Running Water

Judith G. Stetson

The Falmouth Water Company was chartered on February 18, 1898. On March 11, 1899, The Enterprise reported, "The water pipes of the Falmouth water works have been filled with water this week. An exhibition of the force of water was given Wednesday noon from the hydrant in front of the town hall. It was witnessed by a large crowd of the voters of the town who were attending town meeting. All were well pleased with the result. A stream of water was thrown completely over the top of the M.E. church belfry, a height of about 45 feet."

The town was bursting with pride over the new water system. It was another great sign of Progress in an era that enthusiastically welcomed all the new marvels of technology. Transformed by inventors and businessmen, daily life was changing rapidly and for the better. The following excerpts from newspapers and Town Reports give the flavor of those early years at the turn of the century when the Falmouth Water Company began its expansion.

The officers of the new Falmouth Water Company were men of substance.

"In the 1890s, John S. and Robert Bleakie...built grand estates on the ridge on the Woods Hole Road overlooking Buzzards Bay and Vineyard Sound. John S. Bleakie went on to incorporate the Falmouth Water Company in 1898 to supply local homes, and in 1899 presented the Town with a water fountain on the Village Green."

"Horace Crowell, a real estate man from Boston and not related to the Crowell family in Woods Hole, bought the land where the [guano] factories and works had been. By 1894 the first of the summer estates had been built on Penzance Point, named by Mrs. Crowell from a point south of Falmouth, England."²

W.H. Hewins owned a dry goods store on Main Street and served as Town Clerk and Treasurer. George E. Dean was elected moderator of town meeting in 1899. In 1902 and 1903, he was both a Water Commissioner and the Chief Fire Engineer.

The first Falmouth Water Company pipes were laid from the Long Pond pumping station down Palmer Avenue to Woods Hole Road as far as Quissett Harbor Road, then down Quissett Avenue to Woods Hole and on out to Penzance Point. In Woods Hole the new pipes were linked to earlier pipes that had been laid about 1880, presumably to supply the new Fisheries Laboratory. The route was well chosen to supply as many wealthy customers as possible. It also brought water service to the homes and businesses of the company backers.

On March 11, 1899, The Enterprise reported how the town was benefitting from the new water service. At town meeting, "Capt. T. J. McLane, for the board of selectmen, made a concise report on the contract of the town with the Falmouth Water Co., giving the number of hydrants and the location of same, and although the original 10 miles of pipe first contracted for had been placed, they recommended laying of additional pipe and the placing of hydrants on certain other streets of the town."

In 1900, town meeting voted to take over the water company; the ensuing litigation ended in 1902. Town Reports for 1902 include the following very conscientious, if somewhat testy, report:

Significant milestones in the development of the Falmouth water system as summarized from *The Enterprise* by an anonymous historian:

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18 Feb. 1898	Falmouth Water Co. charter signed by Gov. Wolcott.	24 June 1899	Many houses and businesses on Main and Locust connected to
10 Sept. 1898	Notice that Waterworks will be constructed and in operation be- fore end of year.	1 July 1899	system. Town Hall connected to water system.
8 Oct. 1898	Some water pipes arrived and laying will probably begin next week.	5 Aug. 1899	Driveway to Long Pond Pumping Sta. opened and public invited to visit power plant.
29 Oct. 1898	Work of laying water mains began 22 Oct. A large gang of Italians have arrived to do the dig-	6 Jan. 1900	Notice by Water Co. that laying of service pipes discontinued for the winter.
5 Nov. 1898	ging. Work has progressed rapidly last	24 Feb. 1900	Articles in Warrant for Town Meeting 6 March.
29 Apr. 1899	week. Fine view from standpipe of Fal- mouth Water Co. on Week's Hill. [Peterson's Farm, in 1998 the	Art. 25	To see if Town will include 2 hydrants at Nobska in contract Town has with F.W.C. (Request of H. H. Fay)
28	town voted to buy it for open space.]	Art. 26	To see if Town will extend hydrant service to and around Fal.
13 May 1899 20 May 1899	Woods Hole water pipes burst three times. Standpipe finished. King St. being piped for water.	Art. 27	Hts. To see if Town will vote to extend waterworks to village of W.
	During the past week a number of merchants have taken town water into their places of busi- ness.	6 Mar. 1900	Fal. Town voted to defer action on Arts. 25, 26, 27 until after Town purchases Water Co.
27 May 1899	W.H. Hewins and W.F. Durgin have taken water. [W. H. Hewins was a director of the Falmouth Water Co.]	7 Mar. 1900	Special Town Meeting voted 230 to 7 to purchase Water Co. Committee named to put vote into effect.
17 June 1899	Water Co. failed to connect Enterprise with street main so unable to use water motor.	Population of I	Falmouth 1895 = 2655 " 1900 = 3500 - 3600

"The water commissioners herewith present their first annual report. The plant of the Falmouth Water Company was delivered to the town June 16, 1902, and on that date your commissioners took possession of the same in the name of the town. Many difficulties confronted us on assuming the management of the plant. The Court had decreed that the books and bills of the Falmouth Water Company were the private property of the company and were by them to be retained. This left your water commissioners without valuable data for the mapping out of a line of action in the care and maintenance of the water system. It became necessary for us to arrange and establish such business methods as would best serve the interests of the town both for the present and for the future, and such a system of bookkeeping as would, to the greatest degree, facilitate the manipulation of this important part of the plant. The necessity, forced upon us, of making a thorough inspection of the plant together with the fact that two of the commissioners were at their busiest season of the year was accountable for the delay in forwarding to the water takers their bills.

"A matter which it is necessary to call the attention of the inhabitants of the town is the water supply. The supply of water is now, and we believe always has been, taken from the pond, direct. We are advised by our engineer at the station that it would be impossible to obtain water from the present well system without great loss of pumping energy. It appears evident to us that the present course is not a wise one to follow. We deem it necessary to provide some means of filtering the supply. The boilers at the pumping station are of doubtful age and will have to be replaced by new ones before long. The pumps are in an unreliable condition, though the engineer in charge states that probably he can keep them running for this season, but still advises that provision be made in case of accident.

"Since taking possession of the plant we have found that there is either a great waste of water by the water takers or a continuous leaking of the system. We find by comparison with other systems that the quantity of water supplied to ours is entirely out of proportion to the revenue received. For example, we pumped a larger quantity of water for a revenue of about \$6,300 than Plymouth did for a revenue of \$21,965. They used the meter system we did not. We find by the actual experience of other towns that by adopting the meter system the quantity of water to be pumped decreases to about one half while the revenue increases. With the addition of the West Falmouth extension to this system it appears to us necessary that the town adopt the meter system.

"It has been a source of gratification to the commissioners that all through the coal panic we have been able to keep a sufficient supply for all our needs and at prices we consider very advantageous to the town under the prevailing conditions of the market. The average price paid per long ton, at tide water prices, has been \$5.35 per ton for the supply for six months."

In 1903, the water commissioners bought, at the town's request, "the franchise, corporate property, rights and privileges of the Falmouth Heights Water company" and found it in very poor condition. The plant had been built by Mr. Boyden in the 1890s with a capacity just sufficient for the needs of the people in the Heights at that time. The water commissioners had their engineer examine the pumping station machinery and experiment with driven wells as a new source of supply for the water system. "All of the wells furnished, comparatively speaking, a large supply of water, ranging from 30 to 54 gallons per minute when pumping with a No. 3 Edson diaphragm. The water of none of the wells had any noticeable odor of marsh gas."

Trouble with the water service to Falmouth Heights was described in the 1904 Town Report. "The water commissioners herewith submit their third annual report. At the annual town meeting, held March 8, 1904, the town voted to appropriate and raise \$5,000.00 for the purpose of starting the work of putting in a new water system at Falmouth Heights. Owing to the numerous criticisms of the cost of engineering on the extensions previously put in by the water commissioners, your board voted to put in this extension under their own personal supervision, employing an engineer only for the purpose of making a preliminary survey and an inspector to supervise the pipe laying...

"...The great depth to which the pipe had to be laid in going through under Deacon's river, in what is called 'made' land, (that is where material has been carted in as filling for the roadway), caused heavy caving of the sides of the trenches thus causing further delay. While still working in this dangerous locality, the caulker on the job got caught in a 'cave-in' and was disabled. The rest of the gang went on a strike to prevent any possible accident to themselves. The contractor found it very difficult to get a gang of men to take their places, which caused a still further delay. After the work of pipe laying in the 'made' road across the flats had been finished, the work of construction went on smoothly and without incident to its completion..."

The water commissioners reported trouble of a different sort in West Falmouth that same year. The standpipe that they had expected to cost \$7027.99 came in at \$41,641.59. This huge overrun did not even include the final grading and concreting. "Your board of water commissioners sharply criticized the engineer for allowing this to occur. In reply he wrote us: -

"Concerning the cost of engineering the design and construction of this standpipe, I agree that it is far in excess of what it would have been under normal conditions, but for this state of affairs I do not consider I am responsible. It is simply one of those cases where in view of the fact that the work being done by the contractor was delinquent, inaccurate, shiftless, contrary to the contract and plans, and otherwise of such a nature that it was necessary to go to unusual expense in the way of engineering and inspection in order to secure a standpipe and observatory such as was bargained for and would be safe and serviceable.

'In addition to the expense which the contractor forced you to, keeping an engineer and inspector for a period of nearly eight months instead of two months as provided for by the contract, there was additional cost on account of the special design for using the standpipe as an observatory, which required special calculations and detailed drawings which would otherwise not have been necessary, and also for the check-levelling which became necessary in view of the fact that this was a second standpipe instead of the first of a system.

'Concerning the keeping of an inspector constantly on the work, I have to say that in view of the nature of the contractor's methods, the amount and number of defective materials and work that were rejected, replaced or remedied, amounting to approximately eighty-eight items, not including leaky rivets, that were replaced or caulked, I have no hesitation in saying that it was absolutely necessary. Without this constant and careful inspection I should have no confidence as to the stability, value and reliability of the standpipe and observatory, which I believe with the aid of this inspection and the heroic measures taken to force the contractor to complete

his work in a first class manner, is now such a structure as can be relied upon."

The engineer also insisted that the finish work be done, '...as the concrete is not intended merely for a walk around the standpipe, but is an essential part of the whole design, and intended for the protec-

tion of the foundation, the angle iron around the bottom of the tank, the mortar bed of the tank on the foundation and the grading near the foundation. I consider it of vital importance to the welfare of the whole structure.'

The water commissioners had a few words about the policy of accepting low bids, but they

took the advice of their engineer and recommended that the town vote to complete the West Falmouth project.

By 1905 the water commissioners happily reported that, "A gain of 83 services this year is conclusive evidence that the water is regarded as a household necessity. The financial statement shows a considerable increase in the receipts over that of the previous year, accounted for in the more prompt payment of rates and a substantial increase in the fixtures attached."

The Anderson household on Elm Road would not

get running water for another 20 years, but clearly the public water system was already improving life for many Falmouth residents.

There were other growing pains. In their 1906 Town Report, Selectmen Silas Hatch and Tristram P.S. Phinney wrote, "We hope that peace and harmony may

again be restored to our troubled community and the good old town of Falmouth may remain an unbroken circle." They had good cause for their plaintive remarks.

In 1906, Harbor Master John J. Veeder reported that the channel to the Eel Pond in Woods Hole had



Drawing of old Pumping Station by Mary Minot. Courtesy Falmouth Historical Society.

been cleaned out. "It was a great benefit to the boatmen, but owing to the water commissioners allowing the water pipe to remain across the channel with only 13 inches of water over it at low tide, I did not expend the balance. I did everything in my power to have this pipe lowered, but our water commissioners did not care to do it without having a vote of the town." The Harbor Master wanted three feet over the pipe at low water.

1906 was also the year that the town decided to create a harbor in Deacon's Pond. The plan required cutting through the causeway that separated Deacon's Pond from Vineyard Sound. The causeway that had caused the Water Commissioners so much trouble in 1904 was to prove even more troublesome to the town in 1906:

"The harbor matter seems to have been the last straw for a group of taxpayers who were dissatisfied with assessments and general conditions in the town. In December, Horace S. Crowell petitioned the General Court, as a citizen of Falmouth, for a division of the town. The proposed division was drawn up so that nearly all the inhabitants of the 'new town' would be summer residents and it would include three-quarters of the town's coastline and nearly the entire state road from Woods Hole to Bourne.

"Tempers gradually cooled, and at a January 1907 meeting in Boston of both summer and year-round residents the sentiment for division had waned. It was agreed the petition for division would be withdrawn if good men were elected and the town's business carried on economically."

In their 1907 report, the water commissioners observe temperately, "We recommend that action be

taken to enable the commissioners to relocate mains as may be necessary on account of the closing Clinton avenue and that appropriation be made for that purpose."

In 1908, they report, "3532 feet of 8-inch and 939 feet of 6-inch pipe have been laid on the east side of Deacon's Pond to supply water for Falmouth Heights, in place of the connection via Clinton avenue which was cut off by the channel to the new harbor. On account of the low price of iron at the time when the pipe was purchased, the expense of this change was much less than the estimate..."

The report continued, "Forty new services have been added during the year, and we have made arrangements to furnish water for the locomotives of the N.Y., N.H. & H. R.R. at Woods Hole, at the rate of 24¢ per thousand gallons, not less than one million gallons to be used annually. This arrangement can be cancelled by either party on thirty days' notice." Falmouth's young water system was about to experience another rapid growth spurt.

Notes

- The Book of Falmouth p.349. There were two Bleakie mansions.
 The one pictured on p. 348 of The Book of Falmouth is now the headquarters of SEA which was featured in the Summer 1998 Spritsail, Vol. 8 #2.
- 2. Woods Hole Reflections p. 56.
- 3. The Book of Falmouth p.116.

Judith G. Stetson has been on the editorial board of *Spritsail* since it began ten years ago and is currently chairman of that board. She has written for *Spritsail* previously, most notably "Woods Hole Buys Its Post Office" published in the Summer 1994 issue. She was also on the editorial boards of *Woods Hole Reflections*, pub. 1983, and *The Book of Falmouth*, pub. 1986, and wrote articles for both books.