SHARON WATER MANAGEMENT ADVISORY COMMITTEE (WMAC) MEETING MINUTES FOR SEPTEMBER 30, 2004

Prepared by Paul Lauenstein

Present at meeting:

WMAC Chairman Rory McGregor; WMAC members Michael Birschbach, Lealdon Langley, Paul Lauenstein, Richard Mandell, Jack Sulik, and Cliff Towner; DPW Superintendent Eric Hooper; Finance Committee member Charles Goodman; and citizens Alice Cheyer and Michael Sherman

Summary of Minutes for the 9/30/04 WMAC Meeting

1. Approve minutes of the August 19, 2004 meeting (with alterations)

- 2. Guidelines for information gathering
- 3. Update on re-bidding of radio meter system
- 4. Peer review of hydraulic model by Wright-Pierce
- 5. Scope of water master plan by Wright-Pierce
- 6. Report of water conservation subcommittee
- 7. Update on exploratory test wells
- 8. Report on well pumping and tank levels
- 9. New Business
 - A. Further discussion of information-gathering authority
 - **B.** Chairmanship of the WMAC
 - C. Emergency backup
 - D. Retention of surface runoff
 - E. Edge Hill Rd. and Morse St. water main replacement projects

10. Schedule next meeting for Thursday, October 28 at 7:30 PM

Detailed Minutes for the 9/30/04 WMAC Meeting

1. Approve minutes of the August 19, 2004 meeting (with modifications)

The committee voted to approve the August 19 minutes with modifications by Rory McGregor to the section regarding inappropriate emails.

2. Guidelines for information gathering

Cliff Towner requested guidance on information gathering practices by committee members. He said he felt the interests of the town would be best served if committee members were free to independently gather relevant information without being required to obtain prior permission from the committee. He cited the committee's rebuke of Paul Lauenstein's email soliciting opinions from radio meter vendors on the fairness of the Water Department's procurement process, and asked where to draw the line.

Rory McGregor replied that he felt Paul Lauenstein's email was inappropriate because it implied malfeasance on the part of the Water Department. He said in cases where there was potential for harm to the Water Department or the town that the committee as a whole should decide how to proceed.

Lealdon Langley concurred, saying that each member should use good judgement in their information gathering activities. Where there might be potential for adverse consequences (legal or otherwise), the entire committee should be involved in deciding whether and how to gather the information.

3. Update on re-bidding of radio meter system

Eric Hooper reported that the Massachusetts Inspector General (IG) had advised the town to pull the bid for the radio meter system based on a resident's complaint. He said he requested a meeting with a representative of the IG to obtain an explanation of the basis for their action, but his request was denied. He said the IG's office told him that a written explanation would be forthcoming, but so far he had not received one.

Eric Hooper went on to say that a citizen had requested that the Selectmen demand a refund from Weston & Sampson for the cost of preparing the radio meter RFP. He said that he had to wait until he obtained a written explanation from the IG of the flaws in the RFP before approaching Weston & Sampson for a refund.

Rory McGregor said that Sharon's town counsel is trying to get a written explanation from the IG for their action.

Eric Hooper said that Ti-Sales' attorney is also requesting a written explanation from the IG, and is considering legal action against the town.

Rory McGregor asked whether the town would comply with the IG's order.

Eric Hooper replied that Sharon has a DEP water withdrawal permit requiring that bills be sent out quarterly, and therefore the town must have a radio meter system.

Lealdon Langley said his understanding was that quarterly billing was not an absolute requirement of the permit if it were not feasible.

Eric Hooper said it would be possible to do quarterly billing if the town had a radio meter system, but the procurement had to wait for the IG's opinion.

Rory McGregor commented that it would also be possible to take the meter readings quarterly by adding personnel.

4. Peer review of hydraulic model by Wright-Pierce

Rory McGregor introduced this topic by observing that some members of the WMAC think that Sharon's hydraulic model is a useful planning tool, while others do not. He asked whether the proposed Wright-Pierce peer review were likely to change any minds. He suggested that Wright-Pierce could provide committee members with a hydraulic model tutorial as an alternative to doing the peer review, and that funds were available for this purpose.

Michael Birschbach commented on the calibration methodology paper he circulated at the previous WMAC meeting, saying it was an example of procedures necessary to calibrate a hydraulic model. He said that once the model is properly calibrated the results of modeled scenarios should be reliable, provided that assumptions are input properly. He said he liked Rory McGregor's idea of a tutorial.

Eric Hooper said the calibration procedures outlined in the paper Michael Birschbach circulated are similar to those employed by Wright-Pierce. He expressed his frustration with the WMAC, pointing out that they asked for a peer review several months ago but now reject the Wright-Pierce peer review proposal. Eric Hooper said he would be happy to bring in the hydraulic model and demonstrate it.

Rory McGregor said it might be a good idea for committee members to spend a couple Saturdays learning about the hydraulic model. Eric Hooper said it would take much more time than that to understand it properly.

Rory McGregor then asked what course of action could be taken.

Eric Hooper commented that [Wright-Pierce employee] Paul Weisman's prior involvement with the Well #4 nitrate study poisoned the Wright-Pierce proposal by raising questions about their objectivity. Eric Hooper said the WMAC's lack of confidence in the Water Department, as evidenced by the controversy over the radio meters and the Morse Street water main, made it difficult to know what action to propose next.

Rory McGregor suggested delving into the Morse Street water main issue to resolve the difference between the modeled scenario and the flows estimated by other members of the WMAC.

Eric Hooper said it was a black and white issue: professionals using the hydraulic model versus committee members using pencils and calculators.

Alice Cheyer recommended that Rory McGregor ask that each member of the WMAC individually express their attitudes toward the Wright-Pierce proposal, and explain what it would take to engender confidence in the hydraulic model.

Rory McGregor agreed to go first. He said he saw a need to work through scenarios to gain an understanding of how the model works and resolve apparent discrepancies like the Morse Street scenario.

Lealdon Langley agreed that working through scenarios would help, but added that just because the model predicts correctly in some cases does not necessarily mean that its predictions must be always accepted without question, especially given the possibility of operator error in inputting scenario assumptions.

Cliff Towner cited the different conclusions arrived at by consultants such as Horsley & Witten and Metcalf & Eddy, both using the hydraulic model, as evidence that the model can be used to justify different conclusions. He said the model's Morse Street predictions defied common sense. He said he could understand the need for a computerized hydraulic model if Sharon had 250,000 residents and complex sewage treatment plants. However, Sharon's gravity-fed water system, with just five running wells, four water storage tanks, a grid of interconnecting pipes, and no sewers is simple enough to manage effectively without a hydraulic model.

At this point Eric Hooper excused himself from the meeting.

Richard Mandell said the question to ask is not how to gain the confidence of WMAC members in the model, but rather why should committee members have confidence in the model. He said questions about the validity of data input, Paul Weisman's prior involvement with the town, and the usefulness of master plans undermined his faith in the hydraulic model. He said instead of focusing on validating the hydraulic model, the committee should be addressing specific issues affecting the town's future water supply.

Jack Sulik disagreed with Cliff Towner's assertion that Sharon's water supply system is simple. He said it is impossible to accurately predict the behavior of the system without a tool like the computerized hydraulic model. He said he has confidence in the hydraulic model despite glitches documented in the Metcalf & Eddy report. He said that the model gives approximate predictions that are close enough to be useful for planning purposes.

Paul Lauenstein said the whole point of hiring Wright-Pierce was to engender confidence among WMAC members in the validity of scenarios generated by the Water Department using the hydraulic model. However, the revelation that Paul Weisman had had prior dealings with the town after being pitched to the WMAC as an objective outsider undermined the credibility of both the Water Department and Wright-Pierce. He said he feared that the model could be manipulated to generate false scenarios in support of the Water Department's agenda, making it difficult to argue other points of view regardless of their merits. He cited the Water Department's use of the model to try to stop the Morse Street water main replacement as an example of this. He added that a dangerous tendency for members of the WMAC to suspend critical and independent judgement and accept modeled results without question would inevitably ensue from routine use of the model.

Michael Birschbach said that if the model were calibrated and operated properly, its predictions within acceptable tolerance would be irrefutable. However, he asked how the WMAC could trust the modeled scenarios with no control over the inputs. He described using a garden hose to level his patio, saying it worked better than a sophisticated laser-based leveling device. He said Sharon's gravity-fed water delivery system lends itself to a common-sense approach, adding that lack of trust in the Water Department made it hard to support the Wright-Pierce proposal.

Michael Sherman said he had professional experience with similar models in the energy field. He said that just because models predict accurately under normal conditions does not necessarily prove that they will predict accurately under extreme conditions. He added that the point of modeling is to predict how a system will behave under extreme conditions that are impractical to stage in the field. He said modeled results have to pass the "laugh test" to be credible, and that checking assumptions used to generate modeled scenarios is essential.

Rory McGregor said that in view of the opinions expressed about the peer review of the hydraulic model, the issue should be dropped, and suggested hiring a consultant to educate members of the WMAC about the model.

Paul Lauenstein said he would show up to learn if the town provided a seminar about hydraulic modeling.

Alice Cheyer stated that she felt the hydraulic model would be useful in evaluating the impact of the many 40-B developments currently being proposed for Sharon. She also reminded the committee that the issue of which fire flows are appropriate had never been resolved.

Rory McGregor suggested inviting Fire Chief Dennis Mann to speak to the WMAC on the subject of fire flows. Jack Sulik concurred with this idea.

5. Scope of water master plan by Wright-Pierce

Rory McGregor explained that the 5-year capital appropriations budget is based on the water master plan. He said it has been seven years since the last master plan update, and a new update is overdue. He said Sharon could hire a consultant like Wright-Pierce to prepare a scope for a new master plan, or Eric Hooper could do it.

Jack Sulik said the town must have a water master plan. He said it is necessary to anticipate the capital needs of the Water Department in order to establish water rates. He said the large number of 40-B developments currently being planned for Sharon will result in increased demand for water. These increases must be anticipated in a master plan update. He said that it would be better to have a consultant prepare the scope, adding that a scope prepared by Eric Hooper would not be acceptable.

Paul Lauenstein commented that an effective water conservation program could offset population increases, resulting in zero increase in total demand for water.

Jack Sulik replied that although water conservation is admirable, it may not be enough to fully offset increases in demand for water caused by increases in population. He said a master plan would take water conservation and a variety of other factors into account in projecting future demand for water.

Rory McGregor said Wright-Pierce quoted about \$3,500 to prepare the initial scope for a master plan. He said he recalled that the last master plan by Amory Engineers cost about \$80,000.

Michael Birschbach asked who would receive and approve the scope. Jack Sulik replied that the last time a master plan was prepared, the WMAC was very active in all stages of its formulation.

Rory McGregor agreed that the WMAC would be actively involved in determining the content of the scope. He pointed out that the choice of consultant to write the scope could slant the content of the master plan, and asked if other members of the committee would accept a scope prepared by Wright-Pierce. He added that the wording of the hiring agreement was also important because it could affect the scope.

Paul Lauenstein questioned the need for a master plan, asking to what extent past master plans had been used to determine annual capital spending. He said that capital spending decisions made each year were based more on current circumstances than an aging master plan.

Cliff Towner said past master plans have had little effect on actual events. He pointed out that the last master plan recommended two new wells by the year 2000, but Sharon still has no new wells in 2004. He added that the population projections contained in previous master plans have been much higher (25,000) than actual experience (18,000), which undermines the validity of their recommendations.

Rory McGregor commented that lawn watering restrictions have had an impact on the correlation between population and water use. He said such unanticipated factors make it hard to predict future demand for water, adding that every year Eric Hooper's 5-year capital spending plan changes significantly.

Jack Sulik said the master plan should be updated every five years.

Cliff Towner commented that Wright-Pierce's proposal to prepare a scope of work for a new master plan is premature. He said 40-B developments are being planned all over town whose future demand for town water is uncertain. He said the committee should be working instead to establish priorities that will lead to self-sufficiency of water supply, and prevent contamination of aquifers that has forced over 40 communities in the Boston area to turn to the MWRA for water. He reminded the committee of the four tank locations and five tank capacities recommended by prior master plans. He said that even though the various recommendations were based on modeled scenarios, they could not all be correct, adding that new pipes and tanks do not address the key question of where adequate supplies of clean, safe water will come from in the future.

Jack Sulik challenged Cliff Towner's assertion that the town's master plans had recommended multiple tank locations as misleading. He said the four locations were not recommended, but rather evaluated as possible tank sites if the Mountain Street water main were extended to higher elevations.

Cliff Towner agreed that the master plans stated that a new tank would be needed only if the water main were extended up Mountain Street.

Paul Lauenstein questioned spending \$80,000 on a water master plan update that would gather dust on the shelf. He said the annual capital spending plan is where "the rubber meets the road," and that the Water Department and the

WMAC are capable of doing a reasonably good job of setting spending priorities every year without a master plan.

6. Report of water conservation subcommittee

Paul Lauenstein said the water conservation subcommittee would like more and better information about water use in Sharon in order to do a better job of formulating a water conservation strategy. He said the subcommittee is still awaiting a corrected Annual Statistical Report for 2003 as discussed at the May 6 WMAC meeting. He said the subcommittee also needs a breakdown of 115 million gallons of "other area" and "unaccounted-for" water as requested at the July 29 meeting, as well as the starting date of the SCADA malfunction that inflated Well #3 pumping records.

Jack Sulik explained that unaccounted-for water is the total amount of water pumped minus the total of metered water plus estimated, documented water usage for such purposes as hydrant flushing and fire fighting.

Lealdon Langley asked if water used by schools is metered. Jack Sulik explained that even though the schools are not charged for water, their water use is metered and therefore not included in unaccounted-for water. Jack Sulik added that leak detection is performed on the water mains every year to minimize unaccounted-for water.

Chuck Goodman asked how much water was sold in 2002 and 2003. Paul Lauenstein replied that in 2002, about 451 million gallons were sold, and in 2003, about 414 million gallons were sold, a drop of 37 million gallons. Chuck Goodman said this was surprising, and asked what caused the drop.

Paul Lauenstein reported on the six most popular water conservation initiatives as indicated by the results of his recent questionnaire.

1. Public relations

Paul Lauenstein suggested that the WMAC should consider recommending a web site about Sharon's water supply like the town of Acton's: <u>www.Actonh20.com</u>.

- A web site could provide useful functions like bill-paying, and consumer feedback such as usage monitoring and a gpcd calculator.

- The approximate cost to replicate Acton's web site for Sharon would be \$3,000 to \$6,000.

He suggested that WMAC members should visit Acton's site and be prepared to discuss the merits of this idea at a future meeting. He commented that Acton's

web site is the result of efforts by Acton's part-time environmental agent, Jane Ceraso.

2. Feedback on water bills

Paul Lauenstein suggested that the Water Department insert a gpcd lookup table (see below) in each water bill to help residents estimate their water usage in terms of gallons per capita daily, and compare it with the state standard of 65 gpcd. He said an estimate of the cost of this exercise should be determined in order to decide whether to recommend it to the Selectmen.

Use the following chart to look up your gpcd (gallons per capita daily) water usage rate. The generally accepted guideline for normal water usage is 65 gallons per capita per day.

Ν	lumber o	of inhab	itants							
Gallons used	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>1 0</u>
<u>in 6 months*</u>										
10,000	55	27	18	14	11	9	8	7	6	5
15,000	82	41	27	21	16	14	12	10	9	8
20,000	110	55	37	27	22	18	16	14	12	11
25,000	137	68	46	34	27	23	20	17	15	14
30,000	164	82	55	41	33	27	23	21	18	16
35,000	192	96	64	48	38	32	27	24	21	19
40,000	219	110	73	55	44	37	31	27	24	22
45,000	247	123	82	62	49	41	35	31	27	25
50,000	274	137	91	68	55	46	39	34	30	27
55,000	301	151	100	75	60	50	43	38	33	30
60,000	329	164	110	82	66	55	47	41	37	33
65,000	356	178	119	89	71	59	51	45	40	36
70,000	384	192	128	96	77	64	55	48	43	38
75,000	411	205	137	103	82	68	59	51	46	41
80,000	438	219	146	110	88	73	63	55	49	44
85,000	466	233	155	116	93	78	67	58	52	47
90,000	493	247	164	123	99	82	70	62	55	49
95,000	521	260	174	130	104	87	74	65	58	52
100,000	548	274	183	137	110	91	78	68	61	55
105,000	575	288	192	144	115	96	82	72	64	58
110,000	603	301	201	151	121	100	86	75	67	60
115,000	630	315	210	158	126	105	90	79	70	63
120,000	658	329	219	164	132	110	94	82	73	66
125,000	685	342	228	171	137	114	98	86	76	68
130,000	712	356	237	178	142	119	102	89	79	71
135,000	740	370	247	185	148	123	106	92	82	74
140,000	767	384	256	192	153	128	110	96	85	77
145,000	795	397	265	199	159	132	114	99	88	79
150,000	822	411	274	205	164	137	117	103	91	82

*Note - This chart assumes a billing period of 182.5 days (half a year). If your actual billing period differs significantly, just multiply the value from the lookup table by the actual number of days divided by 182.5.

3. Control municipal water use (not yet discussed by the subcommittee)

4. Rebates (not yet discussed by the subcommittee)

5. Radio meters

Paul Lauenstein reported on information he obtained about the potential role of radio meter technology in water conservation since the August 19 meeting.

- Anecdotal information from Ti-Sales' customer in Opelika, Alabama indicates that E-coders may be cost-effective based on detecting and reporting household leaks. Also, E-coders are popular. Water customers in Opelika requested E-coders when they learned their neighbors with E-coders saved money by timely discovery of leaks.

- Flow Metrix' MLOG system, which can utilize the radios in an AMR system, can continuously monitor for leaks in the water main grid, saving significant amounts of water and reducing the cost of repairs by detecting leaks while they are still small. The cost for a town the size of Sharon would be around \$100,000, and the payback is reported by Flow Metrix to be only two to four years.

6. Involve Schools

Lealdon Langley and Richard Mandell reported on Project WET (Watershed Education for Teachers), a nationally distributed curriculum supplement aimed at elementary and middle schools that focuses on water use and watershed hydrology. Lealdon Langley took the one-day Project WET course and said it was well-done. He explained that for as little as \$37 per teacher, a 6-hour instructional seminar, a book with 100 lesson plans, and supplies for several lessons could be provided to teachers. He agreed to write a letter to the School Department to find out if they would support the program if the Water Department would pay for it. He added that the total cost for two classes of eight teachers per year would cost less than \$600 per year, and could be paid for from funds allocated for water conservation.

Cliff Towner asked if teachers would get credit for taking the course. Richard Mandell explained that teachers might be able to obtain required Professional Development Points (PDPs) by taking the course.

Jack Sulik said the letter should contain an explanation of why water conservation is important.

Rory McGregor asked Lealdon to go ahead and send in the letter about Project WET without any further approval from the WMAC. He suggested that there

should be a regular column in the Sharon Advocate to inform townspeople about water supply issues.

Alice Cheyer suggested hiring a part-time writer to write letters and articles about water supply issues. Lealdon Langley replied that there may already be town employees who could do these writing tasks.

Rory McGregor said that the Selectmen are looking to the WMAC to provide them with clear recommendations for actions to take on water supply issues, including estimated costs.

7. Update on exploratory test wells

Cliff Towner reported that he heard Eric Hooper say at a recent televised Selectmen's meeting that the Water Department is still trying to gain access to the Gobbi property and the Canton Street site to drill exploratory test wells.

Rory McGregor asked when access would be granted. Cliff Towner replied that he did not know, but that Selectman David Grasfield has been trying to accelerate the process.

8. Report on well pumping and tank levels

Rory McGregor circulated copies of two similar graphs provided by Eric Hooper, one showing average daily pumping and one showing average daily pumping adjusted by population. Cliff Towner and Michael Birschbach both said they would prefer to see the actual data, as in previous months. Rory McGregor agreed to ask Eric Hooper to provide the committee with the actual data.

9. New Business

A. Further discussion of information-gathering authority

Cliff Towner requested further clarification of his information-gathering authority as a member of the WMAC.

Rory McGregor suggested that committee members should gather information in their own names and not on behalf of the WMAC.

Cliff Towner gave the following example: John Smith, a hypothetical WMAC member, asks an official in a neighboring town how many water tanks they have, identifying himself as a member of the Sharon Water Management Advisory Committee.

Rory McGregor said he thought it would be better for the hypothetical John Smith not to identify himself as a member of the WMAC.

Richard Mandell said there is a difference between seeking information and speaking on behalf of the committee, adding that he saw nothing wrong with identifying oneself as a member of the WMAC when seeking information.

Jack Sulik said he thought WMAC members should not identify themselves as such when talking to outside parties.

Cliff Towner disagreed, saying that as appointees of the Board of Selectmen, WMAC members have an obligation to make an effort to gather information, and should identify themselves as WMAC members when doing so. He said that information gathering is essential to providing the Selectmen with good advice, adding that the WMAC needs to get proactive in a hurry to deal effectively with pressing water supply issues. He said that prior to his appointment to the WMAC he gathered information under his own name, but going forward he felt obliged to identify himself as a member of the WMAC.

Alice Cheyer said that in the past Cliff Towner has gathered information privately without any authority from the WMAC, and she didn't see why he could not continue to do so in the future without identifying himself as a WMAC member. She said she felt the potential for harm to the town had been demonstrated recently by Paul Lauenstein when he solicited opinions from radio meter vendors regarding the fairness of the RFP process, identifying himself as a WMAC member. She said it is necessary for the committee to work harmoniously with Eric Hooper, and that it is counterproductive for WMAC members to take actions that interfere with Water Department initiatives such as procurement of a radio meter system. She said Paul Lauenstein's solicitation had led to intervention by the Massachusetts Inspector General, and that the Water Department's relationship with the vendor of choice, Ti-Sales, was compromised.

Cliff Towner interjected that Alice Cheyer was mistaken about Paul Lauenstein's email being the cause of the Inspector General's intervention.

Alice Cheyer concluded by pointing out that WMAC meeting minutes must first be approved by the committee before being posted to the web site, and she said it was her opinion that WMAC members should similarly obtain the approval of the committee before gathering information on behalf of the committee.

Lealdon Langley countered that identifying oneself as a member of the WMAC is a natural courtesy when attempting to gather relevant information from strangers. He said that when he takes calls in his capacity as an employee of the DEP, he is better able to handle their inquiries in an appropriate manner if they identify themselves as members of an organization. He pointed out that Paul Lauenstein obtained the information on Project WET as a WMAC member, and that unnecessary delay would have resulted if he had to first obtain the approval of the committee before taking action. He said he thought good judgement should be exercised and legal consequences should be considered when gathering information as a member of the WMAC.

Cliff Towner suggested that WMAC members are answerable to the Board of Selectmen rather than the WMAC.

Lealdon Langley disagreed, saying that only motions voted upon by the WMAC are passed along to the Selectmen.

Richard Mandell raised the question, "What is the role of the WMAC?" He said this question was raised a year ago and still remains to be properly addressed. He suggested that the WMAC should focus on larger issues affecting the longer term, and that micro-managing the Water Department is not appropriate.

Richard Mandell recalled that Rory McGregor had admonished Paul Lauenstein for sending an email to the radio meter vendors without approval from the WMAC. He then pointed out that Rory McGregor had sent an email to the Selectmen without the approval of the WMAC complaining about Richard Kramer's behavior at a recent WMAC meeting. He said Rory McGregor's email claimed that other WMAC members would support this complaint. Richard Mandell then said if Rory McGregor had asked his (Richard Mandell's) opinion of Richard Kramer's behavior, that he (Richard Mandell) would have said he had no objection to Richard Kramer's behavior, and that, in fact, Richard Kramer's input to the committee's discussion was quite valuable. Richard Mandell requested that in the future Rory McGregor refrain from speaking on behalf of other committee members without their consent.

B. Chairmanship of the WMAC

Richard Mandell said the WMAC had voted in the spring of 2003 that the chairman should be elected annually, and that the annual election was overdue.

Rory McGregor said he would include a vote on the WMAC chairmanship on the agenda for next WMAC meeting.

C. Emergency backup

Michael Birschbach said he read in the Boston Globe about a plan for Sharon to enter into an agreement among several neighboring towns to cooperate on developing a plan for mutual emergency backup water supply. He said the Water Department should have solicited the input of the WMAC on this issue. He added that emergency backup was an issue that had been discussed in the past by the WMAC and should have been addressed proactively rather than after-the-fact. Lealdon Langley asked what existing reports such as the Annual Statistical Report and the Vulnerability Assessment have to say about emergency backup. He suggested that Eric Hooper should provide the WMAC with this information, as well as information about the connections to neighboring communities' water systems.

Cliff Towner said Eric Hooper had presented the emergency backup cooperation plan at a recent Board of Selectmen meeting. He suggested that emergency backup should be a future WMAC agenda item.

D. Retention of surface runoff

Cliff Towner prefaced his comments about recent activities related to aquifer recharge by saying that it was too late in the evening to properly address this important issue, and that it should be included as a future agenda item. However, he commented that the Conservation Commission was planning to install rip rap (course gravel) in the drainage channel behind Sharon Heights to impede the flow of surface runoff out of Sharon, thereby increasing the amount of water that soaks into the ground to recharge the town's aquifers. He said someone had alerted the MA DEP about this project, which resulted in the necessity of obtaining permission from the DEP, delaying the project.

E. Edge Hill Road and Morse Street water main replacement projects

Cliff Towner reported that a contract had been awarded on July 20 for replacement of A/C water mains on both Edge Hill Road and Morse Street. He said he thought that in view of the magnitude of the projects, the Water Department should have kept the WMAC informed, and provided the WMAC with copies of both the RFP and the contract.

10. Schedule next meeting for Thursday, October 28 at 7:30 PM