T. Allen Berthold
Associate Director
Texas A&M AgriLife, Texas Water Resources Institute
Phone: 979-314-2467
Email: taberthold@ag.tamu.edu

Education

Year	Degree Level	Major	Graduating College	Institution
2014	Doctor of Philosophy	Agricultural Leadership, Education, and Communications	College of Agriculture and Life Sciences	Texas A&M University
2013	Graduate Certificate	Nonprofit Management, Fundraising and Philanthropy Emphasis	Bush School of Government and Public Service	Texas A&M University
2010	Master of Water Management	Water Management and Hydrological Science	College of Engineering	Texas A&M University
2008	Bachelor of Science	Agricultural Leadership and Development	College of Agriculture and Life Sciences	Texas A&M University

Professional Experience

Assistant Professor and Extension Specialist: September 2024 – Current

- **Leadership and management of TWRI:**
  - Assist TWRI Director in developing and implementing strategic plans for TWRI, including setting goals and objectives that align with the institute's mission and vision.
  - Assist TWRI Director for TWRI's investments, guiding the development and execution of research and outreach programs focused on critical water resource issues.
  - Serve on the Institute's statewide leadership and coordination team, contributing to the alignment of TWRI's programs with broader institutional and state priorities.
  - Oversee key programs and projects within TWRI, ensuring they are executed efficiently, on time, and within budget. Develop and monitor program performance metrics and reporting.
  - Provide oversight for daily administrative functions, including budget management, staff supervision, and operational procedures. Ensure compliance with institutional policies and regulatory requirements.

    - Supervise TWRI faculty, staff, and students, ensuring effective management and alignment with program goals.
- **Resource Acquisition and Program Development:**
    - Develop strategies for resource acquisition, including relationship development with potential funders and stakeholders.
    - Lead efforts in writing and securing grants and proposals to acquire external funding for research and outreach programs.
    - Assist TWRI Director in the creation of transdisciplinary programs and projects that address critical water resource challenges.
    - Ensure the integration of research and outreach activities with Texas A&M University System's broader strategic objectives.
- **Institutional Representation:**
    - Serve as representative of TWRI in external engagements, such as meetings with stakeholders, government agencies, and academic institutions. Actively promote the institute's initiatives and cultivate collaborative partnerships to advance water resource management goals.
    - Engage in and provide leadership within professional organizations related to water resources. Actively participate in relevant committees, conferences, and forums to enhance TWRI's visibility and influence in the field.
- **Applied Research:**
    - Develop and conduct an independent applied research program focused on high-priority water resource issues.
    - Disseminate research findings through peer-reviewed journals and presentations at professional and stakeholder conferences and meetings.
- **Extension Program Development:**
    - Lead and implement Extension programs by integrating research findings, addressing community needs and enhancing public understanding of water resource management.
- **Service:**
    - Contribute to academic programs through student support and service on graduate student committees to provide research guidance and water related expertise.
    - Collaborate with faculty and staff to support interdisciplinary approaches and enhance the impact of Extension efforts.

Adjunct Associate Professor, Agricultural Leadership, Education and Communications: January 2024 – December 2024

- Co-Chair and serve on graduate student committees to provide research guidance and water related expertise.
- Participate in monthly departmental faculty meetings
- Collaborate with departmental faculty on grant proposals in the pursuit of extramural research funding
- Provide guest lectures as appropriate.

Interim Director, Texas A&M AgriLife, Texas Water Resources Institute: June 2022 – July 2024

- Provide leadership and management for more than 25 Texas Water Resources Institute (TWRI) staff and maintain operations, consistent with TAMUS policies and procedures
- Provide oversight of over 80 sponsored and non-sponsored accounts
- Engage stakeholders in identifying statewide water issues
- Build collaborative, interdisciplinary teams to address statewide water resource needs and provide leadership in pursuit of extramural resources
- Represent AgriLife, and TWRI, to statewide committees, boards, and other organizational meetings, as appropriate, where water issues, research, and education needs are discussed
- Serve as a liaison with the Texas A&M Government Relations office
- Provide leadership and strategic direction for the TWRI W G Mills Endowment
- Provide assistance for the development of programs across the TAMUS

Associate Director, Texas A&M AgriLife, Texas Water Resources Institute: September 2021 – Current

- Serves as a member of the Institute leadership team
- Assists in developing and implementing overall strategic plans of departments and leads strategic planning for assigned areas
- Assists with preparation of budgets and leads annual budgeting and expense control for assigned areas
- Establishes performance goals and metrics to evaluate the success of areas of responsibility
- Oversees State and Federal reporting for assigned program area
- Assists in formulating and implementing policies and procedures
- Oversees coordination of programs and ensures that program goals are consistent with Institute and System missions
- Develops reports, analyses, and surveys for the Director
- Facilitates relationships with internal and external clients, customers, and other interest groups
- Leads the development of grant proposals to secure extramural funding

Assistant Director, Texas A&M AgriLife, Texas Water Resources Institute: September 2020 – August 2021

- Serve as a member of the Institute leadership team
- Assist the Institute Director with operations and administration, and maintains responsibility for assigned major functional units
- Interprets and evaluates information to modify work processes
- Prepares budgets and annual reports
- Oversees payroll, purchasing, and travel
- Assigns and monitors the workflow of accounting and administrative staff that supports the operations of the Institute

- Creates and maintains fluid standard operating procedures for administrative duties in order to comply with Federal, State, University, and sponsor policies/procedures related to research administration.
- Develops and fosters relationships with both internal and external to TAMUS
- Provide leadership for the development of grant proposals to secure extramural funding and administration for funded projects
- Assists with projects, presentations, and other duties as assigned.
- Manages lab, field, and space issues for the Institute.

Extension Associate Department Head/Program Leader: Texas Water Resources Institute: September 2019 – Current

- Provide direct supervision of Extension specialists and staff in a department or program unit in coordination with the Department Head (DH). Work with the DH to develop duties and expectations for Extension Specialists. Utilize summary information from the Cumulative Faculty Achievement Report, Interfolio and other documentation provided, along with input from other appropriate key Extension personnel to conduct annual faculty performance evaluations.
- Identify Extension needs in Texas and coordinate with the DH to identify priority programs and positions.
- Engage departmental faculty in collaborations through service, applied research, synergistic programs, and graduate committees service to maximize resources.
- Identify, direct, or implement professional improvement opportunities for faculty in the program unit. Collaborate with Regional Program Leaders to determine professional development training opportunities for County Extension Agents relative to the unit's subject matter capabilities.
- Encourage and support departmental development efforts, through acquisition of state, federal and industry contracts, grants, gifts, endowments, and fee-based programs that fit the Extension educational mission. Monitor and lead current and future fee-based program development and delivery.
- Communicate regularly with Extension faculty/staff in the unit on department, agency and system topics and timelines such as award nomination announcements, grant and contract opportunities, reporting/accountability updates and interpretation summaries and requests for program resource materials.
- Foster and lead interaction among specialists, AgriLife Research, and system universities to integrate Extension goals with research priorities.
- Collaborate and communicate with commodity groups, associations, stakeholder groups and agency personnel to maintain relationships in educational programs and to interpret results across subject matter areas.

Senior Research Scientist, Texas A&M AgriLife, Texas Water Resources Institute: March 2018 – August 2020

- Serve as a member of the Institute leadership team.
- Assist the Institute Director with operations and administration, and maintains responsibility for assigned major functional units

- Provide project planning, supervision, development, management, and implementation of research and education projects for the Texas Water Resources Institute
- Develop collaboration and program planning by working closely with County Extension Agents, Extension Specialists, local, state, and federal agencies, TAMU and other university faculty
- Work with collaborators to plan, implement, and report existing and potential partnerships and projects and participate with Research, Extension and other personnel in preparation of proposals to obtain external funding
- Develop research programs, and prepare data results
- Design, perform, and analyze experiments consistent with project objectives
- Conduct independent research aligned with the TAMUS member's mission
- Keep detailed records of procedures and data
- Mentor students on analyzing and preparing data results
- Validates strategic decision-aid models
- Develop procedures to improve efficiency and accuracy of data collection and analyses
- Identify, assimilate, and synthesize data needed for computer models and manages databases relating to statistical and related software
- Maintain expertise with the latest hardware and software technologies for statistical and numerical data analyses
- Keep up-to-date on scientific research via reading of literature, etc.
- Attend scientific meetings and seminars for research enhancement
- Prepare data for publication and presentation

Research Scientist, Texas A&M AgriLife, Texas Water Resources Institute: September 2014 – February 2018

- Develop collaboration and program planning by working closely with County Extension Agents, Extension Specialists, local, state, and federal agencies, TAMU and other university faculty
- Work with collaborators to plan, implement, and report existing and potential partnerships and projects and participate with Research, Extension and other personnel in preparation of proposals to obtain external funding
- Secure, manage and participate in grants and other externally funded projects
- Develop water related Extension and Research programs and projects based on identified needs and priority areas by working with collaborators
- Implement and deliver water related programs by providing leadership and field support to accomplish program goals
- Facilitate the development of stakeholder groups in water resource protection and conservation
- Assess statewide, regional, and national needs, issues and trends in water resources to further develop programmatic areas and enhance program effectiveness
- Evaluate effectiveness of efforts and work closely with collaborators to develop more effective techniques for stakeholder engagement as well as support for Extension and Research activities
- Supervise research personnel as necessary

Project Specialist, Texas A&M AgriLife, Texas Water Resources Institute: November 2012 – August 2014

- Work closely with County Extension Agents, Extension Specialists, TAMU Research faculty, industry, universities, other organizations, and government at the local, state, and national level in developing collaborations and program planning areas related to water resources
- Work with collaborators to plan, implement, and report existing and potential partnerships and projects and participate with Research, Extension and other personnel in preparation of proposals to obtain external funding
- Secure, manage and participate in grants and other externally funded projects as appropriate
- Function as an effective team member in providing project management and program coordination for a variety of projects including planning, implementing budgets, accounts, faculty liaison and reporting
- Work with collaborators to develop water-related Extension and Research programs and projects based on identified needs and priority areas
- Continue to support Extension and Research activities through development of programs and projects
- Work with collaborators to implement and deliver water related programs by providing leadership and field support to accomplish program goals in support of ongoing and upcoming Extension and Research activities
- Develop and deliver as well as provide leadership for team efforts that develop and deliver water resource educational materials and programs related to Extension and Research activities
- Facilitate the development of stakeholder groups who take lead in water resource protection and conservation
- Provide leadership, educational opportunities, programs, and support for stakeholders locally, statewide and nationwide, as needed
- Assess statewide, regional, and national needs, issues and trends in water resources to further develop programmatic areas and enhance program effectiveness
- Evaluate effectiveness of efforts and work closely with collaborators to develop better techniques for stakeholder engagement as well as support for Extension and Research activities
- Participate as an active member in professional associations and keep abreast of and interpret research results for practical application for water resource stakeholders
- Participate as the Institutes designated representative at other meetings and conferences as appropriate

Project Manager, Texas A&M AgriLife, Texas Water Resources Institute: December 2009 – October 2012

- Provide for project management planning, development and implementations of research and education projects

- Establish and maintain collaborations with TAMUS administration and faculty, federal and state agencies
- Evaluate and reporting for TWRI sponsored projects and other activities as assigned by the Director an Associate Director
- Manage a variety of projects as assigned including planning, implementing budgets, accounts, faculty liaison and reporting.
- Work with state and federal agency personnel and others to plan, implement, and report existing and potential partnerships and projects and participate with research and Extension personnel in preparation of grant proposals to obtain external funding
- Regularly communicate with colleagues and TWRI Director and Associate Director about projects and related issues
- Work closely with TWRI communications team to compile reports, prepare results for publication and develop project websites
- Organize quarterly or other regularly scheduled meetings for project participants, update meetings for funding agencies and other sessions as needed
- Work on special assignments and implement objectives identified by TWRI Director and Associate Director
- Participate as the TWRI designated representative in meetings and conferences as appropriate.
- Assist TWRI administration and function as an effective team member.

Other Work Experience

Student Technician, Texas A&M AgriLife, Texas Water Resources Institute: January 2009 – December 2009

Student Intern, The Honerable Ruben Hinojosa, United States House of Representatives: May 2008 – August 2008

Service and Other Relevant Experience

Date	Role	Organization
2024	Committee Member	Department Head Search Committee for Department of Agricultural Leadership, Education and Communications
2023	Reviewer	Minnesota Water Resources Research Institute Hatch Proposal Review
2023	Reviewer	Colorado Water Resources Research Institute USGS 104(b) Proposal Reviewer
2023	Reviewer	Clemson Water Resources Research Institute USGS 104(b) Proposal Reviewer

2022 – Current	Vice President	Texas Water Journal
2022 – Current	Board Member	Texas Groundwater Protection Committee
2022	Reviewer	TWRI Faculty Fellows
2022	Reviewer	USDA-NIFA SBIR Conservation of Natural Resources Phase I review panel
2022 – 2023	Graduate	San Antonio Livestock Exposition – Leadership Extension (SALE-LE) Program
2021	Reviewer	TWRI Faculty Fellows
2021	Associate Editor	Journal of Agronomy
2021 – Current	Higher Education Alternate	Texas Water Conservation Advisory Council
2021 – Current	Manager	TAMU Water Exceptional Item Fund
2021	Reviewer	USDA-NIFA SBIR Conservation of Natural Resources Phase I review panel
2020	Reviewer	North Carolina Water Resources Institute 104b selections
2020 – 2023	Board Member (Powell Consortium)	National Institutes for Water Resources
2020	Graduate	AgriLife Advanced Leaders Program
2019	Reviewer	Texas A&M Water Technology Seed Grant review panel
2019	Reviewer	USDA-NIFA Conference Grant review panel
2019	Reviewer	Southern Regional Water Conference abstract review panel
2018 – Current	TAMU Delegate	University Council on Water Resources

2018	Reviewer	University Council on Water Resources abstract review panel
2017 – 2019	Reviewer	Soil and Water Conservation District awards review panel
2017	Graduate	National Science Foundation Innovation Corps
2009 – 2023	Reviewer	USGS 104(b) grant student proposal review panel

---

Courses Taught and Guest Lectures

Class Number	Class Title	Semester	Role
PSS 6001	Regenerative Ag in Semi-arid Ecosystems – Barriers to Adoption	Fall 2024	Guest Lecturer
ALEC 681	Seminar	Spring 2023	Guest Lecturer
CVEN 681	Seminar	Fall 2023	Guest Lecturer
ALEC 625	Program Evaluation and Organizational Accountability	Spring 2015	Co-lecturer (not on record)

Graduate Student Committees Served

Graduating Year	Name	Degree Level	Department	Thesis/Dissertation Title
Ongoing	Rilee Hall	Masters	Agricultural Leadership, Education, and Communications	N/A
Ongoing	Stephanie deVilleneuve	PhD	Soil and Crop Sciences	N/A
Ongoing	Joel Pigg	PhD	Soil and Crop Sciences	N/A
Ongoing	Galen Roberts	PhD	Soil and Crop Sciences	N/A
2024	Norberto Barragan	Masters	Water Management and Hydrological	Quantifying the Spatial Variability of Scroll Bar

			Sciences	Morphometrics in the Lower Brazos River, TX, USA.
2021	Dhruva Kathuria	PhD	Biological and Agricultural Engineering	Multiscale Big Data Fusion of Soil Moisture from Point to Satellite Scales
2021	Taylor Olsovsky	Masters	Agricultural Leadership, Education, and Communications	Texas Beef Cattle Producers' Behavioral Intention to Adopt Recommended Stocking Rates: Implications for Water and Land Quality
2016	Stacey Dewald	Masters	Agricultural Leadership, Education, and Communications	Identifying Texas Landowners' Preferred Communication Channels, Motivations, and Barriers to Adopting Best Management Practices Related to Watershed Based Plans
2015	Christina Barrera	Masters	Soil and Crop Sciences	The Influence of Dam Releases on Microbial and Physiochemical Parameters in the Alluvial Aquifer of a Regulated River

---

Grants Awarded (*Role if not PI*)
Total Award: $34,756,479, Berthold Award: $12,794,577

FY	Project Title	Total Awarded Amount	TWRI Budget	Sponsor
10	Building Partnerships for Cooperative Conservation in the Trinity River Basin *(grant writer)*	$ 437,946	$ 114,823	EPA/TSSWCB
11	Watershed Assistance to Improve Water Quality in North Central Texas *(grant writer)*	$ 302,400	$ 23,705	USDA-NRCS

11	Colorado River Alluvium Segment 1428 Case Study: Assessment of Pathogen Risk to Human Health in Potable Water Related to NPS of Contamination	$	147,448	$	24,912	EPA/TCEQ
11	Best Management Project (BMP) Assessment Using Rainfall Simulation - Fort Hood, TX *(grant writer)*	$	299,700	$	27,935	USDA-NRCS
11	Sustainability of the Arroyo Colorado Watershed Partnership and Continued Implementation of the Arroyo Colorado Watershed Protection Plan	$	288,592	$	288,592	EPA/TCEQ
12	Lower Laguna Madre Regional Treatment Wetland System: Phase I	$	350,408	$	181,135	NOAA
12	Development and Implementation of Innovative Storm Water Regional Detention Facilities for Urban Water Quality Improvement in the Arroyo Colorado	$	115,637	$	115,637	EPA/TCEQ
12	Bacterial Source Tracking to Support Adaptive Management of the Arroyo Colorado Watershed Protection Plan	$	465,556	$	119,348	EPA/TSSWCB
12	Implementation Plan (I-Plan) Development for the Total Maximum Daily Load (TMDL) for Bacteria, Dissolved Oxygen and pH in Adams Bayou, Cow Bayou and their tributaries	$	29,500	$	29,500	TCEQ
12	Arroyo Colorado Assessment of Tidal Stream Communities	$	107,283	$	20,851	NOAA/TXGLO

12	Support for the Total Maximum Daily Load (TMDL) Program to Address Bacteria in Mission River Tidal, Aransas River Tidal, Mission Bay, Port Bay and Copano Bay	$	40,000	$	40,000	TCEQ
12	Lower Rio Grande Basin and Bay Expert Science Team-Hydrologic Data Acquisition and Support of Development of a Water Balance Between the Arroyo Colorado and the Rio Grande downstream of Anzalduas Dam	$	25,000	$	25,000	TCEQ
13	Support for Total Maximum Daily Loads (TMDLs) and TMDL Implementation Plan (I-Plan) for Indicator Bacteria in the Mission River Tidal, Aransas River Tidal and Portions of Copano Bay Designated for Oyster Water Harvesting	$	167,046	$	137,219	TCEQ
13	Arroyo Colorado Watershed Protection Plan (WPP) Update	$	476,002	$	261,407	EPA/TCEQ
13	Bacteria Modeling in the Arroyo Colorado Watershed	$	162,840	$	39,784	EPA/TCEQ
13	Watershed Characterization, Public Outreach and Education in the Brownsville-Resaca Watersheds of Cameron County Texas	$	185,000	$	124,882	EPA/TCEQ
14	Supporting Total Maximum Daily Load (TMDL) and TMDL Implementation Plan (I-Plan) Development for Bacteria in the Tidal Segments of the Mission and Aransas Rivers and Tributaries	$	18,336	$	18,336	TCEQ
14	Basin Approach to Address Bacterial Impairments in Basins	$	187,933	$	145,306	TCEQ

	15, 16, and 17				
14	Delivering Education Programs Focused on Stakeholder Needs to Address Agricultural NPS in the Arroyo Colorado Watershed	$ 83,027	$ 83,027	EPA/TSSWCB	
15	Characterizing the Little River, San Gabriel River, and Big Elm Creek Watersheds for Future Watershed-Based Plan Development	$ 325,211	$ 325,211	EPA/TCEQ	
15	Supporting Total Maximum Daily Load (TMDL) and TMDL Implementation Plan (I-Plan) Development for Bacteria in the Tidal Segments of the Mission and Aransas Rivers and their Tributaries	$ 15,000	$ 15,000	TCEQ	
15	Approach to Address Bacterial Impairments in Basins 15, 16 and 17	$ 205,649	$ 205,649	TCEQ	
16	Support for Total Maximum Daily Load (TMDL) and TMDL Implementation Plan (I-Plan) Development for Bacteria in the Tidal Segment of the Mission and Aransas Rivers and their Tributaries in Fiscal Year 2016	$ 9,500	$ 9,500	TCEQ	
16	Basin Approach to Address Bacterial Impairments in Basins 15, 16, and 17	$ 297,230	$ 297,230	TCEQ	
16	Continued Development, Research, and Commercialization of a Web-Based Portal Using Advanced Metering Infrastructure Water Data	$ 224,807	$ 112,404	AgriLife Research	

17	Diversifying the Water Portfolio for Agriculture in the Rio Grande Basin *(Co-PI until assumed Project Director role in 2020)*	$	4,997,257	$	808,713	USDA-NIFA
17	Mission and Aransas Rivers TMDL I-Plan Implementation	$	83,979	$	83,979	TCEQ
17	GLO Coordinating Implementation of the Tres Palacios Watershed Protection Plan	$	95,816	$	95,816	NOAA/TXGLO
17	TCEQ Coordinating Implementation of the Tres Palacios Watershed Protection Plan	$	353,800	$	353,800	EPA/TCEQ
17	Implementation of the Tres Palacios Watershed Protection Plan through OSSF Remediation	$	327,361	$	327,361	EPA/TCEQ
17	Bacterial Source Tracking (BST) on Tributaries of Trinity and Galveston Bays	$	240,000	$	240,000	GBEP
17	National Science Foundation Innovation Corps Program	$	18,174	$	18,174	NSF
17	Development of an Autonomous Smart Irrigation Management System (*Co-PI*)	$	18,998	$	18,998	AgriLife Research
17	Continued Statewide Delivery of the Texas Well Owner Network & Water Resources Education and Outreach for Students and Teachers	$	757,749	$	188,758	EPA/TSSWCB
18	Big Elm Creek Watershed Protection Plan	$	160,000	$	160,000	EPA/TCEQ

18	Lavaca River Watershed Protection Plan (WPP) – Coordination Implementation and Routine Water Quality	$	150,000	$	150,000	EPA/TCEQ
18	Characterizing the Middle Yegua, Davidson Creek and Deer Creek Watersheds	$	284,154	$	284,154	EPA/TSSWCB
19	Support for the Development of a Watershed Protection Plan (WPP) for the Mission River and Aransas River watersheds	$	30,000	$	30,000	TCEQ
19	Basin Approach to Address Bacterial Impairments in Basins 15, 16, and 17	$	87,183	$	51,888	TCEQ
19	I-Plans to Address Bacterial Impairments in Basins 15, 16, and 17	$	10,216	$	10,216	TCEQ
19	Post Oak Savannah Groundwater Conservation Education Program	$	33,745	$	24,745	POSGCD
19	Targeted Education to Decrease Nonpoint Source Loadings	$	71,904	$	71,904	TSSWCB
20	Bluebonnet Groundwater Conservation District Education Program	$	15,327	$	12,327	BGCD
20	Post Oak Savannah Groundwater Conservation District Education Program	$	56,089	$	47,089	POSGCD
20	Matagorda Basins FY 20 Work Order	$	36,212	$	36,212	TCEQ
20	Lavaca TMDL Amendment FY 20 Work Order	$	46,826	$	46,826	TCEQ
20	Continued Monitoring in the Middle Yegua, Davidson, and	$	127,485	$	127,485	TSSWCB

	Deer Watersheds					
20	El Campo Pet Waste Station and Education	$	40,164	$	40,164	EPA/TCEQ
20	Pond Creek Water Quality Monitoring	$	101,772	$	101,772	TSSWCB
20	Little River Water Quality Monitoring	$	66,945	$	66,945	TSSWCB
21	Coastal Stormwater and OSSF Education	$	353,917	$	311,200	EPA/TCEQ
21	Big Elm Creek Implementation	$	221,872	$	221,872	EPA/TCEQ
21	Post Oak Savannah Groundwater Conservation District Education Program	$	64,032	$	55,032	POSGCD
21	Bluebonnet Groundwater Conservation District Education Program	$	17,512	$	14,512	BGCD
21	Agreement No. 21-005-W Between Texas A&M AgriLife Research and North Texas Municipal Water District	$	170,328	$	170,328	NTMWD
21	Little River Supplemental Watershed Monitoring	$	40,167	$	40,167	TSSWCB
21	Extended Delivery of the Texas Well Owner Network	$	556,068	$	67,298	EPA/TSSWCB
21	WO1: Two TMDLs for Indicator Bacteria in Lavaca River Above Tidal and Rocky Creek	$	46,826	$	46,826	TCEQ
21	WO2: Basin Approach to Address Bacterial Impairments in Basins 15, 16, and 17	$	36,212	$	36,212	TCEQ

22	Coordinated Implementation of Matagorda Basin Watershed Protection Plans	$	402,500	$	402,500	EPA/TSSWCB
22	Water Quality Monitoring in Middle Yegua and Davidson Creeks	$	136,302	$	136,302	TSSWCB
22	Implementation Ag Management Measures in Multiple Watersheds	$	389,101	$	274,649	EPA/TSSWCB
22	Sustainable Agricultural Intensification and Enhancement Through the Utilization of Soil Health Management Practices *(Project Co-PD, $10M total project award)*	$	10,000,000	$	1,226,743	USDA-NIFA
22	Curriculum Development for Engaging Volunteers in Watershed Management	$	250,870	$	161,094	EPA/TSSWCB
22	Post Oak Savannah Groundwater Conservation District Education Program	$	122,387	$	113,387	POSGCD
22	Bluebonnet Groundwater Conservation District Education Program	$	20,970	$	17,970	BGDC
22	Attoyac Bayou WPP Implementation – OSSF Remediation *(Co-PI)*	$	132,292	$	45,000	EPA/TCEQ
22	Annual Application under Section 104 of the Water Resources Research Act of 1984	$	131,250	$	86,250	USGS
22	Deer Creek Watershed Monitoring and Assessment	$	58,497	$	58,497	TSSWCB

22	WO 16 Total Maximum Daily Load (TMDL) and Watershed Protection Plan (WPP) Monitoring in Tidal Segments of the Mission and Aransas Rivers	$	53,924	$	53,924	TCEQ
22	WO 14 Total Maximum Daily Load (TMDL) and Watershed Protection Plan (WPP) Monitoring in Arenosa Creek and Garcitas Creek Above Tidal	$	35,729	$	35,729	TCEQ
23	Healthy Lawns and Healthy Waters (HLHW) Education Program 3	$	408,713	$	77,066	EPA/TCEQ
23	Total Maximum Daily Load (TMDL) and Watershed Protection Plan (WPP) Monitoring in Tidal Segments of the Mission and Aransas Rivers	$	56,640	$	56,640	TCEQ
23	Total Maximum Daily Load (TMDL) and Watershed Protection Plan (WPP) Monitoring in Arenosa Creek and Garcitas Creek Above Tidal	$	59,370	$	59,370	TCEQ
23	Evaluating Best Management Practices (BMP) Effectiveness for Community Gardens in Dallas-Fort Worth Watersheds.	$	353,184	$	353,184	EPA/TCEQ
23	Brushy Creek Watershed Characterization	$	205,576	$	205,576	EPA/TSSWCB
23	Middle Yegua Watershed Protection Plan Development	$	136,231	$	136,231	EPA/TSSWCB
23	Little River Continued Surface Water Quality Monitoring	$	110,037	$	110,037	TSSWCB

23	Implementing and Tracking Success of Agricultural Management Measures in Four Texas Watersheds – Part II	$	275,908	$	296,295	EPA/TSSWCB
23	Post Oak Savannah Groundwater Conservation District Education Program	$	122,387	$	113,387	POSGCD
23	Bluebonnet Groundwater Conservation District Education Program	$	20,225	$	17,225	BGCD
24	Pond Creek Watershed Characterization for Future WPP Development *(Co-PI)*	$	83,669	$	-	TSSWCB
24	Biomarker discovery and verification of single PFAS or mixtures effects on estuarine biota *(Co-PI)*	$	279,000	$	-	USGS
24	Continued Monitoring on Deer and Pond Creeks to Support Watershed Characterization *(Co-PI)*	$	101,361	$	-	TSSWCB
24	Davidson Creek Watershed Protection Plan	$	151,682	$	151,682	TSSWCB
24	50112 WO4: Total Maximum Daily Load (TMDL) and Watershed Protection Plan (WPP) Monitoring in Arenosa Creek and Garcitas Creek Above Tidal	$	48,783	$	48,783	TCEQ
24	50112 WO#5: Total Maximum Daily Load (TMDL) and	$	53,588	$	53,588	TCEQ

	Watershed Protection Plan (WPP) Monitoring in Tidal Segments of the Mission and Aransas Rivers				
24	Big Elm Creek Watershed Protection Plan Implementation Outreach and Education Phase 2	$ 160,677	$ 160,677	TCEQ	
24	Watershed Education Through Experiment Stations in Texas	$ 104,827	$ 104,827	TCEQ	
25	Soil Health Demonstrations to Increase Regenerative Agricultural Intensification in the Southern High Plains *(Project Co-PD, $4,999,378 total project award)*	$ 4,999,387	$ 557,347	USDA-NRCS	
25	Development and Delivery of a New Landowner Education Program	$ 265,453	$ 265,453	TSSWCB	
25	Post Oak Savannah Groundwater Conservation District Education Program	$ 340,818	$ 267,998	POSGCD	

Refereed Publications

Orchid ID: 0000-0002-2604-1447

McCrary, A., Yang, L., **Berthold, T.A.** (2024). Using machine learning to predict maintenance intentions of septic system owners. (Submitted, under review).

Jamar, P., Fuller, E., Leggette, H., Lu, P., Wald, D., **Berthold, T.A.** (2024). Cash Crops or Cover Crops? The Reasons and Barriers for Adopting Cover Crops in the Southern Great Plains of Texas and Oklahoma. (Submitted, under review).

Johnson, T. D., Mitchell-McCallister, D., deVilleneuve, S., & **Berthold, T. A.** (2024). Producer Willingness to Accept Incentive Levels for Cover Crop Adoption in the Southern Great Plains. *Journal of Agricultural and Applied Economics*, 1–15. doi:10.1017/aae.2024.30

Liu, L., Shields, M. R., Puthigai, S., Gregory, L. F., and **Berthold, T. A.** (2024). Distribution of Per- and Polyfluoroalkyl Substances in Urban Waters in the Arroyo Colorado Watershed, Texas. 180,23-36. https://doi.org/10.1111/j.1936-704X.2024.3405.x.

Berthold T. A., McCrary. A., DeVilleneuve. S., Schramm. M. (2023). Let's talk about PFAS: Inconsistent public awareness about PFAS and its sources in the United States. PLOS ONE 18(11): e0294134. https://doi.org/10.1371/journal.pone.0294134

Ajaz, A., **Berthold, T. A**., Xue, Q., Jain, S., Masasi, B., & Saddique, Q. (2023). Free weather forecast and open-source crop modeling for scientific irrigation scheduling: proof of concept. *Irrigation Science*, 1-17. doi: https://doi.org/10.1007/s00271-023-00881-8

Berthold, A., Olsovsky, T., and Schramm, M. (2021). Direct Mailing Education Campaign Impacts on the Adoption of Grazing Management Practices. *Journal of Contemporary Water Research and Education.* 174, 46-61. DOI: https://doi.org/10.37433/aad.v2i1.89

Berthold, A., Ajaz, A., Olsovsky, T., & Kathuria, D. (2021). Identifying Barriers to Adoption of Irrigation Scheduling Tools in Rio Grande Basin. *Smart Agricultural Technology*, 100016.

Olsovsky, T., Strong, R., and **Berthold, A.** (2021). Enhancing Landowner Adoption of the Natural Resource Conservation Service's Recommended Beef Cattle Grazing Practices. *Advancements in Agricultural Development*, 2(1), 56 – 69. https://doi.org/10.37433/aad.v2i1.89

Dewald, S. S., Murphrey, T. P., Leggette, H. R., **Berthold, A**., & Wagner, K. (2019). Landowner Adoption of Water Quality Best Management Practices: Motivations and Barriers. *The Journal of Extension, 57*(5), Article 12. https://tigerprints.clemson.edu/joe/vol57/iss5/12

Dewald, S., Leggette, H., Murphrey, T. P., **Berthold, A**., and Wagner, K. (2018). Communicating to Landowners in the Texas Little River Watershed: A Descriptive Analysis of their Communication Preferences for Receiving Water-Related Information. *Journal of Agricultural Education,* 59(2), 343-369. https://doi.org/10.5032/jae.2018.02343.

Hawkins, C and **Berthold, A**. (2017). Twelve Tips for Getting Started with AMI Systems: Advice from Utilities, Vendors, and Consultants. *American Water Works Association: Opflow.*

Hawkins, C. A., & **Berthold, T. A**. (2016). A literature review: developing an information feedback interface to encourage water conservation behavior among utility customers. *Texas Water Journal*, *7*(1).

Borel, K., Karthikeyan, R., **Berthold, T. A**., and Wagner, K. (2015). Estimating E. coli and Enterococcus loads in a coastal Texas watershed. *Texas Water Journal*, *6*(1), 33-44.

Book Chapters

Wagner, K., Gregory, L., and **Berthold, A.** Volume I, Chapter 1, "Water Quality Management," CRC Water Sustainability Handbook, Editor, Daniel H. Chen, Taylor & Francis/CRC Press, Boca Raton, FL (December 27, 2016).

Wagner, K., Dictson, N., Gregory, L., Gholson, D., Entwistle, C., Hein, K., Boellstorff, D., **Berthold, A.**, Hawkins, C., Wolff, A., and Jonescu, B. (2016). Texas Water Resources: Chapter 9. Texas Master Naturalist Curriculum Handbook.

Agency Reviewed Technical Publications

DeVilleneuve, S., Yang, L., Rambo, J., Schramm, M., and **Berthold, A**. (2022). Characterization of Middle Yegua, Davidson, and Deer Creek Watersheds. Texas Water Resources Institute, Technical Report 537, College Station, TX: Texas A&M University.

DeVilleneuve, S., **Berthold, T A**., Yang, L., Cowan, D., Roberts, G. (2022). Bois d'Arc Watershed Protection Plan. Texas Water Resources Institute, Technical Report 536, College Station, TX: Texas A&M University.

Rhodes, E., DeVilleneuve, S., **Berthold, A**., Khanal, D. (2021). Big Elm Creek Watershed Protection Plan. Texas Water Resources Institute, Technical Report 520, College Station, TX: Texas A&M University.

Berthold, T.A. and Olsovsky, T. (2021). Targeted Education to Decrease Nonpoint Source Loadings. Texas Water Resources Institute, Technical Report 533, College Station, TX: Texas A&M University.

Rhodes, E. and **Berthold, A.** (2020). Mission and Aransas TMDL effectiveness monitoring. Texas Water Resources Institute, Technical Report 527, College Station, TX: Texas A&M University.

DeVilleneuve, S., Yang, L., Rambo, J., Schramm, M., and **Berthold, A.** Middle Yegua, Davidson, and Deer Creeks watersheds. Texas Water Resources Institute, Technical Report 523, College Station, TX: Texas A&M University.

McCorkle, D.A., L. Gregory, D.P. Anderson, D.D. Hanselka, **A. Berthold**, S.L. Klose, and M.L. Waller. *Economic Impact Brief: Protecting the State's Watersheds.* Texas A&M AgriLife Extension Service, The Texas A&M University System, College Station, Texas, 2020. Update to 2018 publication.

Schramm, M., DeVilleneuve, S., Jain, S., **Berthold, A.**, and Mohandass, U. (2019). Carancahua Bay watershed protection plan. Texas Water Resources Institute, Technical Report 514, College Station, TX: Texas A&M University.

Schramm, M., **Berthold, A**., Entwistle, C., and Peddicord, K. (2018). Lavaca river watershed protection plan. Texas Water Resources Institute, Technical Report 507, College Station, TX: Texas A&M University.

Schramm, M., **Berthold, A**., and Entwistle, C. (2017). Tres palacios creek watershed protection plan. Texas Water Resources Institute, Technical Report 500, College Station, TX: Texas A&M University.

Jonescu, B., Muela, S., Peddicord, K., and **Berthold, A.** (2017). Little river, San Gabriel river, and big elm creek watershed inventory. Texas Water Resources Institute, Technical Report 502, College Station, TX: Texas A&M University.

Gutierrez, V., Wagner, K., and **Berthold, A.** (2016). Delivering education programs focused on stakeholder needs to address agricultural nps in the arroyo Colorado watershed. Texas Water Resources Institute, Technical Report 490, College Station, TX: Texas A&M University.

Berthold, A. (2016). Bacterial source tracking to support adaptive management of the arroyo Colorado watershed protection plan: final report. Texas Water Resources Institute, Technical Report 494, College Station, TX: Texas A&M University.

Dictson, N., **Berthold, A**., Entwistle, C., Simpson, H., and Lewey, S. (2015). Texas riparian & stream ecosystem educational program. Texas Water Resources Institute, Technical Report 479, College Station, TX: Texas A&M University.

Jonescu, B., Gregory, L., **Berthold, A**., and Wagner, K. (2015). Arenosa creek surface water quality monitoring report. Texas Water Resources Institute, Technical Report 482, College Station, TX: Texas A&M University.

Berthold, A., and Gentry, T. (2015). Pathogen risk to human health in potable water related to nonpoint sources of contamination: Colorado river alluvium case study, river segment 1428 phase II final report. Texas Water Resources Institute, Technical Report 478, College Station, TX: Texas A&M University.

Gregory, L., Brown, M., Hein, K., Skow, K., Engling, A., Wagner, K., and **Berthold, T.** (2014). Basin approach to address bacterial impairments in basins 15, 16, and 17. Texas Water Resources Institute, Technical Report 462, College Station, TX: Texas A&M University.

Gregory, L., Brown, M., Skow, K., Engling, A., Wagner, K., and **Berthold, T.** (2014). Application of the recovery potential screening tool in the Matagorda bay watershed.

Texas Water Resources Institute, Technical Report 460, College Station, TX: Texas A&M University.

Flores, J., and **Berthold, T. A.** (2014). Sustainability of the Arroyo Colorado partnership & continued implementation of the Arroyo Colorado watershed protection plan: final report. Texas Water Resources Institute Technical Report TR 467. College Station, TX: Texas A&M University.

Berthold, A. (2012). Arroyo Colorado agricultural nonpoint source assessment final report. Texas Water Resources Institute Technical Report TR 429. College Station, TX: Texas A&M University.

Berthold, A., and Flores, J. (2012). Enhancing water quality and dredged material for the port of Harlingen (phase I). Texas Water Resources Institute Technical Report TR 417. College Station, TX: Texas A&M University.

Gregory, L., Barella, K., **Berthold, T**., Borel, K., Casarez, E., DeLaune, P., DiGiovanni, G., Dyer, P., Govil, K., Hoff, A., Karthikeyan, R., Sij, J., Truesdale, J., VanDelist, B., and Wagner, K. (2012). Buck creek watershed protection plan. Texas Water Resources Institute, Technical Report 420, College Station, TX: Texas A&M University

Berthold, A. (2011). Public service announcements for the Arroyo Colorado watershed. Texas Water Resources Institute Technical Report TR 396. College Station, TX: Texas A&M University.

Berthold, A. (2011). Pesticide education in the coastal zone of the Arroyo Colorado watershed Final. Texas Water Resources Institute Technical Report TR 397. College Station, TX: Texas A&M University.

Berthold, T. A. (2011). North central Texas water quality final report. Texas Water Resources Institute Technical Report TR 409. College Station, TX: Texas A&M University.

Berthold, T. A., and Flores, J. (2011). Arroyo Colorado watershed protection plan implementation project final report. Texas Water Resources Institute Technical Report TR 411. College Station, TX: Texas A&M University.

Berthold, A., and Flores, J. (2011). A progress report for the Arroyo Colorado watershed protection plan. Texas Water Resources Institute Technical Report TR 413. College Station, TX: Texas A&M University.

Berthold, A., Moench, E., Wagner, K., and Paschal, J. (2010). Education program for improved water quality in Copano bay: final report . Texas Water Resources Institute Technical Report TR 422. College Station, TX: Texas A&M University.

Published Abstracts and Conference Presentations

Berthold, T.A., Tracy, J., Ganjegunte, G., Srinivasan, R., McCarl, B., and Fernald. S. (2024). Diversifying the Water Portfolio for Agriculture in the Rio Grande Basin. University Council on Water Resources, St. Louis, Mo. Wednesday - Session 53: Best of the Best II: Impact, outcomes, and challenges from the USDA-NIFA Water for Agriculture CAP Grants - Details.

Berthold, T. A. (2023). Agricultural Challenges and Adaptation in the Face of Climate Change. American Rainwater Catchment Systems Association, San Antonio, TX. American Rainwater Catchment Systems Association (arcsa.org).

Berthold, T. A., DeVilleneuve, S. (2023). Identifying Barriers to Adoption of Cover Crops in the Southern Great Plains. University Council on Water Resources, Fort Collins, CO. 2023-Book-of-Abstracts.pdf (ucowr.org)

Lewis, K., DeLaune, P., Wagner, K., **Berthold, T. A**. and Lewis, C. (2023). Panel Discussion: Overcoming the Challenges of Regenerative Ag Systems in Water-Limited Environments. University Council on Water Resources, Fort Collins, CO. 2023-Book-of-Abstracts.pdf (ucowr.org)

Berthold, T. A., Olsovsky, T., and Schramm, M. (2022). Direct Mailing Educational Campaign Impacts on the Adoption of Grazing Best Management Practices. University Council on Water Resources, Greenville, SC. Greenville, sc (ucowr.org)

Berthold, T. A., Gholson, D. (2021). Extension Education – Adapting to a Changing Audience. University Council on Water Resources, Virtual Conference. Agenda-Details-2021-Virtual-UCOWR_NIWR-Annual-Water-Resources-Conference.pdf

Berthold, T.A. (2020). Diversifying the Water Portfolio for Agriculture in the Rio Grande Basin. Texas Alliance of Groundwater Districts, Virtual Conference. https://drive.google.com/file/d/1PwUM0_TiGdA8BU3WeNM_Hm_lprn5Zi-I/view

Berthold, T. A. (2018). Developing Technology and Exploring Commercialization to Assist Water Utilities in Achieving Conservation Goals. University Council on Water Resources, Pittsburg, PA. 2018_Program_Final.pdf (ucowr.org)

Berthold, T. A., and Brumbelow, K. (2017). Getting out of the laboratory – Our experience and lessons learned from the National Science Foundation Innovation Corps Program. University Council on Water Resources, Fort Collins, CO. 2017_Conference_Proceedings_062717.pdf (ucowr.org)

Wagner, K., Dictson, N., Gregory, L., and **Berthold, T.A**. (2016). Synergistic approach to water quality protection and restoration in Texas. University Council on Water Resources, Pensacola, FL. 2016_Conference_Proceedings.pdf (ucowr.org)

Berthold, T. A., Brumbelow, K., and Wagner, K. (2016). Using advanced metering

infrastructure data to assist homeowners in conserving water. Texas Alliance of Groundwater Districts, San Marcos, TX.

Berthold, T. A., Brumbelow, K., and Wagner, K. (2016). Using advanced metering infrastructure data to assist homeowners in conserving water. University Council on Water Resources, Pensacola, FL. 2016_Conference_Proceedings.pdf (ucowr.org)

Berthold, T. A., Brumbelow, K., and Wagner, K. (2016). Helping Homeowners Conserve Water by Providing Access to Hourly Water Consumption Data. WaterSmart Innovations, Las Vegas, NV.

Berthold, T. A., Brumbelow, K., and Wagner, K. (2016). Helping Homeowners Conserve Water by Providing Access to Hourly Water Consumption Data. Texas Chapter of American Water Works Association, Fort Worth, TX.

Berthold, T. A., Brumbelow, K., and Wagner, K. (2015). Achieving Household Water-Use Efficiency Using Automated Metering Infrastructure. Texas Chapter of American Water Works Association, Corpus Christi, TX.

Berthold, T. A., Brumbelow, K., and Wagner, K. (2015). Can Smart Meters be Used to Encourage Water Conservation. WaterSmart Innovations. Las Vegas, NV.

Berthold, T. A., Brumbelow, K., and Wagner, K. (2014). Achieving Household Water-Use Efficiency Using Automated Metering Infrastructure. American Water Resources Association, Tysons Corner, VA.

Berthold, T. A. (2014). Poster Presentation. Addressing Water Quality Mitigation Challenges through Evaluation. American Evaluation Association, Washington D.C.

Khedun, P., Damodaram, C., Giacomoni, M., Ryan, A., Holmes, H., Klein, R., Saour, W., Hollingsworth, M., **Berthold, T**. Davis, M., Bullock, P., Ravikumar, N. Zechman, E., Moore, G., Boulanger, B., and Stoleru. (2009). Improving hydrologic sustainability of texas a&m university campus. *ASCE Conference Proceedings Khedun*. 342(41036) 122.

Educational Materials and Extension Publications

Wolff, A., Boellstorff, D., and **Berthold, A.** (2017). Evaluating Customer Water Use to Create Effective Conservation Programs. Texas A&M AgriLife Extension Service Publication ESC-043. College Station, TX: Texas A&M University.

Wolff, A., Boellstorff, D., and **Berthold, A.** (2017). Residential Customer Characterization for Urban Water Conservation Planning. Texas A&M AgriLife Extension Service Publication ESC-044. College Station, TX: Texas A&M University.

Jones, C. and **Berthold, A**. (2015). Considerations for Adopting AMI and AMR. Texas Water Resources Institute Educational Materials 119. College Station, TX: Texas A&M University.

Wolff, A., Boellstorff, D., and **Berthold, A**. (2015). Utility Customer Profile Guide for Water Conservation Planning. Texas Water Resources Institute Educational Materials. College Station, TX: Texas A&M University.

Berthold, A. (2012). Bacteria and surface water quality standards. Texas Water Resources Institute Educational Materials 114. College Station, TX: Texas A&M University.

Berthold, A. (2012). Approaches to watershed planning in Texas. Texas Water Resources Institute Educational Materials 112. College Station, TX: Texas A&M University.

Berthold, A. and Enciso, J. (2012). Best management practices (BMPs) and water quality parameters of selected farm locations in the Arroyo Colorado watershed. Texas Water Resources Institute Educational Materials 113. College Station, TX: Texas A&M University.

Project/Public Presentations

Number of Presentations	Audience/Event(s)	Number of Attendees	Total Contact Hours
10	Arroyo Colorado Watershed Stakeholders, Weslaco, TX	228	124
26	Copano Bay Watershed Stakeholders, Refugio, TX	327	197.5
1	National Farm Bureau Annual Conference, Rockport, TX	75	56.25
1	TCAAA, Karnes City, TX	30	22.5
1	County Commissioners and Judges Conference- Vernon, TX	73	36.5

1	County Commissioners and Judges Conference, Lubbock, TX	56	28
1	Regional Water Authorities Meeting, Waco, TX	15	3.75
1	TX Ag Industries, College Station, TX	75	56.25
10	Tres Palacios Watershed Stakeholders, Palacios, TX	156	51.5
5	Lavaca River Watershed Stakeholders, Edna, TX	77	38.5
5	Advanced Metering Infrastructure Training Houston, San Antonio, Dallas, Waco, Amarillo	113	28.25
8	Carancahua Bay Watershed Stakeholders, Lolita, TX	47	18
3	Arenosa and Garcitas Creek Watershed Stakeholders, Victoria, TX	36	13.5
7	Big Elm Creek Watershed Stakeholders, Rogers, TX	80	61.75
2	Upper Rio Grande Basin Stakeholders, El Paso, TX	110	27.5

3	Victoria Farm and Ranch Show, Victoria, TX	550	550
1	Goliad Co. CEU Event, Goliad, TX	25	25
4	Bois d'Arc Creek Watershed Stakeholders, Bonham, TX	100	25
1	CVEN 681 Seminar, College Station, TX	40	40
1	SALE – LE Cohort XV, San Antonio, TX	25	18.75
1	ALEC Advisory Committee Dinner, College Station, TX	35	35
1	Careers in Water – Youth Presentation at Victoria Farm and Ranch Show, Victoria, TX	86	86
1	Victoria Farm and Ranch Show - Texas Water Issues	100	100
1	Tx Farm Bureau Legislative Ag Day	150	37.5