

The technology behind this latest permutation in artificial waves borders on science fiction, and it is primarily the work of two New Zealand scientists — who, not coincidentally, are ardent surfers. Between 1995 and 2000, Kerry Black and Shaw Mead traveled the globe collecting detailed information and bottom contours of 43 of the world's greatest surfing reefs. Returning home, the two toyed and computer modeled. The end result, which will make its long-awaited debut at Orlando's Ron Jon park, is a patented pool floor (called the VersaReef) that, at the push of a button, will assume the shape of a real-world surfing reef, be it Padang Padang, Indonesia, or the scientists' home break of Raglan, New Zealand. Compressed air will then force thousands of gallons of water over this malleable-steel triangle floor, creating waves up to eight feet high and rides up to 100 yards long.

Such a large-scale wave pool has yet to be built. Some within the business snipe that this is, at the moment, only a computer-model dream.

"The surf pools will do the talking," responds Mead, who is one surfer who can't wait for the debut. "I'm not sure what it will feel like or whether it will be any different than dropping into a nice wave in the ocean, but I'm definitely looking forward to finding out."

Says professional surfer Cory Lopez, "We hope this will just blow us away."

Still, the hunt goes on. Mead promises more advances ("R&D is what we do, but, for the moment, we're keeping it to ourselves"); Lochtefeld, too, has several new technologies under way, but he is equally mum.

No doubt, though, a new wave is cresting, and, sooner rather than later, it will unspool with machinelike precision in Sydney, Singapore, and New Jersey, offering a magic carpet ride like no other.

"The ability to create quality wave parks and inland beaches anywhere in the world is within our grasp," says Lochtefeld. "There are a whole bunch of forces that go into making these things work. Now all the forces are aligning. We're going to see the future real soon." 