

HOUSTON'S BUFFALO BAYOU PROMENADE

A Park With a Twist ... and a Turn

By Kevin Shanley

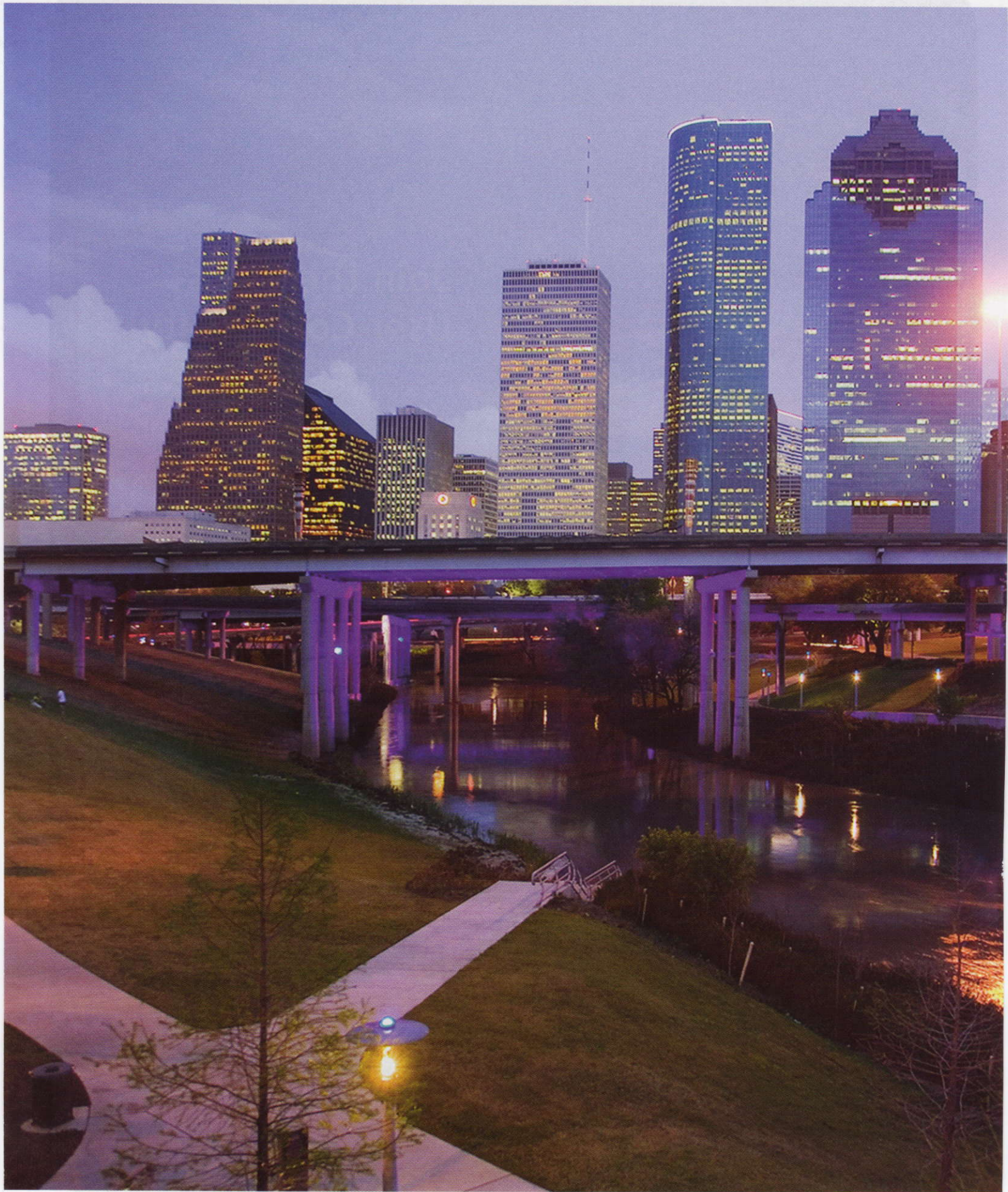
It wasn't too many decades ago that the Buffalo Bayou, which meanders from the west into downtown Houston, was left for dead. Trash, pollution, and foul odors forced Houstonians to go the other direction. Ironically, despite the Texas city's widely used nickname, The Bayou City, only a few stretches of the waterway—and certainly none downtown—were used by the public. One exception: The annual Reeking Regatta canoe race that was aimed at drawing attention to the bayou's plight.

The bayou once flourished as a natural waterway and even carried brothers Augustus and John Allen into its lower reaches, where they founded the city of Houston in 1836. The spot, called Allen's Landing, is now a historic park at the edge of downtown's high-rise office buildings.

As the waterfront-traders' outpost grew up, railways were laid, roads were paved, and subdivisions sprouted. Eventually, an elevated freeway was built along the bayou's path, in part because it was one of the few corridors without buildings. Houstonians went on with their lives, giving little thought to the bayou. It was like many urban waterways, a polluted neglected afterthought.

But today, Buffalo Bayou is becoming a model of what urban waterways should be. After a multiyear collaborative effort between public and private interests, a key stretch has

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Beautifying Basics

A number of innovations and lessons may benefit other storm-water-cum-park efforts:

Top-level support, vision, and patience

Houston's effort centered on a civic group for initial funding, and its leadership maintained a strong vision. At the same time, public-sector agencies became true partners in the long-term objectives so that the project maintained momentum.

Innovative park planning, plants, hardscapes, and equipment

The Sabine-to-Bagby Promenade includes hundreds of native plants and shrubs, all selected for their ability to flourish in Houston's sometimes hot climate and to survive occasional flooding. The pedestrian walkways and bridges, water-conveyance structures, and other hardscapes were carefully designed to handle flooding but within a greater context of enhancing the park's beauty and creating a welcoming safe atmosphere. The team adopted and also innovated a number of techniques in Crime Prevention Through Environmental Design, an urban-design program that anticipates and avoids creating areas that are perceived as unsafe, such as not planting large bushes next to sidewalks.

Innovative hydrology and storm-water engineering

Hydraulic engineers worked closely with the design team so that the aesthetics of the park, which were critical to overall acceptance and fundraising, would not be compromised. At numerous junctures, the project's rock walls, sweeping channels, and other engineered structures provide design elements that enhance both form and function.

Lighting requirements with fewer needs but more effective results

Lighting the promenade was a key element to its success, providing a sense of safety for evening hours and also a sculptural artistic element. Lighting was chosen for strategic positions along pathways but also to illuminate nearby nooks and crannies that might be perceived as unsafe. The team also used light fixtures inspired by a design used on oil platforms in the North Sea, so that Houston's floods wouldn't create a massive light-repair problem. Dual lights along paths also give repair crews time to fix occasional outages without leaving park visitors in the dark. Lighting was also a design attribute, and Houstonians who don't walk the promenade but drive by it have all seen its impact. The concept was to illuminate the bayou differently during the 27-day lunar cycle. Blue lights are at their strongest on bridges and main areas during the darker, new-moon phase. But the blue lights are toned down toward the full-moon phase in a pattern that radiates out from Allen's Landing, the birthplace of the city.

—Kevin Shanley



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been transformed into a \$15 million, 23-acre public park, complete with green space and fish-friendly habitat. Of course, it still serves as a high-capacity storm-water channel, helping to alleviate the potential for devastating floods. Houstonians now run and hike along its paths, canoe its waters, and enjoy concerts and events held throughout the year. Among the improvements are a dozen new pedestrian-access points that invite people into the park, a dramatic blue-to-white lighting system that also enhances security, and native landscaping that includes flood-resistant plants. Says Toni Beauchamp, former chair of the Buffalo Bayou Partnership: "We're trying to put the bayou back into the Bayou City."

The design of the waterside park as a green, well-lit, easy-to-access, pedestrian promenade was integrated into a higher-capacity floodway that would sustain only minor damage in most storms. It was put through a real test during 2008's Hurricane Ike, whose rain brought virtually every part of the city's storm system to capacity and left huge swaths of the metroplex without power for weeks. The promenade, however, performed as expected, and although it sustained some damage, it was back in use within days.

"The promenade and the bayou are quite popular now," says Zane Segal, a resident in a live-work loft overlooking the promenade. "I'm a runner, and I go up and down the bayou all the time. I even use it to walk to meetings downtown." People walk the bayou after concerts in the waterfront amphitheater and at the Wortham Center performing arts



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complex. “It’s so beautiful,” says resident Martha Peterson. “It feels safe and pleasant to walk there, even at night.”

When Waters Rage

For cities large and small, turning urban streams into parks

that double as high-throughput storm-water channels also serves a growing critical need: flood control.

As cities have grown, especially the sprawling concrete-and-culvert systems that dominate the United States, storm-sewer capacities simply have not kept up. Unlike other serv-



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ices, such as freeways, utilities, and cable, water conveyance can’t improve with HOV lanes or high-speed DSL. In recent decades, public flood-control authorities in city after city have been raising alarms about the increased risk of paving over land and shunting all rainwater into the storm sewer.

Even now, infill developers converting the last acres of undeveloped land would rather push every drop of rain off their buildings and off their property. But with a billion raindrops here, a billion there, pretty soon a storm system is overwhelmed.

The urgent message is still relevant: While progress has been made, cities must adopt measures to limit water that is shunted off a property, encourage water-retention ponds, and leave more exposed land.

Getting it Done in Houston

How did the Buffalo Bayou Promenade get done? The bayou’s lower urban portion, downstream from Shepherd Street, has been green space for many years; it was already developed and maintained as park space. In the 1980s, a small section farther downstream in downtown by the then-new Wortham Theater was improved to become Sesquicentennial Park.

Between those areas, roughly from Sabine to Bagby streets, the bayou turned under Interstate 45, hidden and neglected. Thirty years later, the Buffalo Bayou Partnership, a civic group whose private-sector leadership gathered the seed funding, focused on this stretch as the most important in overall regeneration effort and dubbed it the Sabine-to-

Bagby Promenade. With the Buffalo Bayou Partnership as the umbrella organization, other constituents were brought to the table, and both public and private entities collaborated to present their objectives, debate potential solutions, and discuss funding and completion options.

At a critical juncture, the Harris County Flood Control District joined the team, since flooding was a major current issue, and any improvements to the bayou would also have to improve or at least maintain capacity. The upside to this agreement was that additional funding would be available, not just parks money but also flood-improvement funds. The Texas Department of Transportation and other agencies also became proactive participants. Downtown businesses and the growing back-to-downtown residential population saw the value of added park space and became sources of private-sector donations.

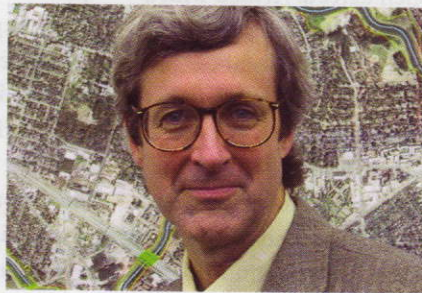
“We try to seek out multiple sources of funding, and the Harris County Flood Control District as well as the Texas Department of Transportation both understood how this effort could meet their objectives, too,” says Anne Olson, executive director of Buffalo Bayou Partnership. “It was somewhat unusual for the flood district to be involved in such a large dual-use project, but they were enlightened enough to see that it would improve the floodway and create something special for Houston as well.”

Another key team member, Houston Parks and Recreation Department, coordinated with others to integrate the promenade with the city’s park program and to enhance the promenade plan. In June 2008, the department’s board and philanthropists Lee and Joe Jamail funded a \$2.7 million skate park just off the Sabine Street Bridge. “The skate park has been incredibly popular, with more than 55,000 users since opening,” says Joe Turner, director of Houston Parks and Recreation Department. “Almost all of our park projects involve public-private partnerships. It’s just how we do business in Houston.”

The next phase of the promenade, the Sabine-to-Shepherd extension, is included in the Buffalo Bayou Partnership’s 20-year master plan, a 10-square-mile district that will create 850 acres of new park space and trails reconnecting neighborhoods to the waterway. At several points, the bayou’s improvements will be viewed from vistas that enhance the city’s beauty as well.

The bayou park’s dual purpose is actually what made the project succeed when none of the groups involved—not parks, flood control, public-sector agencies, philanthropists, environmentalists, civic groups, or elected officials—could have pulled it off alone.

Buffalo Bayou Partnership, the city of Houston, and other constituents continue to plan and implement the 20-year vision for Buffalo Bayou. Work is already underway on improvements that will further enhance life for Houstonians: more parks and less-dangerous flooding. **P&R**



Kevin M. Shanley is president of SWA Group, a landscape architecture and urban design firm. He’s received numerous awards for his work, including six national awards from the American Society of Landscape Architects. Based in Houston, Texas, Shanley specializes in significant natural-systems projects, planned communities and town centers, large commercial projects, and innovative transportation projects. This month he takes a look at Houston’s newly transformed Buffalo Bayou.