



Water Conservation

Cambrian School District

March 2, 2023

Conservation, Modernization, and Maintenance

Water conservation is required as California, and the western United States are going through a “mega-drought”. The District in its desire to conserve water and be good stewards of our funds, is working on various areas to implement changes to save water.

Overall water conservation is a much more powerful and integrated approach to drought tolerance.



Water and Energy Investment Grade Audit

An Investment Grade Audit is a process that entails a very thorough, calculated and detailed analysis to identify cost-effective energy conservation measures.

Develop Strategies For:



The replacement of outdated electrical distribution panels, and electrical fixtures



Solar generation expansion options, and the preservation of revenue rates



The modernization of antiquated irrigation lines and watering control infrastructure



The conversion of most water fixtures into touchless water saving units



The installation of EV charging stations that generate revenue, without maintenance responsibilities

Transition into Battery Powered Maintenance

Work with American Green Zone Alliance to complete participation in the California Air Resources Board or other programs; buybacks, rebates, etc.

- ❖ Tools – Purchase all battery powered hand-held grounds tools
- ❖ Large mowers – Invest in battery powered drive-mowers, and divest of existing equipment
- ❖ Training – Continue with American Green Zone Alliance (AGZA) and other manufacturers training modules for tools and irrigation resource metering



Fair Allocation Resource Costs

Create a policy for the Fair Allocation of Resource Costs for all rental use of District buildings and grounds



Resource allocation is the process of assigning and managing assets in a manner that supports an organization's strategic planning goals



The key to successful cost allocation is to establish an allocation system that is fair, equitable, and supported by current data



Examples: Water meters installed at the fields or electric meters installed in rental portions of our buildings and grounds



The data will then allow us to know the full cost of maintaining our rental assets, and will help us set accurate data based rental rates

S.W.O.T. Analysis

Strengths – stakeholder support, building for today and the future, key management experience in place

Weaknesses – limited staffing for development, implementation, and ongoing maintenance of improvements, tiered Gov't funding

Opportunities – modernize frontal landscape design and appearance, conservation of resources, modernization of critical infrastructure, range of funding, increase revenue from charging stations and preservation of revenue rates

Threats – climate change, competing modernization needs & costs, inflationary pressures, supply chain chaos

Grants and Funding

Lawn areas which can be removed and converted into another use are estimated to reasonably total between 15,000 square feet, or more per site. Each District site is eligible for up to \$100,000 in rebates through the Landscape Rebate Program (LRP) from Valley Water. The LRP offers rebates for converting from lawn to low water use plants, converting lawn to mulch (the newest component intended to help large sites comply with the ban on irrigating non-functional turf), upgrading irrigation equipment, and converting to in-line drip irrigation. The areas include front lawns, quad lawns, and even back lawns. The removed and replaced lawn would be limited to a portion of a designated area; percentage and areas need to be determined per site.

Fammatre

Fammatre has volunteered for a water-wise makeover in the front area of the school

- ❖ Begin planning for the removal of non-instructional front turf
 - Seek outside funding sources as a first option; grants, rebates, etc.
 - Focus on the use of bioretention swales and native plants and grasses
 - Gather questionnaire feedback from stakeholders
 - Engage architecture assistance for conceptual sketches
 - Present final recommendations for approval



Fammatre Elementary School

Fammatre

- ❖ Estimated Budget for replacement of front lawn area:
 - Estimated Area: 3,900sf
 - Water Company \$2/sf rebate for turf removal
 - Architect estimate \$19/sf for Decomposed Granite (DG), Planting/shrubs, irrigation
 - Estimated net cost = $\$17/\text{sf} @ 3,900\text{sf} = \$66,300$
 - Recommendation to move forward with a \$66,300 net budget for the front of Fammatre turf removal and low water landscaping.



Bolsa Grande High School water-wise makeover

Questions?

