

# Briana M. Wyatt

## CONTACT

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## EDUCATION

Ph.D., Soil Science (Applied Soil Physics & Hydrology) Oklahoma State University	2019
M.S., Plant and Soil Sciences (Applied Soil Physics & Hydrology) Oklahoma State University	2015
B.S., Environmental Science (Natural Resources) Oklahoma State University	2013

## PROFESSIONAL EXPERIENCE

Assistant Professor, Department of Soil and Crop Sciences Texas A&M University	2020 - present
Postdoctoral Research Associate, Department of Plant and Soil Sciences Oklahoma State University	2020

## PEER-REVIEWED PUBLICATIONS

### Published

5. Dere, A., C. Engelmann, M. Holzer, D. Lindbo, C. Robinson, T. Wilson, and **B.M. Wyatt**. 2020. Soil: More than the dirt under your feet! *The Earth Scientist*. *In Press*.
4. Sun, X., B.P. Wilcox, C.B. Zou, E. Stebler, J.B. West, A. Hyodo, and **B.M. Wyatt**. Partitioning of evapotranspiration in a subhumid grassland via the isotopic approach: seasonal variations and responses to precipitation. *Accepted to Agricultural and Forest Meteorology*.
3. **Wyatt, B.M.**, T.E. Ochsner, E.S. Krueger, and E.T. Jones. 2020. In-situ soil moisture data improve seasonal streamflow forecast accuracy in rainfall-dominated watersheds. *J. Hydrology*. doi: 10.1016/j.jhydrol.2020.125404
2. Zhang, Y., W. Zhao, T.E. Ochsner, **B.M. Wyatt**, H. Liu, and Q. Yang. 2019. Estimating deep drainage using deep soil moisture data under young irrigated cropland in a desert-oasis ecotone, Northwest China. *Vadose Zone J.* doi: 10.2136/vzj2018.10.0189.
1. **Wyatt, B.M.**, T.E. Ochsner, C.A. Fiebrich, C.R. Neel, and D.S. Wallace. 2017. Useful drainage estimates obtained from a large-scale soil moisture monitoring network by applying the unit-gradient assumption. *Vadose Zone J.* doi: 10.2136/vzj2017.01.0016.

## Under Review

3. E.S. Krueger, T.E. Ochsner, M.R. Levi, J.B. Basara, G.J. Snitker, and **B.M. Wyatt**. Grassland productivity estimates informed by soil moisture measurements: statistical and mechanistic approaches. *Under Review*.
2. **Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. Integrating remote sensing and in-situ data to estimate soil moisture under various land cover types. *Under review*.
1. **Wyatt, B.M.** Insights into student participation in an introductory soil physics course during COVID-19 emergency online learning. *Under review*.

## In Preparation

2. Maples, J., S.M. Abit, T.E. Ochsner, and **B.M. Wyatt**. Modeling soil treatment area sizing requirements for conventional septic systems across climate gradient. *In preparation*.
1. **Wyatt, B.M.**, T.E. Ochsner. MesoSoilv2.0 - An updated soil physical property database for the Oklahoma Mesonet. *In preparation*.

## EXTENSION PUBLICATIONS

2. **Wyatt, B.M.**, D.B. Arnall, and T.E. Ochsner. 2019. Nutrient loss and water quality. Oklahoma Cooperative Extension Service Fact Sheet PSS-2286. doi: 10.13140/RG.2.2.16478.38720
1. **Wyatt, B.M.**, S. Taghvaeian, and T.E. Ochsner. 2018. State-wide estimates of potential groundwater recharge. Oklahoma Cooperative Extension Service Fact Sheet BAE-1539. doi: 10.13140/RG.2.2.15257.67689

## RESEARCH GRANTS AND FUNDING

\* = *BMW developed proposal*

9. Patrignani, A., C. Remley, J. Parsley, **B.M. Wyatt**, M. Cosh, and T.E. Ochsner. 2020. An in-situ testbed for soil moisture sensing and technology transfer. Natural Resources Conservation Service Dynamic Soil Properties Initiative. \$420,000 total, \$105,000 to B.M. Wyatt. *Pre-proposal under review*.
8. Ochsner, T.E. and **B.M. Wyatt\***. 2019. Improving seasonal streamflow forecasts for irrigation districts by incorporating soil moisture information derived from remote sensing. Bureau of Reclamation WaterSMART Applied Science Program. \$88,476.00. Funded.
7. Ochsner, T.E., **B.M. Wyatt\***, and W.T. Crow. 2019. Adapting seasonal streamflow forecasts to incorporate soil moisture information derived from remote sensing data. U.S. Geological Survey 104(b) Competitive Water Research Grants Program. \$25,000. Not funded.
6. Ochsner, T.E., **B.M. Wyatt\***. 2018. Comparing methods of integrating remotely-sensed data for producing high-resolution soil moisture estimates. National Aeronautics and Space Administration (NASA) Earth and Space Science Fellowship. \$45,000. Not funded.
5. Ochsner, T.E., E.S. Krueger, **B.M. Wyatt**, and E.T. Jones. 2018. Developing seasonal streamflow forecasts to inform surface water management in Oklahoma. U.S. Geological Survey 104(b) Competitive Water Research Grants Program. \$25,000. Funded.

4. **Wyatt, B.M.** 2017. Combining remote sensing and in-situ data to estimate soil moisture across mixed land cover types. American Geophysical Union Horton Hydrology Grant Program. \$10,000. Not funded.
3. Ochsner, T.E., **B.M. Wyatt\*** 2017. Combining remote sensing and in-situ data to estimate soil moisture across mixed land cover types. National Aeronautics and Space Administration (NASA) Earth and Space Science Fellowship. \$45,000. Not funded.
2. Ochsner, T.E., **B.M. Wyatt\***, and C.B. Zou. 2017. Modeling soil moisture under various land cover types: Using long-term grassland monitoring data to estimate soil moisture in Oklahoma forests. U.S. Geological Survey 104(b) Competitive Water Research Grants Program. \$5,000. Funded.
1. **Sallee, B.M.** and S. Sharma. 2014. Effects of *Juniperus virginiana* encroachment and growth on soil physical and hydraulic properties in a native grassland. Soil Physics Measurement Techniques course project competitive grant. \$1,000. Funded.

## HONORS AND AWARDS

### Professional Achievements

- |   |      |
|---|------|
| 1. Outstanding Ph.D. student, Department of Plant and Soil Sciences | 2020 |
| 2. Outstanding Reviewer, Journal of Environmental Quality           | 2019 |

### Academic Scholarships

- |   |                        |
|---|------------------------|
| 1. T&S Bowles Coulter Memorial Scholarship          | 2014, 2017, 2018, 2019 |
| 2. Gault-Halstead-Warth Trust Endowment Scholarship | 2016                   |
| 3. Top Tier Graduate Fellowship, Ph.D.              | 2015                   |
| 4. Top Tier Graduate Fellowship, M.S.               | 2013                   |
| 5. Humphrey's Travel Scholarship                    | 2013                   |
| 6. McNally Family Scholarship                       | 2012                   |
| 7. Regents Distinguished Scholarship                | 2009 - 2013            |

### Outstanding Presentations

1. 3rd place, Soil Physics and Hydrology Student Rapid Oral and Poster Competition, Soil Science Society of America Annual International Meeting, 2019.
2. 1st place, Student Poster Competition, National Soil Moisture Network meeting, 2019.
3. 1st place, Graduate Student Poster Contest, Soil Science Division, Oklahoma State University Plant and Soil Sciences Department Research Symposium, 2019.
4. 1st place (tied), Graduate Student Poster Contest, Soil Science Division, Oklahoma State University Plant and Soil Sciences Department Research Symposium, 2018.
5. 1st place, Student Poster Competition, Oklahoma Governor's Water Conference and Research Symposium, 2017.
6. 1st place, Student Poster Competition, Marena, Oklahoma In-Situ Sensor Testbed (MOISST) annual meeting, 2017.

7. 1st place, Graduate Student Poster Contest, Soil Science Division, Oklahoma State University Plant and Soil Sciences Department Research Symposium, 2017.
8. Outstanding Poster Presentation, Oklahoma Governor's Water Conference and Research Symposium, 2016.
9. Outstanding Oral Presentation, Oklahoma State University Student Water Conference, 2016.
10. Outstanding Poster Presentation, Oklahoma Governor's Water Conference and Research Symposium, 2015.
11. 2nd Place, Student Poster Competition, Marena, Oklahoma In-Situ Sensor Testbed (MOISST) annual meeting, 2015.
12. Outstanding Poster Presentation, Oklahoma Governor's Water Conference and Research Symposium, 2014.

## TEACHING EXPERIENCE

8. **Instructor of Record**, SOIL 4683 - Soil, Water, and Weather, Spring 2020. Primary instructor. Taught foundational principles of the soil water balance, soil physical properties, and the surface energy balance. 15 undergraduate and 11 graduate students enrolled.
7. **Guest Lecturer**, PLNT 4770 - Agronomic Problem Solving, Spring 2020. Introduced basic mathematical concepts and methods related to quantifying soil physical properties and processes to undergraduate agronomy and environmental science students.
6. **Instructor of Record**, SOIL/ENVR 4893 - Soil Chemistry and Environmental Quality, Fall 2018. Coordinated all course activities at Oklahoma State University for a course led remotely by Dr. Nicholas Basta of The Ohio State University. This included distributing course materials, proctoring and grading exams, assisting students with problem sets and laboratory exercises, and managing the online classroom environment. 9 undergraduate and 24 graduate students enrolled.
5. **Teaching Assistant**, SOIL 4683 - Soil, Water, and Weather, Spring 2018. Organized in-class demonstrations of soil physical processes, assisted students with problem sets, graded problem sets and exams, lectured occasionally. 20 undergraduate and 8 graduate students enrolled.
4. **Guest lecturer**, BAE 6343 - Groundwater Contaminant Transport, 20 September 2017. Lecture title "Introduction to simulating water flow and solute transport using HYDRUS-1D."
3. **Teaching Assistant**, SOIL 5583 - Soil Physics Measurement Techniques, Spring 2017. Organized laboratory and field work exercises for students, prepared necessary tools and materials for field trips, and assisted students with sample collection, analysis, and data interpretation. 7 graduate students enrolled.
2. **Teaching Assistant**, SOIL 2124 - Introduction to Soil Science, Spring 2014. Independently taught laboratory section, reinforced concepts taught in lecture, prepared materials for hands-on laboratory exercises, assisted students during laboratory experiments, graded laboratory reports and exams. ~30 undergraduate students enrolled.

1. **Intern and English Teacher**, Haramaya University, Alem Maya, Ethiopia, Summer 2013. Developed and implemented basic English language classes for disadvantaged undergraduate women, specifically practicing written and verbal English communication skills. ~25 undergraduate women served.

## TEACHING PREPARATION

3. College of Agricultural Sciences and Natural Resources Teaching Workshop, Oklahoma State University. 2019, 2017.
2. Graduate Teaching Assistant Conference on Teaching, Oklahoma State University Institute for Teaching and Learning Excellence. August 2017.
1. AGED 5813 - College Teaching of Agriculture and Natural Resources. Spring 2017.

## INVITED PRESENTATIONS

5. **Wyatt, B.M.**, T.E. Ochsner, E.S. Kruger, and E.T. Jones. 2019. Developing seasonal streamflow forecasts to inform surface water management in Oklahoma. Oklahoma Water Research Advisory Board Meeting. Oklahoma City, OK.
4. **Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. 2018. Modeling soil moisture under various land cover types. Oklahoma Water Research Advisory Board Meeting. Oklahoma City, OK.
3. **Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. 2016. Combining remote sensing and in-situ data to estimate soil moisture across mixed land cover types. Oklahoma Water Research Advisory Board Meeting. Stillwater, OK.
2. **Wyatt, B.M.**, T.E. Ochsner, C.A. Fiebrich, and C.R. Neel. 2015. Estimating groundwater recharge using the Oklahoma Mesonet. Oklahoma Water Research Advisory Board. Ada, OK.
1. Ochsner, T.E., **B.M. Sallee**, C.A. Fiebrich, and C.R. Neel. 2014. Estimating groundwater recharge using the Oklahoma Mesonet. Oklahoma Water Research Advisory Board. Stillwater, OK.

## ABSTRACTS - NATIONAL & INTERNATIONAL MEETINGS

† indicates award-winning presentation

11. **Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. 2020. Estimating root zone soil moisture across diverse land cover types by integrating in-situ and remotely-sensed data. ASA-CSSA-SSSA Annual International Meeting.
10. **Wyatt, B.M.**, T.E. Ochsner, E.S. Kreuger, and E.T. Jones. 2020. In-situ soil moisture data improve seasonal streamflow forecast accuracy in rainfall-dominated watersheds. National Soil Moisture Network annual meeting.
9. †**Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. 2019. Integration of remote sensing and in-situ data to estimate soil moisture across mixed land cover types. ASA-CSSA-SSSA Annual International Meeting. San Antonio, TX.

8. **Wyatt, B.M.**, T.E. Ochsner, E.S. Kreuger, and E.T. Jones. 2019. Improving seasonal streamflow forecasts by incorporating soil moisture data. ASA-CSSA-SSSA Annual International Meeting. San Antonio, TX.
7. Ochsner, T.E., **B.M. Wyatt**, and E.S. Krueger. 2019. Soil Water as Natural Capital. ASA-CSSA-SSSA Annual International Meeting. San Antonio, TX.
6. <sup>†</sup>**Wyatt, B.M.**, T.E. Ochsner, E.S. Kreuger, and E.T. Jones. 2019. Improving seasonal streamflow forecasts by incorporating soil moisture data. National Soil Moisture Network annual meeting. Manhattan, KS.
5. **Wyatt, B.M.**, T.E. Ochsner, and E.S. Krueger. 2019. Improving seasonal streamflow forecasts by incorporating soil moisture data. SSSA International Soils Meeting. San Diego, CA.
4. **Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. 2017. Integration of remote sensing and in-situ data to estimate soil moisture across mixed land cover types. ASA-CSSA-SSSA Annual International Meeting. Tampa, FL.
3. **Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. 2016. Combining remote sensing and in-situ data to estimate soil moisture across mixed land cover types. ASA-CSSA-SSSA Annual International Meeting. Phoenix, AZ.
2. **Wyatt, B.M.**, T.E. Ochsner, C.A. Fiebrich, and C.R. Neel. 2015. Estimating groundwater recharge using the Oklahoma Mesonet. ASA-CSSA-SSSA Annual International Meeting. Minneapolis, MN.
1. **Sallee, B.M.**, T.E. Ochsner, C.A. Fiebrich, and C.R. Neel. 2014. Estimating groundwater recharge using the Oklahoma Mesonet. ASA-CSSA-SSSA Annual International Meeting. Long Beach, CA.

## ABSTRACTS - REGIONAL, STATE, & LOCAL MEETINGS

<sup>†</sup> indicates award-winning presentation

24. **Wyatt, B.M.**, T.E. Ochsner, E.S. Krueger, and E.T. Jones. 2019. In-situ soil moisture data improve seasonal streamflow forecast accuracy in rainfall-dominated watersheds. Oklahoma Governor's Water Conference and Research Symposium. Midwest City, OK.
23. <sup>†</sup>**Wyatt, B.M.**, T.E. Ochsner, E.S. Kreuger, and E.T. Jones. 2019. Improving seasonal streamflow forecasts by incorporating soil moisture data. Oklahoma State University Plant and Soil Sciences Department Research Symposium. Stillwater, OK.
22. **Wyatt, B.M.**, T.E. Ochsner, E.S. Kreuger, and E.T. Jones. 2019. Improving seasonal streamflow forecasts by incorporating soil moisture data. Oklahoma Clean Lakes and Watersheds Association Annual Meeting. Stillwater, OK.
21. **Wyatt, B.M.**, T.E. Ochsner, E.S. Kreuger, and E.T. Jones. 2019. Improving seasonal streamflow forecasts by incorporating soil moisture data. Oklahoma State University Plant and Soil Sciences Department Seminar. Stillwater, OK.
20. **Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. 2018. Modeling soil moisture under various land cover types. Oklahoma Governor's Water Conference and Research Symposium. Midwest City, OK.

19. **Wyatt, B.M.**, T.E. Ochsner, E.S. Krueger, and E. Jones. 2018. Improving seasonal stream-flow forecasts by incorporating soil moisture data. National Institutes for Water Resources Regional Symposium. Lincoln, NE.
18. **Wyatt, B.M.**, T.E. Ochsner, E.S. Krueger, and E. Jones. 2018. Improving seasonal stream-flow forecasts by incorporating soil moisture data. Marena, Oklahoma In-situ Sensor Testbed (MOISST) annual meeting. Lincoln, NE.
17. †**Wyatt, B.M.**, T.E. Ochsner, E.S. Krueger, and E. Jones. 2018. Improving seasonal stream-flow forecasts to inform surface water management in Oklahoma by incorporating soil moisture data. Oklahoma State University Plant and Soil Sciences Department Research Symposium. Stillwater, OK.
16. †**Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. 2017. Integration of remote sensing and in-situ data to estimate soil moisture across mixed land cover types. Oklahoma Governor's Water Conference and Research Symposium. Norman, OK.
15. **Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. 2017. Integration of remote sensing and in-situ data to estimate soil moisture across mixed land cover types. Marena, Oklahoma In-situ Sensor Testbed (MOISST) annual meeting. Stillwater, OK.
14. †**Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. 2017. Combining remote sensing and in-situ data to estimate soil moisture across mixed land cover types. Oklahoma State University Plant and Soil Sciences Department Research Symposium. Stillwater, OK.
13. **Wyatt, B.M.** 2017. Recent advances in Earth science data and availability. Oklahoma State University Plant and Soil Sciences Department Seminar. Stillwater, OK.
12. **Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. 2016. First steps to modeling soil moisture in an oak forest using the FAO-56 dual crop coefficient model. Marena, Oklahoma In-situ Sensor Testbed Annual Meeting. Stillwater, OK.
11. †**Wyatt, B.M.**, T.E. Ochsner, and C.B. Zou. 2016. Combining remote sensing and in-situ data to estimate soil moisture across mixed land cover types. Oklahoma Governor's Water Conference and Research Symposium. Norman, OK.
10. †**Wyatt, B.M.**, T.E. Ochsner, C.A. Fiebrich, C.R. Neel, and D.S. Wallace. 2016. A simple method for estimating drainage through long-term soil moisture monitoring. Oklahoma State University Student Water Conference. Stillwater, OK.
9. **Wyatt, B.M.**, T.E. Ochsner, C.R. Neel, and C.A. Fiebrich. 2016. A simple method for estimating drainage through long-term soil moisture monitoring. Oklahoma Clean Lakes and Watersheds Association Annual Meeting. Stillwater, OK.
8. **Wyatt, B.M.** 2016. Annual report of the Soil Physics group at Oklahoma State University. Multistate Research Project meeting "Soil, Water, and Environmental Physics Across Scales." Las Vegas, NV.
7. †**Wyatt, B.M.**, T.E. Ochsner, C.A. Fiebrich, and C.R. Neel. 2015. Estimating groundwater recharge using the Oklahoma Mesonet. Oklahoma Governor's Water Conference and Research Symposium. Norman, OK.
6. **Wyatt, B.M.**, T.E. Ochsner, C.A. Fiebrich, and C.R. Neel. 2015. Estimating groundwater recharge using the Oklahoma Mesonet. Marena, Oklahoma In-situ Sensor Testbed (MOISST) annual meeting. Stillwater, OK.

5. **Sallee, B.M.**, T.E. Ochsner, C.A. Fiebrich, and C.R. Neel. 2015. Estimating groundwater recharge using the Oklahoma Mesonet. Oklahoma State University Plant and Soil Sciences Department Seminar. Stillwater, OK.
4. †**Sallee, B. M.**, T.E. Ochsner, C.R. Neel, and C.A. Fiebrich. 2014. Estimating groundwater recharge using the Oklahoma Mesonet. Marena, Oklahoma In-situ Sensor Testbed Annual Meeting. Stillwater, OK.
3. †**Sallee, B.M.**, T.E. Ochsner, C.A. Fiebrich, and C.R. Neel. 2014. Estimating groundwater recharge using the Oklahoma Mesonet. Oklahoma Governor’s Water Conference and Research Symposium. Oklahoma City, OK.
2. **Sallee, B. M.**, T.E. Ochsner, C.R. Neel, and C.A. Fiebrich. 2014. Estimating groundwater recharge using the Oklahoma Mesonet. Oklahoma State University Student Water Conference. Stillwater, OK.
1. **Sallee, B.M.**, T.E. Ochsner, C.A. Fiebrich, and C.R. Neel. 2013. Estimating groundwater recharge using the Oklahoma Mesonet. Oklahoma Governor’s Water Conference and Research Symposium. Midwest City, OK.

## PROFESSIONAL MEMBERSHIPS

1. Soil Science Society of America 2013 — present
  - Mentored by Dr. Glenn Wilson of USDA-ARS, 2016
  - Mentored by Dr. Cristine Morgan of the Soil Health Institute, 2015
2. American Society of Agronomy 2013 — present
3. American Geophysical Union 2015 — present

## PROFESSIONAL ACTIVITIES & SERVICE

1. Soil Physics and Hydrology division symposium organizer, “Looking beyond the soil: Applications of soil moisture data in ecology, meteorology, and hydrology,” 2020 ASA-CSSA-SSSA Virtual Annual International Meeting.
2. Judge, Soil Physics and Hydrology division symposium “Mapping and Modeling Soil Properties and Processes across Scales with Proximal and Remote Sensing” oral graduate student competition, 2020 ASA-CSSA-SSSA Virtual Annual International Meeting.
3. Judge, Soil and Water Management and Conservation division graduate student competition. 2020 ASA-CSSA-SSSA Virtual Annual International Meeting.
4. Current Chair (2020-2021) and Member (2018-2021), Soil Science Society of America K-12 Education and Outreach Committee.
5. Judge, Oklahoma Future Farmers of America (FFA) AgriScience Fair, 2019.
6. Fellow, South Central Climate Adaptation Science Center Early Career Researcher Professional Development Training. Baton Rouge, LA, 2018. Emphasis on creating actionable science, developing interdisciplinary research, interacting with stakeholders, and effective science communication.
7. Judge, Oklahoma State University Scholar Development Undergraduate Research Symposium, 2018.



8. Selected attendee, Graduate Student Leadership Conference, ASA-CSSA-SSSA Annual International Meeting. Tampa, FL, 2017.
9. Judge, Students of Agronomy, Soils, and Environmental Sciences (SASES) Undergraduate Speech Contest, ASA-CSSA-SSSA Annual International Meeting. Tampa, FL, 2017.
10. College of Agricultural Sciences and Natural Resources Graduate Student Representative, Oklahoma State University Academic Integrity Panel, 2017-2018.
11. Judge, Students of Agronomy, Soils, and Environmental Sciences (SASES) Undergraduate Poster Competition, ASA-CSSA-SSSA Annual International Meeting. Phoenix, AZ, 2016.
12. Peer Reviewer
  - Agroforestry Systems
  - Agronomy Journal
  - Geoderma
  - Journal of Environmental Quality
  - Journal of Hydrology
  - Soil & Tillage Research
  - Water Resources Research

## **PROGRAMMING LANGUAGES**

1. MATLAB - fluent
2. Python - proficient
3. Structured Query Language (SQL) - proficient
4. L<sup>A</sup>T<sub>E</sub>X typesetting system - proficient
5. R - beginner
6. Google Earth Engine Code Editor (JavaScript API) - beginner
7. Linux - beginner

## **SOFTWARE EXPERIENCE**

1. Git version control system
2. MINITAB statistical software
3. ESRI ArcGIS/ArcMap
4. HYDRUS-1D vadose zone flow model
5. PetraSim subsurface flow model
6. CrunchFlow reactive transport software
7. Visual MINTEQ geochemical model
8. PHREEQC geochemical model

## COMPUTATIONAL AND RESEARCH TRAINING

1. Satellite Remote Sensing for Agricultural Applications online training, NASA Applied Remote Sensing Training (ARSET). 2020. Certificate of completion available upon request.
2. Managing for a Changing Climate online course, South Central Climate Adaptation Science Center. Fall 2019. Certificate of completion available upon request.
3. Fundamentals of Remote Sensing, NASA Applied Remote Sensing Training (ARSET). 2019.
4. Nonlinear Dynamics: Mathematical and Computational Approaches, Complexity Explorer Massive Open Online Course (MOOC), Santa Fe Institute. Spring 2019. Certificate of completion available upon request.
5. Open Science Framework workshop, Oklahoma State University Institute of Teaching and Learning Excellence. October 2017.
6. “Python for MATLAB Users” training, Enthought. October 2017.

## OUTREACH ACTIVITIES

1. Dr. Wyatt regularly assists and advises graduate students outside her department regarding field work, laboratory methods, and computer modeling. Her expertise in these areas and her openness to interdisciplinary cooperation has facilitated her work with students in the fields of ecohydrology, natural resource ecology, and engineering.
2. Dr. Wyatt organized and led a hands-on activity booth titled “Soil: Nature’s Water Filter” at the 2019 National Science Foundation Established Program to Stimulate Competitive Research (NSF EPSCoR) Women in Science Conference at the Oklahoma Science Museum. This annual event brings together more than 1,500 students in grades 6-12 in order to introduce them to new scientific disciplines and the roles that women hold in those disciplines.
3. During her time as a graduate student, Dr. Wyatt assisted her high school environmental science teacher with an environmental testing and remediation project in collaboration with the City of Broken Arrow, OK. This project involved sediment sampling in Broken Arrow streams and water bodies and testing sediment samples for heavy metal contamination at Oklahoma State University’s Soil, Water, and Forage Analytical Laboratory.
4. ¡Unidos se Puede! Summer Academy - Dr. Wyatt assisted Dr. Tyson Ochsner in presenting a hands-on introductory soil science workshop to potential first-generation college students with the goal of increasing their interest in attending a university.
5. [This website](#) contains maps of long-term and mean annual drainage rates for over 75 sites in Oklahoma. Drainage rates from the soil profile are indicative of potential groundwater recharge rates in areas of the state. These publicly available maps are one output of Dr. Wyatt’s graduate research work.

## POPULAR PRESS COVERAGE

1. [ASA-CSSA-SSSA journals peer review testimonial](#). 2020.
2. [“Preparing for Oklahoma’s Future: Estimating Groundwater Recharge Rates.”](#) Oklahoma Water Resources Center. 2017.
3. [“Words from a Winning Presenter.”](#) Oklahoma Water Resources Center. 2016.

4. [Oklahoma Student Profile](#), The National Institutes for Water Resources. 2015.