

HW Employees Are Serious About Recycling

The US EPA defines recycling as the process of collecting and processing materials that would otherwise be thrown away as trash and turning them into new products. Recycling can benefit your community and the environment.

Last year Hawkins-Weir employees recycled over 2,100 pounds of paper, plastic, and aluminum waste. Working with GREENSource Recycling, the offices of HW recycled items such as:

- » Cardboard, catalogs & magazines
- » Newspapers & inserts
- » Scrap plastics
- » Aluminum cans
- » Office paper, junk mail & envelopes

GREENSource, a division of the West River Valley Regional Waste Management District, offers a host of recycling services for businesses that generate large volume recyclable materials and provides free technical assistance to help businesses of all sizes reduce their waste disposal costs.

www.greensourcerecycling.org



CAD Manager Mike Henson recycling waste at the HW Van Buren office.

HW Project Spotlight:

Sallisaw Water Treatment Plant

The Award-Winning Sallisaw Water Treatment Plant Project included improvements to the water supply and treatment plant for the City of Sallisaw, Oklahoma



In 2003, Hawkins-Weir Engineers, Inc. performed a study of the City of Sallisaw, Oklahoma's water supply and treatment capabilities. The study revealed structural deficiencies with the existing intake structure and pump station at Brushy Creek Lake, and inadequate treatment capacity at the City's two water treatment facilities. Therefore, the scope of the Sallisaw Water Treatment Plant project included the replacement of the raw water intake structure and pump station, and a 6.0 million gallon per day water treatment plant to provide for the 20-year peak daily water demand. The project scope also included the abandonment of the

existing facilities. The City's project budget was \$17.0 million dollars and identified a scheduled completion date of February 2008.

The City was represented on the project design team, and participated in all design decisions. Several site visits to other water treatment plants were taken during the planning phase of the project to evaluate various water treatment technologies for possible incorporation into the project.

A raw water intake structure and pump station was constructed at Brushy Creek Lake, away from its south

shoreline. This design approach borrowed construction techniques used in bridge construction, and was implemented as a cost savings measure following the receipt of bids.

The low bid was submitted by BRB Contractors, Inc. of Topeka, Kansas, in the amount of \$20,398,000, and exceeded the project budget. The cost savings associated with the innovative re-design of the raw water intake structure and pump station and other cost savings resulted in a decrease of approximately \$4.0 million dollars to the project contract amount. This value engineering performed by the design team enabled the City to restore the

project to within budget and proceed with construction without sacrificing major project components.

Although conventional water treatment technology (i.e. solids contact clarifiers, rapid rate gravity filters, etc.) was selected for the Plant, several strategies were implemented to optimize treatment efficiency. Some examples of these strategies included steps to prevent the formation of disinfection by-products, future expandability, flexible operational control, a consolidated finish water pump station, the use of emergency standby generators, and the use of

safer water treatment chemicals. Another project focus was its overall appearance, and the design team strived to incorporate architectural form into functionality.

The project, as designed and constructed, not only addressed all design parameters through optimized water treatment strategies that presently exceed current regulatory requirements, but also through the ability to easily expand the improvements to meet future water treatment needs. The project began start-up activities in November 2007, and began supplying water to Sallisaw and

its surrounding contract customers in December 2007. Final construction cost and project close-out activities were completed below budget at a cost of \$16,764,288.12 on February 25, 2008.

More recently, the Sallisaw Water Treatment Plant and its operational staff was recognized by the Oklahoma Water Pollution Control Association as the 2012 Medium-Sized Water Treatment Plant of the Year. We congratulate the City of Sallisaw on receiving this award, and are proud that the Hawkins-Weir team was a part of this successful project.



A bridge between the pump platform and the lake's south shoreline provides access, and also supports the pump discharge piping and electrical and instrumentation conduits to an Electrical and Chemical Building.



A raw water intake structure and pump station was constructed at Brushy Creek Lake, away from its south shoreline. This design approach borrowed construction techniques used in bridge construction, and was a cost savings measure.

The solids contact clarifiers are covered with aluminum dome covers and the gravity filters are located inside the Plant Operations & Filter Building to prevent their exposure to sunlight and possible algae growth that could result in the requirement to prechlorinate.



Design of the water treatment units and site piping include provisions to allow for the future expansion of plant treatment capacity to meet the 50-year peak daily water demand. The gravity filters may be modified from dual media to multimedia to increase their filtration loading rate and plant treatment capacity.



A finish water pump station was constructed at the plant to consolidate several independent pump stations in the water distribution system that were deficient in pump capacity. In addition to the new finish water pumps, the pump station also contains the filter backwash pumps.

Improvements were made to an existing raw water storage basin located on the plant site. The basin could store up to 18 million gallons but did not have a standby pump available to access this raw water for treatment in case of disruption in service. A standby pump and method of withdrawing water were installed.



Congratulations to One of Our Own



Hawkins-Weir Engineers, Inc. would like to congratulate Joshua S. Durham, P.E. on

attaining his Professional Engineering License. Josh works in our Van Buren office, where he specializes in wastewater treatment process design and has a key role on many projects for Hawkins-Weir. Working with public sector projects he has been responsible for conceptual design, cost analysis, computer modeling, environmental assessments, water and sewer master plan development, construction management, and pedestrian trails. He is a Licensed Class II wastewater operator. Josh also helps our company as a computer technician to support our IT initiatives. A graduate of the University of Arkansas, Josh received his M.S. in Civil Engineering in 2009 and B.S. in Civil Engineering in 2007. He joined Hawkins-Weir in June of 2009.

King Elementary Earns LEED Gold

Van Buren's newest elementary school has received 2012 LEED Gold Certification! The 83,000 sf school, which opened in August 2011, was designed by MAHG Architecture and constructed by Nabholtz Construction. Hawkins-Weir provided the civil engineering design as a member of MAHG's team. The award-winning school design includes 27 classrooms, a gymnasium, new playgrounds, outdoor classrooms, a media center & computer lab, and a storm shelter. Hawkins-Weir Engineer's applauds the Van Buren School District's commitment to creating a positive, healthy atmosphere for its students.



Work Scheduled to Commence on Zero Street Wet Weather Improvements

Plans are underway on the second phase of the Zero Street Pump Station Wet Weather Improvements Project for the City of Fort Smith, Arkansas. This project is a continuation of Fort Smith's effort to manage wet weather sanitary sewage flows and will include construction of a new Zero Street Pump Station and two 5-million gallon equalization tanks. Located near commercial and residential areas, the project site was once occupied by a zinc smelter and required significant site remediation efforts during the first project phase. This is the third such wet weather project for which Hawkins-Weir Engineers has provided design and construction management services, and it is the first involving enclosed, precast concrete tanks for the temporary storage of wet weather flows. Project bidding is expected in April 2013.

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HW HighLights

Welcome to the Hawkins-Weir Team



A.J. Kaufman, E.I.
joined HW's Little Rock office in March of 2013. His experience includes

planning and design of multiple water and wastewater projects including wastewater treatment plant design, wastewater pump station evaluation and design, water distribution system modeling and design, wastewater collection system modeling and design, engineering studies and reports, and construction observation on numerous water and wastewater projects. He is a graduate of the University of Arkansas with a B.S. in Biological Engineering and is an Engineer Intern in Arkansas.



Alyssa Q. Paulus, E.I. joined HW's Little Rock office in October 2012 as a civil engineer. She

has experience performing surveys, designs, cost estimates, construction staking, and construction observation for various agricultural engineering projects including levees, water control structures, drainage ditches, irrigation pipelines, pumps, and reservoirs. She is a graduate of Arizona State University with a B.S. in Civil Engineering and is an Engineer Intern in Arkansas.



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Receive Bids in April 2013

Little Rock Office On The Move



Hawkins-Weir's Little Rock office is managed by Aaron Benzing, P.E.

On its 3-year anniversary in January 2013, the Little Rock office of Hawkins-Weir Engineers moved from its River Market location to 211 Natural Resources Drive. This move was only possible thanks to the strong support of our clients who have welcomed our firm to this region with open arms and have supported our expansion by entrusting us with their important projects. The purchase of this larger and more permanent office location in Little Rock serves as further proof of our firm's commitment to provide outstanding service to the entire State of Arkansas. Located just off Markham Street in west Little Rock, this new location will support the continued growth of our firm for many years to come. We invite you to stop by and visit any time!



From I-430 South
Exit 6B Markham St.;
Right on Shackleford Rd.;
Right on W. Markham St.;
Left on Natural Resources Dr.

From I-430 North
Exit 6 Markham St.;
Right at light onto W. Markham;
Left on Natural Resources Dr.

From I-30 North / South
Exit I-630 W. to Shackleford Rd.;
Right on Shackleford Rd.;
Right on W. Markham St.;
Left on Natural Resources Dr.

