4-5-19 Water- New England-s Next Big Challenge

Is there a resource more precious than water? We cannot live long without it. My father used to tell survival stories as bedtime stories. (I was a privileged child!) One such story emphasized that we can live a long time without food but not long at all without water. Sometimes there were lessons about ways to capture water, such as collecting condensation or finding water in a cactus. He wanted us to be prepared for a variety of locations and circumstances. It wasn't until I was grown that I wondered if these stories were based on his World War II experiences, or his natural predilection for creativity and survival. In any case, the lessons were memorable and influence me still.

I thought of my father and his survival stories as I attended the conference of Watershed Action Alliance of Southeastern Massachusetts last Friday at the charming Camp Kiwanee. As I heard speakers addressing the issue of private wells and the potential impacts of drawdowns from those wells, I thought of my dear Plympton. Later, I was delighted to meet a couple Plymptonians there!

The first speaker, John Mullaney, talked about the age of water. I was immediately fascinated, as I had never thought about that. He talked about recent samples indicating the results of impacts from the 1960's! This is a critical topic for all communities. It means that Halifax's algal blooms are showing the scars of human activities from decades ago.

We also heard that when we make improvements, say to stormwater and septic systems, the improvement is real, but can also take decades to show the improved results. While on the one hand, that message was, "Don't give up. Make those improvements." It was also a bleak morning. Very bleak.

Climate change models showing the impact on our low-lying coastal areas and the damage to water quality from human activities, caused me to write in my notebook, "My grandchildren, what are they inheriting?"

The afternoon was full of hope, though. Landscape changes, by-law changes and working with nature, rather than against; with nature-based solutions being the most successful.

We learned about grant opportunities and they were more likely if our town was certified by the Massachusetts Vulnerability Preparedness (MVP) https://www.mass.gov/municipal-vulnerability-preparedness-mvp-program

We learned from Heidi Ricci of Audubon, that about half of our land is undeveloped and unprotected. That means there is the opportunity for both carefully planned development for what a community needs, such as housing, and protecting open space. Both can be accomplished! Or, both opportunities could vanish if no one is watching.

There were "speed presentations" from the following watershed associations. As quick as they were, they were inspiring! Their presentations showed community involvement, education, and dramatic improvements to the environment.

Neponset River Watershed Association

North and South River Watershed Association

Jones River Watershed Association

Six Ponds Improvement Association

Herring Ponds Watershed Association

Barnstable Clean Water Coalition

Save the Bay-Narragansett Bay

The plenary presentation was titled Help Wanted-Restore Your Wetlands for Ecological Dynamism, by Alex Hackman, restoration ecologist of MA Division of Ecological Restoration. He introduced, with great optimism and cheerfulness, the concept of the practitioner. He compared the involvement of people who care about the environment to physicians, calling us "practitioners". He spoke about minimizing and reducing impacts the way a wholistic doctor would speak about ways we can improve our health.

He uses a five-step recipe for recovery we could all use.

- 1. Understand the land
- 2. Focus on key ecological processes (habitat)
- 3. Identify stressors
- 4. Stress relief
- 5. Give it over to Mother Nature and Father Time
 The example of his recipe in action was Tidmarsh Farms, where the natural
 peat layer of old cranberry bogs covered in several feet of sand from the
 cranberry business. Water was held underneath all of this and could not be

the marsh it originally was. It was decided to open and mix the sand and peat, allowing water to rise and flow. It is now a beautiful marsh habitat, with numerous native wetland plants growing. They were not planted. They just returned.

Returning to a natural state allows water to flow where it was meant to flow. It allows herring to return to spawn. It allows water to expand during flood times to areas next to streams and rivers, without flooding homes, once the natural wetlands were protected and/or restored.

Talk about survival!

Shall we?

Please, let's.

Cathleen Drinan is the health agent for Halifax, MA. She can be reached at 781 293 6768 or cathleen.drinan@halifax-ma.org