Federal Energy and Water Management AWARDS

2013

(background) ORNL's campus revitalization features new and remodeled buildings implementing water efficient fixtures, rainwater harvesting, and native landscaping.

(above) The landscaping on ORNL's campus features native varieties, including switchgrass that is used for biofuels research and native flowers. The native plantings, rain gardens, vegetated swales, pocket wetlands, and protection of riparian buffers and floodplains promote water quality.

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Oak Ridge National Laboratory's (ORNL) water resource management program efforts resulted in savings of 140.6M gallons of water and $186,000 from 2011 to 2012, a 15.8 percent reduction from the prior year. The comprehensive program minimizes water use, maximizes water reuse, and enhances water quality by integrating water resource management into new construction, renovations and retrofits, operations and maintenance, sustainable landscaping, and research and development.

Recent energy savings performance contract projects retrofitted intensive water-using equipment with low flow fixtures and replaced the central compressed air plant with a more efficient facility, resulting in savings of almost 170M gallons annually.

ORNL's campus-wide "Lab within a Park" approach protects water quality through native landscaping by minimizing runoff and improving the management of riparian zones flowing through the campus. The program has reduced ORNL's water intensity by 17.8 percent from the 2007 baseline. With plans that include eliminating additional oncethrough cooling and repairing leaks in the water distribution system, ORNL estimates a 25.2 percent reduction in potable water intensity by 2020.