

## SurfStream creates artificial wave machine for surfers

**Wild river surfing inspired Bruce McFarland's new wave technology that surfboarders can actually ride.**

By Shannon Rose Strybel, SDNN

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Wild river surfing is what inspired Bruce McFarland's SurfStream - the world's first standing wave machine, produced under the auspices of McFarland's company, American Wave Machines.

A product breakthrough in artificial wave technology, the machine produces a dynamic wave that is ridden with a surfboard.

For the first time, a surfing wave has been replicated without the cost-prohibitive pool and generator usually needed with the traveling wave. In other words, you can surf a 6-foot barrel cost-effectively.

The machine is currently in three water parks around the world - two that are open and one under construction, and McFarland maintains that when extreme sports complexes become a reality, the SurfStream will be a natural fit. His company reached profitability last year, after six years of technological development, discussions with resorts around the world, sales meetings and more than \$500,000 in personal investment capital. His chief rival is Wave Loch Inc., where McFarland worked for nine years - a company that uses traditional wave technology.

Traditional wave technology does not allow for adjustment of the size or shape of the manufactured wave, so riders are stuck with a static wave. In many water parks that translates into a 1-foot mush wave, since that small wave fits the bill for the majority.



SurfStream creates artificial waves that people can actually surf. (Courtesy photo)

“Now you get the best of both worlds,” said McFarland, who incorporated American Wave Machines in 2000 from his home office. “The beginner and the kids can surf the smaller wave, while the more experienced can go for the challenge.”

Currently, the four employees, who include his wife, Marie, work out of a 2000-square-foot office in the Cedros Design District in Solana Beach.

While his credentials - a degree in engineering with an emphasis in fluid dynamics and 10 years in the amusement park business - are sterling, it is his lifelong love of surfing and his family background that are behind SurfStream.

McFarland grew up riding the Southern California waves with his dad, following in the footsteps of his great uncle, Charles Wright, a student of surfing legend Duke Kahanamoku and one of San Diego’s first surfers in the 1920s.

In 1999, while conducting research for a new kind of wave system, McFarland stumbled across a video of surfer Kelly Slater riding the river mouth wave at Oahu’s Waimea Bay and realized the dynamics behind river waves could be used to revolutionize the standing wave.

<http://www.sdn.com/sandiego/2009-05-14/sports/surfstream-creates-artificial-wave-machine-for-surfers#ixzz0lcPCDXUV&D>



Surf's up! Even if they're manmade. (Courtesy photo)