1. Welcome & Introductions (9:00)

2. Consideration of Agenda

3. Approval of Meeting Minutes from 1/21/16

4. Public Comments

5. Staff Comments

6. Presentation (9:10)
   Dean Branson, *Three Lakes Association’s recent investigation of Golden Brown Benthic Algae in Torch Lake*

7. Unfinished Business (10:00)
   a. Presentation Schedule (Karner)
      Update with Additional Speakers – September – December

   b. Leelanau Clean Water Database Subcommittee Report and next steps (Allgaier)

8. Discussion/Action Items (10:15)
   Goals, Workshops & Projects for Leelanau Clean Water in 2016 (Karner)

9. Communication Items/Reports (10:40)
   a. Rob Karner – Excessive Nutrient Loading
   b. Invasive/Harmful Aquatic Species
   c. Susan Wheadon – Fracking
   d. Len Allgaier – Water Sampling
   e. Hugh Farber - Communications
   f. Reports from Leelanau Clean Water Members on Activities

10. Public Comments (10:55)

11. Staff Comments

12. Member/Chair Comments

13. Adjourn (11:00)
A REGULAR MEETING OF LEELANAU CLEAN WATER (LCW) WAS HELD AT 9:00 AM ON THURSDAY, JANUARY 21, 2016 IN THE COMMUNITY MEETING ROOM OF THE LEELANAU COUNTY GOVERNMENT CENTER, SUTTONS BAY, MICHIGAN

1. Call to Order
Buzz Long called the meeting to order at 9:00 AM

Welcome & Introductions
Steve Christensen, Drain Commissioner, Conservation Dist. (B)  Rob Karner, Leelanau School (B)
Carolan Sonderegger, Grand Traverse Band (B)  Hugh Farber, Lake Leelanau Lake Assn. (B)
Yarrow Brown, Leelanau Conservancy (B)  Sarah U’Ren, The Watershed Center (B)
Tom Fountain, Benzie-Leelanau District Health Dept. (B)
Buzz Long, Leelanau Conservation District (B)
Chris Otto, National Park Service, SBDNL 9:40 AM

Public:
Sam Getsinger

Staff:
Kristin Holappa, Senior Planner

2. Consideration of Agenda & Consideration of December 17, 2015 Minutes
Long referenced the MEAP Presentation and corrected the spelling of Laura Rigan’s name. It was also spelled incorrectly on the Presentation Schedule.

It was moved by Karner, seconded by Christensen, to accept the agenda as presented, and the minutes as corrected.

On a voice vote, the motion carried unanimously, 6 – 0.

3. Public Comment None

4. Staff Comments
Holappa briefly discussed Sarah Litch’s decision to step down from Chair of Leelanau Clean Water amid health concerns. She and members of LCW thanked her for her dedication and hard work to make Leelanau Clean Water what it is today.

Holappa asked for a moment of silence to remember Tom Kelly, from Inland Seas. Kelly has been a member of Leelanau Clean Water since its inception in 2008.

Holappa mentioned the Leelanau Clean Water Budget for 2016 is: $2570.

Holappa briefly discussed her conversation with Dean Branson and looks forward to his presentation. The topic of his presentation is Three Lakes Association’s (TLA) recent investigation of Golden Brown Benthic Algae in Torch Lake, which is a collaborative investigation with diatom and groundwater experts from MSU and U of M. He plans to cover the 2015 findings and plans for 2016 to investigate the root cause. They don’t have a clue as to how to solve this problem on Torch Lake. He hopes to have a lot of discussion at the meeting and is looking forward to hearing what people think. They are searching for hypotheses as to what may be the root cause. They are looking for something investigable, not just speculative.
He has been working with R. Jan Stevenson from MSU. He is the Head of the Zoology Department. They are also working with the Hydrology Department, to look at groundwater. He noted the work right now is heavily focused on groundwater. Samples of groundwater were collected last year (several hundred) and are being analyzed by chemists within the Hydrology Department. They have not yet seen the results. A lot of the work focuses on the relationship between nutrients in groundwater and the unexpected recent growth of the benthic algae in the bottom of the lake. It is their understanding this is not unique to Torch Lake (See newsletter. He suggested publication in the Enterprise of the aerial photo. A color photo would provide a better understanding of what he is talking about. A picture is worth a thousand words!)

Dean Branson worked for Dow Chemical and managed a product stewardship program for both Dow Chemical and General Electric Plastics. He retired, moved to Torch Lake and became actively involved with the Three Lakes Association (Torch Lake, Lake Bellaire & Clam Lake) in order to protect the watershed and water quality. For five years he was President of the Three Lakes Association and is the immediate past President.

Branson mentioned the Three Lakes Association has done quite a bit of aerial surveillance of other lakes in the area and has yet to find a lake that does not have Golden Brown Benthic Algae. They are not thinking of this algae, like a typical invasive species spreading around. There are questions about how much is biological and how much is chemical, driven by groundwater nutrients. He mentioned there are more than 100 species of algae that are associated with this golden crusty stuff growing on the bottom of the lake.

Torch Lake is known for its gorgeous turquoise blue color. The Golden Brown Benthic Algae changes the color of the water. Light that bounces off the bottom containing this algae creates a dull brown color. At the moment it looks like this algae is an aesthetic nuisance algae and they are definitely trying to do something about it.

Branson is hoping the Chair of the Water Quality Committee of TLA will also be able to attend the Leelanau Clean Water Meeting. Her name is Becky Norris.

5. Organizational Items
   A. Appointment of the 2016 Leelanau Clean Water Board

Holappa noted since the 2015 Rules of Procedure were adopted and continuation of a board is desired, eight of the nine Board Members are slated to continue to serve on the board. Sarah Litch has resigned from the Leelanau Clean Water Board. Smith noted it is best to have staggered terms for the board members so the entire board would not turn over at the same time. The minutes from the 2015 Organizational Meeting directed Leelanau Clean Water to keep some of the board for three years and let some go off after two years in 2016. The list of LCW Board members and their corresponding two or three year terms is in the Agenda Packet.

Holappa noted a replacement for Sarah Litch needs to be appointed by the Leelanau Clean Water Board.

*It was moved by Karner, seconded by Farber, to appoint Tom Fountain, of the Benzie-Leelanau District Health Department, to the Leelanau Clean Water Board for a term ending 12/31/2017.*

Tom Fountain accepted the nomination.

*On a voice vote the motion carried, 6 – 0.*

*It was moved by Farber, seconded by Karner, to accept the 2016 Leelanau Clean Water Board and their terms as modified to include Tom Fountain as a member of the board.*
On a voice vote, the motion carried, 6 – 0.

B. Election of Officers
Holappa stated a new Chair of Leelanau Clean Water needs to be elected. She noted while Allgaier is not in attendance at the meeting, he would like to continue as Vice Chair, if elected. He does not wish to serve as Chair.

It was moved by Christensen, seconded by Sonderegger, to nominate Rob Karner as Chair, Len Allgaier as Vice Chair, and Sarah U’Ren as Chair Pro Tem, of Leelanau Clean Water for 2016.

He hopes the officers would work together as “co-chairs” and help each other out in this transition year with Sarah Litch’s absence.

U’Ren noted she was not sure when the new Bay Keeper starts if she will be attending the Leelanau Clean Water meetings.

On a voice vote, the motion carried, 7 – 0.

The 2016 Officers of Leelanau Clean Water are:
Rob Karner, Chair
Len Allgaier, Vice Chair
Sarah U’Ren, Chair Pro Tem

C. 2016
1. Meeting Schedule
Long referenced the proposed meeting schedule included in the packet. There are two options. He noted there was a conflict with the use of the Community Meeting Room for the April and May meetings. The option of the Commissioner’s Meeting Room is not a very good space for a meeting and presentation for Leelanau Clean Water.

Holappa noted the proposed meeting schedule may continue for LCW meetings on the third Thursday of the month at 9:00 AM. The room has already been reserved through the Clerk’s Office. There is a conflict for use of the Community Meeting Room in April and in May. Holappa will not be available to attend the February Meeting.

A second option would be to move the LCW meetings to the fourth Thursday of the month at 9:00 AM. The November meeting could be held on the third Thursday, due to Thanksgiving.

Fountain noted he always has a conflict on the third Thursday of the month, but does not want the board to change the meeting date solely for him. He tries to do both, although the fourth Thursday would be better for him.

Farber would be unable to attend the fourth Thursday of the month.

Members briefly discussed alternate meeting locations other than the Government Center for April and May. Fountain suggested meeting at the Connie Binsfeld Center for April and May.
It was moved by Karner, seconded by Long, to accept the 2016 Proposed Meeting Schedule, Option 1, as presented, and continue to meet on the third, Thursday of the month at 9:00 AM and find alternate locations for the conflicting dates in April and May.

On a voice vote, the motion carried, unanimously. 7 - 0.

2. Presentation Schedule/Workshops
Holappa briefly discussed the line-up of presentations scheduled in 2016. (See agenda packet)
January – Organizational Meeting
February – Dean Branson, Golden Brown Benthic Algae on Torch Lake
March – Jessica Alpers, Laura Riggins, MAEAP
April – Madeline Messner, Oakland University, Swimmer’s Itch
May – Open
June – Mark Holley, NMC, Impact of Zebra & Quagga Mussels on Archaeological Sites in GT Bay
July – Chris Otto, SBDNL, Lake Michigan Cladophora Study Update (tentative)
August-
September-
October-
November-
December-

Tom Fountain said he would still like to do a presentation, with or without a well driller, he will check into some possibilities for a driller to attend. The presentation is scheduled in May at the Health Department.

Brown joined the meeting at 9:20 AM.

Karner inquired about a presentation from Cal Killen. Long commented Killen was looking at a subcommittee meeting for work he has done on the Water Quality Monitoring Database on January 28th or 29th. Holappa will work to coordinate a meeting time and location with those interested in attending the meeting. It is hoped Killen will provide a presentation at some point in the future at a regular meeting of Leelanau Clean Water.

Holappa asked if any members of the group would be willing to provide presentations or have ideas for presentations in 2016.

Fountain suggested bringing in Stacy Daniels who had written a book about Crystal Lake. Over 100 years ago they cut a section out of the bluff on the south shore to drain the lower level of Crystal Lake for logging and recreational purposes. The dam gave way and the lake level dropped 20 feet in 24 hours. Daniels is a scientist and a resident on Crystal Lake. Fountain thought it was a very interesting story and Fountain would be willing to ask him to speak.

Brown said she would be willing to talk to Meg Waller, of Grand Valley State University, who has done work on Little Traverse Lake investigating Microcystin and Microcystis. She has also done some analysis of plankton samples collected by the Leelanau Conservancy and might be able to present on that. Brown noted she usually spends time in the area with her graduate students in the summer. August may be a good time for a presentation by Waller.
Karner suggested Heather Hettinger, who is in the Department of Natural Resources. He thought she would be a good person to talk about fisheries, cormorants and the relationship between the two, as well as the stocking program, including rotation and census and how it all works.

Christensen commented Hettinger has been instrumental at Veronica Valley, donating a lot of time to the ponds and plantings in the park.

*Otto joined the meeting at 9:40 AM.*

D. Review of 2015 Rules and Procedures

Holappa referenced suggested changes made to Section 9.0 Voting/Quorum. Section 9.2 and 9.3 are new. The purpose of the new sections is to clarify a quorum as well as to allow a scheduled presentation in the event there is no quorum, while stating no official action may be taken.

9.2 *A majority of the appointed members of the Leelanau Clean Water Board present at a regular or special meeting shall constitute a quorum to take action at any meeting.*

Christensen suggested removing the word *present.*

9.3 *In the event there is no quorum present, a scheduled presentation may take place, no official action may be taken by the Leelanau Clean Water Board.*

Holappa commented in order to elect officers, the Rules and Procedures need to be adopted.

*It was moved by Karner, seconded by Christensen, to adopt the 2016 Rules of Procedure, with the recommended changes, by staff.*

*On a voice vote, the motion carried unanimously, 8 – 0.*

6. Unfinished Business

None.

7. Discussion/ Action Items

Fountain discussed the November meeting of the Board of Health. At the meeting, the Board of Health received a request from a resident of the county to “loosen” the Sanitary Code. Fountain noted this same request was heard four years ago, from the same person, to make it easier for people to put in septic systems. Four years ago the Board of Health requested the Director of the Health Department to research this and come forward with a recommendation. He noted they spent hundreds of hours researching and figured out that changing the Sanitary Code wasn’t the best thing for the County. In December of 2011, the Board of Health unanimously voted to go with the recommendation to leave the Sanitary Code alone. The Sanitary Code was developed in 1972. At that time, due to the pressure to build and desire of people to live in this area on the lakes, rivers and streams, the Board of Health said they would allow people to build but they will need to put in a holding tank, because it is not fit for septic system waste. There are 700 holding tanks in Leelanau County. He noted these sites are so wet, holding tanks were the only option, and in most cases are still the only option.

The proposal that has been brought forth again is to allow people to bring in fill, sandy soil, to put in a mounded system. Fountain commented since 1972, they have changed their code to provide additional
options. A task force was created in the early 2000’s and came up with the Alternative Treatment Code. They allow systems to go in on these sites to *treat* the waste first. Sewage doesn’t go away, it is treated and then discharged. This option still wasn’t good enough for some people who want to see the code loosened so they can put in a mound. After hearing the same request from the citizen, under public comment in December, Fountain was asked to come up with something again. The citizen will be at the **Board of Health Meeting next Thursday, January 28th at 4 PM**. He will be asking the Board of Health to take action on this again.

Fountain has prepared his response, yet it is an issue that could happen. He hopes the Board of Health will think things through before they vote if they are asked to vote on it. He noted Public Comment is right at the beginning of the meeting, if anyone from Leelanau Clean Water would like to comment.

Fountain commented the Sanitary Code currently requires 48" of natural soil, dry and not subject to high water table, in order to put in a drainfield. He noted mounded systems are allowed for existing houses, built prior to their code (1972). Fountain intends to defend the department’s decision. They grandfathered in those homes that were built prior to 1972 when there weren’t any good codes in place regulating disposal of wastewater. The Health Department gives those people a break that have those structures, to fix what they have and put in a mound. Fountain commented that natural soils do a better job of treatment. They contain minerals and have natural layering and roots, this mixed with pressure, helps sewage get treated. Loose fill brought in from a gravel pit has no structure and water moves through it rapidly and does not tie up phosphorus, nitrates, *E. coli* and other pathogens or medications.

Otto commented a similar argument would be if you could build a house with toxic building materials (like asbestos) why can’t you still use those materials?

Brown asked if the citizen wants to change the code to allow for mounded systems for any house. Fountain stated it was correct.

Members briefly discussed mound systems with no natural soil or 2 feet of natural soil. Fountain discussed the Alternate treatment system codes, which does include a mounded system, but also includes pretreatment of the waste in an aerobic treatment system or sand filter. The final output is lower phosphorus, nitrates and zero pathogens.

Farber discussed septic issues on Lake Leelanau and options to improve systems. Fountain noted this is one reason the Point of Sale inspections are important to make sure leaking systems are upgraded.

Brown asked if the Health Department had ever considered, especially for those on holding tanks, gray water systems (sink or laundry water). Fountain commented the Board of Health allowed five gray water systems to go in as a study, in order to look at the waste. None of them have gone in yet. It requires separating the plumbing in the house.

Brown thought it might be a good option for people in Leelanau to have an alternative for gray water. Fountain discussed the direction of moving toward more community systems. There are some areas which should not have been built on. They are not suitable for the disposal and treatment of the wastewater.

Brown briefly discussed the issue of economic growth. No new restaurant or coffee shop is allowed in Cedar due to septic/holding tank issues. Access to land for community systems is another issue. The Conservancy has been asked about drainfield space, which is a complicated issue.
Fountain noted the Health Department does not think the proposal that will come before the Board of Health is a good idea for groundwater and surface water in Leelanau County. He noted there is no science or validity behind the request, there are options out there already.

Karner noted the Glen Lake Association invited Clay McNitt to their meeting. McNitt did a one year update on the Point of Sale Septic Ordinance. There were 36 inspections conducted at Point of Sale, and eight were found to be substandard and required improvements. Karner noted the requirements to bring the systems up to code ranged from fixing cracked tanks, replacement of a drainfield or expansion of a drainfield.

Fountain briefly discussed the lead issue. He noted it is unlikely to get lead problems from a well. Fountain noted Flint was a disaster, but don’t believe everything you read. Lead is in fittings and fixtures and some of the service connections in the city of Flint. The fixtures are old, there are lead fittings and solders. When they switched from the Detroit water supply (Lake Huron) to a more aggressive Flint River water supply which ate away the slime that protected the water from the pipe itself and exposed the water to the lead. The Flint River water was a different pH, it was saltier and had more suspended solids in it. Problems could have been averted with the addition of a chemical at $150/day to prevent problems.

Otto noted the pipes, which were really old, did not have corrosion resistance. The chlorine that was added, which would normally kill the bacteria was used up by the corrosion, so they did not have chlorine protecting their water. In addition to lead, they have such things as Legionnaires Disease which killed 10 people over the last year.

Fountain noted non-transient water supply, used to serve the same 25 people or more, is required to do lead and copper testing.

U’Ren commented while Flint switched back to the Great Lakes (Lake Huron) water, they have lost the biofilm covering, pipes throughout the city may need to be replaced.

Fountain mentioned the pipes were designed for a population that doesn’t exist anymore. Everything is designed for a much larger population. The water sits in the pipes longer because there is not the demand to use the water.

8. Communication Items/Report

A. Excessive Nutrient Loading
Karner discussed the Guardian Program. The focus is now on landscapers and yard maintenance. They have a list of forty, including seventeen Certified Landscapers from Michigan Natural Shoreline Partnerships. They will need to sign a pledge asking them to do a number of things including promotion of greenbelting and prevention of nutrient loading. If they do these things they will be promoted on the Glen Lake Association website as lake friendly. He said they are also creating a three ring binder with text and pictures to give to clients about what is good for the lake. The next part of the process would be the design of their landscaping.

B. Invasive/Harmful Aquatic Species
Karner suggested LCW have someone take over this report. Long commented he has done some reporting regarding Invasive/Harmful Aquatic Species. He mentioned the Conservation District will be having Emily Cook from the Invasive species network in the office on the third Friday of the month to answer questions and to identify plants.
C. Fracking
No report.

D. Water Sampling
No report.

E. Communications
Farber said he will work to get a good article in the Leelanau Enterprise prior to Dean Branson’s presentation. He is also hoping to include something about the different algae of concern. Members briefly discussed Blue Green Algae. Karner noted there is a test strip that can be used. It detects varying degrees of the presence of Microcystis.

F. Reports from LCW Members
Otto wanted to let everyone know the Park Service will be hiring someone to do “adopt-a-lake” for aquatic invasives monitoring on their lakes. They are looking for people interested in specific lakes, including school groups. The monitoring would encompass all the lakes within the park. He noted the new position would only be for a season working with Otto to form partnerships to adopt lakes.

Karner discussed the fire load issue. Otto commented in general, the park is not having people harvest downed trees.

Brown noted the Good Harbor Watershed Plan was approved at the state level. The EPA has it now. It will be available on the Conservancy website. It means that all of the major watersheds in Leelanau County have watershed plans with the exception of the lake terrace watershed in the northwestern side of the county and the Bar Lakes area.

U'Ren commented Bay Keeper John Nelson retired at end of December. They are currently in search of a new Bay Keeper, with applications due in February. It is now a paid position. She mentioned Maureen Pfaller’s Program Coordinator position was eliminated and will be combined with the Bay Keeper position. They are looking for experience in advocacy, policy, voting, volunteer coordination, biology, knowledge of watersheds and science in addition to law. They will see what they get for applications and then prioritize.

U'Ren noted they received just over $7000 from the Beach Act Grant for great lakes beach monitoring over the summer. They have money for inland lakes beach monitoring as well.

U'Ren also discussed the national EPA Beach Waters Conference in New Orleans in early April. U'Ren has submitted three different abstracts to speak at the conference.

9. Public Comments
None

10. Staff Comments
None

11. Adjourn
The meeting adjourned, by consensus, at 10:28 AM.
## 2016 PRESENTATION SCHEDULE

**Proposed**

### for

Leelanau Clean Water

<table>
<thead>
<tr>
<th>Meeting Date: 9:00 AM</th>
<th>Organization – Presenter</th>
<th>Proposed Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>Organizational Meeting</td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>Dean Branson&lt;br&gt;Three Lakes Association (TLA)</td>
<td>Three Lakes Association’s (TLA) recent investigation of Golden Brown Benthic Algae in Torch Lake</td>
</tr>
<tr>
<td>March</td>
<td>Jessica Alpers, Laura Rigan</td>
<td>Michigan Agricultural Environmental Assessment Program (MAEAP)</td>
</tr>
<tr>
<td>April</td>
<td>Madeline Messner, Oakland University&lt;br&gt;Meeting at the Benzie-Leelanau Health Department, Conference Room</td>
<td>Swimmer’s Itch/Water Quality Study</td>
</tr>
<tr>
<td>May</td>
<td>Tom Fountain, Benzie/Leelanau District Health Department&lt;br&gt;Meeting at the Benzie-Leelanau Health Department, Conference Room</td>
<td>Well Drilling 101&lt;br&gt;Health Department’s Role in Testing Water from a Well</td>
</tr>
<tr>
<td>June</td>
<td>Mark Holley, Professor of Archaeology&lt;br&gt;NMC</td>
<td>Impact of Zebra &amp; Quagga Mussels on the Archaeological Sites in Grand Traverse Bay</td>
</tr>
<tr>
<td>July</td>
<td>Heather Hettinger, Biologist&lt;br&gt;Central Lake Michigan Mgt. Unit (CLMMU)</td>
<td>Fisheries, Cormorants</td>
</tr>
<tr>
<td>August</td>
<td>Chris Otto, National Park Service&lt;br&gt;Sleeping Bear Dunes National Lakeshore</td>
<td>Lake Michigan Cladophora Study Update</td>
</tr>
<tr>
<td>September</td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td></td>
<td></td>
</tr>
<tr>
<td>November</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Contact the Planning Department at 256-9812 for more information, and to submit Proposed Agenda Items.

**Meeting Location (unless otherwise noted):** Community Meeting Room<br>Lower Level, Leelanau County Government Center

10 of 20
Tentative minutes to be acted upon at the March 24, 2016 meeting. Meeting called to order at 4:00 p.m. by Chair Griner

A Quorum Was Present With the Following Members in Attendance:
Gary Sauer, Benzie County Board of Commissioners
Dr. George Ryckman, Benzie County Member at Large
Roger Griner, Benzie County Board of Commissioners
Marge McCulloch, Leelanau County Member at Large
Carolyn Rentenbach, Leelanau County Board of Commissioners

Pledge of Allegiance

Administration Present:
Lisa Peacock, Health Officer
Dodie Putney, Director of Administrative Services
Tom Fountain, Environmental Health Director
Michelle Klein, Personal Health Director
Dr. Joshua Meyerson, Medical Director

Staff:
Bill Crawford
Clay McNitt

Guests:
John Popa
Larry Fleis
Amy Hubbell
Nick Fleezanis
Larry Kabot
Chloe Willetts
Jim Koberstad
Hugh Farber
Frank Clements
David McCulloch
Lisa Vogler, Attorney

Griner stated the agenda included the election of chair. Griner did not realize it was a two year term and would like to continue to chair the meetings for another year.

Approval of the Agenda:
Motion: by Sauer, seconded by Rentenbach to approve the amended agenda with the removal of Election of Chair.
Voice vote: 5 ayes Motion carried
Approval of Minutes:

**Motion:** by Rentenbach, seconded by Sauer to approve the minutes of the November 19, 2015 meeting.

Voice vote: 5 ayes  

**Motion:** by McCulloch, seconded by Sauer to approve the minutes of the December 15, 2015 special meeting.

Voice vote: 5 ayes  

Public Comments:

Nick Fleezanis, Lake Leelanau Lake Association, stated in 2010 the association sent a letter to the board stating the need to approve the disposal of wastewater. Feels there are many septic systems and holding tanks on the lake not doing what they are supposed to do. Urges the board to make the necessary changes to the code to allow mound systems.

Jim Kobberstad, Sunset Shores on North Lake Leelanau, stated the mound systems that are approved throughout the state and are approved in Leelanau County was brought to the board at prior meetings. Would like to reiterate the need for mound systems, especially for those properties on holding tanks. Only going up two feet. Other areas are at four feet, such as Muskegon area and Saginaw Bay. Wish this would be pushed to the forefront so people can upgrade their systems.

Clay McNitt, Sanitarian stated a 2010 review of the 465 holding tanks at that time in Leelanau County, showed that of 255 newly constructed holding tanks, roughly 11% which would be 29 residences, would be candidates for a possible mounded system under the two foot proposed code change. It’s misleading to think this code change is going to impact the vast majority of holding tanks when in reality it’s only about a 10% number. The same review showed that 172 holding tanks installed for existing residences, which means they had some type of existing onsite system in place at the time of the permit issuance, roughly 10% (17 residences), are already candidates for a mounded system where two foot of natural soils are present. In 2007 the board changed the code to allow two foot of fill on sites that had two foot of native soils so that is already in place. McNitt stated in his opinion this code change is misleading, knows John’s purpose is to find a solution to holding tanks, but the reality is this code change will have very little impact on a very limited number of people. McNitt stated he does not support the code change. It’s going to allow greater development in sensitive areas and have a greater impact on our environment. We have a good code and a responsible code. The other areas in Michigan that allow mound systems such as the Muskegon area and Saginaw Bay simply do not have the same soils as we do, and that is why they do not have the same codes that we do. We have a very precious resource in our area that I feel is our job to protect. (Handout provided by McNitt on file with the minutes).

Hugh Farber, Lake Leelanau Association and Lake Leelanau Clean Water, stated he has been a member of both associations for a long time and therefore very interested in septic systems and effluents into the lake. Stated if you have a good designed mound and appropriate materials in the mound, you can end up with a better system than many that are being permitted now.
Preston Lewis, Sunset Shores, stated he would support a mound system on his lot. As Mr. Farber stated, mound systems will work, they just have to be given a chance.

Tim Cypher, resident of Leland Township, stated he does zoning and planning for four other townships and headed a sewer options task force for Leland Township a number of years ago promoting community drainfields. Would like to have the board consider the two feet but with some guidelines. Not for new land divisions as this is just creating additional parcels that are going to get the benefit of something that a lot of other property owners didn’t have that right in the past. Stated the county, the board of health and the townships need to look at adopting point of sale inspections. Cypher works for Glen Arbor Township where point of sale has been adopted and it has been found to be very beneficial for the buyer, seller and the water quality.

Chris Fry stated he would like to add support to the comment just made on the point of sale inspection and would like to see the board be more pro-active about it. Benzie County has a county wide point of sale in place. Proud the Village of Empire has the point of sale and Glen Arbor Township recently passed it. It makes no sense to not be pushing forward with a county wide structure on this subject.

Lautner, Leelanau County Board of Commissioners arrived at 4:20 p.m.

Griner asked Fountain or Crawford to explain what is out there at this point for the point of sale in both Leelanau and Benzie County. Fountain stated Benzie County adopted the ordinance in 1990 and it has been a success. Fountain explained in Leelanau County there is a modified ordinance that was passed five or six years ago in the Village of Empire and they have private contractors doing the inspections, not just the health department. In July, 2014 Glen Arbor Township adopted a mandatory ordinance and contracted with the Benzie-Leelanau District Health Department to perform those inspections.

Griner stated as far as jurisdiction, the Benzie County Board of Commissioners passed the ordinance, not the health board. So to have a county wide ordinance in Leelanau, it needs to be passed by the Leelanau County Board of Commissioners.

Environmental Health Proposed Code Change –
Popa submitted a one page document with his comments and requests prior to the meeting to Tom Fountain which is on file with the minutes.

John Popa stated there may be some confusion as to what he is proposing. The code already permits a mound system; we are just asking to get rid of the section that says the date the house was built. That is what is discriminatory. None of the other counties that allow mound systems have a cutoff date. Mound systems are good systems. Leave that in the code but strike the date. Popa went on to explain his reasons for proposing this code change. Popa responded to Fountain’s response to Popa’s comments and requests from the one page document submitted. Fountain’s response is on file with the minutes.

Ryckman requested Fountain explain the change in 2007. Fountain went on to explain the code change in 2007 to allow alternative treatment systems.
Fountain read his response to Popa's comments and requests. Fountain commented he received a letter today that was passed out to the board members before the meeting from the Watershed Center Grand Traverse Bay urging the board to not change the code to allow mound systems. (Letter on file with the minutes)

Lautner commented she was not on the board when this proposal was first presented. Lautner stated ATS systems are not working for summer homes. Feels the board should go with the change as recommended.

Sauer stated there is an appeals process in place. Questioned if any of these parcels have been brought to the appeals board. Sauer stated he is in favor of community septic systems. Fountain stated in the three years he has been the Environmental Health Director, not once has this been brought to the appeals board.

Rentenbach stated she believes we have a good code in place, to keep the code as it is as she feels science supports the current code.

McNitt and Crawford both commented on the 2007 code change.

Discussion followed.

**Motion:** by Sauer, seconded by Rentenbach to continue with the way the code currently exists.

**Ayes:** Ryckman, Griner, Sauer, McCulloch and Rentenbach  

**Nays:** Lautner

Bill Crawford –  
Crawford read a letter he had written to the board. (On file with the minutes)

Health Officer Update-  
Peacock commented on the following programs.

1. **Northern Michigan Public Health Alliance:** Two new projects are underway:
   - District Health Department #10 is taking the lead on a Regional Immunization Improvement project; the goal of which is to improve immunization coverage of adults and children across the northern region. Each participating health department will likely receive a small amount of funding to work on a specific immunization issue they feel could be improved in their area.
   - Health Department of Northwest Michigan is taking the lead on a Tobacco Dependence Health Systems Change project aimed at incorporating a strategy around identifying and treating tobacco dependence in clients seen in the family planning clinics. The goal is to have an impact on tobacco use specifically during the pre-conception period – before a woman is pregnant – which would ultimately result in better maternal/child outcomes. Again, each
health department will likely receive a small amount of funding to participate in this regional project.

- Environmental Health Directors have met as a group to discuss potential opportunities for agency support and collaboration. Personal Health Directors have been meeting regularly to improve the quality of the MIHP program.

- The NMPHA met with MDHHS staff overseeing the State Innovation Model (SIM) project to further explore their capacity assessment. No final decision has been made at this point to identify the entities that will serve as the Community Health Innovation Region.

2. Public Health Emergency Planning (PHEP): This project has moved into the implementation phase. The steering committee, which consists of the Health Officers of each Health Department, has been meeting with the Finance Directors to establish a final budget which includes each agency retaining base funding for PHEP activities and contributing a percentage to regional planning and exercising activities. There are two large scale regional exercises being planned this year – one in June and one in October. The first will be a “tabletop” exercise which will involve staff representation meeting together and discussing the steps of regional response. The second will be a full-scale exercise with all staff from all agencies involved and will likely be centered around community flu clinics – to practice all elements of a large response effort.

3. Community Health Needs Assessment (CHNA): This regional collaborative process is well underway across the region. The 8 counties at the tip of the mitt have completed data collection and identification of priorities. BLDHD is collaborating with Grand Traverse County Health Department and Munson Medical Center to complete data collection for our counties. County-level community conversations have taken place in both Benzie and Leelanau counties and were well attended. A community conversation is scheduled in Grand Traverse County in February. In addition to these conversations, we will be distributing a “What Matters to You?” survey to the community in both hard copy and electronic format. Wide distribution is the goal and we will be engaging staff, clients, partner agencies, as well as social media sharing. Munson has also been distributing a health care provider survey. Once the data has been collected it will be reviewed for identification of community priorities. This information will guide health departments, hospitals and other community partners in making resource decisions.

4. Regional Insight Software Project: The Northern Michigan Public Health Alliance (NMPHA) secured 2 mini-grants from MDHHS in 2015 to pursue opportunities to secure efficiencies and effectiveness in purchasing and implementation of Insight Electronic Medical Record software and connectivity to the Health Information Exchange. Insight is used by 5 of the 6 local health departments to support their personal health services. During this exploration, we became aware that the Netsmart Insight software is
being replaced with MyInsight, a web-based and more efficient upgraded version. Through much exploration and negotiation with Netsmart, we have negotiated a plan which results in significant cost savings and efficiencies for the NMPHA partner health departments. Because of this agreement between 4 local health departments and grant funding received by Health Department of Northwest Michigan and District Health Department #4 which covers upfront costs, we are able to realize significant savings for annual maintenance cost – collectively a decrease of $94,000/year. In addition to significant ongoing cost savings this arrangement will allow for:

- A common data base which enables us to benefit from efficiencies in implementation and maintenance of the software.
- Positions health departments to share data across MyInsight and the Health Information Exchange to better link clients to services and more efficiently serve their needs.
- Implementation of population health strategies to improve the health of our population.

5. Northwest Michigan Health Services Inc. (NMHSI): The exploration of the concept of the BRC refinance/renovation by the Benzie Board of Commission has continued steadily. Dodie and I attended the Board of Commission meeting on 12/22/15 and presented the same options to consider that we had previously presented to the BOH. The Benzie commissioners were receptive to exploring the concept and want to carefully consider all of the options for this project. They advised us to present the information at the upcoming Building and Grounds committee which we did on 1/13/2016 and this committee made a recommendation to the full Board of Commission to move forward with the plan to waive upcoming reversionary rights and transfer ownership to the Northern Health Foundation who would proceed with refinance and remodel project. Their recommendation included reversion of ownership to Benzie County at the completion of the term of financing. The full Board of Commission meets on 1/26/2016 and a draft resolution has been submitted with their agenda for consideration.

Peacock stated the Benzie County Board of Commissioners voted to waive their reversionary rights to the Benzie Community Resource Center building and allow the Northern Health Foundation to go forward with refinancing and renovation of the building. Met with an architect prior to the meeting and he mapped out three viable options and are working on numbers to bring back to us. There may be a need to call a special board meeting before our March meeting if we do get an estimate so we can continue to move forward. The partnership is very strong, all entities have agreed to non-cancellable leases for the term of the financing so there is a lot of security with that plan.

6. Additional Collaborations HDNWM: Welcome to our new Medical Director, Dr. Joshua Meyerson! Dr. Meyerson officially began his duties for the BLDHD as of January 1, 2016 and brings a great deal of skill and
experience as a Pediatrician and Health Officer for many years! A warm thank you to Dr. Michael Collins for his many years of leadership at BLDHD. **Healthy Futures/Munson:** Healthy Futures has received one of the grants they applied for which will enhance the program through expanded use of technology and focused efforts to identify and engage eligible pregnant women. Partner health departments may be involved in piloting additional methods of outreach and engagement.

7. **BLDHD Program Highlight:** In response to BOH members request for increased information about services provided we will continue to highlight 1-2 programs per meeting to provide the program details without causing the meetings to become too lengthy. This month we will focus on the Immunization program and the impact widespread immunization coverage has on health of our community.

Peacock stated it was announced today that immunization waiver rates have gone down by 39% across the state since the rule was enacted in 2015. However, two House Bills (5126 and 5127) threaten to overturn the waiver rule. Klein stated Leelanau County has seen a 36% decrease in waivers. Discussion followed.

Peacock passed out two Immunization handouts on file with the minutes.

8. **Flint Water Crisis:** I would like to acknowledge the important work carried out by our colleagues at the Genesee County Health Department. The Health Officer, Environmental Health and Personal Health Directors and staff, and County Commissioners have been standing up for the health and safety of their community along with their community partners since the first concerns about water safety arose. Since this has not been the focus of media attention I wanted you to be aware of the efforts of Local Public Health to alert the public to the potential and then proven danger through public health advisories and emergency alerts as well as their work with United Way, U of M Flint, and other donors and volunteers to coordinate efforts to get safe water to the community, including WIC moms so they could mix formula for their babies. Additionally, they have been working with local doctors and health professionals from Hurley Hospital and MSU College of Human Medicine to assist the community in mitigating the risk of lead exposure through prevention efforts that increase Flint resident’s access to nutrition, education and health care which can significantly reduce the risk of long-term adverse effects of lead exposure. Their call to action for all of us is the reminder to be vigilant advocates for a “Health in All Policies” approach, keeping health as a top priority in all efforts and initiatives.

Fountain commented on the Flint Water Crisis and passed out a letter from the Kettering University’s office of the President, to the parents of students and alumni. (On file with the minutes) Discussion followed.

Ryckman stepped out of the meeting.
2. Personnel and Finance Committee Report:

A. Accounts Payable-
**Motion:** by Sauer, seconded by McCulloch to approve the accounts payable in the amount of $175,084.55
Voice vote: 5 ayes Motion carried

B. December 2015 – Financial Statements-
**Motion:** by Lautner, seconded by Sauer to place the December 2015 financial statements on file.
Ayes: Griner, Sauer, McCulloch, Rentenbach and Lautner Nays: None

C. Adoption of Family Planning Fees –
Klein reported every year we are required to go through our family planning fees and Dodie does a cost study. For the most part the fees have stayed the same, however, there are a few increases as when we start billing commercial insurances we cannot charge less than what they will reimburse. We do use a sliding fee scale so anyone that comes through the door is charged based on their income and will serve them regardless of their ability to pay. The new fees will go into effect February 15, 2016. Discussion followed.
**Motion:** by Sauer, seconded by Ryckman to approve the family planning fees.
Ayes: Griner, Sauer, McCulloch, Rentenbach and Lautner Nays: None

D. 2016 Board of Health Meeting Dates –
**Motion:** by McCulloch, seconded by Lautner to approve the 2016 meeting dates.
Voice vote: 5 ayes Motion carried

Ryckman returned to meeting.

3. Staff Reports:
A. Administrative- Dodie Putney
Putney reported this past week we had our financial audit by Anderson, Tackman. Ken Talsma will be at our March meeting to report on the audit. Before he left he didn’t cite anything unusual and his report will be coming soon.

Putney stated her and Heidi are working with the new financial software. The financial statements you see now will be changing in format, but the same information will be available.

Putney thanked Lisa Peacock for doing an amazing job, the health department is going places and it is a direct result of Lisa’s hard work and dedication to the agency.

Putney reported on January 15, 2016 we were notified of the result of the hearing of the Federal District Court. Lisa Vogler is here to answer any questions. We didn’t know if she could be here or not so she was not put on the agenda.

Vogler stated she is happy to answer questions, however, because of a re-hearing or potential appellate hearing still viable and pending, that we should go into closed session if you have any questions about how it was resolved.
Ryckman inquired if all of the health department employees are at-will employees. Vogler stated the current employee policy, particularly the Sexual Harassment section need to be revised. Putney stated we will probably bring a formal request to revise the policy at the March meeting.

Vogler stated in general comment; this was clearly the right result. Our position was very well received.

B. Environmental Health- Tom Fountain
Fountain reported for 2016 the public beach e-coli monitoring has been approved and distributed. Fountain stated the summer sampling program will be the same as 2015 using composite sample results vs. the geometric means of three individual samples. The one day a week samples will start around Memorial Day and run through Labor Day. Great Lakes sites include Frankfort, Empire, Northport, Suttons Bay Manna, Suttons Bay Park and Greilickville. Inland lake sites will include Lake Ann, Beulah Beach, Crystal Lake, Bellows Beach Crystal Lake, South Bar, Nedows Beach Lake Leelanau. Fountain reported January is Radon Action Month in Michigan and the Health Department has been offering free Radon test kits. Thanks to the press and Benzie Chamber “blast” we have distributed nearly 70 radon kits this month. A twelve dollar charge is required the remainder of the year for the test kit. Generally speaking, radon is not a big problem in our region of Michigan but without testing you will not know your home may have elevated levels.
Fountain reported he and Eric Johnston attend a two day DEQ workshop in Mt. Pleasant. The Revised Total Coliform Rules (RTCR) goes into effect April 1, 2016 and the meeting provided additional training for the implementation of the new rules. These rule changes as reported previously will impact the Health Department as well as the water supply owners. The EPA rule change requires more aggressive sampling and reporting.
Fountain stated the new EH software Healthspace is moving forward. The practice modules should be available to staff soon and the data transfer from CMHC to Health Space is in the works. The Health Department of Northwest Michigan currently houses our EH data (CMHC) and will assist in the transfer. Fountain stated he has assigned Eric Johnston to be the lead employee during this transition.
Fountain stated the Well Driller Advisory Committee will be meeting on January 29, 2016 in Lansing. The group is led by Jim Sygo, Chief Deputy Director for the DEQ. Sygo replaced Dan Wyant who recently left the DEQ. The key topic for the next meeting revolves around the Draft Geothermal Statute proposed in Michigan.
Fountain mentioned the Micro bead-Free Waters Act recently signed by President Obama. These tiny plastic scrubbing beads found in many products end up in the environment and water system causing havoc. The law will prevent the manufacture of these beads in 2017.

C. Personal Health- Michelle Klein
Klein reported a new nurse was hired and will start February 16, 2016. Klein passed out the three year communicable disease case report.
D. Medical Director- Dr. Joshua Meyerson, MD, MPH
Dr. Meyerson introduced himself to the board. Meyerson reported he is also the Medical Director for The Health Department of Northwest Michigan and District 4 since 2000. Meyerson stated he also has a clinical practice in Petoskey and is there on Monday's seeing patients.

Meyerson stated the Zika Virus is spreading. It's a virus that was transmitted in Africa and Asia but has found its way to Brazil. It's spreading throughout Central America, the Caribbean, it's in Puerto Rico and Mexico. This mosquito goes up into Florida and Texas, but unless we get a lot of global warming we are probably not at risk in Northern Michigan. Discussion followed.

Public Comments:
Nick Fleezanis stated the Lake Association’s primary issue this year is Swimmer’s Itch and this is a public health problem. Crystal Lake, Higgins Lake, Glen Lake and Lake Leelanau are part of a pilot program and are going to the state asking for $900,000.00. Fountain stated this department could write a letter of support to the Association. Fountain will write the letter of support and Griner will sign it. Griner suggested Dr. Meyerson sign as well.

Chloe Lewis introduced herself. She is a new resident of Leelanau County, just moved here from Chicago. She is a student pursuing a Masters in Public Health and is here on assignment and wanted to introduce herself as we will probably see more of her at future meetings.

Board Comments:
Griner encouraged the board members to talk to Tom Fountain about the discussion regarding the code change from earlier.
Rentenbach stated she supports the point of sale ordinance.

**Motion:** by Rentenbach, seconded by Ryckman to adjourn the meeting.
**Voice vote:** 6 ayes  **Motion carried**

Chair Griner adjourned the meeting at 6:30 p.m.

Roger Griner, Chair

Heidi Roper, Recording Secretary