

DURHAM CONSERVATION COMMISSION Minutes of Special Meeting Thursday June 26, 2008 Durham Town Office – Council Chambers 7:00 PM

Regular Members Present: Cynthia Belowski, Beryl Harper, Stephen Roberts

Alternate Members Present: Robin Mower, Peter Smith, Robin Vranicar

Regular Members Excused: Dwight Baldwin, Duane Hyde, Cathy Leach, George Thomas

1) The Durham Conservation Commission will host Jeff Schloss, UNH Cooperative Extension Professor/Specialist Water Resources. Professor Schloss will present the most recent science-based recommendations regarding regulations for aquifer and surface water protection and storm water management to ensure the integrity of drinking water supply.

Cynthia reminded the Commission members that a Public Hearing was held last Wednesday during the Planning Board meeting on this proposed zoning change. She explained that the Commission wishes to gather information on this issue and then relay any initial concerns/comments to the Town Council. Robin Mower explained that she lives in the Faculty Road neighborhood and asked if anyone on the commission felt she should recuse herself from these discussions. She said that she does not feel she has a conflict of interest. The members did not feel she had a conflict of interest. Cynthia reminded the members of the area being discussed for the proposed change from residential B to ORLI. She also showed the area on the map that is identified as being an aquifer and where the aquifer overlay section is identified. Cynthia explained that this section alone has additional protection. She then introduced Professor Jeff Schloss.

Professor Schloss said that he was asked to speak to and discuss with the Commission concerns within a source water aquifer protection area. He explained scientists look at protecting potential water supply areas because there are relatively few areas in the state with good water aquifers. He reported that most of the state's population relies on bedrock wells, which don't have the same yield of water. Professor Schloss also noted that the areas identified on the maps are only so accurate – that they are a "best representation" of the aquifer area. He reported that the concerns working on these types of lands include activities that will collect, concentrate or distribute any kind of pollutants. This can be done from a manufacturing process or other activities such as businesses that use hazardous materials or activities that generate pollutants. Professor Schloss explained when the natural area is overlayed by wetland areas such as the Spruce Hole Bogs, which act as a contribution area to the aquifer and allows recharge of the aquifer, it is important to be careful what goes on in and around the wetland areas near the aquifer. He noted the big concern is not covering up those areas with impervious surface --- this will disrupt the typical filtration of water filtered

through the ground and used to recharge the aquifer. It will also have an impact on groundwater supplies and surface water which may occur from storm waters by creating higher volumes. Professor Schloss explained it is prudent to be concerned about what activities occur on the surface even without heavy industry taking place. He noted that road surfaces create pollutants from automobile fluids on the roads which find there way back to the groundwater. He also explained that when dealing with storm water systems it is preferable not to allow large impacts that allow creation of large detention/retention ponds. It has been found that this is not an efficient way to deal with storm water. Professor Schloss explained that to deal with storm water outside of the protection zone the town needs to have a thorough understanding of where the aquifer is in regard to any activity. He suggested having the necessary engineering done to understand where the area that will be influenced is located. Professor Schloss noted there are lessons to be learned from towns that did not take these steps. He stressed that the map lines should not be taken verbatim and that the actual area of influence needs to be further defined. Cynthia asked if road salt would be a problem. Professor Schloss replied that sodium and chloride are both hard to deal with. Robin Mower asked if there is a rule of thumb for the distance or number of acres that allows for an adequate buffer to an aquifer area. Professor Schloss replied that a lot has to do with the soil and vegetation types and also what contributing areas (wetland systems, underground systems between wetlands and surface water) are nearby. Robin noted that in the proposed area there is an issue with knowing which way the water flows. Professor Schloss suggested engineering tests to see how and where water flows with different conditions.

Jack Farrell briefly described to Professor Schloss the JLB proposed project, to give him some background information regarding the proposed zoning change. He stated that they are aware that storm water generated by the project will need to dealt with in an appropriate manner to minimize affect to the natural area.

Cynthia noted that the Commission is concerned about the proposed zoning change taking affect without any regulatory changes to protect the area as needed --- this would allow for other proposals to occur that do not take the same precautions that the current JLB proposal seems to be including. Peter Smith agreed, saying the meeting tonight is to learn more about the possible impacts of a substantial change in zoning use on a substantial piece of land, which has particular significance because it may implicate a major potential water supply for the town. He suggested that it would be most useful to determine what steps should be taken by way of further research before the town agrees to a substantial zoning change. Peter asked if there were any towns with similar situations that could give guidance as to what technical steps should be taken before a change in zoning use takes place. Professor Schloss noted that some towns have undertaken a true inventory of what their true yields are and what are potential yield and where the recharge zones are located. Peter referenced previous research done by Dr. Tom Ballestero (Civil Engineering Professor at UNH) and asked Professor Schloss if he felt there is additional research needed on those questions before moving forward with the proposed zoning change. Professor Schloss felt it would be best to discuss this with Dr. Ballestero. Cynthia noted that there was a \$60,000 study which compiled information from Dr. Ballestero and others work and resulted in recommendations for performing the pump test, where the monitoring should occur to be able to understand the impacts to the aquifer and producing a 3-D representation of the aquifer to better understand

the hydrology of the aquifer. A permit from the DES is expected to be approved in fall for a pump test. It will then be a question if the Town wants to invest in a pump test next spring. Peter noted that this raises the question of which should come first, a pump test or change in the zoning. He said that he would hate to discover six months after Council enacted a new zoning law that there is scientific evidence that demonstrates a different course of action should be taken.

The Commission asked Professor Schloss who they could contact for assistance or review of the situation. Professor Schloss suggested communicating with Dr. Ballestero, inform him of the situation and ask him if there was something not done in his research, or data not gathered that would have answered some questions. He also suggested checking with Dr. Ballestero about how confident he felt regarding his previous research. Cynthia suggested the Strafford Regional Planning Commission as a resource. Stephen Roberts said that he wrote Jim Campbell of his concerns and Jim will be putting together a summary of concerns that were raised for the Town Council to review. Cynthia noted that she would be meeting with Jim Campbell next week.

Jack Farrell suggested the area being proposed for rezoning could be reduced. Cynthia wondered why the larger area was proposed for zoning change. Jack suggested perhaps a less grand rezoning could occur that may address needs, provide other opportunities for the Town in appropriate places, but help to protect the major area.

Cynthia and the Commission members thanked Professor Schloss for the information, the presentation and the question and answer session.

2) Discussion and determination of recommendations, relative to the above presentation, to send to the Town council regarding the proposed zoning change to extend the ORLI district in the Mill/Packers Falls Road area.

Peter Smith began the discussion by saying the Conservation Commission needs to distinguish between the work being done to ensure the proper nature of an explicit project and the sudden move that is more global, that requires more careful examination. He noted that one does not need to conflict with the other. Robin Mower suggested that a new look at the protection of town's water supply in general is needed. Peter suggested that a broader concept of thinking carefully before doing something is needed. He suggested the following topics be covered in a memo to the Council: "The rezoning proposal at this particular time, given the particular location, suggests that things need to be taken in a different order because of the location (aquifer and Oyster River). Enough is not yet known to make such a global change. More information is needed before a decision on the change should be made." Beryl said that it should be mentioned that work (research) has already been done which underlies the need to investigate further. She noted the Commission has a general concern that this is a very sensitive area, and the proposed change is a major zoning change. The group has had an expert in the field present information about how cautious and thorough we must be regarding this area. The Commission feels more information is needed before recommendations can be made.

Cynthia said when writing the letter to the Town Council, she will outline concerns that Professor Schloss mentioned, outline studies done which describe what a sensitive area this is, strive to keep the letter short, concise and to the point. Stephen mentioned that the current aquifer overlay zoning ordinance provides great protection to the aquifer, this does not apply to areas just outside the aquifer zone and this needs to be addressed.

Beth Olshansky (public attendee) raised the issue of recommending to the Town Council that if the zoning is changed to ORLI, any proposal in that area be required to fulfill the requirements of a conservation subdivision. The Commission discussed this suggestion. It was the consensus that at this time it would not be best to request this – such a change would require a long thought process. Cynthia did express her concern that buffers on the Oyster River be increased to 200 or 250 feet and not be subject to conditional use.

Judith Spang (public attendee) noted her concern regarding the order that things are being addressed. She said that she felt the zoning change related directly to the JLB proposal and that things are being suggested by the developer to make the zoning change more palatable. She felt it is premature to be speaking about a change in setbacks. Judith expressed her feelings that there should be a way to avoid being put in a process where the zoning change is approved based on an assumption that is not on paper. Beryl said she feels all on the Commission acknowledge approving a zoning change based on assumptions would not be wise, this is why the Commission feels the need to address the zoning change by garnering more information and providing comments.

The Commission then discussed the issue of not having been consulted about a change in the town zoning that clearly affects a natural resource area. Cynthia asked if the members felt it was appropriate to include this issue in the memo. The consensus was to keep the memo focused on comments regarding the proposed zoning change. Cynthia noted that she plans to read the letter at the July 7th Town Council meeting.

The members then discussed how comments would be made to Cynthia on the draft letter and who would assist her with the draft. It was determined that Robin Mower would offer assistance to Cynthia on the draft letter and that the draft would then be emailed to all members. Each member may respond with comments directly to Cynthia.

3) Adjournment

The June 26th, 2008 special meeting of the Durham Conservation Commission adjourned at 9:20 pm.

Respectfully submitted by,

Sue Lucius Durham Conservation Commission Recording Secretary