Curriculum Vitae

**John S. Jacob**

Professor and Extension Specialist

Environmental Quality and Coastal Community Development

Director, Texas Coastal Watershed Program

Texas Sea Grant and Texas A&M AgriLife Extension Service

Department of Recreation, Tourism, and Park Sciences

Texas A&M University

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#

# CURRICULUM VITAE

# I. Personal Information

John S. Jacob

Director, Texas Coastal Watershed Program

Professor and Extension Specialist

1250 Bay Area Blvd., Ste C, Houston, TX 77058

Date of last promotion: September 1, 2010

# II. Education

1992 **Ph.D.** Pedology, Texas A&M University. Dissertation: "The Agroecological Evolution of Cobweb Swamp, Belize."

1984 **M.S.** Soil Science (Pedology and Mineralogy), Texas Tech University. Thesis: "Persistence of a Zeolite in Tuffaceous Soils of the Texas Trans-Pecos."

1981 **B.S.** Soil Science, Texas Tech University.

# III. Experience

|  |  |
| --- | --- |
| 2010-prsnt | Professor and Extension Specialist. Recreation, Park, and Tourism Sciences Department. Director, Texas Coastal Watershed Program. Houston, TX 100% Extension |
| 2000-2010 | Associate Professor and Extension Specialist. Recreation, Park, and Tourism Sciences Department. Director, Texas Coastal Watershed Program. Houston, TX 100% Extension |
| 1997-2000 | Assistant Professor and Extension Specialist. Soil and Crop Sciences Department and Texas Sea Grant. Texas A&M University. College Station and Houston, TX. |
| CURRENT POSITION DESCRIPTION**Extension Activities**1. Manages the Texas Coastal Watershed Program.

Provides direction and leadership. Supervises 10+ staff members. Develops position descriptions and performs annual reviews. Responsible for all products and activities associated with the TCW Program. Actively seeks external funding. Responsible for strategic planning and budgets.1. Develops innovative extension programs for coastal communities in Texas.

Establishes working relationships with end users of university information, including other universities; state, regional, and local government entities; non-government organizations, citizen groups, professional organizations, etc.Develops demonstration projects accessible to a broad cross section of users.Develops authoritative (reviewed) publications, including brochures, fact sheets, web sites, etc.Develops national, regional, and local symposia, workshops, etc., addressing issues of critical concern.Develops and delivers formal and informal presentations to end users.Provides direct consultation on a limited basis to selected groups and individuals1. Actively pursues extramural funding opportunities.
2. Develops partnerships with outside agencies and groups to further sustainable coastal development.

**Research Activities**1. Engages other extension specialists and research faculty to address and research issues of concern to Texas coastal community residents.
2. Participates in research through close interaction with research faculty. Sits on graduate committees.
3. Publishes occasional research articles in refereed publications.

**Teaching Activities**1. Teaches occasional undergraduate and graduate level classes as invited.
2. Develops and teaches short courses on topical issues.
 |
| PAST POSITIONS |
|  |  |
|  |  |
| 1996 | Senior Environmental Scientist, Fugro International, Inc. Houston, Texas.*Environmental impact assessments, oil and gas operations in South America.* |
| 1995  | Research Fellow, Environmental Institute of Houston, University of Houston-ClearLake**.** *Taught graduate course in Wetland Geoecology. Developed and taught environmental short courses in Wetlands and Environmental Site Assessment.* |
| 1994-1995 | Assistant Training Specialist, Texas Engineering Extension Service. College Station, TX. *Developed and taught short courses on wetland delineation and soil and groundwater remediation.*  |
| 1987-1994 **Research Associate**, Texas A&M University. Supervisor, Soil Characterization Laboratory. | Research Associate, Texas A&M University. *Supervisor, Soil Characterization Laboratory.*  |
| 1990-prsnt | Independent Consultant. *Scores of wetland delineations, mainly on the upper Gulf Coast of Texas; Geoarchaelogical investigations in U.S. and Central and South America. Natural resource analysis and policy.* |
| 1983-1987 | Soil Scientist, USDA-Soil Conservation Service. *Soil survey in Victoria and**Brazos counties, Texas.*  |
| 1979-1983 | Student Worker and Graduate Research Assistant. Texas Tech University, Lubbock, Texas. |
| 1973-1979 | Staff Sergeant, United States Air Force, Reese AFB, Lubbock, Texas.  |
| 1971-1973 | Field Promoter, Alma de Centroamèrica, Guatemala City, Guatemala. *Principal**field promoter in a strawberry project working with campesinos in the western highlands of Guatemala.*  |
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# IV. Extension Activities

#### Presentations

#### National and International

*The weTable and the CHARM model for Climate Change Scenarios.* National Sea Grant Climate Change Network Meeting. Sta. Monica, California. March 2013.

*La Ciudad Resiliente es Ciudad Peatonal*. (The Resilient City is a Walkable City).3er Coloquio Internacional sobre Cambio Climático. INECOL. Xalapa, Veracruz, Mexico, May 2012

*How Resilient is This?* New Partners for Smart Growth 11th Annual Conference. San Diego CA. February, 2012.

*Extension and Democracy on the Texas Coast.* National Conference of the National Association of Community Development Extension Professionals (NACDEP), Charleston, SC. January 2011.

*Optimization of On-site WasteWater Management at a Watershed Level*. Poster presentation at the national meeting of the Soil Science Society of America in San Antonio, Texas. October 2011.

*Wetland transgressions and human misdeeds: Topography, development, and sea level rise on the Gulf Coast.* Restore America’s Estuaries national meeting, Galveston, Texas. November 2010.

*Is Denser Greener?* National STORMCON meeting, San Antonio, Texas. August 2010.

*Low Impact Development: A Watershed Perspective.* International Waterkeeper Alliance, La Paz, Baja California Sur, Mexico. June 2010.

*Gulf Coastal Plain Wetlands: How Significant a Nexus?* International Waterkeeper Alliance, La Paz, Baja California Sur, Mexico. June 2010.

*Density* is *a Stormwater Practice* 18th annual Congress of New Urbanism. Atlanta, May 2010.

*Wetland transgressions and human misdeeds: Topography, development, and sea level rise on the Gulf Coast.* International Conference on Sea Level Rise. Harte Institute, Corpus Christi, Texas. March 2010.

*Cuencas, Cambio Climàtico, y Resiliencia (Watersheds, Climate Change, and Resilience).* Keynote address at the Climate Change and Watershed Management International Symposium in Veracruz Mexico. February, 2010.

*Zen and the Art of Habitat Conservation.* John Jacob. New Partners for Smart Growth 8th Annual Conference. Albuquerque, New Mexico. January, 2009.

*A Walkable City: The Best Stormwater Best Management Practice.* John Jacob. New Partners for Smart Growth 8th Annual Conference. Albuquerque, New Mexico. January, 2009.

*The Smart Growth Imperative for Coastal Resilience.* John Jacob. New Partners for Smart Growth 8th Annual Conference. Albuquerque, New Mexico. January, 2009.

*El Cambio Climático: ¿Afectará el desarrollo social y la calidad de vida? (Climate Change: Will it affect Quality of Life?)* Invited paper. 2nd International Panel on Climate Change: The Coastal Zone in Crisis in the Gulf of Mexico, the Caribbean, and the Mediterranean. October 2008. Instituto de Ecología. Xalapa, Veracruz, Mexico.

*Is greener denser? A model for evaluating higher density development as an urban stormwater-quality best management practice*. John Jacob and Ricardo Lopez. American Planning Association national conference. Las Vegas, NV. April 2008.

*Keeping our Coastal Charm: Texas Sea Grant Extension helps a growing Texas coastal community confront its choices for growth.* John Jacob and Logan Respess. New Partners for Smart Growth 7th Annual Meeting. Washington, D.C. February 9, 2008.

*Comunidades Resilientes. ¿Qué papel para las Universidades?* *(Resilient Communities. What Role for Universities?)* Invited paper. Conferencia Binacional sobre el Agua. Saltillo, Coahuila, Mexico. November 29, 2007.

*La Tormenta Perfecta: Crecimiento Poblacional y el Cambio Climático (The Perfect Storm: Population Growth and Climate Change).*  Invited paper. International Panel on Climate Change: The Coastal Zone in Crisis in the Gulf of Mexico, the Caribbean, and the Mediterranean. August 30, 2007. Instituto de Ecología. Xalapa, Veracruz, Mexico.

*Conservación y Restauración del Hábitat Urbano: Reto Principal para la Integridad Ecológica del Golfo. (Conservation and Restoration of Urban Habitat: Principal Challenge for the Ecological Integrity of the Gulf of Mexico).* Invited paper. Tercer Encuentro Internacional del Mar. Coatzacoalcos, Veracruz, Mexico. August, 2007.

*Houston Growth: A Watershed Event*. 2007. Association of Collegiate Schools of Planning national conference. Fort Worth, TX

*Higher or lower Density? What gives the best bang for the buck for mitigating the effects of development?* J.S. Jacob and Ricardo Lopez. American Water Resources Association National GIS Specialty Conference. Houston, TX. May 2006.

*Rapid and Massive Wetland Loss on the Upper Gulf Coast of Texas: Results of a rapid and inexpensive GIS-based assessment.* Ricardo Lopez and J.S. Jacob. American Water Resources Association National GIS Specialty Conference. Houston, TX. May 2006.

*Sea Grant’s Coastal Community Development Program.* National Association of Community Development Extension Professionals. National meeting. San Antonio, TX. February 2006*.*

*Resilient Coastal Communities: The Smart Growth Imperative.* January 2006. 8th Annual Southern and Caribbean Regional Meeting. NOAA Coastal Service Center and Office of Coastal Resource Management. Panama City, Florida.

*The New “Urban Grant”: Imagining the Role of Extension in Developing Sustainable Cities. Invited paper.* New Partners for Smart Growth national conference. Miami, FL. January 2005.

*Smart Low Impact Development: Integrating Smart Growth and Low Impact Development***.** Invited paper. Coastal Zone 05. New Orleans. July 2005

*The Nature of Coastal Cities: Patterns of Sustainable Development***.** J.S. Jacob. Invited Paper. The Coastal Society. 18th International Conference, Galveston, Texas. May 2002*.*

*Patterned grounds for dismissal: Hypothesis testing and ancient land use in Mesoamerica*. J.S. Jacob. Invited paper, Association of American Geographers annual meetings, Ft. Worth, Texas May, 1997.

*Evidencias para cambio ambiental en la cuenca Mirador, Petén, Guatemala****.***J.S. Jacob. Invited paper, V Simposio de los Investigadores de la Cultura Maya. Universidad Autónoma de Campeche, Campeche, México. November 1995.

*δ 13 C of paleosol organic carbon indicates vegetation and climate changes during the past 15,000 years in the Southern Great Plains.* Nordt, L.C., T.W., Boutton, J.S. Jacob, and R. Mandel. 1995 Annual Meeting, Ecological Society of America.

*Late Quaternary landscape evolution and paleoenvironments in the Medina River valley, South-Central Texas.* R.D. Mandel, L. Nordt, and J.S. Jacob. Association of American Geographers 91st Annual Meeting, Chicago IL, 1995.

*Aquerts and aquertic soils: A querulous proposition***.** J.S. Jacob, R. Griffin, W. Miller, and L. Wilding. Invited paper, special symposium on Problem Hydric Soils, Soil Science Society of America annual meetings, November 1994. Seattle, WA.

*Todorokite in manganese oxide nodules of a Guatemalan Vertisol***.** J.B. Dixon, J.S. Jacob, and G.N. White. Soil Science Society of America annual meetings, November 1994. Seattle, WA.

*La evaluación de los impactos ambientales en operaciones petroleras.* J.S. Jacob. Universidad LaSalle Environmental Symposium for PEMEX. Mexico City, November 1994*.*

*Archaeological pedology in the Maya lowlands****.***J.S. Jacob. Invited paper, special symposium on Pedological Perspectives in Archeological Research, Soil Science Society of America annual meetings, November 1993, Cincinnati, OH.

*A Tropohemist in Belize: An 8000-yr record of paleosalinity in a Maya wetland****.***J.S. Jacob and Javier Alcala. Soil Science Society of America annual meetings, November 1992. Minneapolis, MN.

*The Maya Clay: Late Classic sedimentation in wetlands of northern Belize.* J.S. Jacob. Society for American Archaeology, 1992 Annual Meetings, Pittsburgh, Pennsylvania.

*Agroecological evolution of Cobweb Swamp, Belize.* J.S. Jacob. International conference on ancient Maya agriculture and biological resource management. University of California at Riverside, August 1991.

*Holocene landscape evolution and the Maya at Colha, Belize.* J.S. Jacob. International Congress of Americanists, July 1991, New Orleans, LA.

*Cobweb Swamp: Stable isotope and microfossil reconstruction of a Holocene Maya Wetland*. J.S. Jacob and Javier Alcalá. Geological Society of America annual meetings, San Diego, CA, 1991.

*Stable carbon isotope ratios of organic matter and carbonates from a paleosol in East-Central Texas*. J.S, Jacob, T.W. Boutton, and L.C. Nordt. Soil Science Society of America annual meetings, 1990, San Antonio, TX, and Ecological Society of America, 1991, San Antonio, Texas.

*Pedochemical cycling of sulfur in East-Central Texas*. J.S. Jacob. Soil Science Society of America annual meetings, 1989, Las Vegas, NV.

*Maya raised fields in the Cobweb Swamp Area, Belize: a pedoarchaeologic assessment*. J.S. Jacob. Poster presentation, SSSA meetings, 1987, Atlanta, GA; oral presentation, Society for American Archaeology, 1988, Phoenix, AZ, and Conference of Latin Americanist Geographers, 1989, *Queretaro, Mexico.*

*Pleistocene Colorado delta, Texas: Soils and geomorphology.* J.S. Jacob. Soil Science Society of America annual meetings, 1986, New Orleans, LA

*Persistence of a zeolite in tuffaceous soils, Trans-Pecos Texas.* J.S. Jacob and B.L. Allen. Soil Science Society of America annual meetings, 1983, Washington, D.C.

#### State

*Experts, Extension, and Democracy: Reimagining University Engagement in the 21st Century*. Invited paper presented at the Strategic Review of the University of Hawaii Center for Smart Building and Community Design. Honolulu, HI. August, 2013.

*A Significant Nexus: The Ecohydrology of Coastal Prairie Potholes in Texas*. Soil and Land Resource Workshop, Texas A&M University, College Station, TX. Feb 2013

*Geoecology of the Texas Gulf Coastal Plain*. Invited presentation to the 2012 Annual Coastal Prairie Partnership conference in Kingsville TX. Dec 2012

*The State of Texas’ Coastal Plain Wetlands.* Invited Presentation to TCEQ 2012 Surface Water Quality Monitoring conference in Corpus Christi, December 2012.

*Leopold’s Land Ethic as an Urban Ethic: How walkability saves ducks and freshwater inflows.* Annual State Meeting of the Texas Master Naturalists, Camp Allen, Grimes County TX. October 2012

*The Upper Texas Gulf Coast Ecosystem: Geoecology, Status, and Prognosis.* Keynote speaker at statewide Native Plant Society of Texas annual meeting in Houston. October, 2011.

*Urban Watershed Impacts.* Invited presentation. Land Water People Symposium hosted by the River Systems Institute at Texas State University. San Marcos, Tx. Nov 17, 2009.

*Where are all the Wetlands?* Invited presentation. Texas State Society of Range Management annual meeting, Beaumont, Texas. October 9, 2009

*Urban Watershed Impacts.* Texas Watershed Planning Short Course. Bandera, TX. August 20, 2009.

*Texas Coastal Wetlands: The Significant Nexus.* Invited paper. Texas Association of Environmental Professionals Environmental Challenges and Innovations Conference: Texas Gulf Coast. February 21, 2008. Houston, Texas.

*Urban Open Space: Ecology and Conservation.* April 2007. Invited paper. American Society of Landscape Architects Texas meetings. Houston, TX

*The Years of Living Dangerously: Development and Coastal Hazards on the Texas Gulf Coast.* Sigma Xi Conference. Texas A&M University, College Station, TX. Invited. March 30, 2006

*The Isolated State of Texas Coastal Wetlands.*Invited paper. Fifth Biennial Coastal Issues Conference, hosted by the Texas General Land Office. March, 2004, Corpus Christi, Texas.

*Gypsic horizons in soils of East-Central Texas.* J.S. Jacob. Soil Survey and Land Resource Workshop, 1987, TAMU, College Station, TX

*Probabilistic analysis of soil water tables.* J.S. Jacob and W. Miller. Professional Soil Scientist Association of Texas annual meeting, 1985, Beaumont, TX

#### Regional

*Regional Water Issues.* Extension District 9 County Commissioners and County Judges Workshop. Conroe Texas. November 2011.

*The CHARM (Community Health and Resource Management) model and the weTable*. Gulf of Mexico Alliance (GOMA) All Hands Meeting in New Orleans. Resilience Group. August 2011

*Low Impact Development: A Watershed Perspective*. Houston-Galveston Area Council’s Clean Waters Initiative, Brazosport, Texas. July 2010.

*Coastal Water Quality Tools.* Clean Waters Coastal Communities Initiative, regional meeting hosted by the Houston-Galveston Area Council. Brazosport College. Freeport, TX. *.* July 2009.

*When More is Less: High Urban Density for Stormwater Improvement.* Improving Water Quality Strategies in Central Texas. River Systems Institute, San Antonio, TX. May 2009.

*Denser is Greener: Density and stormwater.* April 2009Gulf Coast Green Symposium and Expo, Reliant Center, Houston.

*The Best Stormwater BMP: A walkable community.* John Jacob. Sustainable Water Resources Conference: Preserving our natural assets as the region grows. Hosted by Bayou Preservation Association. Houston Texas. October 25, 2008.

*Architecture for a healthy Houston region: Soil, Farm, Community.* John Jacob. Food and Sustainable Prosperity for the Houston Region conference. Houston, TX. September 4, 2008.

*Urban Ecology: Place and Preservation*. Invited presentation. Coastal Bend Bays and Estuaries Foundation Coastal Issues Forum. January 14, 2008. Corpus Christi, Texas.

*Changing Tides: Development, climate change, and habitat on the Texas Gulf Coast.* April 2007. Invited keynote presentation. Texas Bays and Estuaries Symposium. University of Texas Marine Science Institute, Port Aransas, Texas.

*Houston at Eight Million: What kind of Habitat?* January 2007. State of the Bay (Galveston) Annual Symposium. Invited plenary session paper. Galveston, TX.

*Having your cake and eating it too: Quality of Life and the Environment.* January 2007 Volunteered presentation. State of the Bay (Galveston) Annual Symposium. Galveston TX.

*Habitat and Runoff—the linkages.* Invited paper. State of the Bay Symposium. Houston. January 2005.

*The City by the Bay****.***Invited paper. State of the Bay Symposium. Moody Gardens, Galveston, TX. January, 2003.

*Reclaiming the Bayou City: Learning to Live in the Houston Gulf Coast Watersheds****.***J.S. Jacob. A Watershed Event: Flooding, Development and Habitat on the Houston Gulf Coast. Houston, Texas, November, 2001.

*State of the Wetlands***.** J.S. Jacob. Invited paper. State of the Bay Symposium. Moody Gardens, Galveston, TX. January, 2001

*Clean Water for Armand Bayou: A watershed partnership.* J.S. Jacob. State of the Bay Symposium (hosted bi-annually by the Galveston Bay Estuary Program). Moody Gardens, Galveston, TX. January, 1999.

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#### Local (Selected, since 2007 only)

*Walkability and Coastal Resilience.* Presentation to the Galveston Alliance of Independent Neighborhoods, Moody Mansion, Galveston. September 2013.

*Building a Better Place for Both People and Nature.* Rice Design Alliance Civic Forum on Environmental Challenges Facing Houston in the Next 25 Years. Houston, TX. August 2013

*Water and Habitat.* MyHouston2040. May 2013

*Water for Houston: Too Much, Too Little?* Clear Lake Chapter, Sierra Club, April 2012.

*Regional water issues and solutions for Houston*. Rice Design Alliance Civic Forum on Water. Aug 31 2011.

*Watersheds, Walkability, and a New Urban Houston*. Congress of New Urbanism Houston Chapter. Nov 2010.

*Salon de Refuses: an alternative greenfield development on the Katy Prairie*. Presentation to the Houston Chapter of the Congress of New Urbanism. June 2010.

*Master Naturalist wetland lecture*. Galveston County chapter. March 2010.

*Quality of Life and Coastal Issues*. Lecture to group convened by Texas Sea Grant and Port Lavaca Chamber of Commerce. Port LaVaca, TX. Feb 2010.

*Walkable and Liveable Places*. Cedar Bayou Conservation-Preservation Fair. Oct 2009. Baytown Texas.

*Where have all the Prairies gone*? Presentation to Prairie Heritage Day, Brazos Bend State Park. Nov 7, 2009.

Lecture to Preserved in Time gala for the preservation of the West Mansion property: *The West Mansion Project: A Guiding Legacy for Houston*. San Jacinto Monument. Houston, TX. July 31 2009.

Lecture and field trip on wetlands for Master Naturalists Armand Bayou Nature Center. March 5 2009

Presented 2 *Liveable Community* lectures to Rockport, Texas citizens. Total attendance 45; 2 hours total. March 19 2009.

*Urban growth and water management.* Lecture for Coastal Prairie Master Naturalist Chapter. Rosenburg, TX. Oct 30 2008

*Planning for the Perfect Storm: Coastal population growth and climate change*. SurfRiders monthly meeting. Houston, TX. Oct 29 2008.

Invited presentation to City of League City Texas City Council: *Density: Neighborhood Friend or Foe?* Oct 1 2008.

Dickinson Bayou Watershed Planning Roundup (abbreviated community charrette). Dickinson, TX. Aug 23 2008.

*Growth and Water* workshops for local officials and citizens. Presentations by entire TCWP staff. Presentation on Quality of Life and the Environment Connections. Dickinson and League City, Texas. Jul 30/Aug 7 2008.

*Water and Cities-the Choices*. NOAA-Coastal Services Center Smart Growth training session. Rockport Texas. May 17 2008.

Co-hosted Growth Management workshop with the Guadalupe Blanco River Authority (Central Texas - Lockhart). Lecture on *Growth and Water*. May 13 2008.

*Sustainable water management*. Master Urban Ranchers. Harris County. Houston, TX. Mar 28 2008.

*Coast Prairie Wetlands*. Lecture and field trip. Gulf Coast Master Naturalists (Galveston County). Mar 6 2008.

Co-hosted Growth Management workshop with the Guadalupe Blanco River Authority (Central Texas - Buda). Lecture on *Growth and Water*. Feb 26 2008.

*Planning for walkability and sustainability*. City of Port Aransas planning commission. Jan 28 2008.

*Walkable communities*. Galveston Area Independent Neighborhoods (GAIN). Nov 7 2007

Lecture on *sustainable landscape management*. Texas Garden Club state convention keynote address. Houston, TX. Oct 19 2007.

*Sustainable Cities*. Coastal Prairie Master Naturalists. Rosenburg, TX. Sep 20 2007.

*Soils for Gardeners*. Harris County Precinct 2 Master Gardeners. Houston, TX. Sep 6 2007.

*Coastal Smart Growth*. Dickinson City Council. July 10th 2007.

 *Compact Coastal Cities*. Harris County habitat coalition meeting at Shoreacres City Hall. June 25 2007.

Emceed the Lessons Learned Wetland Restoration Workshop hosted by the TCWP. Presentation on *Critical Factors for Restoration*. June 5 2007.

*Wetlands lecture and field trip*, Mid Coast Master Naturalists. Mad Island Preserve, Matagorda County, TX. May 12 2007.

Lectured Galveston Bay Area Master Naturalists on *urban water/ecology issues and smart growth*. Armand Bayou Nature Center, Houston TX. May 3 2007.

*Urban quality of life issues*. Galveston Alliance of Island Neighborhoods (GAIN). April 19 2007.

 *Urban quality of life and the environment.* City of Galveston Planning Commission. March 6 2007.

Presentation to teachers on *soils* for Envirothon. Hosted by UHCL Environmental Institute of Houston. Feb 27 2007.

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# V. University Teaching

### Invited lectures –University Level (all one to two hours each):

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Professor** | **Institution/ Dept** | **Class Title** | **# of times taught** | **Dates** |
| Kathleen Garland | University of Houston- Clear Lake | coastal resilience and placemaking, Seminar on Sustainability | 1 | Fall 2013 |
| Deana Schmidt | University of Houston- Clear Lake | Urban Geography –Overview of Urban Water Issues | 1 | Spring 2013 |
| David Matarrita | Texas A&M University/RPTS | Principles of Community and Community Change | 1 | Spring 2012 |
| Ron Kaiser | Texas A&M University/ RPTS | Conservation of Natural Resources | 1 | Fall 2011 |
| Kathleen Garland | University of Houston-Clear Lake | Coastal Management | 1 | Summer 2011 |
| Cynthia Drew | University of Houston Law School | Environmental Management | 1 | 2009 |
| Brad Wilcox | Texas A&M University/ Ecosystem Sci and Mgmt | Watershed Management | 6 | 2005-present |
| Ron Kaiser | Texas A&M University/ RPTS | Water Management Seminar (graduate level) | 2 | 2007-present |
| Tracy Villareal | UTMSI and UT-Austin (TTVN from Austin). | Marine Ecology (Coastal Management) | 1 | 2007 |
| Larry Albert | Rice University/ Architecture | Site Analysis | 8 | 2002-present |
| Sam Brody | Texas A&M University/ Lndscp Arch & Urb Pln | Environmental Planning | 3 | 2007-present |
| Jon Rodiek | LAUP/ TAMU | Design Studio | 1 | 2005 |
| Jim Blackburn | Rice University/ Environmental Studies | Environmental Law | 1 | 2006 |
| Bill Dawson | Rice University/ Environmental Studies | Environmental Policy | 1 | 2005 |
| Peter Bowman | University of Houston – Clear Lake | Environmental Management | 1 | 1998 |

### Semester-long courses:

***Environmental Monitoring and Assessment***. 3-hour graduate course in the Micky Leland-Barbara Jordan School of Planning, Texas Southern University. Fall 2011.

***The Geoecology of Wetlands:*** 3-hour graduate/undergraduate course, taught 3 semesters (University of Houston - Clear Lake, 1995 to ~2003).

***Introductory Soil Science:*** 1-hour laboratory undergraduate course, taught 1 semester (Texas A&M University).

***Short Courses:***

***Texas Coastal Citizen Planner.*** Fall 2013. 8-session program, 2.5 hours each, over a period of 3 months for locally elected and appointed officials. Basic community planning issues, with an emphasis on placemaking and hazard resilience.

***2-day Watershed Management Short Course.*** 2007-2010 in Guatemala.

***Wetland Delineation Certification Course:*** 40-hour short course, taught at least 10 times (Texas Engineering Extension Service, University of Houston - Clear Lake, and TAMU-Extension).

***Watershed Management Short Course.***  1 week. Taught twice in Villahermosa, Tabasco, Mexico. 2006 and 2007.

***Soil and Site Evaluation***: One-day course, taught at least 10 times, 1997-2001.

***Environmental Site Assessment, Phase I (Investigation):*** 30-hour short course, taught 3 times (Texas Engineering Extension Service) 1993-1995**.**

***Environmental Site Assessment, Phase II (Sampling):*** 30-hour short course, taught 5 times (Texas Engineering Extension Service) 1993-1995**.**

### Web-based course

***Web-Based Soil and Site Evaluation Basic Introduction.*** 8-hr CEU credit course for the Texas On-site Sewage Facility program (TCEQ). ~200 registrants per year.

# VI. Research

In the Land and Sea Grant extension tradition, I partner with on-campus researchers to solve particular problems along the Texas coast, rather than maintain my own research platform. The main research areas in which I participate include integrated watershed management, sustainable urban water management, landscape preservation, and sustainable urbanism.

### Graduate Committees

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Student** | **Level** | **Major Professor/Dept** | **Topic** | **Dates** |
| Nick Russo | Ph.D. | Fouad Jaber | Water Quality | 2012/15 |
| Derek Morrison | M.S. | Clyde Munster | Water Quality | 2012/13 |
| Mijin Seo | Ph.D. | Fouad Jaber | Stormwater modeling | 2012/14 |
| Jorge Bustamante | M.S. | Clyde Munster/ AGEN | Stormwater Wetlands | 2012/13 |
| Rosario Sanchez | Ph.D. | Ron Kaiser/ RPTS | Water scarcity policy | 2009 |
| Dex Dean | M.S. | Brad Wilcox/ ESM | Wetland ecohydrology | 2010 |

# VII. Service

**Past Chair** and founder of the national Sea Grant Sustainable Coastal Community Development (SCCD) extension network. Elected by extension peers from across the country.

Member of the national Sustainable Coastal Development (SCD) focus team that sets direction in this area for national Sea Grant.

Reviewer for various scientific and regional publications, including: Water Resources Research, Quaternary Research, Journal of Hydrological Engineering, Landscape and Urban Planning, and Cite (Houston architectural journal). Reviewer for FEMA Mitigation Assistance Team Report on Ike, and others. Currently sit on review panel for Mississippi-Alabama Sea Grant program. Review for HI, SC, and LA Sea Grant Omnibus proposals.

### Board Service

|  |  |  |  |
| --- | --- | --- | --- |
| **Board or committee** | **Description** | **Role** | **Dates** |
| Urban Harvest | Community Gardening and food security non profit. | Member | 2010-2012 |
| Galveston Bay Council (GBC) | Deliberative stakeholder body advising the Galveston Bay Estuary Program and setting natural resource direction for the area. | Member | 2008-present |
| Coastal Prairie Partnership | Broad-based umbrella group dedicated to better management and preservation of remaining coastal prairies in Texas | Founding board member | 2008-present |
| Water and Sediment Quality Committee of the Galveston Bay Council (GBC) | Technical subcommittee | Chair | 2002-2004 |
| Member | 2000-present |
| Gulf of Mexico Alliance, Resiliency Work Group | Association of state governments and stakeholders for the Gulf of Mexico | One of two state representatives for Texas | 2007 - present |
| Research Board, Houston Tomorrow (formerly Gulf Coast Institute) | Houston Tomorrow is the leading think tank on urban futures for the Houston area | Member  | 2005-present |
| Galveston Baykeeper | Member of the RiverKeeper Alliance. Focus on wetlands and water quality. | Founding Board Member and Board Chair | 2008-present |
| Katy Prairie Conservancy | Prominent land trust. | Advisory board member | 2006-present |
| Bayou Preservation Association | Environmental Non Profit | Advisory board member | 2005-present |
| Galveston Bay Foundation | Broad-based environmental advocacy group | Advisory board member | 2007-present |
| Urban Harvest | Urban gardening and food security NGO | Board member | 1998-2004 |
| Armand Bayou Nature Center | One of the largest urban nature centers in the country (Houston) | Board member | 1999-2004 |

### Professional Licenses and Affiliations

Professional Geoscientist, State of Texas License No. 1423; Professional Wetland Scientist, No. 176, Society of Wetland Scientists. Member: Society of Wetland Scientists, American Planning Association, American Water Resources Association, Congress for the New Urbanism, Urban Land Institute.

### Consultancies

2008. Performed work for the Coastal Habitat Alliance on the nature of wetlands on the Texas Sand Sheet, as part of their suit against a windmill project. The investigation revealed significant and previously undocumented hydrologic pathways between the Sand Sheet wetlands and the Laguna Madre.

2006-2007. Performed work under contract to the Organization for Economic Cooperation and Development (OECD) on policy frameworks for adaptation to climate change for wetlands and the built environment in the Gulf of Mexico. I presented the work at a climate change adaptation working group meeting at the OECD headquarters in Paris in March, 2007. This work was later reworked into two Sea Grant publications on the Resilient Coast series.

2006-2007. Consultant for CAPPS Concerned Citizens (Lowerre and Frederick LLP) contesting a U.S. Army Corps of Engineers jurisdictional wetland determination in Montgomery County, Texas. CAPPS prevailed against Far Hills Utility District in a Texas Administrative Court hearing.

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| 1990-prsnt. Independent Consultant. Gulf Coast wetlands and habitats. Extensive use of geographic information systems and remotely sensed data. Preparation of soil maps and reports. Subcontracted to several consulting firms in the Houston area, working on at least 100 wetland projects, from a few acres to over 5,000 acres each. |
| 1991-1993. Staff Geoarchaeologist. New Rio Hondo Archaeology Project, northern Belize. Staff Geoarchaeologist. New Rio Hondo Archaeology Project, northern Belize. Reconstruction of past environments (Holocene) and investigation of ancient Maya wetland agriculture. |
| 1993-1999 Staff Geoarchaeologist. Regional Archaeological Investigation of the Northern Petén, Guatemala (RAINPEG) Project. Investigation of past and present environments (Quaternary) in the central Maya lowlands. Investigation of Maya adaptations to wetland environments.  |
| 1992 Independent Consultant. Contracted by the International Union for the Conservation of Nature to evaluate soils and hydrology for a rehabilitation of indigenous agrotechnology (ancient raised fields in wetlands) in Peten, Guatemala. |
| 1991 Forensic Pedologist. Evaluated soil samples on murder victim for District Attorney, San Diego, California. Identification of provenience of soil contributed to confession of accused. |
| 1989 Independent Consultant. Soil resource investigation of Yalbac Ranch, Belize. Evaluation of soils and landscapes. Interpretations for citrus and vegetables. |
| 1987-1992 Independent Consultant. Soil archaeological investigations in conjunction with theArcheological Research Laboratory, Texas A&M University. Evaluation of site formation parameters and reconstruction of site evolution. Research of paleoclimatic signatures in soil organic matter and carbonates. Research of soil chemical signatures (e.g., phosphorous accumulations) of human influence. |

# IX. Grants and Contracts Awarded

| Grant History |
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|  |
| **Contract Name and Acct No.** | **Dates** | **Amount** | **Principle & Co Investigators** | **Grantor** |
|  |  |  |  |  |
| Support for Implementing Total Maximum Daily Loads for Bacteria in Dickinson Bayou and Three Tidal Tributaries | 9/13-8/14 | 18,739 | Charris YorkJohn Jacob | Texas Commission on Environmental Quality. |
| Coastal Prairie Wetland Restoration at Sheldon Lake State Park | 10/13-5/15 | 160,885 | Marissa SipoczJohn Jacob | Texas Commission on Environmental Quality/ Galveston Bay Estuary Program |
| Collect Wetland Plants | 3-13/12/15 | 24,309 | Marissa SipoczJohn Jacob | Texas Parks and Wildlife Department |
| Galveston Brazoria County Stormwater Quality Improvement | 8/12-5/15  | 495,000  | John JacobMary Carol Edwards | Texas Commission on Environmental Quality/ Galveston Bay Estuary Program |
| Texas Coastal CHARM: Coastal Resiliency Tools for Local Officials02 463121-00000 | 2/12-4/14 | $100,000 | Steve MikulencakJohn Jacob | Sea Grant-NOAA |
| WeTable" Conference02 463981-00000 | 09/12-08/13 | $20,000 | Steve MikulencakJohn Jacob | National Sea Grant Office |
| Coastal Citizen Planner | 09/12-08/13 | $99,341 | Steve MikulencakJohn Jacob | MS-AL Sea Grant Consortium |
| Implementing TMDL Bacteria in Dickinson Bayou Watershed Implementation Project07 546110-00000 | 09/11-08/14 | $188,000 | Charriss YorkJohn Jacob | City of League City (CWA 319 subcontract) |
| Sea Grant Coastal Communities Climate Adaptation Initiative | 09/12-01/14 | $100,000 | John JacobSteven Mikulencak | National Sea Grant Office |
| Analysis of Wetland Loss in the Greater Houston Area 07 246100-60006 | 01/2011 | $5,000 | John Jacob | Rice University |
| Coastal Prairie Wetland Restoration | 11/2010 – 10/2013 | $390,538 | Marissa Sipocz John Jacob | Texas State Soil & Water Conservation Board |
| Rain Gardens: Mitigating Runoff07 446680-00000 | 10/2010 – 03/2012 | $101,686 | Christina LaChance John Jacob | General Land Office |
| Dickinson Bayou Implementation Project07 446670-00000 | 08/2010 –12/2011 | $90,000 | Charriss YorkJohn Jacob | Texas Commission on Environmental Quality (TCEQ) |
| Implementing TMDL’s Bacteria in Dickinson Bayou and Three Tidal Tributaries07 446640-00000 | 09/2010 –08/2011 | $85,000 | Charriss York John Jacob | Texas Commission on Environmental Quality (TCEQ) |
| Highland Bayou Watershed Characterization07 451580-00000 | 02/2010 – 08/2011 | $275,000 | Steven Mikulencak John Jacob | Texas Commission on Environmental Quality |
| WaterSmart Landscaping: A New Generation of Functional, Resource-Efficient Landscapes07 446590-00000 | 09/2009 – 09/2011 | $120,000 | Christina LaChanceJohn Jacob | Houston Endowment, Inc. |
| Sheldon Lake State Park Coastal Prairie Wetland07 446570-00000 | 07/2009 – 12/2011 | $149,000 | Marissa Sipocz John Jacob | Texas Parks & Wildlife |
| Eco-Logical Habitat Mapping07 446560-00000 | 01/2009-7/2009 | $14,580  | John Jacob | Federal Highway Administration(Houston-Galveston Area Council - Main Contractor)Total Grant $150,000 |
| Dickinson Bayou Nonpoint Source Water07 446550-00000 | 05/2008-08/2010 | $477,000  | Charriss YorkJohn Jacob | Texas Commission on Environmental Quality-Galveston Bay Estuary Program |
| Stormwater Wetland Best Management07 446540-00000 | 01/2008 – 08/2009 | $80,574  | Marissa SipoczJohn Jacob | Harris County, Texas (Texas Water Resources Institute –Main Contractor) |
| Improving Coastal Land Use Planning07 446530-00000 | 09/2007 – 02/2009 | $24,370  | John Jacob | Packard Institute(University of Texas Marine Sciences - Main Contractor)Total Grant $250,000 |
| Implementation of the Dickinson Bayou Watershed Plan07 446520-00000 | 07/2007 – 12/2008 | $78,500  | John Jacob | Texas Commission on Environmental Quality-Galveston Bay Estuary Program |
| Dickinson Bayou Watershed Protection Plan07 446510-00000 | 07/2007 – 12/2008 | $99,000 | John Jacob | Texas Commission on Environmental Quality-Galveston Bay Estuary Program |
| Coastal Armoring & Sea Level Rise Response Study –Texas Gulf Coast, Phase 2.07 446490-00000 | 02/2007 – 09/2007 | $24,000  | John Jacob | Industrial Economics, Inc. (From USEPA) |
| Texas Coastal Stormwater Treatment Wetland Design Manual07 446180-00000 | 11/2006 – 05/2009 | $98,772  | Marissa SipoczJohn Jacob | Texas General Land Office  |
| Seminar for WaterSmart Landscaping07 446190-00000 | 11/2006 – 08/2007 | $3,000  | Chris LaChanceJohn Jacob |  Harris County, Texas |
| Wetlands Restoration07 546904-00000 | 11/2006 – 05/2007 | $2,000  | Marissa SipoczJohn Jacob | Aware Foundation |
| Planting of Brays Bayou Wetland Site07 446480-00000 | 04/2006 – 08/2006 | $15,000  | Charriss YorkJohn Jacob | Texas Parks & Wildlife Department |
| Urban Wetlands Restoration & Education07 446170-00000 | 04/2006 – 08/2008 | $40,000  | Marissa SipoczJohn Jacob | Texas Commission on Environmental Quality-Galveston Bay Estuary Program |
| Wetlands for Dickinson Bayou-07 446470-00000 | 02/2006 – 08/2007 | $89,940  | Marissa SipoczJohn Jacob | Texas General Land Office |
| Coastal Community Health & Resource Management (CHARM)07 446160-00000 | 01/2006 – 03/2007 | $44,750  | John Jacob | Texas General Land Office |
| Houston Habitat Highway07 546902-00000 | 01/2006 – 12/2009 | $180,000  | Chris La ChanceJohn Jacob | Houston Endowment, Inc.  |
| Wetland Restoration Team07 446450-00000 | 11/2005 – 06/2007 | $73,981  | Marissa SipoczJohn Jacob | Texas General Land Office |
| Primer on Urban Growth Issues07 446140-00000 | 05/2005 – 08/2005 | $5,775  | John Jacob | Texas General Land Office |
| Galveston Bay Watershed: Urban Watershed Protection07 446130-00000 | 04/2005 – 08/2007 | $151,991  | John Jacob | Texas Commission on Environmental Quality -Galveston Bay Estuary Program |
| Coastal Armoring & Sea Level Rise Response Study07 446150-00000 | 03/2005 – 05/2006 | $10,000  | John Jacob | Industrial Economics, Incorporated (from USEPA) |
| WaterSmart Landscaping for the Upper Texas Gulf Coast07 446120-00000 | 02/2005 – 03/2007 | $50,000  | Chris La ChanceJohn Jacob | Texas General Land Office |
| Urban Watershed Education | 01/2005 | $125,000  | John Jacob | Texas Commission on Environmental Quality -Galveston Bay Estuary Program |
| Arroyo Colorado Watershed (SG)02 430674-00000 | 09/2004 – 04/2006 | $269,500  | John Jacob | Texas Commission on Environmental Quality |
| Compost Utilization Education Project02 430677-00000 | 06/2004 – 08/2005 | $27,720  | John Jacob | Texas Commission on Environmental Quality |
| Urban Wetland Education & Restoration Project07 450440-00000 | 02/2004 – 11/2005 | $88,925  | Marissa SipoczJohn Jacob | Texas General Land Office |
| La Cuenca Cuenta: Hispanic Watershed Outreach in the East End Barrio of Houston | 01/2004 | $80,000  | Marissa SipoczJohn Jacob | Texas General Land Office |
| Restoration & Planting of the Prairie / Wetlands at the Sheldon Lake State Park Restoration Site07 450930-00000 | 09/2003 – 05/2004 | $16,000  | Marissa SipoczJohn Jacob | Texas Parks & Wildlife Department |
| Brays Bayou Urban Wetland Creation Project07 450860-00000 | 09/2003 – 04/2004 | $18,000  | Marissa SipoczJohn Jacob | Texas Parks & Wildlife Department |
| Galveston Bay Watershed: Wetland Inventory07 450180-00000 | 08/2003 – 05/2005 | $100,000  | John Jacob | Texas Commission on Environmental Quality -Galveston Bay Estuary Program |
| Natural Legacy07 450000-00000 | 06/2003 | $4,000  | John Jacob | Texas Natural Resource Conservation Comm. |
| Urban Wetland Education & Restoration07 550607-00000 | 01/2003 – 04/2003 | $1,000  | Marissa Sipocz | Project Aware |
| Non-Point Education for Municipal Officials (NEMO) Start-up Grant for Texas07 502686-86230 | 09/2002 – 09/2004 | $118,000  | John Jacob | Texas General Land Office |
| WaterSmart Landscaping for Houston07 450260-00001 | 07/2002 – 07/2005 | $150,000  | Chris La ChanceJohn Jacob | Houston Endowment, Inc.  |
| Texas Coastal Watershed Center: Linking Land Use to Water Quality07 450360-00000 | 07/2002 – 02/2005 | $75,000  | John Jacob | NOAA/NEMO |
| Phase II Storm Water Circuit Rider Program07 450310-00001 | 06/2002 – 08/2004 | $160,000  | John Jacob | Galveston Bay Estuary Program |
| Monitor Wetland Loss Galveston Bay07 450230-00000 | 05/2002 – 09/2006 | $17,125  | John Jacob |  Galveston Bay Estuary Program |
| No La Riegues Public Service Campaign07 420140-00000 | 05/2002 – 12/2003 | $80,000  | John Jacob | Texas General Land Office |
| Armand Bayou Watershed Action Plan 07 421043-00000 | 05/2002 – 12/2003 | $60,000  | John Jacob | Texas General Land Office |
| Texas Coastal Wetlands Website | 01/2002 | $39,000  | John Jacob | Galveston Bay Estuary Program |
| Shallow Groundwater Maps for On-Site Sewage Facilities | 03/2001 – 01/2002 | $80,000  | John Jacob | Texas On-Site Wastewater Research Council  |
| Urban Wetlands to Treat Stormwater Runoff | 01/2001 | $120,000  | John Jacob | Galveston Bay Estuary Program |
| Development of Maps for Shallow Groundwater Evaluations07 450580-00000 | 09/2000 – 12/2001 | $83,000  | John Jacob | Texas On-Site Wastewater Treatment Research Council |
| Soil Landscape Ground Water Model | 09/2000 – 08/2001 | $10,621  | John Jacob | Research Administration University of Houston Clear Lake |
| Clear Creek Watershed Protection Project07 450620-00000 | 08/2000 – 08/2003 | $64,250  | John Jacob | Galveston Bay Estuary Program |
| Urban Wetlands to Treat NPS Pollution07 450610-00000 | 07/2000 – 08/2003 | $171,082  | John Jacob | Galveston Bay Estuary Program |
| Conservation Landscaping in Communities07 450590-00000 | 06/2000 – 08/2002 | $50,000  | John Jacob | Galveston Bay Estuary Program |
| Armand Bayou Nature Center07 550601-00000 | 02/2000 – 03/2004 | $8,984  | John Jacob | USDA |
| Neighborhood Conservation Landscaping | 01/2000 | $34,000  | John Jacob | Galveston Bay Estuary Program |
| Shallow Ground Water Tables07 450520-00001 | 05/1999 – 08/1999 | $7,000  | John Jacob | Texas On-Site Wastewater Treatment Research Council |
| A Synthetic Literature Review of Soil Water Tables as They Relate to On-Site Sewage Systems | 01/1999 | $15,000  | John Jacob | Texas Natural Resource Conservation Commission |
| Clean Water for Armand Bayou: Runoff Pollution Education & Abatement07 450420-00000 | 01/1998 – 01/2001 | $350,000  | John Jacob(grant obtained prior to hire) | Environmental Protection Agency and Texas State Soil & Water Conservation Board |
| Guidebook for Texas Coastal Wetlands | 01/1998 | $25,000  | John Jacob | Texas General Land Office |
| Agroecological Evolution of Cobweb Swamp, Belize | 01/1990 | $24,000  | John Jacob | National Geographic Society |
|  |  |   |  |  |
|  |  |  |  |  |
| Total Grants Awarded |  | $7,122,700  |  |  |
|  |  |  |  |  |

# X. Publications and Professional Output.

## Refereed Journal Articles

Jacob, J.S. 2013. **Experts, Extension, and Democracy: A Prospectus for a New Urban Grant.** Journal of Extension [online] Volume 51 (5) Article 5FEA1. Available at: http://www.joe.org/joe/2013october/a1.php.

Wilcox, B.P., D.D. Dean, J.S. Jacob, A. Sipocz. 2011. **Evidence of surface connectivity for Texas Gulf Coast depressional wetlands.** Wetlands 31:451-458. DOI 10.1007/s13157-011-0163-x

Jacob, J.S. 2009. **Reply to Discussion – “Is denser greener? A model for evaluating higher density development as an urban stormwater-quality best management practice” by Kenneth W. Potter and Glenn E. Moglen**. Journal of the American Water Resources Association. 1-4. DOI: 10.1111 ⁄ j.1752-1688.2009.00382.x.

Jacob, J.S., and R. Lopez. 2009. **Is denser greener? A model for evaluating higher density development as an urban stormwater-quality best management practice**. Journal of the American Water Resources Association. 45(3):687-701. DOI: 10.1111/j.1752-1688.2009.00316.x

Schuett, M.A., J.S. Jacob, J. Lu, and L. Respess. 2008. **Keeping our charm: Residents, growth, and quality of life issues in a small but growing Texas coastal community**. Journal of Extension. 46, No. 6. December. Article Number 6FEA1.

Hansen, R.D., S. Bozarth, J. Jacob, D. Wahl, T. Schreiner.2002*.* **Climatic and Environmental Variability in the Rise of Maya Civilization: A Preliminary Perspective from Northern Peten.**  Ancient Mesoamerica, 13:273-295.

Nordt, L.C., T.W. Boutton, J.S. Jacob, R.D. Mandel. 2002. **C4 plant productivity and climate-CO2 variations in South-Central Texas during the Late Quaternary. Quaternary** Research 58:182-188.

Jacob, J.S. and C.T. Hallmark. 1996. **Holocene stratigraphy of Cobweb Swamp, a Maya Wetland in Northern Belize**. Geological Society of America Bulletin 108: 883-891

Jacob, J.S. 1995. **Ancient wetland agricultural fields at Cobweb Swamp, Belize: Construction, chronology, and possible function.** Journal of Field Archaeology 22:175-190

Pohl, M.D., K.O. Pope, J.G.Jones, J.S. Jacob, D.R. Piperno, S.D. deFrance, D.L. Lentz, J.A. Gifford, M.E. Danforth, J.K. Josserand. 1996 **Early Agriculture in the Maya Lowlands.** Latin American Antiquity. 7:355-372.

Alcala, J., J.S. Jacob, M. Machain-Castillo, and R. Neck. 1994. **Holocene paleosalinity as inferred from the microfossil assemblage in a Maya wetland, Belize.** Quaternary Research 41:121-130.

Machain-Castillo, M.L. F.R. Gío-Argaez, J.A. Alcalá-Herrera, and J.S. Jacob. 1992. **Ostrácodos del Holoceno del norte de Belice y su interpretación paleoambiental.** Revista de la Sociedad Mexicana de la Historia Natural. 43:87-94.

Jacob, J.S. and L.C Nordt. 1991. **Soil and landscape evolution: A paradigm for pedology.** Soil Sci. Soc. Am. J. 55:1194.

Jacob, J.S. and B.L. Allen. 1990. **Persistence of a zeolite in tuffaceous soils of the Texas Trans-Pecos.** Soil Sci. Soc. Am. J. 54:549-554.

## Refereed Book Chapters

Jacob, J.S. 2013. **Urbanismo auténtico: Una política sin desventajas frente al cambio climático** (Authentic urbanism: A “No-Regrets” approach to climate change). *In:* Alejandro Yáñez-Arancibia (Ed.) Cambio climático: Dimensión ecológica y socioeconómica. Publicación AGT Editor SA, México, DF

Jacob, J.S. 2010. **Urbanización resiliente: Primera respuesta al cambio climático en las costas del Golfo de México**. (Resilient urbanism: First response to climate change on the coasts of the Gulf of Mexico). *In*: A. Yáñez-Arancibia (Ed.) Impactos del Cambio Climático sobre la Zona Costera. Instituto de Ecología A. C., INECOL, Texas Sea Grant Program NOAA, Instituto Nacional de Ecología INE-SEMARNAT, México DF. (http://www2.ine.gob.mx/publicaciones/descarga.html?cv\_pub=638&tipo\_file=pdf&filename=638)

Jacob, J.S., R. Griffin, L.P. Wilding, W.L. Miller. 1997*.* **Aquerts and Aquertic soils: A querulous proposition.** *In* M. Vepraskas and S. Sprecher, eds., Aquic Conditions and Hydric Soils: The Problem Soils. Soil Science Society of America Special Publication No. 50. Madison, WI.

Pope, K.O., M.D. Pohl, and J.S. Jacob. 1996*.* **Formation of ancient Maya wetland fields: Natural and anthropogenic processes**. pp. 165-176 *In:* S. Fedick (ed.). The Managed Mosaic: Ancient Maya Agriculture and Resource Use. University of Utah Press, Salt Lake City.

Jacob, J.S. 1995. **Archaeological pedology in the Maya lowlands.** *In* M. Collins, ed., Pedological perspectives in archeological research. Soil Science Society of America. Soil Science Society of America Special Publication 44. Madison, WI.

Jacob, J.S. 1995. **Perspectivas edafológicas sobre la agricultura en las chinampas: observaciones iniciales**. *In*, T. Rojas Rabiela, ed., Presente, pasado, y futuro de las chinampas. Centro de Investigaciones y Estudios Superiores en Antrolopología Social, Mexico, D.F.

Nordt, L.C., L.P. Wilding, C.T. Hallmark, and J.S. Jacob. 1996. **Carbon isotope composition of soil carbonates and their use in studying pedogenesis**. *In:* S. Yamaski and T.L. Boutton (eds.), Mass spectrometry of soils. Marcel Dekker Inc.

Nordt, L.C., J.S. Jacob, and L.P. Wilding. 1991. **Quantifying map unit composition for quality control in soil survey.** *In* L.P. Wilding and M. Mossbauch (ed.). Spatial variabilities of soils and landforms. Soil Science Society of America Special Publication No. 28. Madison, WI.

## Books

Moulton, D.S., and J.S. Jacob. 2000. **Texas Coastal Wetlands Guidebook**. Texas Sea Grant. 66p. TAMU-SG-00-605. College Station.

## Extension Bulletins and Pamphlets

Jacob, J.S., F. Jaber, C. York, and M. Sipocz. 2012. **Stormwater Wetlands for the Texas Gulf Coast: Ecology and Beauty for Improved Runoff Water Quality**. 2nd Edition. TAMU-SG-12-501. Texas AgriLife Extension Service SP 385.

Mikulencak, S., and Jacob, J.S. 2011. **The weTable: A tool for participatory GIS. Setup and configuration for tabletop planning at public workshops**. TAMU-SG-108. Texas Agrilife Extension SP-418.

Jacob, J.S. 2011. **Upper Texas Gulf Coast Pothole Wetlands: New research shows significant and profound hydrologic connections to Galveston Bay and other area waters**. TAMUG-SG-11-114, Texas Agrilife Extension SP-381.

Jacob, J.S., and M. Sipocz. 2009. **Stormwater Wetlands for the Texas Gulf Coast: Ecology and Beauty for Improved Runoff Water Quality**. TAMU-SG-09-701.

Jacob, J.S., and S. Showalter. 2008. **The Resilient Coast: Policy frameworks for adapting non-deltaic Wetlands to climate change and growth in coastal areas of the U.S. Gulf of Mexico**. Texas Sea Grant. TAMU-SG-07-7401R

Jacob, J.S., and S. Showalter. 2007. **The Resilient Coast: Policy frameworks for adapting The Built Environment to climate change and growth in coastal areas of the U.S. Gulf of Mexico**. Texas Sea Grant. TAMU-SG-07-7401R.

Shafer, S. and J.S. Jacob. 2006. **The Value of Small Urban Parks, Plazas, and other Outdoor Spaces.** Texas Cooperative Extension. E-426.

Jacob, J.S., and D. Crossley. 2005. **Choices for Growth: Quality of Life and the Natural Environment**. TAMU-SG-05-701.

Jacob, J.S. 2001. **WaterSmart Landscapes, Upper Gulf Coast.** Extension pamphlet. Texas Cooperative Extension.

Jacob, J.S. 2001. **Five Tips for Organic Lawn Care on the Upper Texas Gulf Coast.**  Extension pamphlet. Texas Cooperative Extension.

Jacob, J.S. 2000. **Soil and site evaluation manual for on-site septic systems**. Manual for 8-hr short course. Texas Cooperative Extension.

Hollin, D., J. Massey, J. Jacob, and G. Treece. 1998. **Airing out the problem: Methods of reducing water quality impacts and fish kills in coastal marinas.** Marine Advisory Bulletin. TAMU-SG-98-503, Texas Sea Grant College Program, Texas A&M University, College Station.

## Popular and Trade Articles

Jacob J.S. and S. Mikulencak (cartography). Forthcoming. **Forests, Prairies, and Farms: The Agro-ecological Infrastructure of the Greater Houston Area**. Cite. The Architecture and Design Review of Houston.

Jacob, J.S. (and 20 others). **End the Drain on Metro Money and Improve Lifestyles**. Houston Chronicle. Outlook Section. June 24, 2012.

Jacob, J.S. 2011. **Conservation key to accommodating growth**. (Water conservation issues). Houston Chronicle. Outlook Section. August 24, 2011.

Jacob, J. S., and T. Pacillo. 2011. **Smart Growth and Coastal Hazards**. Zoning Practice. 1.11. 1-8. American Planning Association.

Jacob, J.S. 2011. **Watersheds, Walkability, and Stormwater***.* StormwaterMagazine. January/February. 32-40.

Jacob, J.S. 2010. **Water Supply.** Counting on Quality of Place. Center for Houston’s Future. December 2010. 31-42.

Jacob, J.S. 2010. **Let’s improve building and planning methods before building the Ike Dike.** Houston Chronicle. Outlook Section. May 26, 2010.

Jacob, J.S. 2009. **Can Houston Feed Itself? (only if we can walk to the farm!).** Cite, The Architecture and Design Review of Houston. Fall 2009, p48.

Jacob J.S. 2006. **Wetland loss in the Galveston Bay watershed: How much are we really losing?** Galveston Bay Foundation Gazette. 17 (1) 1-5.

Jacob, J.S. 2005**. Houston’s also living in post-Katrina time**. Houston Chronicle. Outlook section (Op-Ed section), front page, Sunday September 18, 2005.

Jacob, J.S. 2004. **Transportation: Which Future is 2025 Plan For?** Houston Chronicle Op-Ed page, Wednesday, June 24. Article addressing transportation and land use issues.

Jacob, J.S. 2004. **One suburbanite's view: Core of Houston must grow, prosper.** Houston Chronicle Op-Ed front page, Sunday, January 16. Article on the advantages of dense urban growth for environmental and urban quality of life issues.

Jacob, J.S. 2001. **What we *can* control: Damage from the flooding**. Houston Chronicle Op-Ed page. Wednesday, June 20th. Article on the implications of Tropical Storm Allison for local patterns of development.

Jacob, J.S. 1999. **Washington’s answers won’t do to save Houston’s wetlands**. Houston Chronicle Outlook Section, front page. Sunday, August 22.

## Web-based Documents

Benner, S., C. York, and J. Jacob. 2007. **Dickinson Bayou Watershed Web Site** (www.dickinsonbayou.org).

Jacob, J.S., Lopez, R. 2004 . **No La Riegues** Spanish language runoff pollution education site. (www. Nolariegues.com).

Vojta, M., Jacob, J.S., Lopez, R. 2004. **Armand Bayou Watershed Web Site** (www.armandbayou.org).

Jacob, J.S., Lopez, R. 2003. **Texas Coastal Watershed Program Web Site** (www.urban-nature.org)

Jacob, J.S., Lopez, R. 2003. **Texas Coastal Wetlands Web Site** (www.texaswetlands.org)

Jacob, J.S., LaChance, C. 2002. **Watersmart Web Site** (www.watersmart.cc).

Jacob, J.S., Lopez, R., 2002. **Clear Creek Watershed Wetland Habitat Atlas**. Hard copy map and ARCIMS web site (www.urban-nature.org).

## Watershed Plans (major contribution to development)

Dickinson Bayou Watershed Partnership. 2008. **Dickinson Bayou Watershed Protection** **Plan**.

Armand Bayou Watershed Partnership. 2005. **Armand Bayou Watershed Plan**.

##

## Contract and Other Reports

Jacob, J.S. **Riparian Soils and Wetlands**. 2013. Chapter 5. *In:* Texas Riparian Areas. (Eds) Hardy, T.B., and Davis, N.Meadows Center for Water and Environment. Texas State University. TWDB Contract #1004831142

Jacob, J.S. and H. Biggs. 2010. **Habitat map of the Metro Houston 8-County Region**. Contract report for the Houston-Galveston Area Council for the Eco-Logic Federal Highway Administration project. (Available at http://arcgis02.h-gac.com/EcologicalGIS/).

Jacob. J.S. 2008. **A Brief Inquiry into the Ecohydrology of the Sand Texas Sand Sheet**. Contract report for the Coastal Habitat Alliance*.*

Levina, E., J.S. Jacob, L.E. Ramos, I. Ortiz. 2007. **Policy frameworks for adaptation to climate change in coastal zones: The case of the Gulf of Mexico.** Organization for Economic Cooperation and Development. International Energy Agency. COM/ENV/EPOC/IEA/SLT(2007)2. Paris.

Jacob, J.S., and L. Respess. 2006. **The Aransas Quality of Life Survey**. Contract project for the Texas General Land Office.

Jacob, J.S., R. Lopez, and H. Biggs. 2007. **Anticipated local response to sea level rise on the Texas Coast: A first approximation.** Contract report to USEPA.

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## Major Conferences Organized

***2013 weTable National Sea Grant Workshop****.* National workshop introducing weTable technology and CHARM model to Sea Grant.

***2010 Coastal Resilience Symposium.*** May 2010. A symposium on structural and non-structural approaches to building a more resilient Houston region. Several co-sponors and organizers.

***Food and Sustainable Prosperity for the Houston region***. A conference on farming, land use, community food security, and local food. Thursday, September 4, 2008. Rice Lofts. Houston, TX. Cosponsored with Gulf Coast Institute, Urban Harvest, and Houston-Galveston Area Council.

***II Workshop/Symposium on Coastal Ecosystems of the Gulf of Mexico and Caribbean.*** June 2007. Co-convened with Universidad Autónoma Juarez de Tabasco and Universidad Veracruzana. Villahermosa, Tabasco, Mexico. (www.golfo-de-mexico.org)

***Density by Design***. May 2004. Co-Conveners: Houston-Galveston Area Council, Gulf Coast Institute of Houston. Sponsored by Main Street Coalition (Houston), Galveston Bay Estuary Program, and the Houston Chapters of the American Institute of Architects and the American Planning Association. Exploring the relationship between well-designed dense cities and environment and quality of life in Houston. (www.densitybydesign.org)

***A Watershed Event****:* ***Habitat, Flooding, and Development in Houston***. November 2001. Cosponsored with Gulf Coast Institute, Galveston Bay Estuary Program. Exploring sustainable urban patterns for Houston’s future.

## Creative Works

***No La Riegues*** water quality advertising campaign in Spanish (nolariegues.com). 2003.

***Psycho*** water quality public service announcement (take off on A. Hitchcock’s film Psycho). 2000.

## Extension Presentations and Lectures

Short lectures (0.5 to 3 hours) presented for various groups, including Master Gardeners and Master Naturalists (20-30 presentations/year).

***The Ecological Infrastructure of the Greater Houston Area.***

***Watersheds and Walkability***

***Urban Growth:*** ***Environmental and Quality of Life Issues.***

***The Resilient City: the role of urban form***

***Watershed Partnerships***

***Watershed Management***

***Managing Urban Runoff***

***Wetlands: Processes and Functions.***

***University Extension Programs*** –presented mainly in international settings

***Urban Grant: Reinventing Extension for the Urban Century***

***Compost: Role in Soil Food Web, Erosion Control, Placement***. Series of three lectures presented separately or in combination.

***Basic soils for Master Gardeners and Master Naturalists***

***Watersmart Landscaping***

# XI. Professional Honors and Awards

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| --- | --- | --- |
| **Grantor** | **Date** | **Name of Award/ Reason** |
| **Personal Awards** |
| Texas A&M AgriLife Extension | 2013 | Superior Service Award |
| Recreation, Park, and Tourism Sciences Dept, Texas A&M University | 2012 | Terry Hershey Award for Excellence  |
| Master Naturalists, Galveston Bay Chapter | 2011 | Treasures of the Bay |
| Congress for the New Urbanism | 2010 | Charter Award for the Salon des Refuses project (team member) |
| Citizens Environmental Coalition, Houston, TX | 2005 | Army and Sarah Emmet Conservation Synergy Award for environmental excellence in the area of promoting conservation |
| The Wildlife Society, Texas Chapter | 2001 | Best Technical Publication (Texas Coastal Wetlands Guidebook) |
| **Awards to TCWP** |
| Keep Houston Beautiful | 2013 | Honorable Mention. Sheldon Lake Wetland Restoration. Marissa Sipocz |
| Keep Houston Beautiful | 2013 | Mayor’s Proud Partner Award -Watersmart Raingarden, EIH/UHCL. Chris LaChance |
| Houston-Galveston Area Council | 2009 | “Best of Show Award”—H-GAC Parks and Natural Areas Awards. Brays Bayou-Mason Park Stormwater Treatment Wetlands. |
| USEPA Gulf of Mexico Program | 2006 | Gulf Guardian Partnership Award. Brays Bayou-Mason Park Stormwater Treatment Wetlands. Marissa Sipocz. |
| Keep Houston Beautiful | 2006 | Mayor’s Proud Partner Award - Chrysalis Watersmart Healing Landscape, Texas Medical Center. Chris LaChance. |
| Texas Master Naturalist Galveston Bay Chapter.  | 2006 | Treasures of the Bay award given to Chris LaChance/ TCWP Watersmart Program  |
| Texas Commission on Environmental Quality | 2007 | Texas Environmental Excellence Award – Finalist. Brays Bayou Stormwater Treatment Wetland |
| TX Council of Engineering Companies | 2007 | Engineering Excellence Award - Brays Bayou Stormwater Treatment Wetland.  |
| Park People  | 2006 | Synergy Award (Excellence in Partnership) Brays Bayou Stormwater Treatment Wetland |