

Where Children Play and Soar Eagle Soar Splash Pad, Temecula, Calif.



Above

Eagle Soar Splash Pad at Margarita Park in Temecula, Calif., was designed with accessibility in mind. Children with and without disabilities can play together – soar together – in this inclusive area. David Neault Associates provided landscape architecture services; Pacific Play Systems was the general contractor. California Waters provided engineering and specialty contracting services. The equipment supplier doubled as designer for the space, with input from the community.

by Leanne Harvey, California Waters

Eagle Soar Splash Pad at Margarita Park in Temecula, Calif., offers an inclusive and welcoming place where children of all abilities can play, explore and socialize. Playgrounds are an essential part of childhood, fostering a child's physical, emotional, social and intellectual development, but often those opportunities are difficult to find for families with special needs. Combining a zero-depth splash pad with fun elements and interactive stations with kinesthetic play prompts, the Eagle Soar Splash Pad was built to deliver an exceptional play experience in a safe, integrative, and inclusive environment where children with and without disabilities can play together with ease, access, and usability.

California Waters of Yorba Linda, Calif., spearheaded the engineering, construction and commissioning of the splash pad through general contractor, Pacific Play Systems of Carlsbad, Calif. David Neault Associates, Inc. of Temecula, Calif., served as the project landscape architect, and a manufacturer from Ashland, Ohio provided conceptual design direction and sprayground equipment. The city of Temecula envisioned a place that would give

children with special needs the ability to access a playground and splash pad with little to no barriers while ensuring the safety and comfort of all children. With safety as a concern, the enclosure has only one entry and exit to prevent children from wandering. The 45' diameter splash pad is considered by statute and code neither a fountain nor pool and therefore is permissible to operate, even under the local water district's strict Stage 4 Water Use Restrictions relating to California's long-term drought.

With input from the city, community and special needs families, the splash pad manufacturer went through several iterations of the concept until all parties involved were completely satisfied with the final design. The final splash pad has seven types of multi-featured play equipment, including a one-of-a-kind "Rain Tree" at its center. The tree has touch sensors, a tunnel, and a raccoon on top, all designed to make it more interactive. A pair of custom drizzle tables combines the classic fun of the domed drizzle drop element with the interactive fun of pooling water. The water troughs that catch the water from the second drizzle drop dome provide more accessibility

playground

Design Team

Landscape Architecture: David Neault Associates

Engineering, Specialty Contractor: California Waters

General Contractor: Pacific Play Systems



Top, Left: There are several interactive play structures in the splash pad. Two domed drizzle drop elements send water into troughs and tables. At the center of the park, a one-of-a-kind “rain tree” is activated when approached. A tugboat gives a place for future sea captains to play. A keyboard and a frog-inspired water tunnel round out the upright structures. Fourteen flush mounted jets enhance the splash pad, including a custom activation bollard that senses when a child enters the splash zone.

Above: Thanks to its designation as neither a fountain nor a pool, the splash pad is permissible to operate even under tight water restrictions from the California drought. In consideration of these restrictions, the water recirculates after being treated. The treatment system includes an automated chemical controller that distributes chlorine and muriatic acid to the water as needed for sanitizing. Though the water drains to the grates around the rain tree, the slope was kept at no more than 2% to keep the space ADA accessible. This was accomplished by meticulous mapping of the pipe drainage slope every 10 feet.

Top, Right: The froggy hoop provides nearly 360 degrees of water, with 10 nozzles pointing through the tunnel. Beyond, a pressure-activated keyboard in the ground sends sound and water through the upright, rainbow-colored keyboard pipes.



to all children. The two domes are topped off with monkey and snake ornaments. Across the splash pad, pressure-activated sensors trigger a ground-level keyboard, which sends sound and water up through a set of five rainbow-colored pipes. A froggy hoop and a tugboat round out the above ground elements, offering both older children and toddlers toys of their own.

In addition to the structures, the 14 ground spray effects across the splash pad include popcorn jets, upstream jets, and a custom activation bollard that senses when a child enters the splash zone.

The treatment system for the recirculating water includes an automated chemical controller that balances and sanitizes the water by distributing liquid chlorine and muriatic acid as required. The pump system includes a medium pressure UV system that deactivates chlorine-tolerant pathogens. The surge tank holds 4,000 gallons. It took more than a half-mile of rebar and over 700' of pipe to complete construction.

One major challenge was the lack of space to house equipment. A below-grade equipment vault was designed to house the feature and filtration pump systems. Another challenge was the change in elevation from the splash pad drainage system to the diverter system and surge tank over long distances and at various elevations to achieve a 1-2% slope. The engineering team resolved this by developing a plan sheet that highlighted the pipe drainage slope every 10' from start to finish to achieve the tight outcomes required for the system to function properly.

According to California Waters, of the 40 public parks in Temecula, Eagle Soar is the first with a splash pad built with everyone's unique physical and cognitive needs in mind. It exceeds the ADA requirements by offering special design features to meet the physical, cognitive, and sensory needs of many different types of children—including those with autism, sensory and cognitive issues, as well as physical and learning disabilities. It is not only accessible, but also inclusive for all the children of Temecula to enjoy, play and soar! 