

Meeting Minutes
July 18, 2011
Glenville Wellfield Protection Study Group
2:30 p.m.

Attending: Carl George, Aaron Kelsey, James MacFarland, Roger Harrison and Kevin Corcoran

Absent: Phil Adams, John Garver, Jason Pelton and Tom Coppola

- Kevin opened the meeting at 2:36 p.m. asking for a vote to approve the minutes of the June 20, 2011 meeting. Carl suggested for the June minutes and all subsequent minutes that the record reflect both those in attendance and those absent. With this correction, the group unanimously approved the June 20th minutes.
- At the June meeting it was suggested that the group more clearly define its purpose or mission and begin focusing its attention accordingly. With that in mind, Kevin put together a draft mission statement and goals for consideration by the group. Having reviewed the draft mission statement and goals, those in attendance endorsed these items as written. Kevin will e-mail the draft mission statement and goals to the remainder of the study group for input and ask that the group vote on these items at our next meeting.
- The group then turned its attention to the monitoring well map/air photo that Jason Pelton recently provided via e-mail. The map/photo depicts the location of 18 monitoring or observation wells that have been placed all around the Town's production wells over the years. The majority of the monitoring wells are located on Scotia Sand & Stone's gravel mine property.

Carl and others questioned when and why these wells were installed. Kevin noted that many of them were likely installed in the 1980s when Malcolm-Pirnie was conducting its study to define the boundaries of the cone of influence and primary aquifer recharge area. Other wells might be the result of earlier studies, or possibly installed during the late 80s and early 90s when the Town of Glenville landfill was undergoing closure.

The group is in agreement that we should verify how many of these wells are still in existence, and document their condition. Jason Pelton provided GPS coordinates for five of the wells, which were all two inches in diameter. Kevin was asked to look at the Malcolm-Pirnie report and any other available resources to see if we have location information on the remaining wells. It was acknowledged that a few of these wells are probably no longer in existence, especially wells 8 and 10, which are shown to be located in the lake that has been created from Scotia Sand & Stone's mining operation. Other wells depicted in undisturbed areas may very well still exist.

In terms of locating these wells, Aaron said that he will ask his bosses at Scotia Sand & Stone if they will give permission for the group to locate wells on Scotia S & S's property. If his bosses do give permission, Aaron will likely serve as the escort.

- Next on the agenda was a discussion of the item put together by Carl called “Glenville Water Supply – Approaches: Level of Importance.” This is a *sense of urgency*-type item, asking group members to “score” 31 possible actions regarding protection and management of the Town’s water supply. With light attendance at today’s meeting, the group agreed to put this off until the next meeting, but Kevin was asked to forward the “score sheet” to the remaining members of the group for their consideration.
- The group then turned its attention to flooding history at the Glenville wellfield. Roger noted that the Town has four production wells, two of which are located within the water treatment/pumping plant and two others located outside. The four wells are not located within the 100-year floodplain, although they are situated within the 500-year floodplain.

In the 15± years that Roger has been working at the water treatment plant, there have been several floods of the Mohawk River. Flooding seems to occur every three to four years. There have been two major floods that resulted in water from the Mohawk running over the pumphouse road – up to a depth of two feet over the road - and into the Scotia Sand & Stone gravel mine. However, flooding has never been severe enough to reach the level of the production wells.

Roger noted that the two out-of-doors production wells are more vulnerable to flooding than the two indoor wells because they are relatively shallow (50 or so feet), slightly lower in elevation, and their pumps are in-line. The pumps for the wells indoors are located above the well. The well that produces the most water is one of the two outside wells.

Berming around the production wells is supported by Roger. Whether you berm all around the wellfield or create individual berms around each production well, he believes that you might as well berm at a high enough elevation to redirect a 500 year-flood away from the production wells. This would probably require three to four feet of berming. But, based on a situation that occurred elsewhere, there needs to be engineering behind the berming or else you could end up trapping water *within* the bermed areas, thereby polluting the production wells.

It terms of general flooding of the Mohawk River, Jamie suggested that ice jams should be our biggest concern. Fortunately, the Town’s wellfield is surrounded by woods to the west, south and east, preventing actual chunks of ice from damaging the water treatment plant, although the most serious threat of flooding of the wellfield is likely from ice jams downriver.

Carl added that he has seen ice chunks at the Mohawk Valley Airport (formerly Gay Valley) come all the way up to and over Route 5. It was noted that just two years ago the Hen House Restaurant on the Mohawk Valley Airport was damaged by ice chunks.

The group is in agreement that flooding is very likely the most serious threat to the Town’s water supply. The merits of raising the elevation of Pumphouse Road and/or berming around the wellfield or individual production wells need to be evaluated through sound engineering. Even if raising the elevation of the road and installing berms prevented flooding of the production wells, we could end up channeling flood waters into the exposed aquifer within

Scotia Sand & Stone's gravel pit. That could also result in contamination of the Town's water supply.

A discussion followed on the types of soil that would be necessary to construct the berm. The native gravelly soils might not be suitable for berming because of the soils' porosity. As a recent example, the soil that was used to dam off the erosion channel on Scotia Sand & Stone's property was brought in from off-site; presumably a less porous, more stable soil type than the native soil.

In wrapping up the discussion on flooding, there was unanimous agreement that we should set aside a good chunk of time at our next meeting to hear from John Garver, who is an expert on Mohawk River flooding.

- Aaron offered that he would personally like to continue meeting with this group, but that his bosses need to see that his time is well spent at these meetings. His bosses at Cranesville Block Company are willing to let Aaron continue, provided there is benefit to Cranesville and provided this doesn't become adversarial between the Town and Cranesville. There needs to be benefit to both parties if Cranesville is going to let Aaron continue to meet. Aaron wants to know how he can help in this regard.

Discussion followed, with those in attendance noting that it is important to have Cranesville at the table and that there is no intention of creating adversaries. However, this group is still very new and we're still fine-tuning our role and tasks. We may not be able to clearly define everyone's role for a few more meetings. Aaron was encouraged to keep participating, even if it means stepping away for a meeting or two while the group continues to lay out a course of action.

- The last item of discussion revolved around the possibility of sampling the Town's production wells for pharmaceuticals. There are approximately 140 homes and businesses on septic systems located over the aquifer just a bit north of the Town's wellfield. These homes and businesses are supplied with Town water, which results in a hydrostatic head as wastewater gets pulled in the direction of the Town's production wells. Consequently, there is benefit to testing for pharmaceuticals, if for no other reason than to establish a baseline.

Roger is concerned that this sort of sampling might unnecessarily alarm the public. Jamie also expressed caution, especially if the Town were asked to pick up the cost of sampling, particularly if there is no basis to undertake the sampling. However, it was agreed that Kevin would reach out to Jason Pelton to determine if either the New York State Department of Environmental Conservation or New York State Department of Health offer sampling – no cost sampling, in particular – for pharmaceuticals. Kevin will report back at the next meeting.

- The next meeting is scheduled for Monday, September 19th at 2:30 p.m.
- With no further business, the meeting was adjourned at 4:11 p.m.

Prepared by Kevin Corcoran
July 20, 2011
July 21, 2011 (revised)