



**Recommendation for
Water & Wastewater Commission**

Commission Meeting Date:	February 8, 2017
Council Meeting Date:	February 16, 2017
Department:	Austin Water
SUBJECT	
Authorize the City Manager to negotiate and execute a 12-month interlocal agreement between the City of Austin and the University of Texas at Austin for sponsored research to be performed by a graduate student in the area of Environmental Engineering for an estimated amount not to exceed \$70,000.	
AMOUNT AND SOURCE OF FUNDING	
Funding is available in the Fiscal Year 2016-2017 Operating Budget of Austin Water.	
Purchasing Language:	N/A
Prior Council Action:	N/A
For More Information:	Judy Musgrove, 512-972-0157; Rick Coronado, 512-972-0127; Denise Avery; 512-972-0104
Boards and Commission Action:	February 8, 2017- To be reviewed by the Water and Wastewater Commission.
MBE/WBE:	N/A

Austin Water proposes to fund a second-year graduate student for one year. The student will research strategies to optimize the polymer used and the type of polymer to get a higher concentration of solid material in the sludge that comes off the belt presses. The cost of this study will be \$70,000.

The student will do a comprehensive study of the entire process from the wastewater plants to the Hornsby Bend Biosolids Processing Plant. This includes studying the effects on the sludge at Hornsby from the addition of magnesium hydroxide and the future addition of lime slurry at the wastewater plants. The student will look at the thickening process at the gravity thickeners and if centrifuges will affect the de-water ability of the sludge at the belt press. The student will also study the operations of the digesters and the type and dosage of polymer used at the thickeners and the belt press.

After all the results of the different studies are taken into consideration the student will recommend a course of action to get a higher percent solids in the sludge at the belt press, while saving polymer costs.

This will directly transmit to savings by either optimizing the dosage and/or type of polymer, (polymer is almost \$1,000,000 a year) or optimizing the process to get the sludge drier which will lower costs.