



Multifamily Executive

## Developers Are Bringing Crystal Lagoons Amenities to U.S. Multifamily Communities

U.S. developers are dipping their toes into an amenity that's been popular in other countries for years: large-scale, man-made water features.

By **Mary Salmons**



*Courtesy Crystal Lagoons*

The world's first Crystal Lagoons amenities, at San Alfonso del Mar (above left) and Laguna Vista (above right) in Algarrobo, Chile.

Earlier this year, Metro Development Group unveiled a long-awaited, landmark amenity at its Epperson community in Wesley Chapel, Fla. The 7-acre artificial lagoon, newly filled with 11 million gallons of fresh water, is the first of its kind in the U.S. Suitable for swimming, boating, and other nonmotorized water activities, the lagoon will be the centerpiece of the community's amenity village and beachfront area.

While the man-made lagoon from Chile-based Crystal Lagoons is a new concept to American consumers, it won't be for long. Epperson represents the crest of the tidal wave, so to speak, in the trend toward massive water-based amenities. It is one of 140 such lagoons now in the planning, design, or construction stage in U.S. residential developments, both single- and multifamily.

Developers and builders say that while the lagoons come with a high price tag—an estimated \$600,000 to \$650,000 per acre—they're worth it for the attention they bring.

“The demand has been incredible,” says Greg Singleton, president of Tampa, Fla.-based Metro Development Group. More than 200 contracts have been signed at the single-family home community, and Singleton attributes at least some of those sales to the development's unique water amenity.

The feature has been a hit with multifamily product, as well.

“It's been pretty consistent around the world that as these lagoons are built and people realize what this amenity is, it has a dramatic impact on interest in renting apartments in those communities because of the lifestyle it offers,” says Uri Man, managing partner of Miami-based UM Development and former CEO of Crystal Lagoons.

Crystal Lagoons' main appeal is its ability to transform most any land asset, even lots in the middle of the desert, into valuable “beachfront” property, according to Kevin P. Morgan, executive vice president of Crystal Lagoons U.S. Corp. This lets developers create communities on less-than-desirable tracts of land.

### **What Is a Crystal Lagoons Amenity?**

In unfiltered man-made water bodies, such as retention ponds and reservoirs, algae and sediment accumulation produce murky-green water and a proliferation of bacteria. Swimming pools have traditionally used high levels of disinfectant and mechanical filtration to produce clear water, but this method is neither environmentally friendly nor economically viable for pools larger than 1 acre.



Courtesy Crystal Lagoons The 30-acre lagoon at Citystars Sharm El Sheikh in Egypt is the largest man-made lagoon in the world.

The exclusive Crystal Lagoons technology, in contrast, utilizes ultrasound waves and strategically applied microbiocides to bypass the need for conventional disinfectant and filtration. According to Crystal Lagoons, this method produces clearer, safer water than other large-scale filtration technologies.

The technology's ultrasound devices emit a frequency into the water that causes suspended dirt and other particulates to clump together. The resulting mass sinks to the bottom of the lagoon floor, where a patented suctioning device removes the bottom layer of sediment from the lagoon.

“We’ve now figured out how to filter only 1% of the body of water—the part of the lagoon that contains all the dirt,” says Kevin P. Morgan, executive vice president of Crystal Lagoons U.S. Corp. “So we’ve avoided the filtration of 99% of that body of water, therefore making it relatively cost-effective to go mass-scale for developers.”

The disinfecting process is conducted via a series of injectors and water-quality sensors installed throughout the lagoon. The injectors apply controlled pulses of microbiocides at intervals and patterns derived from the growth cycles of local algae and bacteria, disinfecting the lagoon without the need to maintain high levels of chemicals in the water.

“We measure what’s happening in the atmosphere, and based on those unique conditions, whether it’s in Austin, Texas, or Washington, D.C., or Dubai, or Singapore, all of those conditions are going to be different,” says Morgan. “So, therefore, we measure what’s happening in those unique conditions, and, based on those inputs, we will disinfect the body of water when and if it’s necessary.”

The company’s local development partners are responsible for the construction of the lagoon’s basin and the upkeep of its surrounding amenities. The additive cycles are all managed remotely by a Crystal Lagoons Control Center, which is located in each Crystal Lagoons office worldwide. Gallon for gallon, this technology uses up to 100 times fewer chemicals than conventional swimming pools or drinking-water treatment processes, and requires only 2% of the energy needed by conventional filtration systems, according to Crystal Lagoons.

The lagoons can operate with any type of water, based on local availability. A 7- to 10-inch-thick freeboard allows the lagoon to catch rainwater, and, in certain climates, including

## **CRYSTAL LAGOONS PROJECTS AROUND THE WORLD**

---

More than 600 Crystal Lagoons water features are underway or have been completed in 60 countries. Here are some examples of the company’s international projects.

### **Chile**

Crystal Lagoons’ home country now has over 30 lagoons in progress or operation, including the original San Alfonso del Mar lagoon and vacation rental property in Algarrobo. Laguna Vista, Crystal Lagoons’ second project, is the company’s smallest, at only 2 acres, and supports 850 associated vacation rental units.

### **Mexico**

The Crystal Lagoons amenity at the Diamante resort in Cabo San Lucas is one of over 50 complete or under construction in Mexico. The 10-acre, saltwater lagoon features a variety of family-friendly activities, along with private cabanas and a restaurant with a swim-up bar.

### **Egypt**

Egypt has close to 40 lagoon projects in progress or in operation. The largest Crystal Lagoons water feature currently in operation is located about half a mile from the Red Sea at Citystars Sharm El Sheikh, developed by Golden Pyramids Plaza S.A.E. The 30-acre lagoon, named the largest man-made lagoon in the world by Guinness World Records, is the first of 10 Crystal Lagoons amenities in development at the resort. The property’s lagoons will cover 247 acres once complete.

### **Thailand**

Eleven Crystal Lagoons projects are in progress or complete in Thailand, including the Mahasamutr resort and country club in Hua Hin. The Mahasamutr lagoon is built around a central peninsula, which is connected to the rest of the project by a vehicular bridge. This arrangement allows each of the resort’s 80 for-sale villas to have its own water frontage.

### **United Arab Emirates**

Of the 19 Crystal Lagoons projects underway or complete in the U.A.E., 15 are located in Dubai. The Crystal Lagoons feature at Mohammed Bin Rashid Al Maktoum City District One, developed by the Meydan Group, is set to become the largest in the world at 99 acres. About one-third of the lagoon is complete and in operation; the full project is expected to be finished by 2020.

The completed lagoon will wind around five islands, with over 4.5 miles of beachfront. Residences at District One range in price from US\$3 million to over US\$14 million.

Mohammed Bin Rashid Al Maktoum City, named for Dubai’s ruler, encompasses multiple Meydan projects. The Meydan One Mall under construction at the lagoon’s north end will feature an indoor ski slope that will run over the lagoon.

Florida, the lagoons are projected to be replenished by rainfall for most of the year. All together, the lagoons use up to 30 times less water than a golf course and one-half as much water as a land park of the same size as the lagoon, says the company.

Crystal Lagoons executives are looking to improve on the firm's model, especially in the U.S. "This year alone, we're bringing so many new innovations to our current U.S. and global clients that are making this a lot more cost-effective to build and to build it in a much shorter period of time," Morgan says. "When I say shorter, before, it could be done in nine to 12 months; now, it could be done in six months, even less. So that's really important to us—shortening the overall cost, of course, and then the ability to build [the lagoons] quickly."

### **Upcoming Projects**

From the start of its worldwide expansion, Crystal Lagoons has had its sights set on the U.S. and its master planned community developments of single-family and apartment housing. As of now, Crystal Lagoons' "big six" target markets are Florida, Texas, Arizona, Nevada, California, and Hawaii, though the concept is also gaining traction in Georgia and the Carolinas. Morgan attributes this focus to the states' warmer climates, though he notes that lagoons can be frozen into skating rinks and used 12 months a year in any part of the world.

"A lot of the East and West coasts has been chewed up with development, so developers are trying to figure out, 'How do I go create value inland?'" says Morgan. "The way to do that for them has been, 'If I can create a Crystal Lagoons amenity, I can build a lot more real estate and density around it and create my own waterfront destination.'"

Crystal Lagoons has signed deals with a number of Texas developers, including the Terra Verde Group and its Windsong Ranch community, which includes multi- and single-family product. Crystal Lagoons' Florida projects, which make up almost a third of all lagoons in development in the U.S., include Metro Development Group's five lagoon projects, two 7-acre lagoons at the Sole Mia rental towers by LeFrak and Turnberry Associates in Miami, and a 15-acre lagoon at the upcoming Lake Nona Resort in Tavistock Development's Lake Nona community in Orlando.

Lake Nona Resort, which will encompass 80 condominium units and 250 guest rooms when it's complete in 2020, is designed around the water feature, including a section where the eight-story resort cantilevers over a portion of the lagoon. It's intended to bring a beachfront vibe to the site, even though it's 60-some miles from the ocean.

“For us, the lagoon was a placemaker,” says Bernardo Fort-Brescia, principal of Miami-based Arquitectonica, the project's architect. “Generally, buildings with a geography are more valuable, more successful. And the geography gives identity to the place.”

The resort's waterfront amenity package is still in progress, but Tavistock intends to choose features that will facilitate well-being and socializing between patrons.

“Designing the whole campus around fitness and performance is key,” says Scott Gasaway, the firm's head of construction. “We're still in the exploration phase, but we're looking at opportunities to create social interaction.”



Arquitectonica

Lake Nona Resort and its Crystal Lagoons water feature are designed around each other, with a building section that cantilevers over the water.

The first Crystal Lagoons amenity to break ground in South Florida will be the first of the two lagoons at Sole Mia in Miami. The master planned community's first phase will

contain 400 rental units distributed across two residential towers, also designed by Arquitectonica, which will be ready for move-in by April 2019.

The residential buildings will be connected by an amenity deck, which will include an elevated pool and sky park on top of a shielded garage designed to match the community's rounded railings and steel-and-glass aesthetic.

Sole Mia's first lagoon and its associated beachfront will be located adjacent to the towers, with canoeing, sailing, kayaking, and paddleboarding activities available to residents. The lagoon and residences will be surrounded by 37 acres of open green space interspersed with walking trails.

The 183-acre community is zoned for 4,390 single-family and multifamily units, and over 1 million square feet of retail and commercial development is also in progress, including office spaces, dining, shopping, and entertainment. The second lagoon will be built in Sole Mia's second phase.

**Multifamily Executive**

**25/05/18**

[http://www.multifamilyexecutive.com/design-development/design/developers-are-bringing-crystal-lagoons-amenities-to-us-multifamily-communities\\_o](http://www.multifamilyexecutive.com/design-development/design/developers-are-bringing-crystal-lagoons-amenities-to-us-multifamily-communities_o)