

RECEIVED

MAR 21 2017

**BOARD OF SELECTMEN AND SEWER COMMISSIONER'S SPECIAL MEETING** TOWN CLERK  
ACTON

**November 1, 2016**

**Acton Boxborough Regional High School Auditorium**

**7:00 PM**

Present: Peter J. Berry, Janet K. Adachi, Franny Osman, Katie Green, Chingsung Chang, Town Manager Steven Ledoux, Lisa Tomyl, Recording Secretary, and Jeffrey Roleoff, Special Town Counsel

Mr. Berry opened the meeting at 7:04 PM

**Public Hearings**

Site Plan Special Permit/Use Special Permit #11/20/2015 – 459, Nagog Pond Water Treatment Plant

Mr. Berry introduced the Board and Special Town Counsel and gave an overview of how the hearing will proceed. Explained that this is a legal proceeding and will not allow any demonstrations (for or against) to any speakers. Will be making a legal decision that could be made in Superior Court and to treat (the hearing) accordingly. Demonstrations distract the Board. Mr. Berry acknowledged that the Board received the changes proposed by Concord DPW on Thursday afternoon prior to the hearing. Feels it was unfair to receive information as late as an hour before the hearing and therefore have not reviewed the information to help make an educated decision.

Ms. Adachi had a GIS mapping of the area proposed for fencing to help understand where the proposed fencing would be placed and also the location of the conservation trails, along with confirming with the Town Assessor to be sure the property lines were accurate.

Mr. Berry stated that the BOS went on a site walk visit and have discussed what plans have changed since the last presentation. The Board will not discuss their visit (to the site).

Peter Durning, Special Counsel for the Town of Concord opened the presentation on behalf of Concord Department of Public Works/ Concord Water and Sewer Division. Mr. Durning made an opening statement regarding the history of this Site Plan and previous hearings (with the Board of Selectmen). Modifications since previous hearings such as power supply, sound assessment, and security were addressed.

Mark Wallace -Tech Environmental – reviewed revised sound study. Removal of the co-generation units, grid power with single emergency power generator, compliance with Mass DEP Noise policy, performed additional ambient sound level measurements. Acoustic louvers are planned to be installed inside the building to reduce sound leaving the buildings.

Mr. Durning expressed reinforcement of the design to commit to the noise levels. Continued with addressing the site security, national standards and guidelines. Public water supplies have to comply

with national requirements for public health issues. Modifications have been adjusted since that last hearing. Gave some industry examples of security fencing. Gave examples of locations on Concord property where more than passive recreation has occurred. Roland Bartl, Acton Planning Director, had commented to move the fence 20 feet off the property line. Concord made the modification of the fencing to avoid significant wetland areas. Planning Department and Engineering Department comment the at the Special Permit 4.1.8 and 4.1.9 the fencing in a significant wetland area complies. Mr. Durning concluded that the Special Permit Criteria listed regarding the proposal by means of SPSP Bylaw 10.3.5 is sufficient for approval.

Ms. Osman – questioned regarding the fencing that leaves open the whole left side (of the property) – and how did you (applicant) figure leaving one side open and not the other – Mr. Durning stated it was due to the threats of security. If the threats migrate to the East, there may be a time to return to (placing)fencing in the area. What about alternate locations like the (Concord Municipal) Light and Power Plant. Mr. Durning stated that it was brought up at previous sessions.

Ms. Green inquired who conducted the site security assessment – Mr. Durning stated is was the Concord Water and Sewer professionals who do patrols and walkthroughs in the area. Public Works department keeps a log of activity seen. It was a compilation of reviews they had compiled. Ms. Green was confused why stopping the fence on the western board that the same threats would happen later (or migrate). Would you (Concord DPW) consider the use of combined heat and power – Mr. Durning - no that has been taken off the board. Ms. Green inquired about the backup generator that must run 30 minutes per week – wondering if it could be schedule a specific time for it to run – Mr. Durning – yes. Ms. Green inquired regarding the delivery times for chemicals – Mr. Durning stated it is not a midnight delivery – mostly 7 AM-7 PM during the weekday and Concord DPW is with them during delivery, so staff is present.

Mr. Chang inquired where the access road is location, Mr. Durning stated it extends from the (Breezy Point entrance) and will continue use for deliveries.

Ms. Adachi noted regarding the wildlife and the proposed fence - just received a memo regarding the height of the fence where the gap may be bigger than others, and deer being able to access the water at the end of the fence. Open Space Committee submitted a letter regarding the wildlife very important for the wildlife corridors and not be blocked as much as possible.

Mr. Berry questioned if Concord DPW/Water and Sewer anticipated taking down any mature trees with the fence installation – Mr. Durning stated no. Mr. Berry inquired regarding the installation of the proposed fence post – is there concrete in use or drilled directly into the ground – Mr. Durning stated they would be secured with concrete. Also, where would the septic area be located – Mr. Durning stated it would be located by the access road. Mr. Berry asked for copies of the Material Data Safety Sheets, Mr. Durning will get them delivered (to the Board of Selectmen). Mr. Berry asked if (Concord DPW) could restrict deliveries to weekdays only – Mr. Durning will work with that. Mr. Berry asked what

other alternatives have you (Concord DPW) thought of and have you (Concord DPW) spoken with other public water suppliers – Mr. Durning stated he mentioned about signage and that it has not deterred blatant ignoring the (No Tresspassing) signs.

Acton Water District –Acting Water Commissioners Mr. Steven Stunz, Leonard Phillips and Ronald Parente , Matt Mosteller, and Chris Allen, Director. Mr. Stunz presented a presentation regarding questions that the BOS had after the previous hearing from September 12. [attached below]

Mr. Berry questioned in Concord DPW/ Water Sewer would be willing to accept water services to parts of Great Road including businesses – Mr. Durning has to speak with officials regarding acceptable wording.

Mr. Chang noted that Acton Water District stated they don't have a projection of water needs in the future – if we (Town of Acton) were to have the need to require the use of Nagog Pond in the future, could we have a facility like Concord's proposal, could we (The Town of Acton) have one - Mr. Stunz stated yes, but it would require state approval (for the use of Nagog Pond Rights).

Ms. Green questioned just to provide service on 2A with the current supply what would it require AWD to take over that service – AWD responded with it would require installation and road cuts. Ms. Green continued with what would be general cost associated with such work - Mr. Stutz responded approximately about \$400 per foot, permits, police details, etc. It would be quite high. Would you (AWD) be willing to talk with Concord with larger issues aside the Site Plan Special Permit – Mr. Stutz it would take a long time for districts to talk smoothly – we have emergency hookups with Concord and Littleton as needed. Long term we will be working with them and willingly. Concord would be willing to work with AWD with those issues as well.

Ms. Osman questioned Acton Water District regarding the amount of water used and any comments in difference in water usage between the towns. Mr. Stutz stated no – he doesn't know the conservation status with Concord – only works on local conservation.

Ms. Adachi had no further questions.

Alan Cathcart – practicing water conservation – EPA has a program called Water Sence – like an energy program. EPA goal is 100 gallons per day per capita – this is a National Standard. Mr. Cathcart explained the makeup of their system using an example from their presentation from slide 21 (see attachment).

Barry Elkin – Skyline Drive – Mr. Elkin spoke from a written statement. Requested the Board make a condition that the fence have a setback of 20 feet and not to exceed 8 feet in height – Mr. Durning stated they are committed to not exceed eight feet.

Carolyn Keily – Skyline Drive – Had a presentation regarding responding to Concord hearing from September 12<sup>th</sup> and also had response to Mr. Durning's opening statement.

Robert Sekular – 17 Parkland Lane – spoke in conclusion of the presentation from Ms. Keily. Mr. Sekular urged the Board to take serious consideration with Acton Water District's 3 suggestions of conditions, also have Concord come up with a drought contingent limitation plan under conditions of extreme drought, and to consider to require Concord to put a conservation constriction on the surrounding land, and to minimize the fencing. One other suggestion was to have Concord to conduct a serious study to commit to preserve the high sensitivity archeological sites.

Lisa Lapinski – Acorn Park – read from prepared statement and sent in via email – posted in docushare file

Ralph Lawrey, Quail Ridge – read from a prepared statement

Kim Kastkins, 290 Pope Road – read from a prepared statement and submitted bia email – posted in docushare file

James Engel, Breezy Point Road – read from prepared statement

Ron Beck, 80 Esterbrook Road – showed a prepared power point presentation on water quality – expressed concern that Acton being in a water deficit in the future. Requested that Concord withdraw application and have more conversations between Acton, Concord, and Littleton.

Bernie Dennis, 40 Greenside Terrace – read from a prepared statement – thanked Ms. Adachi for setting up the GIS map – concerned about the fencing proposal and not just building the fence around the treatment facility only.

Ainsley Brennan, Breezy Point –

Terra Freidrichs, Wright Hill – requested the Selectmen to not close the hearing and order a water study to be paid for by Concord – Acton needs to protect itself.

Barry Rosen, Windemere Road – questioned why the plant is being built in Acton and not in Concord and asked if there are openings in Great Road for pipes – Mr. Cathcart explained briefly that it is not part of this plan.

John Goddard, 4 Breezy Point Road – feels the proposal is arrogant

Ms. Green expressed the need to move forward and close the hearing – doesn't think that it could be closed tonight and hoped that Concord understands with the hearing being continued multiple times (by Concord's requests)and to agree to extend the decision date given that material was presented to the board 2 hours before the hearing. Ms. Osman stated that is was not necessary for the public to reiterate any comments previously given in past hearings. Mr. Berry requested to extend the timeline for a

decision – Mr. Durning agreed to extension. Mr. Berry requested to close hearing at the next (special) public hearing and deliberate for a final decision prior to the December 11 deadline. Ms. Green commented that doesn't feel it's feasible for staff and counsel to wright a decision in such a short time. Mr. Berry added that he is concerned about having a full wildlife study completed before deadline. Ms. Adachi is reluctant to close the hearing without seeing some type of comments first and also hiring consultants for a full wildlife study. Mr. Chang stated he was in favor of hiring "our own" consultants (instead of Concord) for an archeological study. Ms. Adachi and Mr. Berry both agreed to hire consultants.

Mr. Durning stated that it would be appropriate to include the study in the condition of decision, also work would not begin (on the fence) if the conditions for the study are not completed.

Ms. Adachi moved to retain a wildlife consultant for scope of complete study, Ms. Green second. All Ayes (5-0)

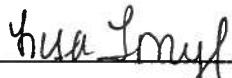
Ms. Adachi moved to continue the Nagog Pond hearing to December 14, 2016 at 7:00 PM, Ms. Green second. All Ayes (5-0)

Mr. During agreed to extend decision from December 11, 2016 to January 11, 2016.

Ms. Adachi moved to extend decision deadline to January 11, 2016, Mr. Chang second. All Ayes (5-0)

Ms. Adachi moved to adjourn, Ms. Green seconded. All Ayes (5-0) Meeting adjourned at 12:15 AM.  
Respectfully Submitted,

---



Lisa Tomyl, Recording Secretary

---



Franny Osman, Clerk



# Water Supply District of Acton

693 MASSACHUSETTS AVENUE  
P.O. BOX 953  
ACTON, MASSACHUSETTS 01720

TELEPHONE (978) 263-9107

FAX (978) 264-0148

**TO:** Town of Acton Board of Selectmen

**FROM:** Board of Water Commissioners

**RE:** Technical assistance on Concord's request to construct a water treatment plant at Nagog Pond

Honorable Selectmen,

Per your request for assistance with citizen concerns and questions surrounding the Town of Concord's application to construct a Water Treatment Plant at Nagog Pond to replace their existing plant, we offer the following responses to your questions:

1. Is there an impact on Acton's groundwater resources if the Concord Treatment Plant increases its water drawdown from Nagog Pond? If so, please describe.

**Based on the hydrology and location of our wells, we do not see a direct correlation between water withdrawn from Nagog Pond and effects on our nearest well, Conant 1 (599 Main St). Although Nagog Brook passes through the area of our Conant 1 well, the dam at Nagog Pond under current conditions already reduces the available flow to the brook during certain times of the year. Additional withdrawals from the pond would have the same type of impact as we see today where consistent flow in Nagog Brook is not a given. Under currently pending water management regulations in Massachusetts, Concord may be responsible for maintaining a more consistent flow in Nagog Brook and mitigating impacts downstream of the dam.**

2. Has the Acton Water District (AWD) completed an existing build out analysis for the Town?

The Acton Water District has not completed a build out analysis for the Town of Acton. We rely on other organizations to look at build out potential and the resulting population and employment projections. We then take that information into consideration as we plan for future water needs. Typically water use is correlated to people and processes, not buildings; therefore a build out analysis is not the only tool of choice in forecasting future water needs. Our recently completed Water Needs Forecast (WNF) by the Massachusetts Department of Conservation and Recreation (DCR) used population growth and employment projections. Our Water Impact Report requirements serve to further evaluate the District's ability to meet the water supply needs of large scale projects in Acton as they arise. These processes will continue to play a vital role in determining what would exceed our capacity and require alternate sources of water to be pursued or developed.



# Water Supply District of Acton

693 MASSACHUSETTS AVENUE  
P.O. BOX 953  
ACTON, MASSACHUSETTS 01720

TELEPHONE (978) 263-9107

FAX (978) 264-0148

3. Is the AWD able to serve the Town at maximum build out capacity with the current drawdown of Nagog Pond? Would the proposed increased drawdown from Nagog Pond affect the AWD's ability to serve at maximum build out?

**We do not see the relationship posed in this question based on our responses to the prior questions. Based on public discourse, the question could be related to service on Great Road and our ability to serve that area if Concord did not serve it anymore. That would require information that is not currently available to begin to address.**

4. What chemicals does the AWD use?

The Acton Water District currently uses sodium hypochlorite(liquid) and sodium fluoride (granulated) at all of our treatment facilities. Potassium hydroxide (liquid), potassium permanganate (granulated), poly-Aluminum chloride (liquid), sodium bisulfite (liquid), citric acid (liquid), and granulated activated carbon are used in bulk at various treatment facilities. In addition we deploy the physical process of aeration to remove volatile organic contaminants and membrane filters to remove minerals and microbes.

5. How many trips/deliveries does the AWD receive per day?

Our major facilities may have 1-4 vehicle trips per day that include the daily operations visits in a mid-size pickup (Ford Ranger). Chemical deliveries (tanker for bulk liquid deliveries, and/or box truck for palletized dry deliveries) are one approximately every 2-4 months (about quarterly) depending on the season and chemical. Other maintenance activities may require additional vehicle trips (contractors and/or District operators) or equipment.



# Water Supply District of Acton

693 MASSACHUSETTS AVENUE  
P.O. BOX 953  
ACTON, MASSACHUSETTS 01720

TELEPHONE (978) 263-9107

FAX (978) 264-0148

The Acton Water District has a unique perspective on Concord's proposal, as we are intimately familiar with the challenges of managing a Public Water Supply. Although we cannot comment on the particular needs driving this project, we can appreciate the pressures to provide a clean, reliable, and redundant water supply while meeting the complex array of environmental and regulatory conditions. That said, each system is individual in its own right, and the specifics of our system, or the Town of Acton, are not an "apples to apples" comparison of the specifics of Concord's system, or the Town of Concord.

We believe that Concord's proposed higher level of treatment of the Nagog Pond waters could pay benefit to our community if three conditions are met. The first is their continuation of providing water service in the vicinity of Great Road in Acton and adding new or expanded service as needed. The second is the inclusion of future short or long term supply to the District via existing or new interconnections, if needed. This would be with the understanding that short term emergency needs would be automatically agreed upon. Finally that the uses of the waters of Nagog Pond that were in the 1884 Act of the Massachusetts Legislature be confirmed with a clear plan on how those rights can be exercised.

The rights to the waters of Nagog Pond, a Great Pond, are an extremely important regional water supply issue, and we do not take that lightly. Chapter 201 of the 1884 Acts of the Massachusetts Legislature provides for Acton's ability to access these waters, and we believe it is critical to maintain that statutory right, and that Nagog Pond be forever considered to be a viable source of drinking water for the region. Efforts should be put forth during this special permit process to protect the watershed lands in perpetuity and the future water supply development rights of both Acton and Littleton.

While Acton has not identified an immediate need for Nagog Pond, given the uncertainties inherent in Questions 1 and 2, the need may very well arise in the future. Furthermore, accessing Nagog Pond as a source would require that we acquire property, construct a facility of similar scope and scale as that being proposed, and gain legal and regulatory authority to exercise those rights. This burden has not been considered in our current planning scheme; nor has the potential of absorbing the demand of Concord's services along Great Road in Acton. Taking this type of system expansion on would require surface water treatment, which would impose a financial burden to our customer base that would substantially exceed the cost of our recent system improvements. The District appreciates the attention to water resource issues that this proposal has generated amongst Acton residents. The water needs of the Town are something that residents bring to the forefront every few years. We want to assure our customers and the residents of Acton that we continually plan for the future of Acton's water needs in a fiscally and environmentally responsible manner.

**Comments and Recommendations to the  
Acton Board of Selectmen on the  
Site Plan Special Permit Application for the Town of  
Concord's Nagog Pond Water Treatment Plant**



## Is there an impact on Acton's groundwater resources if the Concord Treatment Plant increases its water drawdown from Nagog Pond? If so, please describe.

Based on the hydrology and location of our wells, we do not see a direct correlation between water withdrawn from Nagog Pond and effects on our nearest well, Conant 1 (599 Main St). Although Nagog Brook passes through the area of our Conant 1 well, the dam at Nagog Pond under current conditions already reduces the available flow to the brook during certain times of the year. Additional withdrawals from the pond would have the same type of impact as we see today where consistent flow in Nagog Brook is not a given. Under currently pending water management regulations in Massachusetts, Concord may be responsible for maintaining a more consistent flow in Nagog Brook and mitigating impacts downstream of the dam.

# Has the Acton Water District (AWD) completed an existing build out analysis for the Town?

The Acton Water District has not completed a build out analysis for the Town of Acton. We rely on other organizations to evaluate build out potential and the resulting population and employment projections. We then take that information into consideration as we plan for future water needs. Typically water use is correlated to people and processes, not buildings; therefore a build out analysis is not the only tool of choice in forecasting future water needs. Our recently completed Water Needs Forecast (WNF) by the Massachusetts Department of Conservation and Recreation (DCR) used population growth and employment projections. Our Water Impact Report requirements serve to further evaluate the District's ability to meet the water supply needs of large scale projects in Acton as they arise. These processes will continue to play a vital role in determining what would exceed our capacity and require alternate sources of water to be pursued or developed.

**Is the AWD able to serve the Town at maximum build out capacity with the current drawdown of Nagog Pond?**

**Would the proposed increased drawdown from Nagog Pond affect the AWD's ability to serve at maximum build out?**

We do not see the relationship posed in this question based on our responses to the prior questions. Based on public discourse, the question could be related to service on Great Road and our ability to serve that area if Concord did not serve it anymore. That would require information that is not currently available to begin to address.

## What chemicals does the AWD use?

The Acton Water District currently uses sodium hypochlorite(liquid) and sodium fluoride (granulated) at all of our treatment facilities. Potassium hydroxide (liquid), potassium permanganate (granulated), poly-Aluminum chloride (liquid), sodium bisulfite (liquid), citric acid (liquid), and granular activated carbon are used in bulk at various treatment facilities. In addition we deploy the physical process of aeration to remove volatile organic contaminants and membrane filters to remove minerals and microbes.



## How many trips/deliveries does the AWD receive per day?

District

Our major facilities may have 1-4 vehicle trips per day that include the daily operations visits in a mid-size pickup (Ford Ranger). Chemical deliveries (tanker for bulk liquid deliveries, and/or box truck for palletized dry deliveries) are one approximately every 2-4 months (about quarterly) depending on the season and chemical. Other maintenance activities may require additional vehicle trips (contractors and/or District operators) or equipment.



# General Comments

The Acton Water District has a unique perspective on Concord's proposal, as we are intimately familiar with the challenges of managing a Public Water Supply. Although we cannot comment on the particular needs driving this project, we can appreciate the pressures to provide a clean, reliable, and redundant water supply while meeting the complex array of environmental and regulatory conditions. That said, each system is individual in its own right, and the specifics of our system, or the Town of Acton, are not an "apples to apples" comparison of the specifics of Concord's system, or the Town of Concord.



## General Comments (contd.)

**We believe that Concord's proposed higher level of treatment of the Nagog Pond waters could benefit our community if three conditions are met:**

- continuation of providing water service in the vicinity of Great Road in Acton and adding new or expanded service as needed;
- inclusion of future short or long term supply to the District via existing or new interconnections, if needed. This would be with the understanding that short term emergency needs would be automatically agreed upon;
- the uses of the waters of Nagog Pond that were in the 1884 Act of the Massachusetts Legislature be confirmed with a clear plan on how those rights can be exercised.



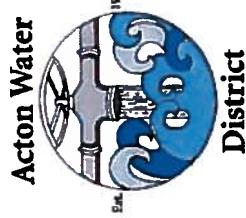
## General Comments (contd.)

The rights to the waters of Nagog Pond, which is a Great Pond, are an extremely important regional water supply issue, and we do not take that lightly. Chapter 201 of the 1884 Acts of the Massachusetts Legislature provides for Acton's ability to access these waters, and we believe it is critical to maintain that statutory right, and that Nagog Pond be forever considered to be a viable source of drinking water for the region. Efforts should be put forth during this special permit process to protect the watershed lands in perpetuity and the future water supply development rights of both Acton and Littleton.



## General Comments (concluded)

While Acton has not identified an immediate need for Nagog Pond, given the uncertainties inherent in Questions 1 and 2, the need may very well arise in the future. Furthermore, accessing Nagog Pond as a source would require that we acquire property, construct a facility of similar scope and scale as that being proposed, and gain legal and regulatory authority to exercise those rights. This burden has not been considered in our current planning scheme; nor has the potential of absorbing the demand of Concord's services along Great Road in Acton. Taking this type of system expansion on would require surface water treatment, which would impose a financial burden on our customer base that would substantially exceed the cost of our recent system improvements. The District appreciates the attention to water resource issues that this proposal has generated among Acton residents. The water needs of the Town are something that residents bring to the forefront every few years. We want to assure our customers and the residents of Acton that we continually plan for the future of Acton's water needs in a fiscally and environmentally responsible manner.



Thank you

**Board of Water Commissioners**

**Stephen Stuntz, Chair**

**Len Phillips**

**Ronald Parenti**

**Chris Allen, District Manager**

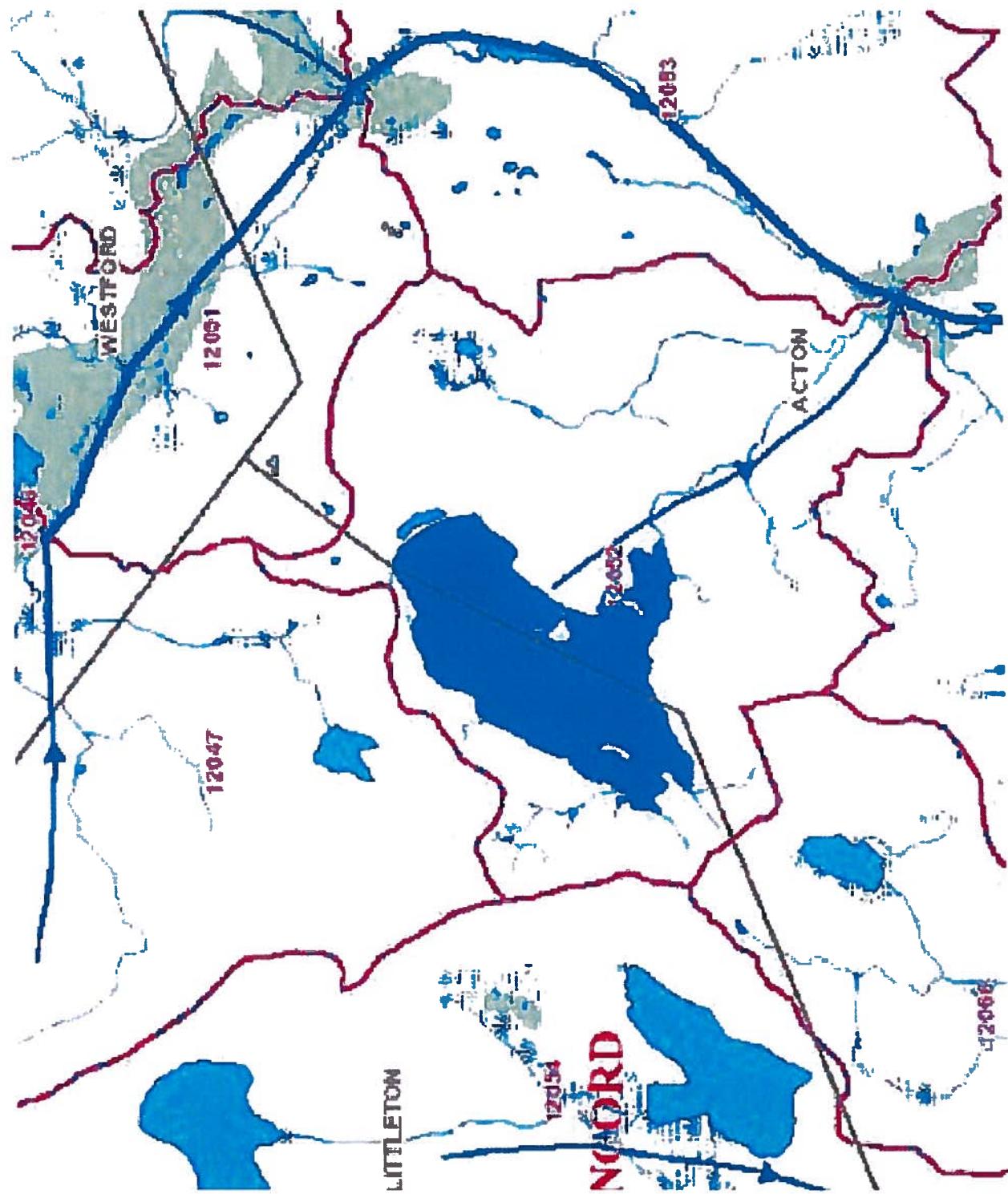
**Matthew Mostoller, Environmental Manager**

**[commissioners@actonwater.com](mailto:commissioners@actonwater.com)**

**693 Massachusetts Avenue, P.O. Box 953**

**Acton, MA 01720**

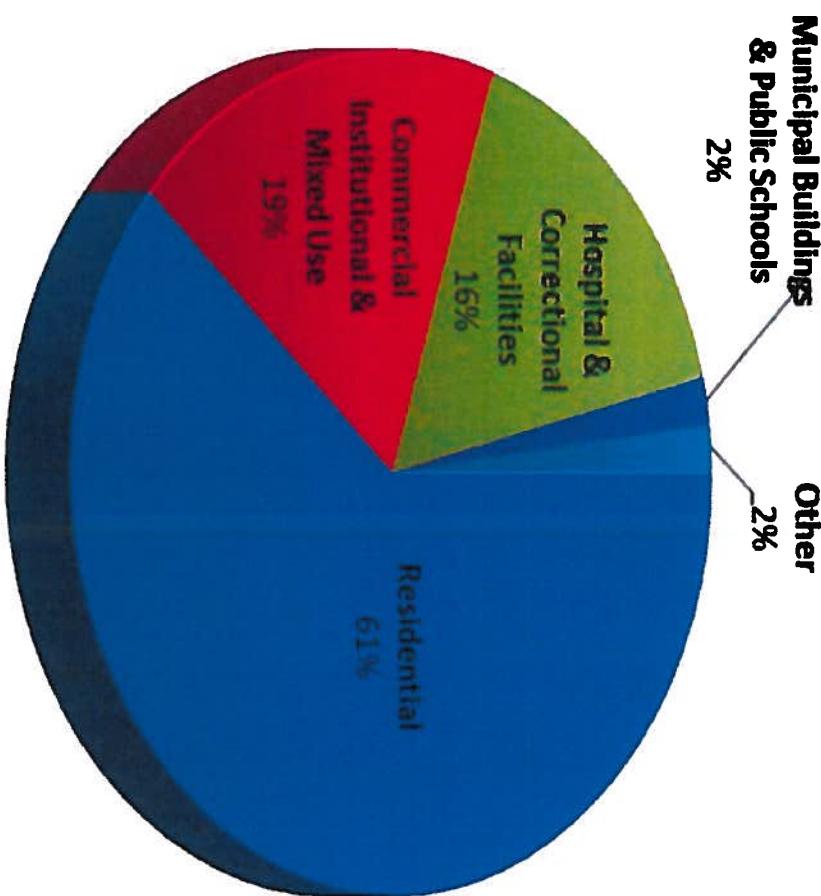
**978-263-9107**



November 1, 2016

# Water Demand Profile

## Concord



PWS Name	Average RGPCD (2009-2015)	% Single Family	% Multi Family	Total Population
ACTON WATER DISTRICT	56	72%	28%	22,614
CONCORD WATER DEPARTMENT	65	81%	19%	18,834
LEXINGTON WATER DEPARTMENT	73	85%	15%	32,306
LINCOLN WATER DEPARTMENT	71	82%	18%	7,381
SUBURY WATER DISTRICT	66	95%	5%	18,197

