Friends of Silver Lake Annual Meeting June 8, 2013 Grace Adventure 9AM

1. Welcome: President Ed DeJong called the meeting to order at 9AM. He introduced the board and welcomed all in attendance.

2. Silver Lake Diagnostic Evaluation -USGS/GVSU AWRI

Bill DeJong reviewed what has been happening since last year with approval of the project and support from Golden Township, Oceana County, local businesses and the Friends of Silver Lake. Larry Byl also commented on the fact that the two studies total over one half million dollars with over \$200,000 coming from USGS and approximately \$300,000.00 coming from the lake property owners. So far over \$145,000.00 of the funds monies have been collected.

Tony Groves from Progressive Engineering gave a report on the Lake Mapping. They had two objectives in doing this analysis. First to update the depth contour map showing the change in the dunes and second to identify how the watershed flows and eventually reaches Silver Lake.

Prior to the great Chicago Fire the area where the dunes are was forest. After the fire the area was harvested which exposed the sand and allowed the wind to begin to form the dunes. The level of Lake Michigan has an effect on the movement of the dunes. When levels are low the dunes recede. When the levels are high on Lake Michigan the dunes show more encroachment. The Michigan Fish Commission made the first Map in 1895. The map was drawn by hand using a weighted line, drilling a hole through the ice every 300 feet and making measurements of the depth. This was done through the 1970's. In 1950 the initial map done with lines on a map showed the depth contours to be about 20 feet with one area by the dunes being 25 feet deep.

Progressive Engineering remapped the area last year. They used GPS, noting geo reference points, with a depth sounder, every 300 feet. They recorded the depth and where they were on the lake. The new map shows that the previous 25-foot depth is now under a dune, but most of the depth remains constant.

Beginning in 1938, a flyover of the dunes was done every 10 years which provides the ability to chart the movement of the dunes. The dunes have encroached on the lakes. From 1950 until now the lake has decreased 18 acres or about 3%.

The watershed is the area that drains to the lake is about 15,153 acres or 24 square miles. Tony shared a watershed map that showed the high and low

areas and where it drains. It begins at Wyckoff Lake at 666 ft. and goes through the Golden drainage ditch into Lake Holiday at 637 ft. Lake Holiday drains into Upper Silver at 613 ft., and then into Silver Lake. Silver Lake has a mandated level of 586.4 ft. in the summer and 585.9 ft. in the winter. The water goes into Lake Michigan at 580ft.

Tony shared an analysis from the air. Over 50% of the watershed is forest or wet lands. This area has very little pollution and acts as filter and stores water. 30% is agriculture of which much is fallow. 10% is developed/urban. This is the area around Mears and the Silver and Upper Silver Lakes.

Sandy soils have a high infiltration rate and low run off. Clay is a heavier soil, which sheds the water with less infiltration. The Silver Lake watershed has a very low runoff with primarily sandy soil. This is advantageous for farms but it can cause a problem around the lake because it does not filter well.

Tony shared a slope map which showed where the water flows. All the areas around the lake flow into the lake. The USGS study will be monitoring the groundwater flowing into the lake. This will include rainwater as well as the type & quantity of nutrients coming in from a variety of sources.

This study will supplement the USGS and GVSU studies. The complete study is attached to this email for you to read.

Dr. Al Steinman, from Grand Valley State University represented both the USGS and the GVSU studies. The objective of the project is to develop a water and nutrient budget for Silver Lake. They are including 8 different tasks in the project, which will provide to water managers and stakeholders answers as to how to move forward in addressing the problems facing the lake.

Task 1 was to set up temporary wells to sample groundwater. This is complete. Four locations will monitor the water for three years.

Task 2. Is to determine septic and groundwater influences. 4 piezometers have been installed and 10 private wells will be used.

Task 3 will be to monitor surface water flow. A water budget will be developed based on the inflow and outflow. This involved installing stream gages at Hunter Creek and at the Dam.

Task 4 is water chemistry. The lake will be monitored 4 times per year, in 5 locations, for 2 years. What if scenarios will be developed once it is determined what is happening. The model will show what the responses would be to different interventions.

Task 5 Other potential nutrient sources will be evaluated. This includes precipitation and waterfowl.

Task 6 the study will identify nutrient controlling algae blooms. GVSU is growing algae with different nutrients added. This will help us know what to do to control blooms.

Task 7 Internal Phosphorus loading estimates. The influx of nitrates and phosphorus from sediments from 2 sites taken in early and late summer for 2 years will be studied.

Task 8 will include the data interpretation and reporting.

The PowerPoint with all this information is also attached to this email. Updated information is on the USGS website where you can follow the data being taken by the stream gauges on a minute-by-minute basis. The USGS also has a twitter account that gives information while they are collecting samples. You can twitter during the time they are taking samples and speak with them directly.

Questions from the audience

Why has there been foam on the lake? The foam is not detergent. It is organic matter formed when the lake is agitated.

Will we be able to keep the models and data for the future? Yes. The Lake Improvement Board will own the data. The USGS and GVSU will make sure we can keep the model. They will help and assist afterwards.

Are the changes in farming techniques in the area being taken into consideration? (More corn is being planted rather than cherries). Yes, data from Hunters Creek will show the impact of it.

Bill Bryker, a seasonal resident and a chemist for Gentex, shared what he has been doing to run parallel tests at a local lab. He has been checking for two forms of phosphorus, orthophosphorus and water-soluble phosphorus. Friends of Silver Lake will be taking samples along side the USGS staff this summer. It is important that we do this so we will know if our testing is accurate. We want to be able to continue doing sampling when the USGS testing is completed.

3. Fracking Larry Byl reported that there is an informational meeting regarding fracking Saturday, June 15, 2PM at Shelby High School. The head of the DEQ will be speaking as well as a person from the oil and Gas Company and a person from Little Point Sable who wants to stop fracking. All are encouraged to attend.

- 4. Gold "N" Silver Park Harry Wierenga of Fleis & Vandenbrink provided a presentation on the development of the new park in "downtown Silver Lake". About 5 years ago a group of interested people met with Golden Township officials to discuss making a public park in the open area in the middle of the commercial district. They have purchased the 6 acres and have drawn plans to develop the park. A survey was distributed by Bill DeJong, which helped in deciding what would be included in the park. The items with the most agreement were benches, trash, restrooms, preserving and enhancing the stream, landscaping and beautification, and family recreation. The front part of the park along the road will be like an attractive front yard. There will be a memorial, bike racks, and paved path. The next area will include restrooms and a small shelter with overhangs. It will be a gathering area. There will be service for bands and food, so that concerts, speakers, etc. could perform under the shelters. There will be about 45 paved parking spots and room for 40 venders. The back part will include the natural area. A large bridge will be part of a teaching station. There will be trails and observation areas. Ouiet areas will be throughout. There is a need for both financial help as well as donations to make this a reality.
- 5. Summer Silver Lake Education Program Nancy Pechar and Sue Sharp shared the Programs that have been set up for this year. (The schedule flier is included with these minutes.) The first program, Heart Defibulator Training, will take place on Wednesday, June 19, 7 PM at the Silver Lake State Park Pavilion. Gary and Diane Dunham from Silver Point have installed a heart defibulator on the outside wall of their business. It is available for anyone in need. Come and receive training on using this easy to use piece of equipment. The more people that are trained in the area the better chance of saving lives.

The second program, **Birds of the Silver Lake Area**, will be held on Wednesday, July 17, 7 PM at the Silver Lake State Park Pavilion. Join Oceana Conservation District Representative Willadene Hutton for an informative look at the birds that are common in the Silver Lake Area.

The third program, **USGS Water Testing**, will be held on Wednesday, July 31, 5:30 PM at the Silver Lake State Park Pavilion. (NOTE EARLIER TIME FOR THIS SESSION). Follow the USGS staff as they take water samples at the state park. They will explain what they are doing and why. You will have an opportunity to ask them questions and find out first hand what this study is all about.

The last program, **Bev Woods- History of Mac Wood Dune Scooters and Silver Lake** will be held on Tuesday, August 6, 7:00 PM at the Silver Lake State Park Pavilion. Come and learn about Mac Woods Dune Scooters and their part in the history of Silver Lake. Bev will share interesting facts about their business and talk about how the dunes have changed over the years. In

addition to sharing her stories of the lake, she will bring some of her fulgurite collection for you to see.

The Friends of Silver Lake will provide free hot dogs and chips each evening. We will eat prior to each session with the exception of the USGS session where we will eat after.

- 6. Silver Event Gary Darling is the chair of this years annual Silver Event. It will be held on August 24 this year at Val-Du-Lakes. Cost this year will be \$60.00 for a couple or \$35.00 single. The cost is less this year because we do not have to raise the large amount of money we did last year. We hope to give the merchants a break this year by asking each participant to contribute something to the auction rather than asking the merchants. It can be something that no longer fits in your house, something you have made, etc. There will be both a silent auction as well as a regular auction. A portion of the money made will go to the Gold "N" Silver Park. This event is in lue of dues. You can sign up at any time. (Flier attached to these minutes).
- 7. **Technology** Marty Hayden reported on the technology committee. Right now emphasis has been on keeping up the database. We would like to start a website to help with communication. At this point we are not looking at Facebook and Twitter. If you have any talents in technology, your help would be appreciated. Contact Marty to volunteer.
- **8. Bike Trails** Bill DeJong shared that there is discussion about enlarging the bike paths to include a path from Silver Lake though state land to the Light House. There has also been talk of a path to Pentwater. Volunteers are needed to help on this long-term project. If you are interested contact Bill DeJong.

9. Treasurers Report

Last year at this time we had Current balance is \$9,737.59

We raised over \$14,000 on last years Silver Event. Our expenses were only \$755.00. Everything else was donated. Other expenses this year included \$1,240.00 for independent testing. No dues are charged so please consider attending the Silver Event or making a donation.

10. Board Elections Tim DeMatt, chairman of the election committee, shared that the terms of Bill DeJong, Bob Busscer, and himself were up for election. Bill and Bob were willing to run again. Tim was not able. Tom Rickoff is willing to run. Tom is a year round resident who lives by Lake Michigan. Ballots containing these 3 names and a line for a write in candidate were handed out, collected and tabulated. Congratulations to Bill DeJong, Bob Busscher and Tom Rickoff who will be serving a 3 year term. Thank you to Tim DeMatt for serving on the board.

11.0ther

Some of your neighbors do not have email. If you know of someone with out email, please run off a copy of the minutes and information that you receive and hand it to him or her or send it to them. Ask them if they would allow you to email us their information so we can add them to our database.

Additional - Heart Defibulator Training - There will be another training on defibulators at Gary and Mary Darling's residence, 705 N June Dr, on June 22 AM at 10 AM. The Sandy Woods subdivision, near Mac Woods, has a defibulator, which is available for public use, located on the access sign to the beach.

Thank you to Grace Adventures for the use of their facilities and for providing refreshments for us.

Meeting dismissed at 11AM

Submitted by:

Sue Sharp - Secretary