

Parks are key to ensuring communities can survive and recover after weather-related impacts.

Parks Are Key to Community Preparedness

By Michele White

During the past year, our communities have experienced new and more extreme impacts of a changing climate, from flooding and wildfire to increased heat. Compounding these challenges is weak community infrastructure that fails to help communities during and after these events. However, parks can be the solution!

Nature-Based Solutions

Whether it's adding indigenous plants or trees, bioswales, or other smaller water-absorbing spaces to large-scale green infrastructure systems, parks can act as sponges to prevent and mitigate the impacts of flooding. Take for instance Franklin, Indiana, where the development of Youngs Creek Park is preventing downtown flooding (tinyurl.com/42353e7r). To the untrained eye it looks just like any other park. However, just this April, Franklin experienced flood waters reaching above 12 feet, and Youngs Creek Park did exactly what it was

designed to do: absorb flood waters and protect the community.

"The playground, amphitheater, green spaces and shelters were all designed to withstand flooding," explains Chip Orner, CPRE, director of parks and recreation for City of Franklin. "This was our first major flood since construction. The park functioned as designed. Our downtown area, which has historically flooded during major rain events, received no flooding. Youngs Creek Park is a success story in using parks to retain water to prevent flooding in other critical spaces in our city. In our situation, the water receded

quickly and the cleanup proved to be minor in this new park."

In New Orleans, St. Bernard/Willie Hall Playground sits within a neighborhood challenged with flooding and that lacked park space in the past. The park builds on a historic sports field and will feature a 5-million-gallon detention basin beneath the field — the largest stormwater storage solution of its kind in the South. Additional elements, including rain gardens and access to the Bayou St. John, will help ensure this community is prepared for future impacts.

Greening of communities also addresses the heat island effect. Green spaces offer shade, evapotranspiration, cooling microclimates, natural ventilation and water-related amenities, like streams and lakes, that add to the cooling effect. Parks can be up to 17 degrees

cooler than urban landscapes, providing a refuge during peak heat incidents (tinyurl.com/yc6kt7vj). By ensuring native or climate-adaptive plant and tree species, these spaces can also be drought tolerant, saving one of our most precious resources: water.

Offering Shelter


In areas prone to drought, wildfires are a threat. Issues with fire loads and ladder fuels can exacerbate the threat. But communities can leverage green spaces as a preventive solution.

In 2018, Paradise, California, experienced the Camp Fire. During that wildfire, residents took shelter in their community park. Due to management techniques, the park created a firebreak and was one of the only

places in the community spared. Since then, the parks department and other partners have been creating nature-based, community-level preparedness plans to combat wildfire, and parks are the key. A local study shows that if they are able to convert identified parcels to parks within city limits, they will be able to decrease community wildfire risk by 60 percent (tinyurl.com/3fu3hyjr).

During emergencies, parks and recreation centers often are used as gathering places to provide essential services, such as food and water distribution. These facilities and the people who staff them need to ensure they are prepared. This can include implementing backup systems, including solar power with battery backups, air filtration systems that

mitigate poor air quality, or energy and water conservation elements that help take the load off of municipal systems. For example, Park District of Oak Park, Illinois' net-zero Community Recreation Center's solar panel roof has a 316 kilowatt capacity that includes onsite battery storage, which staff use during emergencies to ensure the building can operate fully.

Parks are key to ensuring communities can withstand and recover from weather-related events. To do so, planning, maintenance and preparation are critical. With parks and recreation's leadership, communities can be resilient within our ever-changing environment. 

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