

# **SHARON WATER MANAGEMENT ADVISORY COMMITTEE (WMAC) MEETING MINUTES FOR NOVEMBER 18, 2004**

Prepared by Paul Lauenstein

Present at meeting:

WMAC Chairman Michael Birschbach; WMAC members Lealdon Langley, Paul Lauenstein, Richard Mandell, Len Sekuler, Mike Sherman and Jack Sulik; and Selectman David Grasfield

## **Summary of Minutes for the 11/18/04 WMAC Meeting**

- 1. Discussion of meeting format**
- 2. Review and approve minutes of the October 28, 2004 meeting (with alterations)**
- 3. Memo from the Water Department**
- 4. Mission statement**
- 5. Priorities**
- 6. Water conservation subcommittee update**
  - a) Water bill inserts**
  - b) Hot water re-circulation systems**
- 7. Schedule next meeting for Thursday, December 9 at 7:30 PM**

## **Detailed Minutes for the 11/18/04 WMAC Meeting**

### **1. Discussion of meeting format**

Incoming WMAC Chairman Michael Birschbach opened the meeting by saying that he would like to encourage better communication among the WMAC, the Selectmen, the Town Administrator, the Water Department, and other interested parties. He also said he would like to see wide-ranging discussion of all issues affecting the water supply at monthly WMAC meetings. He said he would like to open each meeting with an update from the Water Department followed by a review and discussion of what is going on and where we are going. He said an agenda including water conservation, new well site exploration, etc. would follow the open discussion period.

Michael Birschbach welcomed new WMAC member Mike Sherman.

Richard Mandell said that in the past the WMAC had operated in the dark without sufficient information. He said he would like to hear a status report from the Water Department at each WMAC meeting, scheduling it at the beginning of as a courtesy to Eric Hooper.

Paul Lauenstein said that the initial discussion period of each meeting should be short enough to allow time for discussion of the following agenda items.

Len Sekuler said Eric Hooper's attendance at WMAC meetings is vital because Eric Hooper is involved with Water Department affairs on a daily basis, and can provide the WMAC with needed information without which the WMAC would be recommending water policy in a vacuum. He said the town's best interests would be served by fostering a collaborative relationship between the WMAC and the Water Department.

Lealdon Langley agreed that Eric Hooper's attendance at WMAC meetings is needed, both to provide information and to hear the points of view of members of the WMAC.

Michael Birschbach asked Lealdon Langley if he thought it appropriate for the WMAC to disagree with the Water Department.

Lealdon Langley said it was better for the WMAC to offer informed dissent than to make recommendations in ignorance.

Michael Birschbach said the WMAC should support its recommendations to the Selectmen with reasons to help them to decide on appropriate action.

Jack Sulik said Eric Hooper's views should be afforded respect since he is a professional engineer. He said he had seen WMAC members shoot from the hip without sufficient knowledge. He said that the Water Department can get along without the WMAC, but the WMAC cannot function without the Water Dept.

Mike Sherman said the WMAC should focus on broad policy goals and initiatives. He said micro-managing the Water Department engenders friction. He said that although the Water Department should participate in determining policy, the WMAC should be independent and not automatically endorse Water Department priorities.

Michael Birschbach said that as chairman of the WMAC he would try to reach out to Eric Hooper on behalf of the committee to foster a better working relationship with the Water Department.

## **2. Review and approve minutes of the October 28, 2004 meeting (with alterations)**

The minutes were unanimously approved with minor alterations.

## **3. Memo from the Water Department**

Michael Birschbach handed out a memo and several informational attachments from the Water Department to the members. The memo addressed the following topics:

- Water Meter Replacement
- Groundwater Monitoring Data (plus graphs)
- Production Well and Tank Levels (plus graphs and data)
- Hydraulic Model Update
- Hydrant/Lead Service Replacement – North/South Main Street
- Edge Hill Road/Tiot Street Water Main Replacement
- Morse Street Water Main Replacement
- Gobbi Property Source Exploration

- Boston Edison Property Source Exploration
- Iron/Manganese Treatment at Well #6

Michael Birschbach commented that this kind of information is helpful for keeping abreast of Water Department activities.

Richard Mandell pointed out that the monitoring well graphs are counter-intuitive because up-spikes in the graph represent drops in the water table. He added that expressing the depths to the water table as negative numbers on the y-axis, with zero representing the surface of the land, would make the graph easier to understand.

Jack Sulik said that the nine locations associated with Station #2 correspond to the nine wells in the well field that comprise Well #2.

#### **4. Mission statement**

Len Sekuler reiterated that it is important for the WMAC to collaborate with the Water Department, rather than work at cross-purposes, in order to further the best interests of the town.

Michael Birschbach said he too hoped the WMAC could collaborate with the Water Department, but the mission of the WMAC should be to provide good water to the town.

Paul Lauenstein proposed the following mission statement:

*“The mission of the Water Management Advisory Committee (WMAC) is to assist Sharon's Water Commissioners in assuring that Sharon has an uninterrupted supply of safe, healthful and clean water for the foreseeable future. This goal should be achieved while minimizing the impact of water withdrawals on the local environment, in recognition of the role played by the environment in purifying and storing the town's water, and Sharon's reputation as "a nice place to live because it's naturally beautiful.”*

*The WMAC should establish and periodically revise priorities to provide decision-making guidance for the Water Commissioners. The WMAC should review Water Department initiatives in relation to these priorities, and make specific recommendations to the Water Commissioners.”*

Jack Sulik said the WMAC’s mission statement should not try to explain how to achieve the mission, nor should it involve the environment. He said protecting the environment is the task of the Conservation Commission. He advocated keeping the mission statement brief, focusing on the role of the WMAC in advising the Selectmen on providing a sufficient quantity of high quality water.

Lealdon Langley thought protecting the environment should be everyone’s concern, and ignoring the importance of the environment in protecting Sharon’s water supply is inconsistent with the mission of the WMAC.

Mike Sherman felt that limiting the mission statement to quantity and quality of Sharon’s water failed to account for the role of the environment in purifying and storing our water supply. He added that sustainability should be expressed in the mission statement, recognizing the importance of aquifer recharge.

Michael Birschbach said that adding a clause about protecting the environment in the WMAC mission statement might lead to conflict between human needs and environmental needs. He said using words like “minimize environmental impact” in the mission statement could lead to outdoor watering restrictions, whereas words like “maintain the environment” could lead to total bans on outdoor watering.

Jack Sulik suggested that environmental impact should be taken up in the discussion of priorities, but does not belong in the mission statement. He said the acceptability of environmental impact is a matter of opinion and degree. One person might consider Sharon’s environment healthy enough, but the next person might consider it unacceptably harmed by water withdrawals. However, he agreed that the concept of sustainability should be included in the mission statement.

Richard Mandell said that damaging the environment also harms our water supply. Because pollution and depletion of our groundwater is unacceptable, we must protect the environment that filters and stores our water, and that this necessity should be expressed in the mission statement.

Len Sekuler agreed that both the environment and sustainability should be included in the mission statement, and proposed the following language:

*“The mission of the WMAC is to advise the Board of Selectmen on water issues facing the Town of Sharon to ensure a sustainable supply and high quality of water in an environmentally sensitive manner.”*

Paul Lauenstein said Sharon’s wells are like straws in a glass of water. As long as there is at least a little water in the bottom of the glass, water will continue to flow up the straw. However, the surface of the water in the glass is like the water table. When the water table falls, streams and ponds on the surface of the land dry up, adversely impacting the environment. He said it might be possible to have a sustainable equilibrium (i.e. an amount of water soaking into the ground equal to the amount being pumped out) with the water table drawn down so low that streams and ponds on the surface would dry up between rainstorms. He added that this happens in the Ipswich River. He said this would be unacceptable.

Lealdon Langley said water should not be mined. He underscored the importance of sustainability by mentioning the concept of safe yield of the town’s groundwater. He said that current thinking incorporates environmental and ecological parameters as indicators of safe yield, so it is appropriate to incorporate environmental protection into the mission statement.

Richard Mandell emphasized the importance of sustaining the quality of the town’s water supply as well as the quantity.

Len Sekuler said that it might not be practical to achieve perfect quality of water, and that reasonably high quality would be a more realistic objective.

Mike Sherman suggested using words like “high quality” instead of “best quality” to describe the water quality objective in the mission statement.

Paul Lauenstein and Michael Birschbach agreed to try to work out a draft mission statement to present for ratification at the next WMAC meeting.

## **5. Priorities**

Michael Birschbach presented a spreadsheet listing his own priorities and those of the two WMAC members who responded to his appeal for suggestions.

He began by listing his own priorities as follows:

- Communications among the WMAC, the Selectmen and the Water Dept.
- Professional conduct of committee members
- Aquifer management for sustainable water supply while protecting the environment
- Water quality
- Water conservation education

Michael Birschbach then listed Cliff Towner's priorities as:

- Communication
- Water retention
- Well site exploration
- Emergency backup
- Fe/Mn abatement at Well #6
- Nitrate abatement
- Water conservation education
- Well #4 nitrate tracking
- Increase certain Hampton Road area water mains from 8" to 12"
- Inform WMAC of all RFPs

Paul Lauenstein recited his list of priorities as:

- Emergency backup
- Aquifer recharge
- Fe/Mn treatment at Well #6
- New wells
- Nitrate mitigation
- Water conservation
- Better accounting for water usage

Lealdon Langley's priorities were:

- New well site
- Well #4 nitrate tracking
- Nitrate abatement
- Water conservation

Len Sekuler had the following priorities:

- Fe/Mn treatment at Well #6
- Nitrates
- New water sources (such as a new well or MWRA)
- Groundwater recharge
- Water conservation
- Reduction of risk associated with water level fluctuations in the Hampton Road tank.
- Low water pressures

Richard Mandell's priorities included:

- Emergency backup
- Nitrate abatement
- Aquifer recharge
- Postponing radio read meter system procurement until more information is gathered and results of free pilots are available
- New well sites
- Improved communications with the Water Department

Mike Sherman said he hoped the WMAC would succeed in distilling two short, prioritized lists of objectives, one for the next year and a second for the next five years. He added that achieving these goals would require follow-through on recommendations by means of communicating effectively with the Selectmen. Mike Sherman listed his priorities as:

- New wells
- Fe/Mn treatment at Well #6
- Aquifer recharge
- Cooperation with neighboring communities for mutual backup and groundwater management.

Mike Sherman also expressed his personal interest in participating in a new radio meter system evaluation.

Paul Lauenstein said he was dismayed that the Water Department reinitiated the RFP for a radio read meter system without the involvement of the WMAC in spite of the WMAC's near-unanimous recommendation to form an evaluation committee and to conduct free pilot evaluations. He pointed out that the failure of the first radio read meter system procurement process was attributable to a flawed RFP. He said that he had not yet seen a satisfactory cost justification for this million-dollar investment. He added that developing a cooperative relationship with the Water Dept. would be difficult unless the Water Dept. afforded more respect to the WMAC's recommendations.

Jack Sulik presented his priorities as follows:

- High Pressure Service District, which, he insisted, is a legitimate need
- Water Master Plan to establish priorities
- Sourcing desalinized water from Aquaria

Jack Sulik commented that desalinized ocean water represents an unlimited supply of fresh water for coastal population centers such as the greater Boston area, and will become increasingly prevalent over the next century. He added that desalination is a significant source of fresh water in places like Florida and the Middle East, as well as on submarines.

Lealdon Langley added that in addition to desalination, Florida and other areas purify and recycle waste water.

Michael Birschbach brought the meeting back to the subject of priorities. He suggested compiling a complete list, and then narrowing it to the highest priorities by giving each member a half-dozen self-adhesive dots to affix beside the priorities he considered most important. The highest priorities would be those with the most dots.

Paul Lauenstein suggested an alternative approach whereby each member would rank order a common list of priorities and email it back for compilation. A score would be assigned to each priority according to its rank on each list. The scores would then be summed. The highest priorities would be those with the lowest scores.

Richard Mandell said lesser priorities should not necessarily be abandoned. He also said that Rory McGregor's priorities should be included.

Lealdon Langley suggested grouping priorities into categories such as:

- Water conservation
  - Water-saving appliances & rebates
  - Education, public relations & behavior modification
  - Leak detection (both in the home and in the delivery grid)
    - Accounting for water (and reduction of unaccounted-for and other-area water)
- Water quality
  - Nitrates
  - Fe/Mn
  - Other contaminants
- New sources of water
  - New wells
  - Aquifer recharge
  - MWRA
  - Aquaria desalination
- Infrastructure, storage and delivery of water
  - Bottlenecks in the water main grid
  - Emergency backup
  - Radio read meter system
  - Replacement of A/C pipe
  - HPSD & new water tank
- Decision-making process
  - Communication among WMAC, Selectmen and Water Dept.
  - Professional conduct
  - Information gathering and dissemination
  - Water Master Plan
  - Cooperation with neighboring communities

Richard Mandell commented that addressing some of these issues might yield more immediate benefits than others. For example, an iron/manganese treatment plant at Well #6 might have more immediate benefits than efforts to reduce nitrates in the three wells along Beaver Brook.

Jack Sulik said a Water Master Plan would address and prioritize all these ideas in one document, and recommended this approach as a means of developing a strategy for dealing with Sharon's water supply.

Richard Mandell said he was concerned that a Water Master Plan would be weighted towards the priorities of the Water Department because the consultant preparing the Master Plan would be selected and paid by the Water Department. As such he feared it might not reflect the priorities of the WMAC, and suggested that the WMAC should make its own set of priorities independent of a Water Department Master Plan.

Jack Sulik replied that two competing sets of priorities would be unworkable. He added that a Master Plan would not be created without input from the WMAC.

Mike Sherman said the role of the WMAC is to provide advice and direction to the Selectmen. He said making a prioritized list of actions is different from and not necessarily incompatible with creating a Water Master Plan.

Len Sekuler agreed with Jack Sulik that a Water Master Plan update is overdue, and that the WMAC should participate in shaping it. He said the Water Master Plan must be paid for with Water Department funds since the WMAC has no budget.

Michael Birschbach said the WMAC should provide the Selectmen with independent advice. The WMAC should communicate their priorities to the Selectmen along with explanations for their recommendations, to assist the Selectmen in making their water policy decisions.

Len Sekuler said he felt the WMAC should try to work things out with the Water Department first before making recommendations to the Selectmen. He cited as an example the way the WMAC negotiated with Eric Hooper to accelerate the schedule for installation of the Fe/Mn treatment plant at Well #6 from 2009 to 2006. He added that the Water Department is a vital source of information.

Jack Sulik asked if the WMAC planned to share the list of priorities discussed at this meeting with Eric Hooper. Paul Lauenstein replied that Eric Hooper would be able to review the priorities of the WMAC members in his copy of the draft minutes.

Richard Mandell agreed that the WMAC should work with the Water Department as much as possible. However he cautioned against giving up the advisory role of the WMAC, falling instead into a mode of reacting to Water Department initiatives. He said the WMAC should concentrate on setting priorities and providing the Selectmen with policy recommendations based on sound, independent reasoning.

Michael Birschbach echoed this by saying that the WMAC should provide the Selectmen with independent recommendations and supporting arguments. If the Water Department presents a different point of view, the Selectmen can weigh both sets of arguments and then make their decision. The WMAC fulfills its responsibility to the Selectmen and the town by presenting and defending their independent viewpoints regardless of the final decision made by the Selectmen. Michael Birschbach cited differences of opinion about how to supply water to the proposed Avalon Bay development, and retaining water for aquifer recharge, as two recent examples of differences of opinion between the Water Department and members of the WMAC that must be resolved by the Selectmen.

Mike Sherman said that the WMAC should have a strong voice. He said that two-way dialog should occur between the WMAC and the Water Department, but the WMAC's primary client is the Board of Selectmen.

Richard Mandell asked if Michael Birschbach as chairman should act as spokesperson in presenting recommendations of the WMAC to the Selectmen.



Paul Lauenstein said that ideally the WMAC should attend Selectmen's meetings as a group whenever important decisions about the town's water supply are on the agenda, in order to make recommendations and answer any questions the Selectmen might have.

Michael Birschbach said he would welcome the assistance and input of all WMAC members in communicating with the Selectmen. He added that the WMAC should first focus on achievable objectives that he referred to as "low hanging fruit" and then shift to longer-term issues in order to show progress while maintaining a constant flow of initiatives.

Mike Sherman suggested that the WMAC should make a group presentation to the Selectmen after deciding upon a short list of priorities.

Michael Birschbach offered to bring a list of all priorities, and also self-adhesive dots as a means of ranking the priorities, to the next meeting.

Len Sekuler asked what the next step should be after identifying the top priorities. He pointed out that it may be difficult to rank priorities, some of which may be easy to accomplish yet not especially significant, while more serious priorities may require a lot of time and resources to achieve. He also said nothing would get done without the cooperation of the Water Department, and that it might be difficult to achieve the priorities of the WMAC if the Water Department is preoccupied with accomplishing its own priorities. He suggested that the discussion of priorities be continued at the next WMAC meeting. Michael Birschbach agreed to include it on the next agenda.

Lealdon Langley suggested that an action plan should be established for each of the top priorities.

Richard Mandell replied that the primary responsibility of the WMAC as an advisory committee is to gather information and present the Selectmen with recommendations and reasons for those recommendations, but he agreed that implementation must also be addressed.

## **6. Water conservation subcommittee update**

### **a) Water bill inserts**

Paul Lauenstein passed out copies of the proposed water bill insert. He said the purpose was to raise awareness of the need to conserve water, inform people of the state's 65 gallons per capita daily (gpcd) standard, and provide them with a means of calculating their own gpcd. He said including the inserts with the water bills (as opposed to mailing them separately) would increase their effectiveness because they refer to water usage and water price rates printed on the bills. He also said it would be a good idea to review the rebate program, since the insert promotes the rebate program.

Lealdon Langley said that it is important not to blindside the Water Department. He pointed out that the Water Department's phone number is printed on the insert as a source of water saving advice and information about the rebate program, and the impact that telephone inquiries might have on work flow at the Water Department must be taken into account.

Richard Mandell said he thought the insert should go out with the Water Department's phone number, but even if the Water Department insisted on removing the phone number the insert should be included with the water bills to raise awareness. He added that the flyer should be identified as having been authored by the WMAC and the Water Department.

Jack Sulik said he doubted the Water Department would be overwhelmed with calls, especially considering only about 1,000 water bills go out every month, so including the phone number should not present a problem. However, he recommended asking the Water Department for their input.

**MOTION:**

Paul Lauenstein moved to recommend that the Selectmen instruct the Water Department to include copies of the draft insert in the water bills, and that the Water Department's phone number be listed on the insert to refer customer requests for advice to the Water Department, subject to their approval.

This motion was seconded and passed unanimously.

**b) Hot water re-circulation systems**

Paul Lauenstein mentioned that he had found information about hot water re-circulation systems that could greatly reduce the amount of water lost while waiting for hot water to arrive at the showerhead or the faucet. He said that although not all houses lend themselves equally to this approach, in many cases significant amounts of water could be saved. He added that the convenience and time-savings of these systems make them a "win-win" solution. He advocated that this technology should be studied with an eye toward the possibility of including it in the rebate program.

**7. Schedule next meeting for Thursday, December 9 at 7:30 PM**