

# Sunnylands Center & Gardens

## Rancho Mirage, California, U.S.A.

Sunnylands Center & Gardens in Rancho Mirage, California is a \$35 million, 15-acre extension of the 200-acre desert estate of U.S. Ambassador Walter Annenberg and his wife Leonore. Commissioned in 2006, the garden, which was designed by The Office of James Burnett, uses the most advanced sustainable landscape design approaches available.

Though the project was originally conceived as an extension of the existing golf-course landscape on the estate, both the landscape architects and the Annenberg foundation decided it was more important to create a landscape that would highlight sustainable design innovations related to water conservation. The LEED-Gold certified project uses approximately 20 percent of its water allocation from the Coachella Valley Water District through 100 percent on-site stormwater retention. The new landscape met the specifications and requirements for the use of reclaimed water five years before Rancho Mirage created city-wide standards.

The Office of James Burnett, with horticulturalist Mary Irish, carefully selected more than 53,000 arid landscape- plants and trees from more than 70 species. These plants not only provide year-round visual interest that contrasts with the lush landscapes on the rest of the estate, but they are also adapted to low-water conditions. Trees were thoughtfully placed throughout the site to ensure that ample shade was provided – a necessity in the hot, dry climate of Southern California. Throughout the estate, 60 acres of turf have been replaced with mulch and meadow grasses that can survive without additional irrigation.

With an ongoing drought plaguing Southern California, The Office of James Burnett took dramatic measures to conserve water. Introduction of an on-site weather monitoring system, which includes soil moisture monitoring, helps predict future water needs. On the

property, 45-year-old hydraulic block irrigation systems were replaced with high-efficiency capillary irrigation zones that are independently controlled by zone to reduce water use. A reclaimed water system that will eventually be available throughout the Coachella Valley and Sunnylands has already taken root in Sunnylands; the infrastructure is in place to take advantage of this system when it comes to fruition.

Within the garden, underground retention basins capture water runoff in order to help recharge the valley's aquifer. Unwanted water seepage has also been eliminated by re-lining the estate's 11 man-made lakes. In 2012, Sunnylands was certified as a Groundwater Guardian Green Site by the Groundwater Foundation in recognition of its commitment to restoring groundwater.

The project also strives for energy-efficiency, capitalizing on its desert environment where there are more than 300 clear and sunny days a year. Sunnylands generates solar energy via a photovoltaic field which has three rows of solar panels in a 864-collector module. A geothermic system, which extends 396 feet below the center's Great Lawn, has 96 wells that use a closed-loop temperature transfer to heat and cool the center.

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### Project Resources

#### CLIENT

The Annenberg Foundation Trust at Sunnylands

#### LANDSCAPE ARCHITECT

The Office of James Burnett

#### ARCHITECT

Frederick Fisher + Partners

#### GENERAL CONTRACTOR

MATT Construction Corporation

#### FOUNTAIN DESIGN

CMS Collaborative

#### HORTICULTURALIST

Mary Irish

#### HYBRID BERMUDA SOLID SOD

West Coast Turf

#### KNIGHT BENCH AND DISPATCH LITTER & RECYCLING RECEPTACLE

Forms + Surfaces

#### LIGHTING DESIGN

Horton Lees Brogden Lighting Design

#### MIDIPOLL BOLLARD LUMINAIRE

ERCO Lighting Inc.

#### ORNAMENTAL PLANTS

Arizona Wholesale Growers

Cactus Canyon Succulent Nursery

Mountain States Wholesale Nursery

Randy G. Myers Nursery