zhao, L. Lamb-Wotton, A. Gorsky, E. Gaiser, **T.G. Troxler**, J.S. Kominoski, M. Hiatt. 2020. Hurricanes fertilize mangrove forests in the Gulf of Mexico (Florida Everglades, USA). *Proceedings of the National Academy of Sciences*. doi/10.1073/pnas.1908597117
- Kominoski, J.S., E.E. Gaiser, E. Castaneda-Moya, S.E. Davis, S.B. Dessu, P. Julian II, D.Y Lee, L. Marazzi, V.H. Rivera-Monroy, A. Sola, U. Stingl, S. Stumpf, D. Surratt, R. Travieso, and **T.G. Troxler**. 2020. Disturbance legacies increase and synchronize nutrient concentrations and bacterial productivity in coastal ecosystems. *Ecology* 101. <https://doi.org/10.1002/ecy.2988>
- *Charles, S.P., J.S. Kominoski, **T.G. Troxler**, E.E. Gaiser, S. Servais, B.J Wilson, S.E. Davis, F.H. Sklar, C. Coronado-Molina, C.J. Madden, S. Kelly, D.T. Rudnick. 2019. Experimental Saltwater Intrusion Drives Rapid Soil Elevation and Carbon Loss in Freshwater and Brackish Everglades Marshes. *Estuaries and Coasts*. <https://doi.org/10.1007/s12237-019-00620-3>.
- *Wilson, B.J., Servais, S., Charles, S. P., Mazzei, V., Kominoski, J.S., Gaiser, E., Richards, J., and **Troxler, T.** 2019. Phosphorus alleviation of salinity stress: effects of saltwater intrusion on an Everglades freshwater peat marsh. *Ecology*. <https://doi.org/10.1002/ecy.2672>
- Servais, S., J.S. Kominoski, S.P. Charles, E.E. Gaiser, V. Mazzei, **T.G. Troxler**, B.J. Wilson. 2019. Saltwater intrusion and soil carbon loss: Testing effects of salinity and phosphorus loading on microbial functions in experimental freshwater wetlands. *Geoderma* 337: 1291-1300.
- *Cooper, H.M., C. Zhang, S.E. Davis, **T.G. Troxler**. 2019. Object-based correction of LiDAR DEMs using RTK-GPS data and machine learning modeling in the coastal Everglades. *Environmental Modelling & Software* 112: 179-191.
- Prevéy, J S., C Rixen, N Rüger, T T. Høye, A D. Bjorkman, I Myers-Smith, SC. Elmendorf, IW. Ashton, N Cannone, C Chisholm, E.J. Cooper, B. Elberling, A.M Fosaa, G. Henry, B. Hollister, I. S. Jónsdóttir, K. Klanderud, C.W. Kopp, E. Levesque, M. Mauritz, U. Molau, S. Natali, S. Oberbauer, Z. Panchen, E. Post, S.B. Rumpf, N.M. Schmidt, T. Schuur, P. Semenchuk, J.G. Smith, K.N. Suding, Ø. Totland, **T. Troxler**, S. Venn, C.-H. Wahren, J. Welker, S. Wipf. 2019. Warming shortens flowering seasons of Arctic and alpine plants. *Nature: Ecology and Evolution* 3:45-52.
- Crooks, S., A. Sutton-Grier, **T. Troxler**, B. Bernal, N. Herold, T. Wirth. 2018. Coastal wetland management as a contribution to the US National Greenhouse Gas Inventory. *Nature-Climate Change* 8-1109-1112.
- Breithaupt, J., Smoak, J., Sanders, C., **Troxler, T.** 2018. Spatial variability of organic carbon, CaCO₃ and nutrient burial rates spanning a mangrove productivity gradient in the coastal Everglades. *Ecosystems*. DOI: 10.1007/s10021-018-0306-5.
- Holmquist, J., L. Windham-Myers, B. Bernal, K.B. Byrd, S. Crooks, M.E. Gonnee, N. Herold, S. H. Knox, K. Kroeger, J. McCombs, J.P. Megonigal, L. Meng, J.T. Morris, A.E. Sutton-Grier, **T.G. Troxler** and D. Weller. 2018. Uncertainty in United States coastal wetland greenhouse gas inventorying. *Environmental Research Letters* 13:115005.
- Servais, S, JS Kominoski, SE Davis, EE Gaiser, J Pachon, **TG Troxler**. 2018. Effects of Nutrient-Limitation on Disturbance Recovery in Experimental Mangrove Wetlands. *Wetlands* 39: 337-347.

- *Wilson BJ, S Servais, V. Mazzei, S Davis, E Gaiser, J.S. Kominoski, J Richards, F. Sklar, T Troxler. 2018. Salinity pulses interact with seasonal dry-down to increase ecosystem carbon loss in marshes of the Florida Everglades. *Ecological Applications*. <https://doi.org/10.1002/eap.1798>.
- Mazzei, V., E.E. Gaiser, J.S. Kominoski, **T. Troxler**, BJ Wilson, S Servais, L Bauman, S Davis, S Kelly, F Sklar, D Rudnick, J Stachelek. 2018. Functional and compositional responses of periphyton mats to simulated saltwater intrusion in the southern Everglades. *Estuaries and Coasts* 41:2105-2119.
- *Wilson, B.J., S. Servais, S.P. Charles, S.E. Davis, E. Gaiser, J.S. Kominoski, J. Richards, and **T.G. Troxler**. 2018. Declines in Plant Productivity Drive Carbon Loss from Brackish Coastal Wetland Mesocosms Exposed to Saltwater Intrusion. *Estuaries and Coasts*. 41:2147-2158.
- Dessu, S.B., R.M. Price, **T.G. Troxler**, J.S. Kominoski. 2018. Effects of sea-level rise and freshwater management on long-term water levels and water quality in the Florida Coastal Everglades. *Journal of Environmental Management* 211: 164-176.
- Holmquist, J.R., L. Windham-Myers, N. Bliss, S. Crooks, J.T. Morris, J.P. Megonigal, **T.G. Troxler**, D. Weller, J. Callaway, J. Drexler, M.C. Ferner, M.E. Gonnee, K.D. Kroeger, L. Shcile-Beers, I. Woo, K. Buffington, J. Breithaupt, B.M. Boyd, L. N. Brown, N. Dix, L. Hice, B.P. Horton, G. M. MacDonald, R. P. Moyer, W. Reay, T. Shaw, E. Smith, J.M. Smoak, C. Sommerfield, K. Thorne, D. Velinsky, E. Watson, K Wilson Grimes, M. Woodrey. 2018. Accuracy and Precision of Tidal Wetlands Soil Carbon Mapping in the Conterminous United States. *Scientific Reports*. DOI:10.1038/s41598-018-26948-7.
- Davis, S.E., R. Boucek, E. Castañeda-Moya, S. Dessu, E. Gaiser, J. Kominoski, J.P. Sah, D. Surratt, **T.G. Troxler**. 2018. Episodic disturbances drive nutrient dynamics along freshwater-to-estuary gradients in a subtropical wetland. *Ecosphere* 9: e02296.
- Stachelek, J., S.P. Kelly, F. Sklar, C.M. Coronado, **T.G. Troxler** and L. Bauman. 2018. In-situ simulation of sea-level rise impacts on coastal wetlands using a flow-through mesocosm approach. *Methods in Ecology and Evolution* 10.1111/2041- 210X.13028.
- Prevey, J., M. Vellend, N. Ruger, R.D. Hollister, Elmendorf, S.C., A.J. Bjorkman, I.H. Myers-Smith, T.V. Callaghan, E.J. Cooper, J.H.C. Cornelissen, T.A. Day, A.M. Fosaa, W.H Gould., J. Grétarsdóttir, J. Harte, L. Hermanutz, G.H.R. Henry, D.A. Hik, A. Hofgaard, F. Jarrad, I.S. Jónsdóttir, F. Keuper, K. Klanderud, J.A. Klein, S. Koh, G. Kudo, S. Lang, V. Lowen, J.L. May, J. Mercado, A. Michelsen, U. Molau, S. Pieper, C.H. Robinson, L. Siegart, S.F. Oberbauer, E. Post, N.M. Schmidt, G.R. Shaver, A. Tolvanen, O. Totland, **T. Troxler**, C.H. Wahren, P.J. Webber, J.M. Welker, P. Wookey. C. Rixen. 2017. Greater temperature sensitivity of plant phenology at colder sites: implications for convergence across northern latitudes. *Global Change Biology* 23: 2660-2671.
- Morris, J. Barber, DC, JC Callaway, R Chambers, SC Hagen, CS Hopkinson, BJ Johnson, P Megonigal, SC Neubauer, **T Troxler**, C Wigand. 2016. Contributions of organic and inorganic matter to sediment volume and accretion in tidal wetlands at steady state. *Earth's Future* 4: 110-121.
- *Chambers, L.G., R. Guevara, J. Boyer, **T. Troxler**, S.E. Davis. 2016. Effects of salinity and inundation on microbial community structure and function in a mangrove peat soil. *Wetlands* 36: 361-371.
- Troxler, T.**, Barr, J., Fuentes, J., Engel, V., Anderson, G., *Sanchez, C., Lagomasino, D., Price, R., Davis, S. 2015. Component-specific dynamics of riverine mangrove CO₂ efflux in the Florida Coastal Everglades. Special Issue: Mangrove carbon cycling. *Agricultural and Forest Meteorology* 213:273-282.

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- Serna, A., J. H. Richards, **T. G. Troxler**, L. J. Scinto. 2015. Vegetation and soil response to hydrology in a re-created Everglades. *Hydrobiologia* 757: 167-183.
- Barr, J.G., **T.G. Troxler**, R.G. Najjar. 2014. Meeting the challenge of understanding coastal carbon cycling using top-down and bottom-up approaches from across disciplines. *Eos, Transactions, American Geophysical Union* 95: 315.
- Troxler, T.G.**, C. Coronado-Molina, D. Rondeau, S. Krupa, S. Newman, M. Manna, R. Price, F. Sklar. 2014. Interactions of biological and hydrogeochemical processes facilitate phosphorus dynamics in an Everglades tree island. *Biogeosciences* 11: 899-914.
- *Chambers, L.G., S.E. Davis, **T.G. Troxler**, J.N. Boyer, A. Downey-Wall, L. Scinto. 2014. Biogeochemical effects of simulated sea level rise on carbon loss in an Everglades mangrove peat soil. *Hydrobiologia* 726: 195-211.
- Troxler, T.G.**, D.L. Childers, C.J. Madden. 2014. Drivers of decadal-scale change in the structure and function of southern Everglades wetland macrophyte communities. *Wetlands*. 10.1007/s13157-013-0446-5.
- Troxler, T.G.**, E. Gaiser, J. Barr, J.D. Fuentes, R. Jaffe, D.L. Childers, L. Collado-Vides, V.H. Rivera-Monroy, E. Castañeda-Moya, W. Anderson, R. Chambers, M. Chen, C. Coronado-Molina, S.E. Davis, V. Engel, C. Fitz, J. Fourqurean, T. Frankovich, J. Kominoski, C. Madden, S.L. Malone, S. F. Oberbauer, P. Olivas, J. Richards, C. Saunders, J. Schedlbauer, F.H. Sklar, T. Smith, J.M. Smoak, G. Starr, R.R. Twilley, K. Whelan. 2013. Integrated carbon budget models for the Everglades terrestrial-coastal-oceanic gradient: current status and needs for inter-site comparisons. *Oceanography* 26: 98–107, <http://dx.doi.org/10.5670/oceanog.2013.51>.
- Oberbauer, S.F., S.C. Elmendorf, **T.G. Troxler**, R. D. Hollister, A. V. Rocha, M. S. Bret-Harte, M. A. Dawes, A. M. Fosaa, G. H. R. Henry, T. T. Høye, F. C. Jarrad, I. S. Jónsdóttir, K. Klanderud, J. A. Klein, U. Molau, C. Rixen, N. M. Schmidt, G. R. Shaver, R. T. Slider, Ø. Totland, C.-H. Wahren, and J. M. Welker. 2013. Phenological response of tundra plants to background climate variation tested using the International Tundra Experiment. *Philosophical Transactions of the Royal Society B* 368: 481.
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- Richards, J.H., **T.G. Troxler**, D.W. Lee, M.S. Zimmerman. 2011. Experimental determination of effects of water depth on *Nymphaea odorata* growth, morphology and biomass allocation. *Aquatic Botany* 95:9-16.
- Richards, J.H., M. Dow, **T. Troxler**. 2011. Modeling *Nymphoides* architecture: a morphological analysis of *Nymphoides aquatica*. *American Journal of Botany* 97:1761-1771.
- Wetzel, P.R., F.H. Sklar, C.A. Coronado, **T.G. Troxler**, S.L. Krupa, P.L. Sullivan, S.Ewe and S. Newman. 2011. Biogeochemical processes on tree islands in the Greater Everglades: Initiating a new paradigm. *Critical Reviews in Environment and Technology* 41:670-701.
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- Wetzel, P.R., A.G. van der Valk, S. Newman, C. A. Coronado, **T.G. Troxler-Gann**, D.L. Childers, W.H. Orem, F. H. Sklar. 2009. Heterogeneity of phosphorus distribution in a patterned landscape, the Florida Everglades. *Plant Ecology* 200: 83-90.
- Troxler, T.G.** 2007. Patterns of phosphorus, nitrogen and ^{15}N along a peat development gradient in a coastal mire, Panama. *Journal of Tropical Ecology* 23: 683-691.
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Proceedings

N/A

Chapters in Books

- Troxler, T.G.** and J. Gilbert. 2022. Co-evolution of resilience initiatives toward a resilience collaboration. *In Collaborating for Urban Climate Resilience: Researcher-Practitioner Partnerships in the Americas*, V Shandas and D Hellman, Eds. Routledge, London. 115p.
- Windham-Myers, L., J. Holmquist, K. Kroeger, and **T. Troxler**. 2022. Greenhouse gas balances in coastal ecosystems: Current challenges in "blue carbon" estimation and significance to national greenhouse gas inventories (Chapter 12). *In Balancing Greenhouse Gas Budgets: Accounting for Natural and Anthropogenic Flows of CO₂ and other Trace Gases*, 1st Edition. Editors: Benjamin Poulter, Joseph Canadell, Daniel Hayes, Rona Thompson, Elsevier.
- Troxler, T.G.** 2021. The Building Blocks of CDR Systems: Coastal Blue Carbon. *CDR Primer*, edited by J. Wilcox, B. Kolosz, J. Freeman. <https://cdrprimer.org/>
- Troxler, T.G.**, G. Starr, J.N. Boyer, J.D. Fuentes, R. Jaffe, S.L. Malone, J.G. Barr, S.E. Davis, L. Collado-Vides, J.L. Breithaupt, A.K. Saha, R.M. Chambers, C.J. Madden, J.M. Smoak, J.W. Fourqurean, G. Koch, J. Kominoski, L.J. Scinto, S. Oberbauer, V.H. Rivera-Monroy, E. Castañeda-Moya, N.O. Schulte, S.P. Charles, J.H. Richards, D.T. Rudnick, and K.R.T. Whelan. 2019. Chapter 6: Carbon Cycles in the Florida Coastal Everglades Social-Ecological System Across Scales. *In The Coastal Everglades: The Dynamics of Social-Ecological Transformations in the South Florida Landscape*. Childers, D, Gaiser, E, Ogden, L (Eds). Oxford University Press.
- Davis, S.E., E. Castaneda, R. Boucek, R. Chambers, L. Collado-Vides, H.C. Fitz, J.D. Fuentes, E.E. Gaiser, M.R. Heithaus, J.S. Rehage, V.H. Rivera-Monroy, J.P. Sah, F.H. Sklar, **T.G. Troxler**. 2019. Chapter 7: Exogenous Drivers – What Has Disturbance Taught Us?. *In The Coastal Everglades: The Dynamics of Social-Ecological Transformations in the South Florida Landscape*. Childers, D, Gaiser, E, Ogden, L (Eds). Oxford University Press.
- Kominoski, J., J. Rehage, W. Anderson, R Boucek, H Briceno, M Bush, T.W. Dreschel, M.R. Heithaus, R. Jaffe, L. Larsen, P. Matich, C. McVoy, A.E. Rosenblatt, **TG Troxler**. 2019. Chapter 4: Legacies and future implications of a restored Everglades. *In The Coastal Everglades: The Dynamics of Social-Ecological Transformations in the South Florida Landscape*. Childers, D, Gaiser, E, Ogden, L (Eds). Oxford University Press.
- Crooks, S., L. Windham-Myers, **T.G. Troxler**. 2019. Defining Blue Carbon: the emergence of a climate context for coastal carbon dynamics. *In A Blue Carbon Primer: The State of Coastal Wetlands Carbon Science, Practice and Policy*. L. Windham-Myers, S. Crooks, **T.G. Troxler** (Eds). CRC Press, Boca Raton, FL. 480p.
- Troxler, T.**, H. Kennedy, S. Crooks, A. Sutton-Grier. 2019. Introduction of Coastal Wetlands into the IPCC Greenhouse Gas Inventory Methodological Guidance. *In A Blue Carbon Primer: The*

- State of Coastal Wetlands Carbon Science, Practice and Policy. L Windham-Myers, S Crooks, **TG Troxler** (Eds). CRC Press, Boca Raton, FL. 480p.
- Vegh, T., B. Pendleton, L. Murray, **T.G. Troxler**, K. Zhang, G. Guannel, E. Castañeda-Moya, A. Sutton-Grier. 2019. Ecosystem Services and Economic Valuation: co-benefits of coastal wetlands. *In A Blue Carbon Primer: The State of Coastal Wetlands Carbon Science, Practice and Policy.* L Windham-Myers, S Crooks, **TG Troxler** (Eds). CRC Press, Boca Raton, FL. 480p.
- Sklar, F., J. Meeder, **T. Troxler**, T. Dreschel, P. Ruiz and S. Davis. 2018. Chapter 13: The Everglades: *In At the Forefront of Transition.* E. Wolinski, J. Day, M. Elliot, R. Ramachandran (Eds.). Coasts and Estuaries- The Future. Elsevier.
- Troxler, T.G.** 2016. Collaboration and broadening our scope: relevance of long-term ecological research to the global community. *In Long-term ecological research: changing the nature of scientists.* Willig, M. and L.R. Walker (Eds.). Oxford University Press, New York, NY, USA. p185-196.
- *Chambers, L.G., S.E. Davis, **T.G. Troxler**. 2015. Sea Level Rise in the Everglades: Plant-Soil-Microbial Feedbacks in Response to Changing Physical Conditions. *In Microbiology of the Everglades Ecosystem.* Entry, J., K. Jayachandran, A.D. Gottlieb, A. Ogram (Eds.), CRC Press, Boca Raton.
- Rivera-Monroy, V.H., E. Castaneda-Moya, J.G. Barr, V. Engel, J.D. Fuentes, **T.G. Troxler**, R. Twilley, S. Bouillon, T.J. Smith, T.L. O'Halloran. 2012. Current methods to evaluate net primary production and carbon budgets in mangrove forests. *In Methods in Biogeochemistry of Wetlands.* Delaune, R.D., K.R. Reddy, P. Megonigal & C. Richardson (Eds.). Soil Science Society of America Book Series.

Government Reports or Monographs

- Obeysekera, J., M. Sukop, **T. Troxler**, M. Irizarry. 2019. Potential Implications of sea-level rise and changing rainfall in Florida Building Code for communities in Florida using Miami-Dade County as a Case Study. Final Report to The State of Florida Department of Business and Professional Regulation, Florida Building Commission.
- National Academies of Sciences, Engineering, and Medicine 2018. Negative Emissions Technologies and Reliable Sequestration: A Research Agenda. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25259>.
- U.S. Department of Energy. 2017. Research Priorities to Incorporate Terrestrial-Aquatic Interfaces in Earth System Models Workshop Report. DOE/SC-0187, U.S. Department of Energy Office of Science. https://ess.science.energy.gov/wp-content/uploads/2020/12/TAI_Workshop2016-1.pdf
- IPCC 2014. 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands (Wetlands Supplement). Hiraishi, T, Krug, T., Tanabe, K., Srivastava, N., Baasansuren, J., Fukuda, M. and **Troxler, T.G.** (eds). Published: IPCC, Switzerland.
- IPCC 2014. 2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol (KP Supplement). Hiraishi, T, Krug, T., Tanabe, K., Srivastava, N., Baasansuren, J., Fukuda, M. and **Troxler, T.G.** (eds). Published: IPCC, Switzerland.

Book Reviews

N/A

OTHER PUBLICATIONS

- Ghebremichael, K., **T.G. Troxler**, A. Hernandez, R. Fourqurean, L. Jerome, K. Carroll, D. Moanga, H.Lazzaroni, S. Roy, J. Jenkins, J. McFarlane-Weinstein, A. Kaur, H. Knowles, S. Alvarez, M. Sukop, and J. Obeysekera. 2022. Laying the Groundwork for 'Getting to Neutral' in the State of Florida. Florida Climate Institute. 219p.
- Troxler, T.** 2020. Ghost Tree Islands. Everglades Foundation Science Insider.
https://www.evergladesfoundation.org/_files/ugd/2a7d62_cadd1f65bb0743d1a8c107fe328db95b.pdf
- Troxler, T.**, F. Leone, J. Fourqurean, J. Trexler, S. Sauls, D. Doebler, L. Rodriguez, D. Schoenwald, C. Quaresma-Sharp, C. Allouch. 2017. Inaugural Biscayne Bay Marine Health Summit Report. Florida International University, Miami, Florida.
https://slsc.fiu.edu/_assets/BBC%20MHS_v5_4_appendix.pdf
- Paustian-Underdahl, S., C. Parra, R. Mesia, A. Papadopoulos, N. Scanlon, **T. Troxler**. 2017. Getting Ahead of the Curve for a Resilient Economy: Risks and Opportunities of Climate Change for Top Business Sectors in Southeast Florida. Florida International University, Miami, Florida.
https://slsc.fiu.edu/_assets/slsc.businessschool.report_final5.pdf

TEACHING AND MENTORING

Undergraduate/Graduate Teaching

- | | |
|----------------|---|
| 2021 | Earth and Environment Department, Florida International University,
<u>Course taught</u> : Sustainable Cities |
| 2020 – present | Earth and Environment Department, Florida International University,
<u>Course taught</u> : Sustainability in Action |
| 2016 – 2018 | Department of Biological Sciences, Florida International University,
<u>Course taught</u> (with CARTA faculty): Topics in Ecology: Sea Level Solutions
Interdisciplinary Research and Design Studio (BSC 4932/6936) |
| 2015 – present | Instructor, Department of Biological Sciences, Florida International University,
<u>Course taught</u> : Biological Science Intern (Internships; BSC 3941) |
| 2015 - present | Instructor, Department of Biological Sciences, Florida International University,
<u>Course taught</u> : Student Research Laboratory (BSC 3915/4915) |
| 2014 – 2020 | Instructor, Department of Biological Sciences, Florida International University,
<u>Course taught</u> : Special Topics: Global Biology in the Anthropocene (PCB 4932) |
| 2011 | Instructor, Department of Biological Sciences, Florida International University,
<u>Course taught</u> : Student Research Laboratory (BSC 3915/4915) |
| 2007 – 2009 | NSF Florida Coastal Everglades LTER Schoolyard Program Intern Mentor (Felix Varela High School student Ben Giraldo) |
| 2007 – 2008 | Department of Biological Sciences, Florida International University.
<u>Course Taught</u> : NCEAS-funded Graduate Student Distributed Seminar –Ushering
in a New Era of Functional Ecology: Dynamics in a Changing Environment - FIU
lead (BSC 5935 U04 Biology Graduate Seminar: Special Topic) |
| 2007 | Adjunct Instructor, Department of Biological Sciences, Florida International
University. <u>Course Taught</u> : General Ecology (PCB 3043) |
| 2005 – 2008 | Instructor, Environmental Studies Department, Florida International University.
<u>Course Taught</u> : Independent Study (EVR 4905) |

- 2002 – 2004 Adjunct Instructor, Environmental Studies Department, Florida International University. Course Taught: Field Applications in Restoration Ecology (EVR 4934)
- 1998 – 2003 Teaching Assistant, Department of Biological Sciences, Florida International University. Courses taught: General Ecology Laboratory (PCB 3043L), General Biology I (BSC 1011L) & General Biology II (BSC 1012L) Laboratory Sections

Mentoring

- 2022 – present Postdoctoral Associate co-mentor, Molly Best, National Oceanic and Atmospheric Administration (with Dr. Jenny Davis)
- 2021 – present Postdoctoral Associate mentor, Erin Friedman, Sea Level Solutions Center, Institute of Environment (primary affiliation: City University of New York)
- 2021 – present Postdoctoral Associate mentor, Elizabeth Kelly, Sea Level Solutions Center, Institute of Environment (primary affiliation: Miami Waterkeeper)
- 2021 – 2022 Postdoctoral Associate mentor, Diana Moanga, Sea Level Solutions Center, Institute of Environment
- 2019 – 2022 Postdoctoral Associate mentor, Khandker Ishtiaq, Sea Level Solutions Center, Institute of Environment
- 2021 – present Ph.D. Major Professor, Rachel Stovall, Earth and Environment Department
- 2021 – present Ph.D. Major Professor, Jacob Tepper, Earth and Environment Department
- 2021 – present Ph.D. Major Professor, Shanna Stingu, Earth and Environment Department
- 2021 – present M.S. Major Professor, Marissa Figueroa, Earth and Environment Department
- 2021 – present M.S. (non-thesis) Major Professor, Sebastien Eilert, Earth and Environment Department
- 2021 – present M.S. Major Professor, Courtney Moore, Earth and Environment Department
- 2021 – present Ph.D. committee, Himadri Biswas, Earth and Environment Department
- 2021 NSF Summer Research Experience for Undergraduates (REU) Mentor (University of Puerto Rico Department of Biology undergraduate D'Shaunique Walters)
- 2020 – present Ph.D. Major Professor, Lauren DeVito, Earth and Environment Department
- 2020 – present Ph.D. committee, Meenakshi Jerath, Earth and Environment Department
- 2020 – present Ph.D. committee, Anna Fache, Earth and Environment Department
- 2020 – present M.S. committee, Erika Bonnema, Earth and Environment Department
- 2019 – present Ph.D. Major Professor, Lukas Lamb-Wotton, Department of Biological Sciences
- 2019 NSF Summer Research Experience for Undergraduates (REU) Mentor (Ohio State University Department of Biology undergraduate Hannah Toth)
- 2018 – present Ph.D. committee, Jazmin Locke, Earth and Environment Department
- 2018 – present Ph.D. committee, Tim Kirby, Earth and Environment Department
- 2018 – present Ph.D. Major Professor, Marbelys Garriga, Department of Biological Sciences

- 2017 – 2019 M.S. Major Professor, Lukas Lamb-Wotton, Department of Biological Sciences
- 2016 – 2021 Ph.D. committee, Matt Smith, Department of Biological Sciences
- 2016 – 2021 M.S. Major Professor, Daniel Virden, Department of Biological Sciences
- 2013 – 2018 Ph.D. Co-Major Professor, Benjamin Wilson, Department of Biological Sciences
- 2013 – 2018 Ph.D. committee, Sean Charles, Department of Biological Sciences
- 2013 – 2021 Ph.D. committee, Jinze Lu, Department of Civil and Environmental Engineering
- 2011 – 2012 NSF Research Experience for Undergraduates (REU) Mentor (University of Miami Department of Biology undergraduate Christopher Sanchez)
- 2011 Ph.D. candidate mentor, Lisa Chambers, Department of Soil and Water Science, University of Florida
- 2007 – 2009 NSF Florida Coastal Everglades LTER Schoolyard Program Intern Mentor (Felix Varela High School student Ben Giraldo)
- 2005 – 2008 NSF Research Experience for Undergraduates (REU) Mentor (EVR B.S. undergraduate Joshua Mahoney, EVR B.A. undergraduate Olga Sanchez)
- 2004 – 2005 National Oceanic and Atmospheric Administration Environmental Science Research Internship Program Mentor (EVR B.S. undergraduate Joshua Mahoney)

PRESENTED PAPERS AND LECTURES

Invited Science Seminars and Workshops, Organized Symposia and Conference Presentations

- Jul 2022 Biscayne Bay Southeastern Everglades Restoration Project Development Team (virtual) – Invited Speaker – “Wetland Salinity Performance Measure”
- Nov 2021 Brazil LTER Regional Meeting – Invited Keynote Speaker – “The US Long Term Ecological Research Network and opportunities for collaboration across the Americas region”
- Dec 2020 Council on Environmental Cooperation – North American Workshop on Blue Carbon Science, Conservation and Collaboration (virtual) – Invited Speaker – “Coastal Blue Carbon Ecosystems: Part of a Global Portfolio to Reach Negative Emissions”
- Dec 2020 Everglades National Park Seminar Series (virtual) – Invited Speaker – “Experiments, observations and modeling to advance understanding of Everglades coastal peat marsh vulnerability”
- Apr 2020 Florida Floodplain Managers Association Virtual Conference – Invited Speaker – “Potential Implications of Sea-Level Rise and Changing Rainfall for Communities in Florida using Miami-Dade County as a Case Study”
- Mar 2020 University of South Florida Biology Seminar Series (virtual) – Invited Speaker – “Science to inform transformation toward a sustainable, resilient south Florida”
- Nov 2019 Coastal and Estuarine Research Federation, Providence, RI – Coastal Sustainability Design Competition (with FIU students presenting: “Multidisciplinary Assessment of Urban Design through a Resiliency Framework: Miami Beach Case Study”)

- Nov 2019 Coastal and Estuarine Research Federation, Providence, RI – Symposium session – “Responses of marsh ecosystems to coastal change in the Southeastern Everglades, Florida, USA”
- Apr 2019 Greater Everglades Ecosystem Restoration Conference, Coral Springs, FL - Symposium session – “Responses of marsh ecosystems to coastal change in the Southeastern Florida Everglades”
- Jan 2019 Green Stormwater Infrastructure Workshop UREx Annual All Hands Meeting, Baltimore, MD – Invited Speaker - “Green infrastructure Research and Monitoring: Examples from cities in the Urban Resilience to Extremes (UREx) Sustainability Research Network”
- Dec 2018 The National Academies of Sciences, Engineering and Medicine – Invited Webinar Speaker – “Report Briefing Webinar: Coastal Blue Carbon as a Negative Emissions Technology”
- Mar 2018 Urban Resilience to Extremes Sustainability Research Network Annual All Hands Meeting, Phoenix, AZ – Invited Speaker – “Are we doing enough to build resilience to extreme events in Miami?”
- Nov 2017 Coastal and Estuarine Research Federation, Providence, RI – Symposium session – “Socio-ecological-technological system approaches for coastal urban resilience to extreme flooding”
- Oct 2017 National Academy of Sciences, Engineering and Medicine, Committee on the Independent Scientific Review of Everglades Restoration Program – Invited Speaker – “Implications of Climate Change and Sea-Level Rise for Southern Coastal Ecosystems”
- Sep 2017 Florida Sea Grant Science Symposium, Gainesville, FL – Invited Speaker - “Responses of marsh ecosystems to coastal change in the Southeastern Florida Everglades”
- Aug 2017 Everglades Foundation Sea Level Rise Workshop, Miami, FL – Invited Expert
- Jun 2017 Society of Wetland Scientists, San Juan, PR - Symposium Session – “Responses of marsh and mangrove ecosystems to coastal change in the Southeastern Florida Everglades”
- Apr 2017 Greater Everglades Ecosystem Restoration Conference, Coral Springs, FL - Symposium session – “Carbon cycle science in the Florida Coastal Everglades: Research to inform landscape management”
- Mar 2017 Society of Wetland Scientists Webinar Series (virtual) – Invited Speaker – “The challenges and successes of incorporating coastal wetlands into the U.S. Inventory of GHG Emissions and Sinks”
- Oct 2016 North American Blue Carbon Experts and Partners Meeting: Science for Policy, Falmouth, MS – Invited Expert
- Sep 2016 INTECOL, Changshu, China – Symposium Session – “Ecosystem services and economic benefits of wetland restoration in coastal urban environments”
- Aug 2016 Ecological Society of America, Baltimore, MD – Ignite session – “C cycling, landscape disturbances and water management: Views through the marsh grass lens”
- Aug 2016 Ecological Society of America, Baltimore, MD – Symposium session – “Carbon cycle science in the Florida Coastal Everglades: Research to inform carbon and water management”

- May 2016 South Florida Water Management District Workshop on Coastal Flood Indicators, West Palm Beach, FL – Invited Speaker – “Local Coastal Flood Indicators”
- Apr 2016 National Conference on Ecosystem Restoration, Coral Springs, FL – Symposium session – “Mesocosms for Estimating Climate-Change-Induced Peat Collapse”
- Feb 2016 American Association for the Advancement of Science 2016 Annual Meeting, Washington D.C., USA - Sea Level Rise at Ground Zero Session – “Soil carbon responses to saltwater intrusion from projected sea-level rise in the Florida Everglades”
- Jan 2016 Global Science and Data Network for Coastal Blue Carbon Workshop, Menlo Park, CA – Invited expert
- Apr 2015 Commission on Environmental Cooperation – North American Blue Carbon Experts Partners Workshop, Cancun, MX – Invited Expert
- May 2014 Joint Aquatic Sciences Meeting, Portland, OR – “New IPCC Methodology for National Greenhouse Gas Inventories of Managed Wetlands: A Focus on Coastal Ecosystems”
- Apr 2014 Commission on Environmental Cooperation – North American Blue Carbon Experts Partners Workshop, Menlo Park, CA, USA – Invited Expert
- Feb 2013 LTER mini-symposium, National Science Foundation, Washington, D.C. – “A focus on tropical systems: international LTER research highlights from the Florida Coastal Everglades (FCE)”
- June 2012 International Congress for Ecology (INTECOL), Orlando, FL – “Soil, water and coarse woody debris CO₂ fluxes and aqueous CO₂ in a tidal mangrove forest in the Florida Everglades”
- Dec 2009 Florida International University, Southeast Environmental Research Center, Departmental Seminar, Miami, FL – “Interactions of biological and hydrogeochemical processes facilitate phosphorus transport, availability and accumulation in an Everglades tree island”
- Dec 2008 Florida International University, Department of Biological Sciences, Departmental Seminar, Miami, FL – “Study of arctic ecosystem changes in the IPY (International Polar Year) using the International Tundra Experiment (ITEX)”
- May 2008 Smithsonian Tropical Research Institute, Bocas del Toro, Panama – “Wetland ecosystem studies in the San San Pond Sak wetland, Panama”
- Oct 2007 Florida International University, Southeast Environmental Research Center, Departmental Seminar, Miami, FL – “Ecosystem research in subtropical and tropical wetlands”
- Apr 2007 10th International Symposium on Wetland Biogeochemistry, Annapolis, MD – “Biogeochemical contributions of tree islands to Everglades wetland landscape nitrogen cycling during seasonal inundation”
- Oct 2006 University of Florida, Tropical Research and Education Center, Homestead, FL – “Everglades Tree Islands – model ecosystems for landscape-scale research”
- Apr 2006 University of Miami Biology Departmental Seminar, Miami, FL – “Ecosystem responses to hydrologic change and mechanisms of nitrogen retention in Everglades tree islands”

- Mar 2006 LTER mini-symposium, National Science Foundation, Washington, D.C. – “Ecosystem responses to hydrologic change in Everglades tree islands: Findings and future directions”
- Sep 2005 South Florida Water Management District – “Investigating ecosystem responses to hydrologic change and mechanisms for nitrogen sequestration in seasonally flooded tree islands of the southern Everglades”

Contributed Papers at Science Conferences

- Jun 2022 MetroLab Summit, Chicago, IL – Climate Change and Resiliency Panel
- Apr 2021 Subtropical and Tropical Coastal Resilience Symposium, Miami, FL – oral – “A System for Resilience Learning Through the Resilient305 Collaborative”
- Sep 2019 International Long-Term Ecological Research Program Open Science Meeting, Leipzig, Germany – oral – “The effects of projected sea-level rise on coastal ecosystems in the Everglades, Florida, USA”
- Dec 2015 American Geophysical Union, San Francisco, CA – poster – “West Africa Greenhouse Gas Inventory Project”
- Nov 2015 Coastal and Estuarine Research Federation, Portland, OR –oral – “Investigating plant-soil responses to increased salinity and inundation in Everglades coastal peat marshes”
- Aug 2015 Ecological Society of America, Baltimore, MD – oral – “The effects of projected sea-level rise on Everglades coastal ecosystems: Evaluating the potential for and mechanisms of peat collapse”
- Aug 2014 Ecological Society of America, Sacramento, CA – oral – “Understanding an iconic landscape through comparative international long-term ecological research”
- Feb 2011 North American Carbon Program, New Orleans, LA – poster – “Soil respiration processes in riverine mangroves”
- Aug 2010 Meeting of the Americas, American Geophysical Union, Iguassu Falls, Brazil – poster - “Interactions of biological and hydrogeochemical processes facilitate phosphorus dynamics in an Everglades tree island”
- Aug 2010 Ecological Society of America, Pittsburgh, PA – oral – “Long-term phenological changes in tundra plants in response to experimental warming using the International Tundra Experiment (ITEX) Network”
- July 2010 Greater Everglades Ecosystem Restoration Conference, Naples, FL – oral – “Interactions of biological and hydrogeochemical processes facilitate phosphorus dynamics in an Everglades tree island”
- June 2010 International Polar Year Oslo Science Conference, Oslo, Norway – oral – “Long-term phenological changes in tundra plants in response to experimental warming using the International Tundra Experiment (ITEX) Network”
- Mar 2010 State of the Arctic, Miami, Fl – poster – “Study of arctic ecosystem changes in the IPY using the International Tundra Experiment (ITEX)”
- Nov 2007 Estuarine Research Federation, Providence, RI – oral – “Bacterial diversity, enzyme activities, and soil CO₂ flux along a soil P gradient in a coastal peatland, Panama”

- Mar 2007 FCE LTER Network All Scientists Meeting, Miami, FL – poster – “Bacterial diversity, enzyme activities, and soil CO₂ flux along a soil P gradient in a coastal peatland, Panama”
- Mar 2007 FCE LTER Network All Scientists Meeting, Miami, FL – poster – “Nutrient patterns of dwarf *Rhizophora mangle* and *C. jamaicense* along the southeastern Everglades ecotone”
- Sept 2006 LTER Network All Scientists Meeting, Estes Park, CO – poster – “Biogeochemical connectivity in a complex wetland landscape: nitrogen sequestration by an Everglades tree Island”
- June 2006 Greater Everglades Ecosystem Restoration Conference, Orlando, FL – oral – “Ecosystem responses to hydrologic change in Everglades tree islands”
- June 2006 Greater Everglades Ecosystem Restoration Conference, Orlando, FL – poster – “Biogeochemical connectivity in a complex wetland landscape: nitrogen sequestration by an Everglades tree Island”
- Mar 2006 Florida Coastal Everglades LTER All Scientists Meeting, Miami, FL – poster – “Biogeochemical connectivity in a complex wetland landscape: nitrogen sequestration by an Everglades tree Island”
- Nov 2005 Estuarine Research Federation, Norfolk, VA – oral – “Coupling oligotrophy and peat development in a coastal freshwater swamp of Panama”
- Aug 2005 Ecological Society of America, Montreal, Canada – poster – “Investigating groundwater flow in an Everglades tree island”
- Mar 2005 Florida Coastal Everglades LTER Meeting – poster – “Investigating groundwater flow in an Everglades tree island”
- Mar 2005 International Wetland Biogeochemistry Symposium, Baton, Rouge, LA – oral – “Coupling oligotrophy and peat development in a coastal freshwater swamp of Panama”

CREATIVE WORK

Sea Level Solutions Interdisciplinary Research and Design Studio

Launched in 2016 as an interdisciplinary course with the College of Communications, Architecture and the Arts, the Sea Level Solutions Interdisciplinary Research and Design Studio of Spring 2018 resulted in a design project entitled ‘Multidisciplinary Assessment of Urban Design through a Resiliency Framework: Miami Beach Case Study’ that was showcased at both local (Miami Design Preservation League Symposium and Miami Beach Chamber of Commerce meeting in Miami Beach) and national (CERF 2019) venues and earned an award at the Inaugural Coastal and Estuarine Research Federation Design Competition in November 2019.

Southeast Florida Regional Citizen Science Climate Action Network

Citizen science work that I initiated in 2016 with the FIU Department of Journalism and Media and Sea Level Solutions Center community partners including Miami Dade County, City of Miami and The CLEO Institute expanded from King Tide flood monitoring to include monitoring of urban heat. The program has expanded to a multi-institutional collaboration across four counties (<https://c-scan.net/>) and received an award sponsored by the MetroLab Network and UK government: Convention of the Parties 26 Climate Challenge Cup Innovation Award on November 2021. The link below provides access to the awards ceremony in Glasgow, UK.

<https://www.youtube.com/watch?v=5cuZ2K45ZUM>

WORKS IN PROGRESS

Papers submitted to journals for consideration

- *Friedman, E., W. Solecki, **T.G. Troxler**, Z. Paginini. Linking Quality of Life and Climate Change Adaptation Through the Use of a Decision-Support Tool. *Climate Risk Management. Revise and Resubmit (Original Submission April 15, 2022).*
- Julian II, P., J. Fourqurean, S.E. Davis, D. Surratt, E.E. Gaiser, J.S Kominoski, **T.G. Troxler**, J.N. Boyer, S. Thomas, H.O. Briceño, C. Madden, E. Montes, C.R Kelble. Long-term spatiotemporal patterns and trends in water quality reveal a coastal continuum of disturbance legacies. *Limnology and Oceanography Letters. In Review (Submitted June 13, 2022).*
- *Smith, M.A., J.S. Kominoski, R.M. Price, O.I. Abdul-Aziz, **T.G. Troxler**. Linking seasonal changes in organic matter composition and nutrients to shifting hydraulic gradients in coastal urban canals. *Water Resources Research. In Review (Submitted July 27, 2022).*
- Clement, A., **T. Troxler**, O. Keefe, M. Arcodia, M. Cruz, A. Hernandez, D. Moanga, Z. Adefris, N. Brown, S. Jacobson. Hyperlocal Observations Reveal Persistent Extreme Urban Heat in Southeast Florida. *Bulletin of the American Meteorological Society. In Review (Submitted August 5, 2022).*
- *Lamb-Wotton, L., **T.G. Troxler**, C. Coronado, S.E. Davis, D. Gann, K.S. Ishtiaq, S.L. Malone, P. Olivas, D.T. Rudnick, and F.H. Sklar. Hydrogeomorphic condition indicates alternate stable states in a non-tidal, salinizing peat marsh in the Florida Coastal Everglades. *Ecology. Submitted (August 19, 2022).*

Other completed papers

N/A

Research in progress

- Feagan, M. T.A. Muñoz-Erickson, R. Hobbins, E. Cook, K. Baja, M. Chester, N. Grimm, M. Grove, S. Iyer, T. McPhearson, P. Méndez-Lázaro, C. Miller, D. Sauter, W. Solecki, C. Tomateo, **T.G. Troxler**, C. Welty. Co-producing smart-city knowledge systems: A people-centered approach to visualizing social-ecological-technological systems (SETS) data for resilient and just cities. *Cities. In Prep.*
- *Wilson, B.J., **T.G. Troxler**, J. S. Kominoski, S. P. Charles, S. Servais, V. Mazzei, S. E. Davis, E. E. Gaiser, J. H. Richards, D. T. Rudnick, and F. H. Sklar. Saltwater intrusion and seasonal dry-down accelerate carbon loss in coastal peat wetlands: an experimental synthesis. *Global Change Biology. In Prep.*
- Troxler, T.G.**, D. Moanga, S. Jacobson, A. Hernandez, M. Goshgarian, A. Clement, K.S. Ishtiaq, C. Kamrath, K. Hagemann, M. Sukop, J. Obeysekera. Improving local knowledge of flood resilience with citizen science. *Cities. In Prep.*
- *Moanga, D., **T. G. Troxler**, S. Jacobson, K. Ishtiaq, A. Hernandez, A. Clement, M. Cruz, Z. Adefris. Understanding Miami's urban heat with citizen science. *Urban Climate. In Prep.*
- *Ishtiaq, K.S., E. Swain and **T.G. Troxler**. Calibration of a landscape-scale hydrodynamic and solute transport model for Florida Everglades freshwater restoration. *Journal of Hydrology. In Prep.*

Troxler, T.G., D. Surratt, D. Rudnick, C. Madden. Hydrologic management and extreme events interact along a coastal wetland gradient to modulate subtropical estuarine water quality, Florida, USA. *Estuaries and Coasts. In Prep.*

Grant Proposals

Troxler, T. (PI). Community-driven coastal watershed resilience planning to maximize water quality benefits of regional flood protection. \$350,000. Submitted to the National Fish and Wildlife Foundation, June 30, 2022.

Obeysekera, J. (PI, FIU Lead), P. Hazenberg (Co-Investigator), L. Lagos (Co-Investigator), A.S. Leon (Co-Investigator), S.L. Malone (Co-Investigator), G. Narasimhan (Co-Investigator), M.C. Sukop (Co-Investigator), I. Triay (Co-Investigator), **T.G. Troxler** (Co-Investigator), H. Upadhyay (Co-Investigator), S. Wdowinski (Co-Investigator); A. Clement, University of Miami (Co-Investigator, UM Lead), B. Kirtman (Co-Investigator), K. Mach (Co-Investigator); and C. Polsky, Florida Atlantic University (Co-Investigator, FAU Lead), J.O. Hallstrom (Co-Investigator). Integrated observation, modeling, and prediction of wetland-urban-ocean dynamics and city-scale hazards in the humid subtropics for equitable, resilient adaptation. \$25,000,000. Submitted to The Department of Energy, June 15, 2022.

Clement, A. (PI, UM) and **T. Troxler** (PI, FIU). Miami pilot project on Building Equitable Resilience to Extreme Heat. FIU Subaward: \$20,000. Submitted to The National Oceanic and Atmospheric Administration, June 15, 2022.

FUNDED RESEARCH (Total as PI, co-PI or subaward PI* = \$17.6M; Total to lab = \$9.6M; total to lab since 2017 = \$6.3M)

Troxler, T. (PI), S. Jacobson, (co-PI), J. Obeysekera (co-PI) and M. Sukop (co-PI). Aiding Local Governments with Regionally Relevant Flood Thresholds and Predictions for Vulnerability Assessments. Florida Department of Environmental Protection, Broward County with Subaward from Hazen & Sawyer. FIU Subaward: \$135,000 (Portion of funding: \$120,000). May 2022-September 2022.

Troxler, T. (PI) with Subaward to co-PI E. Swain, USGS. Development of Biscayne Bay and Southeastern Everglades Restoration (BBSEER) performance measures through linkage of RSM and BISECT models. \$75,000 (Portion of funding: \$60,000). June 2021-April 2023.

Troxler, T. (PI), Clement, A. (PI, UM), J. Obeysekera (co-PI), M. Ilcheva (co-PI), K Mach (co-PI, UM), S Evans (co-PI, UM), J. Murley (Miami-Dade College), W. Solecki (CUNY). The Resilient305 Collaborative: Advancing Hyperlocal, Replicable, Impact-driven Adaptation Science through Resilience Learning. NOAA Adaptation Sciences Program. \$300,000 (Portion of funding: \$150,000). September 2021 – August 2023.

Crowl, T. (PI), J.M. Eirin-Lopez, F. Fernandez-Lima, R Teutonico, **T. Troxler**. CREST Phase II: Center for Aquatic Chemistry and Environment (CACHÉ). National Science Foundation. \$5,000,000. September 2021 – August 2026. (Portion of funding: (\$150,000)

Troxler, T. (PI), J. Obeysekera (co-PI), M. Sukop (co-PI), G. Dusek (co-PI, NOAA), and A. Clement (co-PI, UM). Integrated coastal flood observation network for citizen engagement and improved data, modeling and projections. Southeast Coastal Ocean Observing Regional Association. \$400,000 (Portion of funding: \$350,000). July 2021 – May 2026.

- Silverstein, R. (PI, Miami Waterkeeper) and **T. Troxler (co-PI)**. Evaluating Sources of Nutrients and Enterococci in Biscayne Bay, Florida: Connections and Management Implications. US Environmental Protection Agency. \$278,000 (Portion of funding: \$60,000). May 2021-April 2023.
- Troxler, T. (PI)**. Getting to Neutral: Florida Statewide Greenhouse Gas Inventory and Net-Zero Action Planning. Environmental Defense Fund. \$150,000 (Portion of funding: \$75,000). May 2021-July 2022.
- Beesing, G. (PI, Catalyst Miami). **T. Troxler** (FIU SLSC Subaward PI). Miami Climate & Health Equity Coalition. Kresge Foundation. \$600,000 (Portion of funding: \$36,000). April 2021-April 2024.
- Solecki, W. (PI, CUNY-Hunter College) and **T. Troxler (co-PI)**. Promoting Effective Local Coastal Resilience Programs. NOAA. \$65,000 (Portion of funding: \$20,000). September 2020-December 2022.
- Kominoski, J. (Lead PI), J. Fourqurean, E. Gaiser, J. Rehage, K. Grove. LTER: Coastal Oligotrophic Ecosystem Research. National Science Foundation. \$2,400,000. **Troxler, T.** (Subaward PI with D. Gann and S. Wdowski, co-PIs). \$272,000 (Portion of funding: \$125,000). January 2021-December 2025.
- Troxler, T. (PI)**. Monitoring for potential water quality impacts along Eastern Everglades National Park. Department of the Interior, National Park Service. \$1,560,000. July 2016-July 2023.
- Troxler, T. (PI)**, M. Bhat (co-PI), S. Evans (co-PI, UM; separate award), A Stainback (co-PI, Everglades Foundation; separate award). Alternative valuation methodology assessment for equity and environmental outcomes in resilience project benefit-cost analyses. \$50,000. The Miami Foundation. \$31,018. November 2020 – June 2022.
- Troxler, T. (PI)**. Is the Coral Gables coastline keeping up with sea-level rise? City of Coral Gables. \$235,000. June 2017- June 2022.
- Grimm, N. (PI), Redman, C. (co-PI), Gaiser, E. (FIU PI), Kominoski, J. (FIU co-PI), **Troxler, T.** (FIU co-PI), et al. Urban Resilience to Extremes Sustainability Research Network (UREx SRN). National Science Foundation. \$12M; FIU subaward: \$750,000 (Portion of funding: \$175,000). November 2015 – June 2022.
- Troxler, T. (PI)**. Ecological Assessment of Florida Bay and adjacent Mangrove Wetlands. South Florida/Caribbean Cooperative Ecosystem Studies Unit, National Park Service, Department of the Interior. \$738,833. August 2016-April 2022.
- Troxler, T. (PI)**, Oberbauer S., Castaneda, E. Direct measurement of net ecosystem exchange (NEE) in coastal mangroves of Everglades National Park. National Park Service. \$510,000 (Portion of funding: \$200,000). July 2017 – September 2023.
- Troxler, T. (PI)**, P. Gardinali (co-PI). City of Coral Gables Assessment of Water Quality and Habitat Conditions in the Coral Gables Waterway to Inform Management and Restoration. City of Coral Gables. \$300,000 (Portion of funding: \$135,000). July 2020- June 2021.
- Troxler, T. (PI)**, A. Clement (co-PI, UM), C. Genatios (co-PI, MDC). Launching the Resilient305 Collaborative: Little River to North Beach Resilience District Pilot Project. The Miami Foundation. \$50,000 (Portion of funding: \$18,000). June 2020 – June 2021.
- Obeysekera, J. (PI), M. Sukop (co-PI), S. Malone (Co-PI), **T. Troxler (Co-PI)**. CoPe Conference: Interoperability and data needs of models for understanding vulnerability of coastal systems to stresses and shocks associated with sea level rise. National Science Foundation. \$99,362 (Portion of funding: \$1,500). January 2020 – January 2023.

Beesing, G. (PI, Catalyst Miami). **T. Troxler** (FIU SLSC Subaward PI). Climate Change Health Equity Stage 1 project. Kresge Foundation. \$150,000 (Portion of funding: \$12,000). September 2019-April 2021.

Gaiser, E (Lead PI), J. Fourqurean, J. Kominoski, J. Rehage, K. Grove. FCE IV: Coastal Oligotrophic Ecosystems renewal proposal. National Science Foundation. \$2,383,999. **Troxler, T** (Subaward PI). \$210,000. December 2018-December 2020.

Troxler, T. (PI). Ecological monitoring of southern Everglades wetlands, mangrove transition zone and “white zone” interactions with Florida Bay. South Florida Water Management District, Florida Bay Program. \$557,000. September 2016-December 2021.

Obeysekera, J. (PI), Sukop, M. (co-PI), **Troxler, T. (co-PI)**. Miami-Dade County Back Bay Coastal Storm Risk Management Feasibility Study Scope of Work for Hydrodynamic Modeling and Initial Water Quality Evaluations Supporting the Federal Feasibility Study. U.S. Army Corps of Engineers, ERDC. \$250,000 (Portion of funding: \$25,000). June 2020 – June 2021.

Troxler, T. (PI). Surface-groundwater interactions in Everglades tree islands – toward restoration of degraded islands. South Florida Water Management District. \$435,000. December 2015-June 2021.

Troxler, T. (PI). S. Jacobson (co-PI). Using innovative science and technology to create and deliver effective environmental education in Miami-Dade County. Miami-Dade County. \$65,000 (Portion of funding: \$50,000). June 2019 – October 2020.

Troxler, T. (PI), Sklar, F. (co-PI), Gaiser, E. (co-PI), Davis, S. (co-PI), Kominoski, J. (co-PI), Coronado-Molina, C. (co-PI), Madden, C. (co-PI). The Effects of Projected Sea-Level Rise on Everglades Coastal Ecosystems: Evaluating the Potential for and Mechanisms of Peat Collapse Using Integrated Mesocosm and Field Manipulations. Seagrant, NOAA. \$400,000 (Portion of funding: \$250,000). February 2016-January 2021.

Gaiser, E. (PI) J. Kominoski, **T. Troxler**, K. Zhang, M. Heithaus. RAPID: Hurricane Irma: How do ecosystem perturbations interact to influence long-term resilience mechanisms? NSF. \$178,159 (Portion of funding: \$30,000). December 2017-November 2019.

Obeysekera, J (PI), M. Sukop, **T. Troxler (co-PI)**, M. Irizarry. Potential Implications of sea-level rise and changing rainfall in Florida Building Code for communities in Florida using Miami-Dade County as a Case Study. The State of Florida Department of Business and Professional Regulation, Florida Building Commission. \$127,883 (Portion of funding: \$25,000). October 2018 – June 2019.

Grimm, N. (PI), Muñoz-Erikson, T. (co-PI), Feagan, M. (co-PI), **Troxler, T. (co-PI)**. SCC-Planning: Building resilient coastal cities through smart and connected communities. NSF. \$99,867 (Portion of funding: \$10,000). November 2017-August 2019.

Gaiser, E (Lead PI), J. Fourqurean, J. Kominoski, J. Rehage, K. Grove. FCE III: Coastal Oligotrophic Ecosystems renewal proposal. National Science Foundation. \$4,500,000. **Troxler, T.**, Subaward PI: \$420,000. January 2012-December 2018.

Troxler, T. (PI), Wilson, B. DISSERTATION RESEARCH: How do saltwater intrusion and drought interact to change the soil stability of coastal peat marshes? National Science Foundation. \$19,045 (Portion of funding: \$1,500). June 2017-September 2018.

Windham-Myers, L. (PI), Bergamaschi, B. (co-PI), Drexler, J. (co-PI), Byrd, K. (co-PI), Ferner, M. (co-PI), Megonigal, P. (co-PI), Schile, L. (co-PI), Kroeger, K. (co-PI), Crooks, S. (co-PI), Morris, J. (co-PI), Sutton-Grier, A. (co-PI), Callaway, J. (co-PI), Simard, M. (co-PI), Woo, I. (co-PI), Takekawa, J. (co-PI), **Troxler, T. (co-PI)**. Linking Satellite and Soil Data to Validate Coastal Wetland "Blue Carbon" Inventories: Up-scaled Support for Developing MRV and REDD+ Protocols. NASA ROSES-14 A.7: Carbon Monitoring Systems. Subaward PI: \$60,000, October 2015-October 2017.

- Troxler, T. (PI).** Support for EPA Greenhouse Gas Inventory on Coastal Wetland Land-use in the US. Restore America Estuaries. \$8,000. July 2016-April 2017.
- Troxler, T. (PI).** Support for EPA Greenhouse Gas Inventory on Coastal Wetland Land-use in the US. Restore America Estuaries. \$8,000. July 2015-June 2016.
- Troxler, T. (PI).** Monitoring for potential water quality impacts along Eastern Everglades National Park. Department of the Interior, National Park Service. \$260,000. July 2014-June 2016.
- Troxler, T. (PI).** Ecological monitoring of southern Everglades wetlands, mangrove transition zone and “white zone” interactions with Florida Bay. South Florida Water Management District, Florida Bay Program. \$356,323. March 2014-September 2016.
- Troxler, T. (PI),** Sklar, F. (co-PI), Gaiser, E. (co-PI), Davis, S. (co-PI), Kominoski, J. (co-PI), Coronado-Molina, C. (co-PI), Madden, C. (co-PI). The Effects of Projected Sea-Level Rise on Everglades Coastal Ecosystems: Evaluating the Potential for and Mechanisms of Peat Collapse Using Integrated Mesocosm and Field Manipulations. Seagrant, NOAA. \$200,000 (Portion of funding: \$125,000). January 2014-February 2016.
- Troxler, T. (PI).** Ecological Assessment of Florida Bay and adjacent Mangrove Wetlands. South Florida/Caribbean Cooperative Ecosystem Studies Unit, National Park Service, Department of the Interior. \$445,000 August 2013-August 2016.
- Troxler, T. (PI).** Monitoring for potential water quality impacts along Eastern Everglades National Park. Department of the Interior, National Park Service. \$115,000. July 2013-June 2014.
- Troxler, T. (PI).** Ecological monitoring of southern Everglades wetlands, mangrove transition zone and “white zone” interactions with Florida Bay. South Florida Water Management District, Florida Bay Program. \$48,680. October 2013-January 2014.
- Troxler, T. (PI).** Surface-groundwater interactions in Everglades tree islands – toward restoration of degraded islands. South Florida Water Management District. \$266,000. February 2013-January 2016
- Troxler, T. (PI),** Gaiser, E. (co-PI). Ecological monitoring of southern Everglades wetlands, mangrove transition zone and “white zone” interactions with Florida Bay. South Florida Water Management District, Florida Bay Program. \$135,000 (Portion of funding: \$130,000). October 2012-September 2013.
- Troxler, T. (PI),** Richards, J. (co-PI). Monitoring for potential water quality impacts along Eastern Everglades National Park. Department of the Interior, National Park Service. \$115,000 (Portion of funding: \$113,500). June 2012-June 2013.
- Troxler, T. (PI),** Richards, J. (co-PI). Surface-groundwater interactions in Everglades tree islands. South Florida Water Management District. \$89,350 (Portion of funding: \$88,000). January 2012-December 2012.
- McDowell, W. (PI), **Troxler, T. (co-PI),** Vanderbilt, K. (co-PI), Redman, C. (co-PI). US-Mexico Workshop: Catalyzing international collaborations to develop a platform for ecohydrological research - Chamela, Jalisco, Mexico, September 2012. National Science Foundation. \$48,017 (Portion of funding: \$2,500). September 2011-December 2012.
- Troxler, T. (PI).** Hydrogeochemical patterns at temporal and spatial scales of a “pristine” island and a degraded tree island located in WCA-3A: Restoring ecological function of degraded tree islands. South Florida Water Management District, Everglades Division. \$39,600. March 2011-November 2011.
- Troxler, T. (PI),** Richards, J. (co-PI). Carbon dioxide efflux from mangrove soil and woody debris. Department of Interior, National Park Service. \$14,000 (Portion of funding: \$13,000). September 2010-June 2012.

- Troxler, T. (PI)**, Richards, J (co-PI), Engel, V. (co-PI). Surface-groundwater interactions in Everglades tree islands, U.S. Army Engineer Research and Development Center. \$166,000 (Portion of funding: \$164,500). September 2010-December 2011.
- Troxler, T. (PI)**, Richards, J. (co-PI). Monitoring for potential water quality impacts along Eastern Everglades National Park. Department of the Interior, National Park Service. \$120,000 (Portion of funding: \$118,500). June 2011-June 2012.
- Troxler, T. (PI)**, Gaiser, E. (co-PI). Ecological monitoring of southern Everglades wetlands, mangrove transition zone and “white zone” interactions with Florida Bay. South Florida Water Management District, Florida Bay Program. \$340,000 (Portion of funding: \$335,000). September 2010-September 2012.
- Troxler, T. (PI)**, Richards, J. (co-PI). Spatial pattern in nutrient fluxes on two tree islands in WCA-3A: toward restoration of degraded tree islands. South Florida Water Management District, Everglades Division. \$89,950 (Portion of funding: \$87,500). March 2010-December 2010.
- Troxler, T. (PI)**, Richards, J. (co-PI). Monitoring data of the southern Everglades ecosystem for adaptive management of operations and restoration. South Florida Water Management District, Florida Bay Program. \$34,975 (Portion of funding: \$32,500). January 2010-July 2010.
- Troxler, T. (PI)**, Richards, J. (co-PI). Monitoring for potential water quality impacts along Eastern Everglades National Park. Department of the Interior, National Park Service. \$120,000 (Portion of funding: \$115,000). June 2010-June 2011.
- Troxler, T. (PI)**, Richards, J. (co-PI). Data synthesis & refinement of tree island nutrient budgets. South Florida Water Management District, Everglades Division. \$49,975 (Portion of funding: \$44,000). February 2009-December 2009.
- Troxler, T. (PI)**, Richards J. (co-PI). Paleocological and physiological impacts of reduced water flow on estuarine research guidelines for ecosystem restoration, Everglades National Park, Critical Ecosystems Studies Initiative Program, \$65,000 (Portion of funding: \$60,000). October 2008-September 2010.
- Troxler, T. (PI)**, Childers, D. (co-PI). C-111 monitoring plan for southern wetlands, transition zone and flows into Florida Bay. South Florida Water Management District, Florida Bay Program. \$102,500 Portion of funding: \$95,000). September 2008-November 2009.
- Troxler, T. (PI)**. Monitoring for potential water quality impacts along Eastern Everglades National Park, National Park Service (2008 - change to PI from previous award to D. Childers).
- Troxler, T. (PI)**, Childers, D. (co-PI). Spatial and temporal variability in water quality of tree island 3AS3. South Florida Water Management District, Hydrogeology Division. \$40,000 (Portion of funding: \$35,000). June 2007-May 2009.
- Childers, D. (PI), **Troxler, T. (co-PI)**. Monitoring for potential water quality impacts along Eastern Everglades National Park, National Park Service, \$330,000 (Portion of funding: \$45,000). June 2007-May 2010.
- Childers, D. (PI), **Troxler, T. (co-PI)**. Monitoring of the southern Everglades ecosystems for adaptive management of environmental restoration activities. South Florida Water Management District, Florida Bay Program. \$48,900 (Portion of funding: \$5,000). January 2008-July 2008.
- Troxler, T. (PI)**, Childers, D. (co-PI). Pilot study for calculating nutrient and hydrologic fluxes in a tree island. South Florida Water Management District, Everglades Division. \$150,000 (Portion of funding: \$145,000). October 2006-September 2008.
- *If Subaward PI, Only the Subaward Amount is included in the Total*

PROPOSALS SUBMITTED BUT NOT FUNDED *(selected)*

Troxler, T. (PI), Clement, A. (co-PI, UM), J. Obeysekera (co-PI), K Mach (co-PI, UM). SCC-

CIVIC-PG Track B: The Resilient305 Collaborative: Community-driven research for actionable, quantifiable resilience dividends. The National Science Foundation. \$50,000. Submitted May 2022.

Troxler, T. (PI), A. Melesse (Co-PI), W. McDowell (Co-PI). AccelNet-Design: Forecasting and Managing Watershed Urbanization with Globally Distributed Networks (WatUrNet). The National Science Foundation. \$247,811. Submitted October 2021.

Troxler, T. (PI), A.C. Maran (Co-PI, SFWMD), K Hagemann (Co-PI, Miami-Dade County), J. Obeysekera (co-PI), M. Sukop (Co-PI), K. Ishtiaq (Co-PI), J. Bolson (Co-PI), J. Murley (Co-PI, Miami-Dade County), A. Ovosina (Co-PI, SFWMD). Maximizing water quality benefits of regional flood protection to advance watershed restoration planning at the basin scale. Florida Sea Grant. \$300,000. Submitted June 2021.

Troxler, T. (PI), S. Evans (Co-PI, UM), K. Mach (Co-PI, UM), A. Clement (Co-PI, UM), R Teutonico (Co-PI). SCC-PG Enabling Community-Driven Resilience Outcomes through Socio-Technological Resilience Learning. The National Science Foundation. \$150,000. Submitted February 2021.

Troxler, T. (PI), C. Genatios (Co-PI, Miami-Dade College), K. Mach (Co-PI, UM), A. Clement (Co-PI, UM), J. Obeysekera (Co-PI). SCC-CIVIC-PG Track B: The Resilient305 Collaborative: Community-driven research for actionable, quantifiable resilience dividends. The National Science Foundation. \$50,000. Submitted August 2020.

Crowl, T. (PI), K. Boswell (co-PI), **T. Troxler (Co-PI)**, P. Gardinali (Co-PI), K. Rein (Co-PI). MRI: Acquisition and Integration of a Coastal Degradation and Harmful Algal Bloom Mobile Sensing Platform. The National Science Foundation. \$638,602. Submitted January 2020.

Sukop, M. (PI), J. Bolson (Co-PI), **T. Troxler (Co-PI)**, J. Obeysekera (Co-PI). Collaborative Research: Network Cluster: Sea level rise and the dynamics of the subsurface critical zone of cities. The National Science Foundation. \$1,477,250. Submitted December 2019.

McPhearson, T. (PI), D. Sauter (co-PI), M. Chester (Co-PI), T. Munoz-Erickson (Co-PI), **T. Troxler (Co-PI)**. SCC-IRG Track 1 - Resilient Coastal Cities (RC2): Enabling Resilient and Equitable Urban Futures through Codesign. The National Science Foundation. \$4,976,403. Submitted September 2019.

PATENT DISCLOSURES, APPLICATIONS, AND AWARDS

N/A

PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS

Nov 2021	Convention of the Parties 26 Climate Challenge Cup Innovation Award
May 2019–2020	Florida Thrives: Community of Practice Training Fellowship, Hosted by Catalyst Miami, Funded by JP Morgan Chase
Apr 2019	Accepted honor on behalf of Sea Level Solutions Center for contributions to the mission of the Miami River Commission
Jun 2018	Recognized as one of 50 Influencers in the State of Florida by the Miami Herald
Jun 2018	Honored by BISNOW as leader in the commercial real estate industry

Jan 2018	Research Innovation Award, Florida Sea Grant
Dec 2017	FIU College of Arts, Sciences and Education Faculty Service Award
Oct 2016	CLEO (Climate Literacy, Education and Outreach) Leadership Circle Inductee
Apr 2016	Accepted honor on behalf of Sea Level Solutions Center for fostering sea level rise discussions in partnership with the City of Coral Gables
Apr 2016	Accepted honor on behalf of Sea Level Solutions Center for contributions to the mission of the Miami River Commission

OFFICES HELD IN PROFESSIONAL SOCIETIES

Nov 2021–present	International LTER Network Executive Committee, Co-Chair and Incoming Chair
Oct 2017–Dec 2020	Resilient Utility Coalition, Board Member
July 2015–present	Florida Climate Institute, Executive Board member
Jan 2018–present	International LTER Network, Executive Committee
Mar 2015– Jun 2019	Wetlands Ecology and Management, Subject editor
Oct 2014–Jun 2021	US LTER Network International Committee, Committee Co-chair
Sep 2010–present	US LTER Network International Committee

OTHER PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE

Service to FIU

Department

May 2022–present	Earth & Environment Department Professional Science Master’s in Environmental Policy and Management (PSM-EPM) Program Revision Committee
Jan 2021–present	Earth & Environment Department Undergraduate Committee
Jan 2021–Sept 2021	Earth & Environment Department Ad Hoc Committee to Revise Sustainability BA

College/University

Spring 2022	FIU CASE Distinguished Fellowship Committee
Fall 2018–present	Director of Science, Sea Level Solutions Center in the Institute of Environment Search and Screen Committee, Department of Civil and Environmental Engineering in Water Resources Engineering
Spring 2018	
2015-2018	Director, Sea Level Solutions Center in the Institute of Environment

Professional Service

- Dec 2020-present Florida Association of Floodplain Managers Instructor – “Green Elements in the National Flood Insurance Program (NFIP) Community Rating System (CRS)”
- Feb 2020–present Coastal Estuarine Research Federation Design Competition, Co-Chair
- Jul 2020–Jan 2022 Carbon180, Science Advisor
- Jul 2019–present Southeast Coastal Ocean Observing Regional Association (SECOORA) Science Committee member
- Jul 2019–Jan 2021 Southeast Regional Climate Change Compact Sea Level Rise Projection Work Group member (Work Group Sunset)
- Jun 2019–present Resilient305 Collaborative, Co-Director
- Apr 2017–Oct 2018 National Academy of Sciences, Engineering and Medicine, Developing a Research Agenda on Carbon Dioxide Removal and Reliable Sequestration, Committee member
- Mar 2017 North American Carbon Program/Ameriflux Annual Meeting, Washington, D.C. – Breakout Session Co-organizer – “Coastal blue carbon: an essential component of the global carbon cycle”
- Sep 2016 FIU Coastal Wetland Change Workshop, Miami, FL – Co-organizer
- Aug 2016 Ecological Society of America, Symposium Co-organizer – “Coastal Wetlands in the Anthropocene: Novel Ecosystem Challenges for Carbon Cycling Measurements and Modeling”
- Feb 2016–Feb 2017 US Department of Energy, Office of Science, Research Priorities to Incorporate Terrestrial-Aquatic Interfaces in Earth System Models, Workshop Co-Chair
- 2016–present Referee for the following technical documents and government reports: including U.S. Environmental Protection Agency National Greenhouse Gas Inventory Report, the State of Oregon Coastal Blue Carbon Assessment (2022) and Council of Canadian Academies draft report on Canada's Carbon Sinks Potential (2022)
- Dec 2014 International Long Term Ecological Research Network All-Scientists Meeting of the Americas, Valdivia, Chile, Workshop Co-chair – “An international, socio-ecological framework to provide hydrological co-benefits with a changing climate”
- Jan 2014–Jan 2017 Chinese Ecological Research Network-National Ecological Observatory Network steering committee
- Oct 2012 US-Mexico Ecohydrology workshop, Chamela, Mexico – Workshop Organizing Committee
- Sep 2012 US LTER All-Scientists Meeting, Estes Park, CO - Session Co-organizer – “Populating the IPCC Emission Factor Database”
- Jun 2012 The 9th INTECOL International Wetlands Conference, Orlando FL – Session Co-organizer - “Patterns and drivers of carbon storage in peatlands”
- Mar 2012–Aug 2013 The 11th INTECOL Congress, Ecology 2013 - Session Co-organizer – “International perspectives from long term research on ecosystem carbon budgets”

- Oct 2009 NCEAS Working Group – co-Lead - “Long-term phenological changes in tundra plants in response to experimental warming and observed changes in climate”
- Sep 2009 US LTER Network All Scientists Meeting, Estes Park, CO – Working Group Leader - “Biogeochemical Complexity among LTER sites”
- Sep 2006 US LTER Network All Scientists Meeting, Estes Park, CO - Working Group Leader – “Biogeochemical Complexity among LTER sites – the what, where and how”
- Nov 2005 US LTER Group of 100 Planning Meeting, Cape Canaveral, FL
- Apr 2005 US LTER Graduate Student Collaborative Research Symposium, Co-Chair
- Apr 2005 US LTER Network All Scientist’s Meeting, Program Committee, Poster Committee Chair
- 2005–present Referee for the following funding programs: National Science Foundation (DEB), Georgia Sea Grant, Rhode Island Agricultural Experiment Station, EarthWatch, National Center for Ecological Analysis and Synthesis, Department of Energy programs including National Institute of Climate Change Research, Terrestrial Ecosystem Science and Office of Science Graduate Student Research
- 2004–present Referee for the following journals: Wetlands, Hydrobiologia, Wetland Ecology and Management, Ecohydrology, Ecological Indicators, Estuaries and Coasts, Ecosystems, Agricultural and Forest Meteorology, Environmental Pollution, Aquatic Botany, Bioscience, Plant Ecology, Biotropica, Journal of Ecology, Geoderma, Botanica Marina, Biogeochemistry, JGR-Biogeosciences, Nature-Climate Change, Science Reports, Soil Science, Frontiers in Ecology and Environment, and Urban Transformations

Community and Other Institutional Service

Membership on External Advisory Boards, Committee and Task Forces and Program Coordination

- Jun 2019–Aug 2020 Miami-Dade County Biscayne Bay Task Force member (Task Force Sunset)
- Feb 2019–present Miami-Dade County Local Mitigation Strategy Steering Committee member
- Feb–Dec 2019 Miami Beach Chamber of Commerce Resilience and Sustainability Task Force member
- Sep 2018–Sep 2019 West Kendall Baptist Hospital Green Advisory Committee
- Jul 2016–Jun 2019 Greater Miami and the Beaches (Resilient305)-MetroLab Partnership – Co-organizer
- May 2018 NOAA/FDEP/FIU Green Infrastructure Workshop, Naples, FL – Co-organizer
- Feb–Jun 2018 Greater Miami and the Beaches 100 Resilient Cities Living with Water working group
- Aug 2017–2019 Biscayne Bay Marine Health Summit – Research Needs Working Group Co-lead
- Jun 2017 Sea Level Rise and the Public Realm, Miami Beach, FL – Event Co-organizer

- Oct 2016-present CLEO (Climate Literacy, Education and Outreach) Expert Advisory Council member
- Feb 2016 American Institute of Architects Sea Level Rise Discussion, Miami, FL – Co-organizer
- Feb 2016 FIU Sea Level Solutions Center All Hands Meeting, Miami, FL – Co-organizer
- Jan–Apr 2016 A Sea Level Rise Discussion Series – Monthly seminar series co-organized with the City of Coral Gables
- Nov 2015 Citizens Engaging in Sea Level Solutions with Eyes on the Rise – Co-organizer
- Jun 2015 FEMA National Exercise Program Miami Climate Adaptation, Preparedness and Resilience Seminar, Miami, FL – Co-organizer
- Jun 2015–Jun 2019 Southeast Florida Regional Climate Compact, Shoreline Resilience Working Group, member; Monitoring and Metrics Sub-committee, member
- Oct 2014–Oct 2016 Miami Beach Sea Level Rise Initiative – Ecosystem Services and Monitoring working group lead
- Aug 2014–present Tropical Audubon Society – Board member

Invited Non-Academic Community Presentations, Moderated Panels and Roundtable Discussions

- Aug 2022 South Florida Hispanic Chamber of Commerce Good 2 Green Sustainability Panel – Invited Panelist
- May 2022 Aspen Ideas: Climate, Miami Beach, FL – A Pathway to Developing a Code of Conduct for Ocean-Based Carbon Dioxide Removal (CDR) Roundtable Discussion – Invited Discussant
- Mar 2022 South Florida’s Social Coast Forum (virtual) – Invited Speaker – “Skill building café – Citizen Science”
- Feb 2022 United Healthcare Workers East - Florida Region Forum – Healthcare Workers and Climate Change: How To Get Started (virtual) – Invited Speaker – “Climate Change Impacts Now and In the Near Future”
- Feb 2022 City of Coral Gables Waterway Advisory Board, Coral Gables, FL – Invited Speaker – “Coral Gables Waterway Water Quality Assessment”
- Sep 2021 FIU Collaborative Online International Learning (COIL) course in Coastal Design and Other Extreme Environments – Invited Speaker – “Science-based design and adaptation to benefit society in the face of changing climate”
- Jun 2021 Girl Scouts Climate Patch Virtual Event (virtual) – Invited Speaker – “Climate Change: Science, Impacts, Solutions”
- Apr 2021 STEMconnector Virtual Event Series – Invited Panelist
- Apr 2021 City of Miami Climate Resilience Committee (virtual) – Invited Speaker – “Resilient305 Collaborative: Little River to North Beach Resilience District Pilot”
- Mar 2021 Miami-Dade County Office of Resilience Little River Adaptation Action Area Webinar Series (virtual) – Invited Speaker – “Home Elevations”
- Mar 2021 Miami-Dade County Office of Resilience Little River Adaptation Action Area Webinar Series (virtual) – Invited Speaker – “Water Quality”

- Nov 2020 FIU Community Leaders Summit (virtual) – Invited Panelist - Biscayne Bay Health – Can it Be Saved? What Needs To Be Done?
- Nov 2020 Florida Water and Climate Alliance Webinar Series (virtual) – Invited Speaker – “Biscayne Bay”
- Oct 2020 The Monday Group Meeting (virtual) – Invited Speaker – “Science to inform transformation toward a sustainable, resilient south Florida”
- Oct 2020 Journal of Science Policy and Governance-UK Science and Innovation Network Webinar (virtual) – Invited Speaker - “Science to inform transformation toward a sustainable, resilient south Florida”
- Oct 2020 Biscayne Bay Marine Health Summit Coalition Townhall on Biscayne Bay (virtual) - Invited Panelist
- Sep 2020 North Miami Councilman Scott Galvin Townhall on Biscayne Bay (virtual) - Invited Panelist
- Sep 2020 WPLG-FIU Townhall on Biscayne Bay (virtual) - Invited Panelist
- Jul 2020 Coconut Grove Rotary Club (virtual) – Invited Speaker – “Getting Ahead of the Curve for a Resilient Economy: Flood-Related Risks and Opportunities”
- Feb 2020 Captiva Island Yacht Club Lecture, Captiva, FL – Invited Speaker – “Science-based design and adaptation to benefit society in the face of a changing climate”
- Feb 2020 Coconut Grove Garden Club Lecture, Miami, FL – Invited Speaker – “Science-based design and adaptation to benefit society in the face of a changing climate”
- Jan 2020 Everglades Coalition Annual Meeting, Captiva, FL - Invited Speaker/Panelist – “Science-based design and adaptation to benefit society in the face of a changing climate”
- Oct 2019 City of Miami Virginia Key Advisory Board, Miami, FL – Invited Speaker – “Sea-level rise on Virginia Key: Anticipated impacts and resiliency efforts”
- Sep 2019 Biscayne Nature Center, Miami, FL – Invited Speaker/Panelist – “Unveiling Climate Change at Ground Zero”
- Jul 2019 Association of the Society of Landscape Architects Florida Conference, Orlando, FL – Invited Speaker/Panelist - “Unveiling Climate Change at Ground Zero”
- Jul 2019 Breakthrough Miami, Miami Beach, FL – Led by FIU Miami Beach Urban Studios with funding from The Children’s Trust – Invited speaker
- May 2019 Greater Miami Chamber of Commerce Resilient Solutions Summit, Miami, FL – Invited Panelist
- May 2019 15th Annual Workshop on LC/MS/MS Applications in Environmental Analysis and Food Safety, Miami Beach, FL–Invited Speaker – “Science-based design and adaptation to benefit society in the face of a changing climate”
- Apr 2019 Miami Design Preservation League Sea Level Rise and Historical Preservation Symposium, Miami Beach, FL – Invited Speaker – “Multidisciplinary Assessment of Urban Design through a Resiliency Framework: Miami Beach Case Study”
- Apr 2019 CLEO Institute-FIU Enabling Climate Communications, Miami, FL – Invited Panel Moderator
- Apr 2019 St. Thomas University/The Nature Conservancy, Miami Gardens, FL – Invited Speaker - “Climate, Nature and Society International Conference”

- Apr 2019 Hinshaw and Culbertson Third Annual Climate Change Conference, Miami, FL – Invited Speaker – “National Flood Insurance Program Community Rating System: flood risk reduction and natural system benefits”
- Mar 2019 Pinecrest Underwater HOA, Village of Pinecrest, FL – Invited Speaker – “Science-based design and adaptation to benefit society in the face of a changing climate”
- Mar 2019 State Attorney’s Office Grand Jury testimony on Biscayne Bay, Miami, FL – Invited Speaker – “Biscayne Bay”
- Mar 2019 FIU Emeritus Circle, Miami, FL – Invited Speaker – “Science-based design and adaptation to benefit society in the face of a changing climate”
- Mar 2019 American Association of Adaptation Professionals Mentor Program (virtual) – Invited Speaker – “Science-based design and adaptation to benefit society in the face of a changing climate”
- Feb 2019 City of Miami Sea Level Rise Committee, Natural Systems, Parks and Open Spaces Sub-committee, Miami, FL - Invited Participant
- Feb 2019 Miami Democratic Caucus, South Miami, FL – Invited Speaker - “Science-based design and adaptation to benefit society in the face of a changing climate”
- Nov 2018 Extreme Landscape Architecture, Miami Beach, FL – Invited Speaker – “Science-based design and adaptation to benefit society in the face of a changing climate”
- May 2018 Florida Native Plant Society Annual Conference, Miami, FL – Invited Plenary Speaker – “Local and regional opportunities for natural systems to benefit society”
- Apr 2018 Hinshaw and Culbertson Second Annual Climate Change Conference, Miami, FL – Invited Speaker – “Today’s Perspective: Thinking Beyond Risk”
- Feb 2018 Master Naturalist Training Program, Miami, FL – Invited Speaker – “Wetlands, wetland research and opportunities for wetlands to benefit society”
- Jan 2018 Environmental Defense Fund Science Day, San Francisco, CA - Hype or Hope: The Potential of Carbon Dioxide Removal – Invited Speaker – “Blue Carbon”
- Aug 2017 Miami-Dade Department of Environmental Resource Management Professional Development Seminar Series, Miami, FL – Invited Speaker – “Innovating solutions for building resilience to sea-level rise: Reducing risks & creating opportunities”
- Jul 2017 Miami Caribbean Code symposium, Miami, FL – Invited Speaker – “Innovating solutions for building resilience to sea-level rise: reducing risks and creating opportunities”
- Jun 2017 Biscayne Bay Marine Health Summit, Miami, FL – Invited panelist
- Jun 2017 Universities and Coastal Resilience: A strategic discussion, Norfolk, VA – Invited Speaker – “Overview of FIU’s Coastal Resilience Strategy”
- May 2017 Pompano Beach Rotary Club, Pompano Beach, FL – Invited Speaker - “Innovating solutions for building resilience to sea-level rise: reducing risks and creating opportunities”
- Mar 2017 Philanthropy Miami, Miami, FL – Invited panelist - “Innovating solutions for building resilience to sea-level rise: reducing risks and creating opportunities”
- Sep 2016 FIU Workshop on Assessing the effects of a large hurricane striking Miami Infrastructure and developing resilient and sustainable engineering solutions, Miami, FL – Invited Speaker – “Sea Level Solutions”

Sep 2016 Solutions for Coastal Cities: Resilience and Adaptations in Tampa Bay, St. Petersburg, FL – Invited Panelist

Jun 2016 Miami Foundation Sea Level Rise Communications workshop, Miami, FL – Invited Speaker – “Sea Level Solutions”

Jun 2016 Miami-Dade Local Mitigation Strategy Quarterly Meeting, Doral, FL – Invited Speaker – “Exponentializing educational efforts (e³) for community resilience”

May 2016 FIU Ocean Life Seminar Series, Key Largo, FL – Invited Speaker – “Sea Level Solutions”

Apr 2016 Tropical Audubon Society Annual “Wing Ding”, Miami, FL – Invited Speaker - “Sea Level Solutions”

Apr 2016 Science, Technology, Education, Arts and Math (STEAM) Teacher Training, Miami, FL – Invited Speaker – “Sea Level Solutions”

Apr 2016 Greater Miami Chamber of Commerce Sea Level Rise Solutions Conference, Miami, FL – Invited Panelist

Apr 2016 Media Party, Miami, FL – Invited Speaker – “Advancing understanding of sea-level rise science, impacts and solutions – how can we do it better?”

Apr 2016 Miami Beach Chamber of Commerce Event, Miami Beach, FL - The economic impact of sea level rise on south Florida – Invited Panelist

Apr 2016 TigerTail Productions, Water Panel – Invited Speaker – “Changing watery ecosystems and their implications”

Apr 2016 FIU hosting the Seattle Chamber of Commerce – Invited Speaker – “Sea Level Solutions”

Feb 2016 FIU Faculty Senate, Miami, FL – Invited Speaker – “Advancing understanding of regional sea-level rise impacts and resiliency in south Florida”

Feb 2016 Townhall Discussion about Flooding – Invited Speaker – “Sea-level rise and south Florida impacts”

Feb 2016 Miami River Commission, Miami, FL – Invited Speaker – “Advancing understanding of regional sea-level rise impacts and resiliency in south Florida”

Jan 2016 Our Fund Community Event, Ft. Lauderdale, FL - Invited Speaker – “Sea Level Solutions”

Dec 2015 Miami River Commission Urban Infill Committee – Invited Expert

Dec 2015 Greater Miami Chamber of Commerce Resilience Committee Meeting, Miami, FL – Invited Speaker – “The Paris Climate Talks or what we need to know to foretell the future for south Florida”

Nov 2015 FIU GIS Day – Invited Speaker – “Sea-level rise and science to understand regional impacts in south Florida”

Nov 2015 CLIMA panel discussions on climate change, Hialeah, FL – Invited Speaker – “The Paris Talks, Sea Level Rise & Sea Level Solutions”

Jul 2014 Rising Seas Summit, NY, New York, USA – School of Environment, Arts & Society representative

Mar 2010 Gumbo Limbo Nature Center, Ecowatch Science Seminar Series, Ft. Lauderdale, FL – “Human alterations in wetland ecosystems: the impacts of water management and climate change”

Media Service (Since 2016)

[Planet Earth 2072 – the podcast](#). *Produced by Luis Hernandez*, August 15, 2022.

[Can restoring mangroves protect Miami from rising seas?](#) *National Geographic*, July 26, 2022.

[Why should you stop frolicking in Miami-Dade floodwater? It's probably full of poop](#). *Miami Herald*, June 19, 2022.

[FIU leads citizen science team to second place win at UN climate conference](#). *FIU Press Release*, December 16, 2021.

[Ph.D. student fights for mangroves — not concrete seawalls — on Miami's shorelines.](#) *FIU Press Release*, November 10, 2021.

[Apple, Conservation International introduce mangrove carbon credit.](#) *GreenBiz*, May 6, 2021.

[Florida Bill Addresses Sea Level Rise — But Not the Emissions Causing It.](#) *WUFT*, April 23, 2021.

['Decades Of Warning Signs' Preceded Biscayne Bay Fish Kill.](#) *WUSF News*, August 25, 2020.

[An update on climate change.](#) *Sanibel Captiva Island Reporter*, March 3, 2020.

[The building block of the Everglades is in danger.](#) *FIU Press Release*, February 25, 2020.

[To save the Everglades, guardians fight time — and climate.](#) *AP News*, December 2, 2019.

[Half-dozen Virginia Key City projects in flood zone.](#) *Miami Today*, November 12, 2019.

[Florida's building code doesn't take sea rise into account. That could change this year.](#) *Tampa Bay Times*, November 12, 2019.

[Most people try to avoid king tide flooding. These volunteers waded right into the water.](#) *Miami Herald*, September 30, 2019.

[Sea level rise could make plants bigger. Then it may kill them.](#) *FIU Press Release*, April 3, 2019.

[Capturing carbon: Can it save us?](#) *Chemical & Engineering News*, February 25, 2019.

[Wetlands hold the key to cutting emissions.](#) *Miami's Community News*, December 5, 2018

[Everglades needs more freshwater to combat peat soil collapse.](#) *Phys.Org*, October 31, 2018.

[Technologies That Remove Carbon Dioxide From Air and Sequester It Need to Play a Large Role in Mitigating Climate Change, Says New Report.](#) *National Academies Press Release*, October 24, 2018.

[Hit by a hurricane, Everglades National Park adapts to changing climate.](#) *CNN*, April 25, 2018.

[Miami is racing against time to keep up with sea-level rise.](#) *Business Insider*, April 12, 2018.

[Supermoon comes with supersized tides that could bring coastal flooding.](#) *Christian Science Monitor*, November 14, 2016.

[Rising Seas Push Too Much Salt Into The Florida Everglades.](#) *NPR Morning Edition*, May 25, 2016.

Other Professional Activities

June 2021–present	US Army Corps of Engineers Biscayne Bay and Southeastern Everglades Restoration Program Project Delivery Team Ecosubteam member
Nov 2019–present	FCE LTER Vegetation and Geomorphic Gradients working group co-lead
Jun 2019-Oct 2020	As part of a funded Miami-Dade County Environmental Education Grant Program-FIU Webinar Series (Sep 2019-Oct 2020), conducted 28 events reaching over 2000 residents and students with environmental programming on topics including: Water Quality, Water Conservation, Urban Forestry, Solid Waste Management (e.g., recycling and composting), and General Local Environmental including Sea Level Rise and Climate Change
Apr 2019	Miami Scenarios Workshop – UREx SRN-FIU community engagement event, Miami, FL – speaker/co-organizer

Apr 2019	Miami World Café – Venture Café community engagement event, Miami, FL - speaker/co-organizer
Oct 2014	IPCC Expert Meeting: Improving National Greenhouse Gas Inventories Using the 2006 IPCC Guidelines and Related Tools, Hayama, Japan – Instructor
Oct 2014	Southeast Asia Network of Climate Change Offices and United Nations Environment Programme - Hands-on Training Workshop on Greenhouse Gas Inventories for Experts, Singapore, Singapore – Instructor
Dec 2013	IPCC Expert Meeting: Improving National Greenhouse Gas Inventories Using the 2006 IPCC Guidelines and Related Tools, Sapporo, Japan – Meeting Co-organizer and Instructor
Nov 2013	IPCC Expert Meeting: 8 th Data Meeting of the Emission Factor Database: Biomass and Soil Burning, Ghent, Belgium – Meeting Chair
Nov 2013	19 th Session of the Convention of the Parties and the 38 th Session of the Subsidiary Body for Science and Technological Advice, IPCC Special Event on Two New Methodological Reports (Wetlands Supplement and KP Supplement), Warsaw, Poland – Event Co-organizer and Presenter
Oct 2013	Annual Meeting of the International Long-Term Ecological Research Network, Seoul, Republic of South Korea - US LTER Network Delegate
Aug 2013	IPCC Expert Meeting: Fugitive Emissions of Greenhouse Gases from Oil and Natural Gas Systems (including shale gas, coal bed methane, etc) – Meeting Co-organizer
July 2013	Hands-on Training Workshop on Greenhouse Gas Inventory for Experts from Bhutan, Nepal and India, New Delhi, India – Instructor
May 2013	Latin American Workshop on National Greenhouse Gas Inventories Systems, Santiago, Chile – Instructor
Feb 2013	Japan International Cooperation Agency (JICA) Group Training Course: Development of Strategies on Climate Change, Tokyo, Japan – Instructor
Dec 2012	IPCC Expert Meeting on the 2006 IPCC Guidelines and Software, Bali, Indonesia – Meeting Co-organizer and Instructor
Oct 2012	IPCC Expert Meeting: Role of Remote Sensing in Forest and National Greenhouse Gas Inventories, Hayama, Japan – Meeting Co-organizer
Jul 2012–Nov 2019	FCE LTER Primary Production Working Group Co-lead
Jul 2012–present	FCE LTER Internal Executive Committee
Feb 2012	Japan International Cooperation Agency (JICA) Group Training Course: Development of Strategies on Climate Change, Tokyo, Japan – Instructor