The Stream

Is West Park a story of baseball or softball, of tennis or basketball, of sledding or ice skating, of concerts or plays, of swings or slides, of walks or sitting under huge trees gazing into the distance? Well, yes, West Park is all of these, and it is also a story of water. In February 2022 water's starring role took centerstage in West Park in a big snow and ice melt. The sound of running water filled the air, water gushed in streams, and a shallow pool of water covered left field in the ball diamond, adding a temporary ankle-deep retention pond to the park. In the midst of all of this, though, sidewalks were clear and passable.

The land comprising West Park would likely not be park today were it not mostly low-lying land with a stream that once openly flowed through it. The stream had two branches joining toward the middle of what is now West Park then running eastward to Allen Creek (called Allen's Creek into the 1920s). The ground around the stream would have tended toward the wet side, making habitation more difficult and less pleasant than on higher ground. In snowmelts or repeated rains with saturated ground, flooding could occur. Hence, as the area developed in the 1800s most structures were built on surrounding bluffs rather than near the stream.

A topographical drawing from the early years of West Park (around 1914-1919) shows the lay of the land and course of the stream:

Document from Parks Department files for West Park.

Two branches from the west join up then flow east to Chapin Street. The stream is surrounded by bluffs (small hills) that are steep in places. The rectangular shapes delineate boundaries of land with stories to tell of land acquisition for creating West Park.

Another way of depicting the course of the stream and the bluffs nearby on either side is shown in the segment below of an 1854 map of Ann Arbor that predates creation of West Park by about fifty years:

Here future West Park is essentially the valley of a stream at Ann Arbor's western border. It is an open, low-lying area where two eastwardly flowing branches join and then flow to meet both Allen's Creek (later called Allen Creek) and a mill race. There are no roads to impede the stream's course. There are some structures nearby, on the bluffs.

Those wishing to follow the trail of the mill race, a skating park, 3rd Ward/Mack School, McIntyre's property, Toms' greenhouse and formal garden, or the introduction of streets with streams flowing under or over them –all part of development in the area around the stream-- can go on an 1870-1911 tour through city maps There you will find some more buildings springing up on the surrounding bluffs but not much near the stream, and the stream steadfastly continuing to flow in its course.

In the mid-1920s conditions for West Park's stream changed drastically. The newly erected Pergola with its birds-eye view of the park below would have witnessed this change. Intended mostly as a public health measure, the event was a disappearing act that concealed the stream's now-polluted polluted water --and the sealed away the smell. It put the stream's waters into underground drain pipe.

In the early years of Ann Arbor, drinking water was needed not just for people but also for their horses, cows, and other livestock. If you ran a greenhouse and formal garden or kept a kitchen garden water was also necessary for your plants. Water was also needed for tanning processes. Streams or creeks could carry toxic effluents away from tanning establishments, though the stench would be ever-present. So too with other types of industry. Where the effluents were carried was, apparently, of little concern to those establishments. West Park's stream did not have much industry depending on it, but Allen's Creek that West Park's stream fed into did –four tanneries plus other industries. West Park's stream, like Allen's Creek as well, had to contend with household waste and sewage from outhouses and domestic animals.

By meeting these needs in those early years streams and creeks were viewed as valuable commodities. Understanding the need to keep them clean and healthy, however, and how to do that were not part of the scene. As the city developed, pollution in Ann Arbor's streams and creeks mounted.

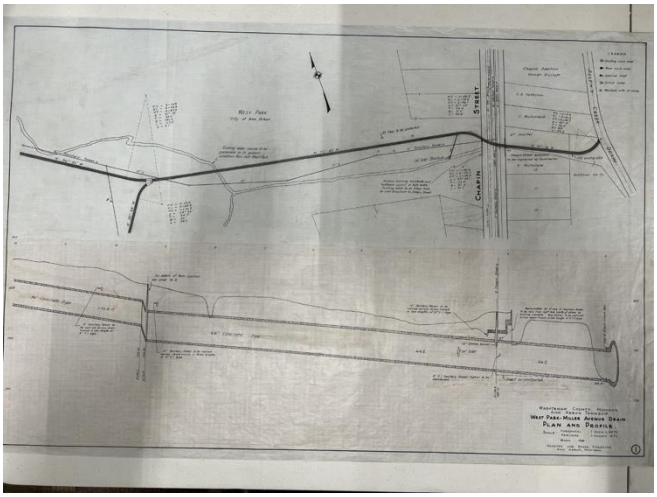
By the 1900s the value of streams and creeks in Ann Arbor was fading from consciousness. Water was piped indoors after 1885, when the Ann Arbor Water Works Company was set up. It is unclear at what point plumbed bathrooms connected to sewage pipes became common. Prior to that outhouses would have dotted the land. Pollution in the streams and creeks –from years of industrial waste and sewage from outhouses– was now front and center, especially with regard to Allen's Creek.

In 1923 property owners along the main branch of Allen's Creek petitioned city council to make the creek into a storm sewer. City council and the Ann Arbor Township board agreed to the request, with the pronouncement "that said proposed drain is necessary and conductive to the public health, convenience, and welfare." In 1925, as the main branch of Allen's Creek drain was in its later stages of construction, property owners along the West Park-Miller branch of Allen's Creek [a name applied to West Park's stream] petitioned to have it put into a storm

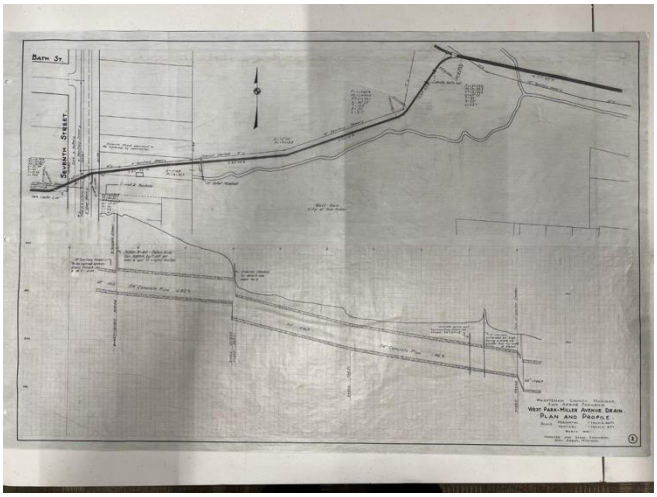
drain. As a tributary to Allen's Creek, the West Park-Miller branch would be encased in drain pipe four feet to eighteen inches in diameter.

That the approach to the problem would be to route the stream into a drain pipe is not surprising given Michigan's historical development once Euro-Americans settled here. Much of Michigan was too wet for European agriculture, and malaria –the ague— was problematic for the newcomers. Early in Michigan's statehood local drain commissioners were established to help make land dry enough for farming, so having drainage systems was a 100 year-old concept when Ann Arborites decided to put urban creeks into drain pipes. The only thing that changed over those 100 years was the capacity and scale of the drain systems.

Interring streams and creeks into drains also fostered road and street construction. Liberty, Huron, and Miller were early high and dry streets that radiated out from Ann Arbor's downtown so as to avoid crossing streams. Seventh Street north of Huron originally stopped at the southern branch of West Park's stream. Cross-streets would proliferate once the streams and creeks were in drain pipe underground. However, this would eventually mean more ground covered by pavement and not absorbing storm water.



The drawings to the left are the old plans from 1925 for encasing the West Park-Miller branch in drain pipe help show the position of West Park's stream relative to the drain pipe. To help readers orient, Chapin and Seventh streets are labeled, and the arrow points to north. Some property lines are shown, giving some reference to park boundaries. The drain pipe is the boldest, darkest line, and the stream is a pair of meandering lines representing the banks of the stream. As this shows, the drain did not entirely follow the original course of the stream. Meanders were straightened out, and the location of the joining of the two feeder branches was shifted to the west.



One wonders: Just how did they manage to coax the stream into the drain? Seems a little like trying to cage a wild animal, but, somehow, they managed. Were the Pergola to speak it might have some interesting tales to tell about this.

Drawings curtesy Evan Pratt, Washtenaw Water Resources Commissioner.

In May 1928, after completing coaxing the West Park-Miller branch into an underground drain pipe, the Washtenaw County Drain Commissioner turned over to the city for West Park the strip of land forming the right of way 3 rods wide running through West Park that essentially followed the course of the drain pipe. While the county is responsible for routine upkeep of Allen's Creek's main drain, the city has responsibility for the tributary drains going into neighborhoods, including the West Park-Miller branch.

The encasing of Allen's Creek in drain pipe was viewed, in the mid-1920s, as a permanent solution to drainage from the creek's watershed. The drain was anticipated to "remain intact on the two hundredth anniversary of the founding of Ann Arbor". In 1926 there was a proposal to city council to erect a monument to mark Allen's Creek, a proposal reminiscent of something otherwise likely to pass from collective consciousness. By then, Allen's Creek and its tributary West Park-Miller branch were out of sight, possibly out of mind, and considered tamed.

However, within about fifty years the Allen Creek drain was insufficient for the task assigned it due to the creek's watershed filling with more buildings, houses, streets, and parking lots, a scale of suburban sprawl and pavement construction way beyond Ann Arborites' wildest dreams in the mid-1920s. Development of this type prevents storm water from being slowed and captured by soaking into the ground, leaving more storm water at the surface collecting in low-lying areas and posing flooding problems. What seemed like a reasonable approach in the mid-1920s turned into a poorly serving system when life became automobile-centered and the size and number of houses and stores and associated pavement grew so much. Appraisal of the Allen Creek drain system became a recurring and prominent concern, as has the whole system of drained and interred creeks in Washtenaw County.

By the 2000s, the high level of development in the area – with impervious surfaces such as rooftops, paved driveways, roads and sidewalks – left the watershed for West Park's stream/drain with relatively little open ground and vegetation to slow and absorb surface water. The interred stream in West Park became flashy, with the amount of water in the drain increasing quickly and dramatically in heavy rain or snowmelt. The stream's watershed was receiving considerably more water than the stream's drain could hold. Parts of West Park would flood, large areas would be too swampy for recreation, and many parts were so soggy that maintaining them was a problem. There was also interest by the Washtenaw County Water Resources Office and the Huron River Watershed Council in West Park as a place to clean and slow the storm water in Allen Creek.

Features in West Park were also aging and in need of major repair or replacement, and safety concerns were a continuing issue. So the Parks and Recreation Department collaborated with the Washtenaw County Water Resources Commissioner's Office and the Huron River Watershed Council and consulted with Friends of West Park and neighbors and interested residents to redesign West Park. The overall aim was to make West Park more inviting for everyone while also easing stormwater and water quality issues. In 2008, at public meetings focused on the West Park area, resident voiced three main priorities: 1) deal with flooding in the park, 2) improve access, and 3) preserve the recreational amenities. A master plan that was drafted:

West Park Recreation & Stormwater Master Plan

Several factors came together as impetus for the resulting 2009 stormwater management part of West Park's renovation. There had for a while been vocal advocates in the public interested in 'daylighting' Allen Creek. Daylighting the creek would be a difficult and highly costly endeavor given the number of buildings standing where the Allen Creek drain runs. The West Park renovation project was an opportunity to bring some daylight into one of the tributaries --West Park's old stream.

The 2009 stormwater project was an opportunity to solve these problems. It transformed the park's landscape to bring daylight to parts of West Park's old stream and amazing swirl concentrators to help clean the water. It also dug the ground to help produce stormwater-slowing and

stormwater-holding areas that came to life as vibrant bioswales, an active wetland, and a duck-filled retention pond.

The water management system with bioswales and wetlands cleans the water both the old-fashioned way and with the clever man-made swirl concentrators. And the system's ability to slow down and capture stormwater has grown in importance as our area has come to experience more severe rain events of higher intensity and shorter duration. The water system in West Park has the added enjoyment of a hint of the wilder side of nature. The pond, bioswales, and wetlands have come to life! If you pause quietly at West Park's pond early on a spring or summer morning you just might see a blue heron fishing there. And throughout the park you are greeted with sights and sounds of many sorts of wildlife—ducks, hawks (though they are pretty quiet), red-winged blackbirds, goldfinch, frogs, turtles, muskrats, butterflies and dragonflies.