2016-2017 WMHS Graduate Policies &Procedures

Water Management & Hydrological Science Program
Texas A&M University

waterprogram.tamu.edu

Introduction and Overview

The mission of the Water Management and Hydrological Science program (hereafter WMHS) is

- Prepare the next generation of water scientists, hydrologists and managers for professional and academic careers.
- Provide graduate students with strong technical skills in water disciplines including the interconnectedness of biophysical and social sciences in water management.
- Improve the availability, security and reliability of human water supplies.

The WMHS degree program is administered by interdisciplinary faculty from four colleges and multiple departments. It is University based program. Two masters' degrees (a thesis and non-thesis option) and a Ph.D. degree are offered through the program. The WMHS Program is under the guidance of an Executive Committee, the College of Geosciences, and the Dean of Faculties. The Department of Geography provides administrative and student office space and computer facilities.

More than 50 faculty from 12 academic departments in the Colleges of Architecture, Agriculture and Life Sciences, Engineering, and Geosciences participate in the WMHS program. Faculty have expertise in the bio-physical and social sciences and in engineering. The curriculum is designed to allow students to become leaders in their focal areas of water while making connections to colleagues in other related disciplines.

Contacts

Dr. Ronald Kaiser, Professor and Chair
409 Agriculture and Life Sciences Building
845-5303 rkaiser@tamu.edu

Dr. Rosario Sanchez, Program Coordinator
213 Teague Building
845-2027 rosario@ tamu.edu

International Student Services
Bizzell East 845-1824

Violetta Cook, Director Sponsored Student Programs
352 Bizzell Hall West
845-2550 vcook@tamu.edu

Graduate Admissions
1601 General Services Complex
845-1044 http://admissions.tamu.edu

International Admissions
http://admissions.tamu.edu
845-1043 international-admission@tamu.edu

Office of Graduate and Professional Studies
302 Jack Williams Administration
845-3631 http://OGS.tamu.edu

Thesis Office, *Submit thesis/dissertations*
Evans Library 845-2225

Off Campus Center*, Housing assistance, etc.
Department of Student Life
845-1741 stulife@tamu.edu

***Students should check web sites such as www.monstermoving.com and the Bryan-College Station Eagle (local newspaper) at www.theeagle.com for additional information concerning housing in the Bryan-College Station area.

General Requirements

This document summarizes policies and procedures to be followed by graduate students in Water Management and Hydrological Science. Students should consult the Graduate Catalog or the Office of Graduate and Professional Studies on all other matters not discussed in the handbook.

Grade Point Average

Graduate students must maintain a cumulative grade point average (GPA) of 3.0 (4.0 scale) for all courses listed on the degree plan and eligible for application toward a graduate degree. Graduate students will not receive graduate degree credit for undergraduate courses taken on a satisfactory/unsatisfactory (S/U) basis. Graduate courses on the degree plan may not be taken S/U, except for 681, 690, 691. Graduate courses not on the degree plan may be taken S/U.

If a student's cumulative GPA for courses listed on the degree plan falls below 3.0 they will be considered scholastically deficient and may be dropped from the University unless the minimum GPA is attained by the end of the next long semester.

Language Requirement

International students, whose native language is not English, are required to show English language proficiency. For requirements see Page 13 & 14 of Graduate Advisor Handbook available at http://ogs.tamu.edu/files2011/06/graduateadvisorhandbook.pdf

Continuous Registration

Graduate students receiving 12 months of University financial assistance must register for 9 credit hours during each of the Fall and Spring semesters, and 6 hours during the Summer (either 6 hours during the 10-week session or 3 hours in each of the 5-week sessions). This constitutes full-time status. Students who are self supported are not required to meet these guidelines.

All students working on a degree requiring a thesis, or dissertation, must be in continuous registration. This continuous registration includes graduate students who have completed all course work on their degree plans. Once all formal course work is completed **and the student is not on assistantship, or fellowship,** continuous registration is satisfied by registration for at least 1 and not more than 4 hours during the Fall and Spring semesters. **Summer semester registration is ONLY required if the student is on funding, plans to take examinations or otherwise use University resources or facilities, or defend their thesis or dissertation.** The continuous registration can be satisfied either:

In Absentia: the student must not have access to or use of facilities or properties belonging to the Texas A&M System during the semester;

In Residence: students who will be on campus or located at one of the Research and Extension Centers or Experiment Stations, and therefore using University facilities must register "in residence" for at least 1 credit hour during the Fall and Spring semesters, and the Summer semester if taking exams or defending.

NOTE: INTERNATIONAL STUDENTS may have additional requirements and should consult with International Student Services (845-1824) to remain in compliance with immigration requirements and enrollment status.

NOTE: SELF SUPPORTED STUDENTS are not required to register during the summer sessions regardless of whether or not they have completed their formal course work.

Other Important Information

Financial and Departmental Travel/Driving Issues

Every graduate student should make an appointment with their advisor, or with the WMHS Chair as soon as possible upon arrival on campus. If applicable they will advise the student on insurance options, initiate the employment process, and initiate the process to determine eligibility to drive departmental vehicles.

Computer Account, E-mail, etc.

Every graduate student should contact the WMHS Program Coordinator to complete necessary forms to establish an E-mail account, provide biographical data for their personal web page, and have their picture taken for the WMHS picture board. Your University e-mail will be used to notify you of official University/WMHS news.

Parking Permit

Go online to http://transport.tamu.edu and follow the prompts. This site will also provide permit pricing information. Students should read ALL information in their parking packet. Traffic on campus is closely monitored for safety reasons.

Student I.D. Card

As soon as a student has registered for class (i.e., pre-registered) then they should visit the General Services Building (on Agronomy Road) Suite 2801, to obtain a University ID card. This card will be used for access to University events and library use.

After hours Teague building access

Students that will be using labs or computers after 6:00 pm or during weekends, must submit their request at: http://bars.tamu.edu

Office Assignment

Students may be assigned office space in labs or buildings under the immediate control of their committee chair or co-chair. If they are to be assigned office space in one of the WMHS graduate student offices they should see the WMHS Program Coordinator for office assignments.

Keys

Students will need key(s) to their office and other areas depending upon responsibilities assigned by their committee chair. Keys WMHS offices can be obtained from the WMHS Program Coordinator.

Computer Lab

Graduate students have open access to computers housed in the Department of Geography**.** Please visit with the program Coordinator for access codes.

Travel authorization: All graduate students who must travel on official business must complete the proper travel authorization forms PRIOR to such travel. Students should visit with their committee chair for proper forms.

WMHS General Requirements

Meet with WMHS Graduate Coordinator
Before the start of the first semester meet with the WMHS Program Coordinator to review a schedule of classes.

Graduate Advisory Committee
Students should, in consultation with their committee chair, identify appropriate faculty in the WMHS Program and other departments to serve as members of their graduate advisory committee. All committee members must be members of the Graduate Faculty at Texas A&M University.

Master of Water Management (MWM) Advisory Committee
Normally consists of three (3) members. At least two (2) members must be members of the WMHS faculty. *The Program Chair will serve as the chair for all MWM student advisory committees*. The advisory committee must be established before the end of the student's second long semester. Failure to do so will result in a registration block by the Office of Graduate and Professional Studies.

Master of Science Advisory Committee
Normally consists of three (3) members. At least two (2) members must be members of the WMHS faculty. The committee chair must be a member of the WMHS faculty. The advisory committee must be established before the end of the student's second long semester. Failure to do so will result in a registration block by the Office of Graduate and Professional Studies.

Doctoral of Philosophy Advisory Committee
Normally consist of the chair and at least 3 additional members. The chair and at least two members must be members of the WMHS faculty. The advisory committee must be established before the end of the student's third long semester. Failure to do so will result in a registration block by the Office of Graduate and Professional Studies.

Degree Plan
Masters degrees. In consultation with their advisory committee, students MUST submit a degree plan that identifies the courses leading to the masters' degree. The degree plan (http://ogsdpss.tamu.edu) must be approved by the student's advisory committee, the Program Coordinator, Program Chair, and the Office of Graduate and Professional Studies. ***The degree plan must be submitted to OGAPS before the end of the student's second long semester and no later than 90 days prior to final oral or thesis defense.*** Failure to do so will result in a registration block being placed on the student by OGAPS. Degree plans are submitted through an on-line process initiated by the student after consultation with their advisory committee.

Doctoral degree. In consultation with their advisory committee, students MUST submit a degree plan that identifies the courses leading to the Ph.D. degree. The degree plan (http://ogsdpss.tamu.edu) must be approved by the student's advisory committee, the Program Coordinator, Program Chair, and the Office of Graduate and Professional Studies. ***The degree plan must be submitted to OGAPS before the end of the student's third long semester and no later than 90 days prior to preliminary examination.*** Failure to do so will result in a registration block being placed on the student by OGAPS. This is an on-line process initiated by the student after consultation with their advisory committee.

WMHS Degree Requirements

Master of Water Management Degree (MWM) (minimum of 36 credit hours required: non-thesis)

This degree is intended to provide professional graduate education with an emphasis on the use of problem solving, management and technical skills.

Required Water Courses (8 hours)
WMHS 601/GEOG 634 Hydrology and Environment
WMHS 602 Contemporary Issues in Water Resources
WMHS 681 Seminar-a minimum of 2 credit hours

Common Body of Knowledge Water Courses (12 hours)
RENR 662 Environmental Law and Policy
AGEC 604 Natural Resource Economics or AGEC 606 Water Resource Economics
CVEN 664 Water Resources Engineering, Planning and Management
GOEG 626 Fluvial Geomorphology or GEOL 614 Hydrogeology

Required Water Courses (minimum of 6 hours)
Courses from the required water course list.

Electives (up to 10 hours)
Hours and courses determined by student and student advisory committee.

Final Exam
A final exam is required. As part of the exam process students in consultation with the advisory committee chair will prepare a presentation addressing a water issues to present to their graduate committee.

Summary of Steps Leading to Master of Water Management Degree

Item	Timeline
Meet with WMHS Coordinator/Chair	*When:* Before first semester starts
Establish Advisory Committee	*When:* Before end of second semester
Submit Degree Plan	*When:* Before end of second semester (OGAPS will block registration if not submitted). *Approval:* On-line approval process.
Apply for Degree Pay Graduation Fees	*When:* During first week of final semester See OGAPS calendar
Submit Paper to Advisory Committee	*When:* At least 2 weeks before final exam

Submit request to OGAPS for permission to schedule final exam	*When:* Must be received by OGAPS at least 10 working days prior to the exam. See OGAPS calendar for deadlines. *Approval:* Advisory Committee, WMHS Program Chair, OGAPS

MWM students will graduate with the College of Agriculture

Master of Science (minimum of 32 credit hours required: thesis)

The degree is designed for students with technical backgrounds who wish to complement their primary discipline by obtaining scientific, technical, or managerial expertise in water. In addition to the water courses students are required to take one research methods class and one statistics class from the designated list.

Required Water Courses (8 hours)
WMHS 601/GEOG 634 Hydrology and Environment
WMHS 602 Contemporary Issues in Water Resources
WMHS 681 Seminar-a minimum of 2 credit hours

Required Research Methods and Statistics Courses (3 hours)
Courses from designated list

Required Water Courses (minimum of 12 hours)
Courses from the required water course list.

Electives (up to 6 hours)
Hours determined by student and student advisory committee. Any tools, planning or certificate courses are allowed. Students may opt to add an additional course in lieu of some research hours.

Research Hours (1 hour minimum)
Hours determined by student and student advisory committee. One (1) hour is the University minimum for a thesis. Student may opt to take more coursework in lieu of research hours.

Maximum of 4 (four) WMHS/OTHER DEPARTMENT 685 credit hours are allowed in the degree plan.

Summary of Steps Leading to Master of Science Degree

Item	Timeline
Meet with WMHS Coordinator/Chair	*When:* Before first semester starts
Establish Advisory Committee	*When:* Before end of second semester
Submit Degree Plan	*When:* Before end of second semester (OGAPS will block registration if not submitted). *Approval:* On-line approval process.
Prepare Thesis Proposal	*When:* During last semester of coursework, or at time and direction of Advisory Committee Chair.
Submit Thesis Proposal to OGAPS	*When:* At direction of Advisory Committee Chair (at least 15 days prior to submission of the Request for Final Exam to OGAPS).
Apply for Degree	*When:* During first week of final semester

Pay Graduation Fees	See OGAPS calendar
Submit Thesis to Advisory Committee	*When:* At least 2 weeks before final exam
Submit request to OGAPS for permission to schedule final thesis exam	*When:* Must be received by OGAPS at least 10 working days prior to the exam. See OGAPS calendar for deadlines. *Approval:* Advisory Committee, WMHS Program Chair, OGAPS
Submit Thesis	*When:* See OGAPS calendar for each semester deadline. See Thesis Manual for format *Approval:* Advisory Committee, WMHS Program Chair

Students will graduate with the College of Agriculture.

Doctor of Philosophy (minimum of 64 credit hours beyond masters degree required)

This degree is designed to give students comprehensive knowledge of water science, hydrology and research methods. Each student must have a chair before they can be accepted into the program. Students who have not taken graduate courses in statistics and research methods will be required to take one research methods and two statistics courses from the designated list.

Required Water Courses (9 hours)
WMHS 601/GEOG 634 Hydrology and Environment
WMHS 602 Contemporary Issues in Water Resources
WMHS 681 Seminar-Up to 3 credit hours of seminar courses

Required Research Methods and Statistics Courses (9 hours)
At least one methods course and two statistics courses from the designated list.

Required Water Courses (minimum of 18 hours)
Courses from the required water course list.

Electives (up to 9 or more hours)
Elective courses to be chosen by student and their advisory committee. Any tools, planning or certificate courses are allowed. Students may opt to add an additional course in lieu of some research hours.

Research Hours (18 hours or more)
A dissertation written on original research as directed by the student's advisory committee

Maximum of 6 (six) WMHS/OTHER DEPARTMENT 685 credit hours are allowed in the degree plan.

Steps Leading to a Doctor of Philosophy

There are several steps that must be successfully completed to fulfill the requirements for the Ph.D. degree in Water Management and Hydrological Science. These include:

Complete English Language Requirements
INTERNATIONAL STUDENTS must meet English language requirements before they can schedule their preliminary exams.

Complete Residence Requirements
Graduate students who have lived away from College Station and attended classes at the College Station campus in a sporadic fashion must verify with the OGAPS that they have met the residence requirements. These requirements state that the student must reside and attend classes at the College Station campus for 2 consecutive long semesters. The OGAPS must confirm that the residence requirement has been fulfilled before students can schedule their final exam.

Students should consult the Graduate Catalog or the Office of Graduate and Professional Studies on all other matters not discussed in the handbook. Additional information can be found in the

Texas A&M University Graduate Catalog, which can be found on-line at
www.tamu.edu/admissions/catalogs/

Summary of Steps to Fulfill Doctoral Degree

Item	Description
Meet with WMHS Program Coordinator	*When*: Before first semester registration
Establish Advisory Committee	*When*: Before end of third long semester
Submit Degree Plan	*When*: Before end of third long semester *Approval*: On-line process after consultation with advisory committee.
Complete, if applicable, English language Proficiency requirements	*When*: Before preliminary exams
Review Preliminary Eligibility Requirements (see OGAPS homepage forms link for checklist)	*When*: Several weeks before the proposed date of the preliminary exams. Checklist must be signed by advisory committee chair, WMHS Program Chair. Checklist is held and submitted to OGAPS with the results of the preliminary exam(s).
Prepare and submit any petitions found necessary from review of eligibility requirements	*When:* At least 3 weeks before preliminary exams *Approval:* Advisory Committee, WMHS program chair, OGAPS
Determine date(s) of the preliminary exam	*When*: Student must be within 6 credit hours of completion of all formal course work or no later than the end of the semester following completion of all formal course work on the degree plan. *Approval*: Advisory Committee, WMHS Program Chair
Complete preliminary exams and submit Report of the Preliminary Examination and the Preliminary Examination Checklist to OGAPS	*When:* Complete within 3 weeks time frame and report results to OGAPS within 10 working days. *Approval:* Advisory committee. For record keeping also provide copy to WMHS Program Chair.
Submit dissertation proposal	*When:* At a minimum of no less than 15 days prior to request for the final exam. *Approval:* Advisory committee, WMHS Program Chair.
Complete residency requirement	*When:* Before submitting request to schedule final exam. *Approval:* OGAPS
Submit dissertation draft to advisory committee chair for review and approval	*When:* Before submitting dissertation to committee
Submit dissertation draft to committee	*When:* After review and approval by chair
Apply for degree, pay graduation fees	*When:* During first week of final semester (see OGAPS calendar for deadlines). *Approval:* OGAPS

Submit request for permission to hold and announce final exam	*When:* Must be received by OGAPS at least 10 working days prior to exam (See OGAPS calendar for deadlines). *Approval:* Advisory committee, WMHS Program Chair, OGAPS. Note: Results to be submitted to OGAPS within 10 working days of the exam.
Submit Dissertation & signed approval form	*When:* See OGAPS calendar for each semester deadline *Approval:* Advisory Committee, WMHS Program Chair

Students will graduate with the College of their corresponding advisors

Appendix A

Required Water Courses

Climate

ATMO 629 Climate Change. Credit 3.
ATMO 631 Climate Modeling. Credit 3.
ATMO 632 Statistical Methods in Climate Research. Credit 3.
GEOG 612 Applied Climatology. Credit 3.
GEOG/GEOL 642 Past Climates. Credit 3.

Surface Water Hydrology

BAEN 667 Entropy Theory and its Application in Water Engineering. Credit 3
CVEN 627 Engineering Surface Water Hydrology. Credit 3.
CVEN 628 Advanced Hydraulic Engineering. Credit 3.
CVEN 675 Stochastic Hydrology. Credit 3.
GEOL 610 Field Methods in Hydrogeology. Credit 3.
GEOL 631 Engineering Geomorphology. Credit 3.
GEOG 626 Fluvial Geomorphology. Credit 3.

Small Watershed Hydrology

BAEN 672 Small Watershed Hydrology. Credit 3.
BAEN 673 Modeling Small Watersheds. Credit 3.
ESSM 636 Range and Forest Watershed Management. Credit 3.
GEOL 633 River Restoration. Credit 3.

Ecohydrology

ESSM 635 /GEOG 623 Ecohydrology. Credit 3
ESSM 631 Ecological Restoration of Wetland and Riparian Systems. Credit 3.
GEOG 634/WMHS 601 Hydrology and Environment. Credit 4.
GEOG 626 Fluvial Geomorphology. Credit 3.
GEOL 633 River Restoration. Credit 3.
WFSC 414 Ecology of Lakes and Rivers. Credit 3.

Groundwater

BAEN 674 Vadose Zone Hydrology. Credit 3.
BAEN 675 Hydrology Across Scale. Credit 3.
CVEN 674 Groundwater Engineering. Credit 3.
GEOL 614 Hydrogeology. Credit 3.
GEOL 610 Field Methods in Hydrogeology. Credit 3.
GEOL 620 Geology of Groundwater. Credit 3.
GEOL 625 Applied Groundwater Modeling. Credit 3.
GEOL 646 Biogeochemical Cycling in Subsurface Systems. Credit 3.
SCSC 657 Environmental Soil and Water Science. Credit 3.

Water Quality

BAEN 655 Design of Biological Waste Treatment Systems. Credit 3
BAEN 669 Water Quality Engineering. Credit 3.
CVEN 604 Environmental Analysis of Treatment Systems. Credit 3.
CVEN 609 Environmental Control of Oil and Hazardous Materials Spills. Credit 3.
CVEN 682 Environmental Remediation of Contaminated Sites. Credit 3.
GEOL 621 Contaminant Hydrogeology. Credit 3.
GEOL 640 Geochemistry of Natural Waters. Credit 3.
GEOL 646 Biogeochemical Cycling in Subsurface Systems. Credit 3.
SCSC 657 Environmental Soil and Water Science. Credit 3.
SCSC 658 Watershed and Water Quality Management. Credit 3.
WFSC 650 Aquatic Microbial Ecology. Credit 3.

Wetlands.

ESSM 628 Wetland Delineation. Credit 3.
ESSM 648 Wetland Plant Taxonomy. Credit 3.
WFSC 611 Estuarine Ecology. Credit 4
WFSC 621 Aquatic Ecology. Credit 3.
WFSC 628 Wetland Ecology. Credit 3.
WFSC 629 Lower Food Web Dynamics of Aquatic Ecosystems. Credit 3

Water Management

AGEC 606 Water Resource Economics. Credit 3.
CVEN 664 Water Resources Engineering, Planning and Management. Credit 3
CVEN 665 Water Resources Systems Engineering. Credit 3.
ESSM 636 Range and Forest Watershed Management. Credit 3.
RENR 662 Water and Environmental Law. Credit 3.
BAEN/CVEN 642: Water Energy Food Nexus: Toward Sustainable Resource Management

Required Research Methods and Statistics Courses

*Methods Courses**

AGEC 607 Research Methodology. Credit 3.
BAEN 662 Statistical Methods in Biological and Agricultural Engineering. Credit 3.
BUSH 631 Quantitative Methods in Public Management I. Credit 3.
BUSH 632 Quantitative Methods in Public Management II. Credit 3.
CARC 601 Foundations of Research in Planning and Design. Credit 3.
CARC 602 Research Methods in Planning and Design. Credit 3.
CVEN 661 Research Methods for Engineers. Credit 3.
EPSY 636 Techniques of Research. Credit 3.
GEOG 611 Geographical Research Design. Credit 3.
PHEO 605 Methods in Environmental and Water Science. Credit 3.
PLAN 604 Planning Methods I. Credit 3.
PLAN 613 Planning Methods and Techniques. Credit 3.
SOCI 623 Measurement of Sociological Parameters. Credit 3.
URSC 641 Analytic Methods in Landscape and Urban Research. Credit 3.
WFSC 609 Wildlife Research Methods. Credit 3.
**** Any other methods course relevant to student's research***

*Statistics Courses**

BAEN 662 Statistical Methods in Biological and Agricultural Engineering. Credit 3.
STAT 651 Statistics in Research I. Credit 3.
STAT 652 Statistics in Research II. Credit 3
STAT 653 Statistics in Research III. Credit 3.
STAT 626 Methods in Time Series Analysis. Credit 3.
****Any other statistics course relevant to student's research.***

Possible Electives

Informatics and Geographic Information Systems

BAEN/ESSM 651 Geographic Information Systems. Credit 3.
BAEN/ESSM 652 Advanced Topics in Geographic Information Systems. Credit 3.
CVEN 658 Civil Engineering Applications of GIS. Credit 3.
GEOG 651 Remote Sensing for Geographical Analysis. Credit 3.
GEOG 660 Applications in GIS. Credit 3.
GEOG 661 Digital Image Processing and Analysis. Credit 3.
GEOG 665 GIS-Based Spatial Analysis and Modeling. Credit 3.
GEOG 695 Frontiers in Geographic Information Science. Credit 3.
PLAN 625 GIS in Landscape and Urban Planning. Credit 3.
PLAN 626 Advanced GIS in Landscape Architecture and Urban Planning. Credit 3.

Planning

ESSM 672 Environmental Impact Analysis for Renewable Natural Resources. Credit 3
PLAN 616 Analyzing Risk/Hazard and Public Policy. Credit 3.
PLAN 620 Dispute Resolution in Planning. Credit 3.
PLAN 641 Problems of Environmental Planning Administration. Credit 3.
PLAN 669 Urban Infrastructure Planning. Credit 3.

Economics, Law, Management, Policy

ACCT 640 Accounting Concepts and Procedures I. Credit 3.
AGEC 604 Natural Resource Economics. Credit 3.
AGEC 659 Ecological Economics. Credit 3.
FINC 635 Financial Management for Non-Business. Credit 3.
MGMT 655 Survey of Management. Credit 3.
MGMT 639 Negotiations. Credit 3.
MRKT 621 Survey of Marketing. Credit 3.
POLS 645 Politics, Policy and Administration. Credit 3.
RENR 664 Coastal Zone Management. Credit 3.
RENR 660 Environmental Impact Analysis for Renewable Natural Resources. Credit 3.
SOCI 616 Political Sociology. Credit 3.

Biophysical Sciences

BAEN 655 Design of Biological Waste Treatment Systems. Credit 3
ESSM 622 Biogeochemistry of Terrestrial Ecosystems. Credit 3.
GEOG 666 Coastal Geomorphology. Credit 3
GEOL 635 Engineering Geology. Credit 3
GEOL 641 Environmental Geochemistry. Credit 3
GEOL 646 Biogeochemical Cycling in Subsurface Systems. Credit 3.
SCSC 615 Reclamation of Drastically Disturbed Lands. Credit 3
SCSC/POSC 619 Molecular methods for Microbial Characterization. Credit 3.
SCSC 637 Environmental Microbiology. Credit 3.
SCSC 650 Mode of Action and Environmental Fate of Herbicides. Credit 3
WFSC 639 Wildlife Ecotoxicology. Credit 3.

WMHS Faculty

Jacqueline Ann Aitkenhead-Peterson, Associate Professor
Soil and Crop Sciences

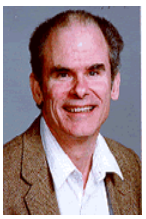
370 Heep Bldg. 2474 TAMU
979-845-3041 jpeterson@ag.tamu.edu
Research Interests: Mechanisms that influence carbon, nitrogen, and phosphorous cycling and loss to surface water under different land uses within watersheds

Srinivasulu, Assistant Professor,
Biological and Agricultural Engineering
Texas Agrilife Research in Vernon Texas

Research Interests: Water quality assessment, irrigation and drainage, groundwater-surface water interactions
P.O. Box 1658, 11708 Highway 70 South
Vernon, Texas – 940.552.9941, ext 232 –sriniale@ag.tamu.edu

Robin Autenrieth, Professor
Civil Engineering

WERC 205-E, 3136 TAMU
979-845-3593 rautenrieth@civil.tamu.edu
Research Interests: Physical and chemical parameters of microbial water contamination; risk assessment framework for human health risks



Bill Batchelor, Professor
Civil Engineering

WERC 205-H, 3136 TAMU
979-845-1304 bill-batchelor@tamu.edu
Research Interests: Treatment systems for water, wastewater, hazardous wastes and contaminated soils; technologies for improving desalination and industrial cooling water systems; water and energy systems

Michael Bishop, Professor and
Haynes Chair in Geosciences
Geography

O&M 707 E MS 3147 TAMU
979-862-4487 michael.bishop@tamu.edu
Research interests: Alpine glaciers, mountain hydrology, Surface runoff and erosion

Diane E. Boellstorf, Assistant Professor and Extension Water Resources Specialist, Texas A&M Agrilife Extension Service

Heep Bldg. 979.458.3562 – dboellstorff@tamu.edu
Research Interests: Water resource planning and management; effective outreach and stakeholder involvement; water conservation; source water protection and public health.

Jean Bowman, Research Scientist, Office of V-P for Research

309C Administration Building
979-458-1140 jbowman@tamu.edu
Research Interests: Climate change and hydrology

Samuel D. Brody, Professor Landscape Architecture and Urban Planning

C104A Langford, 3137 TAMU
979- 458-4623 sbrody@arch.tamu.edu
Research Interests: Adaptive floodplain management; wetlands banking and mitigation; urban watershed management and planning

Kelly Brumbelow, Associate Professor Civil Engineering

205-L, Wisenbaker, 3136 TAMU
979-458-2678 kbrumbelow@civil.tamu.edu
Research Interests: Water resources planning and management; decision support systems; climate variability and climate change effects; assessment of water resources policy

Anthony Cahill, Professor Civil Engineering

WERC 205-J, 3136 TAMU
979-862-3858| tcahill@civil.tamu.edu
Research Interests: Soil moisture and watershed hydrology; stochastic hydrology; numerical modeling; low slope hydrology

Kung-Hui (Bella) Chu, Associate Professor
Civil Engineering

205G WERC, 3136 TAMU
979-845-1403 kchu@civil.tamu.edu
Research Interests: Biodegradation and biotransformation of contaminants in groundwater, soils, and wastewater

Gabriel Eckstein, Professor
Texas A&M University School of Law

1515 Commerce Street Fort Worth, Texas – 817.212.3912 – gabrieleckstein@law.tamu.edu
Research interests: Natural resources and environmental law and policy at both the national and international levels, as well as on the interrelationship of law and science. Endangered species challenged to oil and gas development, climate change challenges to the management of global water resources, and the international law of transboundary aquifers. He is currently researching the management and regulation of pharmaceuticals in our nation's waters and environment.

Juan Enciso, Associate Professor,
Biological and Agricultural Engineering
Texas A&M Agrilife Extension and Center at Weslaco

Research Interests: irrigation system design and management, deficit irrigation, water management, salinity management, drainage problems and wastewater utilization.
2415 E. Hwy. 83, Weslaco, TX – 956.969.5635 –jenciso@ag.tamu.edu

Rosario Sanchez, Associate Graduate Faculty,
Water Management and Hydrological Science Program

213 Teague Bldg MS 3408 – (979) 845-2027 – rosario@tamu.edu
Research interests: transboundary aquifers between Mexico and the United States, international water conflicts and negotiations, groundwater planning and policy under scarcity conditions, water policy development

Oliver Frauenfeld, Assistant Professor
Geography

3147 TAMU, 810 Eller O&M Bldh Phone: (979) 862-8420 Fax: (979) 862-4487 E-mail: oliverf@geog.tamu.edu
Web: http://frauenfeld.tamu.edu/
Research interests: surface-atmospheric interactions, climate change and precipitation impacts, high-latitude climate, atmospheric circulation, quantitative methods, land surface processes.

Huilin Gao, Assistant Professor
Civil Engineering

Zachry Department of Civil Engineering – 979.845.2875 –hgao@civil.tamu.edu
Research interests: Hydroclimatology, hydrometeorology, remote sensing, and water resources management

Guy Fipps, Professor & Extension Engineer
Biological and Agricultural Engineering

207B Scoates Hall, TAMU
(979(845-7454 g-fipps@tamu.edu
Research interests: Regional water planning, irrigation technologies, weather stations, ET networks
http://gfipps.tamu.edu/

Terry Gentry, Assistant Professor
Soil & Crop Science

550A Heep Center
979-845-5323
tgentry@ag.tamu.edu
Research Interests: Soil contamination

John (Rick) Giardino, Professor
Geology & Geophysics

Room 257, Halbouty, 3115 TAMU
979-845-3224 rickg@tamu.edu
Research Interests: Fluvial geomorphology; watershed restoration; remote sensing of hydrologic systems

Ronald Griffin, Professor
Agricultural Economics

Agriculture & Life Sciences Bldg, 2124 TAMU
979-845-7049 ron-griffin@tamu.edu
Research Interests: Water resources economics; water pricing; determinants of water demand

Inci Guneralp, Associate Professor
Geography

803F O&M Building
College Station, Tx
979.845.7155 –iguneralp@geos.tamu.edu
Research interests: Process-based modeling of meander hydro-morphodynamics, biomorphodynamics of fluvial landscapes, and heterogeneity and stochasticity in riverine-landscape dynamics

James Heilman, Professor
Soil and Crop Sciences

237A Heep Center, 2474 TAMU
979-845-7169 j-heilman@tamu.edu
Research Interests: Water movement in ecosystems

Yong Huang, Associate Professor
Biological and Agricultural Engineering

303E Scoates Hall, 2117 TAMU
979-862-8031 yhuang@tamu.edu
Research Interests: Membrane technology for water treatment; environmental remediation technology; contaminant movement in surface and subsurface environments.

Bruce Herbert, Professor
Geology and Geophysics

Halbouty 309, 3115 TAMU
979-845-2405 herbert@geo.tamu.edu
Research Interests: Biochemistry of wetlands, contaminant transport in aquifers

Fouad Jaber, Assistant Professor
Biological and Agricultural Engineering
Texas Agrilife Center in Dallas

17360 Coit Road, Dallas, TX 75252
972- 231-5362 f-jaber@tamu.edu
Research Interests: Integrated watershed management programs; stream restoration

John Jacob, Professor
Recreation, Park, & Tourism Sciences

1250 Bay Area Blvd, Suite C
Houston, TX 77058
281-218-0565 jjacob@tamu.edu
Research Interests: Watershed management, stormwater management, wetland science/management

Ronald Kaiser, Professor & Program Chair
Recreation, Park &Tourism Sciences

409k Agriculture & Life Sciences Bldg, 2261 TAMU
979-845-5303 rkaiser@tamu.edu
Research Interests: Water law & policy; groundwater management; water marketing; urban water conservation

Karthi Karthikeyan, Associate Professor
Biological and Agricultural Engineering

306A Scoates Hall, 2117 TAMU
979-845-7951 karthi@tamu.edu
Research Interests: Biochemical engineering; applied and environmental microbiology; environmental transport processes.

Peter Knappett, Assistant Professor
Geology and Geophysics

Halbouty 503 – 979.845.2006 – knappett@tamu.edu
Research Interests: Field and experimental hydrology, groundwater contamination and treatment

Robert Knight, Professor
Ecosystem Science & Management

322 Animal Industries Bldg., 2138 TAMU
979-845-5557 bob-knight@tamu.edu
Research Interests: Wetland plant ecology; wetland delineation.

Gerald Kyle, Professor
Recreation, Parks and Tourism Sciences

AGLS Building 437 – 979.862.3794 –gkyle@tamu.edu
Research Interests: human dimensions of natural resources: the meanings various groups ascribe to wildland environments, stakeholder conflict and preference related to natural resources and human-wildlife conflict.

Ming Han Li, Associate Professor
Landscape Architecture & Urban Planning

336A Langford, 3137 TAMU
979- 845-7571 minghan@tamu.edu
Research Interests: Urban storm water management; erosion control structures; stream bank stabilization

Franco Marcantonio, Professor
Geology & Geophysics

251 Halbouty Bldg, 3115 TAMU
979.845.9240 marcatonio@geo.tamu.edu
Research Interests: Isotopic geochemistry in hydrology

Bruce McCarl, Professor
Agricultural Economics

Agriculture & Life Sciences Bldg 2124 TAMU
979-845-1706 mccarl@tamu.edu
Research Interests: Climate change; climate change mitigation; water economics

Kevin McInnes, Professor
Soil and Crop Sciences

239 Heep Center, 2474 TAMU
979-845-5986 k-mcinnes@tamu.edu
Research Interests: Environmental and aquifer physics

Gretchen Miller, Assistant Professor
Civil Engineering

205-E WERC – 979.862.2581 – gmiller@civil.tamu.edu
Research Interests: Hydrological connections between vegetation and the subsurface

James Mjelde, Professor
Agricultural Economics

Agriculture and Life Sciences Bldg, 2124 TAMU
979- 845-1492 j-mjelde@tamu.edu
Research Interests: Economics of information as it pertains to water use; climate variability

Binayak Mohanty, Professor
Biological and Agricultural Engineering

301C Scoates Hall, 2117 TAMU
979-458-4421 bmohanty@tamu.edu
Research Interests: Vadose zone hydrology; chemical transport in porous media; detection of soil moisture through remote sensing.

TEES Research Professor, Biological and Agricultural Engineering Department and Zachry Department of Civil Engineering

302B Scoates Hall, 2117 TAMU – 979.845.9886 – mohtar@tamu.edu
Research Interests: the development of a framework to quantify the interlinkages of the Water-Energy-Food Nexus that is constrained by climate change and social, political, and technological pressures; continue the discovery and impact in environmental and natural resources conservation engineering, characterization of the soil water medium at the pedon, field, and watershed scales; and design and evaluation of international sustainable water management programs to deal with water scarcity

Georgianne Moore, Associate Professor
Ecosystem Science & Management

329 Animal Industries Bldg. , 2138 TAMU
979-845-3765 gwmoore@tamu.edu
Research Interests: Ecohydrology; invasive species and water management; land management impacting river hydrology and groundwater recharge.

Miguel Mora, Professor
Wildlife and Fisheries Sciences

316 Nagle Hall, 2258 TAMU
979-845-5775 mmora@tamu.edu
Web Page: http://wfscnet.tamu.edu/mora.html
Research Interests: Aquatic ecotoxicology. Bioaccumulation and biomagnifications of persistent organic pollutants

Saquib Mukhtar, **Professor & Extension Program Leader**
Biological and Agricultural Engineering

207A Scoates, 2117 TAMU
979-458-1019 mukhtar@tamu.edu
Research Interests: Agricultural water management and water quality protection

Clyde Munster, Professor
Biological and Agricultural Engineering

127 Hobgood, 979-847-8793 c-munster@tamu.edu
Research Interests: Agricultural BMPs; hydrologic modeling of agricultural chemical transport; groundwater flow in karst systems

John Nielsen-Gammon, **Regents Professor**
Atmospheric Sciences and Oceanography

Room 202, Eller O&M Building, 3148 TAMU
979 862-2248 n-g@tamu.edu
Research Interests: Climate change, weather analysis and forecasting

Gerald North, **Distinguished Professor**
Atmospheric Sciences and Oceanography

1205B O&M Building, 3150 TAMU
979-845-8077 g-north@tamu.edu
Research Interests: Climate analysis; climate and hydrological modeling; satellite remote sensing

Francisco Olivera, Associate Professor
Civil Engineering

3136 WERC, TAMU
979-845-1404 folivera@civilmail.tamu.edu
Research Interests: Application of GIS to hydrologic modeling; modeling of non-point source pollution; modeling of water transport processes

Kathleen O'Reilly, Associate Professor
Geography

201C CSA Building, 3147 TAMU
979.845.6519 koreilly@geog.tamu.edu
Research Interests: Community and gender influence in domestic water use and decision-making

John Pantano, Research Professor
Geology

Director of Basin Modeling Center of Research Excellence Berg-Hughes Center 102 Halbouty
cell: 406 490-8387 email: john.pantano@tamu.edu
Research interests: Contaminants in soil and water, Biogeochemistry of surface and groundwater interaction, Fate and Transport Reaction Modeling

Suresh Pillai, Professor
Microbiology & Food Safety

418B Kleberg Center, 2472 TAMU
979-845-2994 s-pillai@tamu.edu
Research Interests: Detection of microbial pathogens in ground, surface, and wastewater

Steven Quiring, Associate Professor
Geography

305C CSA Bldg, 3147 TAMU
979-458-1712 squiring@geog.tamu.edu
Research Interests: Drought modeling; climate change; precipitation patterns; arctic climate and hydrology

Daniel Roelke, Professor
Wildlife and Fisheries Sciences

2258 TAMU
979-845-0169 droelke@tamu.edu
Research Interests: Food-web ecology and ecosystem sciences in aquatic environments; plankton ecology; community succession

Paul Schwab, Professor
Soil and Crop Sciences

618 Heep Center – 949.450.7424 – pschwab@tamu.edu
Research interests: Contaminants in soil and water including pesticides, plant nutrients, polychlorinated biohenyls (PCBs), polyaromatic hydrocarbons (PAHs) and heavy metals. Sustainable use of water in energy.

Vijay Singh, Professor
Lehrer Chair in Water
Biological and Agricultural Engineering

321 Scoates, 3136 TAMU
979-845-7028 vsingh@tamu.edu
Research Interests: Surface & groundwater hydrology, hydraulics, irrigation engineering

Patricia Smith, Associate Professor
Biological and Agricultural Engineering

302B Scoates Hall, 2117 TAMU
979-845-3630 patti-smith@tamu.edu
Research Interests: Modeling land-use effects on hydrologic processes at different temporal and spatial scales; bacterial source tracking

Raghavan (Srini) Srinivasan, Professor
Ecosystem Science & Management

1500 Research Plaza, Office 221E
979-845-5069 r-srinivasan@tamu.edu
Research Interests: Water informatics; water modeling; application of GIS to hydrology

John (Jack) Vitek, Professor Emeritus
Geology & Geophysics

302 Williams Administration Bldg, 3147 TAMU
979-847-3631 jvitek@tamu.edu
Research Interests: Hydrogeology

Associate Director, Texas Water Resources Institute
Adjunct Professor, Soil and Crop Sciences

240F Centeq – 979.845.2649 – klwagner@ag.tamu.edu
Research Interests: Watershed management effects on water quality and quantity; Management systems for sustainable soil and water resources; Watershed assessment; Watershed planning; Water policy; Stakeholder engagement

Richard H. White, Professor
Soil and Crop Sciences Department

233C Heep Center 2474 TAMU

979-845-1550 h-white@tamu.edu
Research interests: Drought resistant mechanisms in perennial grasses, water management and conservation in urban/suburban landscapes, and the effects of landscape management practices on water runoff quantity and quality.

Bradford Wilcox, Professor
Ecosystem Science & Management

203 Animal Industry Bldg, 2126 TAMU
979-458-1899 bwilcox@tamu.edu
Research Interests: Ecohydrology and watershed management; rangeland hydrology

Ralph Wurbs, Professor
Civil Engineering

205D Wisenbaker Engineering, 3136 TAMU
979-845-3079 r-wurbs@tamu.edu
Research Interests: Water resources planning and management; hydraulic engineering; reservoir management; hydrology.

Hongbin Zhan, Professor
Geology and Geophysics

259 Halbouty, 3115 TAMU 979-862-7961 zhan@geo.tamu.edu
Research Interests: Groundwater hydrology and contaminant transport