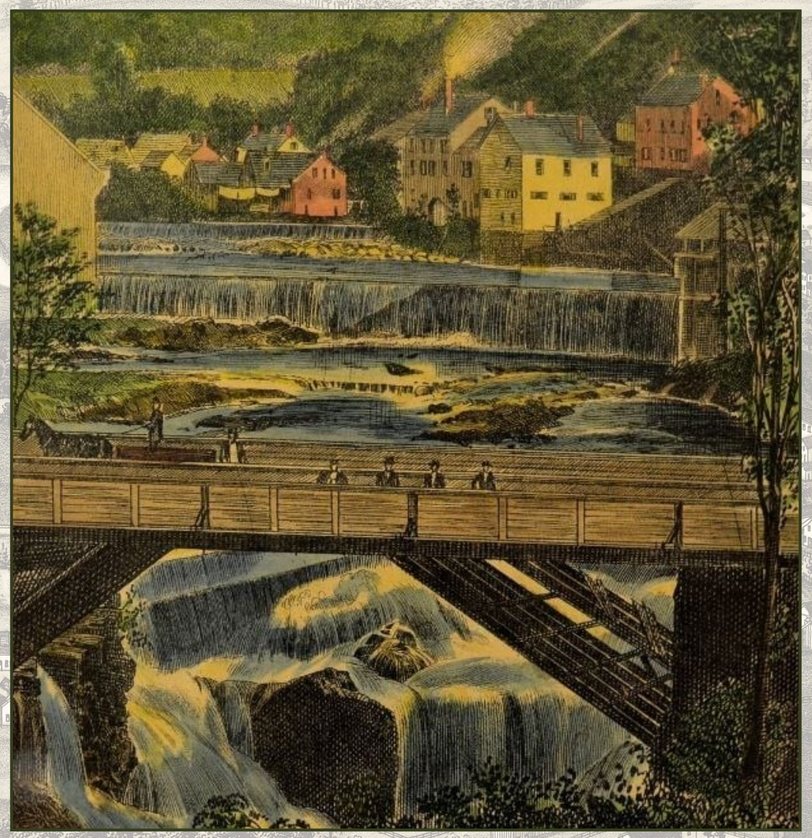
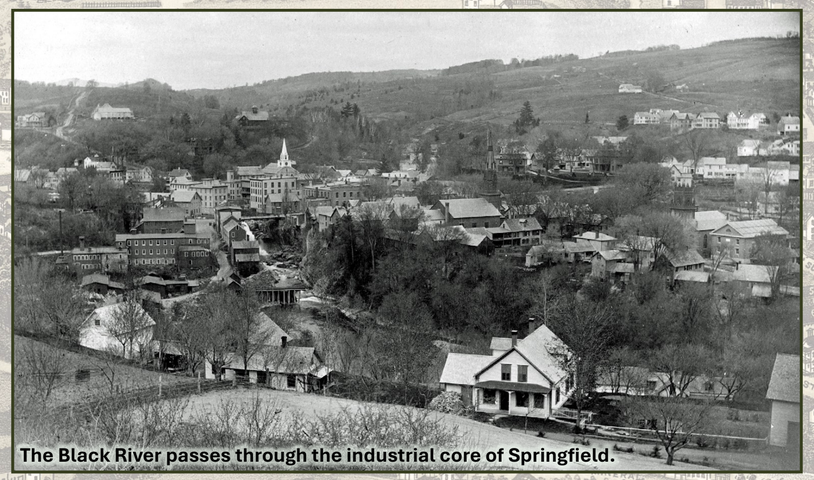
EARLY DAMS ON THE BLACK RIVER

Springfield's industrial development began along the Black River, where early settlers harnessed the river's dramatic 110-foot fall for power. Around 1774, William Lockwood built a log cabin and sawmill on an island near today's Parks & Woolson building. Isaac Fisher later acquired much of the riverfront and created a series of dams to reuse water multiple times as it descended through town.



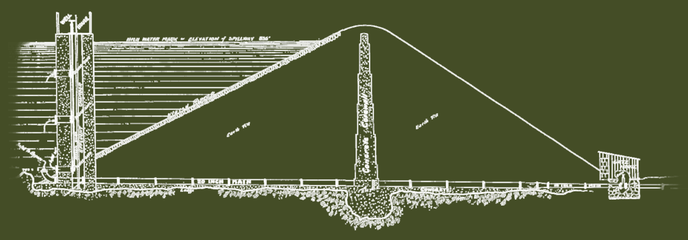


The Black River passes through the industrial core of Springfield.

By the early 1800s Springfield had over 2,300 people, with carding mills, foundries, tripham-mer shops, and a growing industri-al identity. Isaac Fisher's dam system enabled a wave of water-powered cotton, wool, and grist mills. A diversion canal and added dams increased utility, attracting spinning wheel makers, tanneries, and merchant shops. By the mid-1800s, six dams existed within less than a mile. Many of these early structures were destroyed by the freshet of 1869.



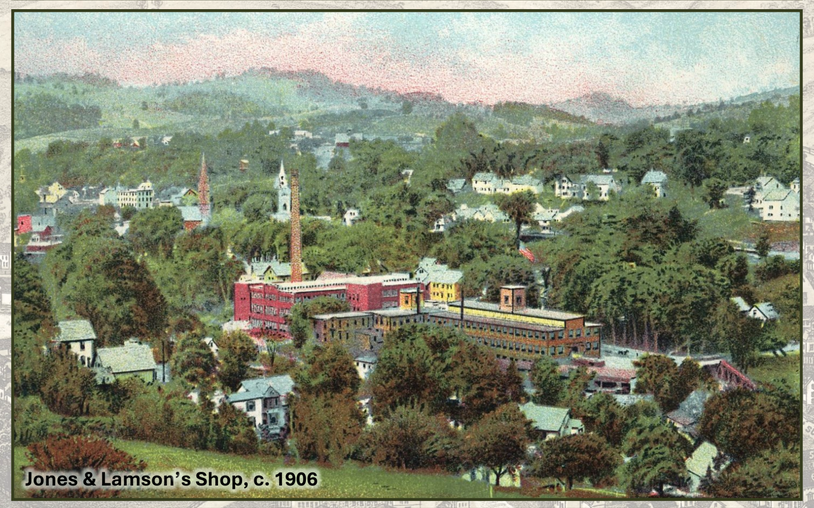
THE SPRINGFIELD DAM REMOVAL PROJECT



PRECISION VALLEY AND ECONOMIC SHIFTS

By the late 1800s, Springfield flourished as a manufacturing hub. The John T. Slack Corporation, Jones and Lamson, and Lovejoy Tool Company anchored local industry. The arrival of the Fellows Gear Shaper Company marked the rise of the machine tool sector and earned Springfield the nickname "Precision Valley." The industry shaped every aspect of life—from steady employment to civic investment by factory owners. But Springfield's prosperity faced major challenges: World War I disruptions, the Great Depression, and postwar economic shifts. World War II brought temporary growth as factories converted to war production. Labor shortages led to wage hikes and brought women and immigrants into the workforce. Lodging and services strained to keep pace. After the war, global competition and technological changes weakened Springfield's industrial base. Though no longer a manufacturing powerhouse, Springfield's downtown mills found new life through adaptive reuse as the town transitioned into a residential community supported by regional commuting.

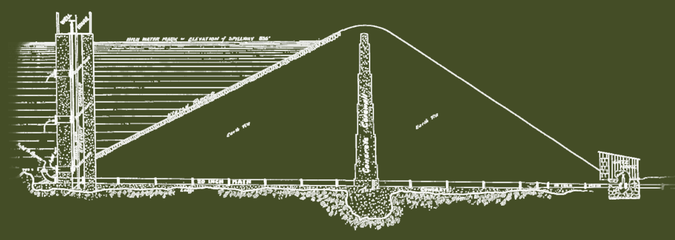

John T. Slack Corporation, 1920


Jones & Lamson's Shop, c. 1906




Gilman Shop workers

THE SPRINGFIELD DAM REMOVAL PROJECT



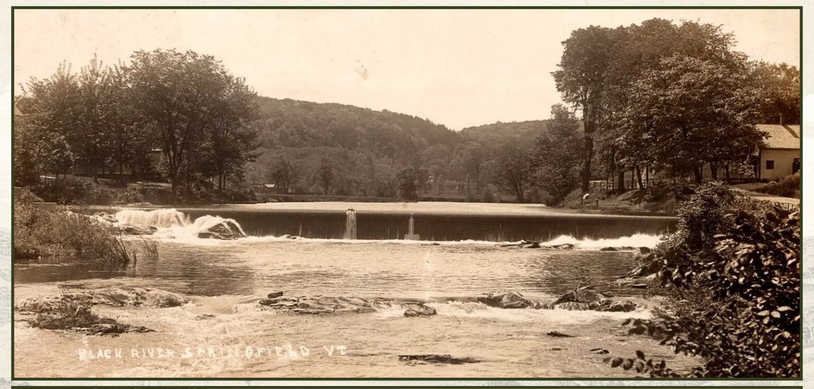
SPRINGFIELD'S INDUSTRIAL DAMS

The Slack Dam, originally built around 1907, supported both the Slack Shoddy Mill and Springfield's electric railway. It was re-



Slack Dam, c. 1905

built in 1986 and includes a concrete gravity dam, Kaplan turbine, and remnants of earlier hydroelectric infrastructure. The Lovejoy Dam, constructed ca. 1913, replaced earlier dams on the same site and powered machinery for the Lovejoy Company using Francis

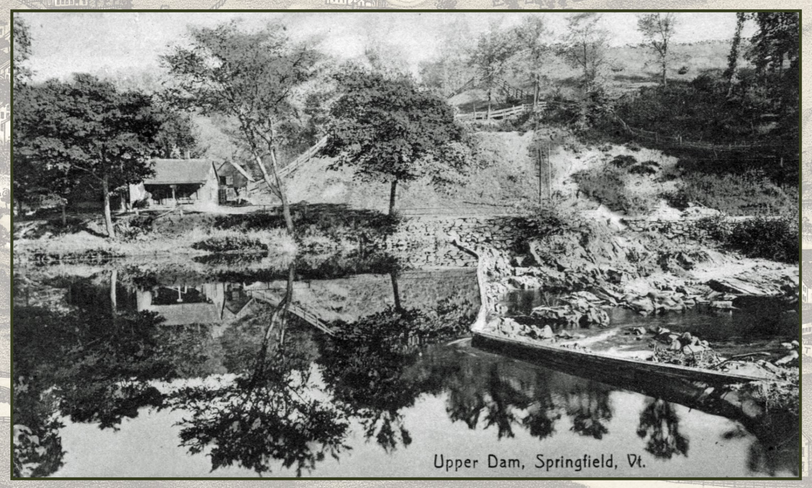






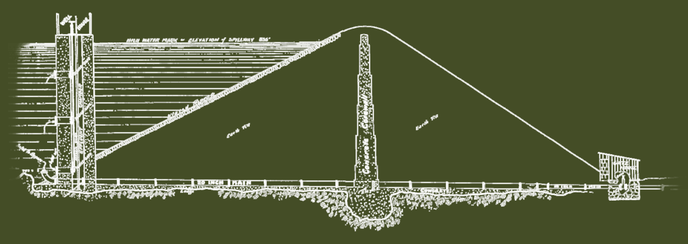
Parks and Woolson

turbines. The Fellows Dam, built in 1917–18, replaced earlier wooden structures lost in floods and supported the Fellows Gear Shaper Company. It includes a 10-foot-high dam and 1917 powerhouse. These dams, along with industrial shops and hydro stations, played an essential role in Springfield's machine tool era, helping power its mills and factories into the 20th century.



Upper Dam, Springfield, Vt.

THE SPRINGFIELD DAM REMOVAL PROJECT



THE FIRST AQUEDUCTS

Water systems in Springfield date to the early 1800s.



NOTICE.

FIRST MEETING OF THE SPRINGFIELD WATER COMPANY.

The corporators of the Springfield water company are hereby notified to meet at the o&ce of H. H. Blanchard in Springfield, Vt., on Wednesday Jan. 21, 1903 at 2 o'clock in the afternoon for the purpose of electing the officers of said corporation and do any other business necessary to complete the organization of said company.

LORING N. FARNUM,
GEORGE GOODHUE,
FRED L. HOWE,
} Corporators,

Springfield, Vt., Jan. 8, 1903.

The Springfield Aqueduct Society, incorporated in 1813, likely improved existing spring-fed systems. In 1816, a second group formed to serve the village center, but evidence suggests no major construction occurred. By the 1880s, residents still relied on hill springs, sharing access through small, informal pipe networks. The Summer Hill aqueduct used a central dividing box to distribute spring water to nearby homes.



Summer Street



SUMMER ST. SPRINGFIELD, VT



Pleasant Street, Springfield, Vt.

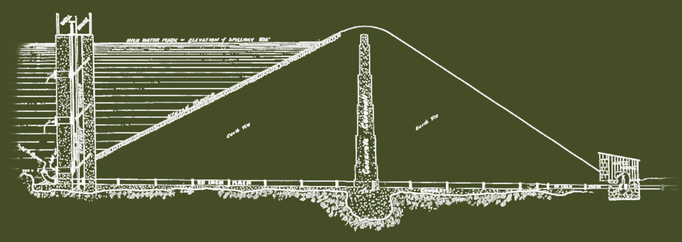


Main Street



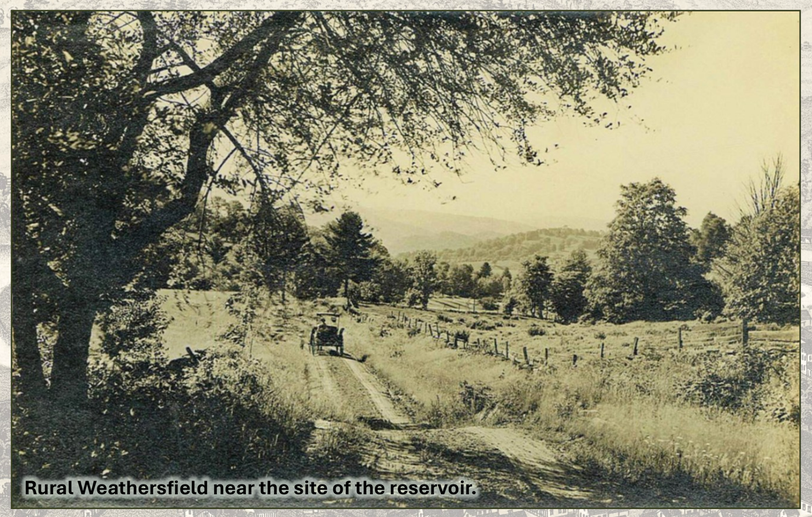
Elm and River Sts. Springfield, Vt

The system conceived of by Albert Brown in 1884 evolved into the Springfield Water Supply Company, using gravity-fed lead pipes and four springs. The system delivered 4,800 gallons daily to just 25 taps. Despite increasing the number of springs, customer numbers declined.



BUILDING THE RESERVOIR

By 1903, Springfield needed a more robust water supply. Trustees selected a reservoir site in Weathersfield on land known as Aldrich Pond.

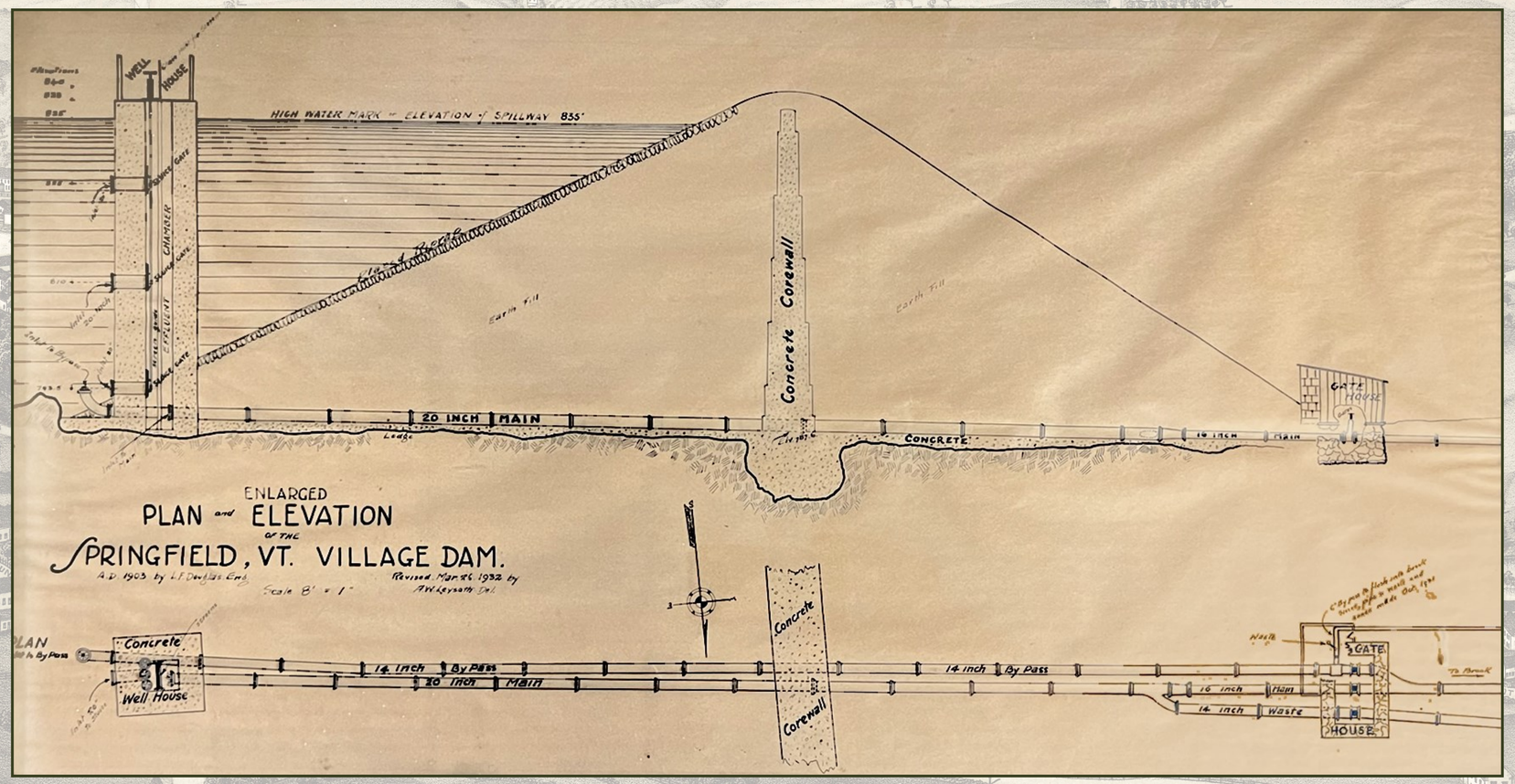


Rural Weathersfield near the site of the reservoir.

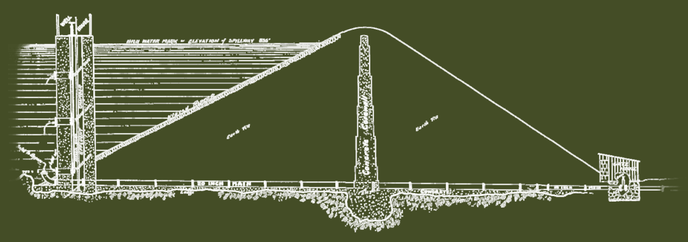
Franklin H. Dewart, a Harvard-trained engineer and Vermont legislator, led the project design.



Engineers estimated a 45-foot dam would store 45 million gallons—enough for 180 days of full use. The site, once a source of ice, was preferred over Wilson Pond and Howe Springs. Estimated costs reached $93,000, including 70 hydrants. Springfield had secured most of the watershed's 100 acres by mid-1903.



THE SPRINGFIELD DAM REMOVAL PROJECT



BUILDING THE RESERVOIR

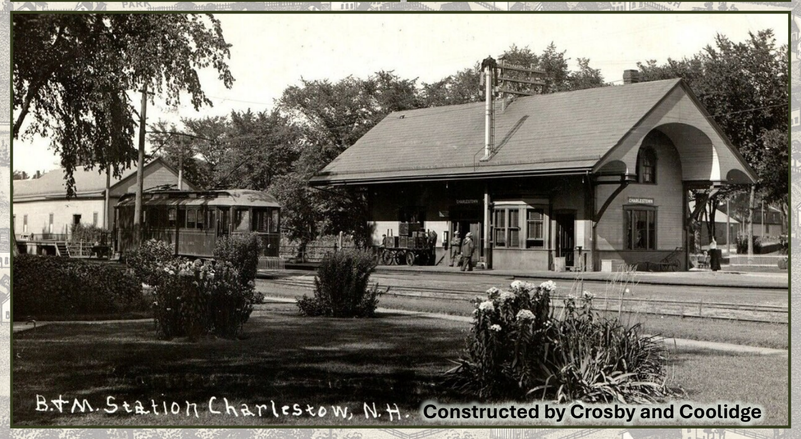
Edward Crosby and Marcus Coolidge, experienced in rail and water projects across New England and Canada, won the dam contract.



Edward C. Crosby



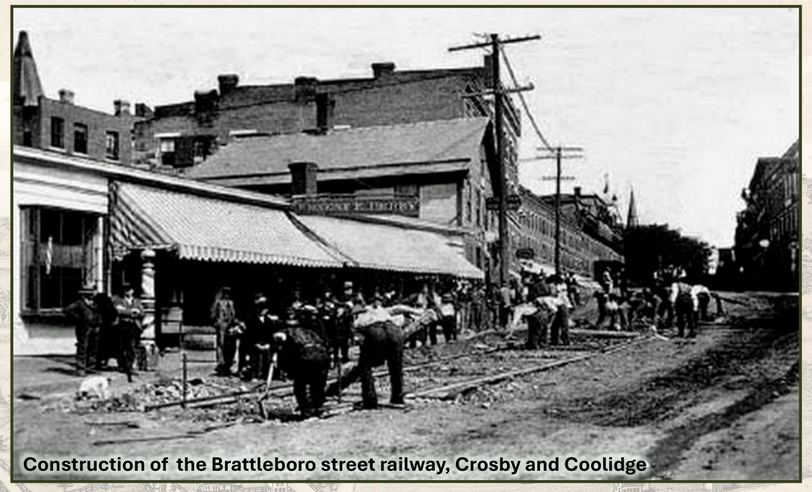
Marcus A. Coolidge



B.&M. Station Charlestown, N.H. Constructed by Crosby and Coolidge

Work began in June 1903. Over 100 Italian laborers—many from local railroad construction—cleared land and dug by hand. Despite early tensions, they were eventually accepted by the community, though local thefts led to renewed friction.

In October 1903, the town connected the new dam and 15-acre reservoir to water mains serving Seminary and Summer Hills. Crews completed the system in early 1904 at a total cost of $161,739. Water traveled 4½ miles from the dam to the village, descending 268 feet to Main and Park Streets and 350 feet to Clinton Street, providing reliable pressure and a vital new supply.



Construction of the Brattleboro street railway, Crosby and Coolidge

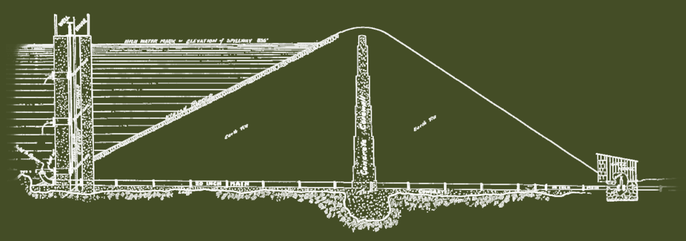
A gang of thirty-six Italians came last Friday, seventy-seven more came Monday night and seven more Tuesday night to work on the water works. The brush and trees on the site of the proposed reservoir have been removed and excavations for the dam commenced.

The Springfield Reporter, 26 Jun 1903



Trees and brush were removed from the site of the reservoir.

THE SPRINGFIELD DAM REMOVAL PROJECT



BUILDING THE RESERVOIR



Workers excavate a ditch for the concrete core of the dam.

> Sixty Italians have been added to the water works force this week and there are now 250 men working on the dam and ditch.

The Springfield Reporter, 21 Aug 1903



Formwork for the concrete core of the dam is in place.

Dam Specifications

- 53 feet high; 287 feet long on the top, and 50 feet long on the bottom.
- The core of the dam is concrete from 2 to 15 feet thick backed by embankments of selected clay, sand and gravel. Upper side covered with layer of heavy placed rip-rap to a level above the line of the wash.

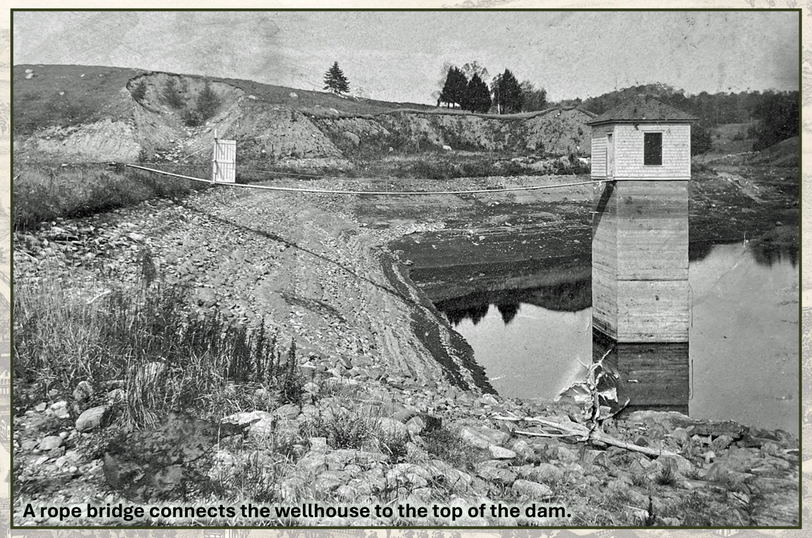
> The new water system is fast approaching completion and many of the Italian noblemen, who have spent the summer here, have left for winter resorts, The concrete core of the dam at the reservoir is complete. A little filling has yet to be done and a gate house is to be built. The digging of the ditches for the pipes is practically finished Some blasting has yet to be done but this will soon be finished.

The Springfield Reporter, Nov 1903

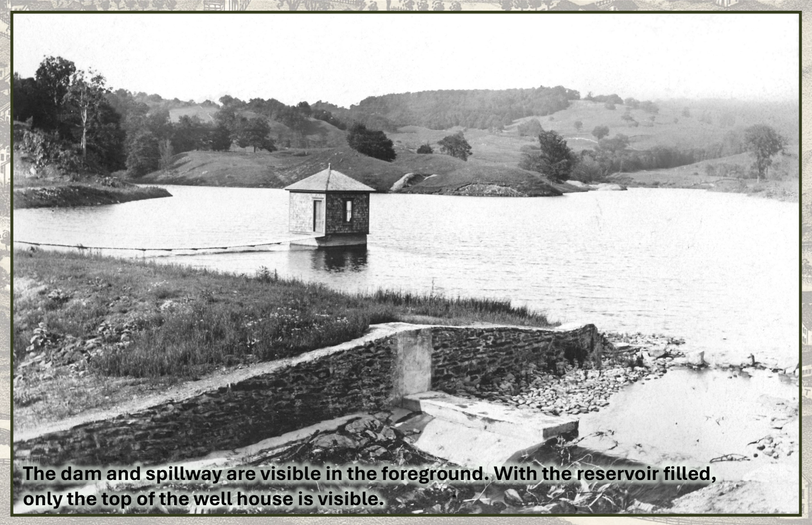
Well House Control

Water from the pond was admitted to the concrete well house through three sluice gates, which could be adjusted to:

- Admit water to the main.
- Flush the well house and the main above the gates and draw off the sediment through the 14 inch waste pipe into the brook.
- Relieve the spill way, if accidentally congested, by drawing surplus water through the waste pipe.
- Take water directly from the pond through a 14 inch bypass into the main below the gates, in case of trouble with the screens, well house or main above the gates.

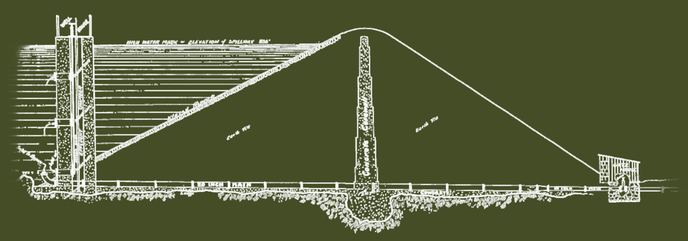


A rope bridge connects the wellhouse to the top of the dam.



The dam and spillway are visible in the foreground. With the reservoir filled, only the top of the well house is visible.

THE SPRINGFIELD DAM REMOVAL PROJECT



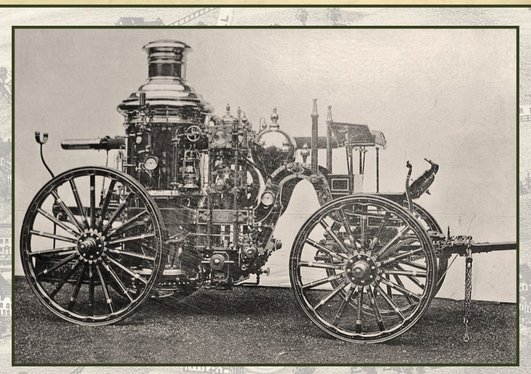
FIRE PROTECTION

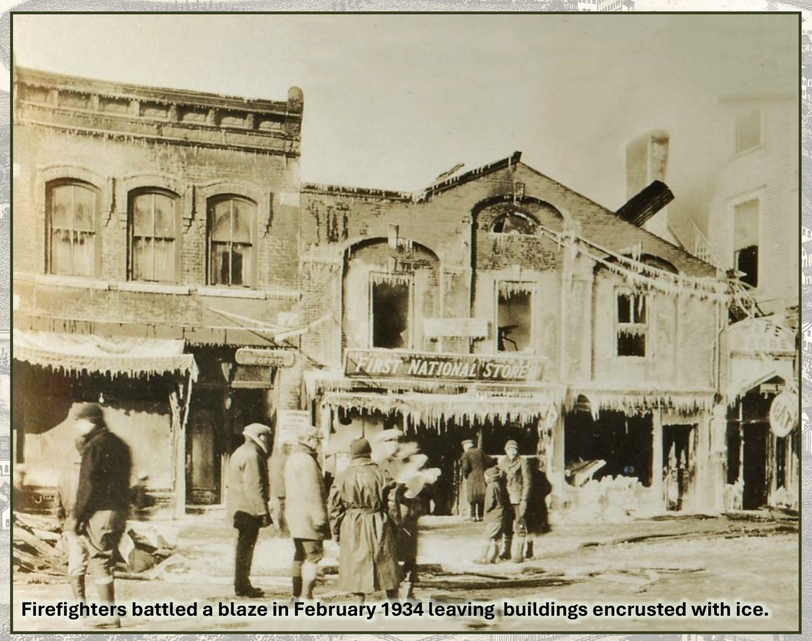
The Springfield Water Company reservoir supplied water for domestic use—accommodating population growth and changing technologies like indoor plumbing—sanitation, and fire protection.



A fire in 1908 destroyed streetcars and the garage where they were stored.

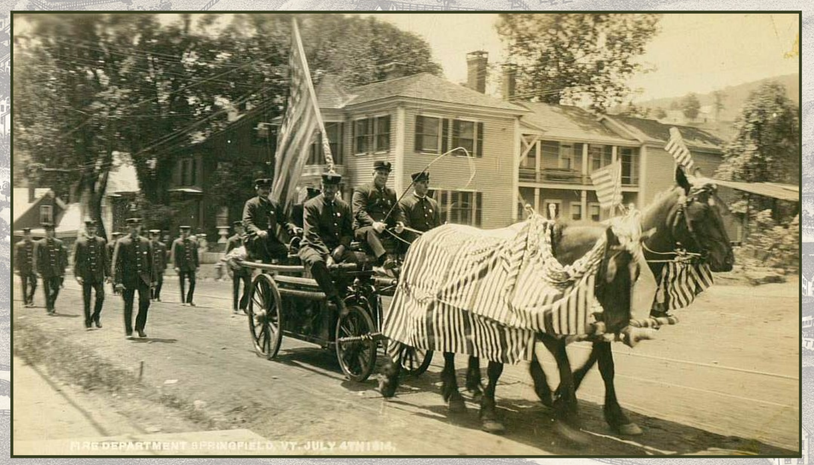




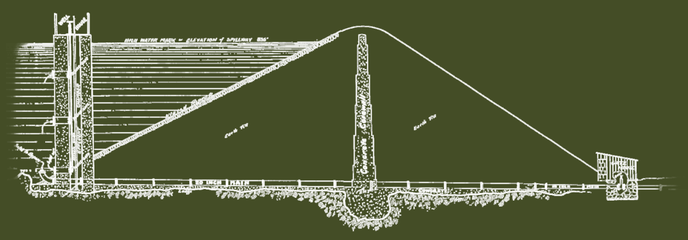


Firefighters battled a blaze in February 1934 leaving buildings encrusted with ice.





THE SPRINGFIELD DAM REMOVAL PROJECT



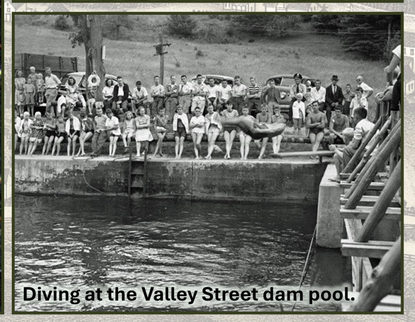
COMMUNITY AND RECREATION DAMS

Dams in Springfield served civic purposes beyond industry. The Gilman Dam, approximately 7 feet high, originally powered 19th-century machine and woodworking shops. Later, it was modified for hydroelectric use with Francis turbines and belt-driven generators. The Comtu Falls Dam, built in 1902 and repaired in 1952, replaced a long sequence of dams that began in 1774 with William Lockwood's first sawmill. It supported grist and sawmill operations before conversion to hydroelectricity.

The Valley Street Dam, completed in 1938 as a Works Progress Administration project, was built to create a public swimming pool—the first such facility for Springfield residents. Designed to be 300 feet long and 60 feet wide, it featured a graded beach, diving platforms, and received contributions from local civic organizations. Its creation represented a shift from industrial to recreational uses of Springfield's waterways and was praised for its pure water and civic utility.




Valley Street dam grand opening.

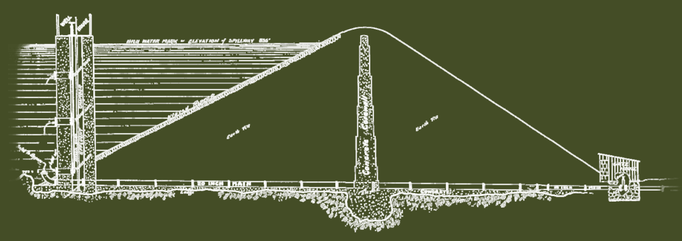

Diving at the Valley Street dam pool.

The Springfield Reservoir was a community gathering place. In the late 1920s, hundreds of anglers lined the banks on opening day. Reports noted cold weather, poor catches, and police supervision to manage crowds. While recreation was unofficial, the reservoir remained part of daily life for both water supply and leisure—until quality issues and restrictions limited access.


ARMY OF ANGLERS
AT TOWN RESERVOIR

Chills Only Reward On Opening Day
of Trout Fishing Season

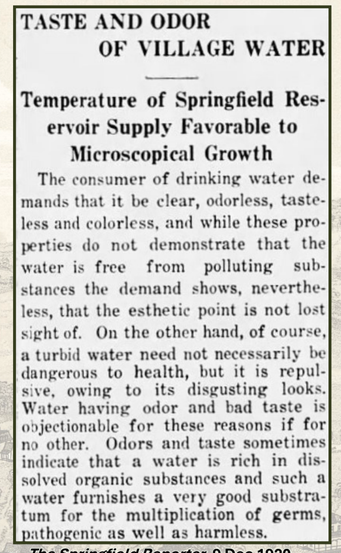
THE SPRINGFIELD DAM REMOVAL PROJECT



FROM RESERVOIR TO WELLS

Droughts in 1923 and 1929 severely lowered reservoir levels. Though officials insisted the water remained safe, rumors linked the water to illness. The town began regular testing to reassure the public. During droughts, officials urged residents to conserve, even as the water supply dropped eight feet below the spillway. Tensions between scientific reassurance and public fear persisted as usage grew.

Breaks in the main line occurred repeatedly in the 1930s. In 1941, the town turned to new groundwater sources. Metcalf & Eddy identified sand-and-gravel aquifers at Chapman Meadows. By 1944, the town operated 30 wells,

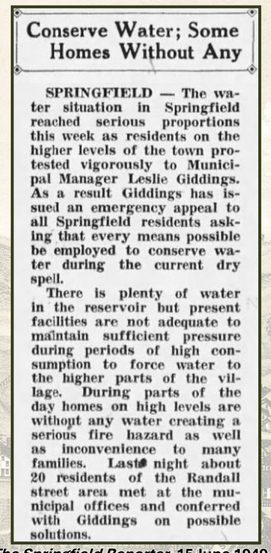


TASTE AND ODOR
OF VILLAGE WATER

Temperature of Springfield Reservoir Supply Favorable to Microscopical Growth

The consumer of drinking water demands that it be clear, odorless, tasteless and colorless, and while these properties do not demonstrate that the water is free from polluting substances the demand shows, nevertheless, that the esthetic point is not lost sight of. On the other hand, of course, a turbid water need not necessarily be dangerous to health, but it is repulsive, owing to its disgusting looks. Water having odor and bad taste is objectionable for these reasons if for no other. Odors and taste sometimes indicate that a water is rich in dissolved organic substances and such a water furnishes a very good substratum for the multiplication of germs, pathogenic as well as harmless.

The Springfield Reporter, 9 Dec 1920



Conserve Water; Some Homes Without Any

SPRINGFIELD — The water situation in Springfield reached serious proportions this week as residents on the higher levels of the town protested vigorously to Municipal Manager Leslie Giddings. As a result Giddings has issued an emergency appeal to all Springfield residents asking that every means possible be employed to conserve water during the current dry spell.

There is plenty of water in the reservoir but present facilities are not adequate to maintain sufficient pressure during periods of high consumption to force water to the higher parts of the village. During parts of the day homes on high levels are without any water creating a serious fire hazard as well as inconvenience to many families. Last night about 20 residents of the Randall street area met at the municipal offices and conferred with Giddings on possible solutions.

The Springfield Reporter, 15 June 1949

two pumping stations, and a chlorinator. A 600,000-gallon concrete tank on Foster Avenue helped maintain pressure, especially in higher neighborhoods. Eventually, this well system reduced reliance on the reservoir, though it remained connected until 1979.

Springfield hired multiple firms to evaluate and expand its water infrastructure from the 1940s through 1960s. Barker & Wheeler's 1953 report called for better water pressure and fire protection. The town added new mains, hydrants, and wells—raising daily capacity to over 1.1 million gallons.

A 1969 flood overtopped the dam, triggering damage and regulatory scrutiny. In 1978–81, state and federal engineers deemed the dam unsafe. The reservoir was disconnected in 1979. A 2010 state memo called the dam a "significant hazard" due to slope instability, poor spillways, and corroded piping. Despite multiple votes, residents rejected selling or breaching.

