

ALAINA O. GRACE, M.S.
Research Associate, The Water Institute of the Gulf

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Baton Rouge, LA 70825

EDUCATION

M.S., Biology
University of Louisiana at Lafayette, 2004

B.S., Biology, Magna Cum Laude
Nicholls State University (Minor in Chemistry), 2001

Interests:

Technical Coordination and Management, Coastal Restoration Planning, Coastal Ecology

PROFESSIONAL EXPERIENCE

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| The Water Institute of the Gulf <ul style="list-style-type: none">• <i>Research Associate</i> | 2012 – Present |
| Brown and Caldwell <ul style="list-style-type: none">• <i>Senior Scientist</i> | 2010 - 2012 |
| Louisiana State University <ul style="list-style-type: none">• <i>Research Associate</i> – School of the Coast and Environment | 2005 - 2010 |
| Johnson Controls <ul style="list-style-type: none">• <i>General Biologist (contractor)</i> – USGS – National Wetlands Research Center | 2003 - 2005 |

SUMMARY OF PROFESSIONAL EXPERIENCE

Alaina has 10 years of experience facilitating, coordinating, and managing large-scale efforts focused on coastal Louisiana restoration science and planning.

Currently, she is a Research Associate with the Water Institute where she coordinates and provides project management to several task orders, including a primary focus on the 2017 Coastal Master Plan. Since joining the Institute she has worked closely with the PIs on the following tasks: Mississippi River Hydrodynamic and Delta Management (MRHDM) Study, data management, model improvements, peer review of model reports, and development of a special issue publication of the modeling effort for the 2012 Coastal Master Plan. She has also assisted with the 9-member Science and Engineering Advisory Council.

Prior to joining the Water Institute, she worked as a Senior Scientist with Brown and Caldwell, where she focused primarily on Louisiana's 2012 Coastal Master Plan. She served as a critical member of the master plan team and key coordinator/facilitator of 60+ member systems-modeling team. She was the lead consultant in coordinating a 10-member science and engineering board and a four-member technical advisory committee. She provided input and assistance for the overall approach, decision framework, and environmental uncertainties. She co-led the adaptive management task and developed / co-authored several of the master plan

technical appendices. She has also managed and coordinated an external peer review of eight technical modeling reports.

From 2005 – 2010, Alaina was a Research Associate at Louisiana State University – School of the Coast and Environment. Here, she served as technical project coordinator for the Coastal Louisiana Ecosystem Assessment and Restoration (CLEAR) Program, which was a multi-year, multi-agency coastal modeling effort funded by the Louisiana Department of Natural Resources. She helped organize and schedule large multi-disciplinary groups, including the Science and Engineering Review Team for Louisiana’s 2007 Coastal Master Plan, conceptual ecological modeling teams, technical review panels for the Coastal Impact Assistance Program, and the Coastal Emergency Risk Assessment team. She assisted with an optimized data collection plan in support of ecosystem forecasting, and provided technical assistance in support of the Louisiana Coastal Area Science and Technology Program. Alaina assisted the Louisiana Recovery Authority in developing restoration scenarios for LA Speaks., created and maintained an information/data request and transfer system through the CLEAR Office to effectively link the modeling community with relevant state and federal agencies, and compiled and edited technical documents and reports. She helped create a suite of conceptual ecological models and newsletters and assisted in content management and web design for the CLEAR Program, LSU Hurricane Center, and the Coastal Marine Institute. Lastly, she managed numerous subcontracts and professional agreements, and helped coordinate the formulation of the Coastal Sustainability Studio at Louisiana State University.

PUBLICATIONS / TECHNICAL REPORTS

Meselhe, E., Reed, D. J., and A.O. Grace. 2015. 2017 Coastal Master Plan: Appendix C: Modeling. Version I. (p. 99). Baton Rouge, Louisiana: Coastal Protection and Restoration Authority.

Peyronnin, N., M. Green, C.P. Richards, A. Owens, D. Reed, J. Chamberlain, D. Groves, W. Rhinehart and K. Belhadjali. 2013. Louisiana’s 2012 Coastal Master Plan: Overview of a science based and publicly informed decision making process. *Journal of Coastal Research* SI 67: 1-15

Rivera-Monroy, V.H., R.D. Delaune, A.B. Owens, J.M. Visser, J.R. White, R.R. Twilley, H. Hernandez-Trejo, and J.A. Benitez. 2011. Removal of Physical Materials from Systems: Loss of Space, Area, and Habitats. In: Wolanski and McLusky (eds.) *Treatise on Estuarine and Coastal Science*, Vol 8, pp. 185–215. Waltham: Academic Press.

Twilley, R.R., B.R. Couvillion, I. Hossain, C. Kaiser, A.B. Owens, G.D. Steyer, and J.M. Visser. 2008. Coastal Louisiana ecosystem assessment and restoration (CLEAR) program: the role of ecosystem forecasting in evaluating restoration planning in the Mississippi River deltaic plain. Pages 29-46 in K. D. McLaughlin, editor. *Mitigating impacts of natural hazards on fishery ecosystems*. American Fisheries Society, Symposium 64, Bethesda, Maryland.

Visser, J.M., C. Kaiser, I. Hossain, B.R. Couvillion, and A.B. Owens. 2008. Forecasting 50-Years of Landscape Change in Coastal Louisiana: No Increased Action & Preliminary Draft Master Plan, Chapter 3. In, R.R. Twilley (ed.), *Coastal Louisiana Ecosystem Assessment & Restoration (CLEAR) Program: A tool to support coastal restoration*. Volume IV. Final Report to Department of Natural Resources, Coastal Restoration Division, Baton Rouge, LA. Contract No. 2512-06-02.

Visser, J.M., C. Kaiser, and A.B. Owens. 2008. Forecasting 50-years of Habitat Switching in Coastal Louisiana: No Increased Action & Preliminary Draft Master Plan, Chapter 4. In, R.R. Twilley (ed.), *Coastal Louisiana Ecosystem Assessment & Restoration (CLEAR) Program: A tool to support coastal restoration*. Volume IV. Final Report to Department of Natural Resources, Coastal Restoration Division, Baton Rouge, LA. Contract No. 2512-06-02.

Nuttle, W.K., F.H. Sklar, A.B. Owens, M. D. Justic, W. Kim, E. Melancon, J. Pahl, D. Reed, K. Rose, M. Schexnayder, G. Steyer, J. Visser and R. Twilley. 2008. Conceptual Ecological Model for River Diversions into Barataria Basin, Louisiana, Chapter 7. In, R.R. Twilley (ed.), Coastal Louisiana Ecosystem Assessment & Restoration (CLEAR) Program: A tool to support coastal restoration. Volume IV. Final Report to Department of Natural Resources, Coastal Restoration Division, Baton Rouge, LA. Contract No. 2512-06-02.

Owens, A.B., C.E. Proffitt, J.B. Grace. 2007. Prescribed fire and cutting as tools for reducing woody plant succession in a created salt marsh. *Wetlands Ecology and Management* 15:405-416.

Steyer, G.D., A.B. Owens, and B.R. Couvillion. 2006. Data Collection Network to Support Ecosystem Forecasting for the Barataria Basin – Mississippi River Domain. In *Coastal Environment and Water Quality* (ed. by Y. J. Xu & V. P. Singh), 431-442. Water Resources Publications, LLC, Highlands Ranch, CO 80163-0026, USA.

Proffitt, C.E., R.L. Chiasson, A.B. Owens, K.R. Edwards, and S.E. Travis. 2005. *Spartina alterniflora* genotype influences facilitation and suppression of high marsh species colonizing an early successional salt marsh. *Journal of Ecology* 93(2): 404-416.

PRESENTATIONS

Owens A.B., M. Green, C. Parsons Richards, D. Reed, N. Snider. Integrated Modeling and Future Ecosystem Scenarios used to inform Louisiana's 2012 Coastal Master Plan. 6th National Conference on Ecosystem Restoration (Restore America's Estuaries), Tampa, FL, October 20-25, 2012.

Owens A.B., R. Del Rio, K. DeMarco, M. Green, C. Parsons Richards, D.J. Reed, N. Snider. Environmental Scenarios Considered in the 2012 Coastal Master Plan Technical Analysis. *State of the Coast: Preparing for a Changing Future*, New Orleans, LA, June 25-27, 2012.

Owens A.B., M. Green, C. Parsons Richards, D.J. Reed, N. Snider. Application of project-effect models in the 2012 Update of Louisiana's Comprehensive Master Plan for a Sustainable Coast. Coastal Estuarine Research Federation, 21st Biennial Conference, Daytona Beach, FL, November 6-10, 2011.

Owens A.B. and N. Snider. An Adaptive Management Framework for Implementing the 2012 Update of Louisiana's Comprehensive Master Plan for a Sustainable Coast. 4th National Conference on Ecosystem Restoration (Restore America's Estuaries), Baltimore, MD, August 1-5, 2011.

Owens A.B., B.R. Couvillion, I. Hossain, C. Kaiser, R.C. Raynie, G.D. Steyer, R.R. Twilley, and J.M. Visser. Coastal Louisiana Ecosystem Assessment & Restoration (CLEAR) Program: Providing Scientific Evaluation for Restoration Management. Coastal Estuarine Research Federation, 20th Biennial Conference, Portland, OR, November 1-5, 2009.

Owens A.B., T.B. Carruthers, W.C. Dennison, R.C. Raynie, D.J. Reed, G.D. Steyer, R.R. Twilley, and J.M. Visser. Using Conceptual Diagrams to Convey Scientific & Restoration Concepts to Stakeholders in Coastal Louisiana. Coastal and Estuarine Research Federation 19th Biennial Conference, Providence, RI, November 4-8, 2007.

Steyer G.D., A.B. Owens (presenter), B.R. Couvillion, and R.R. Twilley. Data Collection to Support Ecosystem Forecasting in the Barataria Basin – Mississippi River Domain. American Institute of Hydrology 25th Anniversary Meeting & International Conference on Challenges In Coastal Hydrology and Water Quality, Baton Rouge, LA, May 21–24, 2006.

Owens A.B. and C.E. Proffitt. Effects of fire and vegetation clipping on survival, regrowth, and recruitment of *Iva frutescens* (marsh elder). Society of Wetland Scientists 24th Annual Meeting, June 8-13, 2003, New Orleans, LA.