



Designing family FUN

Popular splashpads enhance aquatic activities available to park patrons

By Jennifer Schmidt

The campground-themed splashpad at Blue Mound State Park is really making a splash with its patrons. And how could it not, considering how chock full of fun water features the southern Wisconsin splashpad is filled with? Among them are a 14-foot-tall, campfire-themed interactive spray feature, a double-sized tent aimed to soak kids as they shoot through it, water cannons painted to look like chipmunks and squirrels, and giant pine trees that rain water, all guaranteed to keep kids cool – and entertained – all summer long.

“We are really proud of it. I think this is one of the only splashpads like this in the country,” said Missy VanLanduyt, capital development specialist for the Wisconsin Department of Natural Resources (WDNR), which oversees development in the state park system. “It’s gorgeous, and we get a lot of really good comments from our users. It turned out even better than what we had anticipated.”

Blake Theisen of Ayres Associates served as project manager and lead designer and confirmed that the splashpad at Blue Mound State Park – the only Wisconsin state park to have one – indeed features unique elements. As with every splashpad he designs, Theisen made sure he listened to the client’s and community’s needs and used that information to find the essence of the site it was going into.

“We try to have some sort of custom element in every project. I feel pretty strongly that all of our pads should have some individual character,” said Theisen, who designed the Lakeview Park splashpad in Middleton, one of the first in Wisconsin and often regarded as the standard for splashpad design in the state. He also has two complete, custom-designed splashpad lines in an international aquatic play equipment manufacturer’s catalog.

ACCOMMODATING USERS CREATIVELY

VanLanduyt shepherded the Blue Mound project from inception to completion and served as a liaison between the WDNR administration and staff and the project team of WDNR and DOA project managers, contractors, and the design team. Noting that the primary users of their property were families for camping, she said both Theisen and civil engineer Katie MacDonald “hit the mark” in giving them a one-of-a-kind project that stayed within their mission, maintained a recreation- and nature-based focus, and catered to people of all ages.

“It can be challenging to put something so non-natural into a natural state park environment. They did such a good job of listening to us on wanting to blend the natural in the unnatural world by putting in the camping theme along with the style and the colors. The overall design of the space really blends well with the landscape,” she said, sharing how a small wading pool and an adjacent – and dated – 4,000-square-foot swimming pool were in the space before the splashpad and new swimming pool were installed. Ayres also designed a new pool as part of the facility reconstruction project.



VanLanduyt said she appreciated how Theisen and MacDonald were on-site often and “continually went above and beyond for the project.” They made sure the WDNR remained on budget as the project progressed and were responsive when issues arose, such as unsuitable soils uncovered during construction.

“That was a big challenge for us – and especially for Katie at Ayres to do a lot of redesign and calculating to be able to know which soils were coming out, which new soils had to be put back in, and what they were made up of,” VanLanduyt said.

She appreciated how Theisen and MacDonald worked diligently with the contractor to see that the project was completed ahead of schedule by Memorial Day, the unofficial kickoff to summer for campers.

“I always felt like this was their project in their backyard,” said VanLanduyt, who frequents the splashpad with her 4- and 2-year-old daughters and was there for opening weekend this year, Memorial Day. “I felt like they really were advocating for the DNR with the contractor and throughout the design. I felt like they just really cared about it. It was very personal to them.”

MORE THAN MEETS THE EYE

Think a splashpad functions like a simple sprinkler, shooting water in different directions when on and stopping after being turned off? Wrong! A carefully calculated series of events take place behind the scenes.

Water sequences are programmed, and interactive features are hydraulically tied together. If one child stops the pressure on a feature by covering the spray nozzle with his or her foot, it influences the pressure on a feature another youngster is playing with.

Splashpad features are not all on at the same time either. “We try and sequence them around the pad so that it’s always a guessing game as to where the water’s coming from next,” Blake Theisen explained. “Splashpads run in variable time sequences, depending on how we program them, so once a kid activates it, it will start up, and the water flows. It will cycle through all of our features on the pad for six or 10 minutes.”

Theisen programs in four or five sequences “in the brain of the system,” and “once a kids learns that, ‘OK, the water goes from A to B to C to D,’ sequence two starts, and it may either reverse it, or it may go A to C to E to B to D. We try to break the monotony of the same sequence every time.”

Splashpads are also designed to partition off areas by age group, often a section for toddlers, another for kids 5 to 8, and a third for those ages 9 and older.

“Little kids don’t want 20 gallons of water pounding them on the head, but that’s what someone who’s 10, 11, 12 wants to do. They want to have the big soak,” Theisen said.

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POPULARITY PICKING UP

The Blue Mound State Park splashpad is one of 18 Theisen and MacDonald have designed in the last nine years. Splashpads, also referred to as aquatic playgrounds, spray parks, and splash parks, have skyrocketed in popularity since the mid-2000s, according to both Theisen and MacDonald. They’ve found that many municipal pools were reaching or exceeding their life expectancy, leaving clients debating whether to invest millions of dollars to rebuild their pool or spend a fraction of the cost and install an interactive water feature, which typically has far fewer needs for long-term maintenance, upkeep, and staffing.

“They are reasonably affordable for a community to construct and to maintain. There aren’t as many liability issues associated with them as there sometimes can be for pools. They do not require lifeguards, which can be a cost savings for communities, and they fit into almost any kind of landscape,” MacDonald said. “Pool facilities just take a lot more of everything, whereas a splashpad

can fit into almost any location in a community.”

CONSIDERATIONS MADE

When designing splashpads, Theisen and MacDonald consider a host of factors, including parking, ADA standards, shade, location, and proximity to restrooms.

“All of that comes into play. If this is going into a pre-existing site, we will definitely make sure that there is ample parking and that it’s very close to restroom facilities, and potential changing rooms need to be within a couple hundred feet of the splashpad,” MacDonald said.

Different regulations are associated with different types of splashpads. In a “flow-through” system, water is pumped into the splashpad and either drained into the community’s storm system as wastewater or repurposed for irrigation. A “recirculating system” involves filtering and disinfecting water before its redistributed back into the splashpad features. This type of system is regarded as a pool by the state – thus bringing more regulations.

The City of Fitchburg, Wisconsin, opted for a recirculating system when it worked with Theisen and MacDonald to design its McKee Farms splashpad.

“Instead of just dumping the water, we wanted it recirculated for environmental reasons,” said Paul Woodard, Fitchburg’s former director of public works and city engineer, acknowledging the various code regulations that came with it, such as fencing and water treatment, which he said Theisen helped the City navigate.

Previous attempts to put in a pool had fallen through because of initial and ongoing operational costs. The local Optimist Club ultimately assisted the City in raising money for the splashpad’s equipment and features, with the City providing the land and accompanying infrastructure.

The McKee Farms splashpad, which pays tribute to the former farmstead it was built on, has been extremely popular with parkgoers. Bordered by an old split row fence and accented by fruit tree orchard landscaping, its spray features include crop rows, a John Deere tractor, a chicken yard, and more – with even the restroom



and mechanical building designed as a large red barn with white shutters and trim.

So pleased with the end result, Woodard, now public works director for the City of Janesville, Wisconsin, hired Ayres Associates again for a splashpad project there.

“I liked what (Theisen) had done with the Fitchburg project,” Woodard said. “The plans that were put together were very well done, and I thought he was good in working with the public on the design options.”

The Janesville splashpad, located along the Rock River in Riverside Park, also brought its own challenges, including being almost entirely within a floodplain and having no municipal water nearby. Before the splashpad’s construction, the site featured an old, failing wading pool. The City knew it wanted to remove the structure but struggled with what to do in its place – rehabilitate the pool or install a splashpad. A feasibility study and cost comparison helped answer the question.

The Janesville splashpad was designed to honor the Ice Age Trail and geological glacier movements it’s positioned across. Spray features are shaped like flowers, colored concrete provides a path symbolizing the Ice Age Trail, and custom boulders replicate the glacial repositioning of rocks.

Woodard said the splashpads have been well-received in both communities.

“They were very well done, they’re very well used, and people seem to enjoy them very much,” he said. “We were very pleased.” ■