Here are a couple of examples of governing bodies exercising proper risk management - still in New Hampshire!

## NH decision on request for waiver of use on Gilman Pond in Unity, NH

48A Gilman Pond has been the water supply source for Unity, NH (population approximately 1500) for over 100 years, and there have been restrictions on swimming, boating and fishing to protect the purity of the water. Unity had purchased most of the land around the pond. In 2004, a landowner whose land abutted the pond at high water requested a waiver of use to allow swimming, boating and fishing for himself, family and guests. NH Department of Environmental Services denied the request but allowed him shoreline fishing. The owner appealed the decision to the Water Council, saying basically there was no scientific evidence that his family's use of the pond would contaminate it. Meanwhile, the town was attempting to take the shoreline property by eminent domain, so the case was stayed pending that decision. The County Court concluded that the taking of the land was justified. The town paid fair market value for the land and now Unity has ownership of the entire shoreline and a buffer zone.

## NH Department of Environmental Services (DES) Water Council hearing a petiton to open Canobie Lake to swimming

- Canobie Lake is a small 375 acre lake that's the drinking water source for Salem, NH (population 28K).
- The lake has been closed to swimming since 1903.
- Some landowners wanted the lake opened for swimming.
- In 2006, an expert witness named Dr. Jeffery Griffith (provided by DES for the community) testified before the NH DES Water Council regarding the appeal.
  - Dr. Griffith was one of DES's expert witnesses.
- He is an MD and associate professor at the Tufts University School of Medicine in the Department of Public Health.
- He serves on the National Drinking Water Council for the EPA, and the Science Advisory Board of the EPA.
  - He has an extensive background in engineering of water treatment plants.
  - He is one of the foremost experts when it comes to waterborne diseases and infections.
  - He's really good at delving into risk factors and asking what level of risk is acceptable.

Here are a few quotes from his testimony.

"Cryptosporidium has been the poster child of bad bugs because it's difficult to treat in water. And that's because chlorine doesn't do anything against it."

"Now, the only barrier that exists against cryptosporidium is filtration. And I would try to disabuse anyone of the idea that a treatment plant provides a hundred percent protection against cryptosporidium. It provides a partial barrier, and so cryptosporidium has become the poster child because there have been a lot of waterborne disease outbreaks in the US."

"We know 1 oocyst can make someone sick"...... "So the treatment plant can only take out so much. The filtration isn't perfect, it's just a conventional system.... So, yeah, we're worried about people who are drinking that water."

"The incidence of waterborne diseases in the US is underreported, everyone accepts that as true." "The only question is, is it tenfold underreported or is it a hundredfold underreported?"

"The truth is, most people don't get sick from it, but you know, I just saw a child up in Maynard, MA, who lost 30 pounds - a 90-pound kid went down to 60 pounds, pooping his brains out, in the hospital for two weeks, three actually. His mom and his siblings got sick with this. He's not dead, so he's not captured in the statistics. How much was that illness worth? What did it mean in terms of his missing a semester at school, etc, etc, you know, those things add up in terms of cost."

"The treatment plant . . . is meeting regulations, but anybody who thinks that taking less good water and running it through the same treatment plant means you get identical water to what happens if you start with good water is, you know, smoking something funny. . . ."

The Water Council denied (9-1) the request to open Canobie Lake to swimming.