Questions and Answers on Sewer Issues

By Ted Beals, Waterloo Resident

Are there plans for laying a sewer line through Waterloo Township?
At several public meetings, in Stockbridge, Henrietta Township and before the Waterloo Planning Commission, Jackson County Drain Commissioner Geoff Snyder displayed engineering drawings showing a sewer line running through Waterloo Township. At the Stockbridge meeting the drawings showed the line running from Stockbridge down the Mt. Hope Rd corridor to the Sylvan sewer line south of I-94. At the Henrietta and Waterloo meetings, the drawings had the line running along the Portage Lake Road corridor, with branches along Ready Lane, Dorbert Drive, Schrah Dr. into Coachman Cove, Hewlett Road and the seasonal trailer parks on the west and east of Portage Lake. Although not on the drawings, Mr. Snyder also argued that proposals in Sylvan Township would most likely route a line down Waterloo Road through Waterloo village and then down Clear Lake Road to the Sylvan sewer line.

When might these sewer lines through Waterloo be completed?
The Jackson County Drain Commissioner stated that it can take 5 years to complete a sewer public works project. But he also said that the actual laying of a line through Waterloo Township could be completed by the end of this summer, since it would not require bonding approval or establishment of an assessment district. Mr. Snyder has not publicly shown any plans for the possible sewer line down Clear Lake Road.

Does Stockbridge need to route their raw sewage through Waterloo Township?
No. In fact Stockbridge Village Council considered a list of proposals, include the sewer line through Waterloo presented by the Drain Commissioner, and has decided to upgrade their existing sewer treatment facility instead.

Is there a problem with the Stockbridge Village plan to upgrade their facility?
Their current facility discharges the treated effluent from their lagoons into the Huron River system. Their new plans would switch most of the treated effluent west into the upper reaches of the Grand River. Some argue that that is not good. Others, including Geoff Snyder and several property owners downstream from the new discharge point, have also argued that the increased flow in the existing drains would overflow onto their lands. This would be particularly critical when the drains were already carrying away natural runoff.

What drains are involved by Stockbridge's preferred plan?
The plan the Stockbridge Village Council has approved would run a pipe from their plant west along Morton Rd (in Ingham County) discharging into the Upper Jacob Lake drain. This drain flows south. This drain is called the "Wild Drain" by the Drain Commissioners. As it approaches Waterloo Township it is also referred to as Thornapple Creek. As it runs through Waterloo from Baseline south then west to cross Mushbach Road it is often referred to as Plum Orchard drain. It enters Henrietta Township flowing south crossing Territorial, then M-106, then Kennedy Road south and

east to cross Coon Hill Road to the Portage River near the point that the river crosses Dunn Road. The length through Waterloo is 7,800 ft (1 ½ miles).

How much flow would be added to the Wild Drain?
The Stockbridge plan gives a flow of 1.6 million gallons per day of treated discharge from their lagoons. But that would only occur two times a year, and not all would be discharged into the Wild Drain. Sewage treatment facilities prefer to discharge during heavy natural flow in the drain, since undesirable chemicals in the effluent would be diluted by the natural water flow. The timing of discharge is under the control of the Stockbridge plant operators.

What affect would this added flow have on the Wild Drain?
Inspection of the drain down to the Portage River does not find anything that would obstruct the added discharge. Although 1.6 million gallons seems like a lot, the current drains can easily accommodate this amount. Calculations are that the water would rise about 4 inches during the day the discharge was added. Discharge from the lagoons would only happen 2 times a year.

If there were overflow of these drains, where would it occur?
There does not seem to be any potential overflow in Waterloo. Currently spring flooding has occurred in Henrietta Township south of M-106. Bob Hannewald owns farmland in that area.

Would the addition of effluent from the Stockbridge plant add to this flooding?
Not if the effluent was discharge anytime other than during the heavy runoffs into the drain during spring and heavy rains. As stated above, sewage treatment facilities like to discharge during times of heavy flow in the waterways. But there could easily be restrictions on discharge when the flow in the Wild drain was near flood level.

If the flooding doesn't occur in Waterloo, how would Waterloo residents be involved?
Mr. Snyder believes that there will be flooding onto farmland, and that he would be forced to relieve this risk by "cleaning out" the drain. He has stated that if he is forced to do that, he would distribute the costs of the public works project across the property owners in the watershed of the drain. This watershed is the Orchard Creek sub-basin of the Upper Grand River. This watershed is nearly all in Henrietta Township, but does include about 50 properties in Waterloo in Munith and along Coon Hill Road. Mr. Snyder says that he does not want to clean out the drains, and therefore, prefers convincing Stockbridge that closing their facility and routing all their untreated sewage through a pipe across Waterloo to the Sylvan line south of I-94 is better. The cost to Stockbridge would be considerably greater to close their plant and run sewage down the pipe through Waterloo, but Mr. Snyder has obtained a commitment from the Leoni Sewage Treatment Authority to pay the cost of laying the pipe.

I heard that Trustee Bob Hannewald has been active in the issues about sewers.
The Jackson County Drain Commissioner, Geoff Snyder, stated publicly that a member

of the Waterloo Planning Commission had been instrumental in the routing of Mr. Snyder's proposed sewer line through Waterloo. When this came up in a Board meeting, Bob Hannewald said that he had discussed this with Mr. Snyder. Bob Hannewald said he has been following the proposed plans for the Stockbridge Village sewage treatment facility. He and others believe that land that they own/farm would be periodically flooded from the Village Council's preferred plan to discharge the treated effluent from their facility into the Wild Drain/Orchard Creek drain. He said that when discussing this with Mr. Snyder, he indicated that Mr. Snyder's plan to transfer raw sewage from Stockbridge to the sewer line south of I-94 with the pipe running through Waterloo down the Mt. Hope Rd. corridor, would be better if it went instead past Portage Lake. At the same meeting Bob Hannewald stated that as a Waterloo official he is opposed to sewer lines in our township.

Doesn't routing a sewer line through Waterloo Township need approval?
It is true that before an assessment district for public sewers can be established, the township must act to approve it. The Township's elected Board and the appointed members of the Planning Commission appear unanimous in their opposition to the introduction of public sewers into the township. However, recent examples in Waterloo demonstrate that if you are laying pipes, or lines along the road right of way, the township may not even have to be notified. Neither the natural gas line nor the cable line run through the township received any approval or endorsement from the township.

Wouldn't that mean that before hookups could be required, the township would have to approve? Not so. Once the line is present, any homeowner who the Health Department believes is having a problem with their septic system and happens to live near the line can be forced by that department to hook up. And, any proposal to build a subdivision or mobile home community, even if denied by the township, could immediately request the court to force the township to approve their plans including sewer connections or pay million dollar settlements. You can read about this situation in the papers regularly.

Aren't public sewers better than private septic systems?
The best solution to the health risk from a failed septic system with overflowing sewage is routing the sewage to a public sewer if available.

Are there failed septic systems in Waterloo?
Drain Commissioner Snyder publicly stated that there were problems around Portage and Clear Lakes. Homeowners living on those lakes objected when he said this. They said there were no problems. He did not provide any documentation to support his claim. Property owners at both lakes are currently assembling documentation.

Who wants public sewers?

- The operators of current public sewer facilities, Jackson City and Leoni want more sewage, because they have excess capacity, and will profit from providing the service.
- Mr. Snyder as part of his job and even more so with the change in his pay plan.

- Persons looking for homes may prefer properties with sewer lines.
- Land developers, particularly large high-density residential developers, want sewers available. For them the cost of hooking up to an available sewer system is less expensive than constructing septic systems. They also prefer small lot sizes (their profits increase with smaller lots), but as lots decrease in size, the ability to engineer septic systems become difficult to impossible.

For homeowners, isn't it less expensive to hook up to a sewer system?
It depends. If you already have a functioning septic system, the costs of that system are mostly related to the need to periodically clean out the tank. If you are building a new home and there is an available sewer line, you generally are required to hook up to that sewer line. For new homes the comparison is between the assessment costs for building a new public sewer system and installing a septic system. When a new sewer line is planned the costs of the public project are levied on property owners in the area covered by the new lines. The revenues are obtained by assessing each property in the area (an assessment district). The larger the area covered, and the more properties the less cost for each property. This can vary a great deal. Recent assessments in neighboring areas that are building sewer lines have been quoted between $40,000 and $10,000 per hookup. When you are building a new home with a septic field the costs are usually included in the building costs (might run $1,500) but vary a considerably depending on the property. Once connected to a sewer system there are ongoing costs (usually monthly) paid to the sewer authority for providing the service.

Are there indirect costs associated with extending public sewers into a neighborhood?
The most substantial unexpected costs result from the linkage between availability of public sewers and residential development. One of the most significant and predictable results of having public sewers is the increase in residential development that quickly follows laying the pipes. Several townships have recently analyzed the financial effects to taxpayers of new residential development. (The full text of one such study is available online at: http://www.washtenawlandtrust.org/docs/cocs.pdf). In this study the costs of providing community services (police, fire, schools, roads, etc.) were $1.40 for every $1 of tax revenue from the residential properties. Current taxpayers pay the difference whenever, new residential development causes this disparity. It is a myth that adding residential to a township increases the tax base. With the increase in tax revenues there is a loss due to increased costs of providing the added requirements for community services.

Aren't public sewers systems necessary to save the lakes?
If the risk to the lakes is from raw sewage draining from failed septic fields around the lakes, public sewers would solve this problem. If the lakes are threatened by contamination other than bacteria from raw sewage, then it depends on the type of contamination and the source of that contamination. The failure of lakes in populated areas is associated with increased suspended solids, increased phosphates and increased nitrates in the lakes. Some of the phosphates and nitrates can be traced to

septic fields along the shore. But nearly all of this contamination is from surface runoff, not from septic systems. This runoff can be from the land along the shores, or from upstream properties in the watershed. Studies in rural communities have shown that most of the phosphates and nitrates contaminating lakes is from applications of fertilizer on lawns and crop lands. Switching sewage from septic fields to public sewer lines will eliminate none of the contamination from runoff.

How should we determine if Portage and Clear Lakes are at risk from contamination?

The Drain Commissioner recommended that lake property owners have studies performed on the lake waters. His office does not provide that service. The Clear Lake Property Owners Association has been conducting testing for many years. Portage Lake property owners have talked with the DEQ about performing studies on Portage Lake. It will be important to determine the risks, but also to determine what options are available to reduce any contamination that is present. It is unlikely that if there are threats to those lakes, that putting in sewer lines will save them. More likely, the runoff from the additional developments will only make the threat greater. Successful programs to save lakes have mainly focused on changing the behavior of homeowners and agriculture to minimize the content of nitrates and phosphates in the runoff from their lands that enters the lakes.