FRIENDS OF SILVER LAKE MEETING

Location: Grace Adventures

June 2, 2012

The meeting was held at Grace Adventures. We would like to thank Grace Adventures for allowing us to use the meeting facilities and for providing coffee. Approximately 100 Silver Lake property owners and other interested persons attended the meeting.

The purpose of the Meeting: To review the progress made since our meeting last September 3, 2011 [Labor Day weekend] and to hold a follow up meeting on June 2, 2012 as agreed upon last September. Also, to discuss the Water Quality, Water Clarity and Dead Fish Issues in Silver Lake, Mears, Michigan. And to present information related to the United States Geological Survey (USGS) proposal for doing a comprehensive diagnostic evaluation of Silver Lake.

Introductions

Ed DeJong thanked everyone for attending and introduced Bill DeJong, Gary Darling and Michael Cook who made presentations.

Presentation

A PowerPoint presentation was given that outlined the meetings and activities over the past nine months.

- At the September 3, 2011 Silver Lake community meeting it was discovered that the Lake Improvement Board and the Silver Lake Dunes Corporation had not met in 2011 and that the Silver Lake Dunes Corporation has been relatively inactive for the past several years.
- A petition was developed expressing the concern of the water quality of the lake and to encourage the Township, County, State, property owners and business representatives to work cooperatively to address this issue. 557 persons signed the petition.
- In late September 2011 the Progressive Engineering 2011 test results and report were released. The results stated that the lake is becoming eutrophic, which means the lake is dying. The problems of the lake are increasing and if the phosphorous problem persists there would be continuing and increased problems with the lake.
- Michigan State University tests stated that fish die off in August 2011 was caused by a Koi herpes virus, also known as KHV. However, cause of the virus was undetermined.
- Oceana County Commissioner Larry Byl and Bill DeJong worked together to form the Silver Lake Action Committee. The primary function of the Silver Lake Action Committee is to improve communications amongst all parties and to determine a course of action to address the problem.

- Source of the problem. There are many different theories on the source of the problem. Some of these include:
 - o Farms
 - Water Fowl
 - Storm Water Runoff
 - Lawn Fertilizers
 - Human Waste & Sewage
 - Sand Dunes
 - Boat Traffic
 - Development
 - Upper Silver Lake
 - o Internal Phosphorous Loading
- There is also a great deal of finger pointing going on, trying to assess blame for the problem. Some of the finger pointing includes:
 - o Campgrounds
 - Boaters
 - State Park
 - Hotels
 - o Farmers
 - Lake Residents
 - o Businesses
 - Upper Silver Lake
 - o Poor Septic Systems
 - o Geese
 - Sand Dunes
- There are also many possible solutions that people have discussed including
 - Natural Shore Lines
 - Upstream Holding Ponds
 - Water Filtration System
 - Improved Septic Systems
 - o Sewers
 - Alum Sulfate
 - Dredging
 - o Boat Restrictions

There have been multiple studies done on the lake during the past 40 years. Many of these studies collected data but also had to make many assumptions. Based on the information available there is no clear evidence that would lead to a conclusion as to what would be the most appropriate action. Some possible causes such as internal phosphorous loading have not been tested. It is likely that the problems are caused by multiple sources but it needs to be clearer as to which sources are causing the greatest problem so that action can be taken that will solve the problem.

USGS/GVSU Diagnostic Evaluation Proposal

A proposal has been developed by the United States Geological Society, in conjunction with the Annis Water Resource Institute at Grand Valley State University to conduct a diagnostic evaluation of the lake. This would be a comprehensive evaluation that would include extensive testing and monitoring that would examine septic & ground water, water chemistry, upstream analysis of lakes and tributaries, nutrient analysis, internal loading, and determine other possible sources. This would also include modeling of potential solutions. This would be extensive. Our understanding is that once the source[s] of the problem[s] has been identified, the appropriate action can be taken.

It is also become clear that trying to implement long-term solutions without this evaluation might be a hit or miss proposition.

The diagnostic evaluation will take 2-3 years to accomplish. The reason that it will take this long is that the scientists want data collected over at least a two year period of time. If data is only collected for one year, there is the possibility that the year it is collected might be an anomaly. Multiple years of data would be more reliable.

The cost of the diagnostic evaluation is \$531,308. USGS has agreed to cover \$183,600 of the cost which leaves a balance of \$352,708. The Silver Lake Improvement Board has submitted a grant request to the Michigan DEQ for \$100,000. It is unknown at this time whether this grant will be funded or not. Requests are also being made to Golden Township, Oceana County as well as private fundraising through the local businesses and individual contributions. The funding plan was explained in the PowerPoint.

The balance of the cost will require an increase assessment of lake owners. Currently through the Lake Improvement Board there is an annual special assessment that is levied primarily for weed treatment. Historically lake owners have been paying \$100 per year and property owners not on the lake but with deeded lake access, have been paying \$50 per year. If the State, County, Township and private donations are not received, an assessment would need to be increased to approximately \$300 per year for the next three years for lake owners and to \$150 for owners that do not have property on the lake but have deeded access. If the State, County, and Township participate and private donations are received, the assessment would be less. It would then be approximately \$150-\$200 per year for lake property owners and approximately \$75-\$100 per year for owners that do not have property on the lake but have deeded access. The Silver Lake Improvement Board will be holding a hearing on June 30, 2012 at 9:00 am at the Golden Township Hall.

Cooperative Lakes Monitoring Program (CLMP)

Mike Cook talked about Cooperative Lakes Monitoring program that is being implemented by volunteers and DEQ. Mike along with some others have attended training sessions and have received equipment to conduct various tests of the lake. Some of these tests include phosphorous, water clarity, chlorophyll-A, dissolved oxygen, water temperature, and invasive

plant species evaluation. A great deal of valuable data is being collected and can be incorporated into the USGS/GVSU proposal. This is also to be an ongoing program not just for the next year but hopefully for years into the future.

The group applauded Mike Cook for his efforts.

Summer Education Program

A series of educational programs are being developed with the cooperation of the Silver Lake State Park to conduct a series of seminars on how to improve the quality of the lake. These seminars will be open lake owners, campers and all other interested persons. Once the programs are finalized, the programs will be emailed to everyone on the email list.

Two flyers were also developed to encourage everyone to help improve the lake. It is proposed that these flyers be handed out at the campgrounds and disseminated to friends and neighbors.

It is important that everyone have their septic tanks pumped out every two years. Swihart Septic Service as agreed to give all Silver Lake residents a 10% discount if they take advantage of this offer prior to June 30, 2012

Everyone was also encouraged to ask their friends and neighbors to send their email addresses to Friendsofsilverlake@gmail.com so they would be on the mailing list.

Audience Comments

- Lake St. Mary in Ohio has had success in treating their lake using Alum Sulfate. Are we
 investigating other lakes and solutions? Don't mind paying for the solution. Just want
 to be sure that we will have results.
- On the funding, Silver Lake State Park doesn't contribute. Can we charge a surcharge that would benefit the solution?
- Every year we have annual users that affect the water quality. Suggesting that we are not getting to the point of the problem concerning vacationers with the possible solutions currently discussed.
- The State involvement is important. Their lack of involvement in the past is not acceptable.
- Were there other proposals being considered? Reply/Follow-up Comment:: Other
 companies were looked at but when the USGS proposal and agreement to fund a
 portion of the evaluation it was felt that USGS and GVSU would give us the greatest
 credibility.
- Is there a possibility that this could be funded through a loan? Reply/Follow-up Comment:: Taking out a loan is probably is not a viable method to fund the evaluation.
- Is there a break down on how the will be money is spent? Reply/Follow-up Comment:: The proposal includes a breakdown.
- Understanding how the economics is related to the township everyone should help pay for this.

- Mike Cook said that the USGS's proposal and work would be far more extensive compared to what he currently does.
- The depth of the Lake as well as the width of the Lake makes the problem obvious. It is apparent that in the last 50 years the lake area has decreased
- Suggestion on a voucher system for boats.
- Cost per property owner does that include Upper Silver Lake and off-site property owners? Reply/Follow-up Comment:: Upper Silver Lake property owners would not pay for the diagnostic evaluation. But depending on the results it is unknown if they will need to help with the solution that is implemented.
- Would increasing or raising the water level slightly help with the lake turn over?
- Septic tanks should be pumped every two years. Reply/Follow-up Comment:: When a septic is dormant for 9 months, bacteria dies. There may be a chemical solution to keep the septic system active.

Silver Lake Dunes Corporation

The Silver Lake Dunes Corporation has been the civic association for the lake. The organization has not been very active for the past several years. In the past several months, a new interim board of directors has been put in place with the intention of creating a new board of trustees. The bylaws of the organization call for there to be nine trustees and the trustees in turn select the officers. To put together a new board of trustees there will need to be three persons that serve one year term, three to serve two year term, and three to serve three year term. Nominations were encouraged and forms were available for persons to complete.

A motion was made to change the name of the **Silver Lake Dunes Corporation** to the **Friends** of **Silver Lake**.

The motion was seconded and the motion passed.

Once nominations have been received, there will be an online election for the new board of trustees.

Petition

Petitions where distributed to support the USGS/GVSU Diagnostic Evaluation. Approximately 80 persons at the meeting signed the petition.

There will be a Silver Lake Improvement Board Hearing to increase the lake assessment on June 30, 2012 at 9:00 am at the Golden Township Hall to cover the cost of the USGS/GVSU proposal.