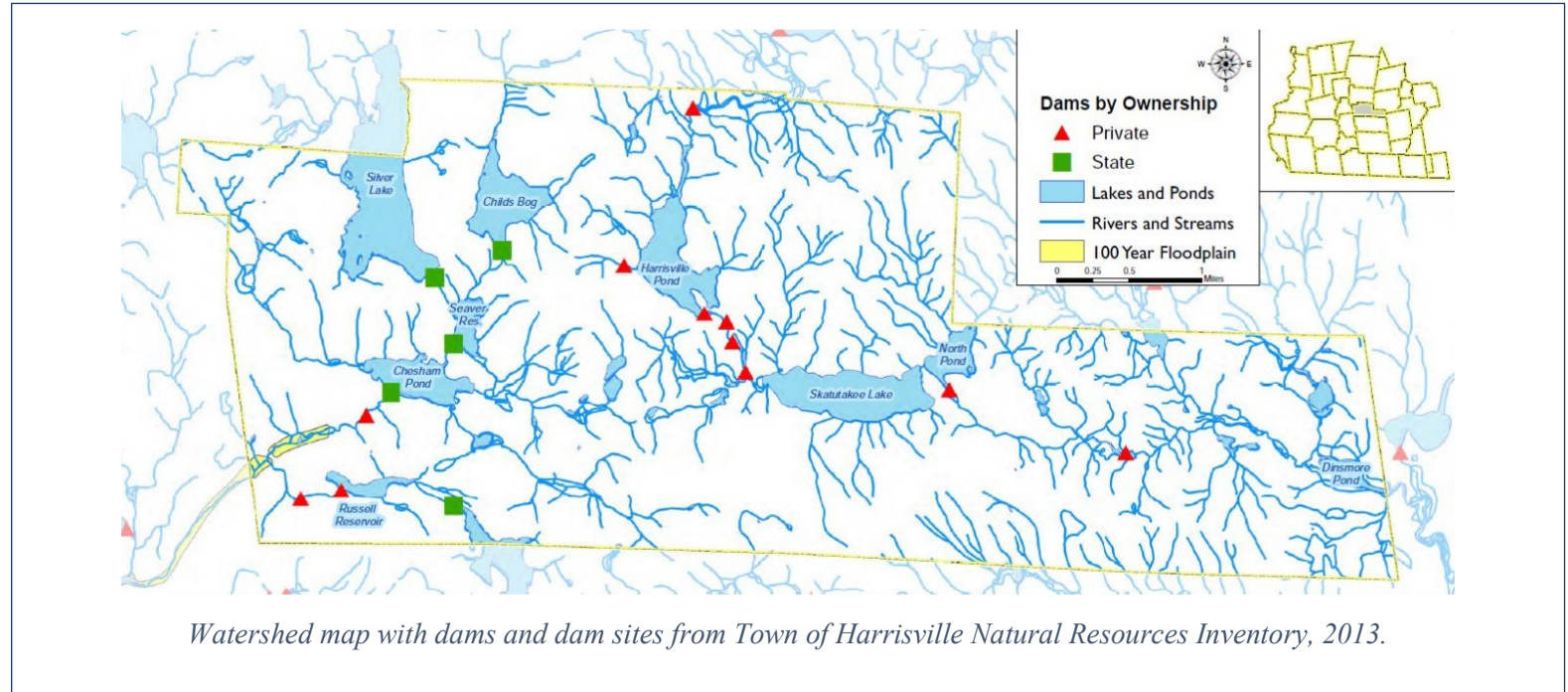


The Dams of Harrisville, New Hampshire

Harrisville can be said to owe its very existence to its water resources and the dams built to control the waterpower of its streams. Water ran the sawmills, woodenware shops, and woolen textile mills that were the basis of the early economy. Reservoirs were key to maintaining power for industry through dry seasons, and the ponds that were created then form the landscape enjoyed today. Within the small town, there are eleven active dams and several more in ruins.

On a watershed divided between the Merrimack and Connecticut rivers, two-thirds of Harrisville’s land drains easterly via Nubanusit Brook, known locally as Goose Brook, and the rest flows west by Minnewawa Brook and its tributaries. Each brook has a series of dams forming an interconnected waterflow system that was managed for industrial and then hydroelectric power during the nineteenth century and first half of the twentieth. Most of Goose Brook fell under control of the Cheshire Mills in Harrisville Village, while Minnewawa rights were owned by the Breed Pond Company of Marlborough and later by the electric company.

Nubanusit/Goose Brook flows southeast from Spoonwood Pond and Nubanusit Lake in Nelson and Hancock to the McDowell Reservoir in Peterborough and continues to the Contoocook and then the Merrimack River. The name Goose Brook is said to refer to the birds kept by a local farmer. Nubanusit was a Native America word, interpreted to mean “little waters” or “small summer place.” There are seven dams and dam sites on the brook within Harrisville. The Great Meadows near the Nelson town line were once dammed in the small mill village that was given the name



“Mosquitobush,” for reasons that are not hard to guess. In the town center, Harrisville Pond is controlled by dams at the Harris Mill and Cheshire Mills of Historic Harrisville Inc., where the brook flows through a stone-lined canal. Downstream, Lake Skatutakee is a summer cottage community, the water level controlled by a dam on the outlet, North Pond. East Harrisville or Eastview also had dams and mills at one time. Dinsmore Pond, a large wetland on the eastern edge of town, is the only local pond formed by a natural beaver dam.

Minnewawa Brook begins at Silver Lake, once called Breed Pond, which is ringed by summer cottages. The stream flows southwest through Harrisville to

Marlborough. The waters join Otter Brook to the Branch River, and then the Ashuelot to the Connecticut. Minnewawa meant “many waters” according to *Indian Place Names of New England* by John Huden, 1962. It was sometimes known as Breed Pond Brook, the Breed Pond Association controlling the streamflow for some seventy years. There are seven dams and dam sites in the Minnewawa watershed. It receives water from Childs Bog at Seaver Reservoir and flows through Chesham Pond, which is fed by several smaller streams, through the historic village of Chesham, formerly “Pottersville.” Near the Marlborough town line, a tributary called Pratt Brook enters from the Howe and Russell reservoirs.

Wood products were important early on. Before 1870 when the town of Harrisville was formed, it was the northern part of Dublin and the southern part of Nelson. Settlement in the late 1700s relied on sawmills to process the timber as land was cleared and homes built. Much of the hilly land was not good for farming, but it produced wood for lumber, shingles and clapboards, tools, and fuel for heating and cooking. By the early 1800s, there were several sawmills and woodenware shops throughout the area.

Woolen Textiles were the focus of Harrisville Village, which developed on the Dublin-Nelson line at the outlet of a natural pond where the brook falls through a steep gorge, dropping a hundred feet in a quarter mile. Today the Harrisville Historic District is a National Historic Landmark, significant as a textile mill village that survives in its original form. The first mill was a saw and grist mill built in 1774 by Abel Twitchell. The woolen cloth business began in 1799 when Jonas Clark, who

married Twitchell's daughter, had a fulling and finishing mill where home-woven cloth was shrunk and strengthened by washing and pounding with large wooden hammers raised and dropped by the turning of the waterwheel. Twitchell and another son-in-law Bethuel Harris set up water-powered carding machinery where the raw wool was prepared for spinning. All woolen processes – carding wool, spinning yarn, weaving cloth, finishing, and dyeing – were combined in one place in the 1820s by Bethuel Harris and his sons Cyrus and Milan. In 1832, Milan Harris built a new factory, the Upper Mill now occupied by Harrisville Designs, which is the oldest mill now standing. Downstream, the Granite Mill that became Cheshire Mills Mill No. 1 was built in the 1840s. After the death of Cyrus Harris, Cheshire Mills Co. was formed by Colony and Faulkner of Keene and brick Mill No. 2 was added in 1859. The flow from Harrisville Pond was insufficient for his machinery so Milan Harris had acquired water rights at the outlet of Nubanusit Lake in the 1830s. In the 1850s, the Colonys built a new dam at Spoonwood Pond to increase the reservoir. Cheshire Mills Co. eventually acquired all the Harris buildings and water privileges and at one time had three water wheels or turbines running nine carding machines, 4,000 yarn spindles and forty-four broad looms.

Marlborough factories downstream from Harrisville on Minnewawa Brook included woolen mills and woodenware factories that made things like pails, boxes, clothespins, and bobbins for weaving, all concentrated in a steep and deep stretch of the valley. To provide continuous waterflow to their industries year-round, a group of Marlborough investors formed the Breed Pond Company in 1851. Breed Pond, now Silver Lake, became



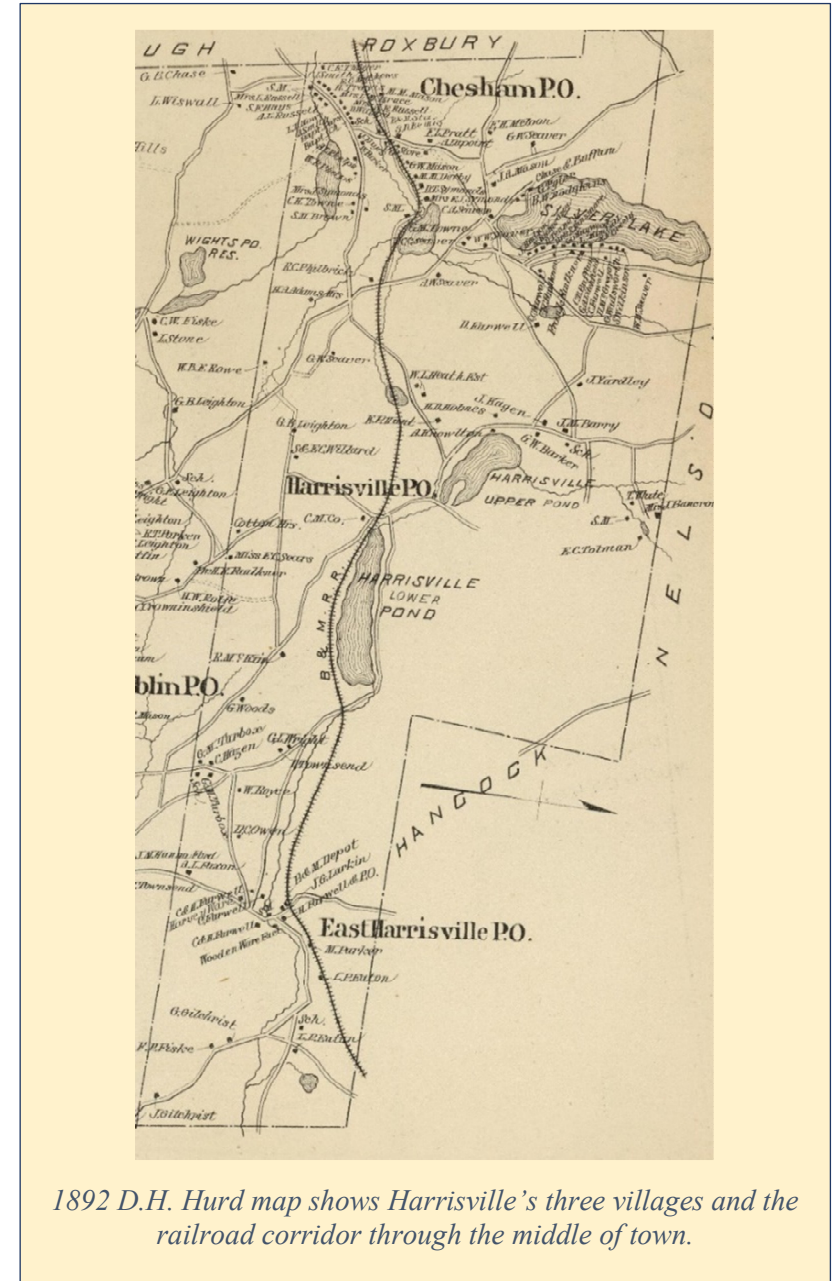
1858 Cheshire County map detail shows Milan Harris Upper Mill, Harris & Hutchinson middle mill that is now gone, and Cheshire Mills granite mill.

a reservoir where water was held for release during dry seasons. To meet increasing demands, additional reservoirs were created including Chesham Pond in 1870, another pond in Marlborough, and then the Howe Reservoir. The older small mills along the brook retained water privileges on the Minnewawa as well as the Nubanusit, using the water as it flowed past. At one time there were about a dozen sawmills and woodenware shops using the waterpower in addition to the larger mills downstream.

The **Manchester and Keene Railroad** built through the mill villages of Harrisville and Pottersville/Chesham was the impetus for the town separation. Harrisville Village was on the chosen route at a low point in the hilly area, and when Dublin and Nelson declined to pay the required fees, residents led by members of the Harris and Colony families formed a new town and provided the money. The railroad was built in 1878-79 and was fully operational by 1880. It connected the western and central parts of the state and Keene with Boston. There was a daily morning and evening train in each direction and more in the summer. The trains ran for just over fifty years and the tracks have been gone since the 1930s, but the route can still be traced, with sections maintained as rail trails. Harrisville's ponds became scenic and recreational resources when the railroad brought summer visitors to the area in the 1880s. Families from Massachusetts and New York built cottages on Lake Skatutakee. Businessmen from Keene and Marlborough had summer homes on Silver Lake where their families stayed while they commuted during the week.

Electricity was introduced in the early 1900s and the streamflow was adapted to run electric generators. Factories were converted to electricity and machinery ran on power that was produced elsewhere. The Cheshire Mills on Nubanusit Brook were increasingly powered by electricity that came from the Minnewawa. The Ashuelot Gas and Electric Company, part of Keene Gas and Electric, built the Minnewawa power plant on the brook in Marlborough in 1923. The rights to the reservoirs upstream were acquired, and dams were rebuilt with concrete, including the Chesham Pond Dam, Seaver Reservoir, Childs Bog and Howe Reservoir dams, and the Silver Lake Dam. In 1926, regional electric companies consolidated as Public Service Company of New Hampshire (PSNH), predecessor of Eversource. There were more than thirty hydroelectric plants in the state at one time, but they were no match for the output of the coal and oil burning plants of the 1950s, and most, like the Minnewawa plant, shut down in the 1960s.

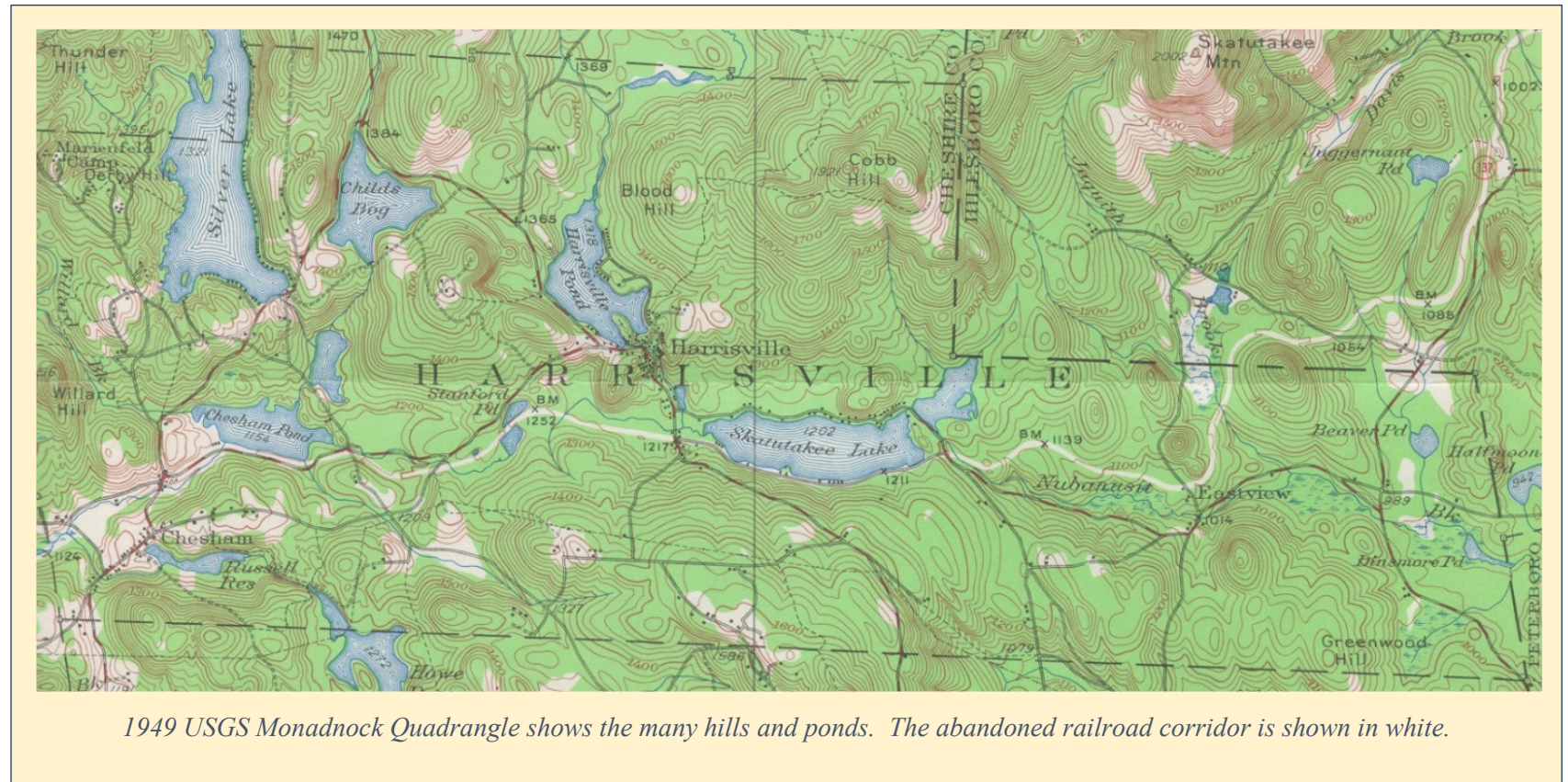
Recreation and waterfront homes on the larger lakes and ponds meant that dams were needed to maintain water levels even after the flow was no longer used for power. The last woodenware shops and sawmills operated into the early twentieth century, but they were not rebuilt after loss to fire or flood. Russell Reservoir was given to the Town of Harrisville in 1940 by the Russell family whose mill had been gone for over two decades. At that time, there were over a hundred summer homes and there were more summer residents than year-round. The Skatutakee dam is maintained by the Lake Skatutakee Association, a group of lakeshore property owners.



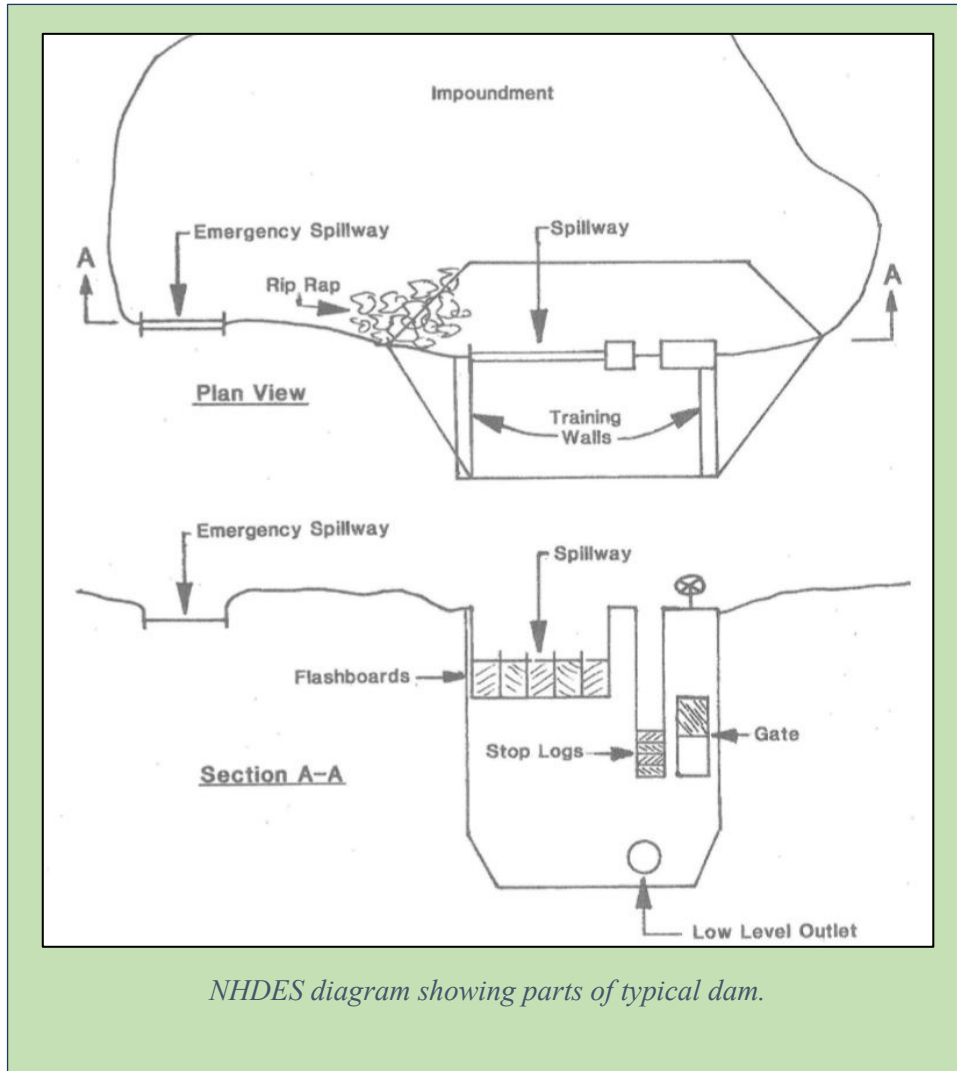
1892 D.H. Hurd map shows Harrisville's three villages and the railroad corridor through the middle of town.

Historic Harrisville, Inc. was formed in 1971 by preservationists and local citizens including members of the Colony family, after the closure of the Cheshire Mills, one of the last New England textile factories. The non-profit group purchased and restored buildings for lease to new businesses, not as a museum but as a working village. Three dams are maintained, and the water runs an electric turbine producing power once again.

The **State of New Hampshire** has owned the dams on Minnewawa Brook since 1967 when PSNH conveyed them to the NH Water Resources Board for recreational purposes for the benefit of the people. Dams, which are also critical for flood control and protection of downstream property, became public infrastructure like roads and bridges. The dams at Silver Lake, Childs Bog, Seaver Reservoir, Chesham Pond, and Howe Reservoir are among the roughly 275 dams now maintained by the Dam Bureau of the NH Department of Environmental Services (NHDES).



Dam Basics



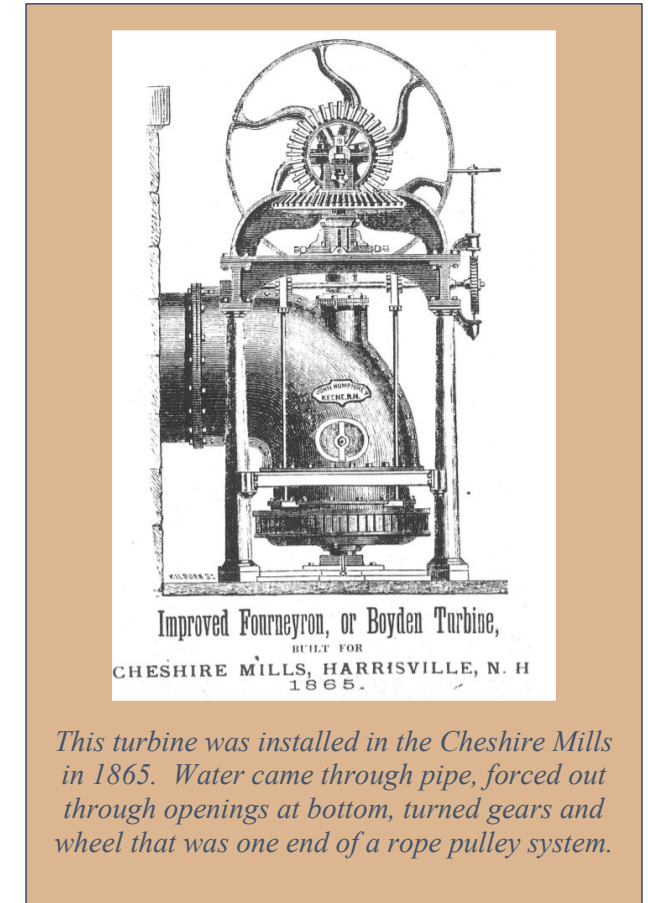
NHDES diagram showing parts of typical dam.

By definition, a dam is a solid wall or mound of earth across a stream valley, that holds back water and releases it as needed. Dams impound water for hydroelectric and industrial power, drinking water, recreational uses, flood control, and fire protection.

Harrisville's dams date from the nineteenth and early twentieth centuries and are a combination of stone, earth, concrete, and wood. All are different and most were rebuilt more than once. Types of dams used historically were the timber crib dam built of heavy timbers stacked like the walls of a log house and filled with earth and rubble or the timber plank dam with a sloping wooden spillway. Dry stone masonry dams have vertical stone walls filled with rubble and earth. An embankment dam has sloping faces of built-up compacted fill and can have a concrete, stone, or timber spillway. A concrete gravity dam has a sloping downstream face. Some dams have a concrete covering and concrete supports over an older stone or timber core.

Excess water flows over the long flat spillway or through an overflow channel when the pond is full. Spillway height is sometimes raised by added flashboards that can be removed in the event of a flood. Water can be released from behind the dam through a sluiceway, flume, or penstock pipe by opening the flat wood or metal gate that slides or flaps across the outlet opening. The mechanism by which the gate is opened and closed is called the gate works.

Power is created when the water passes over a waterwheel or through the turbine and is discharged into the stream below. Traditional "pitch-back" wooden water wheels were used before 1840, powering machinery by turning a system of belts and pulleys. The water dropped onto the wheel near the upper point and turned it inward toward the fall to discharge below. Metal turbines that spun horizontally as water was discharged through them from a pipe were introduced in 1840s.



This turbine was installed in the Cheshire Mills in 1865. Water came through pipe, forced out through openings at bottom, turned gears and wheel that was one end of a rope pulley system.

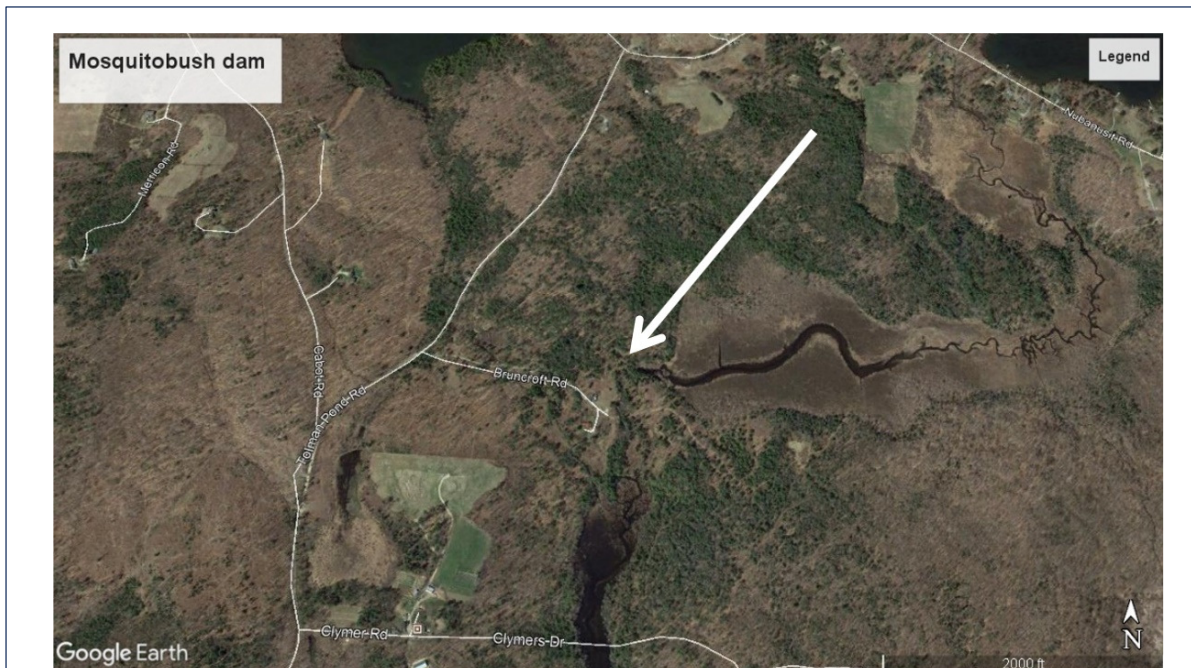
NUBANUSIT BROOK OR GOOSE BROOK WATERSHED

Mosquitobush Dam Site, Nubanusit Brook off Bancroft Road, 109.07

The northernmost dam site in Harrisville is on a section of brook historically known as the Great Meadow. The mill site with stone foundations is owned by Historic Harrisville, Inc., and accessible by trails along the brook from the end of Bancroft Road. There were once saw and grist mills, a clothespin and rolling pin factory, and several houses in the now wooded area. Eben C. Tolman was the mill owner in the late 1800s and provided cordwood, building materials and wood products like battens and cloth boards to the textile mills. Wilmer C. Tolman ran the water-powered sawmill in the early twentieth century. The building straddled the stream with turbine in the basement level and the two 5' steel circular saws above. Hydraulic engineer John Humphrey of Keene made the iron turbine in his foundry. The plank dam had flash boards on top that were closed at the end of the day so the pond would fill up for the next day's sawing. After damage by the Hurricane of 1938, the mill was taken down and the timbers sold. Artist Francis W. Tolman (1902-1969) described and illustrated the mill in *Mosquitobush: Yankee Prints and Stories* in 1963.



Mosquitobush mill foundation walls (Historic Harrisville, Inc.).



Mosquitobush Dam Site (Google Earth).

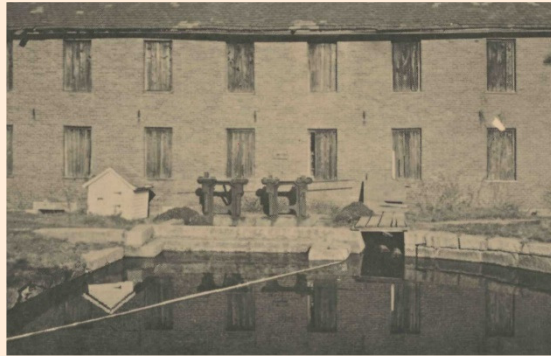


1858 map labeled "Mosquitoville" along the brook downstream from Nubanusit Lake in what was then the southern part of the town of Nelson

Harrisville Pond Dam, Nubanusit Brook, Harrisville Village, 109.08

The water level of Harrisville Pond is controlled by a stone dam at the brick Harris Mill that spans the brook about a tenth of a mile downstream. The brick mill was built around 1832 by Milan Harris whose brick house is across the way on Prospect Street. Historic Harrisville, Inc. has owned the mill since 1971 when it was returned to productivity by Harrisville Designs, making looms and loom parts and spinning woolen yarn. This was the site of the first dam and mills erected by Twitchell in the late 1700s.

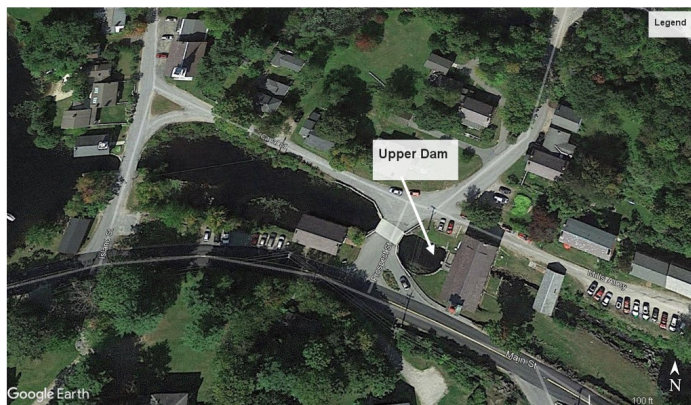
The stone gateway with four gates was installed in 1892 by civil engineer Jonathan Hall of Keene to replace the older dam that had wooden gates and flume. The stone dam is against the upstream wall of the mill and the water flows under the building through an overflow channel. From the 1880s, when the Harris Mill shut down and the building was used for storage, water was piped down to a turbine in the Cheshire Mills wheelhouse downstream that remained in use until 1948.



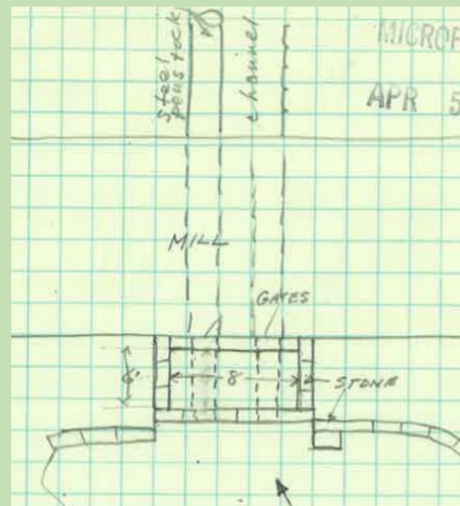
1969 photo of Harris Mill before restoration (Historic American Buildings Survey).



Looking downstream in the 1930s, showing penstock pipe to the powerhouse. Tower on top is the upper end of the rope drive system transferring power to the Cheshire Mills below. The rope drive was used until the plant was fully electric in 1948. The wheelhouse was taken down afterwards (Historic Harrisville, Inc. Archives).



Harrisville Pond Dam (Google Earth).



1937 inspection plan detail shows the gates, steel penstock pipe, and channel under the mill (NHDES).



Harris Mill and dam in 1978 shows the four rack and pinion gate mechanisms (NHDES).

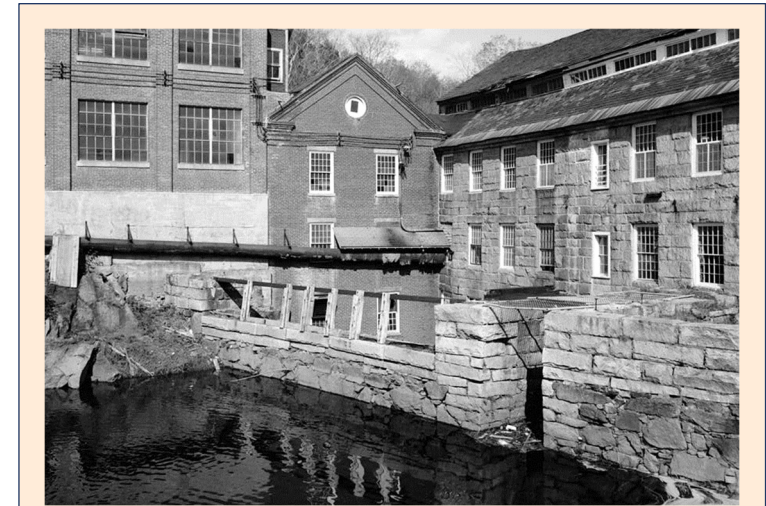
Cheshire Mills Dam, Nubanusit Brook Harrisville Village, 109.14

The dam at the granite mill, Cheshire Mills No. 1, still yields hydropower for the Historic Harrisville complex. The dam is cut granite like the woolen mill that was built by Cyrus Harris and stone mason Asa Greenwood in 1846-48. The stone was quarried eight miles away in Marlborough and hauled here by ox teams. In 1850, the Cheshire Mills woolen company took over the new building and installed twenty-four power looms. The attached brick Mill No. 2 increased capacity when it was built in 1859.

Water is piped under the building and downstream through a long penstock to the basement of Mill No. 2 where the modern turbine is located. Excess water that flows over the spillway, passes under the mill through an arched stone culvert. The Cheshire Mills generated its own electricity in the early 1900s, but soon it was more cost effective to purchase power from the electric company. Mill #6 built on the east bank of the brook in

the 1920s had electric powered looms and in the 1940s, the plant was fully electrified. The waterpower was no longer needed but the dams were maintained as part of the structural support of the old buildings.

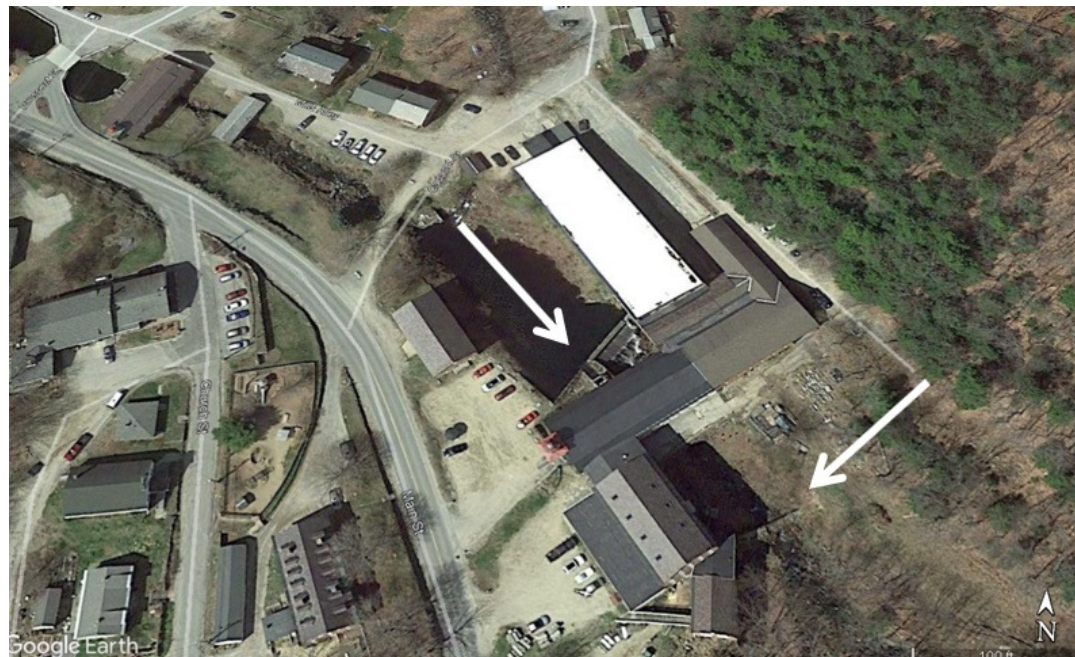
After the woolen mills closed in 1970, the Filtrine company manufactured water filtration and cooling equipment in the old Cheshire Mills. This dam was restored with new gates and penstock and a hydroelectric generator operated below in Mill No. 2. After Filtrine relocated to Keene in 1999, Historic Harrisville, Inc. acquired and restored the Cheshire Mills complex.



1969 view of upstream face, with water-level drawn down (Historic American Buildings Survey).



1979 photo of spillway, downstream face (NHDES).



Cheshire Mills Dam and Lower Dam.

The site is private property but can be viewed from Main Street and Mills Alley.

Cheshire Mills Lower Dam, Nubanusit Brook off Main Street, 109.04

Below the back corner of Mill No. 2 on the Historic Harrisville, Inc. property, the lower Cheshire Mills dam is stone and plank construction that dates from the nineteenth century. In the basement of Mill No. 2, a new Francis style turbine installed in 2018 powers all of the Historic Harrisville buildings. Water is delivered through a pipe from the dam above and discharged into the stream below. This was an early dam site for the nearby trip-hammer shop where water powered a massive hammer that was used to make and repair the metal machinery for the mills.



Upstream face of Lower Dam in low water (NHDES).



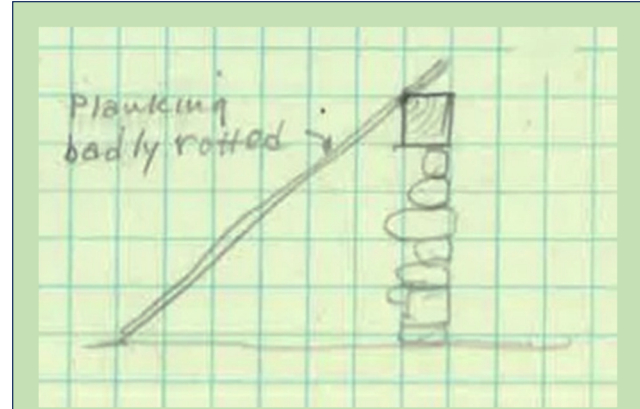
1982 downstream face of lower dam with outlet gate open (NHDES).

Winn Dam Site, Nubanusit Brook at Hancock Road, 109.09

The lower mill village had a large wood products factory for nearly a century. The dam and pond were north of Hancock Road and the factory was downstream along Main Street. It was the woodenware and box factory of Amos E. Perry, who made boxes for shoes and boots in the days before cardboard, and then clothespin factory of Zophar Willard. The dam was described in inspection reports as a stone and plank dam, roughly 150' long and 7' high. The last owners were the Winn brothers, Thomas and Edward, who had a successful chair factory, making porch rocking chairs for two decades and generated their own electricity. The shop burned down in 1933, after which the dam fell into ruin. The former Harrisville railroad station still stands nearby.



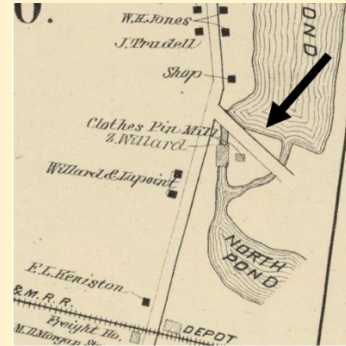
1937 view from the road (NHDES).



1930s inspection plan after the mill burned, shows the old stone and plank dam (NHDES).



Winn Dam Site.



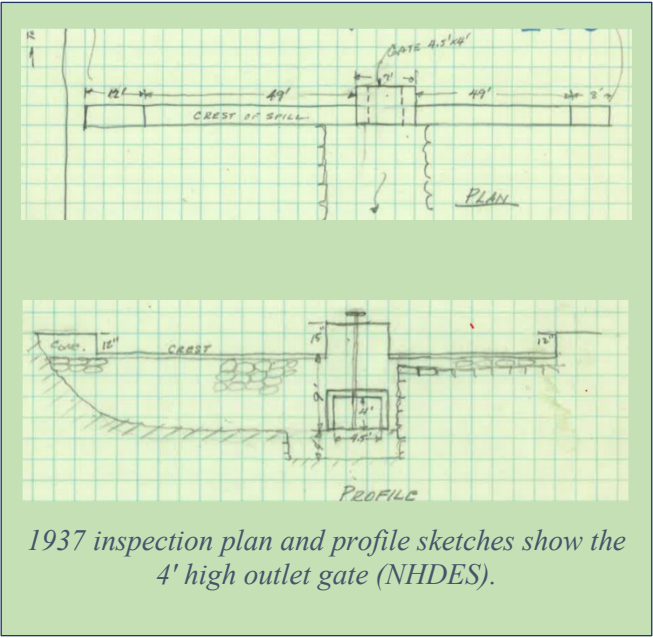
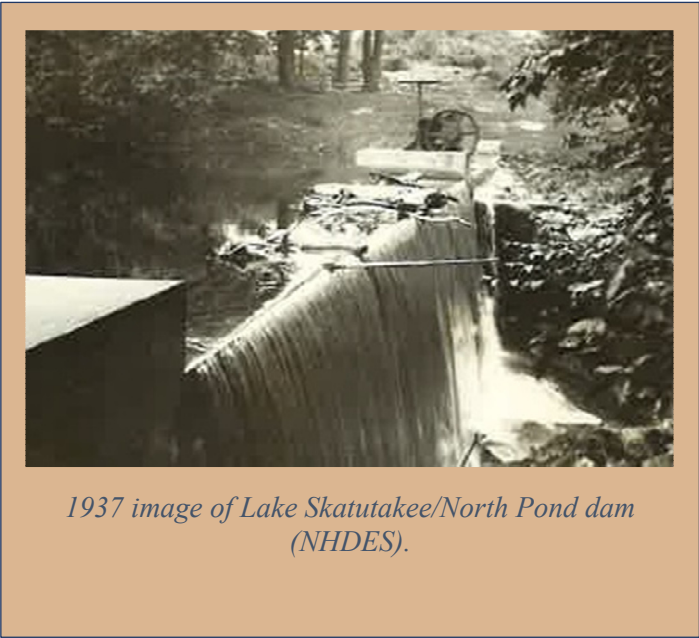
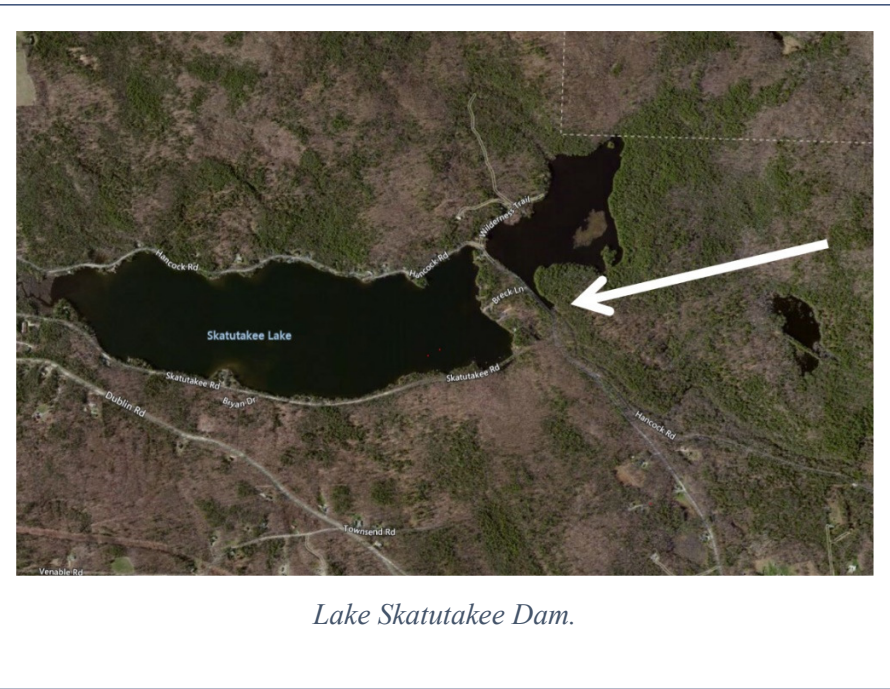
Old map shows dam with flume to clothes pin mill across the road (Hurd 1892).



Remains of the dam are visible in the meadow above Hancock Road (Google Earth).

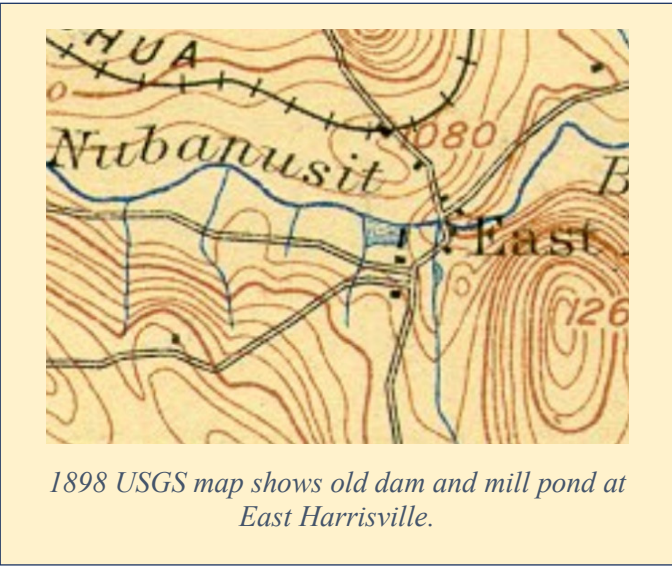
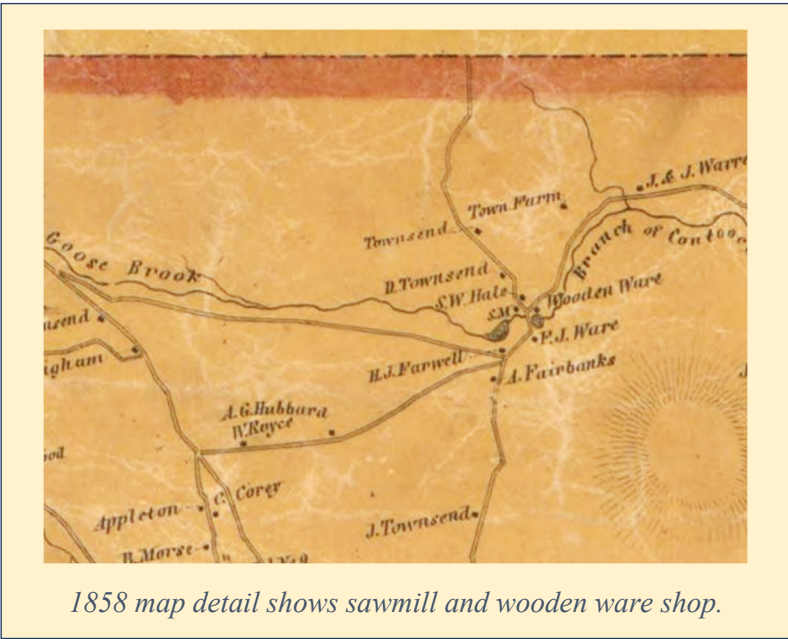
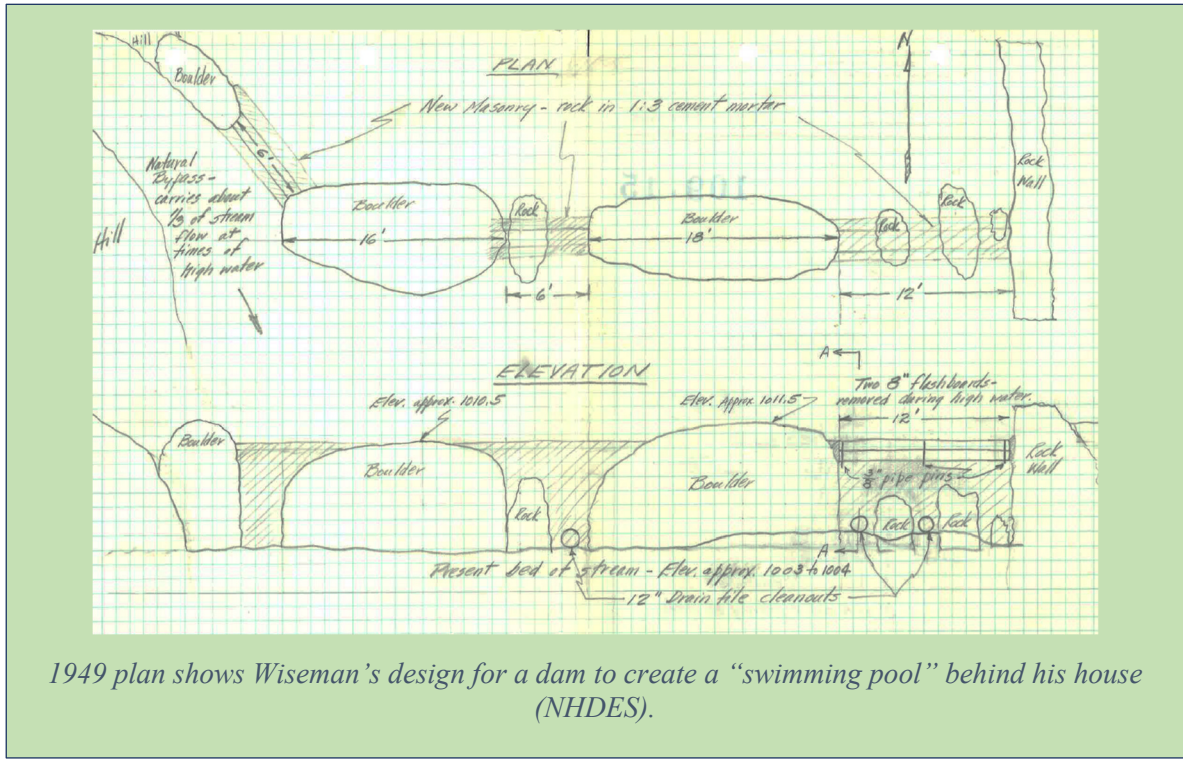
Lake Skatutakee Dam, Nubanusit Brook, North Pond at Hancock Road, 109.10

The stone and concrete dam is visible on the east side of the road below the pond. The dam is maintained by the Lake Skatutakee Association, a volunteer organization formed in 1954 to protect the lake and its waters, owner of the dam and water rights since 1970. The eastern end of the lake retains the name North Pond, which refers to its original position in the northern part of Dublin. The first dam was built here in 1823 to power a sawmill, but “Long Pond” soon became a reservoir for the large factories downriver in Peterborough. Lake Skatutakee was renamed in the early twentieth century, adopting a name given to the area by Native Americans, meaning “a fire swept by here.” The lake has views of the nearby mountain of the same name. Summer cottages were built north of the lake in the early 1900s, and on the south shore along the bed of the railroad after it closed in the 1930s. The late nineteenth century dry rubble-stone dam has a concrete capped spillway and concrete slab upstream face added in 1937. Below the dam, a bridge built by the Harrisville Trails Committee is access to the Eastview Rail Trail and North Pond Trail.



Eastview Dam site, Nubanusit Brook off Hancock Road, 109.15

The dam site numbered 15 in state inspection records was a small dam of rock and concrete in the eastern part of town, constructed in 1949 by a nearby summer home owner to create a swimming pond. Elton J. Wiseman, an electrical engineer from Newton, Massachusetts, used natural boulders with concrete between. Wooden flashboards on top could be removed in high stream flow. Also on Wiseman's land was the site of an older stone and timber dam associated with a nineteenth century sawmill. On the other side of Hancock Road was the woodenware factory, established by George Handy in 1838. Both mills stood into the early 1900s. East Harrisville was renamed "Eastview" by the railroad company that had a stop here. The railroad tracks crossed Jaquith Road north of the brook, where the Eastview Trail now borders conservation land.



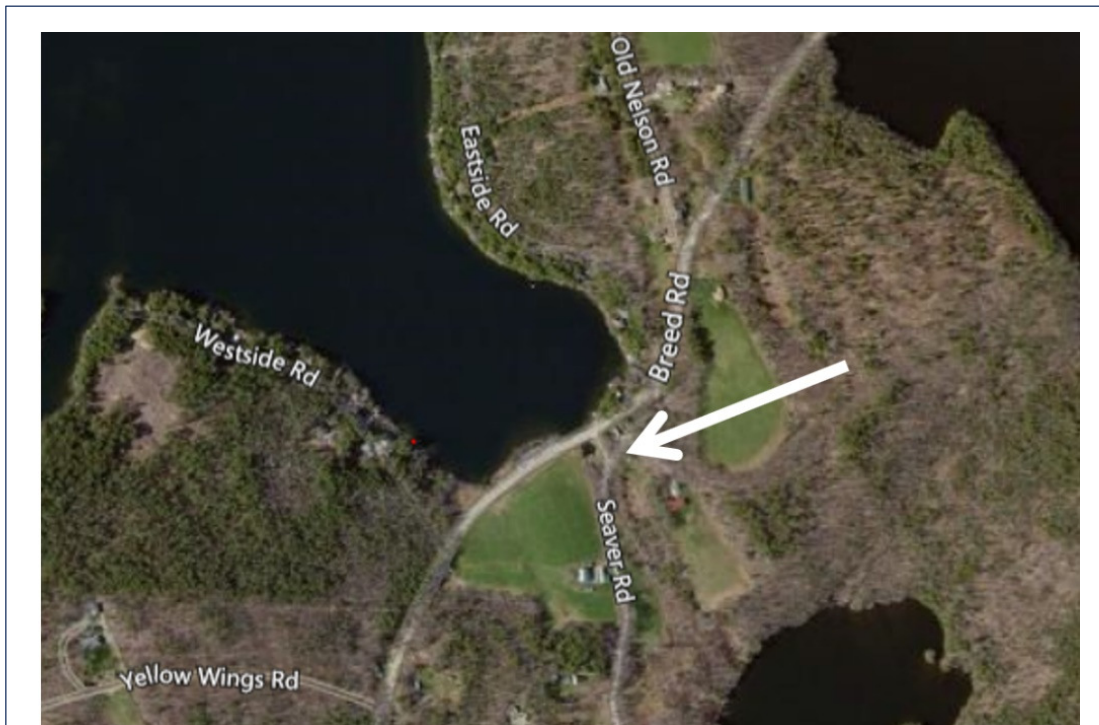
MINNEWAWA BROOK WATERSHED

Silver Lake Dam, Minnewawa Brook at Breed Road, #109.01

Silver Lake at the head of the Minnewawa covers over 340 acres and is up to 95' deep. It was originally called Breed Pond for an early Nelson settler. In 1851, it was dammed to regulate the water flow to industries downstream by the Breed Pond Company of Marlborough. The State of New Hampshire has owned this dam and others downstream since 1967 and maintains it for recreational purposes. The lakefront summer cottages form a National Register of Historic Places-listed historic district. PSNH built a new dam and raised the water level in 1927, bringing the cottages closer to the shoreline. The Silver Lake Dam has concrete walls and concrete sluiceway with an underlying earth and stone structure. A tiny gatehouse shelters the outlet works. Wooden stop logs in the sluiceway are used to raise and lower the lake level seasonally.



Early twentieth century view of downstream face shows underlying stone dam before it was rebuilt by the electric company (NHDES files).



Aerial view shows Silver Lake Dam location, Breed Road at Seaver Road (Bing Maps).



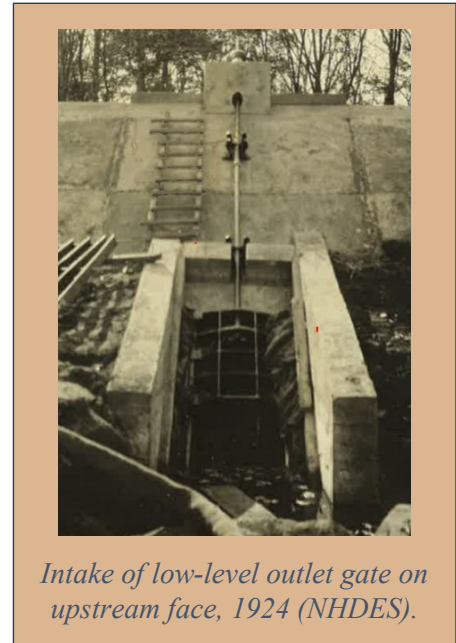
1996 views of upstream face with gate house and downstream face of stop log bays (NHDES).



Aerial view shows Childs Bog Dam location on discontinued road, with Aldworth Manor nearby (Bing Maps).

Childs Bog Dam, Minnewawa Brook tributary at Rosemary Trail, #109.13

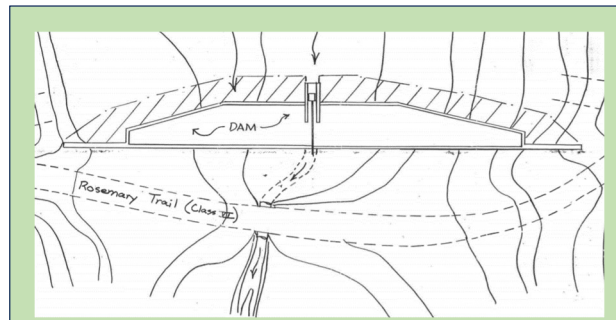
Child's Bog was dammed in 1924 as a reservoir for the electric company. The engineer was L.H. Shattuck of Manchester. The concrete-capped stone dam has a nearly vertical stone downstream face and a concrete spillway. From central drain gate, water passes through an 18'-long culvert into the downstream channel. Repairs were made by the State following Hurricane Bob of 1990. The bog, once called Mud Pond, was part of the nineteenth century farm of Darias and Mary Farwell whose home site and family cemetery are nearby on the discontinued road. Arthur E. Childs of Boston bought up hundreds of acres of abandoned farm land around his summer home and hunting lodge, Aldworth Manor, and he sold 102 acres to Ashuelot Gas and Electric.



Intake of low-level outlet gate on upstream face, 1924 (NHDES).



In the 1990s, the upstream face of the concrete spillway was resurfaced, and new gate stem installed (NHDES).



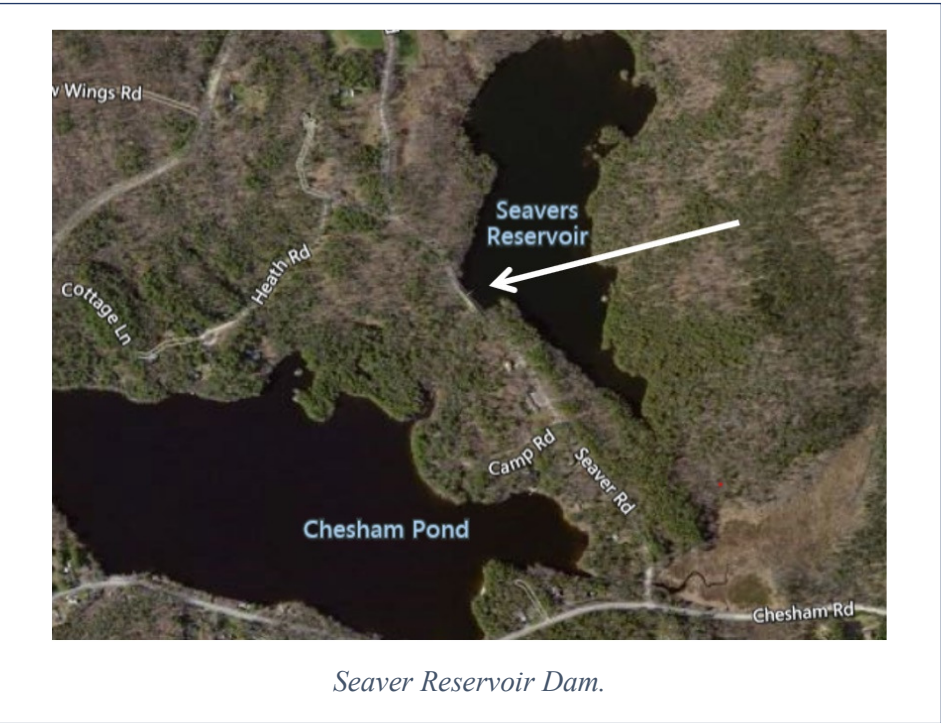
1991 inspection plan (NHDES).



Childs Bog Dam stone downstream face. Construction took place between August and October of 1924 (NHDES).

Seaver Reservoir Dam, Minnewawa Brook at Seaver Road, 109.11

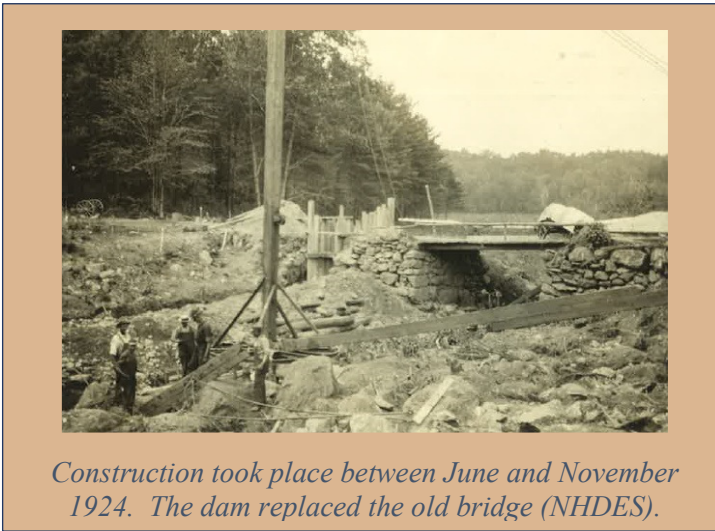
The Seaver family had a sawmill and woodenware factory on the downstream side of the road during the mid-1800s. The existing dam was built in 1924 to enlarge the reservoir for the power company. Construction by L.H. Shattuck Engineers was completed in November. Two years later, the Ashuelot and Keene electric companies joined PSNH. Seaver Road passes over the top of the earth-fill embankment dam. The spillway is a 4' square concrete drop inlet with low level gate at the base and a concrete pipe outlet passing through the dam and under the road to empty downstream. The State repaired the outlet structure and installed a stop log bay in 1976. The loose riprap stone retaining wall dates from 1989. A major reconstruction project completed in 2016 included a new outlet works and earth embankment, rehabilitation of the drop inlet spillway, and improved car top boat launch.



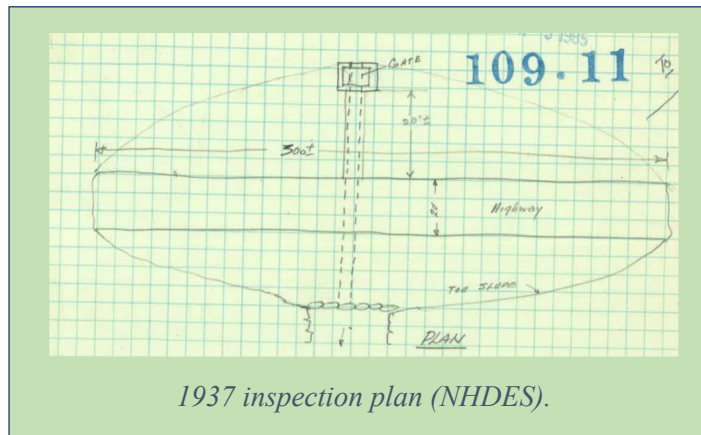
Seaver Reservoir Dam.



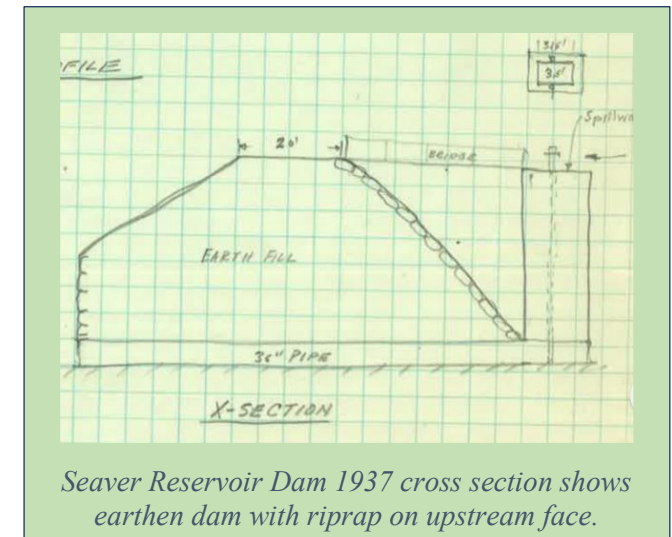
1978 drawdown inspection photo shows the concrete drop inlet and gate and stoplog bay after repairs in 1976 (NHDES).



Construction took place between June and November 1924. The dam replaced the old bridge (NHDES).



1937 inspection plan (NHDES).



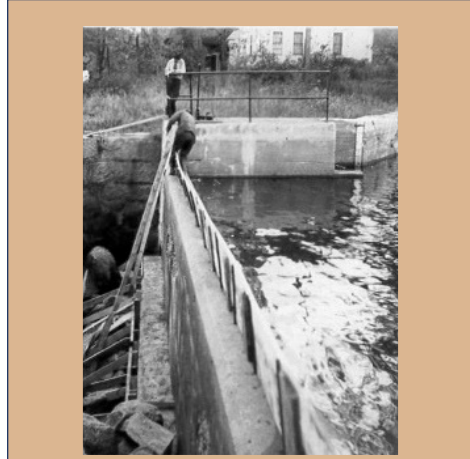
Seaver Reservoir Dam 1937 cross section shows earthen dam with riprap on upstream face.

Chesham Pond Dam, Minnewawa Brook at Chesham Road, 109.02

Chesham Pond was created as the third Breed Pond Company reservoir. The dam flooded flat land built ca. 1869 flooded meadowland along the brook. It is locally known as Symonds Pond for Sylvester Symonds who ran mills just below the dam with partners Elbridge and George Bemis, business from 1849 into the early twentieth century. A sawmill and a woodenware shop making mop handles and washboards were located on opposite sides of the brook. Alongside the dam are the granite abutments of the railroad tracks that ran along the south side of the pond. Parts of the stone and timber dam were retained when concrete was added in 1921, converting the crib dam into a gravity dam. The structure was changed again in 1949, with reconstruction of the concrete ogee or S-curve overflow spillway and repairs to the gate/sluiceway. The dam was recently repaired by the State of New Hampshire, which has been the owner since 1967.



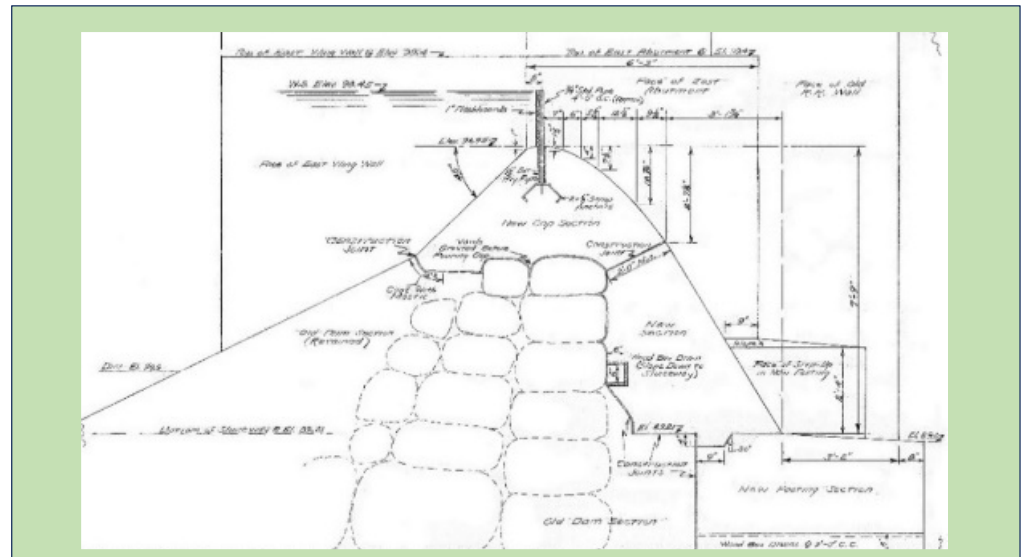
2017 photograph shows granite railroad bridge abutment and concrete dam with sluiceway open (Preservation Company).



1937 before spillway reconstruction, Symonds House is in background (NHDES).



Chesham Pond Dam.



1949 cross section shows the new curved spillway with old stone core (NHDES).

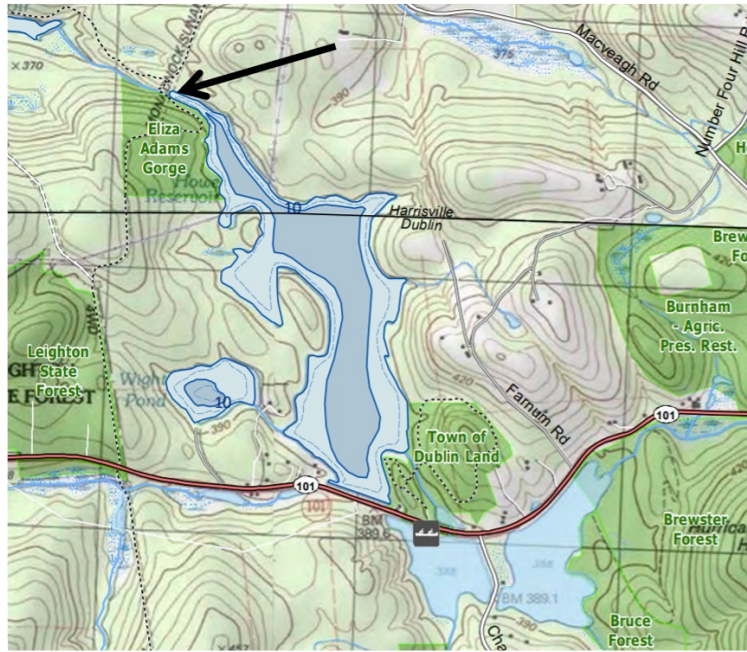
“Eastman Dam Site,” Minnewawa Brook south of Chesham Road, 109.06

There is a dam site recorded in NHDES files that was located downstream from Chesham Pond near Chesham Village where the railroad station and other nineteenth century historic buildings form a small National Register-listed historic district. The dam powered a box and sash factory that stood for only a few decades and was not shown on any historic maps. According to the state dam inspection reports, two waterwheels ran ten hours a day in the 1910s. The timber crib, A-frame dam was 7' high and 75' long. Owners were Eastman, Elwyn W. Seaver, and then E.L. Gray. By the 1930s, the mill was run only occasionally and soon the dam was in ruins.

1. Name of stream on which power is located. Minnewawa Brook					
2. Location of plant: Sec. 4, T. 1, R. 1					
Town or City---Chesham, County Cheshire, State N. H.					
3. Location of point of diversion---500 feet below outlet of Chesham Pond					
4. Name and address of owner or operator---E. W. Seaver, Chesham, N. H.					
5. Operating head, fore bay to tailrace---12---feet.					
6. Water wheels:					
No.	Kind	Make	Size	Rated capacity,	
1		Hunt, White & Flint	30"	horsepower	(total)
1	(old)	Leffel	44"		
Total				100	
7. How many and what wheels are operated during the low-water season? Both					
8. What is the ordinary length of such low-water season? Varies					
9. Generator: No. None Total rated capacity (KVA) Varies					
10. Use of power---Saw and box mill					
11. Average number of hours per day plant runs---10					
12. Auxiliary power---None					
13. Storage reservoirs in addition to storage at dam---small ones					
Number--- Unknown Total capacity--- UNKNOWN					
14. Date---JUNE, 1919 Preparer by---B. L. Sigwood					

1919 US Geological Survey Report of Developed Water Power (NHDES).





Below the dam, the brook flows through a scenic ravine, known as Eliza Adams Gorge. The site can be accessed via the Monadnock-Sunapee Greenway hiking trail from trailhead parking on NH 101 in Dublin or from Brown Road in Harrisville (NH Fish and Game Department).



Downstream face with sluiceway open, 2010 (NHDES).

Howe Reservoir Dam, Pratt Brook on Monadnock-Sunapee Trail, 109.12

Howe Reservoir is visible when driving on NH 101 through Dublin. It is named for Howe who had a sawmill on a much smaller pond near the highway in the mid-1800s. The pond was enlarged by the Breed Pond Company around 1883 with construction of a new dam in southern Harrisville. The dam is over 25' high and 150' long. It was rebuilt in 1924 like the Seaver and Childs dams. Construction is dry rubble stone masonry capped with concrete, an earthen embankment and concrete cutoff walls. A concrete buttress was added to the downstream face in the 1990s. Each fall, the State lowers the water level by 6' to make room for spring floodwaters.



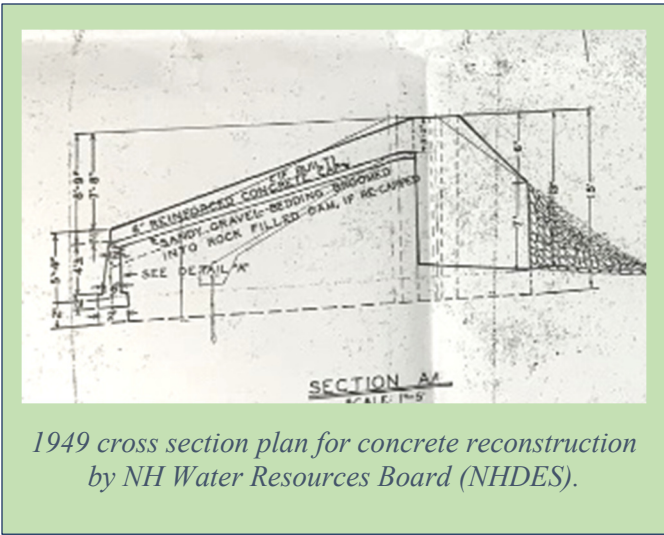
Howe Reservoir Dam downstream face of spillway in high water (NHDES).



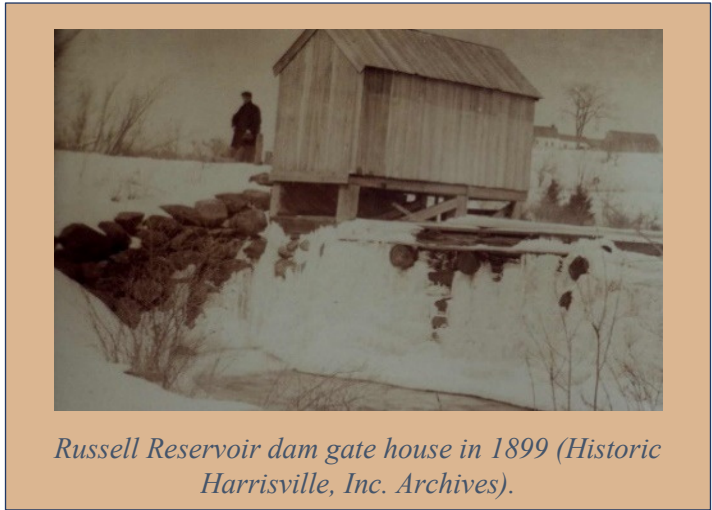
1924 Howe Reservoir reconstruction – upstream face, intake, and downstream face (NHDES).

Russell Reservoir Dam, Pratt Brook at South Road, 109.05

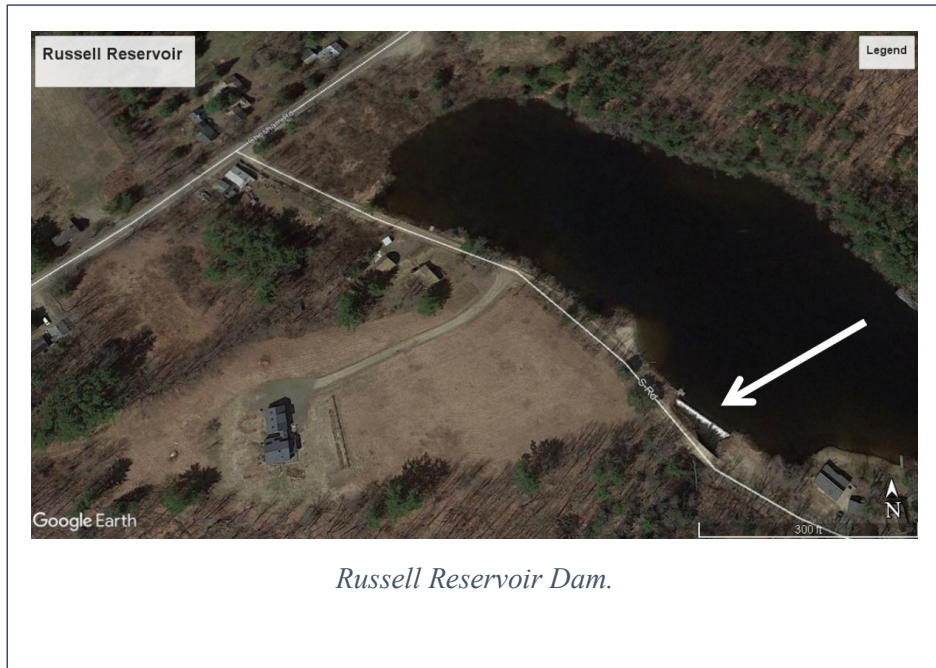
The Russell Reservoir Dam has been owned and maintained by the Town of Harrisville since 1948. The dam was an old crib dam with stone face, concrete cap, and concrete gate structure. It stands near the historic village of Chesham, originally Pottersville, a National Register of Historic Places-listed district. The potteries for which the area was known used clay dug from glacial deposits along the brook, and brown earthenware pottery was produced for about fifty years. In the late nineteenth century, the reservoir was created to store water for the large woodworking plant and box shop just downstream. In the 1940s, after the mill had burned, Mrs. Gertrude Russell gave the dam and lakefront land to the town for recreation.



1949 cross section plan for concrete reconstruction by NH Water Resources Board (NHDES).



Russell Reservoir dam gate house in 1899 (Historic Harrisville, Inc. Archives).



Russell Reservoir Dam.



1996 view with Chesham Community Church in background (NHDES).



1937 downstream face of dam, then owned by Mrs. Gertrude Russell (NHDES).

“Box Shop Dam” Site, Minnewawa Brook, Chesham Road, 109.05

Industries in the historic village of Chesham or Pottersville included the large woodenware factory near the intersection of Chesham and Meadow roads that was owned by the Russell family from about 1890 until it burned down in 1917. The first dam and sawmill were built ca. 1800 by Eli Greenwood. The business was rebuilt several times. The factory was enlarged in the late nineteenth century by Albert Russell and his son Percy W. Russell. It stood along the north bank of the brook, west of the main street. The dam was attached to the mill and formed a small pond on both sides of the road. The structure was abandoned after the fire, and the ruins of the timber and concrete dam were nearly gone by 1937 when it was last inspected by the State.



1858 map of “Pottersville” shows sawmill and mill pond, then in Dublin (Fagan 1858).



Russell mill looking north on Chesham Road toward Meadow Road, before and after the fire (Historic Harrisville, Inc. Archives).

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This document was prepared as part of the mitigation for the Chesham Pond Dam project in Harrisville, in cooperation with the New Hampshire Department of Environmental Services Dam Bureau, New Hampshire Division of Historical Resources, and Historic Harrisville, Inc. Text by Preservation Company, 2020.