

The Bonita Springs (Fla.) East Water Reclamation Facility processes 4.1 mgd. Extensive landscaping makes it an attractive part of the community.



PHOTOS COURTESY OF BONITA SPRINGS



Completely Surrounded

EXTENSIVE NATIVE LANDSCAPING AT THE BONITA SPRINGS EAST WATER RECLAMATION PLANT MEANS PLEASING VISTAS FOR NEIGHBORING RESIDENTS AND PLANT STAFF MEMBERS ALIKE

By Pete Litterski

When Bonita Springs Utilities decided to expand its wastewater treatment capacity, it chose a site along Interstate 75 for a new GE-Zenon (a Division of GE Water & Process Technologies) membrane bioreactor treatment plant. But Cliff Morris, chief operator at the new Bonita Springs East Water Reclamation Plant, can barely see his workplace when he drives down the highway.

BSU, a private utilities cooperative serving Bonita Springs and Lee County, was required by zoning laws to minimize the plant's impact on its surroundings along Florida's southwest coast. "We spent hundreds of thousands of dollars on the landscaping of this site," says Morris. The investment included a green border of trees and shrubs that runs all the way around the 162-acre treatment plant site.

Inside is an award-winning treatment plant that went online in 2007 with a capacity of 4 mgd, expandable to 16 mgd as demand grows. That means a layout so spread out that some of the operators ride bicycles from building to building.

NATIVE PLANTINGS

The plant site is in many ways an attractive mirror of its surroundings. The buffer of trees and shrubs around the perimeter may screen the facilities from public view, but the scenery inside is pretty nice on its own. "We've got a great view of a lake right outside our office, and the landscaping includes a lot of native, drought-tolerant plantings," says Morris. "We brought in cypress trees, cabbage palms, wax myrtles, Florida holly, red maples and water oaks."

The lake is a nine-acre impoundment surrounded by a 10-acre wading-bird habitat designed to attract native wildlife. Mike Liggins, BSU director of engineering, says local zoning codes specified the amount of planting

required, and the project had to clear a number of hurdles before it could proceed.

Utility leaders had to work hard to convince county zoning officials that deep-rooted hardwood trees could not be planted in the middle of a facility with holding basins and

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an extensive underground network of pipes. There was strong resistance from the developer and residents of a large manufactured home subdivision next to the project site.

Public zoning hearings had to be rescheduled and moved to a civic center in nearby Fort Myers to accommodate large crowds of people protesting the project. For all of that resistance, however, the neighbors now seem to be happy with the result.

Share Your Ideas

TPO welcomes news about interesting features of your facility's grounds, signage or buildings for future articles in the PlantScapes column. Send your ideas to editor @tpomag.com or call 877/953-3301.

A LENGTHY LIST

A file from the Bonita Springs Utilities archives includes the original bid form given to contractors for site landscaping. The specifications show the extent of landscaping required.

The form asked for bids on plantings that include 201 red maples, 131 black olive trees, 299 slash pines, 165 live oaks, 310 cabbage palms and 188 bald cypress trees.

The bid also called for 14,000 square feet of San Augustine sod, almost 40,000 square feet of land seeded in Bahia grass, and more than 6,300 bales of pine straw to lie down as mulch. To keep the landscape watered, the project called for more than two miles of irrigation lines, more than 1,200 spray heads, and nearly 500 drip emitters.

“We had an open house eight months after we started operations,” says Liggins. “One of the development’s residents, after touring the plant, came up to me and said, ‘If I had known the quality of this, I never would have fought it.’”

CONSERVING THE RESOURCE

As the provider of freshwater and wastewater treatment for a 60-square-mile region with about 50,000 residents, the cooperative knows of the need to conserve water and uses its own effluent for site irrigation. Although all of the plant’s landscaping is irrigated, the only sprinklers are for the expansive lawn and ground cover. More water-efficient drip emitters handle the rest.

Besides the water used on its grounds, the utility has contracts to sell reclaimed water to area irrigation customers. The agency also took measures beyond landscaping to be neighborly. For example, outdoor lighting is focused downward to limit light pollution.

Although neighbors once fought the plant, BSU’s investment in landscaping and design seems to have addressed all concerns. “We don’t look like a treatment plant and we don’t smell like a treatment plant,” Liggins says. “People don’t even notice we’re here.” **tpo**

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