A waterfall flows in downtown Portland, Ore., ribbons and rivulets of water cascading over slabs of rough, reddish concrete into pools filled with wading children in the summer. Down a tree-lined path, great planted hills pop from the sidewalk. A stepped basin opens up between buildings, looking like a natural spring bursting through the pavement. These bold environments, strung across an eight-block section in the city center, were designed by the modernist landscape architect Lawrence Halprin and his firm between 1965 and 1970, and listed on the National Register of Historic Places in 2013. They are celebrated, along with more than two dozen other parks, pools and gardens, in “The Landscape Architecture of Lawrence Halprin,” an exhibition in Washington commemorating Mr. Halprin’s centennial that runs through April 16. The visual language that Mr. Halprin, who died in 2009, chose to create experiences changed over the decades of his long career. His best-known designs, created in the 1960s and ’70s in Denver, Rochester and San Francisco, used concrete to create rugged, climbable topography that echoed canyons, waterfalls and riverbeds, and were intended to bring nature back into cities riven by urban renewal. He drew watercolors of the rocks and trees of the Pacific Coast, then translated those shapes into geometric compositions. When the Ira Keller Fountain in Portland opened in 1970, the architecture critic Ada Louise Huxtable of The New York Times wrote, “Mr. Halprin is onto something that makes the conventional piece of modern sculpture plonked onto the conventional corporate or public plaza look obsolete.”
Despite the difference in style, the urban parks of Frederick Law Olmsted, which imitated nature by creating rambles and meadows in what would come to be city centers, inspired him. “Halprin is abstracting nature,” said Charles Birnbaum, president of the Cultural Landscape Foundation, which organized the exhibition with the National Building Museum. “Halprin had a bas-relief of Olmsted in his office; he was a big fan. Halprin was creating passages of scenery in the same way, creating narrative in his own language.” Mr. Halprin had a longtime collaborator in his wife, the choreographer Anna Halprin, and movement was never far from his thinking. The exhibition includes a 1949 essay he wrote for Impulse Dance magazine on the “Choreography of Gardens,” as well as photographs of their house in Marin County, Calif., where in the early 1950s Mr. Halprin built his wife a “dance deck” between and around the existing trees.

“The dance deck was an eye-opener to taking theater to where people are, rather than expecting people to come to you,” Ms. Halprin told The Times in 2014. “He wanted to make something people could experience, not just use as a place to go through.” Mr. Halprin also worked closely with architects, as on the organization of the modernist planned community Sea Ranch in Sonoma County, where he made sure that houses by Joseph Esherick and Charles W. Moore, among others, were built in clusters to shelter each other from wind and make minimal disruptions to the environment.
Freeway Park in Seattle, designed with his associate Angela Danadjieva and completed in 1976, was America’s first highway “cap” park, built specifically to knit part of that city back together after the construction of Interstate 5. The seven-block park acts as a lid, covering the roadways and gorge with a network of boxy concrete planters, some overflowing with greenery. The planters are striated, which gives them the look of ancient Mayan ruins. In one section, the Canyon Fountain was designed to send a torrent of water downhill beside a path with a window onto the freeway. “When you went down into that space, all you hear is the sound of rushing water, but you are seeing the cars,” Mr. Birnbaum said. “It was a wonderful device for lifting the veil” on the park’s structural acrobatics.

Today, that fountain has been turned off, a common fate for Mr. Halprin’s works, which may be rugged but aren’t necessarily low-maintenance. On the website created by the Cultural Landscape Foundation to accompany the exhibition, Freeway Park is given a grade of C, for “beginning to falter,” though the Canyon Fountain is scheduled to be rehabilitated in 2017.

The role of this exhibition is not only to celebrate Mr. Halprin’s legacy, but also to aid in its recognition and protection. A sculpture garden in Richmond, Va., and urban malls in Minneapolis and Skokie, Ill., have been bulldozed; his landscape for Capitol Towers in Sacramento is set for demolition. The “rustic” fountain in the center of his Bunker Hill Steps in Los Angeles was smoothed out without warning. Mr. Halprin’s Heritage Park Plaza in Fort Worth has been fenced off since 2007. Fund-raising is underway to restore and reopen this sequence of outdoor rooms, designed to commemorate the fort that gave the city its name.

Even if many city residents don’t know Mr. Halprin’s name, preservation efforts for these parks and fountains often tap a broad wellspring of memories. “Because these landscapes are not that old, people remember them during their heyday,” Mr. Birnbaum said. “In our video oral history, Halprin remembers the mayor of Portland pulling him aside and saying, ‘We have to make sure people don’t go in the fountains.’ It was a period of great racial strife. What does Halprin do at the opening? He jumps in, and invites people to join him.”