Good Morning,

My name is Rob Evans, and I'm the President of the Franklin Watershed Committee, Vice President for the Lake Carmi Campers Association and a member of the TMDL Coordination Team. I am have been the owner of a camp on Lake Carmi for 14 years and have raised my (3) children on its shores. I am proud to say that I have established some wonderful friendships with other camp families, with members of the Franklin Select Board, with members of the Franklin Community, our farming families, and many state water quality professionals with whom I have worked.

I first want to say thank you to this committee, for supporting our clean water efforts. While I know that maintaining clean water is, and will continue to be a state priority, we are grateful for your continued support for our clean water initiatives. Over the past several years I have witnessed that Lake Carmi has been ground zero for the state's clean water work. The extensive algae blooms we experienced several years ago, the public outcry, the fear and anxiety over the health risks associated with these blooms, the tensions between our campers, town residents, farming community and elected officials, boiled over into some very heated debates about how to manage this critical clean water dilemma.

I also want to express how grateful we are for the collaboration we have had with the Department of Environmental Conservation. I want to give heartfelt shout out to Oliver Pearson and his team, who have spent countless hours on the ground, gathering and analyzing data and sharing their professional perspectives on our lake. I also want to say that while we may not always agree with our agricultural partners, I do feel that through a lot of soul searching, self reflection and a lot of hard work, our relationships across all sectors are much better today, than they have been in the past.

As many of you know, DEC developed a TMDL for Lake Carmi back in 2008... for over 13 years we have been working hard to meet the goals and objectives of this TMDL but unfortunately, we are far from reaching our desired outcomes. To highlight the crisis of where we find ourselves today, in 2018, due to a number of factors, the Legislature designated Lake Carmi as a Lake in Crisis, which required the development of state crisis response plan and the identification of critical pathway projects to address the continuing water quality challenges that we have been experiencing.

Since the Lake in Crisis designation, we have seen a tremendous amount of work being done in the watershed that has included,

- The deployment of an in-lake aeration system consisting of 80 diffusers, that pump oxygen into the bottom of the lake in an effort to enhance mixing of the water and reduce the extent of the algae blooms we have been experiencing.
- Our farm community has deployed a manure injection system designed to reduce the overland manure spreading in our watershed.
- Working with our camper community, we have increased our education and outreach work to reduce the impacts or shoreland erosion, septic systems and private road and driveways.
- With the help of our friends at the University of Vermont and other state scientists in a number of state agencies, we are collecting an enormous amount on in-lake, tributary, ground water and soil sample data that will lead to development of science based strategies to help us meet our clean water goals.

Now for some challenges:

Since the aeration system has been deployed, we have yet to have a year when the system has run throughout the entire summer. Maintenance, design and equipment challenges have led to the system being down for days if not weeks in each of the last 4 years. While the data we have received from UVM points to the success of the system when it's functioning properly, if we don't find a long term and sustainable answer to these issues, I fear the significant financial investment in this technology will no longer be worth the annual electrical and maintenance investments required to keep this system running.

While we appreciate the \$50,000 dollars the state allocated for the lake in crisis plan, these funds simply don't meet the direct support needs for much of the on the ground work that needs to be done each and every day. While we recognize the significant clean water funds that are being pumped into the state, we continue to be challenged to find funding for our local watershed coordinator, local outreach and shovel ready projects, and the significant coordination required to collaborate with all those working to improve water quality at the lake.

We are concerned about the internal conflict we see between the Agency of Agriculture, Food and Markets and the Agency of Natural Resources in the oversight and regulatory obligations associated with the states clean water initiatives. We feel strongly that the state needs to empower one state agency with the oversight, management and enforcement of the state's water quality standards. We have seen firsthand that the current system of oversight is broken and this issue must be addressed if we are to meet our clean water goals and objectives.

We also feel the state needs to embark on a process to update the 2008 TMDL for Lake Carmi.... The data has changed, to some extent, the science has changed and the 13 year old TMDL is stale and in desperate need of revisions and refinement.

Due to the challenges with the aeration system and its inability to mitigate the impacts of internal phosphorous loading, now may be the time to explore an alum treatment for the lake. In speaking with our DEC partners and in my understanding of the data we have collected, the science may be leading us to believe that an alum treatment may be the best possible solution to meet our clean water goals.

While we continue to make significant financial and personal investments at Lake Carmi, we can't let our foot off the gas. We have a real chance to make a difference and highlight how when working together, we really can make a difference. If it can't be done at Lake Carmi, then it simply can't be done. In my opinion, we need to prioritize the following:

- We need to ensure that all the critical pathway projects associated with the Lake Carmi Lake in Crisis response plan get accomplished
- We need to increase the lake in crisis funding well beyond the 50,000 currently being allocated
- We need to continue to financially support the data collection efforts currently being conducted by UVM staff. It is our understanding that due to financial constraints, this is the last year our data collection efforts will be taking place and simply can't let that happen
- We need to continue to assist our farming community to provide financial support, equipment and training to assist in reducing the agricultural impacts on our lake

- We need to immediately fill the lake wise coordinator and aquatic invasive species positions that are currently being held vacant within DEC.
- We need continued improvement of our state, local and private roads. We need AOT to be a partner at our TMDL coordination committee meetings on a regular basis.
- We need the VT Department of Health to continue to examine the health related issues associated with exposures to blue green algae. There is mounting medical evidence that blue green alga blooms are contributing factors to ALS and other neurological disorders. We need to understand the science on this and we encourage the VT Department of Health to take an aggressive approach to determine these potential impacts
- We need to consider a broadcast manure spreading ban in our watershed. We know that we have tributaries that feed our lake that are still bringing massive amounts of phosphorous into our lake during major weather events...

So coming full circle....Lake Carmi hosts the state's largest park, is home to great walleye fishing, is uniquely settled just south of the Canadian border and in some ways, is a mirror image of lakes across Vermont. But since joining the lake carmicommunity 14 years ago, not a summer has gone by that we did not experience algae blooms that last from late July until the October/November time frame. The impacts of these blooms have led to financial, health and property value concerns that continue to raise the alarm for all of us. For a state that is such an outspoken environmental advocate, we need to make the commitment to continue to prioritize our clean water efforts with powerful legislation, the appropriate level of oversight and regulation a continued financial commitment.

On behalf of our campers association, watershed committee and our clean water partners, I again want to say thank you for the opportunity to be here today and I'd be happy to answer any questions you might have.