

# So You Want to Build a Hotel Indoor Waterpark!

By Jeff Coy and Bill Haralson

If you're planning to add an indoor waterpark to your existing hotel or start from scratch with a new construction project, like the Kalahari Resort or Great Wolf Lodge at Wisconsin Dells, you may want to get the experts involved early.

Did you hear the one about the guy who built a yacht in his basement and then had to tear down his house to get the boat out? Well, it can be the same problem in reverse when you're building an indoor waterpark. Many times, you have to build the water structure first -- you know, the waterslides and the treehouse. Then you build the walls around it and a roof over the top of it. This can be just one of the unique things about constructing indoor waterparks that requires expert help early in the design stage.

## Want to Build a Hotel Waterpark Resort? Here are some tips:

- First, get a market analysis and feasibility study done. Ask an independent consultant to quantify the demand in your area and specify the size of your indoor waterpark. Sizing



your waterpark must be done in relation to the size of your hotel, area demographics and the preferences of the potential guests within 200 miles of your hotel.

list of features, such as slides, treehouse, rocks, pools, spas, lazy river, wavemaker, mushrooms and geysers.

- Using your feasibility report, determine a tentative footprint for your indoor waterpark, let's say 30,000 square feet. Give this footprint to a pool designer and a waterslide manufacturer along with the report recommendations and
- Ask the pool designer to read the feasibility report regarding the target market and recommend some design and theming concepts.
- Ask the waterslide manufacturer's engineers to work with your pool designer to (1) determine where slides will end and start, (2) design the slide radiuses and descents that are acceptable and (3) determine the final footprint of your building.

“Indoor waterparks are much more than a pool with a slide. They include many complex systems that must be integrated to provide the highest possible entertainment value,” says Tom Pientka of Planning Design Build Inc of Madison WI. Pientka’s firm designed and built the Kalahari Resort and Treasure Island Bay of Dreams and built the Great Wolf Lodge in Wisconsin Dells.

### **More Tips On How to Build a Hotel Indoor Waterpark**

- Go back to the drawing board until you get the pool designer’s OK that all desired attractions can properly fit into the building. Confirm all elevations for fit.
- Understand that you will be using 30-40 inch diameter HVAC ductwork in your indoor waterpark. That’s a lot to fit inside the building. These large ducts will be used to keep the indoor environment fresh and comfortable. You will have to use 100% outside air. Inside air can’t be reused because it is filled with humidity and odor from pool water treatment chemicals. At the same time, you want to recapture the heat using a heat recovery device to keep energy costs down. Be sure to ask an HVAC engineer for help.
- More than half of the construction work is the installation of pumps and underground pipes. Pour the foundations for the walls of the indoor waterpark. You will have to remove up to 5-6 ft of dirt inside for the pool piping system.
- Inspect the concrete work, walls and foundations. Check for sharp edges. Test the slides. Adjust the water flow for the proper speed. Regulate the flow and speed for each slide.

### **Hotel Waterpark Projects Underway**

Sixty two (62) hotel indoor waterparks are open and operating in the USA. Fourteen (14) new hotel waterparks opened in 2003. Nine (9) hotels with indoor waterparks are under construction in the USA, as of October 2, 2003. Forty six (46) additional projects are in the planning stages. Michigan, Wisconsin & Minneapolis are leading the way in new developments.

Coy and Haralson have teamed up to form Hotel Waterpark Resort Research & Consulting, a collaborative effort of their two firms, to collect a hotel-waterpark industry database as a resource for owners and developers. Data resources include waterpark supply & demand growth, construction costs, operating expense ratios as well as before & after impacts of indoor waterparks on hotel occupancy, average room rates and revenues.

### **Workshops Scheduled at the Annual WWA Convention**

If you still have questions for the experts, plan to attend the Hotel Waterpark Resort Workshops, hosted by Coy & Haralson on Days 1 & 2 of the World Waterpark Association convention and exposition. To register, go to [www.waterparks.org](http://www.waterparks.org).

Jeff Coy of Rochester MN-based JLC Hospitality Consulting Inc and Bill Haralson of Richardson TX-based William L. Haralson & Associates Inc will team up to present the results of their recent research on this new lodging-entertainment concept. Jeff and Bill will moderate several panels of experts talking about their experiences with hotel indoor waterpark resorts --- from market analysis to feasibility to design-development concepts, estimating construction costs, preparing a loan request, pre-opening, operations and marketing.

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