Recycling, Reducing, Reusing



Source: www.TurfMagazine.com

The Venetian Casino takes sustainability to the next level

×

Click image to enlarge.

The Venetian Casino Resort, shown here, earned LEED Certification in 2011. Properties on the Las Vegas Strip are incredibly efficient in conserving and reusing water.

Photos courtesy of The Venetian Casino Resort.

In Las Vegas sustainability starts with protecting and conserving precious water resources. For Kent Bagnell, assistant director floral and horticulture for The Venetian Resort Hotel Casino, water is obviously a top priority.

"We have a designated person in charge of operating the Rainbird Maxicom system. We're linked to a weather station to automatically calculate our evaporation rate and apply the minimum amount of water possible to maintain the health of the plant material," says Bagnell.

The Venetian's sister property, The Palazzo Resort, uses a nano-filtration system that's located beneath it. The system collects groundwater, filters it and lowers the total dissolved solids. That allows the Venetian to avoid using potable water for most of its irrigation. Captured water is also used for exterior cleaning and to help replenish water lost to evaporation in water features such as ponds or fountains.

×

Click image to enlarge.

Kent Bagnell's varied experiences in the green industry serve him well in his post at the Venetian Casino Resort.

Changing rainfall patterns, climate variability, high levels of evaporation and reduced snowmelt runoff are putting pressure on the region's water resources. The primary source of its water is Lake Mead where water levels have dropped more than 100 feet since 2000. Even before that, the Southern Nevada Water Authority began instituting programs to conserve water on commercial and residential properties.

Bagnell oversees the management of exterior and interior horticulture and floral shop operations at The Venetian and the Palazzo. He came to the resorts in 2009 bringing a wealth of on-the-job experience with him, including a stint working on a vegetable farm. By 1988 he managed the 500-acre Utah State University, including the campus landscape, athletic fields and greenhouse.

The Venetian Casino Resort

Location: Las Vegas Strip

Owner: Las Vegas Sands Corporation

Design Inspiration: Venice, Italy

Particulars: Hotel tower of 36 stories rising 475 feet, 4,049 suites, 4,059

hotel rooms, 120,000-square-foot casino

Nov. 26, 1996: Sands Hotel imploded to make way for The Venetian Resort Hotel Casino

April 14, 1997: \$1.5 billion Venetian Resort Hotel Casino Complex breaks ground

Aug. 18, 1998: \$1.5 billion Venetian Resort tops out

May 3, 1999: The Venetian opens

June 27, 2003: The Venetian opens the new Venezia hotel tower

After serving as landscape department manager there, he took a position with Idaho State University Grounds Department. His next career stop was in Midvale, Utah, where he worked with and sold irrigation systems to landscape architects and commercial contracts.

While Bagnell is knowledgeable about irrigation and water-conserving systems, he's also been implementing and expanding other environmental solutions at The Venetian.

"We're proud that we have a dedicated department whose sole purpose is to evaluate every aspect of all operations to see where we can reduce our carbon footprint through recycling, reducing and reusing every product that passes though the resort," says Bagnell.

He continues, "In this total effort we recycle nearly all green waste. All

unused plant material is dumped into a green waste dumpster and taken to a local company where it is recycled into rich organic material and sold back to local contractors."

Water conservation is obviously just one part of this 50-acre, world-class resort's sustainability initiatives. For example, in addition to replacing some regions of turfgrass on its property with synthetic turf, The Venetian also boasts a rooftop solar system that heats water for pools and spas.

LEED Gold Certification

Among other awards, The Venetian, Las Vegas received the LEED Gold Certification in 2011 after exceeding the standards set by the U.S. Green Building Council for existing buildings. The LEED certification reflects the property owner's commitment to sustainable practices and reducing environmental impact.

Bagnell says that The Venetian and The Palazzo incorporated "ECO 360 (sustainability) Display" this past autumn, an ambitious display featuring many of the environmental innovations in place at both resorts. The fall-theme atrium display highlighted the resorts' sustainability efforts, and featured a waterfall atrium and gardens surrounded by foliage of native trees, flowers and plants.

"Our display included many of the sustainability practices that The Venetian and Sands Corporation [The Venetian owner] are doing both locally and worldwide to be better stewards of the earth," says Bagnell.

With 64,000 square feet of green spaces and 4,000 guestrooms, Bagnell and his staff of 10 full-time and four part-time groundskeepers make two major color changeouts annually. The team includes a certified arborist, although much of the tree and palm work is contracted out for safety purposes. The resort also has an in-house construction crew that handles the smaller redesign projects. Landscape architects working with experienced private contractors do the bigger jobs.

The Vegas Strip has just three seasons, jokes Bagnell, warm, hot and very hot. For that reason, most plant material is evergreen and does not change except for annual color and seasonal displays.

"In May we plant vinca cora and pentas, which do well in summer's heat; in October we plant geraniums and pansies and do a March planting of petunias in the high-traffic areas," says Bagnell.

The property's landscape is full of color and textures, including native plants that are capable of surviving winter temperatures, says Bagnell. Water features help to make the landscapes more comfortable in very hot weather. Hedges are shaped several times a year to maintain designs with integrated annual colors. Bagnell says that the property's hedges are shaped several times a year, while topiaries get more intense care. And, he doesn't think twice about yanking out poorly performing plant material and replacing it with healthier, more attractive plants.



"The most serious challenge we face each year are aphids," says Bagnell. "They're our number one insect challenge. Although, moving plant material around the property is also difficult." Most landscape planters are on the fourth floor pool deck, and landscape materials have to be transported up and down freight elevators and to an off-site nursery.

Bagnell is the recipient of the prestigious Green Star Grand Award from the Professional Grounds Management Society, whose purpose is to bring national recognition to commercial grounds manicured with a high degree of excellence. Bagnell commented on his award, "Receiving the award was a testament to the team of gardeners I get to work with. They are dedicated to continually improve the resort and the award gave me the chance to publicly recognize and thank them for all their hard work and dedication."

The Venetian's sustainable programs include: LED lighting and heat sensors to adjust air temperature to the number of people and traffic; sustainable food and composting; alternative transportation; renewable energy and water conservation; and recycling. The facility is the first venue in the world to achieve the advanced "level two" industry certification for environmentally sustainable meetings, events, trade shows and conferences.

×

Click image to enlarge.

By skillfully designing and maintaining relatively small "islands" of greenery, Las Vegas resorts offer guests lush, water-conserving landscapes.

With a 14-year drought threatening to get worse, innovation and sustainability are of primary importance in the desert Southwest. The Venetian is a world-class leader with impressive sustainability features, and with the leadership of Bagnell will continue to advance and introduce technologies to ensure that their facilities remains the best that Vegas has to offer.

Mike Ingles is a freelancer writer living in Columbus, Ohio, who writes articles about business and the green industry. Contact him at duckrun22@gmail.com.