

## **MEMORANDUM**

To: Groundwater Advisory Council  
From: H. Bokuniewicz  
Concerning: Minutes of the meeting of 18 November  
Date: December 2, 2002

### **PRESENT**

H. Bokuniewicz  
S. Jones  
J. Milazzo  
M. Nofi  
D. Paquette  
W. Prospect  
R. Ramirez  
K. Roberts  
W. Spitz

### **REGRETS**

N. Bartilucci  
T. Green  
L. Koppelman  
V. Minei  
B. Nemickas  
G. Proios  
S. Robbins

**Next meeting: 16 December, 9:30 – 11:00 AM,  
at the offices of Dvirka and Bartilucci in Woodbury**

1. The minutes of the last meeting and revisions of the previous meeting (September) were distributed.
2. A Long Island contingent (including Paul Granger and Paul Ponturo) visited Ron Entinger last week to discuss SWAP. The issue of a model clearinghouse was brought up. There is some question concerning a transfer of the model after SWAP. The State has a non-exclusion contract with CDM who can withhold proprietary information. (See attached). So while the state will get the SWAP results and the counties (and SCWA) have the original DYNFLOW model, it is not clear whether the updated version or the subregionals will be available.
3. The county legislature is interested in a “water quality data base” and the Institute is recognized as a “potential contact agency” in the proposed budget for \$1. (?).
4. We have submitted a proposal to Cornell/USGS to continue the precipitation databasing and to conduct a new analysis of extreme events (i.e. design storms). Sy Robbins loaned us the logbooks from Islip/Macarthur Airport from '63 to '83, which

were not available from the Weather Service. These are being entered into the database.

5. The Cornell professor of turf grass science, A. Martin Petrovic, visited to discuss the study lawn nitrate being done by a graduate student, Jennie Munster. He gave a lecture at the University and questioned the effectiveness of “organic” fertilizers in preventing groundwater contamination. He will help supervise this student’s research. Lysimeters have been installed at six Water Authority properties for the nitrate studies.
6. Steve Jones discussed a water supply study on providing water to the north fork. Alternatives being analyzed include treating water produced by existing wells, developing new wells within the towns or transmitting water into the town. The Riverhead Water Supply District separates the north fork from the rest of the Suffolk County Water Authority water system. The Water Authority has been discussing the options with the Riverhead District and may co-sponsor a Riverhead groundwater study including potential interconnections at Wading River and Calverton in order to have the option of sharing water. CDM will be studying the eastern extent of the Magothy at the border between Southold and Riverhead, and, perhaps, exploring other sources.

Options for transmitting water to Southold include a pipeline starting at a new well field in Flanders and running to the fork by one of three routes (Rt 105 then along Rt 25, or along Sound Avenue, or along Peconic Bay Avenue). Pipe sizes being analyzed include 20, 24, and 36-inch diameter mains. A larger diameter costs more to put in but reduces frictional losses during transmission. It would run about eleven miles; the longest existing pipeline on Long Island is now seven miles. There is some concern, however, of having the entire water supply and long transit times increase the potential for bacterial contamination. A twelve-or sixteen-inch pipe extends out to Greenport.

Studies show there is enough water in Southold even to support full buildout if treated. The Water Authority is also exploring using filters to remove perchlorate from local water sources. Perchlorate has been found in 17 of 33 wells along the spine of the North Fork. The EPA is on a “fast track” to reduce the perchlorate standard to 1ppb since there is some evidence of thyroid interference at such low levels. This standard would be low enough to preclude the use of other techniques, such as blending or “sweetening” to reach the standard. The first filtering trial was not a success. A plastic resin from the Calgon Corporation was installed at East Northport and in Quogue. Nitrate levels of the raw water were 7-8 ppm and 8-9 ppm, respectively, but after going through the filter the processed water was at 11 or 12 ppm (over the 10 ppm standard). Nitrate was apparently concentrated then released by the resin possibly because of, according to Calgon, low, ambient sulfur content. Alternate treatments might be to destroy perchlorate in-place by heat or to treat the water supply with reverse osmosis. All are expensive; say \$15 million, while the cost of transmission is estimated to be \$10 million.

The water supply plan will undergo state environmental quality review act (SEQR) review including a public comment period. The development of farmland near a new pipeline in the town agricultural district will be reviewed by the Commissioner of Agriculture and Markets. The Commissioner may impose a penalty on the farmer

who converts a farm. In the meantime, water from the Riverhead District would be used this summer. The Authority has already briefed the towns of Southold, and Riverhead as well as the DEC, and expects to release a SEQR document within a few weeks. Upzoing by the towns has been suggested in order to control development around the new water supply.

The Water Authority might also add a pilot project with farmers allowing the Authority a watershed protection easement and work with the farmers on best management practices. Such arrangements have been implemented in other places like Syracuse, the New York City watershed and in Delaware County (Commissioner Dean Frazier)

A new water supply to the north fork apparently would not raise the water table. (In Napeque ten years ago a DEC permit was delayed because of concerns that the water use of hotels and motels would raise the water table). The Riverhead Water District does not have exclusive rights; they have a monopoly on serving water in the District but not on pumping.

There are no plans for water transmission on the South fork.

7. Don Cohen (Malcolm-Pirnie) could not attend to discuss the intended use of the Lloyd Aquifer in Queens. We'll try to get him to the next meeting.
8. We have an issue of Connections on lawn nitrates, which will be distributed in the spring, and a draft of another on pesticides. These will be the last "paper" issues. In 2003, we will concentrate on developing the WEB site to serve and encourage its use in library, etc.
9. The Water Authority is planning to landscape property in eastern Suffolk with native plants requiring less irrigation. There's to be a meeting Thursday (21 November) at the Eastern Regional Office. Jessica Gurevitch (from Stony Brook) might be interested in this project.

HB/ed  
Gwmintuesnov02.doc  
Enclosure: Attachment A