Introduction

Between 1940 and 1970, towns and cities across the nation grew and expanded rapidly. Often these communities were nestled alongside a stream or river. As the towns grew, so did a number of problems associated with the nearby rivers. For instance, if a town’s industrial and human wastes were dumped into a river, public health risks grew along with the town. If a nearby stream flooded its banks easily, construction near the stream was difficult.

Many communities dug trenches to contain these streams during flooding, or buried the streams in pipes underground to avoid associated health risks. Once the streams were buried underground, the towns also found it easier to grow. They built streets, housing, and industrial plants over the buried streams. And the public health problems also disappeared—at least for awhile.

Today many towns and cities are beginning to think differently about the streams buried under their streets. Several reasons account for this. For some towns, the pipes that encase the streams have rusted and must be replaced. For other towns, the volume of water flowing into the underground pipes has increased, and now, during winter storms, the pipes back up and water overflows onto streets and other places. And in some cities, people are asking whether the stream buried underground could be excavated and turned into a park setting that may attract new business and activities to declining and poorly used downtown areas. Often communities are struggling with a combination of these factors.

Many communities are finding that the costs associated with “daylighting” a stream (see sidebar) can be less than designing new pipes and re-burying the stream. They are also discovering that their communities can gain other benefits from a daylighted stream.

Here is the story of two communities that chose to daylight their streams. You’ll learn why they excavated streams that were buried underground for decades. You’ll also learn where you can get more information about daylighting streams and whether it’s a good choice for your community.

What is “daylighting”? Many communities are confronting the problems associated with the streams buried under their downtowns. One option they have is to return these streams to a more natural, open state. This is often referred to as “daylighting” a stream.

The communities profiled here have experienced a revival of their downtown and business districts as a result of daylighting streams that were formerly underground. They are excited by the new look of their downtowns. Often communities are struggling with the streams in pipes underground to avoid associated health risks. Once the streams were buried underground, the towns also found it easier to grow. They built streets, housing, and industrial plants over the buried streams. And the public health problems also disappeared— at least for awhile.

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FOR MORE INFORMATION, CONTACT THE RIVERS & TRAILS PROGRAM
Rivers & Trails Program
National Park Service
909 First Avenue
Seattle, WA 98104
Phone
(206) 220-4113
Website: http://www.nps.gov/rtca

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is to advocate and assist community based conservation action. We build and support partnerships that conserve natural and cultural resources, provide recreational opportunities, and contribute to economic and social well-being.

GIVING NEW LIFE TO STREAMS IN RURAL CITY CENTERS

A former parking lot is now a Festival Site at the end of the recently daylighted Arcardia Creek in Kalamazoo, Michigan.

The National Park Service cares for the special places saved by the American people so that all may experience our heritage.
Arcadia Creek

Over a century ago, Kalamazoo, Michigan buried Arcadia Creek underground. By the 1980s, downtown Kalamazoo had become a depressed area with boarded-up, vacant buildings, high crime and declining public use. The streets also flooded often, because the underground pipes backed up as a result of the city’s growth (see sidebar). In 1986, Kalamazoo began a major renovation of the downtown area. "Daylighting" Arcadia Creek (see introduction) gained support as a way to restore the declining downtown area, as well as address the flooding problems.

Kalamazoo daylighted five blocks of Arcadia Creek. To address the flooding problems the city created a large retention pond that holds the high winter flows and releases the water gradually into the stormwater system. In the summer, the city uses the pond area as an amphitheater for outdoor concerts. The amphitheater is popular with local residents and out-of-town tourists. The summer festivals generate about $12 million annually.

To ensure a strong economic base for the project, the city encouraged local businesses to invest in the area before daylighting and renovation began. The city offered 30-year leases at low interest rates to businesses that developed new construction along Arcadia Creek. The city also offered to renew the leases at $1.00/year after the initial leases expired.

To gain public support, the city passed out booklets in local schools explaining the Arcadia Creek project, as well as the reasons why the business district needed renovating. City staff discussed the problems at public meetings and workshops as well as the proposal for how to address them. The community learned how daylighting Arcadia Creek could revive the downtown area and address the increasing flooding problems. They also learned about the costs of the project, as well as the expected benefits. The citizens of Kalamazoo soon rallied behind the idea.

Today, Arcadia Creek drives an economic revival in the business district. Five festivals are scheduled at the amphitheater site each year, and new businesses continue to locate in the Arcadia Creek district.

For Kalamazoo, gaining firm commitments from local businesses and public institutions before starting to daylight Arcadia Creek was key to the project’s success. As Ken Nacci, director of the downtown development agency said, don’t proceed on a “build it and they will come basis.” He advised that, “Getting commitments from local businesses and institutions early is critical.”

Cow Creek

Downtown Hutchinson, Kansas experienced a host of problems in the 1980s and early 1990s. The underground pipes that encased Cow Creek below the city’s streets were deteriorating. The downtown streets flooded during heavy winter storms, and a major bridge into downtown needed replacing. The general public avoided downtown’s vacant, abandoned buildings and run-down environment, allowing crime and other problems to develop.

The city’s engineers worried about the rusting underground pipes and decaying bridge. They looked at two different approaches to the problems: excavate the old pipes, encase Cow Creek in new underground pipes, and then seek state and federal grants to replace the bridge. The other option was to dig up the pipes and create a park with the restored creek running through it. The city could then re-route traffic and eliminate the need for the bridge. The city found the costs of excavating, replacing and re-burying the pipes, plus replacing the bridge were higher than daylighting the stream and creating a park along its banks. The city’s engineers also designed a stormwater pond to absorb the high winter storm flows and stop the flooding.

Hutchinson prides itself on having a high level of public involvement in its community affairs. City staff held a number of town meetings to share