

Five Star Sustainable

Adams 12 Five Star Schools // Sustainability Report

Spring 2018

Energy Challenge

Ready. Set. Save! Energy that is.

Beginning January 22 through February 23, ten schools across the Five Star District competed against each other to reduce their energy use. Our behaviors have a large impact on the amount of energy we use. Through the Resource Central ReNew Our Schools program, students and staff learned about behavioral changes they can make to reduce their energy use in school and at home, saving money and protecting the environment. They are also able to see the impacts of their actions through eGauge smart electric meters that were donated as part of the program. You can also [view these devices](#) from anywhere in the district.

Participating schools

High School Cohort: **Horizon**, Legacy, Mountain Range and **Thornton**

Middle School Cohort: Rocky Top, Shadow Ridge and **STEM Launch**

Elementary School Cohort: **Hillcrest**, Hunter's Glen and Riverdale

Each of the four winning schools will receive an \$8,000 grant from Resource Central, and their generous donors, to be used for energy efficiency improvements within their school.



Hillcrest Elementary



STEM Launch



Horizon High



Thornton High



If you have further questions or would like to compete in a future energy challenge, contact Shannon Oliver at shannon.t.oliver@adams12.org.

Schools listed in green are the energy challenge winners.

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Energy and Sustainability is responsible for managing utility use and for promoting social, economic and environmental sustainability for the district. Between 2009 and 2016, the team has implemented conservation measures that have reduced energy costs by \$1.1 million annually.

We're taking steps to "go green." That means our schools and district departments are working to be wise stewards of our resources. Learn how we are being energy smart – and how you can do your part.

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www.adams12.org/sustainability

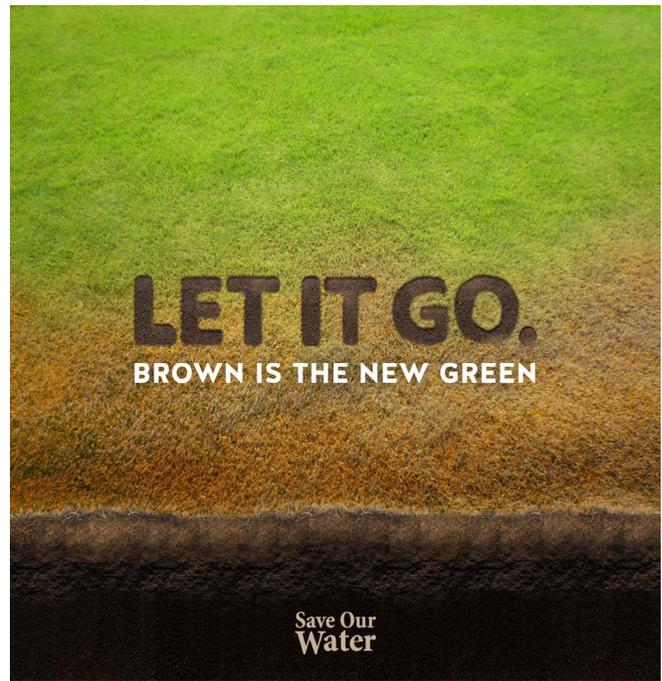
Drying Out in the Five Star District

Do you know where your water comes from?

In Adams 12 Five Star Schools, water comes from six providers: Broomfield, Federal Heights, North Washington Water, Northglenn, Thornton and Westminster. Of these providers, five have seen rate increases greater than five percent in the last two years. The adopted budget for water usage in fiscal year 2018 is \$1.82 million, making it the district's second most costly utility.

Do you know where your water goes?

Between eighty and ninety percent of the water used in the district goes to the maintenance of fields and landscaping. Approximately forty percent of water used for irrigation is lost to evaporation, infiltration and run-off and never makes it into the plant. That equates to a loss of nearly \$620,000 on water that will evaporate during the current fiscal year. That water could be used for growing crops, and that money could be used for growing students.



In an effort to conserve such a precious resource while reducing the financial burden for this utility, the Five Star District is deepening its efforts to reduce water-use related to irrigation activities. As a first step, a Water Resource Specialist role was created in January 2017 to manage the district's central irrigation control system. In 2017, the district surpassed the goal to reduce water use by 10 percent, reducing our water we use by over 17 percent and saving over \$110,000.

2017 GOAL
↓ 10% WATER USE REDUCTION 

2017 PERFORMANCE
↓ 17.3% WATER USE REDUCTION 

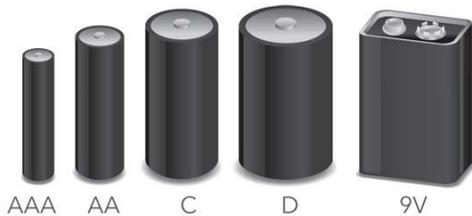
Continuing in 2018, the new goal is to reduce water use by 20 percent. This will be achieved through continued central irrigation improvements and targeting water wasteful landscapes. Specifically, just over one acre on the north side of STEM Launch will be converted from Kentucky Bluegrass to a Colorado Native seed mix. Once established, this turf will require only 25 to 30 percent of the total water use previously required by the bluegrass, saving thousands of dollars per year in water costs.

Battery Recycling

Adams 12 Five Star Schools is focused on reducing our impact on local and global environments. One way everyone can help is to not send disposable or single-use batteries to the landfill. These are the name-brand batteries used in schools for remote controls, flashlights, emergency lights and other portable devices. This document provides the information necessary for successful collection and disposal of these batteries through a third-party contractor.

Collection Buckets

The waste handler who manages the disposal of batteries for the district provides black five gallon buckets at no charge. Buckets are picked up once-per-semester at each school, or on-call through the warehouse if it becomes full sooner.



Battery Disposal

Collection buckets are intended to collect alkaline batteries only. These are the most common disposable battery type, in sizes AAA, AA, C, D and 9V.

Battery types NOT allowed include rechargeable batteries of any type, lithium (phone and computer) batteries, button coin (watch) batteries, damaged, broken or rusting batteries of any type. No other electronics are permitted in these buckets. If you have any questions on what is allowed, please email shannon.t.oliver@adams12.org.



CELL PHONE BATTERIES



RECHARGEABLE BATTERIES



POWER TOOL BATTERY



DAMAGED BATTERIES



CAR BATTERY



"WATCH" BATTERIES

Center for Green Schools – School District Sustainability Scholarship

Every year the United States Green Building Council (USGBC), through its Center for Green Schools, selects five school districts across the country to receive the School District Sustainability Scholarship. Adams 12 Five Star Schools was selected for this honor for the 2017-2018 award year, for its continued commitment to improving school environments and reducing impacts to the local and global environment.

“The Five Star District has demonstrated a commitment to sustainability and is truly deserving of the benefits the school district scholarship program provides,” said Anisa Heming of the Center for Green Schools at USGBC.

Benefits available to each of these districts include participation in the School Sustainability Leaders Summit, the national Green Schools Conference and Summit, ongoing professional development support, and direct access to the nation’s leading green schools experts throughout the year. Green schools can significantly lower district operating costs, putting money back into classrooms. The School District Scholarship program allows administrators to evaluate and plan for changes system-wide and to elevate the level of the conversation in their communities regarding green school design and operation. More information about the Scholarship program can be viewed at centerforgreenschools.org.



THE SUSTAINABILITY TEAM

Chris Wilderman

Director of Safe and Sustainable Environments

Chris worked previously for Adams 12 Five Star Schools as the Security Manager before moving to Boulder Valley School District for five years as the Director of Operations, Security and Environmental Services. Eager to return to Five Star Schools, Chris took on the role of Director of Safe and Sustainable Environments in July 2017. He leads the sustainability team, facilities, operations, community use, environmental and security.

Shannon Oliver

Assistant Director of Energy and Sustainability

Shannon began with Five Star Schools in February 2016 and brings over seven years of experience in environmental regulatory compliance and energy efficiency for the oil and gas industry. He has a Bachelor of Science in Environmental Health from Colorado State University and a Master in Public Health — Global Environmental Health from Emory University. Shannon is excited to work with district students and personnel to achieve meaningful reductions in energy use, water use and help improve waste reduction efforts.

Terry Clymer

Energy Engineer

Terry began with Five Star Schools in March 2008 and brings over 35 years of experience in energy management. He has a Bachelor of Science in Mathematics with a minor in Computer Science from Central State University of Oklahoma. Terry is a great resource for energy reduction in the district.

Justin Price

Water Resource Specialist

Justin Price now has almost three years of experience operating our irrigation systems. He came to us with prior grounds experience, military service and landscape design experience. Justin will focus on managing one of Colorado’s most precious resources by ensuring our irrigation systems are watering adequately without over watering, as well as by moving toward more sustainable and low-water use landscapes.