John Raymond. Andrews

Professional Summary

April 19, 2024

Business address: The University of Texas at Austin
Bureau of Economic Geology
10100 Burnet Rd., Bldg. 130
Austin, TX 78758
E-mail address: john.andrews@beg.utexas.edu

Professional Preparation

Academic Background

M.A., 36 hours completed, Geography, The University of Texas at Austin, 1998

B.A. Political Science, University of North Carolina at Chapel Hill, 1990

Professional Appointments

Present Position: Research Scientist Associate, Bureau of Economic Geology, The University of Texas at Austin (February 1996 - Present). Tasks include GIS analysis, remotely sensed data processing, and writing programs for processing and visualization of GIS, geophysical, and hydrologic data.

Research Technician, BRON Research (September 1993 - July 1994). Tasks included consulting FEMA Flood Insurance Rate Maps (FIRM), TIGER street data, and digital elevation models (DEM's) to determine location of building structures with respect to 100-year floodplain.

Continuing Education Courses Taken

Intermediate C++ Programming: Austin Community College, Austin, TX, January 1999

Introduction to C++: Austin Community College, Austin, TX, August 1998

UNIX Programming: Austin Community College, Austin, TX, August 1998

Geologic Applications of Remote Sensing: The University of Texas at El Paso, El Paso, TX, July 1998

Remote Sensing & Image Processing: June 1998

Land and Environmental Applications: ERMapper, San Diego, CA, March 1998

Introduction to ArcInfo: ESRI, San Antonio, Texas, April 1996

Areas of Expertise

Areas of Expertise

GIS Software: LAStools, GlobalMapper, Python GIS Modules (gdal, geoPandas, shapely), ERMapper

Platforms: Unix, Linux, Microsoft Windows

Programming Languages: C++, Python 3.x, Javascript, AWK, three.js, HTML, AVR microcontroller programming

Spatial data processing and 3D visualization

Service

Outreach Activities

A 3-D virtual tour of Bureau research: presented at Bob Bullock Texas State History Museum, Austin, Texas, March 12, 2005.

A 3-D virtual tour of Bureau research: presented at Bob Bullock Texas State History Museum, Austin, Texas, February 19, 2005.

A 3-D virtual tour of Bureau research: presented at Science Stuff Science Fair, Austin, Texas, October 16, 2004.

A 3-D virtual tour of Bureau research: presented to participants of Austin Earth Science Week, Austin, Texas, October 2004.

A 3-D virtual tour of Bureau research: presented to participants of Midland Earth Science Week, Midland, Texas, October 2004.

Texas beaches, lidar, and advanced mapping techniques: a 3-D virtual tour: presented at Texas Coastal Issues Conference hosted by General Land Office, Corpus Christi, Texas, March 10-12, 2004.

An introduction to Central Texas geology: a 3-D virtual tour: presented to Texas legislators and their staff, Decision Makers Field Trip, Austin, Texas, February 2004.

3-D laser survey of Victorio Canyon: a 3-D virtual tour: presented at RCRL Annual Meeting, Austin, Texas, October 2003.

Edwards aquifer geography, structure, and flow properties: a 3-D virtual tour: presented at Annual NSPE Conference, San Anotonio, Texas, July 17-18, 2003.

Virtual Reality Lab presentation: presented to class from Lake Travis Elementary School, Austin, Texas, November 26, 2002.

Virtual imaging as an integrated tool in Earth Science research: Virtual reality presentation, Bureau of Economic Geology, Austin, Texas, November 4, 2002.

3-D computer models help us understand geology: Earth Science Week Career Day Fair presentation: presented at The University of Texas at Austin, Pickle Research Campus, Commons Conference Complex, Austin, Texas, October 15, 2002.

3-D visualization of the geotextile-tubes (geotubes) installed along the Gulf of Mexico shoreline of the upper Texas coast: virtual reality demonstration presented at Coastal Coordination Council meeting, The University of Texas at Austin, Bureau of Economic Geology, Austin, Texas, March 5, 2002.

Presentations

Presentations

Analysis of Arctic summer sea ice heights to validate ICESat-2 measurements with airborne lidar technology: presented to public, presented at International Glaciology Society Symposium 2023, Bremerhaven, Germany, June 5-9, 2023.

Salt Domes, the Energy Transition, and a 21st Century Geospatial Database: presented to GCAGS, presented at GeoGulf 2023, Houston, Tex., April 24, 2023.

Applying bathymetric GPR, borehole logging, passive seismic, lidar and structure-from-motion methods in hydrogeologic studies of the Devils River, southwestern Texas: presented at 35th Symposium on the Application of Geophysics to Engineering and Environmental Problems, New Orleans, La., April 4, 2023.

Landscape Alteration from Energy Development in the Greater Big Bend Region of Texas: presented at Soil Science Society of America International Soils Meeting, San Diego, Calif., January 8, 2019.

Rapid response on the Texas coast: acquiring post-Harvey lidar and imagery to assess storm

impact and monitor recovery: presented to Texas Chapter American Shore & Beach Preservation Association, presented at ASBPA Texas Chapter 2018 Symposium, Corpus Christi, Texas, April 24, 2018.

Geomorphic characterization of thermokarst lakes on the North Slope, Alaska: presented to The Geological Society of America, presented at The Geological Society of America South-Central Section 51st Annual Meeting, San Antonio, Tex., March 13, 2017.

Topographic and bathymetric lidar applications in coastal research at the Bureau of Economic Geology: presented to GCAGS, Corpus Christi, Tex., September 18, 2016.

Beach and dune analysis using Chiroptera imaging system, South Padre and Brazos Islands, Texas Gulf Coast: presented at Texas Beach and Dune Forum, Corpus Christi, Tex., September 25, 2015.

An immersive 3D presentation of Permian Basin geology: a web portal prototype for accessing online geologic data: presented to West Texas Geological Society Fall Symposium, Midland, Tex., September 25, 2013.

A custom software approach to visualizing 4D models: an example from the CO2 sequestration study area, lower Tuscaloosa Formation, Cranfield Field, Mississippi: presented at GCAGS Annual Convention, Austin, Tex., October 21, 2012.

A custom software approach to sharing multidimensional geoscience research findings: presented at GCAGS Annual Convention, Houston, Tex., October 15, 2008.

Developing interactive 3-D presentations and publications for multidimensional geoscience research: presented at GCAGS Annual Convention, Lafayette, La., September 25, 2006.

Using airborne lidar to assess coastal environments: presented at Texas Coastal Erosion Technical Conference, Galveston, Texas, September 24-26, 2003.

EarthView Texas: high-tech investigation of geology in your backyard: workshop presented at Cyprus Valley Education Center, Austin, Texas, July 2000.

Activities of a Professional Nature

Professional Societies

American Society for Photogrammetry and Remote Sensing

The Society for Conservation GIS

Publications

Peer Reviewed Journal Articles

Saylam, K., Briseno, A., Averett, A. R., and Andrews, J. R., 2023, Analysis of depths derived by airborne lidar and satellite imaging to support bathymetric mapping efforts with varying environmental conditions: lower Laguna Madre, Gulf of Mexico: Remote Sensing, v. 15, no. 5754, 23 p., http://doi.org/10.3390/rs15245754.

Pierre, J. P., Andrews, J. R., Young, M. H., Sun, A. Y., and Wolaver, B. D., 2020, Projected landscape impacts from oil and gas development scenarios in the Permian Basin, USA: Environmental Management, v. 66, no. 3, p. 348-363, http://doi.org/10.1007/s00267-020-01308-2.

Caudle, T., Paine, J. G., Andrews, J. R., and Saylam, K., 2019, Beach, dune, and nearshore analysis of southern Texas Gulf Coast using Chiroptera LIDAR and imaging system: Journal of Coastal Research, v. 35, no. 2, p. 251-268, http://doi.org/10.2112/JCOASTRES-D-18-00069.1.

Pierre, J. P., Wolaver, B. D., Labay, B. J., LaDuc, T. J., Duran, C. M., Ryberg, W. A., Hibbitts, T. J., and Andrews, J. R., 2018, Comparison of recent oil and gas, wind energy, and other anthropogenic landscape alteration factors in Texas through 2014: Environmental Management,

v. 61, no. 5, p. 805-818, http://doi.org/10.1007/s00267-018-1000-2.

Saylam, K., Hupp, J. R., Andrews, J. R., Averett, A. R., and Knudby, A. J., 2018, Quantifying Airborne Lidar Bathymetry quality-control measures: a case study in Frio River, Texas: Sensors, v. 18, no. 12, p. 4153, http://doi.org/10.3390/s18124153.

Wolaver, B. D., Pierre, J. P., Ikonnikova, S., Andrews, J. R., McDaid, G., Ryberg, W. A., Hibbitts, T. J., Duran, C. M., Labay, B. J., and LaDuc, T. J., 2018, An improved approach for forecasting ecological impacts from future drilling in unconventional shale oil and gas plays: Environmental Management, v. 62, no. 2, p. 323-333, http://doi.org/10.1007/s00267-018-1042-5.

Paine, J. G., Caudle, T., and Andrews, J. R., 2017, Shoreline and sand storage dynamics from annual airborne lidar surveys, Texas Gulf Coast: Journal of Coastal Research, v. 33, no. 3, p. 487-506, http://doi.org/10.2112/JCOASTRES-D-15-00241.1.

Pierre, J.P., Young, M. H., Wolaver, B. D., Andrews, J. R., and Breton, C., 2017, Time series analysis of energy production and associated landscape fragmentation in the Eagle Ford Shale Play: Environmental Management, v. 60, no. 5, p. 852-866, http://doi.org/10.1007/s00267-017-0925-1.

Young, M. H., Andrews, J. H., Caldwell, T. G., and Saylam, K., 2017, Airborne LiDAR and aerial imagery to assess potential habitats for the desert tortoise (Gopherus agassizii): Remote Sensing, v. 9, no. 458, 16 p., http://doi.org/10.3390/rs9050458.

Bonnaffe, Florence, Jennette, Dave, and Andrews, John, 2007, A method for acquiring and processing ground-based lidar data in difficult-to-access outcrops for use in three-dimensional, virtual-reality models: Geosphere, v. 3, no. 6, p. 501-510.

Gutiérrez, Roberto, Gibeaut, J. C., Smyth, R. C., Hepner, Tiffany, Andrews, J. R., Weed, C., Gutelius, Bill, and Mastin, M., 2001, Precise airborne LIDAR surveying for coastal research and geohazards applications: International Archives of Photogrammetry and Remote Sensing, v. 34, part 3/W4, p. 185-192.

Peer Reviewed Book Chapters

Paine, J. G., Costard, L., Andrews, J., Averett, A., Saylam, K., and Hupp, J., 2021, Determining annual to decadal subsidence areas and rates using airborne lidar, GPS surveys, and topographic maps at the Wink sinkholes, West Texas, in Johnson, K. S., Land, L., and Decker, D. D., eds., Evaporite karst in the Greater Permian Evaporite Basin (GPEB) of Texas, New Mexico, Oklahoma, Kansas, and Colorado: Norman, Oklahoma, Oklahoma Geological Survey, Circular, v. 113, p. 93-103.

Paine, J. G., Andrews, J. R., Saylam, K., and Tremblay, T. A., 2015, Airborne LiDAR-based wetland and permafrost-feature mapping on an Arctic coastal plain, North Slope, Alaska, in Tiner, R. W., Lang, M. W., and Klemas, V. V., eds., Remote sensing of wetlands: applications and advances: London, CRC Press, p. 413-434.

Non Peer Reviewed Journal Articles

Saylam, K., Andrews, J. R., and Hupp, J. R., 2016, Inventory and characterization of more than 4,500 shallow-water bodies: Lidar bathymetry on the Alaskan North Slope: Hydro International, Focus on Shallow Water, v. 20, no. 3, p. 22-25.

Paine, J. G., Andrews, J. R., Saylam, K., Tremblay, T. A., Averett, A. R., Caudle, T. L., Meyer, T., and Young, M. H., 2013, Airborne lidar on the Alaskan North Slope: wetlands mapping, lake volumes, and permafrost features: The Leading Edge, v. 32, no. 7, p. 798-805.

Paine, J. G., White, W. A., Smyth, R. C., Andrews, J. R., and Gibeaut, J. C., 2005, Combining EM and lidar to map coastal wetlands: an example from Mustang Island, Texas, in Geophysical solutions for today's challenges: 18th Annual Symposium on the Application of Geophysics to Engineering and Environmental Problems, April 3-7, Atlanta: Environmental and Engineering Geophysical Society, p. 745-756, CD-ROM.

Paine, J. G., White, W. A., Smyth, R. C., Andrews, J. R., and Gibeaut, J. C., 2004, Mapping coastal environments with lidar and EM on Mustang Island, Texas, U.S.: The Leading Edge, v. 23, no. 9, p. 894-898.

Gibeaut, J. C., Hepner, T. L., Waldinger, Rachel, Andrews, J. R., Smyth, R. C., and Gutiérrez, Roberto, 2003, Geotubes for temporary erosion control and storm surge protection along the Gulf of Mexico shoreline of Texas, in Proceedings, 13th Biennial Coastal Zone Conference: Coastal Zone 3: Coastal Zone Management through Time: Baltimore, National Oceanic and Atmospheric Administration, 5 p., CD-ROM.

Gibeaut, J. C., White, W. A., Smyth, R. C., Andrews, J. R., Tremblay, T. A., Gutiérrez, Roberto, Hepner, T. L., and Neuenschwander, Amy, 2003, Topographic variation of barrier island subenvironments and associated habitats, in Coastal Sediments '03: Crossing disciplinary boundaries: Proceedings, Fifth International Symposium on Coastal Engineering and Science of Coastal Sediment Processes, Clearwater Beach, Florida, May 18-23, 10 p., CD-ROM.

Non Peer Reviewed Atlases and Maps

Elliott, B. A., Childress, T., and Andrews, J. R., 2023, Geologic Map of the Cerro Diablo Quadrangle, Texas: Bureau of Economic Geology, OFM0280, 1:24000.

Elliott, B. A., Childress, T., and Andrews, J. R., 2023, Geologic Map of the Sixteen Mountains Quadrangle, Texas: Bureau of Economic Geology, OFM0279, 1:24000.

Hunt, B., Andrews, J. R., and Paine, J. G., 2023, Geologic map of the Dolan Springs quadrangle, Val Verde County, Texas: The University of Texas at Austin, Bureau of Economic Geology, Open-File Map, no. 272, 1:24,000.

Caudle, T., Paine, J. G., and Andrews, J. R., 2022, Geologic map of the High Island quadrangle, Texas Gulf of Mexico Coast: The University of Texas at Austin, Bureau of Economic Geology, Open-File Map, no. 256, 1:24,000.

Hunt, B., and Andrews, J. R., 2022, Geologic map of the Bee Cave Quadrangle, Travis Co., Texas: The University of Texas at Austin, Bureau of Economic Geology, Open-File Map, no. 264, 1:24,000, 1 sh.

Caudle, T. L., Paine, J. G., Andrews, J. R., and Suarez, J., 2014, Gulf of Mexico shoreline change, Bolivar Peninsula, Texas: Bolivar Roads to High Island: Bureau of Economic Geology, The University of Texas at Austin, PS0012, 1:24,000.

Caudle, T. L., Paine, J. G., Andrews, J. R., and Suarez, J., 2014, Gulf of Mexico shoreline change, Brazos River to San Luis Pass, Texas: Bureau of Economic Geology, The University of Texas at Austin, PS0015, 1:24,000.

Caudle, T. L., Paine, J. G., Andrews, J. R., and Suarez, J., 2014, Gulf of Mexico shoreline change, eastern Matagorda Peninsula, Texas: Colorado River to Brazos River: Bureau of Economic Geology, The University of Texas at Austin, PS0011, 1:24,000.

Caudle, T. L., Paine, J. G., Andrews, J. R., and Suarez, J., 2014, Gulf of Mexico shoreline change, Galveston Island, Texas: San Luis Pass to Bolivar Roads: Bureau of Economic Geology, The University of Texas at Austin, PS0014, 1:24,000.

Caudle, T. L., Paine, J. G., Andrews, J. R., and Suarez, J., 2014, Gulf of Mexico shoreline change, High Island to Sabine Pass, Texas: Bureau of Economic Geology, The University of Texas at Austin, PS0016, 1:24,000.

Caudle, T. L., Paine, J. G., Andrews, J. R., and Suarez, J., 2014, Gulf of Mexico shoreline change, Mustang Island and North Padre Island, Texas: northern Padre Island to Aransas Pass: Bureau of Economic Geology, The University of Texas at Austin, PS0013, 1:24,000.

Caudle, T. L., Paine, J. G., Andrews, J. R., and Suarez, J., 2014, Gulf of Mexico shoreline change, southern Padre Island and Brazos Island, Texas: Rio Grande (U.S./Mexico border) to

Port Mansfield Channel: Bureau of Economic Geology, The University of Texas at Austin, PS0010, 1:24,000.

Caudle, T. L., Paine, J. G., Andrews, J. R., and Suarez, J., 2014, Gulf of Mexico shoreline change, western Matagorda Peninsula, Texas: Pass Cavallo to Colorado River: Bureau of Economic Geology, The University of Texas at Austin, PS0017, 1:24,000.

Gibeaut, J. C., Hopkinson, Christopher, Gutiérrez, R. C., Smyth, R. C., Andrews, J. R., and Stephens, D. M., 2001, Digital elevation model, Austin, Texas (oversize, color lidar poster (2.5 × 5.25 ft): The University of Texas at Austin, Bureau of Economic Geology, including 1-p text.

Andrews, J. R., 1998, GIS data base and map, in Henry, C. D., Geology of Big Bend Ranch State Park, Texas: The University of Texas at Austin, Bureau of Economic Geology, Guidebook 27, 72 p + 2 pl.

Andrews, J. R., 1996, GIS data base and map, in Henry, C. D., and Muehlberger, W. R., eds., Geology of the Solitario Dome, Trans-Pecos Texas: Paleozoic, Mesozoic, and Cenozoic sedimentation, tectonism, and magmatism: The University of Texas at Austin, Bureau of Economic Geology, Report of Investigations No. 240, 182 p.

Andrews, J. R., 1994, GIS database and map, in Henry, C. D., Davis, L. L., Kunk, M. J., and McIntosh, W. C., Tertiary volcanism of the Bofecillos Mountains and Big Bend Ranch State Park, Texas: revised stratigraphy and 40AR/30AR geochronology: The University of Texas at Austin, Bureau of Economic Geology, Report of Investigations No. 253, 1 sheet, scale 1:24,000.

Conference Proceedings

Moscardelli, L., Duffy, O. B., Zhang, J., Andrews, J. R., and Shuster, M., 2023, Subsurface H2 storage: the role of understanding salt dome caprocks, AAPG ICE.

Contract Reports

Elliott, B. A., DeJarnett, B. B., Kyle, J. R., Andrews, J. R., Averett, A. R., and Childress, T., 2023, CONTRACT REPORT FOR FY 2019 & FY 2020 NATIONAL GEOLOGICAL & GEOPHYSICAL DATA PRESERVATION PROJECT
NGDPP G19AS00009 & G20AS00008: Final Report prepared for NGGDPP, under contract no. G19AS00009, G20AS00008, 46 p.

Paine, J. G., Andrews, J. R., Caudle, T., Elliott, B. A., Grunau, B., Helper, M. A., Hunt, B., Morris, J., Werner, C. W., Woodruff, C. M., Jr., and McCall, L., 2023, Texas STATEMAP program summary, FY22 (2022-2023): The University of Texas at Austin, Bureau of Economic Geology, Final Technical Report prepared for U.S. Geological Survey, under contract no. G22AC00495, 35 p.

Paine, J. G., Caudle, T., Costard, L., Hunt, B., Woodruff, C. M., Jr., Andrews, J. R., McCall, L., Rogers, H., and Werner, C., 2022, Texas STATEMAP program summary, FY21 (2021-2022): The University of Texas at Austin, Bureau of Economic Geology, Final Technical Report prepared for U.S. Geological Survey, under contract no. G21AC10838, 29 p.

Paine, J. G., Caudle, T., and Andrews, J. R., 2021, Shoreline movement and beach and dune volumetrics along the Texas Gulf Coast, 1930s to 2019: Bureau of Economic Geology, The University of Texas at Austin, final report prepared for Texas General Land Office, under contract no. 16-201-0000, 101 p.

LaDuc, T. J., Wolaver, B. D., Pierre, J. P., Duran, C. M., Labay, B. J., Ryberg, W. A., Hibbitts, T. J., Roelke, C. E., Fujita, M. K., Wright, I. M., Surya, G. S., Shank, C. J., Andrews, J. R., Ikonnikova, S., and McDaid, G., 2018, Final Report: Collaborative Research on the Natural History of the Enigmatic Spot-Tailed Earless Lizard (Holbrookia lacerata) in Texas: The University of Texas at Austin (http://dx.doi.org/10.18738/T8/C1C7X7), contract report prepared for Texas Comptroller of Public Accounts, under contract no. 14-000769, 259 p.

Wolaver, B. D., Saylam, K., Caldwell, T., Bongiovanni, T., Andrews, J. R., Pierre, J. P., and

Hupp, J. R., 2018, Airborne Lidar bathymetry survey and aquatic habitat evaluation for Devils River minnow and Texas hornshell mussel in the Devils River: BEG Year 1 Interim Report (Feb. 20, 2018, to Sept. 30, 2018) prepared for Texas Parks and Wildlife Department, under contract no. 507663, 8 p.

Pierre, J. P., Young, M. H., Wolaver, B. D., Andrews, J. R., and Breton, C., 2017, Time series analysis of energy production and associated landscape fragmentation in the Eagle Ford Shale Play: prepared for JP Morgan Chase Foundation, 16 p.

Brown, R., Paine, J. G., Saylam, K., Tremblay, T. A., Andrews, J. R., and Averett, A. R., 2016, Mangrove monitoring using airborne VNIR in the Espiritu Santo Bay area, central Texas coast: Bureau of Economic Geology, The University of Texas at Austin, Final Report prepared for General Land Office, under contract no. 14-078-000-7946, 38 p.

Paine, J. G., Caudle, T., and Andrews, J. R., 2016, Shoreline movement in the Copano, San Antonio, and Matagorda Bay systems, Central Texas coast, 1930s to 2010s: Final Report prepared for General Land Office, under contract no. 13-258-000-7485, 72 p.

Paine, J. G., Caudle, T., and Andrews, J. R., 2016, Shoreline movement in the Copano, San Antonio, and Matagorda Bay systems, central Texas coast, 1930s to 2010s: prepared for General Land Office, under contract no. 13-258-000-7485, 72 p.

Saylam, K., Hupp, J. R., Andrews, J. R., and Averett, A. R., 2016, Colorado River Lower Basin, Airborne Lidar Bathymetry Survey: The Bureau of Economic Geology, Final contract report prepared for The U.S. Bureau of Reclamation, under contract no. UTA15-001236, 31 p.

Saylam, K., Andrews, J. R., and Young, M. H., 2015, Desert tortoise habitat research using airborne lidar: Bureau of Economic Geology, Jackson School of Geosciences, The University of Texas at Austin, Contract prepared for Clark County, Nevada, under contract no. 26-8274-8312, 31 p.

Saylam, K., Andrews, J. R., Hupp, J. R., Averett, A. R., Brown, R., and Young, M. H., 2015, Determining lake depths and volumes and classifying wetlands using airborne lidar and satellite imagery on the Alaskan North Slope, Deadhorse area, Alaska: Bureau of Economic Geology, University of Texas at Austin, Contract report prepared for Great Bear Petroleum (LLC), under contract no. UTA12-0000752, 69 p.

Tremblay, T. A., Caudle, T. L., and Andrews, J. R., 2015, Colonial waterbird rookery island geoenvironmental mapping for oil spill response: final report prepared for the Texas General Land Office, Oil Spill Program: under contract no. GLO 13-438-000-7897, 26 p.

Caudle, Tiffany, Tremblay, T. A., Paine, J. G., Andrews, J. R., Saylam, K., 2014, Final report: Beach and dune analysis using Chiroptera imaging system, South Padre and Brazos Islands, Texas Gulf Coast: The University of Texas at Austin, Bureau of Economic Geology, report to the Texas Coastal Coordination Council pursuant to NOAA Award No. NA12NOS4190021, final report prepared for General Land Office under contract no. 13-030-000-6895, June 2014, 68 p., 34 figs., 3 tables.

Paine, J. G., Caudle, T., and Andrews, J. R., 2014, Shoreline movement along the Texas Gulf coast, 1930's to 2012: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for General Land Office, under contract no. 09-074-000, 52 p.

Saylam, K., and Andrews, J. R., 2014, Hydraulic fracture pits existing and potential volume calculation with airborne bathymetric lidar: The University of Texas at Austin, Bureau of Economic Geology, final technical report prepared for Pioneer Natural Resources USA, Inc., under research agreement UTA-000693, 50 p.

Saylam, K., Andrews, J. R., Averett, A. R., Hupp, J. R., Young, M. H., and Ekercin, S., 2014, Determining lake depths and area sizes on the North Slope, Deadhorse area, Alaska: The University of Texas at Austin, Bureau of Economic Geology, contract report prepared for Great Bear Petroleum LLC, under contract no. UTA14-000820, 27 p.

Saylam, K., Andrews, J. R., Hupp, J. R., Caudle, T., Brown, R., Young, M. H., and Ekercin, S., 2014, Clark County Desert Conservation Program, Desert Tortoise Habitat Research, Lidar Point Cloud Data, CIR Image Delivery & Calibration Report: Bureau of Economic Geology, The University of Texas at Austin, Data delivery report prepared for Clark County, Nevada, under contract no. 26-8274-8312, 18 p.

Paine, J. G., Andrews, J. R., Saylam, K., Tremblay, T. A., Young, M., Abolt, C., Bradford, B., Caudle, Tiffany, Meyer, T., and Neuenschwander, A. L., 2013, Determining wetlands distribution, lake depths, and topography using airborne lidar and imagery on the North Slope, Deadhorse area, Alaska: The University of Texas at Austin, Bureau of Economic Geology, final technical report prepared for Great Bear Petroleum Operating LLC, under, sponsored research agreement UTA12-0000752, 76 p.

Paine, J. G., Caudle, Tiffany, and Andrews, J. R., 2013, Shoreline, beach, and dune morphodynamics, Texas Gulf Coast: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for the General Land Office under contract no. 09-242-000-3789, 64 p.

Paine, J. G., Young, M. H., Andersson, D., Andrews, J. R., Averett, A. R., Caudle, Tiffany, Gustafsson, D., Kullenberg, P., and Tremblay, T. A., 2012, Determining wetlands distribution, lake depths, and topography using airborne lidar and imagery on the North Slope, Deadhorse Area, Alaska: The University of Texas at Austin, Bureau of Economic Geology, data-acquisition report prepared for Great Bear Petroleum Operating LLC, under Sponsored Research Agreement UTA120000752, 15 p.

Collins, E. W., Tremblay, T. A., Gibeaut, J. C., Waldinger, R. L., White, W. A., Raney, J. A., Smyth, R. C., Hepner, T. A., Andrews, J. R., and Gutiérrez, Roberto, 2006, Summary report for the 2005-2006 STATEMAP Project: geologic mapping to support improved database development and understanding of urban corridors, critical aquifers, and special areas of environmental concern in Texas: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for U.S. Geological Survey, under cooperative agreement no. 05HQAG0046, 20 p. + maps.

Paine, J. G., White, W. A., and Andrews, J. R., 2004, A new look at Mustang Island wetlands: mapping coastal environments with lidar and EM: The University of Texas at Austin, Bureau of Economic Geology, a report of the Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA17OZ2353, and General Land Office Contract Number 03-005, 79 p. + CD ROM.

Gibeaut, J. C., Hepner, Tiffany, Waldinger, R. L., Andrews, J. R., Smyth, R. C., and Gutiérrez, Roberto, 2003, Geotextile tubes along the upper Texas Gulf Coast, May 2000 to March 2003: The University of Texas at Austin, Bureau of Economic Geology, report of the Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA07OZ0134, GLO Contract Mp/ 02-493 R, 102 p. + 3 pls.

Smyth, R. C., Gibeaut, J. C., Andrews, John, Hepner, Tiffany, and Gutiérrez, Roberto, 2003, The Texas Shoreline Change Project: coastal mapping of West and East Bays in the Galveston Bay System using airborne lidar: The University of Texas at Austin, final report prepared for the Texas General Land Office, under GLO Contract Number 02-520 C, 41 p.

Gibeaut, J. C., Hepner, Tiffany, Waldinger, R. L., Andrews, J. R., Smyth, R. C., and Gutiérrez, Roberto, 2002, Geotubes along the Gulf shoreline of the upper Texas coast: observations during 2001: The University of Texas at Austin, Bureau of Economic Geology, final report prepared for Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA97OZ0179, under GLO contract number 01-597 R, 24 p. + apps.

Gibeaut, J. C., Hepner, Tiffany, Waldinger, R. L., Andrews, J. R., Gutiérrez, Roberto, Tremblay, T. A., and Smyth, R. C., 2001, Changes in Gulf shoreline position, Mustang and North Padre Islands, Texas: The University of Texas at Austin, Bureau of Economic Geology, final report

prepared for the Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration, under Award No. NA97OZ0179 and GLO Contract No. 00-002R, 28 p.

Gibeaut, J. C., White, W. A., Hepner, Tiffany, Gutiérrez, Roberto, Tremblay, T. A., Smyth, R. C., and Andrews, J. R., 2000, Texas Shoreline Change Project: Gulf of Mexico Shoreline change from the Brazos River to Pass Cavallo: The University of Texas at Austin, Bureau of Economic Geology, report prepared for the Texas Coastal Coordination Council pursuant to National Oceanic and Atmospheric Administration Award No. NA870Z0251, 32 p.

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