

FUN IN THE SUN

Splash park brings children of all ages to Red Lion

By **Pat Devlin**, Environmental
Planner, Land Logics Group



Red Lion Borough's new splash park made its debut this past summer, and by all accounts, it has been a sunny sensation.

Perched atop the northeast hill of Fairmount Park, the splash pad features sixteen water features that misted, sprinkled, sprayed and dumped water on hundreds of visitors escaping the summer heat.

"It's been packed," said Dianne Price, Red Lion Borough Manager. "We just never expected hundreds immediately and that's what we had."

The splash pad has indeed breathed new life into Fairmount Park, which was plagued with crime, drug use and vandalism. After the splash park opened in June, calls to the police virtually vanished. "When it was open, families were there into the evening," Price noted. More families at the park meant more eyes on the park. The criminal element doesn't want to be around families.

"There was another community in York County with the same types of issues in their park and their answer was to basically take everything out of the park," Borough Council President Kelly Henshaw added. "Strip it; get rid of the basketball court; get rid of the tables. Everything that was vandalized they got rid of. But they really didn't get rid of the element."

"Our feeling was let's get more people in the park. It will help get rid of that element. With the splash park you have many more families coming and they're interacting with other families and getting to know one another. You then become a community, Henshaw said. "That's what parks are all about."

When plans began three years ago to improve the park in this low-to-moderate income level borough in York County, there was no public pool in the area, and the idea of a splash park provided a way to offer aquatic play.

"We never could have afforded a pool – as far as building it, let alone maintaining it and keeping



FUN FOR ALL Water jellies, water bugs, water cannons and water buckets delight toddlers, teens and entire families at Red Lion Borough's new splash pad at Fairmount Park

it staffed," Price said. Splash pads provide a safe, zero-depth play area that does not require lifeguard supervision and only requires minimal maintenance.

The Big Picture

The splash pad is part of a three-phase master park plan that includes upgrades to the existing horseshoe pits and shuffleboard courts, constructing an amphitheater on the park's southwestern side, and an irrigation system that will use gray water from the splash park to spray irrigate the forested and lawn areas of the park. The recent improvements also included restrooms, a changing room and a pavilion with picnic tables and grills.

"It's really important to consider all ages and how different people use the facilities in a park like this," emphasized Sally Holbert, a registered landscape architect and president of Land Logics Group, which was the consulting firm retained by the borough to write the Department of Conservation and Natural Resources (DCNR) grant application, develop the park master plan and prepare detailed design and construction documents.

Older people or those who are not comfortable swimming, for instance, like to sit and watch the action on the seat wall that curves alongside the play area. Those in wheelchairs can easily maneuver around the water features, such as the arched spray loops that are spacious enough to accommodate

wheelchairs.

"Parents like the splash pad because it's confined," Price added. "There's only one way in and out, and it's between the restroom and changing area. You don't have to worry that the kids are going anywhere. It's all right there. A couple of parents said they really appreciate that design."

Borough officials also welcome out-of-towners who want to use the splash park. "We like to bring people in here," Price noted. "That's something that can help revitalize the downtown. Usually, they are grandparents or outsiders coming for the day. That's a good thing."

Henshaw agreed. "I probably spent one night a week at the splash park over the summer, and I never heard any negative complaints," Henshaw said. "We got a state grant, so why shouldn't people from all over be able to use it?"

One such group visiting the park was a York City day care facility. With no funds for trips, the day care was attracted to the free summer programs at Fairmount Park recently started after hiring a new assistant to the recreation director. "When kids came off the pad, they went to the playground and then back to the splash pad," Price noted. "It worked very well with everything being used."

From a business standpoint, the borough sees the park as an economic catalyst for local businesses. Downtown establishments may benefit as



A PICNIC IN THE PARK People were lining up to rent the new pavilion situated next to the splash pad, and rental fees help offset maintenance costs

Red Lion becomes a destination point as a result of visitor traffic to Fairmount Park. Plans are underway to develop an information area near the splash park to draw visitors downtown, which is only a short walk away.

The splash park has also inadvertently boosted visits to its neighbor, the public library. “At first we had some problems with people parking at the library,” explains Price. “We posted signs and even the hours that the library was open so people could use the parking when the library wasn’t open. [The library was] very supporting.”

“We did hear from the library that they actually had an increase in children in their programs this year, which they related to the splash pad. I think people didn’t know the library was right there either. It worked well as a partnership.”

Green Design

The splash park was built with a grant from the state DCNR and support from the borough’s public works staff who assisted with construction, painting, electrical work and landscaping. The Red Lion Municipal Authority also contributed \$100,000 for the restrooms.

“Low impact design and integrating green elements are important to our design approach,” Holbert said. “In all our projects, we look for opportunities to reduce impacts of the built environment on the community’s natural resources. At Fairmount Park, green infrastructure was integrated in as many design elements as possible.”

Green elements of design start

with the pervious walkways that greet visitors. Pervious pavement infiltrates rain water rather than shed it. This stormwater management technique helps recharge groundwater and decrease loads to a community’s stormwater conveyance and treatment systems.

Visitors will also notice three rain gardens hugging the restroom and changing room buildings. Rain gardens are designed to capture and store runoff from rooftops, and the native species of shrubs and flowers make the gardens more resistant to droughts, insects and disease.

Keeping the water clean and free of harmful bacteria is critical in splash parks, especially when water is recirculated for use. Water is gravity fed into a system that filters, treats, stores and eventually pumps the cleaned water back to the splash park’s water features. State law requires that water be tested for bacteria at least once a week. Additionally, disinfectant and pH levels must be tested and recorded twice a day whenever the splash park is open to the public. The splash pad’s system has a controller that evaluates the water chemistry every second and adds bleach or acid to the water in very small increments to maintain water quality automatically. A manual chemical test must be done daily.

“Our biggest challenge is that you need to have the testing seven days a week,” Price said. “We had to find someone to come in and do the testing and check the rest rooms. We hired someone new, but it’s only a couple hours a day so it’s a minimal expense.” Price reported that even during the hottest days last summer, they did not see any issues with bacteria.

Two tanks are buried underground – one 2,000 gallon tank that collects water from the pad and provides filtered and chemically treated water for the pumps and a second tank that collects rainwater falling on the splash pad when not in operation. The rainwater harvest

tank is currently used to irrigate the rain gardens, but it will eventually be used for irrigation throughout the park after completing additional park improvements.

Roughly 300 gallons per minute are pushed through the splash pad. Controllers and activators sequence the park’s water flow between various spray features. The motion detectors ensure the park is only running when activated by someone ready to play. This reduces water consumption and adds play value by putting control of the park in the hands of the kids. After pushing the activator, the kids excitedly try to anticipate which features will spray next.

Other green design elements include the decorative concrete that includes recycled glass and reuse the existing building as a changing room rather than demolish it. There are also plans to install rain barrels that will capture rooftop runoff and a woodland garden to be planted under treed areas next to the splash pad.

The Next Steps

With only one season under its belt, Red Lion is still on a learning curve with its new splash pad. “We’re going to sit down this winter and see what are our needs – what did we do right or wrong, what do we need to do next year,” Price said.

A few things did in fact go wrong but have since been rectified. For example, the lawn next to the splash pad wasn’t seeded when it should have been, which resulted in some mud getting into the filters. Price suggested using sod if a grassy area isn’t well established prior to opening. Additionally, when suntan lotion gummed up the filters, filters that clean easily were purchased.

“We’re just now pulling together the cost of the chemicals, testing, electricity and water,” Price explained. “We haven’t seen any real increase in electric. The chemicals cost about \$700 for the whole season, and testing was \$15 a week.” Price noted that the borough does

not charge an admission fee but may eventually if funds are needed for maintenance.

Tom Karst, a product design manager with Vak Pak, Inc., recommends that parks with less than ten features eliminate the valve sequencing option. "In most all cases where I have opened a park of that size, the owners have asked if all valves could be set to run continuously without sequencing. Since there are limited features on the pad to begin with, closing some give the appearance

of improper operation or low water flow," said Karst.

"I would also recommend that prevailing winds be considered during the planning stages of the park. These systems are designed to retain water, treat and reuse it. If the wind is pushing water outside the perimeters of the play area, it is lost and must be made up from the fresh water supply. Be sure to choose nozzles that don't allow this to happen, consider placement of nozzles related to wind directions and consider increasing the

diameter of the spray area," added Karst.

"It has been absolutely wonderful," Henshaw said. "My feeling is if you're not going to make improvements you're just going to have decline and decay. You have to do it if you're serious about recreation, which is a big part of the community."

For more information on Fairmount Park's new splash pad, see the video at www.redlionpa.org or www.landlogicsgroup.com. (B)

Considering a Project in Your Community?

For those communities contemplating a splash park of some type, DCNR Recreation and Park Advisor Beth Helterbran cautioned that you must be willing to make a long term commitment. Be sure to consider the costs to maintain such a facility for the next 20 years.

Helterbran sees smaller spray parks becoming more popular. Green design is one of the components DCNR is looking for regardless of the type of project for which a community is submitting a grant. Red Lion's green elements definitely helped during DCNR's ranking of grant applications.

"If you are considering applying for a grant, talk with your DCNR regional advisor," Helterbran urged. The 2014 grant cycle opens in January so now is the time to discuss the project with regional advisors.

For more information, visit www.dcnr.state.pa.us and select "Apply for Grants".

How To Cut Your Municipality's Street Lighting Energy Bill By \$10,000 For Every Ten Miles of Roadway.

On average just ten miles of street lighting can account for 225,000 kilowatt hours of energy consumption per year for a municipality. Multiply those kilowatt hours times your local energy rate and that adds up to some substantial energy costs. And just imagine what that cost becomes for a municipality having more miles of roadway and street lighting.

Typically, with the right approach to a street lighting LED retrofit, a municipality can save almost \$10,000 in energy costs the first year alone — just within ten miles of roadway.* When you factor in reduced maintenance costs, you can more than double those savings.

If your energy saving strategy doesn't include taking a hard look at your lighting energy expenses, let us help you take a closer look. We've been helping dozens of other municipalities save over 60% per year across the board on all their lighting energy costs by implementing the "best approach" to their LED lighting solution.

Find how much we can save your municipality. It's FREE, with our No-Obligation Street Lighting Energy Evaluation.

Call 866-964-8559. Or visit www.stouchlighting.com/evaluationPB.html

*Savings based on 11 hours of operation per day, kWh rate of \$0.07, 10 miles of road, using 440 100w HPS fixtures



525 Turner Industrial Way Aston, PA 19014
www.stouchlighting.com