BOARD OF SELECTMEN AND SEWER COMMISIONER'S SPECIAL MEETING

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ACTON

September 12, 2016
Francis Faulkner Room 204
Regular Meeting 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 Roelofs, Special Town Counsel

Mr. Berry opened the meeting at 7:00 PM

Public Hearings

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

Ms. Osman gave an overview of the project from the continuation from the meeting on January 25, 2016. The removal of the solar array field and the addition of cogeneration, and addition of gas line. Mr. Berry stated it is a legal proceeding under the Zoning Bylaw – Concord is seeking a Use Permit 3.4, and section 3.4.7 under Acton Zoning Bylaw. Governed under section 10.4 of the Zoning Bylaw to either grant or deny the Special Use Permit, and Concord is also seeking a Site Plan Special Permit.

Town of Concord to give presentation, then the Board of Selectmen will ask questions, then there will be an opportunity for questions from the Acton Water District, then the opportunity for audience members to make comments.

Acton Special Counsel Jeffrey Roelofs brought up a fencing proposal as a floodway special permit is being sought by the Town of Concord. The fencing is part of the Special Use Permit under Acton Zoning Bylaw 10.4. Submitted to the Board and into record of the MEPA report. Mr. Berry wanted it entered into record with the draft environmental report. No opposition from the Town of Concord.

Alan Cathcart – Water/Sewer Superintendent, Concord. Mr. Cathcart acknowledged the representatives from the Town of Concord, Concord Board of Selectmen, Concord Town Manager Chris Whalen, Director of the Department of Public Works Richard K. Reine, and part of the firm that worked on the plans (Environmental Partners, Paul Gabriel, Mark White, Paul Millis and Mark Wallace). Concord Special Counsel John Shea and Peter Durning. Mr. Cathcart presented the power point presentation and overview of the Site Plan Special Permit/Use Special Permit (SPSP/USP) application. Mr. Cathcart outlined some of the concerns of the Town of Concord and their proposal to the Board of Selectmen. Mr. Cathcart made a brief historical presentation of the history of Nagog Pond and the acquisition of the rights and the construction of the current water treatment plant. The current property line was a land swap back in 1990 with the Palmer family property as they were developing the (Quail Ridge) golf course and housing.

Mr. Mark White from Environmental Partners Group gave a description of the proposed building and plans including the water treatment plant upgrade, raw water intake improvements, site security, site access and traffic, site lighting, power supply, and zoning. Proposed utilizing natural gas as a source of energy and co-generators to eliminate the need for electrical energy due to the potential of loss of power.

Mr. Mark Wallace (Tech Environmental) performed the sound study and discussed the distributed energy units and the noise conditions compared to the Mass DEP noise policy. He conducted the ambient noise level study. Conducted multiple samples at various time of the day including overnight.

Peter Durning – Special Counsel for Town of Concord, reviewed the legal aspect of article 97, variances, special permit criteria, and criteria for the site plan special permit. (xx see the **PP printout** notes).

Ms. Osman inquired what is the current amount (of water) being taken out versus what will be planned to be taken out (in the future). Inquired about how many customers are currently served by Nagog Pond – currently 5500. Acton Water District currently has 140 residential units and 38 commercial service connections however some are multi connections for commercial and multi-unit residential. Ms. Osman inquired about future service connections if there is more development in the area. Ms. Osman was happy to hear how Concord is responding to concerns regarding safety, chemicals, etc. Would like to hear why Concord is not going on the (electrical) grid, also, what are the pros and cons for both Concord and Acton.

Mr. Berry stated that Concord may not be happy with the MEPA report, and that Acton already has a problem with natural gas leaks throughout the town and that natural gas leaks are far worse for the environment than carbon dioxide (CO2) emissions. Mr. Berry inquired about what percent of energy will be produced with the co-generators – the 3 units will use 100 percent of the loading. Ms. Green inquired if Concord Department of Public Works has looked at the Town of Acton's electrical aggregation aspects of electricity sources. Mr. White was not familiar with the energy aggregation with the Town of Acton. Mr. Ledoux gave an overview of the electrical aggregation plan (recently approved): Looking to go out to bid in November, the goal is to have a green option and a very green option. Ms. Adachi noted that gas leaks are a regional problem, not just Acton. Ms. Osman questioned about the water level going down while the letter from Friends of Pine Hawk stated it was up. Mr. White referred to the slide with the 100 year record of draw and elevation. Ms. Osman wanted to know if there was any recourse if the Town (Acton) needed water, could the Town (Acton) go back and get water from the pond. Mr. Roelofs stated he needed to do some research, however he would have to go to state legislation.

Ms. Adachi inquired if the archeological study had ever been completed, it was explained that there are many levels of detail in such study, and how green (green energy) was going to be a factor, and since the plans for replacing the photovoltaic (to co-generation) the point was moot to continue and complete the archeological study.

During the (2 phase) infrastructure update, Ms. Adachi inquired if the Town of Concord Water District would be able to handle the water demand with the 6 wells in Town. Mr. Cathcart stated they are about 50% completed with the infrastructure plan – and that it is to be determined.
Ms. Adachi inquired about the fence and the effect visually, and fragmentation of habitat and the restriction of access of abutters that were able to use the trails up to now.
Mr. White stated it was going to be a high quality vinyl coated black PVC fence so it blends in. There will be a gap on the bottom for small animals to go back and forth under the fence.
Ms. Adachi expressed concerns about noise especially at evening – full tilt operation that the level is acceptable, was wondering about potential buffering at the site. Response was that the presentation showed that the noise is well within DEP standards.
Mr. Chang stated that he wanted to be assured that the fence is just going to be a fence and not cameras or electrified fencing – Mr. Reine assured it would just be PVC fencing – not electrified.
Inquired regarding Vehicle traffic during construction and time frame of construction - there will be more traffic during the construction timeline. The building could take up to a year for completion and the pipe replacement would occur during the fall months and take 3-4 months.

Ms. Green – regarding two recommendations (regarding sound) about acoustic louvers and buffering – are you integrating the recommendations of shifting the acoustic louver issue .– yes (Mr. Reine). Since Concord is well within the DEP requirement for acoustic testing and decibels. Any plans of shifting the acoustic louver would be the ozone contact chamber as an additional buffer. Ms. Green inquired about Concord contacting other water districts in regards to security and fencing (such as Quabbin Reservoir) that do not use fencing and allow people to walk on their land. Mr. Cathart – have had discussions – Concord has looked at risks for protecting the supply.

Mr. Cathart showed a slide to show the risks of safety and security such as fire pits, general land fires, graffiti, horse manure, fishing, ice fishing etc. His intent with the fencing is not to keep good people out, but to keep people out after hours. Ms. Green inquired about just placing the fencing around the facility vs. all the way to the pond.

Mr. Millis discussed security surrounding storage and water supplies.

Ms. Green inquired about the intake pipe and environmental impact report with other option on building location and why not locate the building on a property in Concord. Concord looked at another location on 300 Great Road, but the new building plan does not fit on the small property.

Mr. Berry inquired about the chemicals that will be brought in and requested the MSDS sheets of the chemicals for the record. Inquired about the height of the fence at 8 feet and no barbed wire. Questioned about stormwater runoff and do they (Concord Water) have to meet the new requirement since the new bylaw went in effect.

Paul Millis, Environmental Partners, commented on the stormwater runoff and communication with the Town Departments.

Terra Friedrichs, Wright Hill – Question about the maximum capacity withdrawals – Mr. Cathcart explained that (Concord Water) is looking at design basis of 1.5 million per day maximum withdrawal – over the year it may be more like 1 million gallons maximum a day.
Ms. Freidrichs inquired about the number of trucks per day per week now – Mr. Cathcart stated that there is very little traffic per day off peak season (fall, winter, early spring). During summer occasional operator or 2 (4-6 travel events per day maximum) or if there is a problem (at the facility) Also the maximum withdrawal per day currently – Mr. Cathcart stated that Concord water can withdraw up to 3 million gallons per day – varies on the demand. What percentage of withdrawal is from Acton currently – during the winter there isn't any, but during summer it has been half a million per day.

Noor Roomi - 170 Skyline Drive – what is the decibel sound compared to – Environmental Partners explained that the sounds would be equivalent of an empty conference room (40 decibels).

Couldn't get name, Acorn Park - wanted to see pictures of trucks and wanted to know how many times per day the trucks will be driving by in her neighborhood – Mr. Berry stated a maximum of 2 vehicle trips per day of chemical trucks.

Bernard Dennis - 42 Greenside Lane - - inquired about a site in New England to hear about co-generation configuration. Representative from Environmental Partners explained there were many types of cogeneration configurations in use in multiple locations in New England, but not in this type of configuration.

Ron Beck – 80 Esterbrook Road – familiar with the cogeneration but confused about application and would like the rational of the need for a combined heat and power source and what is benefit for the Town of Acton – a gas powered power source would create air emissions. Mr. Reine reiterated that the explanation had been delivered clearly in the presentation.

Lillian Stokes - 90 Skyline Drive – nobody has addressed the total emissions and how that will affect air quality in the surrounding neighborhoods. Environmental Impact Report did air quality report analysis for co-generation units and they meet the most stringent requirements according to the California Air Resources Board – more stringent than requirements in Massachusetts based on the co-generation units running at 100% load, and emissions would be less than one ton per year.

Renee Robins – 53 Windsor Ave – Would like to know what amount would be taken out of Nagog Pond with the historical withdrawal rate and with the current drought going on now. Also reviewing the act of 1844, there was a statement regarding protecting the rights of the Town of Acton. Mr. Roelofs stated that if the Board would like that looked into, it could be done. Mr. Berry stated that Senator Eldridge was working on that act with Attorney General Maura Healy.

Ms. Robins asked if the Town has done a full build out analysis of water needs in the future of the Town of Acton. Mr. Berry stated that the Acton Water District is a separate Board not overseen by the Town of Acton. Any information regarding this must be answered by Acton Water District. Questioned why the water cannot be treated in Concord and then pumped back to the facility already treated. Ms. Robins mentioned about larger bodies of potable water such as the Quabbin Reservoir (city of Boston) being pumped into the Marlboro (Clinton - Wachusett) Reservoir.

Lisa Lapinsky – 525 Acorn Park Drive– Water treatment facilities – how many of them have chemical shipments into a road as small as Acorn Park? Concern for the trucks entering and maneuvering through the neighborhood occupied by many children. Mr. Cathcart stated that these facilities all are public water supplies but can't speak to the size of the facilities, only by DEP standards and reports. Went through the virtual walkthrough and saw two trailers that were emitting noises – they are ozone treatment trailers and the equipment inside is failing – the two units are temporary. Ms. Lapinsky requested an address of another water treatment facility similar to the proposed one at Nagog Pond.

Elizabeth Crowley – 99 Concord Road – read from a prepared statement and did not receive a copy – wondered if the Board is under an obligation or can we vote yes or no. Mr. Berry stated that the Board is under an obligation to take the facts presented by the (applicant) and the comments/questions from residents and make a decision based on the Zoning Bylaw aspects and recommendations from Town Staff.

Edward Root - 40 Greenside Lane – had a concern about the fencing – what is the purpose of the fencing if you don't have it all around Nagog Pond. If it is just around the facility, it allows people to have access (for walking).

162 Skyline Drive – Wanted to know if the fencing will keep people from not getting around it somewhere else. Have evidence that people won't walk around the fence and continue to do the activities you explained. Environmental Partners stated that people will find a way to breech the fencing but they are a preventative measure versus no fence at all. Questioned if Skyline Drive is an egress for people to get into the property easily and where is the egress just around the building (treatment plant). Mr. Cathcart – the risk to the pond and quality exists all along the shoreline of the pond. Mr. Cathcart explained that the fencing is located in areas where the activities have been on the increase.

Maura Callahan – 47 Newtown Road – advocate to drinking water – asked if Concord would consider a small release into Nagog Brook. Mr. Cathcart – one community thought they were doing the right thing and allowed a small release and now they are in a water emergency (Scituate). They were releasing their drinking water to help maintain the fish and wildlife downstream – not a model (he) finds successful for anybody.

Ju Wong – Breezy Point – what is spacing between the posts – Mr. Cathcart stated approximately 10 feet between poles - very small animals will be able to get through (6-8 inches from bottom of fence will be open).

Terra Freidrich, Wright Terrace – Acton Water District uses 1.3 million per day – if Concord has less population, what are they going to do with all the water. Concord has average 2 million per year. Ms. Freidrichs wants to know where all the water currently being drawn is going.

10 Wachusett Drive – can restrictions be applied for archeological concerns so they can be addressed.

Abutters presentation – Carolyn Kiely, Robert Sekuler, Barry Elkin - Mr. Elkin opened the abutters comments presentation, with the majority of the presentation by Ms. Kiely. Mr. Sekuler gave a presentation regarding not issuing the Town of Concord approval for their Site Plan Special Permit. (See both presentations following the meeting minutes)

James Engel – Concord has access to an easement at their property to use access to the treatment facility since they bought their property in 1992. Wanted to bring up the subject of the fencing plan that was presented 2 weeks prior to the public hearing. Stated the fence will cut off access to conservation land to travel up to 2 miles away.

Board commented to continue hearing due to the late time. The Board offered November 1 at 7:00 PM.

Ms. Green moved to continue the hearing to November 1, 2016 at 7:00 PM and to keep the decision deadline for December 11, 2016, Ms. Adachi seconded. All Ayes.

Ms. Green moved to adjourn, Ms. Adachi seconded. All Ayes. Meeting adjourned 11:30 PM.

Respectfully Submitted,

Lisa Tomyl, Recording Secretary

Franny Osman, Clerk

ZONING ISSUES:
PROPOSED CONCORD WATER TREATMENT PLANT AT NAGOG POND, ACTON, MA

BY CAROLYN KIELY

September 12, 2016

THERE ARE OPTIONS

- For Concord:
  - MWRA hook-up through Bedford (existing)
  - Present approach
    - Treat ozone at Nagog
    - Perform remaining treatment at 2A facility
      - "Finished water" flows from 2A facility now
    - Water conservation
    - Move facility downstream/in Concord
- For Acton:
  - Chris Allen, Acton Water District Manager: 1,400 feet (approx) short of pipe to serve 2A customers
  - Two weeks to add pipe and service 2A

Concord's Intentions

- DEP:
  - "Concord has tended to use Nagog Pond in recent years on a limited basis to meet peak seasonal demand."
  - 2014 – "Nagog Pond provided only about 4% of Concord's water supply."
  - The new facility "will give the Town more flexibility in management of its water sources. Concord is likely henceforth to use Nagog Pond more often as a water source … which in turn means that it will likely withdraw less from its municipal wells."
    - Meaning – 365 days/year withdrawals (vs. seasonal)

Noise

- DEP Noise Policy – no more than a 10 decibel increase over background levels
- Pre-June 2016 – ozone facility only
  - Quiet
- June – One "trailer" added to the site
  - Noise
- Late June/Early July – Second "trailer" added
  - Significant noise
  - Heard at property boundary & conservation land
- Trailers – augment failing equipment

Trailers at Ozone Plant

Noise (continued)

- July 28th – Sound testing
- Technician – measuring background to determine the increased sound from generators
  - "This is not background"
  - "Trailers are temporary. Can't be used to determine background"
  - "Background is ZERO – before temporary trailers added"

Noise (continued)

- Property line walked
  - Technician: "The dominant sound was the trailer sounds at the property line – even over air conditioners of adjacent homes"
- Concord's findings:
  - Baseline -- "principal sound sources were **the WTP operations**, aircraft flyovers and insects"
  - Generators -- "an increase of 1.5 dBA **to 9.2 dBA** above existing night-time ambient sound levels is predicted."
- IF BASELINE WAS TAKEN WITHOUT THE TRAILERS OPERATING, **CONCORD WOULD EXCEED 10 dBA!!**
- **New test needed without trailers operating.**

Acton's Zoning Bylaws: Special Use Permit

- Section 10.3.5: You have ***affirmative findings*** that you must make in order to issue the special permit.
  - 10.3.5.1: Is consistent with the Master Plan
  - 10.3.5.2: Is in harmony with the purpose and intent of this Bylaw
  - 10.3.5.3: Will not be detrimental or injurious to the neighborhood in which it is to take place
  - 10.3.5.4: Is appropriate for the site in question
  - 10.3.5.5: Complies with all applicable Bylaw requirements

10.3.5.1 – Consistent with Master Plan

- Concord: "the Master Plan recognizes Nagog Pond as a natural resource … that should be preserved." (references Acton 2020)
- Inconsistencies:
  - 2020 Objective 2.3: "Reduce emissions of carbon dioxide and other greenhouse gasses"
    - Concord's generators: "the net change in CO2 emissions is an *increase* of 308.6 to 317.1 tons/year." (DEIR, Appendix L)
    - 2020 Strategy 2.3.1: "Encourage use of cleaner energy sources"
    - 2020 Strategy 2.3.6: "Continue planning for reducing Acton's carbon footprint" using "joint community and town effort to use less fossil fuels."

10.3.5.1 (continued)

- Inconsistencies (continued):
  - 2020 Goal 2: "Protect the quality and quantity of Acton's water," ... taking "surface water into account"
    - 365 surface water withdrawals does not protect water "quantity" especially with drought
  - 2020 References Open Space and Recreation Plan (OS&R):
    - State's scenic landscape inventory – Nagog Pond and its shoreline

10.3.5.1 (continued)

- <u>2020/OS&R:</u>
  - "Broad wildlife corridor … connects the Nashoba Brook Basin with Lake Nagog …"
    - Fence – inconsistent with wildlife corridor referenced in 2020/OS&R
  - Nagog Brook "meanders, forming a series of deep pools … & broad floodplains. This is a prized area for fishing and is populated by both beaver and otter"
    - Dewatering – only occasional water added to Nagog Brook. Concord's plan is against the 2020/OS&R due to harm to fish

10.3.5.2 – In Harmony with Purpose/Intent of Bylaw

- <u>Concord:</u>
  - "The project satisfies the purpose of the bylaw"
  - "… drinking water and fire protection to … customers along the Route 2A corridor…"
  - "… designed to preserve and utilize the important natural resource of Nagog Pond …"

10.3.5.2 (continued)

- <u>Inconsistencies:</u>
  - Zoning bylaw purpose – "to conserve the value of land and buildings"
    - Property values of surrounding homes diminished:
      - 9,338 square foot industrial treatment plant in a residential neighborhood
      - Noise increase of up to 9.2 dBA is just .8 shy of the "nuisance" standard of DEP Noise Policy. No one wants to hear this noise 24 hours/day
      - Fence at property line – unsightly
      - Truck traffic through residential neighborhood/kids
      - Chemicals driven through residential neighborhood/kids

10.3.5.2 (continued)

- Inconsistencies (continued):
  - Zoning bylaw purpose – "to protect and enhance the quality and quantity of Acton's surface and groundwater resources"
    - Concord is reducing the quantity of Acton's surface water source – Nagog Pond
      - 365 days/year withdrawals (vs. seasonal)
      - Pond fed by run-off – recharge may be insufficient
      - Drought/water levels declining without increased withdrawals
      - Potential harm to ecosystem and wildlife

10.3.5.2 (continued)

- <u>Inconsistencies (continued):</u>
  - Zoning bylaw purpose -- "… including … the prevention of blight and pollution of the environment"
    - Project – "an increase of 308.6 to 317.1 tons/year" of CO2 emissions
  - Zoning bylaw purpose – "to lessen congestion in the streets"
    - Truck and other traffic (with chemicals) through residential neighborhood, estimated at "10 to 15 trip ends per day"

10.3.5.3 – Detrimental or Injurious to the Neighborhood

- <u>Concord:</u>
  - "The WPT will not be detrimental or injurious to the neighborhood."
  - The project "provides sufficient mitigation of any potential noise associated with the" generators
- <u>Inconsistencies:</u>
  - 9.2 dBA noise increase is only .8 below DEP standard!
  - Traffic through neighborhoods – potentially injurious to residents/children
    - If travel over private road, owners of road harmed financially
  - Fences at property line – detrimental to neighborhood
  - Property values decreased

10.3.5.4 – Appropriate for the Site

- Concord:
  - " … this specific area has accommodated a water treatment facility for over 20 years."
- Inconsistencies: The WTP:
  - 552% size increase in building footprint
    - 1,297 sq. ft. now; 7,165 sq. ft. proposed
  - 530% size increase in building floor space
    - 1,760 sq. ft. now; 9,338 sq. ft. proposed
  - Additional external noise of up to 9.2 dBA
  - Increased CO2 emissions of 308.6 to 317.1 tons/year at the site (in a residential neighborhood)
  - Fence – cuts off wildlife corridor and pedestrian traffic through a parcel that connects to conservation land

10.3.5.5 – Complies with Bylaw Requirements

- Concord: Silent/not addressed
- Does not comply with:
  - 10.3.5.1 (consistent with Master Plan)
  - 10.3.5.2 (in harmony with Bylaw purpose and intent)
  - 10.3.5.3 (detrimental or injurious to neighborhood)
  - 10.3.5.4 (appropriate for site)
- Because you can't make findings that the project complies with these bylaw provisions, this project must be denied.

Acton's Zoning Bylaws: Site Plan Special Permit

- Section 10.4.5: You need to find that the site plan:
  - 10.4.5.1: Is consistent with the Master Plan
  - 10.4.5.2: Protects the neighborhood & Town against seriously detrimental or offensive uses, or adverse effects to the natural environment
  - 10.4.5.3: Provides for convenient and safe vehicular and pedestrian movement
  - 10.4.5.6: Protects surface water & groundwater
  - 10.4.5.7: Complies with all applicable Bylaw requirements

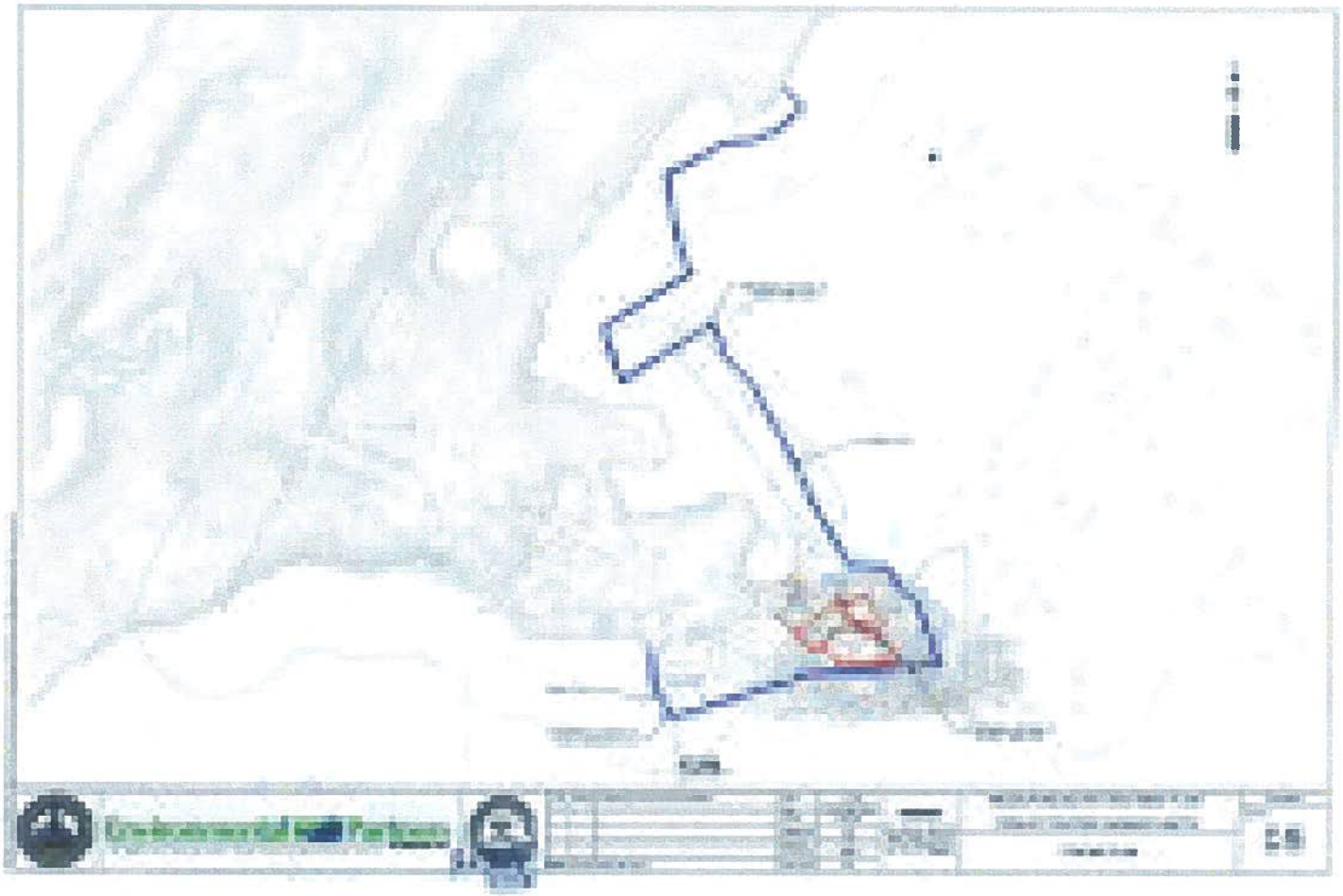
10.4.5.1 – Consistent with Master Plan

- <u>Concord:</u>
  - "the public drinking water supply treatment facility is consistent with the Master Plan"
- <u>Inconsistencies:</u>
  - Provided already in 10.3.5.1
    - Significant greenhouse gas emissions (up to 317.1 tons/year)
    - Decreases the quantity of surface water
    - Nagog Pond is listed on the State's scenic landscape inventory and the vista/water level must be preserved
    - Wildlife corridor impacted by fence
    - Dewatering will harm Nagog Brook

10.4.5.2: Protects Neighborhood & Town

- Bylaw Text: "Protects the neighborhood & Town against seriously detrimental or offensive uses, or adverse effects to the natural environment"
- Concord:
  - The design "will protect the neighborhood and the Town against seriously detrimental or offensive uses…"
- Inconsistencies:
  - The following are seriously detrimental to the neighborhood & will cause a drop in property values:
    - Noise increase of up to 9.2 dBA (.8 below max)
    - 9,330 square foot industrial treatment plant in a residential neighborhood (552% increase – footprint, 530% increase – floor space
    - Fence at property line
    - Truck traffic/chemicals through residential neighborhood
  - Adverse effects to the natural environment:
    - Harm wildlife habitat
    - Noise impacts – prevent bird nestings
    - Decrease in water quantity; Pond level decrease and bank exposure

Fence – Jan (red), Sept. (blue)



10.4.5.2: Convenient and Safe Vehicular and Pedestrian Movement

- <u>Concord:</u>
  - On-site parking and access road "provides for convenient and safe vehicular movement"
  - Access road "is appropriate"
  - "***Some fencing***" is added – called an "***enhancement***"
  - Nothing said about traffic through the neighborhood (employees, trucks, chemicals)
- <u>Inconsistencies:</u>
  - Fence – cuts off pedestrian movement to conservation land and pond
  - Traffic and chemical deliveries to facility is through a residential neighborhood – an unsafe condition

10.4.5.6: Limit Adverse Effects on Surface and Groundwater

- <u>Concord</u>:
  - Because we comply with 10.3 Special Permit requirements, we comply with this
- <u>Inconsistencies:</u>
  - Reduced quantity of Acton's surface water
  - Pond fed by run-off; recharge may be insufficient
  - Drought/water levels declining

10.4.5.7 – Complies With All Site Plan Special Permit Requirements

- <u>Concord:</u>
  - "The WTP project complies with all applicable requirements of the Acton Zoning Bylaw."
- <u>Inconsistencies:</u>
  - Does not comply with:
    - 10.4.5.1 (consistent with Master Plan)
    - 10.4.5.2 (protects against seriously detrimental effects)
    - 10.4.5.3 (safe vehicular & pedestrian movement)
    - 10.4.5.6 (protects surface water resource)
  - Because you can't say make findings that the project complies with these Bylaw provisions, you can not issue a Site Plan Special Permit

We Shouldn't Be Here

- Variance
  - Concord needs a new Variance
- Conservation Commission
  - Significant changes with in the 100' buffer zone
  - Wildlife concerns

Variance

- Present variance – 1994
- 1994 Findings:
  - "The location of the treatment building is **isolated** and **remote** from any other active land use … the only abutting private property (Palmer) is undeveloped …"
  - "The project site is located in woods at a location that currently lacks vehicle access. The property also lacks frontage on a public way …"

Variance -- continued

- Permit application – "Concord relies on the 1994 Variance"
  - Not seeking a new variance
- Caselaw: When a building is originally permitted under a variance, it CAN NOT then use the special permit process for future expansion.

Leading Case

- "Variances are difficult to obtain … by comparison, the special permit power presupposes the allowance of certain uses…"
- Variances are issued "grudging and restricted"
- Special Permits are "anticipated and flexible"
- "We do not think the Legislature intended … to authorize the expansion of uses having their genesis in a variance pursuant to the more generous standard applicable to a special permit."

Case (continued)

- " … it would be analogous if a variance, by its nature sparingly granted, functioned as a launching pad for expansion as a nonconforming use."
- Zoning matter / zoning lawyer needed.

Article 97

- State issue – not your issue

Major concerns and remedies

Bob Sekuler

"Nagog Pond at Sunset"
Drawing by Alex Zhang
Winner, 2012 Acton Youth Art Competition

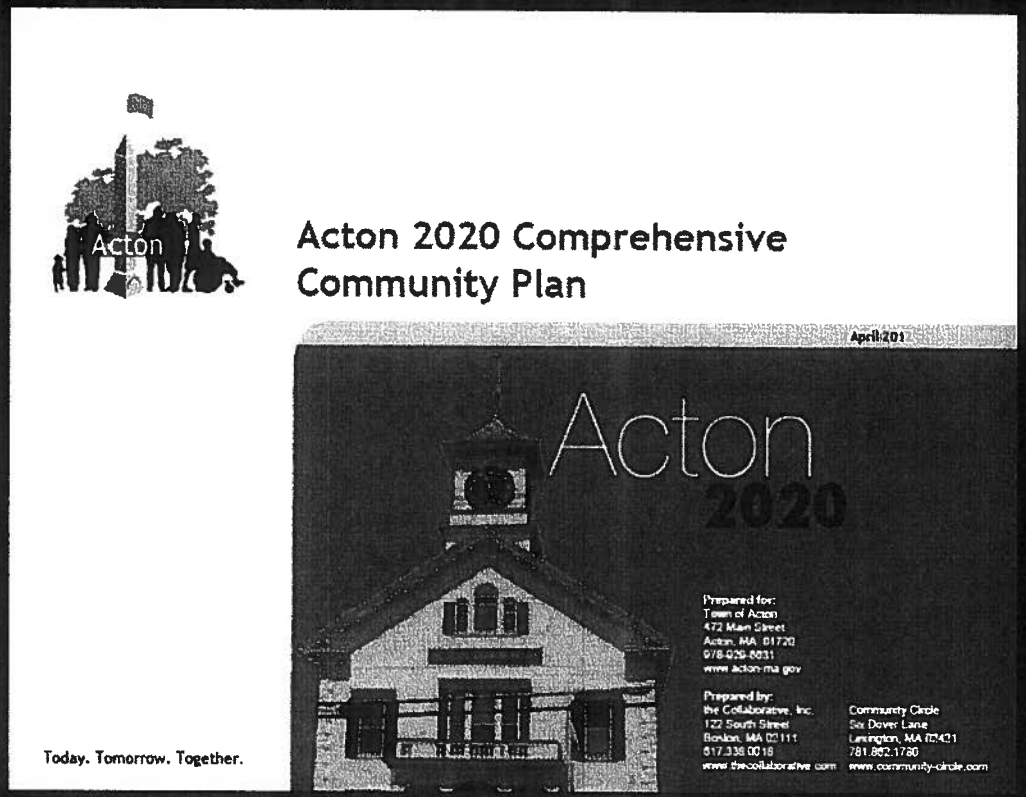
Three major concerns

- Project will harm Acton's water supply
- Project is wrong for a residential neighborhood
- Project will adversely affect animal habitat

Acton Zoning Bylaw

- **10.3.5 Mandatory Findings by Special Permit Granting Authority – Except for a Site Plan Special Permit, the Special Permit Granting Authority shall *not* issue a special permit *unless without exception* it shall find that the proposed USE:**
- **10.3.5.1 Is consistent with the Master Plan.**
- **10.3.5.2 Is in harmony with the purpose and intent of this Bylaw.**
- 10.3.5.3 Will not be detrimental or injurious to the neighborhood in which it is to take place.
- 10.3.5.4 Is appropriate for the site in question.
- 10.3.5.5 Complies with all applicable requirements of this Bylaw.

The Master Plan

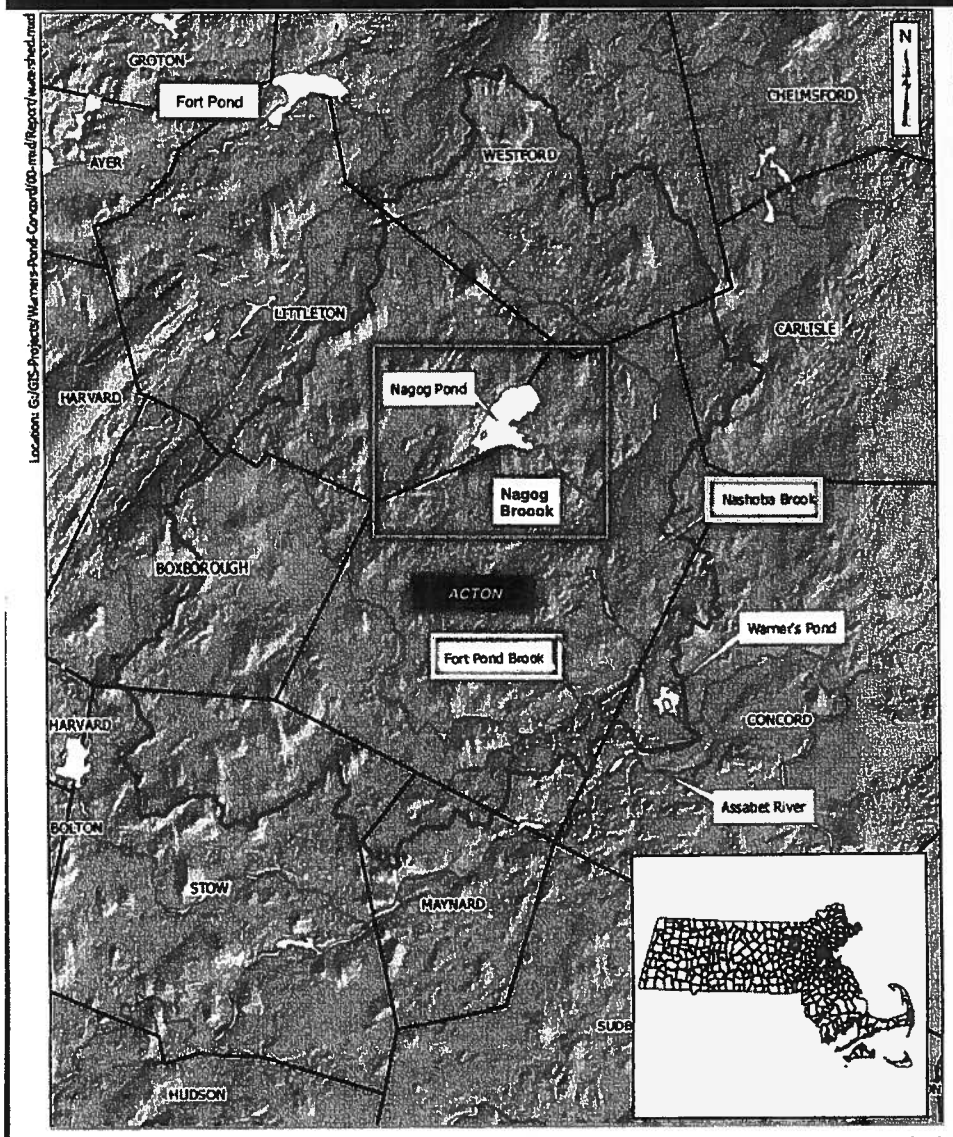


- Objective 2.1.
- Protect the quality and quantity of Acton's water

Our water resources

- Acton depends upon ground water resources
  - AWD has been a careful steward of our water, for 104 years, but the resource is fragile.
- Two-thirds of Acton's ground water aquifer reflects infiltration from just two brooks: **Nashoba & Fort Pond Brooks.**

Our water resources



WARNER'S POND WATERSHED MANAGEMENT PLAN

Warner's Pond Watershed

ess group

Scale: 1" = 8,500' (1.6 miles)

Watershed boundary

Nashoba *Brook receives water from* Nagog *Brook.*

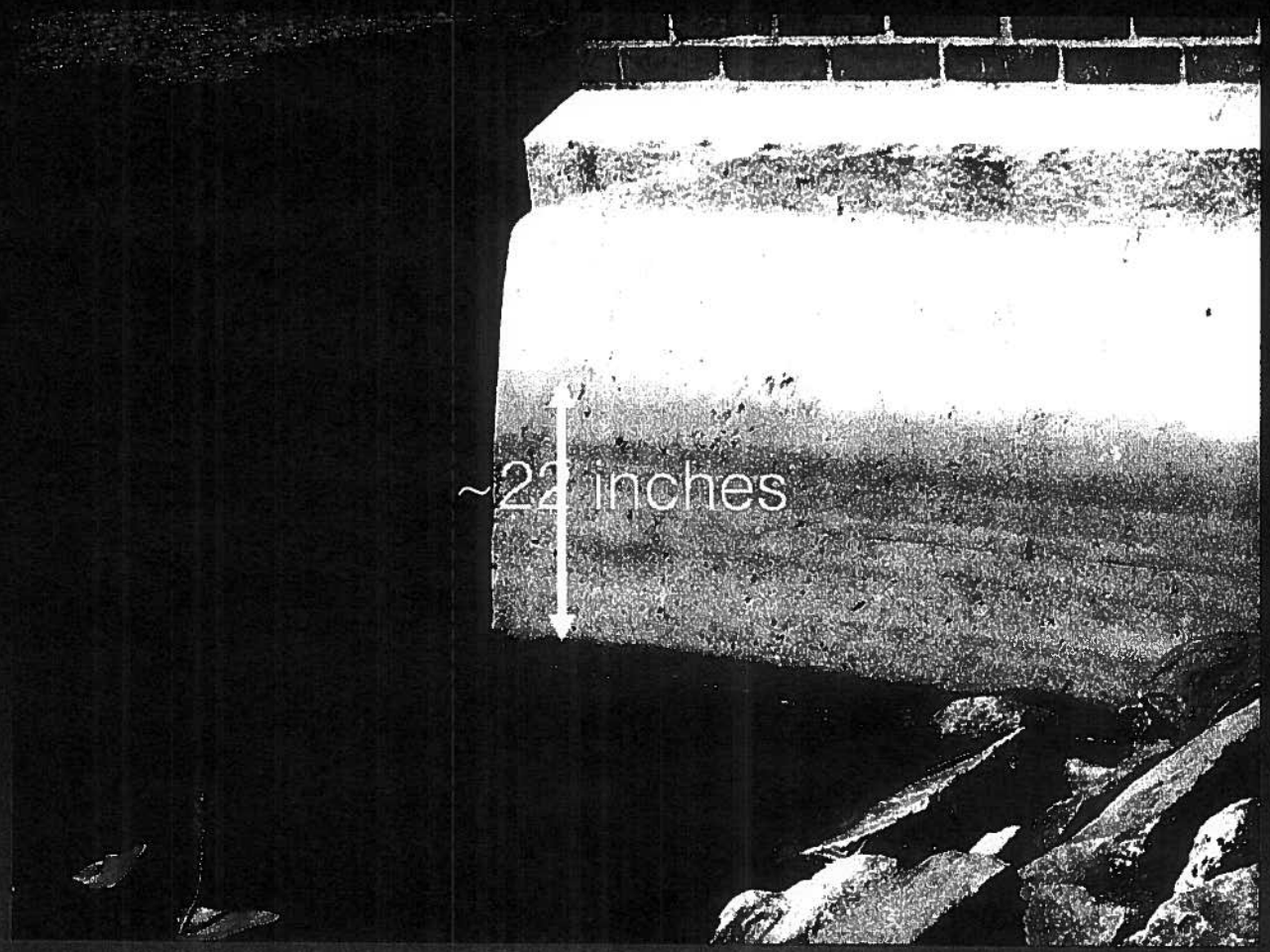
AND Nagog Brook gets its water from Nagog Pond.

Result?

Threats to water resources

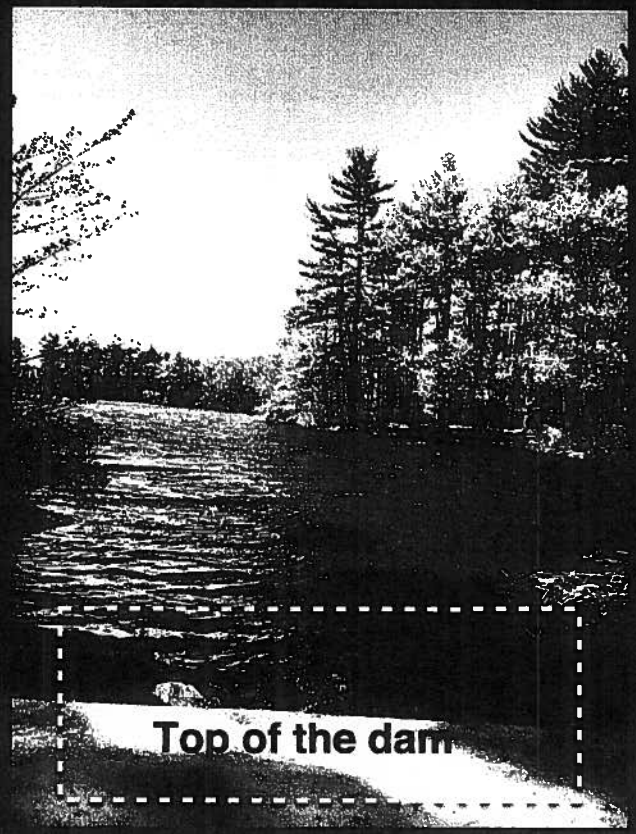
- Dioxane plume from Concord
  - Previous chemical infiltration of Assabet wells caused water emergency (~40% of our supply was lost)
- Droughts and longer-term climate change
- **Concord's plan will increase its drawdown of Nagog Pond surface water —no longer just summer time draw, but 365 days per year**

Impact of 2016 drought

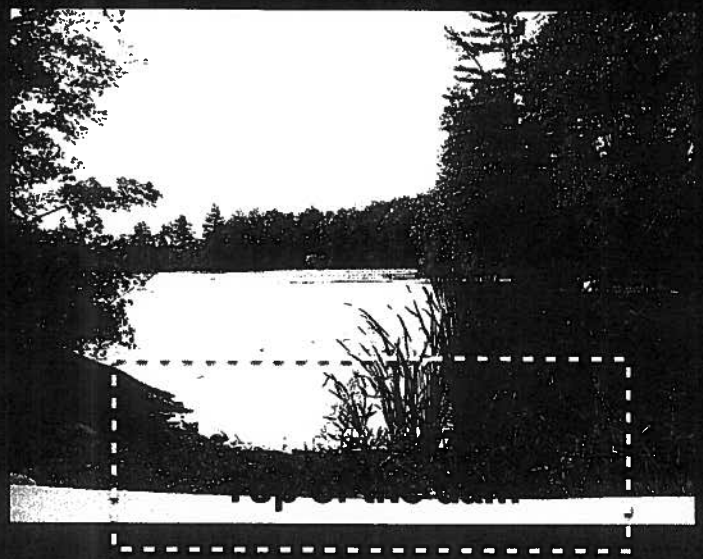


Water level has dropped nearly two feet

Impact of 2016 drought



May 15, 2016



August 22, 2016

~8 feet shoreline is newly exposed
Great deal of new plant growth

Acton Zoning Bylaw

- **10.3.5 Mandatory Findings by Special Permit Granting Authority – Except for a Site Plan Special Permit, the Special Permit Granting Authority shall *not* issue a special permit unless without exception it shall find that the proposed USE:**

- 10.3.5.1 Is consistent with the Master Plan.

- 10.3.5.2 Is in harmony with the purpose and intent of this Bylaw.

- **10.3.5.3 Will not be detrimental or injurious to the neighborhood in which it is to take place.**

- **10.3.5.4 Is appropriate for the site in question.**

- 10.3.5.5 Complies with all applicable requirements of this Bylaw.

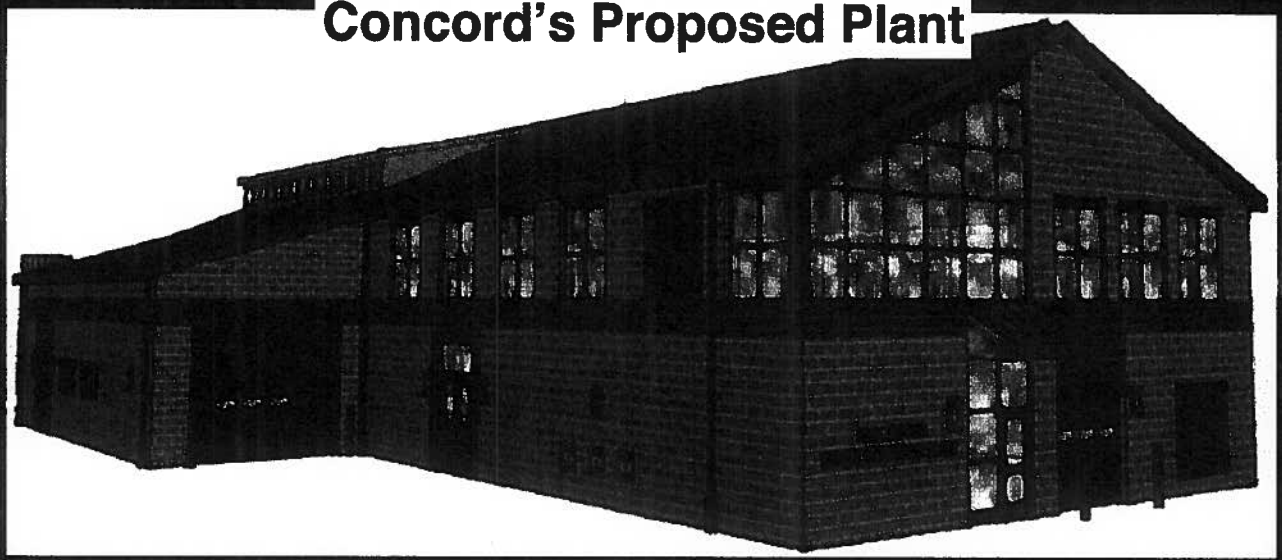
Existing neighborhoods

Acorn Park

Quail Ridge

Fitting into the neighborhoods?

Concord's Proposed Plant

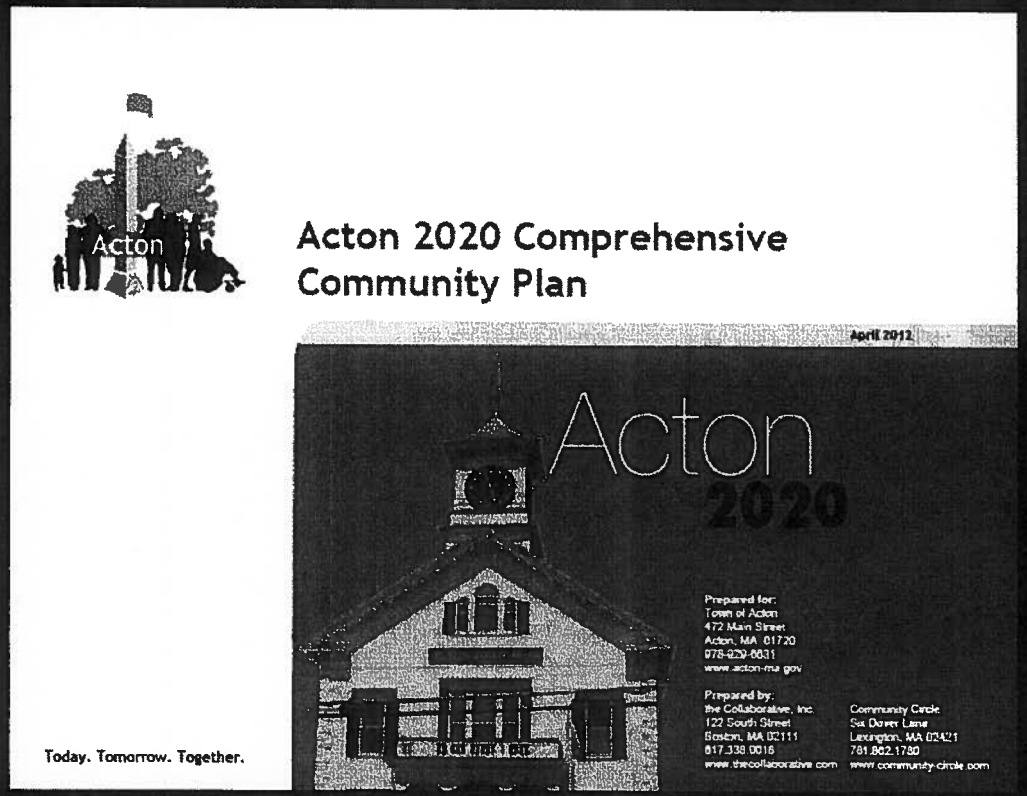


Acorn Park

Quail Ridge

Concord's proposed plant is about the size of Acton Town Hall

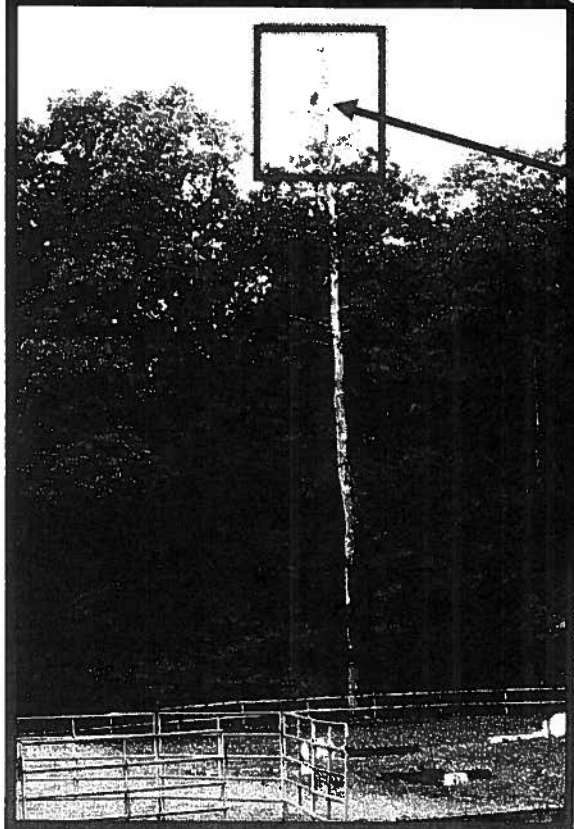
The Master Plan



- Healthy ecosystems and habitats with a diversity of wildlife are indicators that families can live healthy lives and enjoy their surroundings. (Page 130)

Multiple impacts on habitat

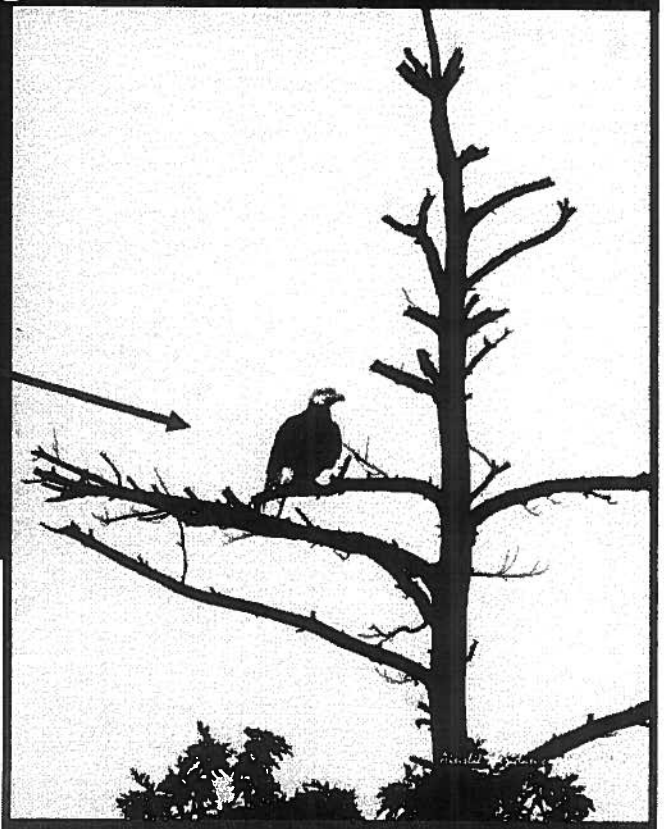
A state-designated "threatened species," the American Bald Eagle, now has a congenial habitat at Nagog Pond



Breezy Point, August 2016

Massachusetts Division of Fisheries and Wildlife: *Eagles require large forested area, good supply of fish, unimpeded views, and* ***reasonable freedom from human disturbance.***

Concord's project would threaten this habitat, driving away this species.



Multiple impacts on habitat

"A Coldwater Fish Resource (CFR) is a waterbody (stream, rivers, or tributary thereto) where reproducing Coldwater Fish use such waters to meet one or more of their life history requirements. CFRs are particularly sensitive habitats. Changes in land and water use can reduce the ability of these waters to support trout and other kinds of cold water fish."

Department of Energy and Environmental Affairs designates Nagog Brook as Coldwater Fish Resource. **Concord's project will reduce the flow of Nagog Brook.**

We ask that....

1. Multiphase treatment of water be moved downstream to an appropriate site, such as
   Concord's present Route 2A Satellite Pumping Station
   Small distributed processing sites at several locations
   Or in Concord itself, e.g., at its Light Plant property.

2. That the plan for cogeneration be abandoned. The electrical production exceeds project's needs; cogeneration produces noise, emissions, and heat.

Acton Zoning Bylaw

- *10.3.6 Special Permit Conditions – The Special Permit Granting Authority may impose such <u>conditions, safeguards and limitations</u> as it deems appropriate to protect the neighborhood or the Town* including, but not limited to:

- 10.3.6.1 Dimensional requirements greater than the minimum required by this Bylaw;

- 10.3.6.2 Screening of parking areas or other parts of the premises from adjoining premises or from the STREET by specified walls, fences, plantings or other devices;

- 10.3.6.3 Modification of the exterior features or appearances of the STRUCTURE(S);

- 10.3.6.4 Limitation of size, number of occupants, method and time of operation, and extent of facilities

The Board should...

If the plant were permitted in any form, our Selectmen must include conditions:

(1) Define drought-contingent drawdown restrictions

(1a) Assert Acton's right to reduce or halt Concord's water withdrawals from Nagog Pond if conditions require

(2) Establish a Conservation Restriction on Concord's property surrounding the water treatment plant. Protect wildlife habitat and guarantee Acton public access in perpetuity

(3) Minimize fencing to preserve the present wildlife corridor and public access

(4) Minimize noise from the facility.

The Board should...

If the plant were permitted in any form, our Selectmen must include conditions:

(5) Preserve all archaeologically-significant features of Concord's land

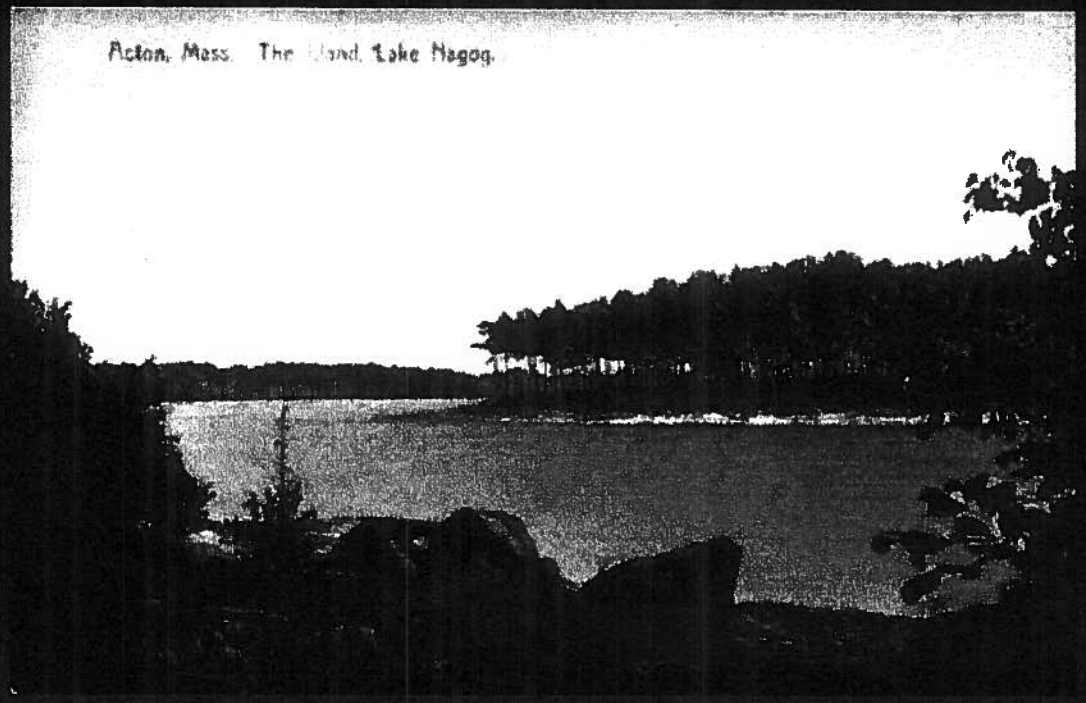
(6) Prohibit vehicle traffic to the facility over private streets

(7) On non-private streets, ensure safety and comfort of residents (particularly children) by:

- Restricting hours of truck traffic
- Strictly enforcing speed limits
- Restricting number of trips by trucks

(8) Require substantial reduction in size of proposed structure, and require that it be clad in materials appropriate to its residential site.

In sum, Concord's proposal is not consistent with Acton's Master Plan and violates Acton's Zoning Bylaw. The proposal should not be permitted.



Nagog Pond in pristine state, circa 1905

Near the site that later
became Concord's dam