

Water Resources Advisory Committee

Draft Minutes of Meeting

April 29, 2009

Town Hall, Room 126

Members present: Ron Beck (chair), Helen Probst, Chris Schaffner, Barry Rosen, Carol Holley (Clerk).  
Staff: Doug Halley. Transient guest: Eric Hilfer.

The meeting opened at 7:20 p.m. Mr. Beck noted that co-chair, Ms Bissetta, had another engagement and would probably not attend. Mr. Beck announced that here we are, a new committee. The minutes of the reorganizational committee were reviewed and a minor correction made. Mr. Schaffner moved to approve, Ms Probst seconded, and all voted in favor.

Status of previous subcommittee efforts was reviewed. Mr. Beck noted that two subcommittees had been ongoing – education and innovative and alternative systems. The education subcommittee has a brochure almost done for mailing. Ms Probst asked if doing the mailing now was good timing; Mr. Schaffner noted it's not out of date. Mr. Beck felt it would be good to have it available at the upcoming special town meeting, since water, septic, etc. is the topic of the meeting. Mr. Beck gave Mr. Rosen some background on the project, noting that it is an EPA document that has been tweaked to fit local circumstances, including water conservation. The only amendment left undone on the brochure is adding "printed on recycled paper". There is an approved purchase order to execute this project for this year – the money needs to be spent before the end of June, and the quotes received earlier need to be revisited. Mr. Halley noted that the Sewer Action Committee is looking for a Special Town meeting in the June 15-25 date range. Mr. Rosen suggested mailing as an insert in the Warrant, but committee members felt a standalone mailing was more effective. Mr. Rosen noted that postage is going up on May 11, but it was not felt to be an excessive increase, and the timeline is too short to get the mailing done before the increase.

Future educational projects were discussed. Ms Probst felt that education could be a "committee of the whole" since the membership of the WRAC has contracted significantly. Once the priorities of topics have been addressed, more projects can be lined up. Mr. Halley noted that the brochure, in pdf format, can be posted on the web site. Ms Probst noted there was a plan to provide it to realtors as well.

Mr. Schaffner reported on Innovative/Alternative (IA) subcommittee efforts. The initial charge was to explore options for the Spencer/Tuttle area to determine applicable solutions, and then to explore what options are applicable to other needs areas in town. We had tried to educate ourselves on what these things were and set up a google group for a resource repository. It turned from a discussion about things in general to Spencer/Tuttle and then we kind of stopped being active, and the chair became busy in his professional life. Mr. Schaffner noted that he has a colleague that does IA design who would come out and explain his technologies to the committee. Mr. Halley thought that having vendors come in to

present at points in the meeting would be good. Mr. Schaffner noted that the subcommittee's objective was to explore IA systems – we need to find out the latest, how it's going for other towns – reclaimed water, etc. Mr. Halley observed that designers are the biggest impediment – a lot of engineers are conservative, they want tried and true.

Mr. Beck said he had done some online research on low-pressure systems and couldn't find a lot of knowledge on how they work. Mr. Halley felt engineers need to be told "do it this way", or otherwise they don't. Mr. Schaffner felt that if you start looking at needs areas, IA will enter into the committee's thinking – we can't build sewers everywhere. Mr. Halley noted that the Mass DEP hasn't accepted everything that EPA recommends. Massachusetts is very conservative in wastewater technology.

Ms Probst felt that setting aside the first half hour of meetings for self education – if there is a consistent schedule – can we apply this? Mr. Schaffner noted that the committee can also assign members to review literature and report back to the group.

Mr. Beck asked – what should we do going forward? He had been thinking about this for the last couple of days. He is in agreement that we need to learn stuff. It's such a wide and broad topic that it's going to be easy to wander through without anything actionable. We exist because the Selectmen want us to continue. If we go back to the CWRMP – here is where we stand - and make suggestions on ways to proceed –nothing was done to explore most of that. Where I see we are is that we are going to explore how to make progress with other areas, and we need to explore other approaches – management areas, IA, etc. I suggest we set a goal – 10 to 12 months or some other period of time – we will do a set of activities that can generate a report – here is what we learned, here is what we recommend now, here is what we will do next – so maybe we can come up with a solution for other needs areas. The Selectmen may want us to take it to a level of detail.

Mr. Halley asked the committee to consider stormwater – everything we do is about producing water quality and quantity. Mr. Rosen noted that rainwater has a major effect on this town. We can watch a heavy rainstorm driving water levels up in our municipal wells. None of the public water wells are deeper than 46 feet – they are very vulnerable to outside conditions.

Mr. Schaffner noted regarding things to do in the next 12 months – we have a task on the pervious paving issue. The Design Review Board drafted a zoning warrant article to allow it; because we get drinking water from wells, this could be an issue. This is a nice, little discrete project – making recommendations on this issue. Mr. Rosen noted that pervious paving is a double edged sword, and there are both concrete and petroleum based products. There are advantages and disadvantages, and he was concerned about what went through the water. He cited a UNH pilot project, and wanted to find out if they had tracked the deltas in water quality above and below the pervious paving.

Two other things to do in the next 12 months: next step for getting the flyer out, going back and looking at the CWRMP high priority needs areas and starting to think about what to do.

Eric Hilfer jointed the meeting and brought soil survey documentation and said he would forward contact information for the IA vendors that he had compiled when on the committee. He felt that it was

a good idea to have a vendor come and discuss what could be done with a specific needs area, giving examples that could be talked about.

Ron Beck broached the topic of Sewer Action Committee activities. They are at the point of bringing forward a proposal for an SBU in the range of \$22,000 with pump costs separate at an addition range of \$10,000 for each individual to connect. Regarding management districts – one SAC member felt the WRAC will have to deal with this – should we? Mr. Halley noted that all of Acorn Park is on low pressure and they have contracted with Steve Badger to maintain their pumps – it could be just requiring that they contract with a company. The Town could also do this as a contractor. Mr. Beck noted that Lancaster, PA has material regarding lending out pumps to homeowners as a bridge while they are waiting for replacements. Ms Probst noted that the town already has a small system of low pressure, which can be used as a model – or not. You have to create a neighborhood association for contracting purposes. Mr. Beck felt that a failing pump might impact the rest of the system. Mr. Hilfer noted that a management district concept was something the IA group was considering. Mr. Rosen noted that if people put in their own pumps, you want them to be responsible for installation.

Mr. Halley would like input from the WRAC regarding management of grinder pumps. Ms Probst felt some sort of associations needs to be promulgated - it shouldn't be the town. Mr. Halley noted that connections would be paid for by people – management and maintenance. Mr. Schaffner noted that this issue would come up at town meeting – it would be in the SAC's best interest to figure it out. Ms Probst felt it didn't need to be worked out in detail by June, but by the time the system was actually constructed. Mr. Schaffner felt that the group should, tonight, decide to recommend to the Selectmen some kind of entity – management district or association – for maintaining pumps. Mr. Beck felt the significant part of this system is in the hands of the homeowner – 127 pumps. Ms Probst asked if the pumps required annual inspection and maintenance, and felt that homeowners would be happy to have somebody to call. Mr. Beck noted that these systems will require service. Mr. Schaffner felt that the town and Board of Health would not be responsible. Mr. Halley noted that the pumps have a 3-year warranty and the vendor claims an 8-12 year life span. Mr. Rosen felt a maintenance organization was required.

Mr. Beck asked, why don't we want this to be something for the town to do? Mr. Halley replied – budget issues. Personnel issues. It's more complicated in the billing – there would be a surcharge on a certain part of the properties in the sewer district billing.

Ms Holley drew analogies to the requirement for private treatment plant inspections.

Ms Probst felt the recommendation from this committee should be, as part and parcel of planning the system, some maintenance method must be in place before starting. Mr. Schaffner felt that this committee didn't need to recommend the precise structure – that's for town counsel and the Selectmen to figure out. Mr. Rosen thought that most people would say that this makes sense. Mr. Schaffner noted that public health considerations could also be noted as there are health consequences in case of a failure. Mr. Rosen felt that homeowners would feel more comfortable doing this as a group, and jointly purchasing maintenance would be a better deal.

Mr. Beck moved to send a statement he drafted to the Selectmen as follows: “The WRAC Recommends that at the same time that the Spencer/Tuttle/Flint low-pressure sewer extension is planned and initiated, a maintenance entity (private or public) be put in place to be ready at the time of “first connect” to the new sewer extension such that ongoing preventative maintenance, repair and replacement of grinder pumps is provided for in a reliable manner.” Mr. Schaffner seconded, all voted in favor.

Mr. Beck passed out a paper listing topics for prioritization (not listed in priority order):

1. Needs areas review
2. Criteria (benefits/costs/risks)
3. Recommendations on actions- next highest priority areas
4. Pervious paving
5. Emerging water pollutants
6. Alternative/innovative treatment
7. Cluster/local treatment
8. Quality/progress monitoring
9. Water protection zone review
10. Education
11. Stormwater/nonpoint source
12. Relationship wastewater/water supply/recharge/surface water

He asked how the committee would work with Mr. Halley and the Board of health – and asked about progress indicators – monitoring of water quality, etc.

Mr. Schaffner noted that the CWRMP has identified needs areas. Have any of these changed? Mr. Halley didn't think so, observing that this can be hard to discern because of the economy – if houses aren't changing hands, septic systems aren't being inspected and fewer systems are being replaced. Mr. Halley felt that as a committee, there is a lot of information on a lot of properties – you could spend a lifetime doing analysis. It's hard for a committee to get into data. You have to decide how to approach this in a reasonable fashion so that we are confident that we understand what the issues are.

Mr. Beck would like to be able to have enough input. He had spent a lot of time going over the maps from the reports. From the reports, the needs areas are very fragmented – even in Spencer/Tuttle/Flint, 30-40 houses really need. Mr. Halley felt that data wasn't necessarily accurate – you don't know until you visit the lot what is really happening.

Mr. Beck noted that you have 2-3 things going on. Looking at IA, if we can come up with a period of time for 2-3 of the systems, and then look at the needs areas – clusters could actually solve most of the problems. You also have to incentivize people to do something. Mr. Halley noted that if you find a good IA system you can say it's the default system, but otherwise, they might build a conventional system. Ms Probst noted that some needs areas are still slated for cluster solutions. Mr. Halley observed that you can't have a cluster system that serves every other house – you have

to have definite areas; it's not cost-effective otherwise. He thinks more in terms of management districts.

Mr. Beck noted that Mr. Halley had mentioned stormwater – has anyone done an assessment of the magnitude of this issue? Mr. Halley replied that stormwater is harder to determine than wastewater; we tried to measure phosphorous, but you have to be there in when it's raining, and it could never define what the phosphorous runoff was.

Ms Probst noted that in Bermuda, people collect stormwater and drink it. If we are worried about water – there is a lot of water falling on roofs – technology for collecting rainwater could be explored. Mr. Schaffner stated that a lot of people are doing that in new construction, using Newton North High School as an example – that building will collect stormwater to flush toilets. It's harder to deal with what lands on pavement. Mr. Rosen stated that the Town is considering a large parking lot on a soccer field. Mr. Schaffner stated that now, when the water runs off, they have swales or underground infiltration, and vegetated roofs. Low Impact Development (LID) includes a change in design of parking lots to recharge. MIT students did a study of Acton. Mr. Schaffner noted that organizations like the Planning Board are reactive.

Ms Probst noted that the whole idea of WRAC is being proactive. We can recommend to the Selectmen that they recommend to Planning. Mr. Halley considered that there are currently a lot of businesses discharging into the public storm water system – what if they would have to pay the town or have a water balance on their property?

Mr. Beck brought up pervious paving. Mr. Rosen noted that another group is doing that – we could contact them and tell them we want to be involved, and we are looking at it. Mr. Schaffner noted that the Selectmen might ask WRAC for an opinion, and there might be something other than a binary answer. Mr. Rosen felt that WRAC needed to tell the DRB, we are going to be looking at this because it directly affects water quality in town. Mr. Schaffner asked about the impact of pervious paving near drinking water wells; Mr. Rosen noted that parking areas are different from roads. Mr. Beck stated, whenever we meet next, we should spend time on pervious paving. Mr. Schaffner noted that the DRB is trying to reduce pavement in general.

Mr. Beck tried to prioritize the top 4 or 5 topics:

1. Pervious paving
2. Education next steps – after the brochure
3. Finding two or more from the list of feasible IA systems and doing/having presentations
4. Looking at the needs areas
5. LID and understanding the stormwater picture better.

He then asked – is there a nonpoint source model of the town based on land use? Mr. Halley said the entire town was done with land use back when they started the sewerage process; Woodard and Curran did a model. Per query of Ms Holley, Mr. Halley said it was in his office somewhere.

It was decided that half of the next meeting will be a discussion of pervious paving, then education next steps, and AI will be an ongoing conversation. He asked that people look at the list of approved AI systems from the DEP website at [wracia@googlegroups.com](mailto:wracia@googlegroups.com) and then the group can figure out a plan for reviewing and learning about them as a committee. Subcommittees in a group this small aren't viable.

Ms Probst asked, where do we stand? Quality progress monitoring is a good idea. We need a starting point. Mr. Beck felt this could be a conversation for two or three meetings from now – what data is there to collect? What form is it kept in? Is there enough? What's missing? What can we recommend? How do we help publicize and index measurements?

Next meeting date was determined to be May 27 at 7:15 p.m.; Ms Holley will get a space.

At 9 p.m., Mr. Schaffner moved to adjourn, Mr. Rosen seconded, and all voted in favor. Meeting adjourned.

Respectfully submitted,

Carol Holley