



The Role of the Oklahoma Water Survey at the University of Oklahoma

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Director

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Oklahoma Water Survey

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History of the Oklahoma Water Survey

- Founded in 2011
- First director was Dr. Bob Puls, who retired in 2015
- Early focus on Water Data Portal and outreach on fracking and produced water
- Had not been active since 2015
- Part of the recently formed Corix Plains Institute, which also includes the Archeological, Biological, Climatological, and Geological Surveys

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Overall Goals

- Have an impact on the sustainability of our water resources in Oklahoma
- Make the University of Oklahoma more of a player in providing solutions to the water issues in the state
- Connect the OU faculty, students, and staff to the Oklahoma Water Community

...how will we do this:

by focusing on doing **MORE**

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Monitoring Outreach Research Education



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OKLAHOMA WATER SURVEY



at the **UNIVERSITY of OKLAHOMA**

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Monitoring

- Have professional staff trained in sampling and QA/QC
- Providing monitoring service and assistance for OU researchers and Oklahoma stakeholders
 - *How can we partner with your group?*
- Monitor selected, high-impact long term sites
 - Kessler Farms
 - Trailwoods development in Norman
 - City of Tulsa pervious concrete demonstration
 - *Let us know your high-impact site that we can add to this list*

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Monitoring

- Provide one-stop shop for public data gathering and distribution on OWS website
- Data products
 - Historic and current open surface water data for Oklahoma (and related data products)
 - Developing protocol and potential online site for distribution of hard-to-find data sets
 - *We are currently open to ideas on what data sets would be useful for you*

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Monitoring

- Exploring Plains Institute coordinated monitoring
 - Discussions to monitor around a theme of extreme events (floods) at select sites across the state (co-located with long-term USGS gages)
 - Water Quality [sediment, nutrients, and metals] (OWS)
 - Aquatic Community Disruption (OBS)
 - Geomorphology and Erosion; loss of cultural sites (OAS, OGS, and OWS)

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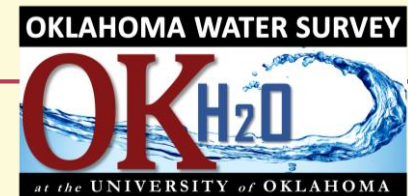


Outreach

- Developing a new website at OKH2O.org
- Creating professional development program and training portal
 - *What workshop topics would you like to see?*
- Providing outreach assistance to OU faculty and Oklahoma stakeholders, to a wide variety of audiences
 - *How can we work together on outreach programming?*

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Outreach

- Organizing and cooperating in local conferences
- Continuing to partner with OWRB, OCC, and others to implement innovative stormwater BMP demonstrations across the state
 - *Are you in need to a stormwater BMP at your site?*
- Provide more outreach on current and future research at OU through media releases, trade literature, etc. so that Oklahoma stakeholders are aware of our work

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Outreach

- Potential signature outreach activity:
 - POND (Protecting our Neighborhood Detention) Program targeting volunteer monitoring of detention ponds
 - Will include:
 - Water Quality Surveying
 - Bird Watching Aesthetic Improvements
- ***We are potentially looking for partner communities for proof-of-concept trials***

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Research

- Coordinate large-scale proposals to provide solutions for Oklahoma water issues
 - *Currently involved with OU produced water portfolio development under the coordination of the Oklahoma Secretary of Science and Technology*
- Involve stakeholders across the state with OU research proposals
- Encourage faculty to pursue and be involved with research that directly impacts the water resources in Oklahoma

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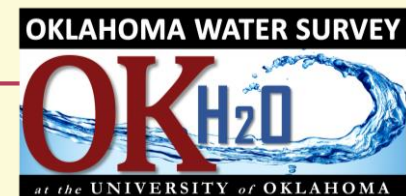


Education

- Serve as a conduit between Oklahoma stakeholders and the classroom
 - *Please let us know if you would be willing to share your water knowledge with OU students*
- Provide an internship portal for students
 - *Please send us your internship opportunities!*
- Provide outside the classroom learning opportunities for students (volunteer)
 - *Please let us know if you need volunteers!*

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Education

- Currently working on “Hydrology and Water Security” and “Civil Engineering” online M.S. programs
- Making progress towards dual degree program in Environmental Engineering, Environmental Science, and Environmental Sustainability with a university in Puebla, Mexico

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Education

- Potential signature education activity:
 - **New student organization: SAFE (Sooners Aiding Flood Emergencies)**
 - Will potentially include:
 - Student training on preparation and response in case of floods
 - Student assistance in flood preparation and cleanup
 - Potential for outreach workshops related
 - ***This is very preliminary, but we are potentially looking for partners for establishing this student organization***

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Providing Monitoring, Outreach, Research, and Education for Oklahoma's Water Community

www.OKH2O.org



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