

**From:** Mears, David

**Sent:** Tuesday, August 09, 2011 11:36 PM

**To:** MacLean, Alex

**CC:** Markowitz, Deb; Recchia, Chris; Johnson, Justin

**Subject:** Draft Lake Champlain Documents

**Attachments:** Governor Shumlin Lake Messages-2011-08-09 DRAFT.docx; Lake Champlain Tyler Place Presentation -- Talking Points for Governor Shumlin-revised 5-23-11.docx

Alex: I have attached two documents: (1) a draft of several messaging documents that could be used as the basis of more specific remarks, or as a start of briefing materials, for the Governor if a media event on the lake comes together for next week; and (2) a draft of the materials we prepared for the Governor's Tyler Place presentation back in May. There is a final version of the Tyler Place document but I could not access it from home. The Tyler Place materials may have some additional useful information and I plan to work from that to develop some updated background information (for instance, referencing the blue-green algae blooms that are hitting the lake hard at the moment, and the source of the muddy water coming from Canada if we can find that out in time).

The messaging document is a draft only -- I will continue to work with my staff to fill in the blanks but wanted you to have this sooner than later so you could react before we get too far down any one track. Feel free to take it over, or to just give me comments and suggestions that I can incorporate.


Please let me know your thoughts on the St. Albans Initiative idea if you are able to get any external feedback and I will proceed with that piece accordingly. I plan to kick off that initiative at some point but can start out low-key if that would make more sense.

One logistical issue I wanted to raise is that I am planning to be out of the office for most of the day Monday the 15th, returning from a hiking trip with my son mid-afternoon. I will be in the rest of that week and can be available to do any briefing or to assist in any other way if helpful. I can also adjust my hiking trip if the press event comes together Monday and you need me then. David

Possible Messages for Governor Shumlin relating to Lake Champlain restoration:

- Lake Champlain is one of Vermont's crown jewels, and our region's "Great Lake."
- The lake is fundamental to our quality of life. The lake is,
  - A major and unique ecosystem that supports a rich and diverse array of fish, insects, crustaceans, birds, and wildlife,
  - A recreational hub and source of natural beauty that provides Vermonters and visitors with abundant opportunities to engage in a variety of activities including sightseeing, swimming, sailing, kayaking, and fishing, and
  - An economic asset that is critical to many regional businesses, our property values and our shared prosperity.
- The lake is suffering from multiple threats:
  - Pollution, particularly nutrient pollution (phosphorous), is interfering with our enjoyment and use of the lake.
  - Invasive and nuisance species, including species of plants, fish, shellfish and even some birds, are also causing problems.
  - Some areas are suffering from overdevelopment and crowding, with insufficient recreational access.
- Everyone can do something to help: The sources of the threats to the lake are many and shared. No one of us can point the finger at someone else without also accepting responsibility. Nearly everything we do on the Vermont landscape within the lake's watershed has an impact on the lake.
- This will be hard work and it will take time: Solving the problems that confront us as we work to clean up the lake will not be easy work. Much has been done but we still have a ways to go.
- We can do this: Just because it will be hard work does not mean that solutions are beyond our reach, nor that we should put off this important work. I am not interested in slogans, and I will not make promises that I cannot keep. I am interested in doing the serious work of building on the foundation laid over the past two decades to ensure that we make measurable progress in cleaning up the lake.
- My Strategy:
  - A coordinated state agency response involving all of the major state agencies with responsibility for actions impacting the lake (ANR, AAFM, AOT, DOH, ACCD)

- Outreach to and inclusion of all interested Vermonters
- Involvement of the other sovereigns with an interest in and an impact on the lake: New York and Quebec.
- Coordination with and support from our federal agency partners (EPA, USDA –NRCS, USDA--USFS, FEMA, Interior—USFWS)
- Participation in the Lake Champlain Basin Program efforts to ensure a coordinated regional approach to protecting and restoring the lake

 Calling out Senator Leahy for praise: I would like to give special credit to our delegation for their advocacy on behalf of the lake. In particular, Senator Leahy and his staff have contributed greatly to education, outreach, and on-the-ground work relating to increasing awareness of the importance of the lake and efforts to reduce pollution levels.

## Possible Specific Announcements:

### Bringing Vermonters Together:

- TMDL outreach: We have invited EPA to join DEC for Public Outreach Meetings about the Lake Champlain phosphorous TMDL (“total maximum daily load” – or in plain English, a “lake pollution cleanup plan”). This plan will require federal, state and local governments to work together with landowners, communities, farmers, developers and watershed groups to address the broad range of activities polluting the lake. DEC Commissioner Mears and EPA Region 1’s Office of Ecosystem Protection Director Stephen Perkins are currently organizing two sets of stakeholder outreach meetings, one in early October for the north lake, and one in late October, early November for the south lake. [add dates]
- St. Albans Bay Initiative: Invite the key leaders in St. Albans Bay together to develop and implement a specific plan for addressing phosphorous pollution into the bay. Relationships within this community of local governments and stakeholders have been particularly strained. For this reason, and because of the relatively small size of the bay, a focused effort to resolve those tensions to develop a shared approach could result in unrealized synergies and real progress in cleaning up the bay. We are in the process of arranging an initial meeting in late August or September.

### Coordinating Government Action:

- Vermont State Summit: Call key state agencies/departments (ANR, ACCD, AOT, AAFM, Dept of Health) to a state summit meeting to ensure that we have an updated and coordinated set of action plans for cleaning up the lake and for addressing the issue of flood resiliency. [add details]

### Changes at DEC:

- DEC recently combined all of its surface water quality programs into one Watershed Management Division so that all important functions (monitoring, planning, regulating, and funding) for protecting the state’s streams, rivers, ponds, wetlands and lakes, including Lake Champlain, are in one division to improve coordination and effectiveness. This change will be effective September 15.
- DEC also hired new manager of its Ecosystem Restoration Program (formerly known as “Clean and Clear”). This position is critical to the state’s coordination and outreach efforts related to major ecosystem cleanup efforts with a primary focus on Lake Champlain.

### Likely Questions and Possible Answers:

Q: How much money has been spent already to clean up the lake?

A: (1) Over the past X years, the combined resources allocated to the lake cleanup, including state and federal dollars is \$X. (2) The amount of money spent on the lake cannot be our only metric of whether we are making progress. I am interested in actual, measurable improvements in the lake. Public dollars are increasingly precious so we will have to make better progress with fewer resources.

Q: Given all of the work that has already been done, with no observable effect, why do you think that your strategy will be any different?

A: (1) measurement and demonstrated progress is critical and we need to build our programs with that kind of accountability in mind (2) progress has been made – drive around the lake's watershed, as I have, and you will see Vermonters from every walk of life contributing to efforts that are reducing the pollutant load on the lake and (3) my strategy depends on the cooperation and commitment of all Vermonters. That is not a guarantee but an invitation. My experience tells me that, when Vermonters put their minds to solving a problem together, the problem gets solved.

Q: Why hasn't the state done a better job enforcing the law to stop pollution from [farms, towns and cities, developed land, sewage treatment plants, septic tanks, loggers, etc.]?

A: All of our good work will be lost if a few bad actors are allowed to skirt the law. Our state agencies must work together to ensure that pollution from each of these sources is addressed including enforcement when appropriate. Enforcing the laws passed by our legislature is an obligation I expect all of our state agencies to meet. I also expect those agencies to use the full array of tools available to them including outreach and education, technical assistance to small businesses and farmers, incentives, and when appropriate loans and grants. We need to work smarter and more strategically to ensure that the combination of these tools results in real improvements in the lake.

Q: Are you in favor of spending hundreds of millions of dollars on reducing phosphorous from sewage treatment plants, or would you rather spend that money to reduce phosphorous from other, more significant sources, such as farms?

A: The reduction in the phosphorous contribution from sewage treatment plants is one of the major successes over the past 30 years of our work on the lake. That does not mean we are finished and the Clean Water Act requires communities to continue to look for ways to further reduce phosphorous. We will work with those communities to look for common sense ways to further reduce phosphorous looking to new and evolving pollution control technologies.

Q: Do you have a plan in place to pay for the new stormwater requirements that DEC has said it will impose on the larger towns and cities in the lake's watershed?

A: We are actively exploring funding options and intend to discuss those options with the affected communities and the legislature in hopes of finding a way forward that avoids any new significant burdens on Vermonters.

Q: Are you going to stop controlling lampreys or will you support protecting mudpuppies instead?

A: False choice. [expand]

Q: What is the state doing to control nuisance and invasive species such as cormorants, zebra mussels and milfoil?

A: Coordinated strategies by DEC and DFW including emergency response when new species are discovered. [expand]

Q: Will you support efforts to remove the causeway?

A: No. [expand]

Q: Will you support efforts to rebuild the bike path?

A: Yes. [expand]

[Look through Q & A's from Tyler Place briefing materials for other ideas]

**“High Waters, Implementation and What’s Next”**

Presentation at the 8<sup>th</sup> Annual Fundraiser for Friends of Northern Lake Champlain

The Tyler Place, Highgate Springs

May 26, 2011

**Background on the event:**

- The Event starts at 5:30 with a social hour and dinner.
- The Governor’s remarks will start at 7:15 pm and are scheduled to go for 15 minutes.
- Following the Governor’s remarks, DEC Commissioner Mears, AAFM Secretary Ross, and Hank Lambert of the Vermont Local Roads program will each separately rotate through three groups of people with remarks relating to lake water quality issues.
- Paul Madden, Executive Director of Friends of Northern Lake Champlain describes this event as follows: “This is an opportunity to provide information and direction to leading Lake and water quality advocates from around the state, in addition to local business people, farmers and citizens. We will have 250 people and this is the largest annual gathering of Lake advocates in the whole Lake Champlain basin.”
- Madden also notes that “The audience is very interested in the impact of high water, but it is really the implementation projects and the next steps that are most important for the work on the Lake.”

**Background Facts:**

- Lake Champlain is one of the largest freshwater lakes in the U.S.
- Lake Champlain has a high ratio of land to lake area – meaning a large amount of land drains into the lake. This makes the task of protecting the lake harder, since such a large area and so many activities can affect the lake’s water quality.
- The lake has five distinct segments: the South Lake; the Main Lake; Mallet’s Bay; the Inland Sea; and Missisquoi Bay. Each segment has different attributes and each shows different impacts from the elevated levels of phosphorous.
- Phosphorous is a naturally occurring nutrient but one which is found in low concentrations in undeveloped watersheds in Vermont. It is considered a “limiting nutrient” in Lake Champlain and, when concentrations are elevated, phosphorous causes an unnatural increase in the amount of aquatic plants and algae, in the lake and this in turn reduces the aesthetic beauty of the lake, and interferes with natural systems including impacts on fish populations.
- The worst water quality in the lake is in the shallower, northern bays where the shallow bays mean that the phosphorous laden sediments get stirred up more easily during storms.
- Blue-green algae blooms are the result of high phosphorous levels in the lake. When temperatures are right, typically in late summer, blue-green algae populations can explode.

Some types of blue-green algae can produce toxins that make it unsafe to swim or recreate where the blooms exist.

- The majority of phosphorous entering Lake Champlain is from “non-point sources” such as runoff from fields or developed land. About two percent of the phosphorous entering Lake Champlain is from point sources, primarily sewage treatment plants.
- Non-point source pollution from undeveloped land generates a greater proportion of the phosphorous load in Missisquoi Bay and non-point source pollution from developed land generates a greater proportion of the phosphorous load into Mallet’s Bay and the Main Lake.
- In 1998, Congress designated Lake Champlain as one of the Great Lakes, thanks in large part to Senator Leahy. This designation was later changed but the effort increased the eligibility of Lake Champlain cleanup efforts for federal funding. Senator Leahy was instrumental in the formation of the Lake Champlain Basin Program and has made funding for the lake cleanup a priority.
- In 2002, DEC established a total maximum daily load (TMDL) for phosphorous into the lake. In the simplest terms, a TMDL is a target for the amount of phosphorous (or other pollutant) that a waterbody can absorb before it is considered degraded and not good enough for fishing and swimming. The target load was set at approximately 400 metric tons per year. Estimates of actual phosphorous entering the lake range from 600 to 1,200 metric tons per year.
- In January 2011, EPA disapproved the 2002 TMDL and has started a process to develop a new one. This may have some significant legal implications but the bottom line is that we are not even meeting the old target and need to keep working to reduce phosphorous levels.
- According to scientists, the lag time for the lake to respond to the reduction of nutrients like phosphorous is years to decades depending on the extent of the accumulated pollution. We may be currently seeing the results of activities in the 50’s and 60’s in the lake. It may take as many decades to see the benefits of our current efforts. The best predictor of future lake quality will be a prolonged and consistent effort to reduce phosphorous loads.

Some organizations which are actively engaged in the lake cleanup and likely to be represented at the event that you might mention if given the opportunity (names of directors, chairs or both in parentheses):

(There is always the risk of leaving someone out but the following groups are definitely making a difference)

- Friends of Northern Lake Champlain (Paul Madden) is engaged in a variety of projects in Missisquoi and St Albans Bay watersheds to help control phosphorous, sediment and bacteria.
- Farmers Watershed Alliance (Roger Rainville) and UVM Extension (Dr. Heather Darby). These groups are working with area farmers to identify and try out different soil and water conservation and nutrient management practices.
- Franklin Watershed Committee (Jim Cameron/Heidi Britch-Valenta). This group is working with the range of Lake Carmi watershed landowners to help improve the lake which is also impaired by phosphorus.
- Missisquoi River Basin Association (John Little/Cynthia Scott). This group is engaged in monitoring the river, educating landowners and implementing certain riverbank vegetation projects.



- St. Albans Area Watershed Association (Eric Wolinsky). This group works with the local, state and federal partners to identify projects and improve water quality.
- Vermont Land Trust (Gil Livingston). Has permanently conserved many acres of land in the Missisquoi drainage basin.

Mears Notes:

- It may be helpful to strike a gracious tone with regard to the work of prior administrations on the lake cleanup efforts and to offer a modest assessment of likely future progress. Governors going back at least to Madeline Kunin have made lake cleanup an explicit priority and none were able to come up with a solution that resulted in measurable water quality improvements. This is because this effort is scientifically complex, touches on a wide range of human activities across the Vermont landscape, and will take many years, perhaps decades to show results.
- Under Governor Douglas, the state created a program called “Clean and Clear,” that served to focus additional funding and provide needed coordination. Criticisms of this program have been that it was simply a repackaging of existing programs, was overly focused on measuring success in terms of dollars spent, and that it did not result in enough on the ground actions that resulted in measurable results. While valid to a degree, I think these criticisms can be overstated and we need to remain alert to the risk that our efforts will be perceived in the same light. I see our work over the coming months and years to build on the DEC’s efforts begun under Governor Douglas and to become more strategic, better coordinated, and to do a better job measuring what works and what does not.
- Since taking office, Deb and I have changed the name of ANR’s Lake Champlain funding and coordination program from “Clean and Clear” to the “Ecosystem Restoration Program” and have worked to integrate it more carefully into the other water quality related work of DEC. While well-received generally, this change was perceived by some, including the Friends of Northern Lake Champlain, as an effort to diminish the profile of the lake cleanup efforts. The name change and organizational shift was not, however, intended to lower the priority of the lake cleanup but instead to professionalize this work and to ensure that it is coordinated with all of the other funding and regulatory activities that DEC manages to protect water quality.
- One early mistake that Governor Douglas is said to have made, and which you can easily avoid, was to not give sufficient credit to our delegation, particularly Senator Leahy, for their efforts to support the cleanup efforts. Under Senator Leahy’s leadership, hundreds of millions of federal dollars have gone to the cleanup effort, most of it through the Lake Champlain Basin Program, an organization that coordinates the efforts of federal and state agencies across Vermont and New York, and from the Province of Quebec.

### Talking Points:

- A healthy Lake Champlain is critical to the economic future of Vermont (as is the Connecticut River, if you will accept the views of someone who has lived in a different part of this great state). We depend upon the lake for fishing, swimming, sailing, kayaking, canoeing and all manner of recreational activities that can only happen when the lake is clean. Summer tourism is tied to the health and beauty of the lake. And our ability to attract the kinds of innovative businesses with a work force who appreciate the natural beauty and working landscapes of Vermont also depends upon our maintaining Lake Champlain as the crown jewel of our region.
- Each one of us has a responsibility for reducing pollution into Lake Champlain, no matter where we live or work in the vast area of our state that lies within the Lake Champlain watershed. The ecology of the lake, the health of the sports fishery, the clarity of the water, the desire of people to be in on and around the lake, all depend upon our finding ways to reduce the amount of pollution going into the lake. That includes reducing nutrients like phosphorous coming off of our lawns, out of our sewage treatment plants or septic tanks, in the runoff from our back roads, fields or logged forests, or in the erosion off of our stream and river banks. As Secretary Ross is fond of saying, “if you want to know who is responsible for the pollution of Lake Champlain, look in the mirror.”
- We all want to clean up the lake. While it can feel daunting to be confronted with a job that requires everyone to take part, one of the great benefits of living in this great state is that everyone here gets it – Vermonters understand that we need to work together to solve this problem. And everyone agrees that we need to protect the lake.
- The solutions are within our grasp to achieve. Let me list three of the major challenges as examples and associated actions we need to implement:

(1) Challenge: We need to reduce the amount of stormwater that runs off of our parking lots, roofs and developed areas. This stormwater carries pollutants including phosphorous, and the sheer amount of the water can wash out streams and rivers causing the kind of sediment pollution we saw as a result of the recent flooding events. (Did anyone see the recent aerial photographs showing the large plumes of sediment washing well out into the middle of the lake?).

Solution: We need to reduce the amount of impervious cover – pavement, roofs, hard surfaces – in our communities. New developments can incorporate designs that allow water to seep into the ground, more closely imitating the natural cycle of water in which rain flows into the ground, is filtered by the soil, and then is slowly released into streams. And we can retrofit existing development to achieve the same end. This is not necessarily easy work, or cheap – but many communities have begun this work and are seeing results. I realize that

now is not a good time to talk about increasing costs to communities – and I have asked Secretary Markowitz and Commissioner Mears to work with Vermont’s cities and towns to figure out a schedule and system of financing that will ensure that we get this important work done.

- (2) Challenge: Polluted runoff from farms and livestock. Manure contains nutrients like nitrogen and phosphorous that, when properly managed, can help offset the need for farmers to buy fertilizers. But those same nutrients, when they wash off of fields and feedlots can pollute the lake. Also, poorly considered drainage ditches and tile drains, while providing short term relief from wet soils, can lead to greater erosion and a loss of good productive land. Solutions that keep those nutrients on the fields, in the soils, where they benefit crops, and which keep the soils out of the streams are a win-win for everyone.

Solution: We are working with farmers all across this region, through the assistance of the U.S. Department of Agriculture, our own Agency of Agriculture, and the Agency of Natural Resources to ensure that we have a coordinated set of recommended practices that farmers can use and that we know can make a difference. Much has been done over the years with ideas such as cover-cropping, injecting liquid manure into the ground, keeping livestock out of rivers and streams, creating buffers along streams and ditches, and paying attention to a host of details down to the level of the type of feed given to cows. Producers like Roger Rainville, with the help of experts like Dr. Heather Darby of the UVM extension service, are experimenting with new methods – not in laboratories, but in real farm fields and are showing real results. We still have work to do, and we know that just having a plan in place is not enough, we need to make sure that every farmer is doing their part. This requires grants, loans, technical assistance, and regulation with enforcement.

- (3) Challenge: The flooding we are currently experiencing was only partly caused by the amount of precipitation this winter and spring. It is hard to accept, but the scientists have shown that we share the responsibility for this flooding.

This is in part because we have reduced the ability of our river systems to absorb floodwaters by channeling them and disconnecting the rivers from their floodplains. In addition to the increased runoff associated with the developed landscape, we have made the problem of flooding worse by building in floodplains, armoring stream banks, straightening and narrowing our rivers and streams, and eliminating wetlands. Rivers and streams need to be able to move in order spread sediment across the floodplain. Otherwise, those rivers pick up speed, cause greater erosion, and deposit all of that sediment downstream – and in the Lake Champlain watershed, downstream means the lake. All of that sediment, in addition to making a murky mess when it rains, carries phosphorous and adds to the long-term legacy of phosphorous in the lake. And, as we have all recently experienced, when that water cannot seep into the land, it causes flooding and all of the damage to our homes and businesses associated with flooding.

Solution: We are fortunate in Vermont, that we still have large stretches of undeveloped rivers and streams, and functioning wetlands that we can protect, if we start now. And, while we cannot move Montpelier, St. Albans, Burlington, or any city or town built along a river or stream, there are areas in every community where we can fix the bridges, install new culverts, move bike paths and roads further away from the stream and river banks. We can take out levies, recover former wetlands by blocking up unnecessary drainage ditches, and implement a host of other innovative ideas that will allow our rivers to return to something more equivalent to their original state. When we renovate, or rebuild, we need to use new low impact development techniques. This requires local governments, the state, transportation agencies and private landowners to work together to implement programs that rely upon a mix of regulations, incentives and purchasing or leasing property. It is easy to say, hard to do – but it is possible if we work together. And it turns out to be cheaper to prevent floods, and the associated pollution, now than it is to fix things later.

- These are just three challenges of many. I wish it were that simple but of course we also need to undertake a host of other actions such as reducing phosphorous based fertilizers (and I was pleased to recently sign H.26, a bill restricting the sale of lawn fertilizers containing phosphorous), fixing failed septic systems, continuing to reduce the phosphorous coming from sewage treatment plants, and using better road building and ditch maintenance practices. I am sure the folks in this room can think of a few more problems we need to solve.
- We also need to hold ourselves accountable. I have asked Secretary Ross, Secretary Markowitz and Commissioner Mears, to ensure that we take actions that are strategic and that will result in real results. We need to measure the results of our efforts and, if we cannot see a benefit, we need to have the courage to admit we were wrong and to try another approach.
  - One effort I was pleased to learn about is the research going on in the Missisquoi Bay watershed to determine the critical sources of phosphorous so that we can appropriately target our efforts to the right locations and the right problems. Another effort is specific to the Rock River watershed – there is a targeted implementation initiative which includes the coordination of a group of farmers with the support of a partnership among UVM extension, federal and state agencies . We are also applying lessons based on research dating back three decades. It is this kind of strategic effort we need to use to demonstrate results if we expect that the public will continue to support our efforts.
- More of the same will not work – we all need to embrace changes in the way we inhabit and use the landscape if we want to see the lake improve. This kind of change will also protect the working landscape, wild areas and scenic vistas that is the reason we are all so committed to preserving. The kind of change I am talking about will provide many other benefits along the road to the recovery of the lake: improved habitat for wildlife and fish; more attractive and greener development; reduced risks from flooding; reduced fertilizer use; lower road maintenance costs – what's not to like about this?

- Most importantly, we need to work together. There are an awful lot of people contributing to this effort and we should recognize and acknowledge that we are all pulling in the same direction: developers, communities, state agencies, federal agencies and citizen groups – we need to ensure a coordinated effort that cuts across jurisdictional boundaries. I am proud to lead a state where people like yourselves have committed themselves to making this change happen. You know it will not be easy and it will not happen overnight, but if we work together, it will happen.
- What's next: The title of this event asks this question. The answer lies in more gatherings like this one, in which all of us who care about the lake come together in search of solutions.

Thank you.

Possible questions:

Q: Why did ANR change the name of the lake cleanup effort – we liked “Clean and Clear.”

A: I do not care whether the name is “Clean and Clear” or “Wet and Wild,” the fact is we need to get serious about cleaning up the lake. I have let Secretary Markowitz, Secretary Ross, and Commissioner Mears know that I see protecting Vermont’s environment as critical to getting Vermonters back to work and that I expect them to do what it takes to get the lake trending back to a healthy condition.

Q: Why does the state let farmers apply manure to fields near rivers and streams that flow into the lake?

A: We have been making progress in developing manure application practices that reduce polluted runoff but more needs to be done. On the one hand, this winter and spring clearly represent an unusual situation, with record snow and rainfall, and so we should not overreact to some of the flooding that impacted fields where manure had been applied. On the other hand, this kind of flooding may represent a longer-term shift in precipitation patterns and we need to consider whether more restrictions are necessary.

Q: Why does everyone point the finger at farmers? We take care of the land. I take care of my land and do not want to waste any of the nutrients in the manure my cows generate. What are you doing about the sprawl, people applying lawn fertilizer, and failed septic tanks?

A: There should be no finger pointing, by anybody. As I said, everyone in this state has some responsibility, not just farmers. We have to imagine and realize a new way of living on this landscape that protects our way of life, and protects the lake.

Q: What about New York, and Quebec, what are they doing?

A: We are working with the State of New York and Province of Quebec through the auspices of the Lake Champlain Basin Program to ensure that we have a coordinated effort. All three jurisdictions have committed to taking meaningful action. I would like to see New York undertake more of the actions we are taking here in Vermont and will look for an opportunity to have that conversation with Governor Cuomo. His father signed an historic document with Governor Kunin out on the lake. If that was the start, it may be time for us to challenge New York, and ourselves, to take the kind of actions that will get us to the finish line.

Q: What does it mean for the lake cleanup effort that EPA has disapproved the Lake Champlain TMDL?

A: We need to keep our eyes on the ball and the ball in this case is to implement a set of solutions like I outlined above. The issue with the TMDL (total maximum daily load) relates to a complex set of legal issues under the Clean Water Act but it is my understanding that the TMDL is basically a target for phosphorous reductions -- you can ask Commissioner Mears for more details when you get the chance. But what I care about more is actually making progress in reducing phosphorous levels. We all know that we are not meeting the target -- we do not need more studies, we need action.

Q: How long until the lake is clean?

A: We did not get to this point overnight and we will not solve all of the problems facing the lake overnight. The problems in the lake represent decades of choices that it may take decades to undo. What is important is that we are started and that we not stop until we are done. No less than Vermont's future depends upon it.