

## A Historied Creek

By: Loring Bullard

Jordan Creek, Springfield's founding waters, flows through the heart of the city. John Polk Campbell moved his family to its banks in 1830, raising corn where the Springfield Square is today. Other settlers, mostly from Tennessee at first, soon followed, referring to the little stream as "Campbell's Creek." At about the time of the Civil War, when the settlement had grown to a few thousand residents, the stream got a new name, or nickname—Jordan Creek. By that time, the small but steadily expanding community had already begun to corrupt its founding waters.

In broad outline, the story of Jordan Creek is one that has been repeated in urban areas across America and around the world. As cities expanded, the underlying drainage pattern was invariably altered—often obliterated. Development pressed close to streambanks, choking floodways and destroying forested bottomlands and wetlands. Urban streams became drainage ditches, carrying the filth of the city. The streams fought back, periodically flooding the encroaching development and in response, cities straightened, armored and in some cases, buried the offending waterways.

Jordan Creek mirrored that pattern. It began with recurring floods that devastated the city's commercial heart, where businesses clustered near the stream. Although residents eventually realized that impervious surfaces such as rooftops and streets funneled runoff to the stream and contributed to flooding, the removal of development from floodplains was never seriously considered. Instead, floodwater, the common enemy, was something to be fought, controlled and quickly shunted out of the city.

Springfield's city engineer in 1883 touted the idea of a large "storm sewer" to convey the frequently flooded stream through the middle of town. A high-capacity flume seemed to be the only solution to a vexing urban problem. But by then, flooding wasn't the only issue. Industries dumped wastes of all sorts directly into the creek. The engineer noted that the stream had become a "death-breeding cesspool," flowing from town "reeking in poisons." Springfield's mayor complained that the "low, ill-smelling valley of the historied creek" was an impediment to progress.

That same year—1883—Springfield got its first public water system. Soon afterward, the city engineer explained that sewers were needed to flush away human wastes, made fluid by newly installed hydrants and water closets. Prominent citizens claimed that the lack of sewers stifled growth and discouraged new business. Brick sewers were finally installed in the Jordan valley in the 1890s. The main outlet emptied downstream of the city, spilling raw sewage into Jordan Creek. In 1898, Drury College professor Edward Shepard observed that sewage pollution rendered the stream "very impure and turbid."

Not surprisingly, people living downstream of the sewer outlet complained that the creek spewed out "impure and health-destroying odors and germs," causing them "much sickness." Petitions and lawsuits followed and city councilmen finally saw the

handwriting on the wall. In 1912, “septic tanks” (actually, German-engineered Imhoff Cone treatment plants) were installed at the city’s two sewer outlets, on Jordan Creek and Doling Branch. With fine tuning, these plants finally began to improve water quality downstream of the city. In the upper section of Jordan Creek, however, industrial discharges and polluted runoff continued to create problems, as did flooding.

Large-scale channel straightening and rip-rapping projects got underway in the 1920s, using an army of the unemployed (accompanied by complaints that existing wage-earners were being deprived of work). But it still wasn’t enough to prevent damage from flooding. In 1927, Jordan Valley property owners, uniting under the Jordan Valley Improvement Association, got a funding measure for a large storm drain placed on the ballot, along with viaducts to carry vehicular traffic high over the Jordan valley. As if on cue, the stream flooded the day before the election, delaying trains and closing businesses. The next day, April Fool’s Day, the measure passed overwhelmingly.

With funding from the bond measure and subsequent PWA money obtained during the Depression, the central part of Jordan Creek was placed in a concrete tunnel nearly two-thirds of mile long, conveying floodwaters directly under downtown streets and buildings. During most storm events, businesses along the stream could breathe easier. But the “out of sight, out of mind” mentality had the unfortunate effect of making the creek’s other problems even less conspicuous to a citizenry who, in large measure, didn’t care to look.

By the late 1930s, Springfield newspapermen exploring the Jordan found the stream approaching “the twilight of its existence.” Noting that once-flowing springs had been obliterated, dry weather flows reduced, and the waterway buried out of sight, they concluded, “not only is its presence being concealed, but it is losing its identity.” The “morale” of the Jordan had been broken; it “no longer displays any disposition to act up. In fact, it seems to have just about lost interest in life altogether.”

Jordan Creek had, in fact, reached a low point in its existence. Trash and junk lined its banks, and its toxic waters were nearly devoid of life. It had followed the path of many other urban streams, spiraling downward through cycles of abuse and neglect. As it became trashed and polluted, and no one seemed to care enough to clean it up, it lost even more value in residents’ eyes, leading to even more abuse.

A few vocal citizens in the 1930s sounded the alarm about the deplorable conditions in Jordan Creek. After all, the city’s founding waters deserved at least a modicum of respect. Civic-minded residents working through the “City Beautiful” movement rolled up their sleeves and cleaned up floodplain dumps and planted trees on the banks of the beleaguered stream. A 1933 plan for one section of Jordan Creek even included a Japanese garden and an “Ozark dell,” complete with waterfalls. But the park was never built. The difficult and complicated rehabilitation of Jordan Creek would have to wait.

For the most part, real progress on cleaning up the waterway didn’t occur until after World War II. Basic health protection and anti-pollution laws were finally passed that

prevented industries from dumping poisonous chemicals directly into the creek. Routine trash collection and designated dump sites alleviated some of the problems with promiscuous dumping. City-wide clean-up events, often using students dismissed from schools, focused on blighted areas and eyesores. Outhouses and septic systems were removed from service as homes and businesses connected to city sewer.

As a result of these initiatives, water quality in the creek slowly improved. Some fish and aquatic life reappeared, even though habitat remained poor in the concrete-lined sections of the stream. Springs, which provided most of the stream's base flow, began to discharge cleaner water as leaking outhouses and failing septic tanks were removed from recharge zones.

Carrie Lamb, who monitors Jordan Creek for Springfield's Department of Public Works, says that in spite of the progress, the Jordan still suffers. "Much of the development is old and drains directly into the creek, with little or no flood or water quality controls," she notes. The result is "flashy" hydrology, meaning the stream rises quickly after even moderate rains, and runoff pollution continues.

Still, water quality in Jordan Creek is much better than in years past. The stage has been set for the next steps in renewal. Public officials have taken note that a restored stream corridor can provide an anchor for downtown revitalization. The stream forms a central feature of Jordan Valley Park, a recreation and economic engine conceived during a community-wide visioning process.

Some steps toward rehabilitation have begun. A section of upper Jordan Creek has been taken out of its underground tunnel, or "daylighted." As Todd Wagner, head of Springfield's Stormwater Division, explains, this work was undertaken because "an open stream is more attractive than a large, enclosed concrete system, and will become a neighborhood amenity." This particular section was chosen first, he said, because it provides a "unique opportunity to connect two historic parks by a new linear park and recreational trail."

The public has been invited back to experience the founding waters. As people return to walk and explore and recreate along the old stream, a constituency for further renewal will be created—the long awaited upward spiral, a stepwise ascendance in value, can begin. With the taste of a rejuvenated Jordan Creek, the public will demand even more restoration. Someday, the Jordan may once again embody those values that attracted John Polk Campbell and generations of Springfieldians to the banks of this "historied creek."