

**Village of Franklin
Water Study Meeting
Tuesday, October 1, 2002, 7:00 p.m.
Franklin Community Church
26425 Wellington, Franklin, Michigan**

The meeting was called to order by Council President James Pikulas at 7:10 p.m. in Searles Hall at the Franklin Community Church.

Council members present were: President James Pikulas, President Pro Tem Florence Saltzman, Trustees Randy McElroy, H. Fred Gallasch, and Alan Harnisch. Trustee Ralph Sosin arrived during the meeting. Trustee Brian Coyer was absent.

Also present were: Jon Stoppels, Village Administrator and Eileen Pulker, Village Clerk Village Engineers, Tom Biehl and Ed Zmich, of Hubbell, Roth and Clark.

President Pikulas thanked everyone for coming to the meeting and introduced Tom Biehl, our chief engineer with Hubbell, Roth and Clark, who was asked to be in attendance to give a presentation on the Water Study conducted in the Village in August 2001.

Mr. Biehl explained that the Village had contracted to have Hubbell, Roth and Clark, as Village Engineering Consultant, conduct a water study to ascertain the Village's water quality and quantity.

Three issues:

- 1) Well water quality**
- 2) Water quantity of ground water**
- 3) Costs for alternatives such as Detroit City Water**

Well Water Quality:

The engineers opted to sample from 12 sites, 12 different properties, to get a representative sample of ground water quality in the Village, which were tested for arsenic, chlorides, fluorides, hardness, iron, nitrates, nitrites, sodium, sulfates, PNA's, and volatile organic compounds. These are the parameters that the Environmental Protection Agency reviews for drinking water supplies including the ground water in the Village. Three of the parameters are of particular interest, and they are:

1. Arsenic: tests ranged from non-detectable to 6 parts per billion, so not a problem in the Village, well within EPA standards.
2. Nitrates: none, but if present would indicate fertilizers and sewage were in the water.
3. Nitrites: none

Additional parameters listed in the report are as follows, secondary standards:

- Chlorides: 2.4 to 210 parts per million, all below national standards.
- Iron: 0.51 parts per million to 4.1 parts per million is high, exceeded standard, not uncommon for well water, more of an aesthetic issue.
- Fluorides: 0.16 to 2.1 parts per million, all below EPA standards

In general, Village water meets all of the EPA requirements, except for iron.

Well Water Quantity

The engineers evaluated the well logs for Franklin wells from Oakland County Health Department. The well logs showed that wells in Franklin range from a depth of 60 feet to 235 feet below grade. The yields for the wells, and the records showed that some were dry, ranged from approximately 4 gallons per minute to over 100 gallons per minute. The demand on the ground water supply has not changed much in the last twenty years. There are new subdivisions, but the surrounding communities are connected to City water, so they no longer affect the local ground water. SEMCOG does not foresee an increase in the population in Franklin in the next ten years, and possibly a slight decrease in the next twenty years. Based on past experience, the conditions experienced over the last two years, expectations are to return to normal water conditions when the drought is over.

Cost of connecting to the Detroit system:

Biehl explained that their firm Hubbell, Roth and Clark also consults for Clarkston which when faced with arsenic in wells last year, went to a voted millage and are constructing a water system to connect to Independence Township Community water system, not Detroit.

If the Village decides to proceed in some manner, there are several things to be done:

1. The Village would have to vote on connecting to Detroit regional water system, as stated in the Charter.
2. The Village would then have to contract with DWSD for water service, typically 30-year contracts.
3. The Village would have to construct and finance a local water system capable of delivering water to all of its customers, that also meets Detroit's requirements.
4. The Village would need to establish a Department of Water Works, or contract with Oakland County similar to what is being done with the sewer system, or with a neighboring community, or with a private contractor to maintain the system.
5. The Village would need to establish a system for reading water meters and billing water customers. There would be a new water main built on every street; fire hydrants built every five hundred feet residential, every four hundred feet commercial. This would only connect water to the property line. Villagers would then have to hire a plumbing contractor to connect their house to the water main, and then would connect an internal meter and external reader to monitor the water used.

A question frequently asked is could I still keep my individual well for sprinkling and irrigation? Basically, if there is no cross connects between your well and the connection to the system, then yes you are allowed to keep your well.

Cost to connect to the water system would involve a one-time charge of \$1,000 per customer, for the privilege of using the Detroit system. It is estimated that connect with water mains, hydrants and two main lines and two master meter connects to Detroit could cost approximately \$10,200,000. These numbers are considered current as well as conservative.

First there would be a water main on every street in the Village and on every perimeter street around the sides of the Village. A number of the neighboring communities have water mains on the other sides of the street along these same streets. Could there be a cooperative agreement between communities to share water mains? This is possible, something may be able to be worked out. The Village of Franklin is within the district of SOCWA, the Southeastern Oakland County Water Authority, which has a number of communities as members such as Beverly Hills, Bingham Farms, Southfield, Lathrup, Royal Oak, Clawson, and Birmingham. SOCWA has indicated that their system has capacity in their regional authority to include Franklin, which would enable Franklin to purchase water without a direct contract with Detroit.

The \$10,200,000 cost estimate, would be shared by the 1100 households in the Village, and include the commercial properties which would be valued as approximately 100 households, making the total REUs 1200. This would result in costs of \$8500 per customer, if paid up front with no interest and \$17,000 per customer if financed over twenty years.

Biehl also explained the costs of maintaining a well, and conceded that maintaining a perfectly functioning well with no filters or treatments necessary would be less expensive than Detroit Water. However, not everyone in Franklin operates his or her well in this manner. And obviously these decisions would be made house to house, based on issues with salt or arsenic. Also considered would be the costs of the system whether leased or purchased, the material used, or reverse osmosis systems for arsenic removal that add to the cost of an individual well system.

For an existing residence in Franklin on a functioning well, the annual cost to deliver water without softening, iron filters, or arsenic removal is approximately \$270. This cost assumes, on average, \$80 in electrical charges on an annual basis to run the pump, and also factors in a well pump replacement and a well screen cleaning every 10 years. If a resident chooses to provide water softening, iron removal, and arsenic removal the annual cost could increase to \$500 to \$1,000. The capital cost for a new well for new residents or those whose wells need to be replaced, based on discussions with well drillers, on average would be \$3,500 to \$10,000.

If the Village goes to the DWSD system and uses general obligation bonds, not Special Assessment Districts, to pay for it, which would be a voted millage to fund the entire project of \$10,200,000, it would be about 4 mills annually for 20 years to pay the debt off. For a home with a market value of \$400,000, assessed at \$200,000, that would be about \$800 a year for 20 years to pay off the water project. In addition, there would be a one-time charge of \$1,000 to Detroit. There would also be a cost to run the service from the street to your house and install a meter of about \$950. In general numbers, if you were to put all of it on a millage, and you had a house that was valued at \$400,000, you would be talking about approximately \$800 a year to retire the debt on millage, and about \$1,950 in up front charges to connect to the system.

What does Detroit water cost? Based on current water rates, the annual cost of DWSD system using moderate sprinkling, the annual cost is \$260 straight cost charge for the water. In addition, there would have to be charges for the operation and maintenance of the local system, which the cost for which many communities are questioned about by their customers. The total cost would be between \$400 and \$800 per year depending on how heavy the water use is.

The costs of connecting to Detroit are substantially higher than the cost of using untreated ground water as a source of water supply. Do the benefits of soft water with less iron and no arsenic and fire protection justify the additional expense? The reason the water study was done was for the purposes of discussion, so that the Council could get questions and comments from people as to whether or not the Villagers want water. The purpose of this meeting and the study are to provide Villagers with information.

Mr. Biehl explained financing options:

1. Grants and Loans: DWRP Fund, the City of Wixom's plan, using grants to help pay for water system, similar to what the Village did for the sewer system.
2. 4 Mill Bond, Village wide.

3. Special Assessment, which cannot be deducted from income tax, considered by financial institutions as a lien on a property, which means if the homeowner wants to sell a house before the Special Assessment is paid off, they have to pay the balance of the loan before they can sell.

Following Biehl's comments, Pikulas opened the discussion, limiting comments to three (3) minutes each to allow as many people as possible to speak.

Jeff Despard of 30780 Cheviot Hills asked if the cost of the Detroit water system add to the cost of pressure sewer system.

Biehl replied that the water typically would be metered and sewage rates are usually based on water usage. But because the Village's system is pressurized, the cost would need to be negotiated.

Dean Moenck of 26148 Meadow asked if you were on septic system would you have to pay more to use your septic.

Biehl replied that you could only be charged for water, there would be no charge for using your septic system.

Don Papke of 30835 Hickory Lane commented stating his appreciation of the work Council is doing on the problem and stated that his concern was with the way water is being used in that watering of lawns that has gone up, and a survey he conducted (of 100 surveys received back 83) showed that 66% of his neighbors have had problems with well water. Mr. Papke continued stating that he had been a resident since before 1987 and in his opinion the problem is getting worse. Papke also stated that a community such as Franklin would benefit from fire hydrants for safety and insurance premium savings.

Courtney Goldberg of 32850 Romsey stated her particular well had tested high for arsenic, having done tests with two (2) different laboratories.

Biehl replied that 12 well sites randomly selected throughout the Village were tested. High arsenic levels are not occurring typically in this part of Oakland County.

Mickey Nemer of 31460 Briarcliff stated that with a public water system fire insurance premiums would have major savings, questioned the figure in the study being too low to redig a well, and stated that it was important to note that no one would be required to tap into water system.

Biehl responded stated that insurance premiums are mostly based on the rates set by the Insurance Services Office of Michigan for which every community has been rated. Franklin is classified at a high level because there are no hydrants. On an average, a homeowner would save approximately \$50 to \$100 per year insurance costs. Also that if the system were installed Village wide and paid for through millage, everyone would pay the debt through taxes, even if they did not tap into the water system.

Pikulas commented that no one would be forced to go on the water system, there is no such ordinance under development. The pressure sewer system was mandated in certain areas of the Village, and is available for the rest of the Village should they choose to tap in.

Alfred Varone of 30700 Kirk asked the engineers to elaborate on the well system and the various aquifers.

Biehl responded that there are different levels of wells and aquifers and a thorough investigation would require a hydrogeologist to map the different aquifers.

Jim Moore of 30695 Bruce asked how expensive it would be to find out how much water there is and that due to the many new homes that the water is a continuous problem.

Biehl responded that when not in a drought, ground water recharges and wells function better. Individual water rights are difficult to regulate. The Health Department runs tests on what influence your well has on neighbors' wells drawing down. In Biehl's, opinion what has happened is a combination of factors including drought, more frequent watering, new construction and more sprinkler systems.

Carrie Povirk of 25330 Franklin Park Dr. a resident for over 25 years, stated her concern regarding water usage in filling swimming pools, ponds and lakes and now several of the neighbors have had trouble recently with their wells.

Trustee McElroy stated that water is trucked in for an initial filling of a pool. The additional water added from a hose is just to replace that which has evaporated.

Ron Reame of 32692 Ravine stated that it is obvious by the number of people present that many are passionate one way or another about this issue, but that in his view a simple solution would be for the Village Council to place the issue on the ballot. Reame continued stating that Mr. Nemer has put together a petition to force Council to put this to a vote and allow Villagers to exercise their right to vote on whether or not to bring public water into the Village.

Mark Kent of 30805 Helmandale stated that as a 10 year resident of Franklin has spent significant money on his well, he had never been able to water his lawn and he stated that this will be a problem for everyone eventually.

Richard Ortland of 26350 Woodlore stated that deeper wells and better maintenance would improve output of wells.

Biehl responded that this depends on which lot you are on, and filters and water treatment systems can fix many problems. However, quantity problems are more difficult and geology might dictate drilling very deeply at a greater cost. The same is true of septic fields; some properties perk well and others do not.

Richard Ortland asked if the study considered community wells for areas with unique problems.

Biehl replied that that had not been looked into, but would mean digging very large, deep wells that may cause greater problems for neighboring wells.

Pikulas stated that there had been a community well at Wellington and Irving but it had been abandoned a long time ago.

Patrick O'Leary of 30450 Forest Drive stated, as the owner of Hometown Building Company, he had never once spent as little as \$3,500 on a well. Mr. O'Leary stated that during construction, he

had hired his own hydrogeologist and found that there was a problem with water and had dug 57 wells for 22 homes. John Lamb, McDowell Assoc. would attest to the problem.

Dr. Sheldon Stern of 26125 Woodlore stated that as a 38 year resident, last two year's drought has caused things to come to a head, how long will this last? A hydrogeological survey might help and the tremendous number of new houses cannot sustain activity in neighborhoods, urged everyone to address this in a rational manner, not emotional and call upon government to help.

David Katzman asked if the engineers knew anything about the 14 Mile Road project.

Biehl replied that the project involved a 72-inch water main valve connection for Detroit Water, which should be finished by the end of the year.

Ron Slyter of 26100 Hawthorne questioned that while the Village has spent the last two years paving streets, would putting water in tear up the new streets?

Biehl replied that storm sewer or sanitary sewer water mains are not under roads, but rather outside road right of way on the opposite side of street from the pressure sewer. Directional boring equipment used would only cut roads to cross driveways. The Village would not want their water mains under roads, which would mean tearing up roads every time there is a problem. Videotaping of the job before any work is done ensures that any damage to the roadwork would be evident and repaired by the contractor.

Bill Berman of 30542 Hickory Lane stated that it is obvious that those south of 13 Mile have fairly serious water problems. Berman continued stating it would be cheap to connect, and that an assessment district south of 13 Mile should be established, so that those who don't need it won't pay for it.

Pikulas replied that that would be one option, just scratching the surface on the various options available and there are pluses and minus to each, such as paying off a special assessment at the time you sell your house. It would still take a vote of the entire Village as stated in our Charter.

Mariam Mansour of 30720 Roberts stated that her recent well work resulted in a flow of 8 gallons per minute which her well repair man said would be considered good for Franklin. Ms. Mansour stated that she is concerned that if Villagers do not have problems, if you sell your home, property is devalued and further stated she would love to have city water.

Alan Havis of 30239 Hickory acknowledged that there are problems, but without study, how do we answer questions and truly assess problems and how to fix them?

Biehl replied that a Village wide hydrogeologist study would cost between \$300,000 and \$400,00 and would not answer the specific questions, would only tell you generally what is going on.

Jonathan Robinson of 30193 Cheviot Hills commented that as a new resident and a builder noticed that all of his neighbors have had issues with wells, and thought it absurd to not do this necessity. Robinson further stated that global warming could be having an effect for years to come and asked if any testing of aquifers had taken place in the Village.

Biehl answered that limited testing had been conducted at the Cressbrook site and that this type of testing is not commonly conducted in Michigan.

Mariam Mansour asked what does a Villager do if they cannot produce 6 gallons of water per minute flow?

Pikulas stated that some Villagers have built reservoirs for storage capacity.

Bonnie Cook of 26550 Scenic stated that she works for a SOCWA community where restrictions are placed to control water pressure and asked if Franklin could enforce odd and even watering days?

Biehl replied that for owners of individual wells private property rights preclude anything other than voluntary restrictions.

Mike Hoyt of 25020 W. Thirteen Mile stated that emotions are high on both sides of this issue and that the Detroit water system dates back to 1853 with billions more dollars are needed to fix their aging system, which may not solve any of our current problems.

An audience member stated his concern that the Village is 70 miles from a nuclear facility and that before connecting to the Detroit system address concerns related to nuclear problems.

Bill Kahn of 25825 W. Fourteen Mile Road stated that while he has good water where he is, he has many neighbors who would love to have Detroit water for the fire protection advantage and to address the need for water south of 13 Mile Road. And for those north of 13 Mile Road who would like to use a modern city water system.

Mike Jacob of 30490 Stonegate stated he has lived in the Village for two years, and admitted to being troubled by the comment that the Village Council could place this issue on the ballot but refuses to do so. Mr. Jacob asked for clarification and some history as to whether or not this has been placed on a ballot.

Pikulas replied that the question of bringing water into the Village was on a ballot in 1990. McElroy stated that the vote was approximately 600 against and 400 in favor of pursuing bringing water into the Village. Pikulas continued stating that Council is considering whether or not to place this on the ballot.

Shally Williams of 26620 Woodlore stated that she is in real estate sales and is certain that now that there is no sewer problem the Village knows that water should be put in and that houses will be more valuable as a result.

An audience member (Joyce) stated that she understands there are multiple wells on properties, is that allowed?

McElroy responded that residents with large properties may have more than one well on their private property.

Pikulas thanked everyone for coming and commented that Council benefits from the tremendous turnout and closed the meeting at 8:30 p.m.

Respectfully submitted,

Eileen H. Pulker
Village Clerk

James A. Pikulas
Council President