

**MINUTES  
BOARD OF SELECTMEN  
Saturday, March 23, 2013 10:00AM**

**REVISED**

*Location:* Earle Mountain Room

*Present:* Selectman Aimee J. Eckman, Chair; Selectman John F. Knight, Vice-Chair; Selectman Wallace F. Adams, Clerk; Selectman Linda S. Burt; Selectman Martin F. McDonald; Sheila Vanderhoef, Town Administrator, Assistant Town Administrator Nan Balmer

*Also Present:* Jeffery H. Davis, DBA Organization Renewal Associates

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The meeting was called to order at 10:00am.

**Municipal Water Discussion**

Mr. Jeffery H. Davis, DBA Organization Renewal Associates, was present and acted as Moderator Facilitator of the meeting, as contracted by the Town to do so.

The Board of Selectmen were present to discuss and answer questions of the public as to Why a Municipal Water System Design and Installation.

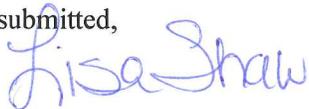
The powerpoint presentation and the list of questions asked by the public at this meeting are attached to these minutes.

**ADJOURNMENT**

*The meeting was adjourned at 11:20am*

Respectfully submitted,

Lisa Shaw



## QUESTIONS AND ANSWERS FROM THE WATER MEETING TOWN HALL MARCH 23, 2013

1. What is the anticipated cost per foot to bring the water from the town connection to the house?  
Ans. Local installers have provided estimates of \$12 - \$16 per foot for open trench installation. Trenchless installation is more expensive.
2. Is there a likelihood of much tree die-off from root damage when main trenches are dug?  
Ans. Main installation will be laid out to minimize tree damage. Significant trees will merit additional protection.
3. Can I have water connection on a street other than my address?  
Ans. Yes, you may connect wherever you have legal frontage and may wish to do so to Reduce the costs to connect.
4. Does the design include a water treatment plant? If not, why? If we need one in the future, how much could that cost?  
Ans. Design includes the ability to adjust PH and chlorinate if ever needed. Because the water from the town wells is pristine, no additional treatment is needed.
5. Who will be responsible for writing the rules and regulations for the system? What are their qualifications?  
Ans. The rules and regulations for the system will be adopted by the Board of Water commissioners in strict conformance with state standards. Many excellent regulations have been developed by other communities. These will serve as the basis for a draft which will be developed by the town's engineering consultant.
6. What will be the treatment and method of filtration? Will chlorine or ozone treatment be the preferred method of bacteria? How often will the filter elements be replaced? Will the storage tanks be glass or stainless steel lined?  
Ans. Treatment will be in strict conformance with state regulations. At this point, it appears adjustment of PH is the only treatment necessary. Water tanks will be probably be steel with paint on both sides – similar to new tank in Wellfleet.
7. Is the storage tank a water tower? How high would the tank/tower be?  
Ans. The most practical design is the water tank installed in Wellfleet (golf ball on "T"). It is about 120 feet high. Tank locations are selected to minimize visual impact while supplying adequate pressure.
8. What happens after the water meter batteries run out after 10 years?  
Ans. Battery replacement would be scheduled by the town to take place before the batteries fail. A contractor would require access to your meter for this routine service.
9. In the event a homeowner elects not to hook up to the main and therefore does not have a water meter: is it correct to say that homeowner will not be monthly billed, i.e., therefore does not get any water bills?  
Ans. The operation of the system would be paid for through water bills. If you are not hooked up to the system, you would not pay a monthly water bill. Construction of the water system will be funded through taxation.

10. If you choose not to hook up, will the “curb-stop” go in anyway? So, if sometime down the road you decided to hook up, you would be able to hire a plumber to do so? If you do not hook up, do you still pay for the system through taxes?

Ans. A curb stop will be placed at each lot. All taxpayers will pay for the construction of the water system regardless of when they choose to hook up to the system.

11. How is the water quality monitored and maintained regarding PH levels, etc., etc., that our private systems now correct?

Ans. Public water supply wells require much more testing than private wells. PH is adjusted near the well. Private homes connected to town water will not need private (in house) treatment systems for PH, iron, etc. PH is maintained at a neutral level in town water. This minimizes damage such as pin holes in pipes.

12. Raising PH of town water: is this the same thing the blue water treatment tank in my basement does? If so, will these individual treatment tanks no longer be necessary?

Ans. Individual treatment systems will no longer be necessary for adjusting PH. Municipal water will meet all applicable water quality standards.

13. Dear Fire Chief: Hyannis water system issued a 3 month hydrant flush notice. How many months will you flush our hydrants? Will you boil our water during flushing? Will your staff handle the hydrants? How will you notify residents and renters? Must we drink bottled water during flushing?

Ans. The Hyannis water system is over 100 years old and requires significant flushing. Eastham’s system would have new cast iron cement lined pipes. It would also have the advantage of being designed as a town-wide system requiring minimal maintenance. Hyannis’s system evolved over the past century and many mains are undersized.

14. Will the Conservation Commission be involved in areas that are “wet” areas?

Ans. Conservation regulations will be followed in full conformance with the law.

15. On 3/22/2013, the Cape Cod Times said: “State will pay for Cape wastewater plan” – State officials have signed a memorandum of understanding with the Cape Cod Commission to pay for a Cape-wide water quality management plan.” Does this State prepaid plan effect (or possible?) future relationship to Eastham’s town wide municipal water proposed plan?

Ans. No. The wastewater plan will address primarily environmental impacts of waste water on our marine embayments.

16. What about a house with a very high nitrate level, but is in phase 5? Rosalyn Kaplan

Ans. Every effort will be made to hook up properties with documented water quality problems as soon as possible.

17. Will the contractor restore all of the roads to their former condition? Is there any additional cost to private roads?

Ans. The contractor will restore roads to their former condition with no additional cost for private roads.

18. Is the well H too near the dump?

Ans. Groundwater modeling (showing the flow of water in the aquifer) and pump tests indicate that well H will not be impacted by the landfill or the Atlantic Ocean.

19. How many significant (+\$100,000) house fires have occurred in Eastham in the last 10 years?

Ans. Typically 2 – 3 per year.

20. Will private roads all be supplied with municipal water? Will temporary easements be necessary?

Ans. The answer to both questions is yes.

21. How much extra fire equipment will be needed by the Fire Department be needed by the time?

Ans. No extra fire equipment is necessary. Existing engines and hoses will be able to connect to hydrants.

22. Who will maintain all the hydrants? Rust never sleeps in a marine environment.

Ans. Hydrant maintenance will be part of the contract for privatized water system maintenance.

23. If someone opts to not hookup to the water service, would there be a requirement to hook up upon the sale of the property?

Ans. There will be no town requirement for hookup. Banks and home buyers might require that the property be hooked into the system in cases where water quality is not acceptable.

24. Did you just say in an answer, "We will pay the plumbing inspector to sign off on indoor connection?"

Ans. The cost of inspection is included in the plumber's cost. Fees for plumbing permits are not waived.

25. When trenching across private property, will "dig safe" be involved?

Ans. Dig safe will be conducted in full conformance with the law.

26. Will the system be chlorinated/fluoridated?

Ans. Chlorination is not planned for normal operation. Fluoride would be a local option.

27. Can the "service connection" tie into the current well line leading to the house, thus saving the trenching? [ldifiwizio@comcast.net](mailto:ldifiwizio@comcast.net)

Ans. No. Higher pressure pipes are required for the public water system.

# Eastham Water System: System Design and Installation

March 19 and 23, 2013



## Town-wide Water System

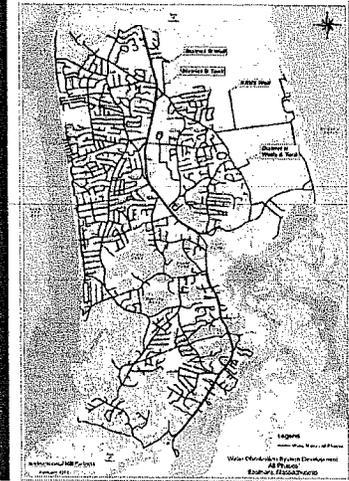
6646 Lots Served

### Demands

Annual average day:  
1.00 MGD

Summer average day:  
1.88 MGD

Peak Day: 2.65 MGD



## Agenda

- Water system overview and water supply demand needs
- Water supply sources and demands
- System development
- Construction approach
- Homeowner responsibilities
- System operations

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## Supply Sources

More than we need  
to be self-sufficient

NRHS – 0.882 MGD

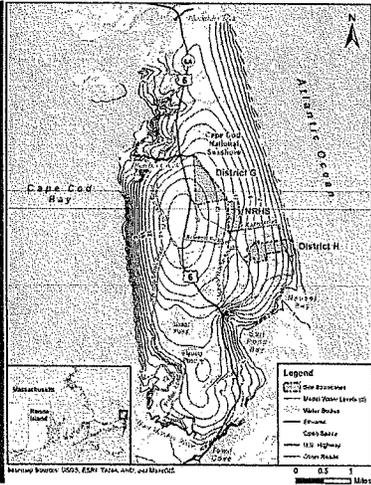
District G – 0.995 MGD

District H – 1.30 MGD



## Nauset Lens Groundwater Model

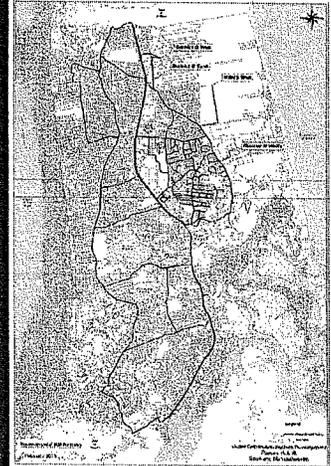
- Aquifer is a bubble
- Supplies are on less developed side of Town
- Supplies are on undeveloped land within or next to CCNS



## Phase 1

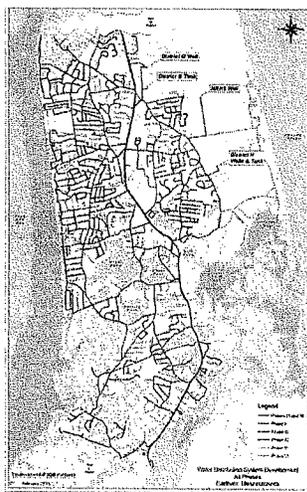
System backbone of transmission mains:

- Area southeast of landfill
- Wellfields (3)
- Storage Tank
- 2,056 Connections



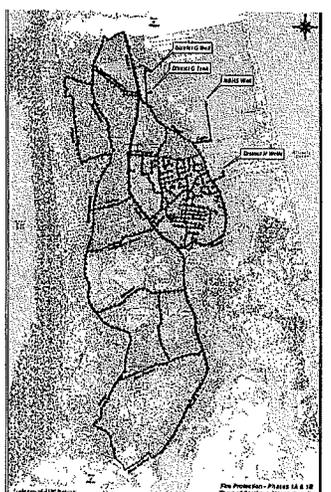
## Town-Wide Water System

Six phases of construction



## Phase 1 Fire Protection

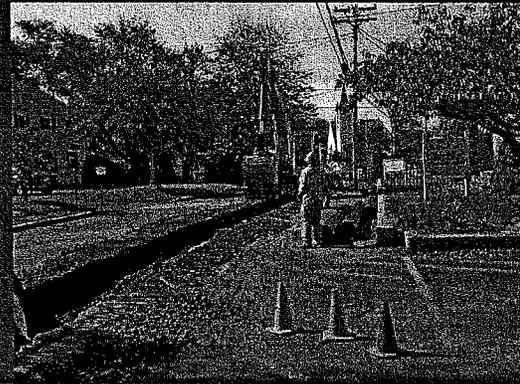
- Fire protection 1000' radius from mains
- Lower ISO rating
- Phase 1 gives fire protection to 79% of all lots in Town (within two years of construction start)
- By Phase 2 – 90% fire protection for Town



## System Construction

- Construction in six phases
  - Starting 2014 - two years each
  - Multiple crews
  - No construction on Rt. 6 during summer
- Area southeast of landfill is priority
- \$114.8 M construction cost
  - (includes inflation through construction)

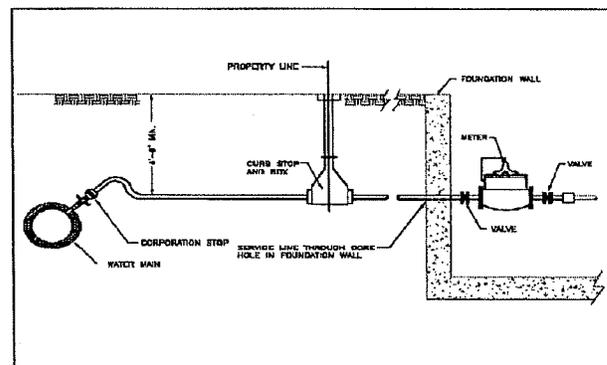
## Water Main Installation



## Service Connections Program

Phase	Year Connected	Connections	Cumulative	% of total
1	2016	2056	2056	31%
2	2018	1036	3092	47%
3	2020	1049	4141	62%
4	2022	915	5056	76%
5	2024	1316	6372	96%
6	2026	274	6646	100%

## Homeowner Responsibilities The Service Connection

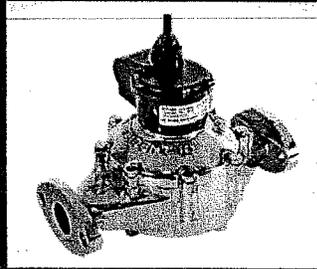


## Service Connections

Corporation Stop



Water Meter



## Next Public Information Program

System Design and Installation  
March 23 @ 10:00 am

Financing/Operations  
March 26 and March 30, 2013

Full Story  
April 13 and 27, 2013

## System Operations

- Privatized operation
- Company responsible for:
  - Operations
  - Administration
  - Billing
  - System repairs

# Questions