



Oklahoma Water  
Resources Center

# Currents

July 2018

The **Oklahoma Water Resources Center** holds its annual Water Research Symposium in conjunction with the **Oklahoma Water Resources Board's** Governor's Water Conference each fall.

The 2018 Governor's Water Conference and Research Symposium will be held at the Reed Conference Center in Midwest City on December 5th and 6th.

**Save the date to be a part of this year's event.**

More at <http://water.okstate.edu/activities/symposium>.

**SAVE THE DATE**

39<sup>th</sup> Annual Oklahoma  
Governor's Water Conference  
and Research Symposium

**December 5-6, 2018**

at the Reed Conference Center  
in Midwest City

## Swine Lagoon Effluent for Agricultural Production (by Dr. Hailin Zhang and Brittany Davis)

Significant amounts of water in Oklahoma are used for crop irrigation. Water shortage in Oklahoma and the Southern Great Plains has become a major limitation for crop production and other uses, resulting in major impacts on local economies. Therefore, alternative sources of irrigation water need to be explored. Treated municipal wastewater (TWW) is one of the most readily available alternative water sources; however, infrastructures that use TWW for crop irrigation are lacking in most places. Additional field evaluations in Oklahoma are necessary to improve public acceptance. Currently, most TWW in the state is directly discharged to streams and rivers rather than recycled for crop production. In addition to TWW, treated swine lagoon effluent is also available in western Oklahoma and other regions. Although swine effluent has been used to irrigate crops, additional water use efficient application techniques need to be evaluated and promoted.

Given the abundance of effluent and the need to identify alternative water sources, Dr. Hailin Zhang, director of the Soil, Water and Forage Analytical Laboratory, applied for an Oklahoma Competitive Water Research Grant through the USGS 104(b) program. He was awarded a grant in 2016 to conduct his project, *Evaluating the Reuse of Swine Lagoon Effluent and Reclaimed Municipal Water for Agricultural Production*.

[\[Read a summary of his project here.\]](#)



This irrigation method is similar to what is used in Chickasha for reclaimed municipal waste water.

## Opportunities

### Funding

- **Water Research Foundation:** Focus Area, Unsolicited, and Emerging Opportunities (due 7/13/18)
- **NSF/USDA:** INFEWS (due 9/26)
- **NSF:** Environmental Engineering (due 10/22/18)
- [\[more info\]](#)

### Events

- **2018 AWRC Annual Water Research Conference** (Fayetteville, AR; 7/23-24)
- **Ecological Society of America Annual Meeting** (New Orleans, LA; 8/5-10)
- **2018 Early Career Researcher Professional Development Training** (Baton Rouge, LA; 8/5-10)
- **Oka Institute 2018 Sustainability Conference** (ECU; 10/2-3)
- **Global Water Security for Agriculture and Natural Resources** (Hyderabad, India; 10/3-6)
- [\[more info\]](#)



See what makes us stand out from the crowd! [Watch a short video](#) or [get the full story](#).

## Dr. Art Stoecker Remembrance (by Dr. Mike Woods and Leslie Elmore)

I am saddened to inform you that Dr. Art Stoecker passed away Sunday, June 3.

Art was on vacation with his wife, Barbara, and his children and grandchildren—surrounded by family he loved and who loved him.

Dr. Stoecker had been a collaborator with the Water Center since 2009 and was currently serving as PI on a student-led project through the USGS water grants program.

We appreciate all he did for the faculty and students in the Division of Agricultural Sciences and Natural Resources, the Water Center, and the citizens of Oklahoma.



### Oklahoma Water Resources Center

Oklahoma State University | 139 Agricultural Hall | Stillwater, OK  
<http://water.okstate.edu> | 405.744.5615 | [water@okstate.edu](mailto:water@okstate.edu)

