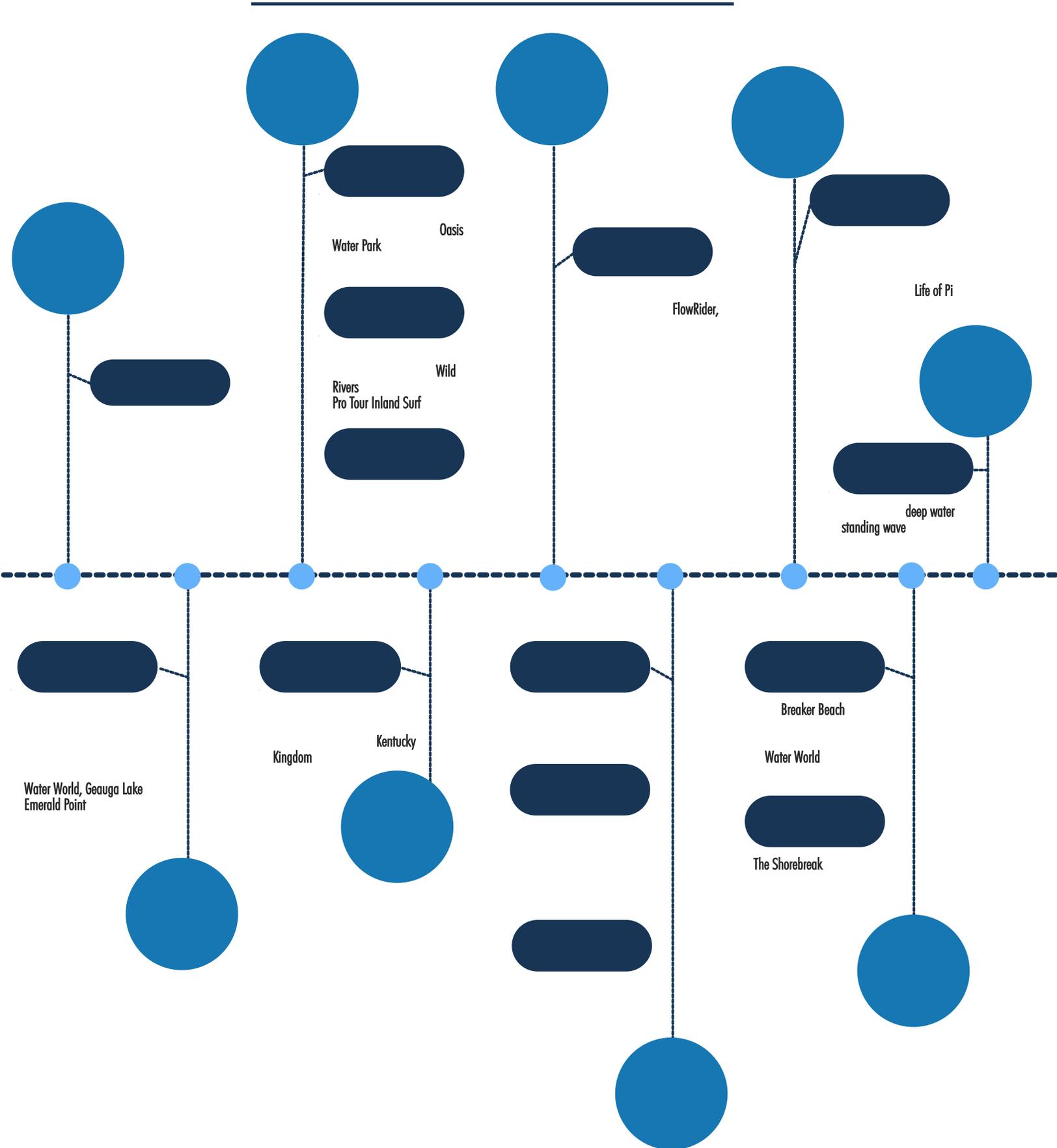
A young girl and boy are splashing in water. The girl is in the foreground, wearing a blue swimsuit, with a large green water balloon behind her. The boy is in the background, wearing a black swimsuit. The water is splashing around them, and the sky is blue with white clouds.

a long history of  
**MAKING  
WAVES**

**ADG WAVES**  
powered by WAVETEK<sup>®</sup>



## EVOLUTION IN WAVES

### ADG's Long History and Lasting Impact on Today's Advancements in Wave Technology – from recreation to surf and everything in between

WITH 50 YEARS AND 500+ WAVE POOLS AND SPECIALTY WAVE SYSTEMS TO THEIR CREDIT, *ADG leads the way in waves having successfully developed, tested, and implemented more technological advancements to wave systems than any other company in the industry – from recreational wave pools and rivers, to stationary sheet waves and deep water waves, to surf pools and specialty wave systems for aquariums, rescue training, motion pictures and more – ADG Waves, powered by their exclusive WaveTek® technology, is the go-to system for every wave application.*

#### **At the Forefront – The Early Years**

At the forefront of wave pool technology ADG was on the scene, creating the first set of hydraulic surf pools in the early 1980's at *Water World, Geauga Lake, and Emerald Point* parks. The IP that they developed for those pools is also featured on *Disney's Typhoon Lagoon*, an iconic wave pool that showcased this early entry technology into man-made surfable waves. In fact, their once patented high-head/low-volume technology is the backbone for many of the large wave systems found throughout the Asian market today.

Throughout the next decades what followed was a dedicated drive to advance the technology behind producing waves for commercial use. By combining WaveTek's patented technology with ADG's expertise in manufacturing, design, and construction, what followed were groundbreaking innovations that earmarked a new growth in the recreational wave market.

#### **Leading the Way – Emerging Technologies**

As wave shape and quality began to take center stage, ADG was first on the scene with pneumatic wave systems, proving that they could produce large, consistent waves that dispersed at steady intervals and hold their shape through the length of the pool.

These systems were the driving engine producing the first surfable pneumatic wave pools in the 1980's at some of the most renowned venues of the day including *Oasis Point*, the setting for Hollywood's surf classic, *The North Shore*, and *Wild Rivers* in CA, the host of the 1988 *Pro Inland Surf Tour*. In the early 1990's they produced their second-generation pneumatic system that they deployed at *Festival Bay*, a full-scale model that provided proof-of-concept for successful, purpose-built pneumatic surf technology.

#### **Forging Ahead – Innovation & Advancement**

Many of today's wave system features considered "standards" within the industry were developed by ADG who was pivotal in bringing to market innovations that included all stainless-steel construction, multiple wave pattern technologies, and specialty wave chamber arrangements for low energy usage.

ADG also became the first, and only company, to offer a complete wave pool package – from the planning & design of the pools to the engineering and manufacturing of the waves, to building, installing, and servicing the equipment – making wave pools a commercially viable option, and helping usher in the age of the water park. And since the 1980's ADG has designed, built and/or provided wave generation systems to over 90% of the recreational wave pools across N. America.

Among their long list of innovative firsts, some notable mentions include the world's first pre-programmable variable wave pattern application for wave pools, introduction of waves to rivers, cost-effective staggered caisson pneumatic system configurations, and the first 6' (1.8m) high pneumatic roller waves for recreational use.

### **Branching Out – Specialty Wave Applications & The Cross-Over Effect**

When it comes to R&D and innovative ways to produce waves, ADG has established itself as the go-to system for a variety of applications. In the world of zoos & aquariums, ADG has developed a variety of wave system options that support animal and plant life ecosystems, from real-world ocean simulations to deep-water vertical wave propagation. Their work is featured at premiere locations around the world including *The Melbourne Zoo*, *Ripley's Aquariums*, *The Georgia Aquarium*, and *The National Zoo* in Washington DC.

Another noteworthy innovation includes an application of the first remote-mounted wave system. Developed for a pinniped exhibit at *Sea World* it was designed to create a better environment for the animals, producing less noise and no equipment in the water – a system that would later reinvent itself for recreational use in the early 2000's with the launch of ADG's *Twin Tides™* wave pool.

When it comes to large waves needed to “perform” on demand, the Hollywood motion picture industry relies on ADG to recreate realistic ocean settings for their films. Their innovative work can be seen in feature films such as *The Guardian* – where they built the first beachless wave pool ever made, *Master & Commander* – where they designed a moveable wave generator for a 3-acre lagoon with a zero-horizon edge, and *Life of Pi*, where they designed the program and equipment to customize wave shape and angle on waves up to 8' (2.4m), providing on-demand capabilities for directly altering the wave itself. ADG also introduced its second-generation advancement on their pneumatic system that has resulted in the deployment of a high-efficiency surf technology.

The R&D developed for these applications led to the advancement of unique system configurations that they applied to recreational wave and surf pools, such as their popular large-scale *Shorebreak™* and *OceanSwell™* wave systems capable of producing large roller waves for boogie boarding and learn-to-surf.

You will also find ADG Waves operating in a multitude of other applications, including rescue training facilities for the *US Coast Guard*, and highlighted in distinctive large fountain displays in locations such as *SeaWorld* and the *United States National Oceanic and Atmospheric Building*.

### **Continuing the Evolution – the Surfing Phenomenon Takes Off**

ADG's advancements in waves has led to many new and emerging technologies – from standing and sheet wave attractions, to surf pools and rivers – that have quickly become the industry standard for use in recreational and surfing applications.

The stationary surf wave market took off in 2003, when ADG partnered with Tom Lochtefeld to transform his idea of a stationary surfable wave and make it a commercially viable attraction. From that, *FlowRider*® was born – a ride with over 225 installations worldwide, 130+ of which have been designed, built, and installed by ADG in indoor, outdoor and resort waterparks across North America.

Surf parks today also benefit from ADG's early research and development of advanced pneumatic systems which provide more control of the wave generator, delivering reliable consistency in wave formation and offers a solution that requires no equipment in the water.

## **Where We Go from Here – The Wave of the Future**

Over the past decade ADG Waves have expanded internationally with growth in Asia, the Middle East, the Philippines, and Australia. Their WaveTek® technology can be found in a variety of recreational projects that run the gamut from large wave pools of all shapes and sizes, to shallow kid's pools and beachless pools, to waves for rivers, specialty boogie boarding and surf pools, pools with no equipment in the water, and pools with remotely located wave systems, ideal for when you are dealing with space limitations.

ADG's latest surf wave project under works is taking place in Australia. With a planned opening for their 2021 summer season, this purpose-built boogie-boarding and "learn-to-surf" pool is the first of its kind in the southern hemisphere delivering breaking interchangeable waves of 1.2m. in a 55-meter compact pool.

With the dramatic growth of surf pools and parks, ADG is building on their already proven success in the field of surfable wave applications which today includes their *ShoreBreak*™ recreational surf pool, *Breaker Beach*™ recreational boogie-boarding pool, *TidalWave*™ River, *FlowRider* sheet wave attraction, and their soon-to-be-released deep water surf wave ride, which they are promising will be epic!

For over 50 years ADG has been delivering consistently reliable and groundbreaking innovations in the world of waves. The future promises nothing less.



**WAVES**  
by  **ADG**  
powered by WAVETEK®