

About the Texas Environmental Excellence Awards

Since 1993, the governor of Texas and the TCEQ commissioners have been presenting annual awards that spotlight the state's highest achievements in environmental preservation and protection. TEEA honorees are recommended by the governor's blue-ribbon committee every spring. The awards



recognize outstanding, innovative environmental programs in nine categories. Governor Greg Abbott welcomed and congratulated the winners on May 6, at a banquet in Austin.

For more information and to apply, visit: teea.org

TEXAS ENVIRONMENTAL EXCELLENCE AWARDS 2015

Outstanding Achievement in Resource Conservation, Waste Reduction, and Pollution Prevention

A Texas grocery-store chain that's making groundbreaking innovations in protecting our natural resources, an Eagle Scout who spearheaded a project to both beautify a neighborhood and protect water quality, and a retreat camp that is teaching children how to become stewards of our environment—these are only a few of the outstanding recipients of this year's Texas Environmental Excellence Awards. All told, there were nine winners, in eight categories, as follows:

- Civic/Community: TreeFolks
- Youth: Riley Sanders
- Education: Variety's Peaceable Kingdom Retreat for Children
- Water Conservation: City of Frisco Public Works
- Agriculture (two winners!): Dixon Water Foundation and Texas Alliance for Water Conservation
- Technology: Chevron Phillips Chemical Company—Orange
- Innovative Operations: H-E-B
- Pollution Prevention: Nucor Steel Texas

Civic/Community TreeFolks

The 2011 Bastrop County Complex Fire, in Central Texas, was the most destructive wildfire in Texas history. Destroying over 1,600 homes, it inflicted property damage estimated at \$325 million. The fire also devastated the native population of loblolly pines, leaving many of the affected properties severely burned and unlikely to recover their original pine coverage. In response, TreeFolks initiated an effort to provide cost-free education and reforestation to those affected by the fire.

The organization's ultimate goal is to plant 2 million trees within the first five years. Local sentiment toward TreeFolks could not be more positive, with over 1,000 landowners having



applied for tree-planting services and many more attending the hosted tree giveaways. And all this good work is not done without help: to date, more than 1,100 volunteers have donated 3,500 hours of their time to the project.

Youth Riley Sanders

Inspired by his concern for the health of the watershed, Riley Sanders, a Boy Scout with Troop 17 in Austin, spearheaded a multi-year project to manage runoff from the Dobie Middle School's impervious surfaces.



The first phase of the project consisted of building out and reinforcing the walls for a school rain garden, and then creating trenches and installing a grating system and drainage lines to direct all the rainwater into the garden. The water sustains the garden and makes it even more beautiful, and the garden in turn cleans the water before it goes into the watershed.

During the second phase, Riley rallied an impressive group of more than 100 volunteers—including students and faculty from Dobie Middle School, other Boy Scouts, and members of the community—to come together for the planting and beautification of the rain garden. With the interest and support he witnessed, Riley even expanded his work to include plantings that would enhance rest areas at the school's entrance, thereby encouraging student congregation.

Education Variety's Peaceable Kingdom Retreat

Nestled on the outskirts of Killeen (70 miles north of Austin) on 120 acres bordering the Lampasas



River, Variety's Peaceable Kingdom Retreat for Children offers a haven for Central Texas kids. Founded in 1984 by the non-profit organization Variety of Texas, Peaceable Kingdom provides educational and recreational opportunities for more than 5,000 children and their families each year.

One of its principal educational initiatives is its Environmental-Education Program, which both supports the individualized education plans of students with special needs and is TEKS-aligned for mainstream students. Students from 16 surrounding school districts get a chance to experience the Hill Country during a day of outdoor education.

What makes Peaceable Kingdom unique is its focus on environmental

education tailored for children with chronic illnesses and special needs. Even youths with specific physical challenges will find a haven specifically designed for them to learn and be physically active.

Water Conservation Department of Public Works, City of Frisco

The City of Frisco, north of Dallas, is making a name for itself in water conservation. By simplifying its water-conservation message, Frisco's innovative WaterWise outreach campaign is saving billions of gallons of this valuable resource.



Instead of focusing education on the residents' understanding of, and compliance with, the current drought-stage restrictions, Frisco decided just to simplify the message. Instead of answering "How much?" or "How often?" the city's water education team turned the focus of their outreach to "Do we need to water at all?" In 2009, the city also installed a weather station and set up rain gauges all over.

Through its proactive and focused approach to water-conservation education, the city has seen consumption drop to 147 gallons per person per day and estimates that its residents have saved 6.2 billion gallons in the most recent year.

By providing Frisco homeowners with accurate information to make informed decisions, the city allowed the individual to play a part in protecting a precious resource for the betterment of the quality of life of current and future generations of Frisco residents.

Agriculture (two winners!) Dixon Water Foundation

Nestled among open land in both



the Trans-Pecos and the North Texas prairie, the ranches of the Dixon Water Foundation are raising livestock in a new way. Using planned grazing strategies to aggressively graze defined fields before moving the herd, they mimic the natural grazing of migratory bison, which inhabited much of this area in the distant past. This method—sometimes called rotational or intensive grazing—actually uses the land more efficiently and strengthens the root systems of vegetation, improving the biodiversity of the property and the health of the soil. It also reduces the use of pesticides, contributing to healthier watersheds.

In this style of grazing, the livestock feed intensely on a relatively small segment for a short amount of time, eating all the grass and the weeds too, before being shunted into an adjacent plot. Their waste is left on the land and serves as natural fertilizer for the grasses. Ranch managers typically allow six months or more as a recovery period for the plants and soil.

Texas Alliance for Water Conservation

Housed at Texas Tech University, the Texas Alliance for Water Conservation is a research project made up of



producers, industries, universities, and government agencies. Its mission includes linking researchers from Texas Tech with volunteer producers to test and refine improvements in field techniques in order to solidify, demonstrate, and promote best-management practices that will not just save water, but do so while maintaining producer profitability.

The project is making a real impact. Estimations of water savings in 2006–13, encompassing the time during 2011 and 2012 in which the area experienced particularly severe drought, averaged

616 acre-feet per year across all sites—more than 200 million gallons. With increasing buy-in from area producers every year, the most recent three-year average was even more outstanding, with almost 300 million gallons conserved.

Technology Chevron Phillips Chemical Company—Orange

Beginning in 2010, the Chevron Phillips chemical plant in Orange, Texas (in the Beaumont–Port Arthur area), recognized a unique opportunity to make serious strides in reducing hazardous waste. At the time, the plant was generating more than 750 tons of isopentane per year; spent isopentane represented more than 90 percent of the facility’s total hazardous waste.



The general idea was simple: design a process where the isopentane could be reused instead of sent off to be disposed of as waste. The implementation of this concept, however, presented a challenge, and demanded a great deal of research and development, time and effort.

A single-distillation tower purifies batches of used isopentane, providing Chevron Phillips, at the completion of the process, with isopentane that is more than 99.5 percent pure. Over the last five years, as the facility fine-tuned and perfected this procedure, Chevron Phillips saw the rate of successful recovery stabilize. The waste reduction for isopentane is now greater than 76 percent.

Innovative Operations H-E-B

H-E-B is a longtime Texas institution, with stores from Laredo to Houston and from McAllen to Waxahachie. So H-E-B’s strategies for



conservation and environmental stewardship have the potential to make a significant impact, affecting nearly all corners of the state.

The company’s approach is broad—incorporating energy and water conservation in many of its stores and selecting some locations to serve as testing sites for new technologies, such as water-cooled, self-contained refrigerated cases or propane-cooled, energy-efficient freezers. Over the last decade, H-E-B has seen a 12 percent decrease in energy use across all stores and currently has six LEED-certified stores. (LEED, Leadership in Energy and Environmental Design, is a rating system, developed by the U.S. Green Building Council, to measure the performance of green buildings, homes, and neighborhoods.)

And that’s not all. In San Antonio, border, and Gulf Coast locations, H-E-B installed recycling units at car washes, continuously cleaning and reclaiming used water, for a reduction in water use of 73–80 percent. Austin, San Antonio, and Houston stores give customers access to electric-vehicle charging. And H-E-B’s “Made in Texas” line offers the opportunity for Texans to shop locally wherever they might be.

Pollution Prevention Nucor Steel

In 2012, Nucor Steel’s Texas plant (in Jewett), in East Texas, began an innovative project to replace its five large baghouse fan blades with higher-efficiency backward-inclined blades. These fans evacuate emissions from the production of steel in an electric arc furnace. By incorporating the new blade design in the needed replacement, Nucor achieved increased efficiency and eliminated the need to replace the fan housing completely.



A Few Facts about This Year’s Accomplishments

- Number of residential sprinkler audits the City of Frisco has conducted since 2006: **14,000**
- Number of saplings TreeFolks has planted over the last two years: **660,000**
- Amount of money Eagle Scout Riley Sanders raised to complete the Dobie Middle School water-conservation project: **\$14,000**
- Amount of money in disposal and material-purchase costs that Chevron Phillips–Orange saves with isopentane recovery: **\$170,000 per year**
- Amount of money Nucor Steel’s variable-frequency drives save in electrical costs: **\$100,000 per year**
- Dixon Water Foundation’s new open-air education pavilion in Cooke County aspires to be the **first certified living building in Texas**. (A “living building” is a structure that “generates all of its own energy with renewable nontoxic resources, captures and treats all of its water, and operates efficiently and for maximum beauty.”)
- Number of farms that the Texas Alliance for Water Conservation has recruited to test a range of water-saving and land-management tools: **more than 30 in eight counties, encompassing 6,000 acres**.
- H-E-B **donates 5 percent of pre-tax profits back to the communities**, including contributions to environmentally focused nonprofit organizations such as Keep Texas Beautiful and the Nature Conservancy.
- Peaceable Kingdom designs **day programs specifically to train students to be peer mentors** during the summer camps. These week-long, specifically designed summer camps offer hundreds of children opportunities to learn from and cherish the outdoors.

The increased efficiency of the design allowed Nucor to reduce the number of fans required from four to three, while continuing to achieve the same minimum airflow. Additionally, the refurbished fans use less electricity. Operating

the upgraded fans saves 2,000 kilowatts every hour.

Following the success of its baghouse upgrade, Nucor reviewed other energy-saving opportunities. The company has been installing variable-frequency

drives throughout the facility, saving even more energy throughout the site. ↻



View videos of the award winners and see Governor Greg Abbott's welcome address at [youtube.com/user/TCEQNews](https://www.youtube.com/user/TCEQNews).



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