Lake Hallett Should Be Preserved: Cleaning Lake Hallett

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Lake Hallett Should Be Preserved

Lake Hallett is one of those "hidden treasures" in St. Peter. It is a little gemstone that is not known by many people. Some citizens of St. Peter don't even know what or where Lake Hallett is. The lake is used by many St. Peter citizens for the Winter Fest Polar Plunge, fishing, canoeing, swimming, scuba diving, ice fishing, and even for St. Peter High School's ecology class who have tested water quality, taken soil samples, and captured microorganisms from the water to make miniature ponds in class. It has even been home to migrating loons during the spring especially in recent years. The water quality of the lake has varied over the years but it continues to be one of the cleanest, and clearest, lakes in southern Minnesota. These are just some of many reasons Lake Hallett should be preserved.

Lake Hallett wasn't always a lake; it actually started out as a gravel pit called Hallett's gravel pit, named after the owners of the gravel pit, Hallett's Construction Company. In the 1930's, the gravel pit filled up from an artisan spring and then became Hallett's Pond, a 14 acre body of water. Urban legend says that it only took twenty-four hours for the gravel pit to fill up (Lake Hallett Association). The news spread quickly of the gravel pit filling up and Hallett's Pond became St. Peter's public swimming area. It was complete with a rope swing and even a diving board. It was all fun and games until a man from Lake Crystal drown in Hallett's Pond. The city quickly made plans to build a swimming pool to replace Hallett's as the public swimming area.

In 1968, Hallett's Pond was classified as a lake by the Department of Natural Resources (DNR). Although everybody calls it Lake Hallett, the lake's actual name is a

number. The lake's actual name is classified as #52-0001 (Minnesota DNR). Also in 1968, the city of St. Peter diverted 100 acres of storm water into Lake Hallett through an agreement with Hallett's Construction Company. This was commonly done in this time period in time as it was not illegal at the time. This practice is one of the main reasons why our lakes in Minnesota are so polluted. This was finally made illegal in 1977 when the Federal Water Pollution Control Act (renamed the Clean Water Act) stated that there is to be no discharging of pollutants from a point source to navigable waters without a permit, but the pollution to Lake Hallett didn't stop. It was only the beginning of the problem.

In 1995, the city diverted storm water from the new Standard Lumber Subdivision increasing the total acreage flowing into the lake from 100 acres to 390 acres, which went against all storm water rules. This sparked the City Council to study the drainage problem of Lake Hallett. They decided that to stop the water drainage into Lake Hallett they must design and create a storm water basin 3.9 acres in size. The city kept pushing to designate Lake Hallett as a storm water basin. In 1998, the city purchased land next to the lake for the Waste Water Treatment Plant and also, at the same time, bought Lake Hallett for \$410,000 (Lake Hallett Association). The deed was dated April 29, 1998. Now that the city owned the lake they dispatched the police department to keep people, including private property owners around the lake, off of their lake (Lake Hallett Association).

In December of 1998, the Department of Natural Resources presented the city with their designation of Lake Hallett as a DNR protected water and provided the lake with an identification number. Following this, in January of 1999, the Lake Hallett

Association was formed to protect Lake Hallett. The Lake Hallett Association is an association made to protect Lake Hallett and the president of the association is Trudi Olmanson. The Lake Hallett Association has taken on many of the problems concerning the lake. They have done testing and created various petitions concerning the lake and have had an ongoing feud with the city over the cleanliness of the lake.

1999 was the big start for the feud between the Lake Hallett Association and the city of St. Peter. It all started when an Environmental Assessment Worksheet for the Waste Water Treatment Plant Project was submitted to the Minnesota Pollution Control Agency (MPCA) by the city and the city told them that Lake Hallett was a storm waterpond that was there for use by the city. This was not true, as Lake Hallett is DNR protected water. The Lake Hallett Association quickly informed the MPCA of this. The next action taken by the Lake Association in 1999 was a petition, which got 500 signatures, to the city to make their top priorities be protection of the lake and development of a city park. The protection part of the petition included removing Lake Hallett from the city's storm water system to stop further storm water damage to the lake. Clear cutting of trees around the lake was put to an end, until a park plan was put into place, after many complaints by the Lake Association to the city. In July of 1999, the city of St. Peter tested the water and soil of Lake Hallett and claimed that everything was clean in Lake Hallett (Lake Hallett Association). The Lake Association asked for copies of these tests, but the city would only give them partial copies even after many requests for full copies. Dan White of the MPCA tested the Diesel Range Organics of Lake Hallett and they came out higher than expected (result- 190 ppb, limit for sustainable aquatic life- 200 ppb) (Lake Hallett Association). The city was informed by the Lake

Association of these high numbers, but they gave no response. This sparked a meeting between the DNR, MPCA, and the city of St. Peter employees where they discussed Lake Hallett, but the DNR and MPCA were not shown the water testing results done by the city (Lake Hallett Association). This is a scandal that has been going on many years now, and is still going on today.

As the feud between the Lake Association and the city of St. Peter continued, the Lake Association finally received a full copy of the city's soil and water testing in April of 2000. Once again, the feud continued. The city of St. Peter, upon building the Waste Water Treatment Plant, acquired the proper permits to build next to the lake, and continue to have runoff occasionally flowing into the lake, so not much could be done by the DNR (Poage). The MPCA did say that if the lake started to show problems, then the city would be forced to divert the storm water elsewhere (Poage).

On June 11, 2001, a petroleum spill was reported (MPCA). The petroleum was spilling from the Waste Water Treatment Plant construction site through a storm sewer into Lake Hallett (MPCA). The storm sewer was closed for the first time in decades. The MPCA started doing testing of the lake to determine the effects of the storm water on the lake in the summer of 2001. These tests showed a large buildup of phosphorus in the lake sediment which suggests there may be severe problems in the future (MPCA).

The first Lake Hallett clean-up was organized in 2002 by the Lake Hallett Association. This clean-up was mainly to clean the tornado debris from 1998 (Lake Hallett Association). The clean-up was a three phase process: Phase 1- remove and dispose of tires, Phase 2- volunteer lakeshore clean-up, Phase 3- volunteer scuba divers clean debris in the lake. The clean-up was a great success as around 30 volunteers helped

and over three tons of debris was taken from the lake (Lake Hallett Association). These clean-ups continue annually, but they don't always have scuba divers. They have scuba divers about every other year. The lake was finally being cleaned, but that was all reversed when the storm sewer was reopened and started draining into the lake again; however, the city did agree to make repairs to the storm water basin (Lake Hallett Association).

Algae blooms became a problem in Lake Hallett beginning in 2003 (Lake Hallett Association). An algae bloom is a heavy growth of algae in and on a body of water as a result of high phosphate concentration which can come from farm runoff or other pollution. There were major algae blooms due to the high phosphorus levels in the lake's sediment (Lake Hallett Association). Many fish and frogs started washing up dead on shore, but it was said, by the DNR, that this was due to a bacterial infection. The lake continued to be polluted by the storm water, but the city blamed the pollution problems on there being too many fish in the lake; in the past they had blamed the pollution on scuba divers, trees, a non-functioning outhouse, and wind currents (Lake Hallett Association). They believed that the fish were polluting the lake and not the storm water, so the city suggested that to deal with this problem that they should poison the lake to kill all of the fish. The city thought this would solve the problem, but this never was allowed, as the DNR refused to give them a permit to "kill" Lake Hallett. Curly leaf pond weed, an invasive aquatic plant species that is native to Eurasia, also started showing up around the time of the algae blooms (Lake Hallett Association). This pond leaf was growing quickly due to the storm water pollution. Although it was not as severe as the algae

blooms, it did pose a bit of a problem as this pond weed can take over a body of water quickly.

In 2006, Ken Moon, of the MPCA, was e-mailed a picture of the storm water sewer spewing storm water and its pollutants into Lake Hallett (Olmanson). This got Moon's attention and he was surprised that Dave Morrison, of the MPCA, had approved of this (Moon). The storm sewer, or pipe, runs from the storm water detention basin to Lake Hallett and drains storm water into Lake Hallett. Most of the storm sewer's draining comes in the winter months as the city puts the detention basin in "winter mode" to prevent the detention basin from freezing. This pipe is the main pollutant of Lake Hallett and the cause for all of the controversy. This picture was taken in 2005 by Trudi Olmanson, the Lake Hallett Association President and property owner on Lake Hallett.



Fig. 1, Trudi Olmanson

In 2006, the Friends of Lake Hallett was created. This organization was created to concentrate on acquiring property and developing a nature area around Lake Hallett. The Lake Hallett Association continued to focus on water quality and compliance with state laws. Gene Jeseritz, of the DNR, attended a Friends of Lake Hallett meeting in

2006 and made it clear that the city would be fined if they dumped any more silt into the lake through the storm water sewer. At this point there was already an estimated twelve feet of silt that had been dumped into the lake through the city's storm water sewer (Lake Hallett Association). Lew Giesking, head of St. Peter's Public Works, whose department was the main contributor to the dumping into Lake Hallett, also attended this meeting and claimed that the DNR was taking away the rights of the city to dump storm water in the lake. The city had paid for these rights in the 1960's for one dollar (Lake Hallett Association).

In March of 2007, the St. Peter Waste Water Treatment Plant backed up when all three pumps failed. This was not noticed until a person passing by noticed sewage pouring out of the loading dock doors located on the east side of the building and then called police. The reason nobody noticed this until then is because there was no alarm system in place for a situation like this. The city washed the sewage spill into the storm water basin where some of it seeped into Lake Hallett through the leaky storm sewer and then kept the spill quiet, as neither the public, media, nor private property owners living on the lake were notified (Lake Hallett Association). There was an estimated 30,000 gallons of sewage that spilt (Lew Giesking, head of St. Peter's Public Works). Because of this spill and the sewage that could be entering the lake through the leaky storm sewer an *E. coli*, a subgroup of fecal coliform bacteria which comes from animal and/or human waste, test was requested (Trudi Olmanson, Lake Hallett Association). Even after requesting this test, it was never done by the city of St. Peter (Lake Hallett Association). The Lake Hallett Association then reported the sewage spill to the MPCA, who had not

previously been contacted by the city of St. Peter about the incident, which is a state and federal law.

Finally, after training for the Citizen's Bacteria Monitoring Program, members Kevin Petry, Tom Hausenbauer, Trudi Olmanson and Paul Schwichtenberg, of the Lake Hallett Association started their own *E. coli* testing. The Citizen's Bacteria Monitoring Program ran through the University of Minnesota and was overseen by Barbara Liukkenen of the Water Resources Department. The Lake Association members tested the water near the leaky storm sewer and at the beach on the north side of the lake. The water being tested was laboratory-verified and the result was an *E. coli* count of 1400 CFUs, or colony-forming units, which was above the acceptable standard of 1000 CFUs (Lake Hallett Association and The Free Press). These tests were taken after heavy rains, which causes the number to spike a bit. When numbers spike after rain it indicates possible contamination to the silt in the storm water basin. "There are always high levels after surface rains, so this doesn't surprise me," said Barb Liukkenen.

Despite these high numbers due to rains, other tests, where rain was not a factor, displayed high numbers, too. These high numbers were blamed on the leaky storm sewer and the city. Lew Giesking had this to say, "We're cited as really bad guys, but we've been told it's one of the cleanest bodies of water in southern Minnesota, so we must be doing something right," (The Free Press). In response to the test results, Trudi Olmanson requested that the leaky storm sewer be fixed or replaced, although her main goal remained to have the storm water diverted. Giesking said the pipe had corroded to the point of creating pinhole leaks (The Free Press). "The pipe is too thin and fragile to seal properly. It allows a thin stream of water into Hallett. Not a lot, but it's continuous,"

said Giesking (The Free Press). The city did try to patch up the leaky pipe with a temporary patch on August 24, 2007, but it did not work as the pipe started leaking again the very next day, August 25, 2007 (Lake Hallett Association).

2008 was the first year, since the 1960's, that no storm water was introduced to the lake (Lake Hallett Association). This caused water quality to increase and algae blooms to decrease. Then, in September of 2008, a new storm sewer was finally put in, replacing the old one and the old sewer was permanently closed. The new system will greatly reduce the amount of silt and sediment pouring or leaking into the lake. This system was a step in the right direction as it shows that a little is being done in favor of the lake, although the main goal, for the Lake Association, is to divert the storm water elsewhere.



This is a picture of the new storm sewer system.

Fig. 2, Trudi Olmanson

The water quality of Lake Hallett has varied over the years but it continues to be one of the cleanest, and clearest, lakes in southern Minnesota and should be kept that way. Lake Hallett is one of those "hidden treasures" in St. Peter which should be preserved for the members of our future generations. It is a little gemstone that is not known by many people but should be noticed by more people as it is polluted by our city. These are some of the reasons Lake Hallett should be preserved. We should all live free, but we should not live careless.

Bibliography

- Lake Hallett Association. "Lake Hallett Association Newsletter." <u>Lake Hallett</u>

 <u>Association</u>. 9 Feb. 2009 http://www.lakehallett.com.
- Ojanpa, Brian. "How best to protect Lake Hallett rallies St. Peter." <u>MankatoFreePress</u>. 30

 Aug. 2007. 9 Feb. 2009 ."
- Olmanson, Trudi, and Lake Hallett Association. "History." <u>Lake Hallett Association</u>. 9

 Feb. 2009 http://www.lakehallett.com/chronology.htm>.
- Wettergren, Bob, DNR, and Trudi Olmanson. "Facts." <u>Lake Hallett Association</u>. 9 Feb. 2009 http://lakehallett.com/facts.htm.

Olmanson, Trudi. Email. E-mail to the author. 9 Feb. 2009.