

Environmental Policy

for the
South Tahoe Public Utility District

Adopted
March 21, 2020

South Tahoe Public Utility District Mission: Furnish our customers with reliable water and wastewater services, and provide those services safely, efficiently, and cost effectively.

District Vision: Maintain a dynamic organization that can quickly and proactively meet an ever increasing environment of regulations and scarce resources.

Acknowledgements

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Introduction

South Tahoe Public Utility District (District) is committed to furnishing its customers with safe and reliable water and wastewater services, which is increasingly important in an environment of escalating regulations and scarce resources. As a result, the District's Board of Directors (Board) is adopting this Environmental Policy (Policy) to assist in guiding its decision making processes in the future.

Sustainability is commonly defined as the responsible management of economic, environmental, and social resources to meet the needs of present and future generations. Incorporating sustainability into everyday operations, decision-making, and policy development presents opportunities for the District to reduce costs and inefficiencies, streamline operations, increase revenue, and seek out new resources and revenue streams.

This Policy establishes guiding principles to maximize economic performance, reduce/mitigate environmental and natural resource impacts, ensure compliance with California law, and allow the District to take advantage of grants and other opportunities. The principles identified in this Policy will be implemented throughout everyday operations and evaluated annually during the Annual Budget and the Capital Improvement Program planning process. Many of the principles presented in this Policy are already being implemented in the District's ongoing management practices and programs. This Policy identifies these principles which are designed to inform the District's decision-making going forward. This Policy is designed to be adjusted in response to changing conditions, Board direction, and new information.

Background

The District already incorporates sustainability principles into a wide array of programs and practices which have been summarized below.

Capital Improvement Program

During development of capital projects, the District seeks to minimize environmental impacts and reduce energy consumption by utilizing energy efficient equipment and installing monitoring systems to reduce consumption. As an example, two of the District's top priorities are replacing aging water and wastewater pipes. Replacing water pipes reduces water leaking from pipes, which subsequently reduces the amount of water extracted from the groundwater basin and energy required to extract the water. Replacing sewer pipes reduces groundwater and surface water infiltration which reduces the amount of energy required to treat and export wastewater. The District continues to evaluate efficiency opportunities when identifying and prioritizing capital projects and is implementing a system to track efficiency gains starting in 2020.

Operations and Maintenance Program

During the development of the annual budget, the District plans and funds programs to minimize environmental impacts, reduce energy consumption, and meet system demands. Rehabilitating and replacing inefficient pumps and motors improves efficiency and reliability. Reducing groundwater and surface water infiltration into the sewer system through spot repairs reduces infiltration and the risk of sewer spills while also resulting in energy savings. Repairing water leaks reduces groundwater extraction, energy demands, and helps meet state mandates to minimize water loss. The District

continues to evaluate efficiency opportunities during operations and maintenance practices.

Asset Management Program

Through the Asset Management Program, the District identifies assets reaching the end of useful life and prioritizes repairs and replacement prior to costly and environmentally damaging system failures. The District recently purchased a new closed circuit TV truck to assess the interior condition of sewer lines and prioritize projects before failures occur. On the water system, the District is considering leak detection and repairs, cathodic protection, anodes, District Metered Areas, artificial intelligence modeling, and pressure monitoring/adjustments. These programs and tools will help extend the life of the District's assets while protecting the environment.

Water Conservation Program

The District's multi-faceted Water Conservation Program, established in 2007, incorporates designated watering days, rebates for water efficient clothes washers, toilets, irrigation equipment and turf conversions, and free Water Wise Landscape Consultations and House Calls to help identify leaks and install water efficient fixtures. This program provides extensive outreach and education by advertising through local TV, newspaper, and radio, teaching environmental curriculum through the South Tahoe Environmental Education Coalition, and presentations at community events and workshops. The District's new demonstration garden in front of its administration building will feature interpretative signs and brochures promoting Tahoe friendly garden options. Water conservation reduces energy use and our carbon footprint. Through these efforts, the District continues to meet state mandates, promote a culture of efficiency and protect the environment.

Meters

The District plans to have all water service connection metered by the end of 2020. Along with installing smart meters, the District installed an Advanced Meter Infrastructure (AMI), which enables remote continuous meter reading. The District also launched WaterSmart, a water usage analytics software, that allows the District and its customers to track water use and receive alerts for high use or water leaks. The metering program actively utilizes these tools to promote water efficiency and identify and minimize water loss.

Recycled Water and Biosolids

The District recycles 100% of its treated wastewater and biosolids. Recycled water is transported 26 miles to Alpine County where it is stored in Harvey Place Reservoir before being used by the District and local ranchers for agricultural irrigation. Biosolids are delivered bi-weekly to Bently Agrodynamics in Douglas County, NV where it is turned into fertilizer.

Groundwater

The District currently relies solely on groundwater. The District adopted a groundwater management plan in 2000 and updated it in 2014. In response to the State of California adopting the Sustainable Groundwater Management Act, the District and the El Dorado County Water Agency became the Groundwater Sustainability Agencies for the South Tahoe Sub-Basin and are currently updating the groundwater management plan in accordance with the Department of Water Resources' approval as an Alternative Plan to a Groundwater Sustainability Plan. As such, the District and El Dorado County Water Agency work collaboratively with other water utilities, state and local agencies, private well owners, and the general public to sustainably manage groundwater.

Energy Reliability

As the region's largest water service provider and only wastewater service provider, the District is required to continuously provide safe, clean drinking water and collect, treat and transport treated wastewater out of the Tahoe Basin. The District is continually evaluating and implementing new and improved back-up power systems to ensure resiliency and reliability. These systems include a new emergency generator at the wastewater treatment plant and back-up power at wells, pump stations, tanks, and booster stations. As the largest energy consumer in the South Lake Tahoe area, the District is conducting an energy and greenhouse gas assessment, which is expected to be completed in 2020. The District seeks to implement energy efficiency opportunities and alternative energy options to meet demands and increase reliability. The District also continues to evaluate alternative energy and battery storage opportunities to provide energy efficient reliable operations.

Alternative Energy

The District is pursuing alternative energy options to reduce reliance on fossil fuels and conducted an Alternative Energy Study in 2013 and in 2019. The District recently joined a regional effort to evaluate and potentially construct solar facilities on District property. In 2019, the District began producing renewable energy through the hydro-electric turbine at its Diamond Valley Ranch facility and purchased its first electric fleet vehicle. The District will continue evaluating and incorporating electric vehicles and applying for grant opportunities and working with partners for alternative energy.

Hazard Fuel Reduction

Catastrophic wildfire poses an imminent threat to our community. As such, the District has prioritized waterline replacement and fire hydrant installation to upsize waterlines and increase pressure for fire-fighting. In 2019 the District received a grant through the California Tahoe Conservancy and Southern Nevada Public Land Management Act (SNPLMA) to reduce hazard fuels on the 100 acres surrounding the wastewater treatment plant. The District applied for a grant to evaluate and develop a plan for fuel reduction and management on the District's properties throughout South Lake Tahoe.

Sustainability Principles

Within the context of economic, environmental and social trends and benefits, the District is integrating sustainability into everyday operations and long-term resource management. The three principles below (economic, environmental and social) provide a basis for evaluating and prioritizing initiatives undertaken by the District.

Economic Sustainability

1. Does it reduce operational costs?
2. Does it reduce the lifetime costs?
3. Does it reduce or delay future rate increases?
4. Does it prevent maintenance, repairs or emergency responses due to infrastructure failures?
5. Does it add value for customers (financial and/or increased reliability)?
6. Does it produce revenue?
7. Does it address current and future state requirements?
8. Does a business case evaluation support this decision?
9. Does it minimize net present value of future costs?

Environmental Sustainability

1. Does it reduce negative impacts to the environment?
2. Does it promote greater independence and emergency preparedness?
3. Does it reduce use or reliance on fossil fuels?
4. Does it reduce energy consumption, greenhouse gas emissions, and our carbon footprint?
5. Does it increase system redundancy, reliability, and resiliency?

Social Sustainability

1. Does it enhance civic engagement and transparency in District actions?
2. Does it align with community actions and goals?
3. Does it enhance community health and well-being?
4. Does it benefit the community?
5. Does it support employee safety and well-being?
6. Does it integrate local government and non-profits?
7. Does it help to address affordable and workforce housing?

Goal Setting

In order to monitor success of this Policy, the District is establishing clear and measurable goals to track and reduce the District's energy consumption and greenhouse gas emissions. These goals will take into account the economic, environmental and social sustainability principles, along with the District's overarching mission to provide safe, reliable, and cost-effective water and wastewater services, while complying with California law. Once goals are established, the District will develop actions steps to achieve the goals. This process includes documenting baselines, establishing a timelines, measuring and tracking progress, and reporting progress updates to the Board and the community. This process will allow staff and the Board to evaluate progress and implement improvements to address the ever-changing environment. By setting clear goals and strategies, the District will be an environmental leader for our community.

Data Tracking and Reporting

The District is establishing a data gathering and reporting program to monitor the programs identified in this Policy, including, but not limited to, cost savings, energy savings, emissions reductions, and water conservation. An initial progress reporting system is being developed in 2020. These metrics will be evaluated annually during the Capital Improvement Program planning process and will be reported in the Comprehensive Annual Financial Report. Performance reporting will enable the District to understand what is working and what is not, and adapt or adjust accordingly.

As the District continues to evaluate and incorporate energy efficient equipment, vehicles, and procedures, it is imperative that sufficient information is provided to the Board so that they can make informed and educated decisions. As such, District staff will incorporate efficiency options within planning documents and staff reports for projects, programs and equipment purchases.