Diana C. Del Angel

6300 Ocean Drive, Unit 5869 • Corpus Christi, Texas 78412 Office: (361) 825-2089 • Email: diana.delangel@tamucc.edu

EDUCATION

Ph.D. Coastal and Marine System Science

2021

Texas A&M University- Corpus Christi

Dissertation: "social-ecological system approach for assessing impacts of sea-level rise and the benefits of natural and nature-based features"

Advisor: Dr. David Yoskowitz

M.S. in Environmental Science

2011

Texas A&M University- Corpus Christi Concentration: Coastal Geology

Thesis: "Dune-beach morphodynamic interaction along a semi-arid, wave-dominated

barrier island: South Padre Island, Texas"

Advisor: Dr. James Gibeaut

B.S. in Environmental Science

2008

University of Texas at Brownsville Concentration: Geoscience

PROFESSIONAL EXPERIENCE

Assistant Research Scientist

Sept 2022-Present

Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi **Community Resilience**

Develop and engage in interdisciplinary research projects related to changing coastal environments, ecosystem services, vulnerability, human well-being, Gulf of Mexico restoration, natural and nature-based solutions and resilience. Develop geospatial and other informational products in support of project activity. Support undergraduate and graduate students. Organize, write, and submit research publications.

Postdoctoral Research Associate

Sept 2021-Sept 2022

Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi Socio-Economic Laboratory

Participate in research projects related to changing coastal environments, ecosystem services, and resilience. Develop geospatial and other informational products in support of project activity. Engage with stakeholders in the topics of restoration, changing environment, and values. Prepare and conduct surveys. Analyze data and documents. Produce synthesis products and reports.

NOAA Center for Coastal and Marine Ecosystems EPP/MSI Graduate Research Scholar and **Graduate Research Assistant**

2016-Present

Harte Research Institute for Gulf of Mexico Studies, Texas A&M University- Corpus Christi Socio-Economic Laboratory

Assist in research projects related to ecosystem services, economic impact analysis and coastal mapping. Extended assistance to the institute, providing translation and workshop facilitation in international collaborations with Mexico and Cuba.

NOAA EPP Intern Mar-May 2019

NOAA Coastal Office for Coastal Management – Charleston, SC

Synthesized information on ways to evaluate benefits of green infrastructure. Compared currently available models for coastal habitat change for the Northern Gulf of Mexico National Estuarine Research Reserves.

Science and Policy Fellow

2015-2016

Gulf Research Program, The National Academies of Sciences, Engineering, and Medicine Host Office: Florida Department of Environmental Protection, Florida Coastal Office

Support in the state's Coastal Zone Management 309 Strategy, assist in grant writing, and maintain external communication with agency partners. Developed a framework for the implementation of an ecosystem assessment program for state managed coastal lands.

2012-2015 **Coastal Geoscientist**

Harte Research Institute for Gulf of Mexico Studies, Texas A&M University- Corpus Christi Coastal and Marine Geospatial Laboratory

Conduct research of coastal environments using geospatial analysis and mapping tools. Manage projects and people in the Coastal and Marine Geospatial Lab. Mentor interns and undergraduate and graduate students. Projects:

- 2014 2015 Synthesize the state's wetlands status and coastal hazards exposure for the Texas Coastal Management Program Section 309 Assessment and Strategies report (2016-2020 enhancement cycle).
- 2014 Barrier Island Vulnerability: Geospatial data integration & assessment.
- 2013-2015 Assessment of geomorphic impacts of beach maintenance practices on Mustang and North Padre Island, TX. Planning of Beach and Dune Forum.
- 2013-2015 Shoreline change analysis for Natural Resource Damage Assessment post DWH oils spill.
- 2012- 2015 Synthesis and of coastal management needs and development of permitting tool for state managed submerged lands in Texas.
- 2011- 2012 Post Hurricane Ike beach and dune erosion and recovery study.

Graduate Research Assistant

2008-2011

Harte Research Institute for Gulf of Mexico Studies, Texas A&M University- Corpus Christi Coastal and Marine Geospatial Laboratory

Coordinated fieldwork. Conduct quarterly topographic surveys of beach and dune environments and for post-hurricane impact assessments. Projects:

- Geohazard mapping on South Padre Island.
- Hurricane Ike impact studies.
- Shoreline and dune mapping on the Texas coast.

Geology Teaching Assistant, Texas A&M University- Corpus Christi

2008-2009

Lead physical and historical geology labs.

Lab Assistant, Texas A&M Galveston - Laboratory for Oceanographic and Environmental Research

2008

Processed and sampled sediment cores as part of the South Padre Island Offshore Sand study including labeling, sediment analysis, and database input. Assisted in the collection of offshore sediment cores and water samples.

Geology Teaching Assistant, University of Texas at Brownsville

Organized and graded geology lab material.

2008

Lab/Field Assistant, University of Texas at Brownsville

2007

Assisted with the Bahia Grande Wetland Restoration Project. Maintained native coastal grasses and shrubs in a greenhouse. Transplanted native plants to restoration sites.

Research Assistant, University of Texas at Brownsville

2007

Mapped riparian vegetation along the coastal plains of South Texas. Collected and managed data in an ArcGIS database.

GRANTS & CONTRACTS

- 2020-2027 Co-Principal Investigator. Colony Island Network Design and Implementation. National Oceanic and Atmospheric Administration- Restore Program. Dale Gawlik (PI). \$493,725
- 2023-2024 Co-Principal Investigator. Coastal Restoration for Texas. Texas Commission on Environmental Quality. James Gibeaut (PI). \$251,500
- 2023-2024 Co-Principal Investigator. GLO Beachwatch- Beach use study. Texas General Land Office. Katya Wowk (PI); Christine Hale (Co-PI). \$50,044.
- 2023 Principal Investigator. Socio-economic analysis of oyster reef restoration sites. The Nature Conservancy. Christine Hale (Co-PI). \$53,060
- 2022-2023 Co-Principal Investigator. 2022 Engaging Communities to Design Nature-based Solutions to Mitigate Climate-related Hazards (Refugio County, Texas). National Academies of Sciences, Engineering, and Medicine. Subaward from National Wildlife Federation. Christine Hale (Co-PI), Katya Wowk (Co-PI), Arsum Pathak (PI)- \$19,966 (Total budget -\$100,000).

PRESENTATIONS

Hale C., and D. Del Angel. Tools and Data for Urban Planning: Desired, Challenges & Opportunities. American Planning Association. November 10, 2023. APATX23 State Planning Conference. Corpus Christi, Tx.

Del Angel, D.C., Collaborative Relationships and Team Building. Texas OneGulf Center of Excellence, Texas OneGulf Workshop Series: Data and Methods Exchange. August 24, 2022. Virtual event. Available online

Del Angel, D.C., D. Yoskowitz, K. Wowk. Enhancing Resilience to Sea-Level Rise with Green Infrastructure: A Study of Adaptation Measures in the Florida Panhandle. Gulf of Mexico Conference. April 27, 2022. Baton Rouge, LA.

Del Angel, D.C*, . L. Balthis, M.V. Bilskie, C.A. Buckel, R. Collini, D. DeLorme, S.C. Hagen and D. Yoskowitz Communicating the Socio-Economic Impacts of Storm Surge Flood Plains under the Coastal Dynamics of Sea-Level Rise in the Northern Gulf of Mexico, Gulf Coastal Solution Workshop/ Web/April 27-28, 2021. Available online: https://www.oceanvisions.org/2021-gulf-coast-solutions-workshop

Del Angel D.C.*, Yoskowitz, D., Bilskie M., and Hagen S., Economic Impact Analysis of Storm Flooding under Sea Level Rise. Apalachicola NERR Research Symposium. February 18-19, 2021. Virtual event. Recording available online at https://youtu.be/Y_VfMrEXqF8

- Del Angel, D.C.*, D. Yoskowitz, M. Bilskie, S. Hagen, and K. Wowk. Understanding the increased cost of storm surge flooding under sea level rise (Poster). Coastal and Estuarine Research Federation Conference. November 3-7, 2019. Mobile, Alabama.
- Del Angel, D.C.*, B. Bowes, S. Dohner, B. Kim, S. Marriott, J. Song, J. Goodall, L. Schaffner, S.M. Fiore, T. Hartley Team Science Approach for Coastal and Marine Resilience. Coastal and Estuarine Research Federation Conference. November 3-7, 2019. Mobile, Alabama.
- Del Angel, D.C.*, D. Yoskowitz, S. Hagen, and M. Bilskie. Socio-Economic Impact of Storm Surge under Projected Sea Level Rise: Spatial Assessment of Communities at Risk. 9th biennual NOAA EPP/MSI Educational Science Forum. March 18-21, 2018. Washington D.C.
- Del Angel, D.C.*, D. Yoskowitz, Assessing Economic Impact of Storm Surge Under Projected Sea Level Rise Scenarios. AGU Fall Meeting. December 11-15, 2017. New Orleans, LA.
- Del Angel, D.C.*, D. Yoskowitz, Assessing Socio-Economic Impacts of Sea-Level Rise Induced Wetland Change (poster). SACNAS National Conference. October 18-21, 2017. Salt Lake City, UT.
- Del Angel, D.C.*, J.C. Gibeaut, A. Lord, Beach Maintenance Impacts to Beach and Dune Morphology and Vegetation on Mustang and North Padre Islands, Texas. Texas Beach and Dune Forum. September 24-25, 2015. Corpus Christi, TX.
- Del Angel, D.C.*, and J.C. Gibeaut, Texas Coastal Wetlands: Synthesis and Analysis (poster). Texas Bays and Estuaries Meeting. April 8-9, 2015. Port Aransas, TX.
- **Del Angel, D.C.***, J.C. Gibeaut, and B. Lupher. *Texas Coastal and Marine Spatial Planning Initiative* (poster). Restore Americas Estuaries 7th National Summit on Coastal and Estuarine Restoration. November 1-6, 2014. Washington, D.C.
- Del Angel, D.C.*, J.C. Gibeaut, M.J. Starek, and A. Reisinger. Shoreline Change Analysis of Hurricane Ike Impact and Recovery on the Upper Texas Coast. American Shore and Beach Preservation Association National Conference. October 22-25, 2013. South Padre Island, TX.
- Del Angel, D.C.* and J.C. Gibeaut, Geomorphic Controls of Dune Accretion on a Barrier Island: South Padre Island, TX. American Shore and Beach Preservation Association National Conference. October 10-12, 2012. San Diego, CA.
- **Del Angel, D.C.*** and J.C. Gibeaut, Alongshore Variability of Dune Accretion on South Padre Island, Texas: Implications for Post Storm Dune Recovery. Sixth Education and Science Forum, Florida A&M University. March 26, 2012. Tallahassee, FL.
- Del Angel, D.C.* and J.C. Gibeaut, Dune Morphological Evolution for Nourished and Non-Nourished Beaches, South Padre Island, TX. 45th Annual Geological Society of America South-Central Meeting. March 28-29th, 2011. New Orleans, LA.
- Del Angel, D.C. *, C.S. Roberts, A.S. Reisinger, N. Gutierrez, A. Hockaday and J.A. Benavidez. Characterization of The Riparian Wetlands in the Lower Rio Grande Valley. 111th Annual Meeting of the Texas Academy of Science. March 6-8, 2008. Corpus Christi, TX.

Del Angel, D. C*. and E.A. Heise, Black Mangrove Transplantation for Shoreline Stabilization in the Bahia Grande Wetland Restoration Project, South Texas. (poster). GSA Annual Meeting. October 28-31 2007. Denver, CO.

INVITED SPEAKER & WORKSHOP PRESENTATIONS

Del Angel, D. Ecosystem Services: Connecting Human Well-Being & Nature. Guest Lecture, Urban Ecology, Concordia College, Moorhead, MN. November 25, 2023. Web conference via Zoom.

Del Angel, D. Using Maps to Understand Environmental Justice. Guest Speaker and Panel. SCOTT Blitz Series. Conrad Blucher Institute. October 28, 2022. Texas A&M University – Corpus Christi. Corpus Christi, TX

Del Angel, D. Las Afectaciones del Incremento del Nivel del Mar. Guest speaker to the Colegio de Ingenieros Agrónomos del Sur de Tamaulipas, A.C. June 16, 2022. Web Conference. Tampico, Tamaulipas, MX.

Del Angel, D. Decision-support Tools for Assessing Coastal Hazards and Resilience. Guest Lecture. GEOG40960 Coastal Risks, University College Dublin. March, 3, 2022. Web conference via Zoom.

Del Angel, D. Approaches for Evaluating Ecosystem Services. Guest Lecture, Urban Ecology, Concordia College, Moorhead, MN. November 22, 2021. Web conference via Zoom.

Del Angel, D. Personality and Teams. Socio-Economics Group Retreat. Welder Wildlife Refuge. December 8, 2017. Sinton, TX

Del Angel, D., and C. Lozada, CV and Personal Statements workshop for undergraduates, sponsored by the Texas A&M University - Corpus Christi SACNAS Chapter. November 8, 2017. Corpus Christi, TX.

Del Angel, D. C., The Importance of Women Mentors and Role Models. SACNAS National Conference: Women in STEM Reception. October 17, 2017. Salt Lake City, UT.

Del Angel D.C and L. Hutchison, Designing Scientific Posters workshop for undergraduates, sponsored by the Texas A&M University - Corpus Christi SACNAS Chapter. February 14, 2017. Corpus Christi, TX.

Del Angel, D.C., Using Science-Based Models to Improve Coastal Management. Women's Leadership Texas meeting. Harte Research Institute. September 12, 2016. Corpus Christi, TX.

Del Angel, D.C.*, J.C. Gibeaut, and E. Taylor. Geohazard Map of South Padre Island, Texas. Texas General Land Office Coastal Resiliency Forum – Region 4. December 9, 2014. Port Isabel, TX.

Del Angel, D. C., Coastal Application of GIS. GIS Day of the Coastal Bend. November 19, 2014. Corpus Christi, TX

Del Angel, D. C., Beach Nourishment on the Texas Coast. Aquarium at Rockport Harbor. July 18, 2013. Rockport, TX.

Del Angel, D. C., Studying Coastal Change with GIS. Foundations of Geographic information Systems –guest lecture. Texas A&M University – Corpus Christi. October 24, 2012. Corpus Christi, TX.

PUBLICATIONS

Del Angel, D.C., D. Yoskowitz, K. Wowk, and C. Hale. ND. Green Infrastructure to Mitigate the Effects of Sea-Level Rise: A Study of Adaptation Measures in Place-Based Plans of the Florida Panhandle. Journal of Environmental Planning and Management (In Review)

Del Angel, D.C., D. Yoskowitz, M.V. Bilskie, and S.C. Hagen. 2022. "A Socioeconomic Dataset of the Risk Associated with the 1% and 0.2% Return Period Stillwater Flood Elevation under Sea-Level Rise for the Northern Gulf of Mexico" Data 7, no. 6: 71. https://doi.org/10.3390/data7060071

Bilskie, M. V., D. Del Angel, D. Yoskowitz, and S. C. Hagen. 2022. "Future Flood Risk Exacerbated by the Dynamic Impacts of Sea Level Rise Along the Northern Gulf of Mexico." Earth's Future 10 (4): e2021EF002414. https://doi.org/10.1029/2021EF002414

REPORTS

Del Angel, D., C. Lozada, C. Hale. 2023. Socioeconomic Analysis of The Nature Conservancy's Galveston Bay and Calcasieu Lake Oyster Reef Restoration Projects: Results from Subject Matter Expert Interviews and Human Dimensions Public Survey. Report to The Nature Conservancy. Harte Research Institute for Gulf of Mexico Studies.

Hale, C., D. DelAngel and C. Lozada. 2023. Socio-economic monitoring recommendations for the Calcasieu Lake oyster reef restoration project. Report to The Nature Conservancy. Harte Research Institute for Gulf of Mexico Studies.

Hale, C., D. DelAngel and C. Lozada. 2023. Socio-economic monitoring recommendations for Beezley Reef restoration project. Report to The Nature Conservancy. Harte Research Institute for Gulf of Mexico Studies.

Wowk, K., D. Del Angel, J. Lee, C. Hale, E. Martinez. 2023. GeoRED Geospatial resilient economic development-Guide for applying the GeoRED Economic Development Tool for economic resilience. Regional Resilience Partnership.

Del Angel, D. (2023). ESLR Coastal Resilience MTAG Spring 2023 Workshop Report: Report of Activities, Methods, and Results from the ESLR 2021 Coastal Resilience: Living with Sea Level Rise in the Texas Coastal Bend Management Transition Advisory Group (MTAG) Spring 2023 Meeting May 2nd, 2023 (in-person) and June 21st, 2023 (web). Editor(s): Kara Coffey. 75 pages. Harte Research Institute for Gulf of Mexico Studies. Texas A&M University-Corpus Christi.

Del Angel, D., C. Hale, K. Wowk. 2023. Engaging Communities to Design Nature-based Solutions to Mitigate Climate-related Hazards in Refugio County, Texas. Final Report to National Wildlife Federation. Available online at https://www.harteresearch.org/sites/default/files/projects/HRI FinalReport 20230817.pdf

Del Angel, D., Coffey, K., Wowk, K., Collini, R., Gibeaut, J. 2022. Report of activities, methods, and results from the ESLR 2021 Coastal Resilience: Living with Sea Level Rise in the Texas Coastal Bend Management Transition Advisory Group (MTAG) Kickoff Meeting- December 8, 2022. Available Online.

Yoskowitz, D., Hale, C., Coffey, K., Del Angel, D., Kramer, M., Guthrie, C., and Schoenbaechler, C. 2022. Values-Based Outcomes Related to Freshwater Inflow in the Watershed of the Mid-Texas Coast. A report to NOAA

Restore Science Program. Award No. NA21NOS4510176. Harte Research Institute for Gulf of Mexico Studies. 4 pg.

Del Angel, D., C. Hale, K. Wowk. (2022). Mapping Flood Hazards and Vulnerability in the Coastal Bend. Regional Resilience Partnership. Harte Research Institute for Gulf of Mexico Studies. Texas A&M University-Corpus Christi. Available online.

Yoskowitz, D., L.H. Williams, V.C. Ramenzoni, D. Del Angel, K. Coffey (2019). Socio-Behavioral-Economic Observing System Indicators for Coastal Community Sustainability. 46 pages. Harte Research Institute for Gulf of Mexico Studies. Texas A&M University-Corpus Christi. Available online.

Del Angel, D.C, J.G. Gibeaut, A. Lord. (2015). Beach Maintenance Impacts and Recommendations for Best Management Practices. A Report to the General Land Office under GLO Contact No. 14-246-000-8341. CEPRA Project No. 1593. Harte Research Institute for Gulf of Mexico Studies, Texas A&M University - Corpus Christi.

Gibeaut, J.C., D. Del Angel, B. Lupher, W. Nichols. (2015). Resource Management Codes: Data Standards Committee Procedures and Update Process. Report to the Texas General Land Officer under NOAA Grant No. NA12NOS4190264. Harte Research Institute for Gulf of Mexico Studies, Texas A&M University Corpus – Christi. 46 p.

Del Angel, D.C, J.G. Gibeaut, B.L Lupher, E. Taylor. (2014). Barrier-Island Vulnerability Data Integration and Assessment. A report to the Landscape Conservation Cooperative. Harte Research Institute for Gulf of Mexico Studies, Texas A&M University - Corpus Christi. 42 p.

Gibeaut, J.C., D. Del Angel, B. Lupher, W. Nichols, & F. Moretsohn. (2014) Coastal Texas Initial Needs Assessment: Texas Technical Advisory Committee Findings and Report. Corpus Christi, TX: Harte Research Institute for Gulf of Mexico Studies, Texas A&M University Corpus – Christi. General Land Office contract no. 12-493-000-6690.

OPEN DATA and DATA PRODUCTS

Yoskowitz, D., Hale, C., Coffey, K., Del Angel, D., Kramer, M., Guthrie, C., and Schoenbaechler, C. 2023. Values-Based Outcomes Related to Freshwater Inflow in the Watersheds of the Mid-Texas Coast [dataset]. Distributed by: Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC), Harte Research Institute, Texas A&M University–Corpus Christi. doi: 10.7266/we3sxh6r

Angel Diana C., David Yoskowitz, Matthew Bilskie, and Scott Hagen. 2022. Socioeconomic risk associated with the 1% and 0.2% return period Stillwater flood elevation under sea-level rise for the northern Gulf of Mexico [dataset]. Distributed by: Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC), Harte Research Institute, Texas A&M University–Corpus Christi. doi:10.7266/V8T1M61X

SERVICE TO PROFESSION

2017-2019	Green Infrastructure Working Group member – Gulf of Mexico Alliance
2016-2017	Field Volunteer- Mission Aransas Research Reserve
2012-2015	Committee Member – City of Corpus Christi Watershore and Beach Advisory Committee
2013-2014	Committee Member - Student Outreach — American Shore and Beach Preservation Association

OUTREACH AND EDUCATION

2017-2021	English-Spanish Translator for the Third Coast Science Magazine, Corpus Christi, TX
2018	Organizer- Science Saturday Corpus Christi, Corpus Christi, TX (attendance ~500)
2017	Organizer- Harte of Gulf Film Competition, Corpus Christi, TX (attendance ~150)
2017 -2018	Wetlands at Work- Workshop at Oso Bay Wetland Preserve
2013;2017	National Ocean Science Bowl volunteer
2013;2017	Regional Science Fair volunteer
2014-2015	Earth Day /Bay Day volunteer
2009-2015	Texas Coastal Monitoring Program

AWARDS AND HONORS

- 2018 Selected participant of Harte Research Institute Student Workshop on International Marine and Coastal Management (SWIMM)
- 2018 Virginia Sea Grant Team Science and Cross-Disciplinary Problem-Solving Training
- 2016-Present Center for Coastal and Marine Ecosystems PhD Fellowship
- 2016 AGEP Scholar
- 2015 Gulf Research Program, Science Policy Fellow
- 2012 USDA Graduate Fellow
- Dean's List for Summer 2003, Fall 2005, Fall 2006, Spring 2007, and Summer 2007
- College of Science, Mathematics and Technology Scholarship, May 2007

PROFESSIONAL AFFILIATIONS

2018-Present 2017-2021	Coastal Bend Children in Nature Association of State Wetland Managers
2016-2011	Society for the Advancement of Chicanos/Hispanics and Native American in Science, Texas A&M
	Corpus Christi Chapter- Graduate President 2016-2018
2016-2021	Society for Conservation GIS
2016-2021	The Coastal Society
2010-2016	Toastmasters International
2011-2013	American Shore and Beach Preservation Association
2011-2012	American Geophysical Union
2008-2010	Sigma Xi Scientific Research Society
2007-2012	Geological Society of America