

# CURRICULUM VITAE

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## Jenny Wrast Oakley

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### EDUCATION

#### **Ph.D. Marine Biology Interdisciplinary Program, Texas A&M University, 2019**

**Dissertation:** “Coastal Health Index for the Northern Gulf of Mexico: Moving towards Meaningful Ecosystem-Based Management.”

#### **M.S. Biology, Texas A&M University-Corpus Christi, 2008**

**Thesis:** “Spatial and Temporal Variability in Food Web Structure on Subtidal Oyster Reefs in Lavaca Bay, Texas.”

#### **B.S. Biology, Texas A&M University-Corpus Christi, 2006**

Minor in Chemistry.

### PROFESSIONAL BACKGROUND

#### **Adjunct Faculty** **January 2021-Present**

College of Science and Engineering, University of Houston-Clear Lake, Houston TX

- Conservation Biology (BIOL 5534)
- Marine Biology (BIOL 3311)

#### **Associate Director, Research Programs** **December 2020-Present**

Environmental Institute of Houston, University of Houston-Clear Lake, Houston TX

- Manage EIH Environmental Research Department
- Development and implementation of research budget
- Responsible for research program policy, long-range forecasting, and strategic planning
- Supervise research grants: scheduling, study design, data analysis, training and quality assurance

#### **Environmental Scientist** **September 2010-December 2020**

Environmental Institute of Houston, University of Houston-Clear Lake, Houston TX

- Supervise EIH Environmental Research Department
- Grant and proposal writing
- Data Analysis and final report writing

#### **Graduate Assistant Non-Teaching (GANT)** **January 2015-May 2015**

Texas A&M University, College Station, TX

- Graded 1 graduate (WFSC 613) section of Animal Ecology (writing intensive)
- Graded 2 undergraduate (WFSC 403) sections of Animal Ecology (writing intensive)

#### **Senior Environmental Research Associate** **February 2008-September 2010**

Environmental Institute of Houston, University of Houston-Clear Lake, Houston TX

- Manage contract research projects
- Coordinate field activities
- Assist with grant and final report writing

#### **Graduate Research Associate** **January 2007-February 2008**

Texas A&M University-Corpus Christi, Corpus Christi, TX

- Fisheries Ecology Laboratory-Identification of marine fish and invertebrates for community structure studies

**Graduate Teaching Assistant (TA)**

August 2006-January 2007

Texas A&amp;M University-Corpus Christi, Corpus Christi, TX

-Taught 3 sections of introductory Biology I laboratory

**National Coastal Assessment Internship (Intern Technician III)**

May 2006-August 2006

Texas Parks and Wildlife Department, Corpus Christi, TX

-Field equipment and sample collection preparation

-Proficient in vehicle and boat maintenance and operation

**Laboratory Technician for Microbiological, Molecular Biology labs.**

August 2004-March 2006

Texas A&amp;M University-Corpus Christi, Corpus Christi, TX

-Set up lab supplies for courses from Introductory Biology through Microbial Ecology

-Inoculate and culture bacterial and fungal cultures

-Operate autoclave and minor maintenance

**RESEARCH GRANTS***Year(s) Project Name/Title, granting/contracting agency or organization. Oakley's Role (Budget \$)***Awarded (PI or Co-PI \$2.37M)**

- 2022-2023 Utilizing eDNA and Plankton Sampling to Monitor American Eel Recruitment in Texas. **Texas Parks and Wildlife Department.** Co-PI (\$153,023)
- 2022 National Lakes Assessment, Texas. **Texas Commission on Environmental Quality.** Co-PI (\$300,874)
- 2021-2023 Establishing a Network of Eel Ramps to Monitor Recruitment of Glass and Elver American Eel. **Texas Parks and Wildlife Department.** Co-PI (\$130,769)
- 2021-2023 Clean Rivers Program, Surface Water Quality Monitoring. **Houston-Galveston Area Council.** Co-PI (\$130,672)
- 2021 National Wetland Condition Assessment, Texas. **Texas Commission on Environmental Quality.** Co-PI (\$280,225)
- 2019-2023 Distribution and Habitat Associations of the Western Chicken Turtle in Texas. **Texas Comptroller of Public Accounts.** Co-PI (\$314,893)
- 2019-2021 Clean Rivers Program, Surface Water Quality Monitoring. **Houston-Galveston Area Council.** Co-PI (\$190,000)
- 2020 National Coastal Condition Assessment, Louisiana. **Great Lakes Environmental Center.** Co-PI (\$440,000)
- 2020 National Coastal Condition Assessment, Texas. **Texas Commission on Environmental Quality.** Co-PI (\$315,000)
- 2017-2020 Distribution, Abundance, and Habitat Use of the American Eel in the Lower Sabine, Colorado, and Guadalupe River Basins. **Texas Parks and Wildlife Department,** Co-PI (\$109,657)
- 2018-2019 Brazos Estuary Instream Flow Water Quality and Nekton Study. **National Academies of Science Engineering and Medicine - Hurricane Harvey Disaster Recovery Grant.** PI (\$7,119)

## **Awarded (Participated as Project Manager \$4.83M)**

- 2020-2023 Baseline Study of Alligator Snapping Turtle (*Macrochelys temminckii*) Population Viability in Texas Watersheds. **Texas Comptroller of Public Accounts.** Project Manager and Quality Assurance Officer (\$400,000)
- 2019-2023 Design, Construction, and Analysis of Floating Treatment Wetlands. **Harris County Flood Control District.** Project Manager (\$130,000)
- 2019-2021 Distribution, Abundance, and Habitat Use by the Dwarf Seahorse, *Hippocampus zosterae* along the Texas Coast. **Texas Parks and Wildlife Department.** Project Manager (\$83,573)
- 2018-2020 Characterization of the influence of freshwater inflow on the Trinity River delta salinity, *Rangia*, and submerged aquatic vegetation. **Texas Commission on Environmental Quality – Galveston Bay Estuary Program.** Project Manager and Quality Assurance Officer (\$60,000)
- 2018-2020 Baseline Research Studies in support of validation or refinement of the adopted Texas Commission on Environmental Quality environmental flow standards for the Brazos River estuary. **Texas Water Development Board.** Project Manager (\$75,000)
- 2018-2019 National Rivers and Streams Assessment, Texas. **Texas Commission on Environmental Quality.** Project Manager and Fish Taxonomist (\$484,800)
- 2017-2019 Clean Rivers Program, Surface Water Quality Monitoring and Special Study Sampling for Basin 11 and 13 Watershed Protection Plans. **Houston-Galveston Area Council.** Field Manger and Quality Assurance Officer (\$145,000)
- 2017-2018 Biological Monitoring of the Tres Palacios River and Upper Tres Palacios Bay, Texas. **National Wildlife Federation.** Project Manager (\$12,500)
- 2016-2018 Texas Coast-wide Characterization of Saltmarsh Topminnow – *Fundulus jenkinsi* Populations. **Texas Parks and Wildlife Department.** Project Manager (\$69,973)
- 2017 National Lakes Assessment, Texas. **Texas Commission on Environmental Quality.** Project Manager (\$248,000)
- 2017 Biological Monitoring in the Red River Basin. **Red River Authority.** Project Manager (\$55,000)
- 2016-2017 Clean Rivers Program, Surface Water Quality Monitoring. **Houston-Galveston Area Council.** Field Manger and Quality Assurance Officer (\$89,760)
- 2016-2017 Water Quality and Biological Monitoring of the Trinity River Delta and Bayou and Marsh Sites in the Anahuac National Wildlife Refuge. **National Wildlife Federation.** Project Manager (\$49,000)
- 2016-2017 Brazos Basin Studies, Research Related to the Brazos River and Associated Bay and Estuary System, Basin and Bay Area (BBASC). **Bio-West.** Co-Project Manager (\$75,000)
- 2016 National Wetland Condition Assessment, Texas. **Texas Commission on Environmental Quality.** Project Manager (\$239,691)
- 2015-2016 Upper Trinity Bay, Lower Trinity River and Delta, *Rangia* Sampling and Population Assessment. **National Wildlife Federation.** Project Manager (\$38,500)
- 2015-2016 Clean Rivers Program, Surface Water Quality Monitoring. **Houston-Galveston Area Council.** Field Manger and Quality Assurance Officer (\$77,440)
- 2015 National Coastal Condition Assessment, Texas. **Texas Commission on Environmental Quality.** Project Manager and Team Leader (\$290,000)

- 2014-2015 Clean Rivers Program, Surface Water Quality Monitoring. **Houston-Galveston Area Council.** Field Manger and Quality Assurance Officer (\$70,088)
- 2014-2015 Brazos Basin Environmental Flow Standard Validation and Integration of River Flows and Brazos Basin Estuary Response. **Bio-West.** Co-Project Manager (\$85,000)
- 2013-2014 National Rivers and Streams Assessment, Texas. **Texas Commission on Environmental Quality.** Project Manager and Team Leader (\$404,203)
- 2012-2013 Clean Rivers Program, Surface Water Quality Monitoring. **Houston-Galveston Area Council.** Field Manger and Quality Assurance Officer (\$283,605)
- 2011-2013 Estimation of Blue Crab Fishery By catch Mortality and Critical Life History Parameters of the Texas Diamondback Terrapin, *Malaclemys terrapin littoralis*. **Texas Parks and Wildlife Department.** Project Manager (\$71,807)
- 2010-2013 Armand Bayou Water Quality Improvement Grant. **Texas Commission on Environmental Quality – Galveston Bay Estuary Program.** Field Manger and Quality Assurance Officer (\$544,343)
- 2010-2012 Harris County Texas Comprehensive Turbidity Study. **Harris County Flood Control District.** Project Manager (\$69,129)
- 2011 National Wetland Condition Assessment, Texas. **Texas Commission on Environmental Quality.** Project Manager and Team Leader (\$253,000)
- 2010-2011 Clean Rivers Program, Surface Water Quality Monitoring. **Houston-Galveston Area Council.** Field Manger and Quality Assurance Officer (\$59,600)
- 2010-2011 Baseline Monitoring at Springwoods Subdivision. **Harris County Flood Control District.** Project Manager (\$24,226)
- 2010-2011 Time of Travel Study at Mason Park. **Harris County Flood Control District.** Project Manager (\$17,645)
- 2010 National Coastal Condition Assessment, Texas. **Texas Commission on Environmental Quality.** Project Manager and Team Leader (\$244,000)
- 2009-2010 Total Maximum Daily Load Study, Armand Bayou. **Texas Commission on Environmental Quality.** Project Manager (\$82,389)

## PUBLICATIONS

### In Prep

- Oakley, J.W.**, A. M. Lawing, G. J. Guillen, A.R. Armitage, and F. Gelwick. (in prep). COASTAL HEALTH INDEX FOR THE NORTHERN GULF OF MEXICO. TBD.
- Oakley, J.W.**, A. M. Lawing, G. J. Guillen, A.R. Armitage, and F. Gelwick. (in prep). USING STAKEHOLDER VALUES TO INFORM DIFFERENTIAL WEIGHTING OF THE COASTAL HEALTH INDEX. TBD.

### In Print

- Oakley, J.W.** and G. J. Guillen. 2019. IMPACT OF HURRICANE HARVEY ON GALVESTON BAY SALTMARSH NEKTON COMMUNITIES. Estuaries and Coasts. DOI: 10.1007/s12237-019-00581-7
- Oakley, J.W.**, A. M. Lawing, G. J. Guillen, and F. Gelwick. 2018. DEFINING ECOLOGICALLY, GEOGRAPHICALLY, AND POLITICALLY COHERENT BOUNDARIES FOR THE NORTHERN GULF OF MEXICO COASTAL REGION: FACILITATING ECOSYSTEM-BASED MANAGEMENT. Ocean and Coastal Management. 154: 1-7. DOI: 10.1016/j.ocecoaman.2017.12.019

**Oakley, J.W.**, J. Simons, G.W. Stunz. 2014. SPATIAL AND HABITAT-MEDIATED FOOD WEB DYNAMICS IN AN OYSTER DOMINATED ESTUARY. *Journal of Shellfish Research* 33: 841-855  
DOI: 10.2983/035.033.0319

### TECHNICAL REPORTS

**Oakley, J.W.**, M.E. Omar, and G. Guillen. 2020. CHARACTERIZATION OF THE INFLUENCE OF FRESHWATER INFLOW ON TRINITY RIVER DELTA BIOINDICATORS. EIH Report 20-001, 57 pp.

Fazioli, K., G. Guillen, and **J.W. Oakley**. 2018. DRAFT TECHNICAL CONSULTATION FOR COMPLIANCE WITH THE MARINE MAMMAL PROTECTION ACT IN SUPPORT OF THE COASTAL TEXAS PROTECTION AND RESTORATION STUDY: Final Report. Environmental Institute of Houston. EIH Final Report #18-003. Submitted to the Texas General Land Office. Houston, Texas. 57 pp.

USACE and TGLO. October 2018. COASTAL TEXAS PROTECTION AND RESTORATION FEASIBILITY STUDY: DRAFT INTEGRATED FEASIBILITY REPORT AND ENVIRONMENTAL IMPACT STATEMENT. USACE Galveston District and Texas General Land Office. 442 pp. **Co-Preparer** of the Marine Mammal Protection Act Section.

**Oakley, J.W.**, M. Gordon, and G. Guillen. 2018. LITTLE WHITE OAK BAYOU AT TIMBLE RD. BIOLOGICAL MONITORING SUMMARY PACKET. EIH Report 18-002, 27 pp.

**Oakley, J.W.**, M. Gordon, and G. Guillen. 2017. MILL CREEK AT FM 149 BIOLOGICAL MONITORING SUMMARY PACKET. Final Report to Houston-Galveston Area Council. EIH Report 17-005, 46 pp.

**Oakley, J.W.**, M. Gordon, and G. Guillen. 2017. BEAVER CREEK AT FM 2326 BIOLOGICAL MONITORING SUMMARY PACKET. Final Report to Houston-Galveston Area Council. EIH Report 17-004, 46 pp.

**Oakley, J.W.**, M. Gordon, and G. Guillen. 2017. WICHITA RIVER AT FM 810 BIOLOGICAL MONITORING SUMMARY PACKET. Final Report to Houston-Galveston Area Council. EIH Report 17-003, 49 pp.

Guillen, G., A. Gordon, **J.W. Oakley**, and M. Mokrech. 2016. TRINITY RIVER DELTA AND UPPER TRINITY BAY RANGIA POPULATION ASSESSMENT. Final Report submitted to the National Wildlife Federation. EIH Technical Report 16-001, 58 pp.

Guillen, G., J. Robertson, **J.W. Oakley**, and S. Curtis. 2015. DISTRIBUTION, ABUNDANCE, AND HABITAT USE OF THE SALTMARSH TOPMINNOW (*FUNDULUS JENKINSI*). Final Report to Texas Parks and Wildlife Department. EIH Technical Report 15-002, 61 pp.

Guillen, G., A.M. Moss, **J.W. Oakley**, R. George, B. Alleman, M. Mokrech and D. Bush. 2015. POPULATION SURVEY OF THE TEXAS DIAMONDBACK TERRAPIN IN SAN ANTONIO BAY, MATAGORDA BAY, AND SABINE LAKE. Final Report to Texas Parks and Wildlife Department and United States Fish and Wildlife Service. EIH Report 15-001. 194 pp.

Guillen, G., M. Mokrech, **J.W. Oakley**, and A. Moss. 2014. ARMAND BAYOU WATER QUALITY IMPROVEMENT GRANT: UHCL CREATED STORMWATER TREATMENT WETLAND. Final Report to Galveston Bay and Estuary Program. EIH Report 13-003, 137 pp.

Guillen, G., A. Moss, **J.W. Oakley**, and S. Curtis. 2014. CEDAR BAYOU ABOVE TIDAL AT FM 1942 (TCEQ 11118) BIOLOGICAL MONITORING SUMMARY PACKET. Final Report to Houston-Galveston Area Council. EIH Report, 48 pp.

Guillen, G., A. Moss, **J.W. Oakley**, and S. Curtis. 2014. CEDAR BAYOU ABOVE TIDAL AT US 90 (TCEQ 11120) BIOLOGICAL MONITORING SUMMARY PACKET. Final Report to Houston-Galveston Area Council. EIH Report, 45 pp.

- Guillen, G., **J.W. Oakley**, M. Mokrech. 2013. BASELINE AQUATIC COMMUNITY SURVEY AT RESTORATION STREAM SEGMENTS (P138-00-00, T101-0-00, L100-00-00) Final Report submitted to Harris County Flood Control District, Houston, TX. EIH Technical Report 13-001:156.
- Guillen, G., **J.W. Oakley**, A. Moss, M. Shepard. 2013. AQUATIC LIFE MONITORING STUDY. Final report to Houston-Galveston Area Council. EIH Report 13-002, 66 pp.
- Guillen, G., A. Moss, and **J.W. Oakley**. 2013. CEDAR BAYOU ABOVE TIDAL AT FM 1942 (TCEQ 11118) BIOLOGICAL MONITORING SUMMARY PACKET. Final Report to Houston-Galveston Area Council. EIH Report, 45 pp.
- Guillen, G., A. Moss, and **J.W. Oakley**. 2013. CEDAR BAYOU ABOVE TIDAL AT US 90 (TCEQ 11120) BIOLOGICAL MONITORING SUMMARY PACKET. Final Report to Houston-Galveston Area Council. EIH Report, 42 pp.
- Guillen, G. and **J.W. Oakley**. 2013. BYCATCH MORTALITY AND CRITICAL LIFE HISTORY PARAMETERS OF THE TEXAS DIAMONDBACK TERRAPIN. EIH Report 13-004, 151 pp.
- Guillen, G. and **J.W. Oakley**. 2013. RESPONSE OF AQUATIC COMMUNITIES IN URBAN AREAS OF HARRIS COUNTY TO STREAM SUBSTRATE: 2007-2010. Final Report to Harris County Flood Control District. EIH Report 13-005, 153 pp.
- Guillen, G. and **J.W. Oakley**, and M. Mokrech. 2013. BASELINE AQUATIC COMMUNITY SURVEY AT RESTORATION STREAM SEGMENTS (P138-00-00, T101-0-00, L100-00-00). Final Report to Harris County Flood Control District. EIH Report 13-001, 156 pp.
- Guillen, G., **J.W. Oakley**, M. Shepard, and K. Vale. 2012. SEDIMENTATION STUDY OF DICKINSON BAYOU TIDAL (SEGMENT 1103). Final Report to Texas Commission on Environmental Quality. EIH Report 12-003, 103 pp.
- Guillen, G., M. Mokrech, **J.W. Oakley**, M. Shepard, and K. Vale. 2012. TIME OF TRAVEL STUDY AT MASON PARK. Final Report to Harris County Flood Control District. EIH Report 12-002, 42 pp.
- Guillen, G., M. Mokrech, **J.W. Oakley**, M. Shepard, K. Vale, and A. Moss. 2012. HARRIS COUNTY TEXAS COMPREHENSIVE TURBIDITY STUDY. Final Report to Harris County Flood Control District. EIH Report 12-001, 138 pp.
- Guillen, G., **J.W. Oakley**, M. Shepard, A. Moss, and K. Vale. 2012. SPRINGWOODS SUBDIVISION STUDY. Final Report to Harris County Flood Control District. EIH Report 12-003a, 80 pp.
- Guillen, G., E. Clarkson, and **J.W. Oakley**. 2011. MID-TEXAS COAST COMPLEX TEXAS DIAMONDBACK TERRAPIN (*MALACLEMYS TERRAPIN LITTORALIS*) ECOLOGY PROJECT. Final Report to United States Fish and Wildlife Service, Region 2. EIH Report 12-004, 33 pp.
- Guillen, G., M. Mokrech, **J. Wrast**. 2011. TEXAS NUTRIENT CRITERIA DEVELOPMENT SUPPORT PROJECT. Technical Report submitted to the Texas Commission on Environmental Quality. EIH Report 11-001, 679 pp.
- Guillen, G. and **J. Wrast**. 2011. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT: SAN BERNARD RIVER ABOVE TIDAL (SEGMENT 1302) COMPREHENSIVE RUAA, GUM TREE BRANCH (1302A) BASIC RUAA, AND WEST BERNARD CREEK (1302B) BASIC RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 11-002, 57 pp.
- Guillen, G., **J. Wrast**. 2010. FISHES AS SOURCES OF E. COLI BACTERIA IN WARM WATER STREAMS. Technical Report Submitted to Texas AgriLife Research, Texas Water Resources Institute. EIH Report 10-015, 81 pp.
- Guillen, G., R. Brinkmeyer, and **J. Wrast**. 2010. INFLUENCE OF THE WAUGH STREET BAT COLONY ON INDICATOR BACTERIA LEVELS IN BUFFALO BAYOU. Technical Report Submitted to Texas AgriLife Research, Texas Water Resources Institute. EIH Report 10-016, 48 pp.

- Guillen, G., H. Biggs, and **J. Wrast**. 2010. DEVELOPMENT OF A GIS BASED HYDROLOGICAL MODEL AND DATABASE FOR THE GREENS BAYOU WETLAND MITIGATION BANK: SUBDIVISION A, PHASE 1. Final Report to Harris County Soil and Water Conservation District Board of Directors. UHCL-EIH Technical Report 1-10, 125 pp.
- Guillen, G. and **J. Wrast**. 2010. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT; BRUSHY CREEK (SEGMENT 1244) COMPREHENSIVE RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 10-006, 31 pp.
- Guillen, G. and **J. Wrast**. 2010. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT; BULLHEAD BAYOU (SEGMENT 1245C) AND UNNAMED TRIBUTARY OF BULLHEAD BAYOU (SEGMENT 1245D) BASIC RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 10-004, 24 pp.
- Guillen, G. and **J. Wrast**. 2010. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT; CANEY CREEK ABOVE TIDAL (SEGMENT 1305) COMPREHENSIVE RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 10-003, 31 pp.
- Guillen, G. and **J. Wrast**. 2010. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT; CEDAR CREEK (SEGMENT 1209G) BASIC RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 10-007, 21 pp.
- Guillen, G. and **J. Wrast**. 2010. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT; COUNTRY CLUB BRANCH (SEGMENT 1209D) BASIC RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 10-008, 20 pp.
- Guillen, G. and **J. Wrast**. 2010. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT; DUCK CREEK (SEGMENT 1209H) BASIC RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 10-009, 22 pp.
- Guillen, G. and **J. Wrast**. 2010. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT; GIBBONS CREEK (SEGMENT 1209I) BASIC RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 10-010, 22 pp.
- Guillen, G. and **J. Wrast**. 2010. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT; NAVASOTA RIVER BELOW LAKE LIMESTONE (SEGMENT 1209) COMPREHENSIVE RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 10-005, 33 pp.
- Guillen, G. and **J. Wrast**. 2010. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT; SHEPHERD CREEK (SEGMENT 1209J) BASIC RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 10-011, 21 pp.
- Guillen, G. and **J. Wrast**. 2010. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT; STEELE CREEK (SEGMENT 1209K) BASIC RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 10-012, 23 pp.
- Guillen, G. and **J. Wrast**. 2010. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT; WICKSON CREEK (SEGMENT 1209E) BASIC RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 10-013, 23 pp.
- Guillen, G. and **J. Wrast**. 2010. COMPREHENSIVE RECREATIONAL USE ATTAINABILITY ANALYSIS OF DICKINSON BAYOU ABOVE TIDAL (SEGMENT 1104). Final Report to the Texas Commission on Environmental Quality. EIH Report 10-001, 30 pp.
- Wrast, J.** and G. Guillen. 2010. COMPREHENSIVE RECREATIONAL USE ATTAINABILITY ANALYSIS OF ARMAND BAYOU ABOVE TIDAL (SEGMENT 1113A). Final Report to the Texas Commission on Environmental Quality. EIH Report 10-002, 26 pp.

- Guillen, G. and **J. Wrast**. 2009. BASIC RECREATIONAL USE ATTAINABILITY ANALYSIS OF ARMAND BAYOU ABOVE TIDAL (SEGMENT 1113A). Final Report to the Texas Commission on Environmental Quality. EIH Report 09-001, 18 pp.
- Guillen, G. and **J. Wrast**. 2009. CENTRAL AND SOUTHEAST TEXAS RECREATIONAL USE ATTAINABILITY ANALYSES PROJECT; UPPER OYSTER CREEK (SEGMENT 1245) COMPREHENSIVE RUAA. Final Report to the Texas Commission on Environmental Quality. EIH Report 09-002, 44 pp.
- Guillen, G., **J. Wrast**, and D. Ramirez. 2009. TRINITY RIVER BASIN BBEST INSTREAM FLOW STUDY: ECOLOGICAL OVERLAY FOR THE TRINITY RIVER FOR THE SUPPORT OF DEVELOPMENT OF INSTREAM FLOW RECOMMENDATIONS FOR ENVIRONMENTAL FLOWS. Final Report to Trinity River Authority and Texas Water Development Board. EIH Report 09- 003, 178 pp.
- Reese, M., **J. Wrast**, G. Stunz, and J. Simons. 2008. CHARACTERIZING OYSTER REEFS IN LAVACA BAY. Final Report to the Texas Parks and Wildlife Department, State Wildlife Grants Program, Federal Aid Grant No. T-9, 31pp.

### ABSTRACTS, PROCEEDINGS, AND CONFERENCE PUBLICATION/PRESENTATIONS

- Oakley, J.W.**, F. Gelwick, A. M. Lawing, A.R. Armitage, and G. J. Guillen. 2020. ECOSYSTEM HEALTH ASSESSMENT FOR THE COASTAL GULF OF MEXICO: OPPORTUNITIES FOR DOWNSCALING TO GALVESTON BAY. State of the Bay Symposium. (Oral) Galveston, TX
- Mays, K., S. Curtis, G. McCoy, D.A. Hendrickson, A.E. Cohen, M. Casarez, G. Guillen, **J.W. Oakley**, and J. Hansen. 2020. PRELIMINARY RESULTS OF AMERICAN EEL SAMPLING EFFORTS IN GULF OF MEXICO DRAINAGES OF TEXAS. Annual Meeting of the Southern Division of the American Fisheries Society, Little Rock, AR. Poster.
- Omar, M.E., **J.W. Oakley**, and G.J. Guillen. 2020. UNDERSTANDING ECOLOGY OF ATLANTIC RANGIA IN GALVESTON BAY: DECIPHERING THE ROLE OF FRESHWATER INFLOWS. Galveston Bay Estuary Program, State of the Bay Symposium, Galveston, TX. Presentation.
- Oakley, J.W.**, F. Gelwick, A. M. Lawing, A.R. Armitage, and G. J. Guillen. 2019. DEVELOPING A COASTAL HEALTH INDEX FOR THE NORTHERN GULF OF MEXICO. National Water Quality Monitoring Conference. (Oral) Denver, CO
- Gordon, M., **J.W. Oakley**, and G.J. Guillen. 2019. STAYING CLOSE TO HOME: SEASONALITY AND SITE FIDELITY OF AN INSULAR POPULATION OF TEXAS DIAMONDBACK TERRAPINS AS DETERMINED BY ACOUSTIC TELEMETRY. 8th Triennial Meeting of the Diamondback Terrapin Working Group, (Oral) Wilmington, NC.
- Hansen, J., **J.W. Oakley**, S. Curtis, and G. Guillen. 2019. THE HUNT FOR THE ELUSIVE AMERICAN EEL IN TEXAS: A STORY ABOUT EELS AND BLUE CRAB. Annual Meeting of the Southern Division of the American Fisheries Society, (Oral) Galveston, TX.
- Oakley, J.W.**, F. Gelwick, A.M. Lawing, A.R. Armitage, and G.J. Guillen. 2019. COASTAL HEALTH INDEX FOR THE NORTHERN GULF OF MEXICO: HOW FISHERIES CONTRIBUTE TO MEASURING ECOSYSTEM HEALTH. Annual Meeting of the Southern Division of the American Fisheries Society, (Oral) Galveston, TX.
- Omar, M.E., **J.W. Oakley**, and G.J. Guillen. 2019. UNDERSTANDING ECOLOGY OF ATLANTIC RANGIA: TOWARD BETTER MANAGEMENT OF FRESHWATER INFLOWS. Coastal and Estuarine Research Federation, (Poster) Mobile, AL.
- Scanes, C., **J.W. Oakley**, and G. Guillen. 2019. USING NATIONAL SURVEYS TO EVALUATE THE CONDITION OF TEXAS STATE-WIDE FISH COMMUNITIES. Annual Meeting of the Southern Division of the American Fisheries Society, (Oral) Galveston, TX.

- Oakley, J.W.**, C. Scanes, M. Gordon, G. Guillen. 2018. RECOVERY OF GALVESTON BAY SALTMARSH NEKTON COMMUNITITES AFTER HURRICANE HARVEY. Texas Chapter of the American Fisheries Society, (Poster) College Station, TX.
- Swanson, T., **J.W. Oakley**, and G. Guillen. 2018. Exploring impacts of physical stressors on fish diversity and abundance in the Brazos River Estuary, Texas. Texas Chapter of the American Fisheries Society, (Poster) College Station, TX.
- Guillen, G., S. Scanes, M. Gordon, T. Swanson, and **J.W. Oakley**. 2018. THE INFLUENCE OF FRESHWATER INFLOW ON THE ESTUARINE NEKTON OF A TIDAL RIVER. Annual Meeting of the Texas Chapter of the American Fisheries Society, (Oral) College Station, TX.
- Hansen, J., **J.W. Oakley**, S. Curtis, and G. Guillen. 2018. HUNTING FOR THE ELUSIVE AMERICAN EEL ALONG THE TEXAS COAST. Biennial Gulf Estuary Research Society Meeting, (Poster) Galveston, TX.
- Oakley, J.W.**, M. Gordon, and G. Guillen. 2016. NATIONAL AQUATIC RESOURCES SURVEYS: APPLICATIONS FOR WETLAND CONDITION MONITORING AND ASSESSMENT IN TEXAS. Society of Wetland Scientists Conference, (Oral) Corpus Christi, TX.
- Curtis, S., **J.W. Oakley**, M. Gordon, and G. Guillen. 2016. DEVELOPMENT OF METHODOLOGY TO VALIDATE FRESHWATER NEEDS OF THE BRAZOS RIVER ESTUARY. Texas Chapter of the American Fisheries Society, (Oral) Kerrville, TX.
- Guillen, G., M. Gordon, S. Curtis, and **J.W. Oakley**. 2016. THE INFLUENCE OF FRESHWATER INFLOW ON WATER QUALITY & NEKTON COMMUNITIES OF THE BRAZOS RIVER ESTUARY, TEXAS. In Restore America's Estuaries, (Poster) New Orleans, LA.
- Guillen, G., **J.W. Oakley**, N. Johns, and M. Gordon. 2016. INFLUENCE OF FRESHWATER INFLOW ON THE OCCURRENCE OF WATER CELERY AND THE ABUNDANCE AND HEALTH OF ATLANTIC RANGIA IN THE TRINITY RIVER DELTA, GALVESTON BAY, TEXAS. In Restore America's Estuaries, (Poster) New Orleans, LA.
- Oakley, J.W.**, M. Lawing, F. Gelwick, and G. Guillen. 2016. DEVELOPING A COASTAL HEALTH INDEX FOR TEXAS WATERS: MOVING TOWARDS MEANINGFUL ECOSYSTEM BASED MANAGEMENT. National Monitoring Conference. (Oral) Tampa, FL.
- Robertson, J., S. Curtis, **J.W. Oakley**, and G. Guillen. 2016. GROWTH AND REPRODUCTION OF THE SALTMARSH TOPMINNOW (FUNDULUS JENKINSI). Texas Chapter of the American Fisheries Society, (Oral) Kerrville, TX.
- Robertson, J., S. Curtis, **J.W. Oakley**, and G. Guillen. 2016. AN OVERVIEW OF THE POPULATION AND HABITAT CHARACTERISTICS OF THE SALTMARSH TOPMINNOW (FUNDULUS JENKINSI) IN GALVESTON BAY AND SABINE LAKE. State of the Bay Symposium, (Oral) Galveston, TX.
- Curtis, S., **J.W. Oakley**, M. Gordon, and G. Guillen. 2015. EFFECTS OF FRESHWATER INFLOW AND TIDES ON WATER QUALITY OF THE BRAZOS RIVER ESTUARY. Texas Bays & Estuaries Meeting, (Poster) Port Aransas, TX.
- Curtis, S., **J.W. Oakley**, M. Gordon, and G. Guillen. 2015. INFLUENCE OF INSTREAM FLOW AND TIDES ON THE WATER QUALITY OF THE BRAZOS RIVER ESTUARY, TEXAS. American Fisheries Society, (Poster) Portland, OR.
- Robertson, J., S. Curtis, **J.W. Oakley**, and G. Guillen. 2015. DISTRIBUTION, ABUNDANCE, AND HABITAT USE OF THE SALTMARSH TOPMINNOW (FUNDULUS JENKINSI). Texas Bays and Estuaries Meeting, (Oral) Port Aransas, TX.
- Robertson, J., **J.W. Oakley**, S. Curtis, and G. Guillen. 2015. DISTRIBUTION, ABUNDANCE, AND HABITAT USE OF THE SALTMARSH TOPMINNOW (FUNDULUS JENKINSI). Texas Academy of Science, San Antonio, Texas and Texas Chapter of the American Fisheries Society, (Poster) Tyler, TX

- Lane, M., **J.W. Oakley**, G. Guillen, and S. Curtis. 2014. PRELIMINARY ANALYSIS OF SPATIAL PATTERNS IN TEXAS LOTIC FISH COMMUNITIES. Joint Annual Meeting of the Oklahoma & Texas Chapters American Fisheries Society, (Poster) Pottsboro, TX.
- Oakley, J.W.** 2013. NATIONAL RIVERS AND STREAMS ASSESSMENT. 2013-2014. 27th Annual SWQM Workshop, (Oral) Austin, TX.
- Oakley, J.W.** 2012. ARMAND BAYOU WATER QUALITY IMPROVEMENT GRANT. CWI Workshop: Local 319 Grant Projects at Houston-Galveston Area Council, (Oral) Houston, TX.
- Oakley, J.W.**, G. Guillen, M. Shepard, and K. Vale. 2012. TEXAS WETLAND CONDITION ASSESSMENT. Restore America's Estuaries, (Poster) Tampa, FL.
- Wrast, J.**, G. Guillen, M. Mokrech, and E. McCarthy. 2011. DEVELOPMENT OF A HABITAT SUITABILITY INDEX FOR THE TEXAS DIAMONDBACK TERRAPIN, *MALACLEMYS TERRAPIN LITTORALIS*. In Restore America's Estuaries, (Poster) Galveston, TX.
- Snoza, R., G. Guillen, **J. Wrast**, and M. Shepard. 2011. TURBIDITY IN HARRIS COUNTY WATERSHEDS. EPA Region 6 MS4 Conference, (Oral) San Antonio, TX.
- Guillen, G., **J. Wrast**, D. Ramirez, and P. Lokanath. 2010. GEOGRAPHIC DISTRIBUTION AND HISTORICAL TRENDS OF FISH SPECIES WITHIN THE TRINITY RIVER BASIN, TEXAS. Texas Chapter, American Fisheries Society, (Poster) Athens, TX.
- Guillen, G., **J. Wrast**, and D. Ramirez. 2010. CONSTRUCTION OF RIVER FISH COMMUNITY GUILDS USING LIFE HISTORY CHARACTERISTICS AND MULTIVARIATE CLASSIFICATION METHODS: CASE STUDY TRINITY RIVER, TEXAS. In Texas Chapter of the American Fisheries Society, (Poster) Athens, TX.
- Wrast, J. L.**, G. Guillen, M. Mokrech, and E. McCarthy. 2010. DEVELOPMENT OF A HABITAT SUITABILITY INDEX FOR THE TEXAS DIAMONDBACK TERRAPIN, *MALACLEMYS TERRAPIN LITTORALIS*. Restore America's Estuaries, (Poster) Galveston TX.
- Guillen, G., D. Crossen, **J. Wrast**, and G. Sutton. 2009. NUTRIENT DYNAMICS IN GALVESTON BAY AND POTENTIAL CYCLING WITHIN THE ECOSYSTEM AS IDENTIFIED BY RECENT STABLE ISOTOPE STUDIES AND HISTORICAL DATA. Gulf of Mexico Alliance Nutrient Criteria Research Framework Workshop, (Oral) New Orleans, LA.
- Ramirez, D., M. Franks, **J. Wrast**, and G. Guillen. 2009. FISH AS POSSIBLE SOURCES OF INDICATOR BACTERIA IN URBAN STREAMS. Texas Chapter of the American Fisheries Society Meeting, (Oral) Fort Worth, TX.
- Guillen, G., **J. Wrast**, and D. Ramirez. 2008. FACTORS AFFECTING WATER QUALITY IN LAKE MADELINE (GALVESTON, TEXAS): IMPLICATIONS FOR DESIGN OF WATERFRONT COMMUNITIES. Basics of the Basin Research Symposium, (Oral) New Orleans, LA.
- Wrast, J.**, G.W. Stunz, and J. Simons. 2008. SPATIOTEMPORAL AND HABITAT MEDIATED FOOD WEB DYNAMICS IN LAVACA BAY, TEXAS. Texas Academy of Science, (Oral) Corpus Christi, TX
- Wrast, J.**, G.W. Stunz, and J. Simons. 2007. SPATIAL AND TEMPORAL FOOD WEB ANALYSIS OF POTENTIAL, ESSENTIAL FISH HABITAT TYPES IN LAVACA BAY, TEXAS. (Oral) Texas Academy of Science, Waco, TX
- Wrast, J.**, G.W. Stunz, and J. Simons. 2007. SPATIAL and TEMPORAL VARIABILITY in OYSTER REEF FOOD WEB STRUCTURE COMPARED to OTHER ESTUARINE HABITATS. Estuarine Research Federation, (Poster) Providence, RI

Full-text publications, reports, and presentations available for viewing at:  
<https://www.uhcl.edu/environmental-institute/research/publications/>

## CERTIFICATIONS AND LICENSES

- Operator of Uninspected Passenger Vessel License, United States Coast Guard, 2011-Present  
Over 3,500 hrs. on-the-water in offshore, nearshore, and inland waters. (Vessels 14' – 50')  
5 years' experience operating vessels during dolphin photo identification and biopsy darting.
- Wetland Delineation Certification, 2010
- SCUBA Certified, 2006 (Over 50 dives)
- Certified in First Aid, CPR, and Oxygen Administration 2010 - Present
- Certified in Wilderness First Aid, National Outdoor Leadership School, 2016

## SYNERGISTIC ACTIVITIES

- Curriculum Development for Professional Development Workshop: SURFACE WATER QUALITY MONITORING. Lead facilitator <https://www.uhcl.edu/environmental-institute/outreach/continuing-education/surface-water-quality-monitoring-training>
- National Trainer for the National Coastal Condition Assessment under contract with the EPA. Train state agency staff and contractors of sampling techniques specific to the assessment and evaluate their level of understanding for approval to conduct sampling. (2015 and 2020)
- Reviewer for: Environmental Challenges, ISSN: 2667-0100 (2021)
- Reviewer for: Communications Biology, ISSN: 2399-3642 (2020)
- Reviewer for: Estuaries and Coasts, ISSN: 1559-2723 (2018)
- Master's Thesis Graduate Committee Member, University of Houston-Clear Lake, College of Science and Engineering.
  - 2020-present Story Leshner – Habitat Associations of the Dwarf Seahorse in Texas
  - 2020-present Kaylei Chau – The Use of Floating Wetlands to Provide Tertiary Treatment of Stormwater in Retention Basins.
  - 2018-2020 Mahmoud E. Omar - Modelling growth of Atlantic Rangia, *Rangia cuneata*, in response to freshwater inflow (Trinity River Delta, Galveston Bay, Texas)
- Undergraduate Practicum Project Mentor, University of Houston-Clear Lake, College of Science and Engineering.

2021	Victoria Vourganas	Graduated summer 2021
2019	Angelika Ortiz	Graduated fall 2019
2018	Randon Pierson	Graduated fall 2019
2018	Samantha Salas	Graduated fall 2018
2018	Nakailla Kirkpatrick	Graduated spring 2018
2017	Kaylei Chau	Graduated spring 2017
- Publicity and Exhibits Committee Chair, Texas Chapter of the American Fisheries Society (2013-2015)

## FELLOWSHIPS AND SCHOLARSHIPS

- Texas Chapter of the American Fisheries Society Scholarship, 2015 (\$1,500)
- Marine Biology Interdisciplinary Program Fellowship, 2014 (\$8,000)
- Dinah Bowman Endowed Scholarship, 2004-2008 (\$3,000/year)
- Dodson Memorial Scholarship, 2007 (\$500)
- Texas A&M Graduate Studies Scholarship, 2007 (\$406.50)
- Student Research Grant: Reef Fish Assemblage of the Sian Ka'an Biosphere Reserve, Quintana Roo, Mexico, 2006, (\$500)
- University Honors Scholarship, 2005-2006 (\$1,000)

## SELECTED LECTURE/TEACHING EXPERIENCE

**University of Houston-Clear Lake:** Marine Biology (BIOL 3311) Adjunct Professor (Fall 2021)

**University of Houston-Clear Lake:** Conservation Biology (BIOL 5534) Adjunct Professor (Spring 2021)

**Liberty County Master Naturalists:** Aquatic Systems Topic Guest Presenter. "Aquatic Systems: Freshwater Wetlands and Swamps" (September 14, 2019 and March 28, 2020)

**University of Houston-Clear Lake:** Environmental Institute of Houston, Surface Water Quality and Hydrology Monitoring Workshop Trainer/Professional Development Course Instructor (April 23-26, 2018, March 18-21, 2019, and March 9-12, 2020)

**Houston-Galveston Area Council:** Clean Rivers Program, Surface Water Quality and Hydrology Monitoring Training Trainer/Professional Development Course Instructor (February 27, 2020)

**University of Houston-Clear Lake:** Guest Lecture for Biology of Fishes class: "Zoogeography" (November 14, 2017)

**University of Houston-Clear Lake:** Guest Lecture for Research Methods class: "PowerPoint Pitfalls" and "Aquaculture" (March 1, 2017)

**University of Houston-Clear Lake:** Environmental Institute of Houston, Surface Water Quality and Hydrology Monitoring Workshop Trainer/Professional Development Course Instructor (March 14-17, 2016)

**Texas Envirothon:** Aquatics Lecturer, Test Writer, and Grader. University of Houston-Clear Lake (April, 2016 and April, 1, 2015)

**University of Houston-Clear Lake:** Guest Lecture for Ichthyology class: "Modern Bony Fishes" (October, 20 2015)

**Environmental Protection Agency:** National Coastal Condition Assessment, Region 2 (Newark, NJ) Training: Fish collection and processing, and data collection trainer and presenter. (May 12-14, 2015)

**Environmental Protection Agency:** National Coastal Condition Assessment, Region 6 (Grande Isle, LA) Training: Fish collection and processing trainer and presenter. (April 28-30, 2015)

**Houston-Galveston Area Council:** Clean Waters Initiative, In Stream Water Quality monitoring and Data collection. Oral Presentation: "Federal and State In-Stream Water Quality Monitoring" (April 1, 2015)

**University of Houston-Clear Lake:** Guest Lecture for Wetland Ecology class: "National Wetland Condition Assessment" (February 26, 2013)