

DESIGNING FOR DROUGHT: LANDSCAPE DESIGN TEMPLATES FOR TURF REBATES PROJECT DESCRIPTION

Four years of drought in California has taken a toll on ornamental landscapes featuring extensive lawns and flowering shrubs. The Los Angeles Department of Water & Power commissioned the development of five easy-to-use, real world Landscape Design Templates to include on their website, as an incentive to customers to conserve water and participate in the Turf Rebate program.

The design team adopted the goal that the planting and irrigation renovations be constrained by the amount of material homeowners can purchase with their Turf Rebate check. This way, no additional investment is required and everyone can use the Landscape Design Templates to renovate their property, regardless of income.

A typical 50'x 140' lot with a single family home and 1500 SF of lawn in the front, rear and parkway was assumed. At \$3.75/SF, this typical project would yield a Turf Rebate check of \$5,625, which became the landscape renovation budget. To further encourage use of the Templates, plant and irrigation equipment selections are readily available from local nurseries and home improvement stores, and are easy to install. The simpler and more accessible the Landscape Design Templates, the more water savings achieved.

The Templates were tailored to each of four climatic regions identified within the Water Department's 600 square mile service area: Coast, Foothill, Basin, and Valley. At the Landscape Architect's recommendation, the Water Department agreed to a fifth template, a Native Plant Palette, to accommodate growing interest in restoring indigenous habitats.

Each Template includes a Planting Plan appropriate to its climatic region, Plant Images with Care Instructions, Irrigation Plan and Irrigation Installation Instructions. Invasive and turf-like plants were precluded, and city restrictions severely limiting parkway groundcover selections accommodated. Plant sizes are small and plant spacing generous, to accommodate the tight budget. A permeable sand-set paving option is shown and a link to free City mulch.

The irrigation plan provides a layout and legend of irrigation materials needed to retrofit an existing irrigation system of overhead sprays to a drip system. A do-it-yourself homeowner can add new equipment, including a smart controller, as shown. Equipment images and hyperlinks to a Water Department irrigation product database are included.

The Landscape Design Templates were developed on a fast track and launched on the Water Company's website in 2014. Water Department records show that over 14 million square feet of turf and associated irrigation was removed that year. This represents a 58% increase over previous years, since the Turf Rebate program started in 2009.

In July 2015, the Governor mandated a 25% statewide water use reduction. Records show that another 19 million square feet of turf and associated irrigation was removed in 2015. As a result of an effective water conservation campaign that includes promotion of the Landscape Design Templates, the City is in compliance with the State's mandate.

The Landscape Design Templates, easily accessible through clicks on a website, take the worry out of landscape design decisions and offer the homeowner options for conserving water and creating beautiful gardens.