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Save Water for Climate Resilience



ReScape Principle: Save Water

Creating drought resistant soils with compost and mulch, selecting plants naturally adapted to summer-dry climates, using stormwater, greywater and recycled water, and installing efficient irrigation systems are essential practices for saving water in the landscape.

⊗ Problem

A significant amount of energy is used to pump, move, and treat urban water in California. Scientists project that climate change will cause more severe droughts, higher average temperatures, and a reduction in the amount of water supplied from the Sierra snowpack.[1]

✓ Solution

Landscaping practices that conserve water also help mitigate climate change by reducing water-related energy use.[2] Techniques such as building healthy soil and selecting plants adapted to our climate not only save water, but also make landscapes more resilient to climate change.

Research Shows:

- About 50 percent of California’s urban water use, or about 4 million acre-feet, goes to landscaping. [3]
- Residential landscapes are regularly overwatered by 30-40%.
- ReScape Rated Landscapes use 50% to 90% less water than conventional landscapes.
- 19% of California's electricity consumption goes to water-related uses. [4]



ReScape and PG&E are partnering to offer eight webinars about landscaping practices that address climate change, with a focus on carbon sequestration. This Speaker Series is a part of ReScape’s Climate Change Consortium Demonstration Projects to educate about climate change landscaping challenges and the solutions available using regenerative practices.



The average water supply from snowpack is projected to decline by 2/3 by 2100. [5]
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Techniques to Save Water:

- **Create drought resistant soils with compost & mulch.** A robust, living soil, with sufficient organic content, is the foundation of a water conserving landscape. Compost and mulch reduce the need for irrigation by increasing soil water-holding capacity and permeability.
- **Select plants naturally adapted to our climate.** Appropriately sited CA native or Mediterranean plants can tolerate dry summers with little to no water once they are established, and often require less soil preparation, mowing, fertilizing and spraying. On the other hand, lawns require frequent watering to stay green during California's long dry season.
- **Design and install high-efficiency irrigation systems.** Drip and high-efficiency sprinkler irrigation technologies apply water accurately and at the rate that it can infiltrate. High-efficiency systems not only limit evaporation and runoff, but also prevent disease and minimize weed growth.
- **Use rainwater, greywater and recycled water.** Rainwater can be collected from roofs and stored for irrigation. Greywater is wastewater from sinks, showers, bathtubs, and washing machines that can be reused on site for subsurface irrigation of trees and shrubs. Recycled water is wastewater that has been purified through treatment systems to meet health standards for use in landscapes and other non-potable applications.

ReScape is a non-profit organization that advocates for a regenerative, whole systems approach to landscaping education and advocacy, addressing earthscape climate change issues.
www.rescapeca.org

As a provider of gas and electricity to millions of Californians, **PG&E** strives to be an environmental leader, demonstrating this commitment through action. Doing so is integral to their ongoing efforts to provide safe, reliable, affordable and clean energy.
www.pge.com

More Resources

California Department of Water Resources prepared the Model Water Efficient Landscape Ordinance, which is a statewide water conservation law for new and renovated landscapes.

Climate Positive Design provides resources to designers of the built environment in order to help reduce carbon footprints and increase sequestration.

The Pacific Institute is a global water think tank that combines science-based thought leadership with active outreach to influence local, national, and international efforts to develop sustainable water policies.

California's Climate Change Assessments assess the impacts and risks from climate change and identify potential solutions to inform policy actions.

Project Drawdown is a global research organization that identifies, reviews, and analyzes the most viable solutions to climate change, and shares these findings with the world.

1. California Climate Assessment. The State of California, www.climateassessment.ca.gov. Accessed 16 December 2019.
2. "The Water-Energy Nexus: Challenges and Opportunities." U.S. Department of Energy, www.energy.gov/downloads/water-energy-nexus-challenges-and-opportunities. Accessed 16 December 2019.
3. "Model Water Efficient Landscape Ordinance." California Department of Water Resources, water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Model-Water-Efficient-Landscape-Ordinance. Accessed 16 December 2019.
4. Brekke, Dan, "19%: The Great Water-Power Wake-up Call." KQED Science. 10 June 2012, ww2.kqed.org/climatewatch/2012/06/10/19-percent-californias-great-water-power-wake-up-call.
5. "California's Fourth Climate Change Assessment Key Findings," State of California, <https://www.climateassessment.ca.gov/state/overview/>. Accessed 16 December 2019.