

1 **Water Resource Protection Subcommittee**
2 **Tuesday, June 16, 2009 at 8:00 a.m.**
3 **Durham Town Hall — Council Chambers**

4
5 **— MINUTES —**

6 **MEMBERS PRESENT:** Jim Campbell, Town Planner; Dave Cedarholm, Town Engineer; Brian
7 Gallagher, UNH representative; Jamie Houle and Dwight Baldwin, Conservation Commission;
8 Richard Kelley and Stephen Roberts, Planning Board; Robin Mower, Town Council

9 **MEMBERS ABSENT:** none

10 *Minutes taken from audio tape recording which began about 5 minutes into the meeting. Note that*
11 *there was no agenda for this first meeting.*

12 *

13 Dave Cedarholm began the meeting with a discussion about sources of turbidity and cost of
14 treatment, and the possible role of agricultural practices. Jamie Houle pointed out that these
15 practices fall under the USDA and are exempt from any EPA activities. Houle suggested two
16 categories of subcommittee recommendations related to agricultural practices: 1) changes in the
17 facilities to better protect water resources, and 2) better management practices that could be
18 employed by owners.

19 The subcommittee then discussed what level to seek in terms of level of water resource
20 protection: the so-called minimum standards (State regulations), or more stringent standards, if
21 the committee believes there is a gap between that and best practices.

22 Houle stated that the subcommittee has an opportunity to recommend zoning changes that will
23 help protect a relatively undeveloped watershed by providing adequate protection for our drinking
24 water source if under threat of development. These should be the primary focus of the
25 subcommittee.

26 Richard Kelley stated that because this subcommittee came out of the Planning Board, he agreed
27 that the primary focus should be revisions that come out of the zoning ordinance. He suggested
28 that the subcommittee look at where Durham stands relative to other ordinances, for example, the
29 state model ordinances. Houle stated that the relevant two State level ordinances focus on well
30 head protection and source water protection (for surface water supplies). He also volunteered to
31 get a copy of an extensive review of town ordinances prepared by the Piscataqua Region
32 Estuaries Project.

33 The subcommittee next agreed to become more informed before deciding whether to consider
34 hiring a professional to help with its work.

35 Brian Gallagher noted that there is an existing form for state source water protection rules,
36 created by the previous Town Engineer, which could be used relative to the Lamprey and the
37 Oyster rivers and suggested that might be a place to start.

38 Robin Mower commented that it might make sense to talk with Lee or Barrington to see what
39 they're doing and there was some discussion about who might have done some regional work
40 already.

1 Houle raised the point that rezoning is potentially a lengthy process but that it is the most
2 immediate thing the committee could do, since State approval is not required; rezoning could
3 simply be adopted at the town level by a Council vote.

4 Discussion followed about the focus of rezoning updates. Jim Campbell stated that the Town has
5 jurisdiction over its aquifer protection but the State has it over well head protection.

6 Cedarholm opened discussion about different approaches to protection of the Oyster River water
7 supply. Houle pointed out that the designation into the New Hampshire Rivers Management
8 Protection Program [RMPP] entails a very lengthy process and questioned whether the RMPP
9 has adequate teeth. Stephen Roberts noted that the subcommittee could organize zoning
10 amendments such as allowed uses and setback requirements. Mower said it is through those that
11 one has much better control. She pointed out that through the RMPP the town is completely
12 dependent on volunteers stepping forward and taking an active role.

13 Mower suggested that the subcommittee collect and evaluate information about what we need to
14 protect, whether it is protected, how would it best be protected according to the model
15 ordinances... There was discussion about who would work on this.

16 Houle suggested that the subcommittee aim for “an ounce of prevention as worth a pound of
17 cure” [from a cost perspective as well as protection perspective]. Discussion about protection of
18 the water supply through adjoining land conservation followed, including that watershed partner
19 communities such as Barrington and Lee have been very active conservationists.

20 There was a brief discussion about whether Durham considers neighboring towns in the
21 watershed when making decisions that have an impact on shared water sources. Houle
22 commented that one of the largest threats that we’re trying to address is the ORLI zoning on both
23 sides of the Oyster River just up from the College Woods properties. He urged that we not rely on
24 the current lack of infrastructure (e.g., water and sewer lines) in this area to protect what we
25 should be protecting proactively.

26 Kelley asked that Campbell send out a planner-wide email requesting information about NH
27 drinking water ordinances that are considered top-notch.

28 Houle suggested that the subcommittee imagine the consequences if the area around the Oyster
29 River were built out under current zoning and whether current protection is adequate. He
30 suggested that the central role in the charge of the subcommittee is looking at the protections,
31 focusing on the sources of municipal drinking water, and assessing their adequacy, and if they
32 are inadequate, making recommendations for update.

33 Discussion followed about current zoning, the known extent of the aquifer, ways to measure it
34 and state requirements regarding the delineation. Houle commented that there are advanced
35 strategies to delineate an aquifer.

36 Kelley volunteered to gather the information on what we currently have for the aquifer protection
37 overlay as well as the contributing areas to our surface water and to prepare a couple of graphics
38 for the group to understand the geographic limits of the area. He noted that the Lamprey River
39 Advisory Committee could provide some information and that he would talk with people at the
40 state level to find out if the State does require precise delineation of areas that feed groundwater
41 and surface water supplies under the [federal] Safe Drinking Water Act.

1 Cedarholm noted that [the engineering firm] Emery and Garrett is currently conducting analyses
2 and when it completes pump tests in the Spruce Hole area, we will have a better idea of where
3 the aquifer is. A discussion followed about techniques to define the boundaries.

4 Cedarholm commented that he does not think we are going to get a better definition of the
5 perimeter of the aquifer, but through the pump tests, we will certainly get a better idea of
6 recharge times, recharge and discharge zones and water-quality parameters.

7 There was another brief discussion about reviewing NH town and state ordinances.

8 Roberts asked Gallagher for insight about the ability to meet an upcoming large increase in
9 demand from several large projects coming in on the part of the university, for example, with a
10 business school and performing arts center. Gallagher said that [the Durham-UNH water
11 treatment plant is] looking at supplemental lines to manage all four sources for the single water
12 system. Discussion followed about seasonal challenges in meeting the community's needs and
13 the limitations imposed by the 401 Certificate on the Lamprey.

14 The committee agreed that while zoning recommendations are important, it should not overlook
15 best management practices. Some discussion followed whether either the town or university is
16 using best management practices.

17 Mower asked whether for some of the major points in the water system there should be an
18 evaluation of what kind of management practices are being used. Do they approach best
19 management practices? Where are the vulnerabilities in terms of best management practices?
20 Houle replied that these things would be the collective, cooperative arm of this process. We
21 could reach out to the university and could present the findings of the Subcommittee.

22 Cedarholm noted that the subcommittee had approached an interesting subject. He pointed out
23 that there's a lack of best management practices within the town's and the university's stormwater
24 systems.

25 Roberts questions whether we have the capacity to provide water to the 4,000 or 5,000 people
26 that the university plans to bring into our community as daytime residents.

27 Cedarholm answered, "In my opinion, more than enough."

28 Houle added, "Provided Spruce Hole is developed."

29 Cedarholm noted that water conservation is paramount. It's going to boil down to an economic
30 matter, just like gasoline. When it becomes expensive, you start to conserve. When our source
31 water becomes expensive, and there are alternatives, like changing out a toilet.

32 Dwight Baldwin noted that that comes back to education... He stated that the best management
33 issue is a thorny one. If the subcommittee can show that there are certain points within the
34 watershed that are clearly causing major problems, that's where it needs to suggest that best
35 management practices be implemented.

36 Mower said that that's what she had said before, that we do not have the money to address an
37 entire infrastructure in great need of attention, but we could try to pinpoint the key points where
38 there's real leverage financially.

1 Cedarholm commented that everything the committee was talking about in terms of the threat to
2 the water supply is related to stormwater. He stated that if the committee only focuses on drinking
3 water protection, it would be missing the boat. Stormwater is a much higher water quality concern
4 for this Durham and the whole Great Bay watershed. The real problem is water quality. He
5 suggested that the committee's focus should not just be on water supply, but about the larger
6 issue of water resource protection.

7 Mower asked whether the new stormwater ordinance that Cedarholm is working on would be
8 adequate to address his concern.

9 Cedarholm replied that it would absolutely not, and that the majority of towns that are really on
10 top of it have a highly focused stormwater committee.

11 Houle agreed but stated that he is trying to focus on what the sub committee can do and what its
12 task is. If the subcommittee were to really address the problems of Durham, then it would take
13 time. He said that he is looking at a goal that we can achieve in a relatively quick fashion,
14 something that's achievable before we start to see possible developments. He agreed that there
15 are issues, but he said that with the Oyster River, particularly, stormwater is a resource in
16 addition to being a threat. In an undeveloped area, it's actually very beneficial. When stormwater
17 that falls on forested portions on either side of the river it provides our base flow during August.
18 It's critical, and that infiltration is critical, so stormwater in that sense is not a problem. It's the
19 development and the land use change that's the threat.

20 Discussion resumed about defining the scope of the subcommittee, whether to focus on
21 approaches to protect only drinking water or to include stormwater, and a timetable. Kelley
22 expressed concern about raising people's expectations about the swiftness of implementing
23 zoning revisions. Discussion also included the status of the Master Plan rewrite.

24 Campbell suggested that the subcommittee could make recommendations to the Planning Board
25 that the subcommittee look at other things as well. He said that he hoped the subcommittee
26 would be ready to present part of its work to the Planning Board at the end of the summer.

27 Houle asked whether site plan review regulations adequately protect storm water. Campbell
28 noted that we're just about to begin updating those, using Cedarholm's expertise.

29 Cedarholm said that his intent is to split the Stormwater Ordinance in half, returning one part to
30 the Planning Board to put into site plan and subdivision regulations, so that it is clear to
31 developers what they're supposed to do. Then a separate stormwater ordinance would be
32 adopted by the Town Council to address illicit discharges, stormwater issues that are not related
33 to development. Both those pieces are required by the EPA.

34 He said that this committee could work the first portion into the site plan and subdivision
35 regulations, which would be a huge help for him and the Planning Board.

36 Mower said that the Economic Development Committee has stated that the uncertainty [about
37 regulations] is a considerable stumbling block for developers coming to Durham, so doing as
38 Cedarholm suggests might be perceived as an advantage.

39 Cedarholm said that he is not sure what is going to happen with the pieces of the permit that
40 relate to impaired waters, and what towns are supposed to do in terms of water quality monitoring
41 outfalls (material that will be sent to the Council), but that material the Planning Board needs to
42 deal with is pretty clear-cut. The important thing is that the regulations be adopted so that all

1 developments must provide adequate stormwater management, not just developments that
2 disturb more than an acre. He said that a real benefit to working on the stormwater ordinance is
3 that when development happens in that ORLI district, there will be some real drainage
4 requirements.

5 Cedarholm suggested that the question of the subcommittee's scope should be brought back to
6 the Planning Board. Campbell would do so and report to the subcommittee at the next meeting.

7 [The audio tape recording did not continue after this point, but the meeting adjourned shortly
8 thereafter.]

9 **VI. Next meeting of the Committee**

10 The next meeting of the Committee will be held on July 14, 2009 at 8:00 a.m.

11 **VII. Adjournment**

12 Adjournment at 6:05 p.m.

13 Robin Mower, minutes taker [from audio tape]