



With more than 18 years of experience in the consulting industry, Mr. Chastain has managed and performed a diverse array of natural resource and due diligence related environmental work across the Texas Coast. Mr. Chastain has provided these natural and cultural resource permitting and regulatory services to a wide range of clients, including wind and solar firms, utilities, midstream pipeline partnerships, petrochemical and waste management facilities, oil and gas companies, manufacturers, lawyers, commercial and residential developers, and government agencies. His experience specifically includes:

- Local, State, and Federal Permitting
- Mitigation Design, Implementation, and Evaluation
- Wetland and Waters of the U.S. Delineations/Investigations
- Stream, Wetland, and Aquatic Features Modeling and Analysis
- Biotic and Baseline Inventory Assessments
- Threatened and Endangered Species and Critical Habitat Surveys

He has initiated, coordinated, and procured Clean Water Act Section 401/402/404 permits, Rivers and Harbors Act Section 10 permits, Biological Assessments and Opinions, Categorical Exclusions (CEs), and Environmental Assessments (EAs) from multiple agencies, including the Texas Parks and Wildlife Department (TPWD), U.S. Army Corps of Engineers (USACE), Federal Aviation Administration (FAA), Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA), U.S Coast Guard (USCG).

Aside from his technical and project management experience, Mr. Chastain has led multi-disciplinary teams of technical professionals through many large-scale projects, focusing on the client's needs. As the Houston Office Manager of an international multi-disciplinary engineering and consulting firm, Mr. Chastain has mentored and coached his staff and instituted individualized professional development and career plans. He has also created and managed strategic marketing initiatives, focusing on renewables/wind power generation and oil & gas midstream markets from both a client and geographic region standpoint. His leadership, management, and experience have assisted his clients in completing many diverse and difficult projects on time and within budget. Striving to be his client's trusted advisor, Mr. Chastain has extensive expertise in developing innovative, cost-effective solutions to complex problems using proven methodologies, technologies.

RELEVANT PROJECT WORK

Gulf Coastal Plains Wetland Mitigation Bank Monitoring and Coordination ♦ Senior Project Manager/Coastal Ecologist

The Earth Partners LLC purchased the Gulf Coastal Plains Wetland Mitigation Bank (GCPWMB) in 2018 and sought to change the project team in favor of a more experienced, efficient, and knowledgeable group. Based on his history and experience, Mr. Chastain was asked to join the team as the lead technical wetland specialist. Under his leadership, Mr. Chastain's team has completed four years of annual USACE iHGM on the first three phases of the mitigation bank, completing standard wetland delineations, iHGM assessments, and GIS classifications of the bank in support of future mitigation credit releases across multiple degraded and natural systems, including high/low marsh, furrows, tidal and submerged flats, and submerged aquatic vegetation. Mr. Chastain oversaw and participated in quarterly construction monitoring on future phases, water level and quality monitoring, and weekly, monthly, and yearly reporting on behalf of the project team to the USACE, TCEQ, USFWS, TPWD, and GLO. Due to the site's service area, Mr. Chastain also

EXPERIENCE

- ▶ wetland and waters of the U.S. investigations / identification
- ▶ wetland mitigation, design, implementation, and evaluation
- ▶ TES species and habitat surveys
- ▶ environmental and due-diligence permitting
- ▶ hydrographic and remote sensing survey

SPECIAL TRAINING AND CERTIFICATION

- ▶ 2012: Professional Wetland Scientist, Society of Wetland Scientists
- ▶ 2011: Field Indicators of Hydric Soils, Wetland Training Institute
- ▶ 2008: Wetland Delineation Training Course, Wetland Training Institute
- ▶ 2008: Great Plains Regional Supplement, Wetland Training Institute

EDUCATION

- ▶ 2012: MNRD natural resource development, Texas A&M University, College Station
- ▶ 2007: BS renewable natural resources, Texas A&M University, College Station

directed coordination with both the Galveston and New Orleans District of the USACE for credit purchases and ledger information. 2018 – present.

City of Palacios Breakwater Project, Palacios, Matagorda County, Texas ♦ Senior Project Manager/Coastal Ecologist

The City of Palacios contracted with a regional engineering firm to permit the construction and installation of a two-mile long breakwater along the north shore of Tres Palacios Bay in Matagorda County, Texas, to alleviate erosion, protect the shoreline, and provide suitable substrate for oyster reef recruitment in the area. Mr. Chastain led the overall project effort, including kickoff, oversight of all fieldwork and surveys, compilation of permit applications and submittals, and agency coordination. Mr. Chastain's Texas-based team performed all fieldwork for this project, including a waters of the U.S. delineation, bathymetric and side-scan sonar surveys for marine natural and cultural resources, threatened and endangered species assessment, and terrestrial cultural resource surveys. Under Mr. Chastain's direction, staff biologists compiled all pertinent reports and permitting documents for submittal to the USACE and GLO for approval. Mr. Chastain is currently overseeing the permit application through the USACE process, working with the project team on an avoiding and minimization impacts, and coordinating with the USACE. 2022 - present.

West Side Calhoun County Navigation District Port O'Connor Marina, Seadrift, Texas ♦ Senior Project Manager/Coastal Ecologist

West Side Calhoun County Navigation District (WSCCND) contracted with a regional engineering firm to permit the construction and dredging of a new public marina and bulkhead in Port O'Connor, Calhoun County, Texas, to benefit the city and surrounding county. Mr. Chastain led the overall project effort, including kickoff, oversight of all fieldwork and surveys, compilation of permit applications and submittals, and agency coordination. Mr. Chastain's Texas-based team performed all fieldwork for this project, including a waters of the U.S. delineation, bathymetric and side-scan sonar surveys for marine natural and cultural resources, threatened and endangered species assessment, and terrestrial cultural resource surveys. Under Mr. Chastain's direction, staff biologists compiled all pertinent reports and permitting documents for submittal to the USACE and GLO for approval. Mr. Chastain is currently overseeing the permit application through the USACE process, working with the project team on an avoiding and minimization impacts, and coordinating with the USACE. 2022 - present.

Bryan's Landing Breakwater Project, Galveston, Galveston County, Texas ♦ Senior Project Manager/Coastal Ecologist

A private party in Galveston, Texas contracted with Mr. Chastain and his team of dedicated coastal experts to permit the construction and installation of four tier, 1,800-ft long breakwater along the south shore of West Galveston Bay in southern Galveston County, Texas, to alleviate erosion, protect the shoreline, provide suitable substrate for oyster reef recruitment in the area, and allow beneficial use and accretion of eroding saltgrass marshes. Mr. Chastain led the overall project effort, including kickoff, oversight of all fieldwork and surveys, compilation of permit applications and submittals, and agency coordination. Mr. Chastain's Texas-based team performed all fieldwork for this project, including a waters of the U.S. delineation, bathymetric and side-scan sonar surveys for marine natural and cultural resources, threatened and endangered species assessment, and terrestrial cultural resource surveys. Under Mr. Chastain's direction, staff biologists compiled all pertinent reports and permitting documents for submittal to the USACE and GLO for approval. Mr. Chastain is currently overseeing the permit application through the USACE process, working with the project team on an avoiding and minimization impacts, and coordinating with the USACE. 2022 - present.

Perry R. Bass Fisheries Intake Structure, Palacios, Texas ♦ Senior Project Manager/Coastal Ecologist

TPWD contracted with LAN Engineers to replace the decades-old saltwater intake structure for the Perry R. Bass Fisheries Facility near Palacios, Matagorda County, Texas. Mr. Chastain led the permitting effort, including project kickoff, oversight of all fieldwork and surveys, compilation of permit applications and submittals, and agency coordination. Mr. Chastain's Texas-based team performed all fieldwork for this project, including a waters of the U.S. delineation, bathymetric and side-scan sonar surveys for marine natural and cultural resources, threatened and endangered species assessment, and terrestrial cultural resource surveys. Under Mr. Chastain's direction, staff biologists compiled all pertinent reports and permitting documents. Due to project demands and an iterative review process, the permitting for this project was determined during approvals, resulting in several changes to the permit application, all overseen by Mr. Chastain. Mr. Chastain also oversaw the permit process through the USACE, working with the project team on an avoiding and minimization impacts, and coordinating with the USACE on response to agency inquiries, response to Public Comments, and a final Decision Document. Although originally proposed as a Standard Individual

Permit (SIP), the project was approved under stacked Nationwide Permits (NWP), including #3 (Repair and Rehabilitation), # 12 (Utility Lines), and #33 (Temporary Access, and Dewatering). 2020 - 2022.

38-mile Roux Pipeline, Jefferson, Chambers, and Liberty Counties, Texas and Cameron Parish, LA ♦ Senior Project Manager/Coastal Ecologist

EnLink Midstream planned to install a new 38-mile crude oil interconnect to connect their existing system to their gathering line systems in Louisiana. As part of the environmental review and permitting process, Mr. Chastain led fieldwork and assist with USACE with WOTUS delineation efforts and with USFWS permitting for the federally endangered red-cockaded woodpecker (*Picoides borealis*). Our efforts included overseeing all environmental field activities for the entirety of the proposed pipeline, reviewing and assisting with all necessary permits, maintaining records, and coordinating with both the client and regulatory agencies. Mr. Chastain, as a PWS, was also the technical lead for all wetland delineation, modeling, and assessments for potential impacts resulting from the pipeline, including iHGM and TXRAM assessments on a hose of different ecosystems such as bottomland hardwood forest, longleaf pine groves, prior converted cropland and timber furrow wetlands, and pitcher plant bogs. Throughout the project, Mr. Chastain maintained the environmental review and coordination portion of this project including coordination with both the Galveston and New Orleans District of the USACE. On an expedited timeline, Mr. Chastain and his team delivered the results in a timely manner, working nights and weekends to meet the client's goals and objectives, while coming in under budget.

Breakwater Repair and Dredging Project, Corpus Christi, Texas ♦ Senior Project Manager/Coastal Ecologist

The City of Corpus Christi contracted with LAN Engineers to repair, replace, and rehabilitate portions of the century-old breakwater surrounding the Corpus Christi Marina as well as dredging shoaled material to accommodate continued boat access and navigation in Corpus Christi, Nueces County, Texas. Mr. Chastain led the permitting effort, including project kickoff, oversight of all fieldwork and surveys, compilation of permit applications and submittals, and agency coordination. Mr. Chastain's Texas-based team performed all fieldwork for this project, including a waters of the U.S. delineation with both marine and terrestrial surveys, threatened and endangered species assessment, and cultural resource survey. Under Mr. Chastain's direction, staff biologists compiled all pertinent reports and permitting documents per USACE – Corpus Christi Field Office standards. Due to project demands and an iterative review process, the permitting for this project was determined during approvals, resulting in several changes to the permit application, all overseen by Mr. Chastain. Mr. Chastain also oversaw navigating the permit application through the USACE process, working with the project team on an avoiding and minimization impacts, and coordinating with the USACE on response to agency inquiries, response to Public Comments, and a final Decision Document. Although originally proposed as a SIP, the project was approved under several NWPs within four months, including #3 (Repair and Rehabilitation), #35 (Maintenance Dredging), and #16 (Decant Water from Upland Containment Areas), saving budget and long-term monitoring and management costs, thanks to Mr. Chastain's intimate knowledge of the permitting process and professional relationships with USACE staff. 2018 - 2020.

Dredge Material Placement Area Design, Permitting, and Monitoring, Port Bolivar, Texas ♦ Senior Project Manager/Coastal Ecologist

In response to the forthcoming USACE Coastal Texas Protection and Restoration Project commonly referred to as the "Ike Dike", a private developer on the Bolivar Peninsula retained Mr. Chastain to evaluate, survey, and permit a 450-acre parcel of land with the potential either contain a portion of the Ike Dike project or provide material and sand source for the construction of a coastal barrier system. Under this contract, Mr. Chastain oversaw baseline field surveys, including delineations and assessments for all natural resources such as wetlands, coastal dune swale communities, and marshlands. Mr. Chastain currently manages and oversees the permitting portion of this project, navigating the USACE Regulatory program to determine the best course of action. As part of the coordination and permitting strategy, Mr. Chastain oversaw the production of reports and analysis concerning potential impacts and effects to the coastal ecosystems, as well as development of wetland and dune system management and restoration plans. These draft plans include design, management, monitoring, and long-term maintenance components to establish success criteria and demonstrate compliance with the USACE, EPA, and the Texas General Land Office. 2019 - 2020

Cedar Bayou Barge Terminal and Fleeting Area Environmental Permitting, Channelview, Texas ♦ Senior Project Manager/Coastal Ecologist

Accutrans, Inc., commercial marine construction company, proposed to expand their marina and barge dock to accommodate increasing market demand for their services. Mr. Chastain led the permitting effort, including project kickoff, oversight of all fieldwork and surveys, compilation of permit applications and submittals, and agency coordination. His Texas-based team performed or oversaw all fieldwork for this project, including a waters of the U.S. delineation, threatened and endangered species assessment, and cultural resource survey. Mr. Chastain and his team of experienced biologists compiled all pertinent reports and permitting documents and are in the process of submitting an letter of permission permit application for approval. Mr. Chastain and his team are also navigating the permit application through the USACE process, working with the project team on a compensatory mitigation plan, and coordinating with the USACE on responses to agency inquiries and public comments, as well as a final decision document. 2017 - present.

3,000-ac Master Planned Community ♦ Senior Regulatory Manager

In October 2004, LGI Development, a luxury residential developer on the Texas Gulf Coast, purchased a 3,000-acre tract of land in northern Harris County. Having completed minimal due diligence on the property, LGI proceeded to develop the property in phases, as acreage home sites. In 2005, they were reported to the Environmental Protection Agency (EPA) by an adjacent landowner for alleged violations of Section 401, 402, and 404 of the Clean Water Act. Between 2005 and 2009, LGI received eight Administrative Orders and five Cease and Desist orders from the EPA – Region 6 office, all demanding immediate cessation of activities and threatening jail time and \$32,500/day fines. In 2009, Mr. Chastain was brought in to address the EPA's concerns and provide information and data to potentially counteract their claims. From 2009-2012, Mr. Chastain participated in multiple field visits and meetings at the project site, and with the LGI legal team in Houston to address the EPA's claims and assist with legal filings. Mr. Chastain were responsible for a host of environmental surveys to determine the legitimacy of the EPA's assertions, including forensic waters of the U.S. delineations, T&E assessments, and vegetative analysis throughout the project site, and verification and rebuttal of EPA field data. This effort also included biotic and baseline ecological surveys of all aquatic features using the current USACE iHGM and Stream Assessment tools. Mr. Chastain compiled the environmental data for the LGI legal team and participated in multiple regulatory meetings and deposition hearings with EPA, USACE, United States Fish and Wildlife (USFWS), and other agencies. Based on the work of Mr. Chastain in the field, and the LGI Legal team in court, the U.S. District Court for the Southern District of Texas ruled in favor of LGI and dismissed the case (Number 4:10-cv-01904).

Oyster Reef Damage Assessment and Substrate Characterization ♦ Senior Ecologist/Hydrographer

Mr. Chastain oversaw and participated in field efforts for an oyster reef assessment and substrate characterization on approximately 500 acres of oyster leases in and around Christmas Bay, St. Bernard's Parish, Louisiana for a confidential legal action following a potential vessel strike on reefs within an approved The Louisiana Department of Wildlife & Fisheries lease tract. As part of the expert witness team for the defense, Mr. Chastain oversaw field investigation efforts and surveys, including personally operating the side-scan sonar, single beam echo sounder, and sub-bottom profiler, as well as oversaw field staff who hand poled, physically examined dredge substrate, and recorded data. The overall effort was undertaken to determine the potential extent of impact, structure, and composition of the lease following the vessel strike on the reef. 2017-2019.

Dagger Point Marine Pipeline Natural Resources Surveys ♦ Senior Project Manager/Coastal Ecologist

Mr. Chastain led and managed marine cultural and natural resources surveys for a proposed living shoreline habitat protection and rehabilitation project in San Antonio Bay, Calhoun County, Texas. Mr. Chastain led and participated in all aspects of project work included conducting remote-sensing surveys utilizing echosounders and side-scan sonar to map potential marine natural resources (oyster reefs, seagrass beds, rangia reefs, and special aquatic sites) in support of permitting efforts. Once Mr. Chastain then identified potential resource locations through interpretation of remote sensing data, he and his qualified team of coastal biologists employed agency-approved sampling techniques like patent tongs, dredge tows, Eckman and ponar dredge sampling, poling, scientific diving, and physical examination to assess the function, structure, and health of reef and seagrass bed communities. 2019-2020.