**CURRICULUM VITAE**

Randall W. Parkinson, Ph.D., P.G.

Research Associate Professor

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# EDUCATION

Ph.D., University of Miami; Marine Geology and Geophysics

M.S., University of Iowa; Geology

B.S., Cornell College; Environmental Science

**LICENCES**

Registered Professional Geologist (PG1054), State of Florida

**EMPLOYMENT**

2016 to present *Research Associate Professor*

Sea Level Solutions Center

Florida International University

2006 - present RWParkinson Consulting Inc.

*President*

2012 – 2016 Environmental Remediation & Recovery

*Director, Division of Coastal Zone and Watershed Management*

2000 - 2006 Coastal Technology Corporation

*Senior Geologist and Laboratory Director*

2000 Summer Faculty Fellowship

*NASA Kennedy Space Center*

Conducted applied research on conservation-land and wetland management issues.

1993 - 2000 Associate Professor

*Florida Institute of Technology*

1995 - 1996 Fulbright Scholar

*American Republics Research Program*

1987 - 1993 Assistant Professor

*Florida Institute of Technology*

**PUBLICATIONS AND REPORTS**

Peer Reviewed Publications

Parkinson, R.W., in review. Relevance of ongoing mitigation efforts to reduce Indian River Lagoon water quality impairment and restore ecosystem function under conditions of a changing climate. Proceedings of the BASIS7-ANEP Conference, February 28 to March 4, 2022, St. Petersburg, Florida. Florida Scientist.

Parkinson, R.W., in review. Late Holocene interaction of natural processes and human activity at two archaeological sites in the Ten Thousand Islands area of Southwest Florida, U.S.A. Journal of Quaternary Science.

Parkinson, R.W., and Wdowinski, S. In review. Accelerating sea-level rise and the fate of South Florida mangrove plant communities. Geomorphology.

Parkinson, R.W. 2021. The tragic collapse of the Surfside condominium was a bellwether moment in coastal zone management. Ocean and Coastal Management. (215): 105968.

Parkinson, R.W., Seidel, V., Henderson, C., and De Freese, D., 2021. Risks to Indian River Lagoon biodiversity caused by climate change. Florida Scientist. 84(2-3):232-242.

Meeder, J.F., Parkinson, R.W., Ogurcak, D., Ross, M., Kominoski, J., 2021. Changes in sediment organic carbon accumulation under conditions of historical sea-level rise, Southeast Saline Everglades, Florida, U.S.A. Wetlands. <https://doi.org/10.1007/s13157-021-01440-7>.

Parkinson, R.W., 2021. Comment on “Increasing Rates of Carbon Burial in Southwest Florida Coastal Wetlands” by J. Breithaupt et al. JGR Biogeosciences 126, e2020JG006057. <https://doi.org/10.1029/2020JG006057>.

Parkinson, R.W., Seidel, V., Henderson, C., and De Freese, D., 2021. Adaptation Actions to reduce impairment of Indian River Lagoon water quality caused by climate change, Florida, U.S.A. Coastal Management. <https://doi.org/10.1080/08920753.2021.1875399>

Parkinson, R.W., and Ogurcak, D., 2020. Will beach nourishment be enough to hold back the sea? Shore and Beach. 88(4):44-45.

Parkinson, R.W. and Ogurcak, D. 2018. Beach nourishment in not a sustainable strategy to mitigate climate change. Journal of Estuary, Coastal, and Shelf Science. 212:203-209.

Meeder, J., Ross, M.S., Parkinson, R.W., and Castaneda, S. 2018. Enhancing coastal wetland resilience to SLR: just add water? Solutions. 9(3). <https://www.thesolutionsjournal.com/article/enhancing-coastal-wetland-resilience-slr-just-add-water/>

Turner, R. E., Kearney, M., and Parkinson, R. 2018. The tipping point rate of sea level rise for delta survival. Journal of Coastal Research. 34(2): 470-474.

Meeder, J., and Parkinson, R. 2018. Southeast Saline Everglades transgressive sedimentation in response to historical acceleration in sea level rise: a viable marker for the base of the Anthropocene? Journal of Coastal Research. 34(2): 490-497

Parkinson, R., et al. 2017*.* Correspondence - Marsh vulnerability to sea level rise. Nature Climate Change. 7:756.

Meeder, J., Parkinson, R., Ruiz, P., and Ross, M. 2017. Saltwater encroachment and prediction of future ecosystem response to the Anthropocene Marine Transgression, Southeast Saline Everglades, Florida. Hydrobiologia. doi 10.1007/s10750-017-3359-0.

Parkinson, R., Harlem, P., and Meeder, J. 2015. Managing the Anthropocene Marine Transgression to the Year 2100 and Beyond in the State of Florida U.S.A. Climatic Change, v128:85-98. doi:10.1007/s10584-014-1301-2.

Parkinson, R., Huggins, E, and Taylor, D. S., 2012*.*  Sedimentary environments, karstification, and the preservation of a Late Pleistocene coastal bone bed: Pine Island Conservation Area, Brevard County, Florida, U.S.A. Florida Scientist. v. 75(1):25-40.

Donoghue, J., and Parkinson, R., 2011. Discussion of: Houston, J.R. and Dean, R.G., 2011. Sea-level acceleration based on U.S. tide gauges and extensions of previous global-gauge analyses (JCR 27(3):409–417. Journal of Coastal Research, v. 27(5):994 – 996. doi: 10.2112/JCOASTRES-D-11-00098.1.

Parkinson, R. and Latiolias, M., 2011. Geologic map of Cumberland Island National Seashore - Georgia, U.S.A. Geologic Resources Division, National Park Service, Denver, Colorado.

Parkinson, R. and McCue, T., 2011. Assessing municipal vulnerability to predicted sea-level rise: City of Satellite Beach, Florida. Climate Change, v. 107:203-223. doi: 10.1007/s10584-011-0086-9.

Parkinson, R., and Donoghue, J., 2010. Bursting the bubble of doom and adapting to aea-level rise. Shoreline, March 2010. Florida Shore and Beach Preservation Association, Tallahassee, FL, pg. 12 – 22.

Parkinson, R. 2009. Adapting to Rising Sea Level – A Florida Perspective, *in* G. Nelson and I. Hronszky (eds.) - Sustainability 2009: the Next Horizon, American Institute of Physics, pg. 19 – 25.

Mayhew, T., and Parkinson, R., 2007, Holocene Evolution of the Barrier Island System, East-Central Florida. Florida Scientist, v. 70(4):383-396.

Parkinson, R., and Schaub, R., 2006. Geological Map of Canaveral National Seashore, Florida, U.S.A. Geologic Resources Division, National Park Service, Denver, Colorado.

Parkinson, R., DeLaune, R., Hutcherson, C., and Stewart, J., 2006, Tuning Surface-Water Management and Wetland Restoration Programs using Historic Sediment Accumulation Rates: Merritt Island National Wildlife Refuge, East-Central Florida, U.S.A. Journal of Coastal Research, v. 22:1268-1277.

Parkinson, R., Perez-Bedmar, M., and Santangelo, J., 2000, Litter Fall Response of the Red Mangrove (*Rhizophora mangle* L.) to Selective Pruning Indian River Lagoon, Florida USA. Hydrobiologia, 413:63-76.

Parkinson, R., 1999, The Role of Geologic Processes in Estuary Management. Florida Naturalist, v. 72:15-17.

Nuttle, W., et al., 1997, Conserving Coastal Wetlands Despite Sea Level Rise: Eos, v. 78:257-261.

Parkinson, R., 1995, Managing Biodiversity from a Geological Perspective. Bulletin of Marine Science, v. 57:28-36.

Parkinson, R., 1994, Guest Editor, Thematic Section on Sea-Level Rise and the Fate of Tidal Wetlands. Journal of Coastal Research, v. 10:987-990.

Parkinson, R., and White, J.R., 1994, Late Holocene Shoreface Retreat within a Siliciclastic to Carbonate Transition Zone, East Central Florida. Journal of Sedimentary Research, v. B64:408-415.

Parkinson, R., DeLaune, R., and White, J., 1994, Holocene Sea-Level Rise and the Fate of Mangrove Forests Within the Wider Caribbean Region. Journal of Coastal Research, v. 10:1077-1086.

Parkinson, R., Wang, T.C., White, J.R., David, J.R., and Hoffman, M.A., 1993, Distribution and Migration of Pesticide Residues in Mosquito Control Impoundments, St. Lucie County, Florida. Environmental Geology, v. 22:26-32.

Parkinson, R., 1992, Building a Conceptual Model of Mangrove Ecosystem Response to Global Climate Change: Sea Level Rise and the Geologic Record: Jaina. v. 3, p. 6-9.

Parkinson, R.W., 1991, Stratigraphic Evidence of Onshore Sand Transport throughout the Holocene Marine Transgression, Southwest Florida. Marine Geology, v. 96:269-277.

Parkinson, R., and Meeder, J., 1991, Mudbank Destruction and the Formation of a Transgressive Sand Sheet, Southwest Florida Inner Shelf. Geological Society of America Bulletin, v. 103:1543-1551.

Bader, S., and Parkinson, R., 1990, Holocene Evolution of the Indian River Lagoon in Central Brevard County, Florida. Florida Scientist, v. 53, p. 204-215.

Parkinson, R.W., 1989, Decelerating Holocene Sea Level Rise and its Influence on Southwest Florida Coastal Evolution: A Transgressive/Regressive Stratigraphy. Journal of Sedimentary Petrology, v. 59:960-972.

Book Chapters

Parkinson, R. W., 2011. In Search of a Stable Sea Level, in Enjoying Florida’s Indian River Lagoon Coast by Rodney Smith, Pure Ocean Productions, ISBN-978-0-9771284-3-3.

Wanless, H.R., Parkinson, R.W., and Tedesco, L.P., 1994, Sea Level Control on Stability of South Florida Wetlands, in S. Davis and J. Ogden (eds.), Everglades: the Ecosystem and It's Restoration. St. Lucie Press, Florida, p. 199-223.

Peer Reviewed Abstracts

Parkinson, R.W. 2021. What is a Climate Ready Estuary? Florida Shore and Beach Preservation Association Annual Conference. Delray Beach, Florida. September 17, 2021.

Parkinson, R.W., Seidel, V., Henderson, C., and De Freese, D., 2020. Risks to Indian River Lagoon Biodiversity Caused by Climate Change. Indian River Lagoon Symposium 2020 – Reassessing IRL Biodiversity. Harbor Branch Oceanographic Institute. Ft. Pierce, FL. February 13-14, 2020.

Parkinson, R.W., Seidel, V., Henderson, C., and De Freese, D., 2020. Adaptation Actions to Reduce Impairment of the Indian River Lagoon Caused by Climate Change. University of Florida Water Institute Symposium. Gainesville, FL. February 25-26, 2020.

Parkinson, R.W., Seidel, V., and Henderson, C. 2019. Action Plans to Reduce Impairment of Indian River Lagoon Water Quality caused by Climate Change. 5th Annual Technical Conference on Coastal Water Quality. Indian River Lagoon Research Institute, Melbourne, Florida, September 27th.

Parkinson, R.W., Ogurcak, D.E., Olivas, and Schwadron, M., 2019. Pilot investigation designed to evaluate short-term strategies to mitigate inundation and erosion of archaeological sites in Biscayne and Everglades National Parks, Florida, USA. Keeping History Above Water, St. Augustine, Florida, May 5 – 8.

Schwadron, M., Hadden, C., Parkinson, R., and Hawthorne, P., 2019. Paleoecological Adaptations of Coastal Hunter-Fisher-Gatherers at the Turner River Shell Works, Ten Thousand Islands, Florida. Ninth International Symposium, Radiocarbon and Archeology, University of Georgia, Athens, Georgia, USA. May 20 – 24, 2019.

Parkinson, R.W. and Seidel, V., 2019. Results of risk-based climate change vulnerability assessment of the IRLNEP CCMP. Indian River Lagoon Technical Conference, Melbourne, Florida. September 28, 2018.

Meeder, J.F., Parkinson, R.W., Ross, M.S., Kominoski, J.S., and Castaneda, S. 2018. Anthropocene Marine Transgression and Changing Organic Carbon Storage, Southeast Saline Everglades, Florida, USA. Society of Wetland Scientists Annual Meeting, May 29 – Jun 1, 2018.

J. F. Meeder, M.S. Ross, R.W. Parkinson and S. Castaneda, 2018. Enhancing coastal wetland resilience to sea level rise; just add water? The 6th University of Florida Water Institute Symposium, February 6-7, 2018, J. Wayne Reitz Union, University of Florida Campus, Gainesville, Florida

Turner, R.E., Kearney, M.S., Parkinson, R.W., 2017. The Sea Level Rise Tipping Point of Delta Survival. Lake Pontchartrain Basin Foundation. Southeastern University. October 2017.

Turner, R.E., Kearney, M.S., Parkinson, R.W., 2017. The Sea Level Rise Tipping Point of Delta Survival. Amer. Geoph. Union.

Meeder J., Kominoski, J., Ross, M., and Parkinson. R. 2017. Marine transgression is changing coastal sediment organic carbon storage: A quantitative assessment from the Southeast Saline Everglades, Florida. Society of Wetland Scientists 2017 Annual Meeting to be held in San Juan, Puerto Rico, June 5-8, 2017.

Ogurcak, D., Parkinson, R., Crowl, T., and Schwadron, M. 2017. Stabilization of Everglades’ Cultural Resource Sites with Integrated Ecosystem Restoration. GEER 2017. April 17-20, Coral Springs, Florida.

Parkinson, R.W., 2017. Should SET-MH Data be Used to Forecast Effect of Sea Level Rise on Wetland Resilience and Carbon Sequestration? Coastal Habitat Integrated Mapping and Monitoring Program Workshop. Florida Fish and Wildlife Research Institute, St. Petersburg, Florida

Parkinson, R.W., 2016. An Update on Adaptation Action Activities Undertaken Since Completion of the City of Satellite Beach (FL) Vulnerability Assessment to Rising Seas (2010). 2016 Cela Tega Conference: Resiliency and Adaptions in the Estero Bay Region. Florida Gulf Coast University, Ft. Meyers, Florida.

Meeder, J., Parkinson, R., Harlem, P., and Ross, M., 2016. The Threshold Rate of Sea Level Rise Determining Resilience vs. Non-Resilience in Southeast Florida Coastal Wetlands. Mangrove & Macrobenthos Meeting, July 18-22, 2016. St. Augustine, Florida.

Meeder, J., Parkinson, R., Harlem, P., Renshaw, A., and Ross, M., 2016. Saltwater encroachment and prediction of future ecosystem response to the Anthropocene Marine Transgression, Southeast Saline Everglades, Florida. Ecological Society of America Annual Meeting, August 7-12, 2016. Ft. Lauderdale, Florida.

Parkinson, R., Harlem, P., and Meeder, J., 2016. Adapting to Sea Level Rise in the State of Florida to the Year 2100 and Beyond: National Conference on Beach Preservation Technology, February 3-5, 2016. Jacksonville, Florida.

Parkinson, R., Harlem, P., and Meeder, J. 2014. Adapting to Sea Level Rise to the Year 2100 and Beyond in the State of Florida, USA: A Regional Approach Based upon Common Vulnerabilities and the Utility of Shared Resources, in Connecting Climate Projections to Responses in Coastal and Continental Shelf Environments I (posters). American Geophysical Union 2014 Fall meeting, San Francisco, California, paper number GC21A-0492.

Parkinson, R.W., and Fergus, J., 2011. Assessing Municipal Vulnerability to Predicted Sea Level Rise: City of Satellite Beach, Florida, USA. Invited paper, 21st Biannual Conference of the Coastal and Estuarine Research Federation, Daytona Beach, Florida, November 6 – 10, 2011, Program Book p. 51.

Parkinson, R., McCue, T., and Day, R., 2010. Modeling Municipal Vulnerability to Rising Sea Level, Program with Abstracts, *in* Keeping Our Heads Above Water: Surviving the Challenges of Sea-Level Rise in Florida. A Workshop at Archbold Biological Station, Lake Placid, Florida January 18-20, 2010. Sponsored by the Florida Institute for Conservation Science, Inc., Orlando, Florida.

Parkinson, R., 2009. Geohazard Assessment of Proposed Construction Excavation at the Reserve at Bay Harbor, Galveston Island, Texas. Geological Society of America, Southeastern Section Meeting, St. Petersburg, Florida, Program with Abstracts.

Parkinson, R., and Schaub, R., 2007. Application of NPS Coastal Mapping Protocols in Construction of “A Geologic Map” for Canaveral National Seashore, East-Central Florida USA. Geological Society of America Annual Meeting (28-31 October 2007). Program with Abstracts.

Parkinson, R., and Budde, L., 2006. [Plans & Specs – Level Offshore Sand Search Investigation, South Peninsula Volusia County, Florida U.S.A.](http://www.fsbpa.com/06Proceedings/13-Randall%20W.%20Parkinson.pdf) in Proceedings National Conference on Beach Preservation Technology, February 1 – 3, 2006, Sarasota, Florida.

Parkinson, R., Walther, M., and Truitt, C., 2006. Borrow Area Delineation and Native Beach Compatibility, Volusia County, Florida. National Conference on Beach Preservation Technology, Sarasota, FL. January 30 to February 1, 2006.

Hinkle, C., et al., 2005. Environmentally Endangered Lands Acquisition and Conservation Program in Brevard County. Fifth Workshop on Salt Marsh Management & Research. Sponsored by Florida Subcommittee on Managed Marshes. Cocoa Beach, Florida. February 14 – 17, 2005.

Parkinson, R., Davenport, S., Moya, J., 2005. Reconnaissance-Level Investigation of Late Pleistocene Incised Channel-Fill Sequences as Potential Borrow Areas for Nourishment of East Texas Gulf coast shorelines. Geological Society of America Abstract with Programs, v 37, n 3, pg. 10. South-central Section Meeting, Biloxi, Mississippi. March 17-18, 2005.

Parkinson, R., Schaub, R., and Stiner, R., 2005. Late Quaternary Subsurface Geology of Canaveral National Seashore/Merritt Island National Wildlife Refuge. Fifth Workshop on Salt Marsh Management & Research, Sponsored by Florida Subcommittee on Managed Marshes. Cocoa Beach, Florida. February 14 – 17, 2005.

## Fielder, B., Majzlik, E., Dellapenna, T., Parkinson, R., McInnes, A., Noll, C., Joiner, N., and Moya, J. 2005. Exploration of buried paleochannels under Follet’s Island, Texas, for beach renourishment. Geological Society of America Abstracts with Programs, South-Central Section - 39th Annual Meeting, v. 37(3): 10.

Parkinson, R., DeLaune, R., Hutcherson, C., and Stewart, J. 2003. Forecasting the Probability of Wetland Restoration Success Using Historical Sediment Accumulation Rates: Merritt Island National Wildlife Refuge, Florida, USA. Proceedings, International Conference on Coastal Sediments 03, Clearwater Beach, FL.

Parkinson, R., Dombrowski, M., and Walther, M. 2002. Integrating Technical Expertise to Enhance Project Performance: Santa Rosa County, Florida. Proceedings - Florida Shore and Beach Association Annual Meeting.

Magron, J., and Parkinson, R., 2001. Evaluating the Potential Effect of Long-Term Upland Sand Deposition on High-Density Nesting Beaches Located Within the Archie Carr National Wildlife Refuge. Proceedings of the 20th International Sea Turtle Symposium, Orlando, Florida.

Parkinson, R. and Brantly, R., 2001. Physical Monitoring Workshop: Survey Results and Summary. Proceedings 20th International Sea Turtle Symposium, Orlando, Florida. <http://www.seaturtle.org/mtn/archives/mtn89/mtn89p17.shtml>

Lucas, L. and Parkinson, R., 2000. Rationale for Evaluating the Design and Function of Monitoring Programs Undertaken in Association with the Nourishment of Florida’s Marine Turtle Nesting Beaches. 20th Annual Sea Turtle Symposium, Orlando, Florida.

Mayhew, T. and Parkinson, R., 2000. Late Holocene Geologic Evolution of a Barrier Island Complex and the Indian River Lagoon, East-Central Florida. Proceedings of the Southeastern Estuarine Research Society, Tampa, Florida.

Dunlevy, C., and Parkinson, R., 1999. Rapid Land Loss on Pelican Island, The Nation’s First National Wildlife Refuge. Geological Society of America Program with Abstracts.

Parkinson, R., Magron, J., and Ehrart, L., 1999. Impact Assessment of Upland Source Beach Nourishment on the Physical Environment of a High Density Marine Turtle Nesting Beach, Sebastian Inlet, Florida. Proceedings of the 19th Annual Symposium on Sea Turtle Conservation and Biology, South Padre Island, Texas.

Parkinson, R., Magron, J., Lucas, L., Herren, R., and Ehrart, L., 1999. The Influences of Climatological Anomalies on Marine Turtle Nesting Beaches at Sebastian Inlet, Florida. Proceedings of the 19th Annual Symposium on Sea Turtle Conservation and Biology, South Padre Island, Texas.

Cornelisen, C., Parkinson, R., and Ehrhart, L., 1997. Quantifying the Effects of the Beach Environment on Sea Turtle Reproductive Success at Sebastian Inlet, Florida. An Update. Spring SEERS Meeting, Islamorada, Florida.

Magron, J., Cornelisen, C., and Parkinson, R., 1997. Long-term Reproductive Success of Western Loggerheads in East-Peninsular Florida: Does Exponential Growth of Beach Nourishment Present an Insurmountable Obstacle? Spring SEERS Meeting, Islamorada, Florida.

Parkinson, R., and Magron, J.P., 1997. Physical Attributes of a Natural (Control) and Renourished (Treatment) Beach, Sebastian Inlet, Florida, Year 5. Sebastian Inlet Tax District Commission. [Presented at the SEERS Symposium, Marathon, Florida, USA]

Cornelisen, C., and Parkinson, R., 1996. Effects of Beach Renourishment on Physical Attributes of a High-Density Sea Turtle Nesting Beach, East-Central Florida. Florida Scientist, v. 59, Supplement 1, p. 33.

Parkinson, R., and Perez-Bedmar, M., 1996. The Florida Mangrove Trimming Law: Seasonal Restrictions are One Solution to this Complex Management Issue. 3rd Marine and Estuarine Shallow Water Conference, United States Environmental Protection Agency, Atlantic City, N.J.

Perez-Bedmar, M., and Parkinson, R., 1996. Effects of Selective Trimming on Litter Fall in a Fringing Red Mangrove Forest, East Central Florida, USA. 3rd Marine and Estuarine Shallow Water Conference, United States Environmental Protection Agency, Atlantic City, N.J.

Perez-Bedmar, M., and Parkinson, R., 1996. Impact Assessment of Selective Trimming on Mangrove Primary Productivity, Habitat Value and Ecosystem Function, St. Lucie County, Florida. Third Workshop on Salt marsh Management and Research, Florida Coordinating Council on Mosquito Control, Vero Beach, Florida.

Parkinson, R., David, J., and Haydt, P., 1996. Effects of Predicted Sea-Level Rise on Wetland Management and Mosquito Control. Third Workshop on Salt Marsh Management and Research, Florida Coordinating Council on Mosquito Control, Vero Beach, Florida.

Wiegman, G., and Parkinson, R., 1996. Effects of Rotary Ditching on Salt Marsh Sedimentation, Vegetation Community Succession and Mosquito Control, Volusia County, Florida. Third Workshop on Salt marsh Management and Research, Florida Coordinating Council on Mosquito Control, Vero Beach, Florida.

Nelson, W., Parkinson, R., Eilers, M., Karlen, D., Wiegman, G., and Traudt, B., 1996. Estuarine Reconnection of a Salt Marsh Creek: Part I. Project Overview and Effects on Water Quality. Florida Coordinating Council on Mosquito Control, Third Workshop on Salt marsh Management and Research, Vero Beach, Florida, 22-25 October 1996.

Eilers, M., Karlen, D., Nelson, W., Parkinson, R., and Wiegman, G., 1996. Estuarine Reconnection of a Salt Marsh Creek: Part II. Effects on Sediments and Macro-Benthic Fauna. Florida Coordinating Council on Mosquito Control, Third Workshop on Salt marsh Management and Research, Vero Beach, Florida.

Karlen, D., Eilers, M., Nelson, W., Parkinson, R., and Wiegman, G., 1996. Estuarine Reconnection of a Salt marsh Creek: Part III. Effects on Fishes and Macro-Crustaceans. Florida Coordinating Council on Mosquito Control, Third Workshop on Salt marsh Management and Research, Vero Beach, Florida.

Parkinson, R., Nelson, W., Wiegman, G., Traudt, B., Eilers, M., and Karlen, D., 1996. Estuarine Reconnection of a Salt Marsh Creek: Part IV. Effects on Marsh Vegetation and Summation. Florida Coordinating Council on Mosquito Control, Third Workshop on Salt marsh Management and Research, Vero Beach, Florida.

Perez-Bedmar, M., and Parkinson, R., 1995. Windowing Effects on the Above-Ground Primary Productivity of a Fringing Red Mangrove Forest, East Central Florida. Estuarine Research Federation 13th International Conference, Programs with Abstracts, p. 102.

Parkinson, R., and Fluke, L.A., 1995. Coastal Overstepping in Response to Late Quaternary Catastrophic Sea-Level Rise Events. First Annual SEPM Congress on Sedimentary Geology “Linked Earth Systems”, St. Petersburg Beach, Florida.

Parkinson, R., and Swart, P., 1995. The Distribution and Geochemistry of Ooids as Evidence for Warm Equatorial Conditions During the Last Glacial Maximum. First Annual SEPM Congress on Sedimentary Geology “Linked Earth Systems”, St. Petersburg Beach, Florida.

Wiegman, G., Parkinson, R., and DeLaune, R., 1995. Effects of Spoil Deposition and Rotary Ditching on Tidal Wetland Vertical Accumulation Rates, East-Central Florida, U.S.A. Estuarine Research Federation 13th International Conference, Programs with Abstracts.

Parkinson, R., Vann, J., and Perez-Bedmar, M., 1995. Effects of Beach Nourishment on the Physical Attributes of a High-Density Nesting Beach, Sebastian Inlet, Florida: Assessment of Year 3 Data. Fifteenth Annual Symposium on Sea Turtle Biology and Conservation, Hilton Head, South Carolina, 1-5 March, 1995.

Parkinson, R., 1994. Management of Estuarine Biodiversity from a Geological Perspective. Proceedings, Biodiversity of the Indian River Lagoon, Harbor Branch Oceanographic Institution, Ft. Pierce, Florida, 15 - 17 February, 1994.

Parkinson, R., and Civil, M., 1994. Inner Shelf Stratigraphy within the U.S. Atlantic Siliciclastic to Carbonate Transition, East-Central Florida. Geol. Soc. Am. Abstracts with Programs, v. 26:92.

Parkinson, R., and Nelson, W.G., 1994. An Overview of Workshop B: Innovative Approaches to Environmental Monitoring of Near Shore Beach Restoration Projects. Proceedings of the 1994 National Conference on Beach Preservation Technology, Florida Shore and Beach Preservation Association, Tallahassee, Florida, 244 pg.

Parkinson, R., White, J., and Perez-Bedmar, M., 1994. Effects of Beach Nourishment on Compaction, Grain-Size, Moisture and Temperature: Sebastian Inlet. Proceedings of the Fourteenth Annual Symposium on Sea Turtle Biology and Conservation, U.S. Department of Commerce, National Oceanic and Atmospheric Administration Technical Memo NMFS-SEFSC-351, p. 112-114.

White, J., and Parkinson, R., 1993. Erosional Shoreface Retreat Along a Storm Dominated, Mixed Siliciclastic/Carbonate Barrier Island Complex, East-Central Florida. Geo. Soc. Am. Programs with Abstracts, v. 25.

Parkinson, R., and Ryder, C., 1992. A Comparison of Physical Attributes of a Renourished and Natural Beach: Implications for Sea Turtle Monitoring. Proceedings of the 1992 National Conference on Beach Preservation Technology, Florida Shore and Beach Preservation Association, Tallahassee, FL, p. 416-425.

Parkinson, R., Nelson, W., and Haydt, P., 1992. Evaluation of the Effectiveness of Salt Marsh Restoration with Rotary Ditching: Program Design and Preliminary Observations. Proceedings, Second Workshop on Salt Marsh Management and Research, Vero Beach, Florida, 28 October - 2 November, 1992.

Parkinson, R., Wang, T., White, J., David, J., 1992. Distribution and Migration of Pesticides in St. Lucie County Mosquito Control Impoundments. Proceedings, Second Workshop on Salt Marsh Management and Research, Vero Beach, Florida, 28 October - 2 November, 1992.

White, J., Parkinson, R., David, J., DeLaune, R., 1992. The Influence of Impoundment Management on Mangrove Swamp Accretions Rates: Observations and Long-Term Implications. Proceedings, Second Workshop on Salt Marsh Management and Research, Vero Beach, Florida, 28 October - 2 November, 1992.

Parkinson, R., and Meeder, J., 1991. Controls on Long-Term South Florida Mangrove Swamp Survival: Sea Level Rise and the Geologic Record. Coastal Wetland Ecology and Management Symposium, New Orleans, Louisiana.

Parkinson, R., and Meeder, J., 1991. Controls on Holocene Coastal Evolution of the Southwest Florida Peninsula. Programs and Abstracts, Research Conference on Quaternary Coastal Evolution, SEPM and IGCP Project 274.

Parkinson, R., Venanzi, P., and Fitzpatrick, K., 1991. Preliminary Observations of a Long-Term Turbidity Study, Sebastian Inlet, Florida: Fourth Annual Conference, Beach Preservation Technology '91. Florida Shore and Beach Preservation Association, Tallahassee, FL, p. 295-310.

Parkinson, R., 1990. Sea Level Rise and the Fate of Florida's Tidal Wetlands: Research Needs and Recommendations. Florida Coastal Management Conference - Navigating the Nineties, Clearwater, Florida.

Wanless, H., and Parkinson, R., 1989. Late Holocene Sea-Level History of Southern Florida: Control on Coastal Stability, in Tanner, W.F. (ed.), Coastal Sediment Mobility, Proc., Eighth Symposium on Coastal Sedimentology. Geology Department, Florida State University, Tallahassee, FL.

Parkinson, R., 1988. Sea Level Rise and Coastal Response Projections for Marsh/Mangrove Fringed Shorelines: The Importance of Vertical Peat Accumulation Rates. Joint Oceanographic Assembly, Acapulco, Mexico, Abstracts, p. 81.Parkinson, R., 1987. Rate of Sea Level Rise as a Control on Physical vs. Biological Sedimentation: Examples from the Holocene of South Florida. Am. Assoc. Petroleum Geologists Bull., v. 71, p. 600.

Parkinson, R., 1987. Development of the Cape Romano Shoals Complex, Southwest Florida, and it's Influence on Holocene Coastal Sediment Sequences. Soc. Econ. Paleontologists and Mineralogists Midyear Mtg., v. 4, p. 63.

Snedaker, S., and Parkinson, R., 1987. Potential Effects of Climate Change on Mangroves with Specific Reference to Global Warming and Sea Level Rise. Proceedings, IOC/WESTPAC Symposium on the Indo-Pacific Convergence, Townsville, Australia.

Parkinson, R., 1986. Reevaluation of Southwest Florida's Coastal Response to Rising Sea Level: Evidence for Progradation. Soc. Econ. Paleontologists and Mineralogists Midyear Mtg. Abstracts, v. 3, p. 87.

Parkinson, R., 1985. Holocene Sedimentation and Coastal Response to Rising Sea Level Along a Low Energy Coastline, Southwest Florida. Geol. Soc. Am. Abstracts with Programs, v. 17, p. 685.

Reports

Parkinson, R.W., and Seidel, V. 2021. Indian River Lagoon: Climate Ready Estuary: Indian River Lagoon . Technical Report No. 003. Indian River Lagoon National Estuary Program. Sebastian, FL. 198 pgs.

Parkinson, R. W., Seidel, V., Henderson, C., 2020. Ensuring Resiliency of the Indian River Lagoon to Climate Change Stressors: Monitoring and Review of Action Plans. Indian River Lagoon National Estuary Program. 26 pgs.

The Balmoral Group & RWParkinson Consulting, 2020. Nassau County Vulnerability Assessment: Phase II – Report of Vulnerability Assessment. Nassau County. 78 pgs.

Parkinson, R.W., 2020. Paleoenvironmental Context Before, During, and After Construction of Shell Works in the Ten Thousand Islands Area of Southwest Florida, U.S.A. National Park Service Southeast Archeological Center, Tallahassee, Florida.

The Balmoral Group & RWParkinson Consulting, 2019. Nassau County Vulnerability Assessment: Phase I – Report of Vulnerability Assessment. Nassau County. 70 pgs.

Parkinson, R., and Seidel, V., 2018. Risk-Based Vulnerability Assessment of the Indian River Lagoon to Climate Change – Final. Submitted to the Indian River Lagoon Council, Sebastian, Florida. 110 pgs.

Seidel, V., and Parkinson, R., 2014. Prioritizing Total Maximum Daily Loads (TMDLs) Using Seagrass Habitat Vulnerability to Sea Level Rise Phase II. Saint Johns River Water Management District, Palatka, Florida.

Seidel, V., and Parkinson, R., 2013. Prioritizing Total Maximum Daily Loads (TMDLs) Using Seagrass Habitat Vulnerability to Sea Level Rise Phase I. Saint Johns River Water Management District, Palatka, Florida.

Parkinson, R.W. 2010. Municipal Adaptation to Sea-Level Rise: City of Satellite Beach, Florida. City of Satellite Beach, Florida.

Ernest, R., and Parkinson, R., 2010. Implementing Sediment Quality Assurance Measures for the Bathtub Beach Restoration Project, Hutchinson Island, Florida. Martin County, Stuart, Florida.

Parkinson, R.W., 2008. Geological Assessment of Pine Island Conservation Area. Environmentally Endangered Lands Committee, Brevard County Florida.

Parkinson, R. 2008. Spoonbill Bay Cumulative Impact Assessment of Geohazards. Spoonbill Bay Holdings, LP, Galveston, Texas.

Parkinson, R., 2008. Report of Investigation - Reach 8 Offshore Sand Search Survey. Surfrider Foundation, Inc.

Parkinson, R., 2008. Report of Investigation - Reach 7 Project Performance Assessment. Surfrider Foundation, Inc.

Parkinson, R., 2007. Report of Investigation - Reserve at Bay Harbor Development Geohazards Cumulative Impact Assessment – Phase II. Rush Development, LP, Katy, Texas.

Parkinson, R., 2007. Report of Investigation - Reserve at Bay Harbor Development Geohazards Cumulative Impact Assessment – Phase I. Rush Development, LP, Katy, Texas.

Parkinson, R., 2006. Report of Investigation - Offshore Sand Search, Native Beach Characterization, and Compatibility Assessment. MRD Associates, Destin, Florida.

Parkinson, R. 2005. Report of Investigation - Offshore Sand Search, Native Beach Characterization, and Compatibility Assessment. Volusia County.

Parkinson, R., 2004. Report of Investigation - Offshore Sand Search, Native Beach Characterization, and Compatibility Assessment, Phase II. Santa Rosa County.

Parkinson, R., 2003. Report of Investigation - Offshore Sand Search, Native Beach Characterization, and Compatibility Assessment. Sarasota and Charlotte Counties.

Parkinson, R., 2002. Report of Investigation - Offshore Sand Search, Native Beach Characterization, and Compatibility Assessment, Phase I. Santa Rosa County.

Parkinson, R., Magron, J., and Lucas, L., 1999. Physical Attributes of a Natural (Control) and Renourished (Treatment) Beach, Sebastian Inlet, Florida, Year 7. Sebastian Inlet Tax District Commission.

Parkinson, R.W., and Lucas, L., 1998. Biological Monitoring Programs: Marine Turtles-Physical Attributes Sebastian Inlet, Florida. Sebastian Inlet Tax District Commission.

Parkinson, R.W., Magron, J.P., and Rozycki, J., 1998. Physical Attributes of a Natural (Control) and Renourished (Treatment) Beach, Sebastian Inlet, Florida, Year 6. Sebastian Inlet Tax District Commission.

Parkinson, R., and Dunlevy, C., 1999. Action Plan for the Shoreline Stabilization of Pelican Island. U.S. Fish and Wildlife Service Technical Report.

Parkinson, R., Bumstead, T., and Dunlevy, C., 1999. A Preliminary Assessment of the Surman Tract: Recent and Historical Landscape Features. U.S. Fish and Wildlife Service Technical Report.

Parkinson, R., Wiegman, G., and Dunlevy, C., 1997. Development of Restoration and Management Plans: Pelican Island and Surman Tract: Project Status Report. Unpublished Report Submitted to United States Fish and Wildlife Service, Sabastian, Florida.

Parkinson, R., and Perez-Bedmar, M., 1996. Effects of Selective Trimming on Litter Fall in a Fringing Red Mangrove Forest, Indian River Lagoon. Florida Department of Environmental Protection.

Parkinson, R., and Wiegman, G.J., 1996. Characterization of Sand Trap Sediment, Sebastian Inlet, Florida. Sebastian Inlet Tax District Commission.

Parkinson, R., and Nelson, W.G., 1995. Evaluation of the Effectiveness of Salt Marsh Restoration with Rotary Ditching. East Volusia County Mosquito Control District.

Parkinson, R., Fluke, L.A., 1995. Characterization of Surficial Sediment, Sebastian Inlet Sand Trap. Sebastian Inlet Tax District Commission.

Parkinson, R., and Nelson, W.G., 1995. Annual Technical Report: Biological Monitoring Programs. Sebastian Inlet Tax District Commission.

Parkinson, R., and Fluke, L.A., 1994. Environmental Evaluation of Northern Route for the Proposed Navigation Channel Extension to the Inter-Coastal Waterway. Sebastian Inlet Tax District Commission.

Parkinson, R., and Nelson, W.G., 1994. Annual Technical Report. Biological Monitoring Programs: Sebastian Inlet Tax District Commission.

Parkinson, R., Wiegman, G.J., 1994. Geotechnical Analysis: Channel Extension Project Technical Report. Sebastian Inlet Tax District Commission.

Parkinson, R., 1993. Characterization of Surficial Sediment, Sebastian Inlet Sand Trap. Sebastian Inlet Tax District Commission.

Parkinson, R., and Fluke, L.A., 1993. Geotechnical Analysis of Core Borings, Taylor Creek Area, Ft. Pierce, Florida. Harbor Branch Oceanographic Institution.

Parkinson, R., and Nelson, W.G., 1993. Annual Technical Report: Biological Monitoring Programs. Sebastian Inlet Tax District Commission.

Parkinson, R., and Nelson, W.G., 1993. Environmental Base-Line Study of Lost Creek and Ten Mile Creek, Volusia County, Florida. East Volusia County Mosquito Control District.

Parkinson, R., 1992. Physical Attributes of a Natural (Control) and Renourished (Treatment) Beach, Sebastian Inlet, Florida - Year 1. Sebastian Inlet Tax District Commission.

Parkinson, R., 1992. Preliminary Environmental Assessment of the Proposed Navigation Channel Extension to the Intracoastal Waterway: Physical Assessment. Sebastian Inlet Tax District Commission.

Parkinson, R., 1992. Geologic History of St. Lucie County Mosquito Control Impoundment 10A. St. Lucie County Mosquito Control District.

Parkinson, R., and Nelson, W., 1992. Annual Technical Report: Biological Monitoring Programs. Sebastian Inlet Tax District Commission.

Parkinson, R.W., 1991. Moisture and Grain Size Characteristics of a Renourished and Control Beach. Sebastian Inlet Tax District Commission.

Parkinson, R., and Nelson, W., 1991. Annual Technical Report: Biological Monitoring Programs. Sebastian Inlet Tax District Commission.

Parkinson, R.W., 1990. Summary Report of Sebastian Inlet Ebb Shoal Core Borings. Sebastian Inlet Tax District Commission.

Parkinson, R., and Nelson, W., 1990. Annual Technical Report: Biological Monitoring Programs. Sebastian Inlet Tax District Commission.

Parkinson, R., Wang, T., David, J., 1990. Pesticide Residue in Barrier Island Salt Marshes Along the Indian River Lagoon. Coastal Zone Management Program, Florida Department of Environmental Regulation.

Parkinson, R., 1988. Turbidity Monitoring of Sebastian Inlet Channel Dredging Project Final Report. Sebastian Inlet Tax District Commission.

**OTHER MEDIA**

In Brevard County, Dorian Leaves Widespread Beach Erosion. WMEF Central Florida News, September 4, 2019. <https://www.wmfe.org/in-brevard-county-dorian-leaves-widespread-beach-erosion/134927?fbclid=IwAR0q7lF1IqAXx1SHe3KriSSAp2XHkN1gSGPyqh8wXWsdJwyw_vZ-YbB5MwM>

Climate change in Florida. WMFE Speaker Series. February 21, 2019. <https://www.wmfe.org/speaker-series-climate-change-in-florida>.

Beach nourishment is the latest chapter in a never-ending tale of erosion. Produced by Vox News. Posted December 8, 2018. <https://www.youtube.com/watch?v=e3ZYaL0Q9os>.

Mangroves. Produced by 4Ocean. Posted September 14, 2018. <https://www.facebook.com/4oceanBracelets/videos/279592256099928/>.

Florida estuaries-fragile buffers against a rising ocean. GateHouse Media. June 21, 2018.<http://gatehousenews.com/risingseas/estuaries/site/heraldtribune/>.

Everglades under threat as Florida’s mangroves face death by rising sea level. The Guardian. May 2, 2018. <https://www.theguardian.com/us-news/2018/may/02/mangroves-everglades-florida-rising-sea-level>.

One small Florida city tries to adapt to climate change, mostly along. PRI. December 21, 2017. <https://www.pri.org/stories/2017-12-01/one-small-florida-city-tries-adapt-climate-change-mostly-alone>.

Smart Growth: Cities versus Natural Disasters: Retreat or Resist? National Public Radio Cities Project. National Building Museum, Washington D.C. October 22, 2014. <http://go.nbm.org/site/Calendar/1029868583?view=Detail&id=117861>

A Coastal Paradise Confronts Its Watery Future. All Things Considered, National Public Radio. September 18, 2014. <http://www.npr.org/2014/09/18/348985568/a-coastal-paradise-confronts-its-watery-future>

Global Warming has been Confirmed. The Florida Times-Union. June 14, 2011. <http://jacksonville.com/opinion/letters-readers/2011-06-14/story/guest-column-global-warming-has-been-confirmed>

The World is Warming and Waiting for Science. Orlando Sentinel. January 23, 2011. <http://articles.orlandosentinel.com/2011-01-23/news/os-ed-climate-change-guest-012311-20110121_1_climate-change-dengue-fever-global-warming>

**CONTRACTS**

2022 Restoration Plan for the Bird Island Rookery. Brevard Zoo. $20,000.

2022 Cutler Flow Way hydrological survey. South Florida Water Management District. $56,000

2021 Enhancing Living Shoreline Suitability Analyses to Optimize Resilience to Future Sea-Level Rise. EPA Wetlands Program Development Grant. $284,820.

2021 Using Citizen Science to build a Strategic Spatial Framework to guide Conservation and Restoration of Indian River Lagoon Habitats and Associated Recreational Fisheries. Brevard County Board of County Commissioners. $49,999.

2021 Resilient Martin. Erin Deady Law. $25,000.

2021 Comprehensive Conservation and Management Plan and IRL Restoration Project List Support Services (with The Balmoral Group and Geosyntec). Indian River Lagoon National Estuary Program. Continuing Services Agreement.

2020 Planning for Resiliency in Brevard County. Florida Office of Resilience and Coastal Protection (with East Central Florida Regional Planning Council). $75,000.

2017-2021 Stabilization and Protection of South Florida Archeological Sites. National Park Service. $239,996.

2019 Ancient Shell Work Engineers of the Ten Thousand Island, Florida. National Geographic. $25,255 (with National Park Service).

2019 Nassau County Vulnerability Assessment: Phase II. Nassau County (with The Balmoral Group). $40,000.

2019 Sampling and Analysis of St. Lucie Inlet Flood Shoal. Atkins. $12,500.

2019 Nassau County Vulnerability Assessment: Phase I. Nassau County Board of County Commissioners. $38,900 (with The Balmoral Group).

2018 Establishing an Action Plan for Adaptation Planning. Indian River Lagoon National Estuary Program. $52,000.

2017 Coastal Zone Management Plan. Rhum Cove Condominium Association. $6,500.

2017 Risk-Based Vulnerability Assessment of the Indian River Lagoon to Climate Change and Sea-Level Rise – Phase 1. Indian River Lagoon National Estuary Program. $24,700.

2017 Coastal Working Group, Martin County, Florida, $20,000

2017 Coastal Zone Land Management Plan. Rhum Cove Condominium Association. $6,240.

2016 Erie Bluff State Park Trail Improvements – Part 2. PA Department of Community and Economic Development, $45,000.

2016 Erie Bluff State Park Trail Improvements – Part 1. Erie County. $34,000

2016 Trout Run Channel and Creek Bank Stabilization Using BMPs. PA Department of Community and Economic Development, $59,000

2016 Coastal Working Group, Martin County, Florida, $20,000

2015 Scott Run Watershed Protection and Restoration. PA Growing Greener 2014 Grant Program, $132,795

2015 Coastal Working Group. Martin County, Florida, $20,000

2014 Coastal Working Group. Martin County, Florida, $20,000

2013 Effect of Sea-Level Rise on Indian River Lagoon Seagrass Habitat – Phase II: Climate Ready Estuaries Program. US EPA, $27,000

2013 Walnut Creek Watershed Riparian Buffer Re-Vegetation. Pennsylvania Sea Grant, $30,363

2012 Effect of Sea-Level Rise on Indian River Lagoon Seagrass Habitat – Phase I: Climate Ready Estuaries Program. US EPA, $22,000

2011 Geologic Investigation of Potential Borrow Areas Offshore Singer Island Site, Palm Beach County Florida. Taylor Engineering, Inc., $48,500

2011 Sand Trap Compatibility with Native Beaches, St. Lucie Inlet. Atkins, $8,000

2011 Coastal Working Group: Martin County, Florida, $27,000

2010 Upham T-Groin Performance Evaluation: Surfrider Foundation, $5,000

2010 Building Public Consensus on Issues of Beach Fill Compatibility and Near

Shore Habitat Quality. Martin County, Florida, $24,000

2010 Real-Time Sediment Testing of Fill During Beach Nourishment. Martin County, Florida, $3,500

2010 Geologic Mapping of Cumberland Island National Seashore. National Park Service, $41,000

2009 Assessing Municipal Vulnerability to Predicted Sea-Level Rise: City of Satellite Beach, Florida. Climate Ready Estuaries Program: Department of Environmental Protection, $20,000

2009 Port Dolphin Geotechnical. Taylor Engineering, $25,000

2009 Geological Assessment of the USACE Offshore Sand Search for Martin

County. Martin County, Florida, $29,000

2009 Analysis of Geotechnical Criteria Relating to Coastal Restoration Project

Performance. Martin County, Florida, $10,000

2009 Building Public Consensus on Issues of Beach Fill compatibility and Nearshore Habitat Quality. Martin County, Florida, $24,000

2008 Spoonbill Bay Development Geohazards Assessment. Spoonbill Bay

Holdings, LP, Galveston, Texas, $16,000

2008 Coastal Working Group Facilitator. Martin County Florida, $45,000

2008 Reach 8 Geological Investigation. Surfrider Foundation, Inc., $5,000

2008 Reach 7 Geological Investigation. Surfrider Foundation, Inc., $9,000

2008 Geological Assessment of Pine Island Conservation Area. Brevard County, Florida, $9,500

2007 Reserve at Bay Harbor Development Geohazards Assessment – Phase I

and II. Rush Development, LP, Katy, Texas, $20,000.

2006 Offshore Sand Search, Native Beach Characterization, and Compatibility Assessment. Gulf County, Florida, $45,000

2006 Geological Map of Canaveral National Seashores. United States National

Park Service, $25,000

2004 Offshore Sand Search, Native Beach Characterization, and Compatibility Assessment. Volusia County, Florida, $1,500,000

2002 Offshore Sand Search, Native Beach Characterization, and Compatibility Assessment. Sarasota and Charlotte Counties, Florida, $75,000

2000 Offshore Sand Search, Native Beach Characterization, and Compatibility Assessment, Phase I and II. Santa Rosa County, Florida, $275,000

1999 Wetlands Initiative - Historical Marsh Accretion Rates. United States

Environmental Protection Agency, $45,000

1998 Environmental Impact Assessment. Sebastian Inlet Tax District, Brevard County, Florida, $200,000

1997 Proposal for the Development of Restoration and Management Plans: Pelican Island and Surman Tract. United States Fish and Wildlife Service (USFWS), $49,000

1997 Environmental Impact Assessment of Mangrove Trimming in the Southern Indian River Lagoon. United States Fish and Wildlife Service (USFWS), $42,045

1997 Evaluation of Physical and Biological Effects of Beach Nourishment on Sea Turtle Nesting and Hatching Success. Sebastian Inlet Tax District, Brevard County, Florida, $68,000

1996 Evaluating the Effects of Selective Trimming on Mangrove Productivity. United State Fish and Wildlife Service, $43,000

1996 Geotechnical Evaluation of Sebastian Inlet Sand Trap. Sebastian Inlet Tax District, Brevard County, Florida, $15,000

1996 Biological Monitoring of Sebastian Inlet. Sebastian Inlet Tax District, Brevard County, Florida, $140,000

1996 Evaluation of Physical and Biological Effects of Beach Nourishment on Sea Turtle Nesting and Hatching Success. Sebastian Inlet Tax District, Brevard County, Florida, $64,000

1995 Evaluation of Physical and Biological Effects of Beach Nourishment on Sea Turtle Nesting and Hatching Success. Sebastian Inlet Tax District, Brevard County, Florida, $60,000

1995 Effects of Selective Trimming on Macro-Benthos and Algae. Florida Sea Grant, $18,000

1995 Project Extension: Evaluation of Permitted Mangrove Pruning on Productivity and Habitat Value. U.S. Environmental Protection Agency, $20,000

1995 Shoreline Stabilization of Spoil Islands. A Pilot Project: St. Johns River Water Management District, $15,000

1994 Evaluation of Permitted Mangrove Pruning on Productivity and Habitat Value. U.S. Environmental Protection Agency, Florida Department of Environmental Protection, St. Johns River Water Management District, and South Florida Water Management District, $60,000

1994 Environmental Monitoring of Sebastian Inlet. Sebastian Inlet Tax District Commission, Brevard County, Florida, $224,000

1994 Physical and Biological Assessment of Sebastian Inlet Rock Reefs. Sebastian Inlet Tax District Commission, Brevard County, Florida, $30,000

1993 Geotechnical Assessment of Proposed Ft. Pierce Turning Basin. Harbor Branch Oceanographic Institution, Ft. Pierce, Florida, $11,000

1993 Physical Attributes of a Renourished and Natural Beach, Sebastian Inlet, Florida, Sebastian Inlet Tax District, Brevard County, Florida, $14,500

1992 Environmental Monitoring Program, Sebastian Inlet. Sebastian Inlet Tax District Brevard County, Florida, (with Walter Nelson, FIT): $130,000

1992 Natural Resource Assessment of Proposed Navigation Channel Extension, Sebastian Inlet. Sebastian Inlet Tax District Brevard County, Florida, (with Walter Nelson, FIT): $14,500

1992 Physical Attributes of a Renourished and Natural Beach, Sebastian Inlet, Florida. Sebastian Inlet Tax District, Brevard County, Florida, $13,000

1992 Evaluation of the Effectiveness of Salt Marsh Restoration with Rotary Ditching. East Volusia County Mosquito Control (with Walter Nelson, FIT), $20,000

1991 Geological Investigation of St. Lucie County Mosquito Control Impoundment 10A. St. Lucie County Mosquito Control, $5,000

1991 Habitat and Water Quality Monitoring of the Sebastian Inlet Area. Sebastian Inlet Tax District Commission, Brevard County, Florida, $54,000

1991 Shoreface Sediment Distribution Patterns: A Measure of Inlet Influence? National Oceanographic and Atmospheric Administration, $41,100

1991 Grain Size Analysis of Nourished and Control Beach Sites: Sebastian Inlet, Florida. Sebastian Inlet Tax District Commission, Brevard County, Florida, $5,800

1990 Core Borings of the Sebastian Inlet Ebb Shoal. Sebastian Inlet Tax District Commission, Brevard County, Florida, $15,000

1989 A Five-Year Biological Monitoring Program of the Sebastian Inlet Area. Sebastian Inlet Tax District Commission Brevard County, Florida, (with Walter Nelson, FIT), $170,000

1989 Core Borings and Sediment Analysis of the Fort Pierce Harbor Area. Beindorf and Associates (with Lee Harris, FIT), $6,000

1989 Pesticide Residue in Barrier Island Salt Marshes along the Indian River Lagoon. Department of Environmental Regulation (with Tsen Wang, HBOI), $98,000

1988 Turbidity Monitoring of Sebastian Inlet Channel Dredging. Sebastian Inlet Tax District Commission, Brevard County, Florida, $15,000

**INVITED LECTURES** (select examples)

What is a Climate Ready Estuary? NOAA Southeast and Caribbean Disaster Resilience Partnership Meeting (December 15, 2021).

Impact of Climate Change on Indian River Lagoon Water Quality. Clean Water Coalition of Indian River County (February 20, 2020).

Climate and Impacts. NOAA Adaptation Planning for Coastal Communities, Martin County, Florida (October 30, 2019).

Case study: short-term strategies to mitigate inundation and erosion of archaeological sites in Biscayne Bay and Everglades National Park, Florida, USA. Foundations and Frontiers in Mangrove Ecology, Rookery Bay National Estuarine Research Reserve, Naples, Florida (November 14 – 16, 2018).

Effect of Anthropocene Sea-Level Rise on the Plant Communities, Soils, and Carbon Dynamics: Northern Reach of the Southeast Saline Everglades, Florida, USA. Biscayne Bay Regional Restoration and Coordination Team Meeting, Miami, Florida (July 18, 2018).

If the Protect and Defend Strategy Won’t Save Florida From Rising Seas, What Will? Florida Institute of Technology, Melbourne, Florida (February 10, 2016).

**PROFESSIONAL SERVICES**

2018 Chair, Beautification and Energy Efficiency Board, City of Melbourne, Florida

2017 to present Scientific Advisor, Cape Canaveral Sustainability Working Group

2015 to present Technical Advisor, City of Satellite Beach Resilient Community Program

2006 to present Administrator, Space Coast Climate Change Initiative

1991 to 2019 Member and Chair, Brevard County Environmentally Endangered Lands Selection and Management Committee

2015 to 2016 Chair, Climate Science, Risk & Adaptation Planning, Curriculum Working Group, Association of Climate Change Officers

1993 to 2006 Member, Conference Planning Committee and Co-Sponsor, Florida Shore and Beach Preservation Association

2000 to 2005 Member, Coastal Engineering Technical Advisory Committee, Florida Department of Environmental Protection

1993 to 2005 Member, Advisory Board of the Florida Shore and Beach Preservation Association

1992 to 2005 Associate Editor, Journal of Coastal Research

1995 to 2000 Research Committee Member, Florida Archie Carr National Wildlife Refuge

1993 to 1996 Member, Technical Advisory Committee, National Marine Debris Monitoring Program, U.S. Environmental Protection Agency

1994 to 1995 Science Subcommittee Co-chair, Mangrove Technical Advisory Committee, Florida Department of Environmental Protection

1991 to 1993 Member, Brevard County Committee on Beach Improvement, Tourist Development Council

**PROFESSIONAL MEMBERSHIPS**

American Geophysical Union

Geological Society of America

Society of Sedimentary Geology