

Climate Change Resolution – Sharon Town Meeting, May 5, 2014

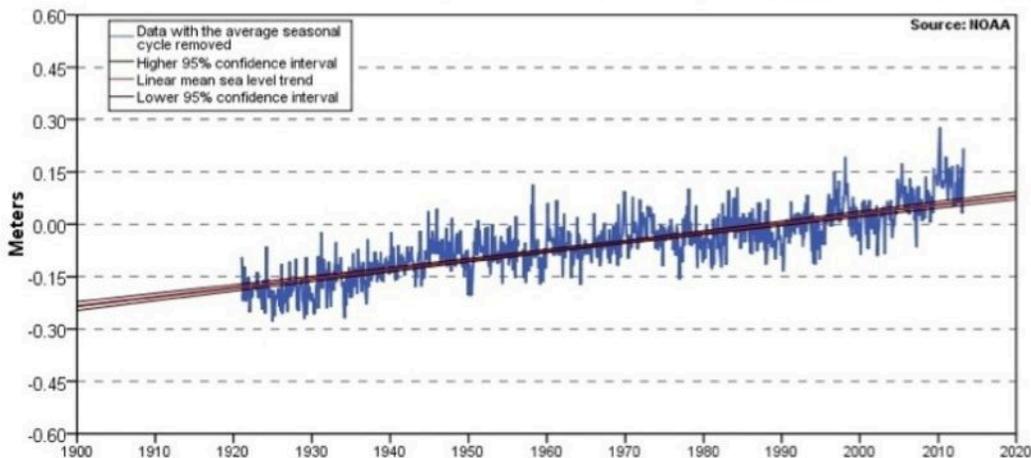
Sharon Town Meeting recognizes that greenhouse gas emissions generated by fossil fuels have already set climate change in motion, and that arresting these changes will require actions at every level of society, including federal, state, local and individual, to:

- *become more water- and energy-efficient in our homes, businesses, schools and town facilities.*
- *incorporate water- and energy-efficiency into all new buildings and developments.*
- *adopt clean, renewable energy sources such as wind and solar.*

Sharon Town Meeting hereby encourages every elected and appointed town official to promote measures that conserve vital water and energy resources, and minimize carbon emissions.

Sharon is vulnerable to the impacts of climate change. For example, we grow very little of our own food, so when a drought hits California, we feel it in the form of higher prices at the supermarket. As a community comprised largely of commuters, Sharon's economic wellbeing is linked to the fortunes of Boston. Sea level in Boston harbor has already risen a foot over the last 100 years or so, and it is rising at an accelerating rate.

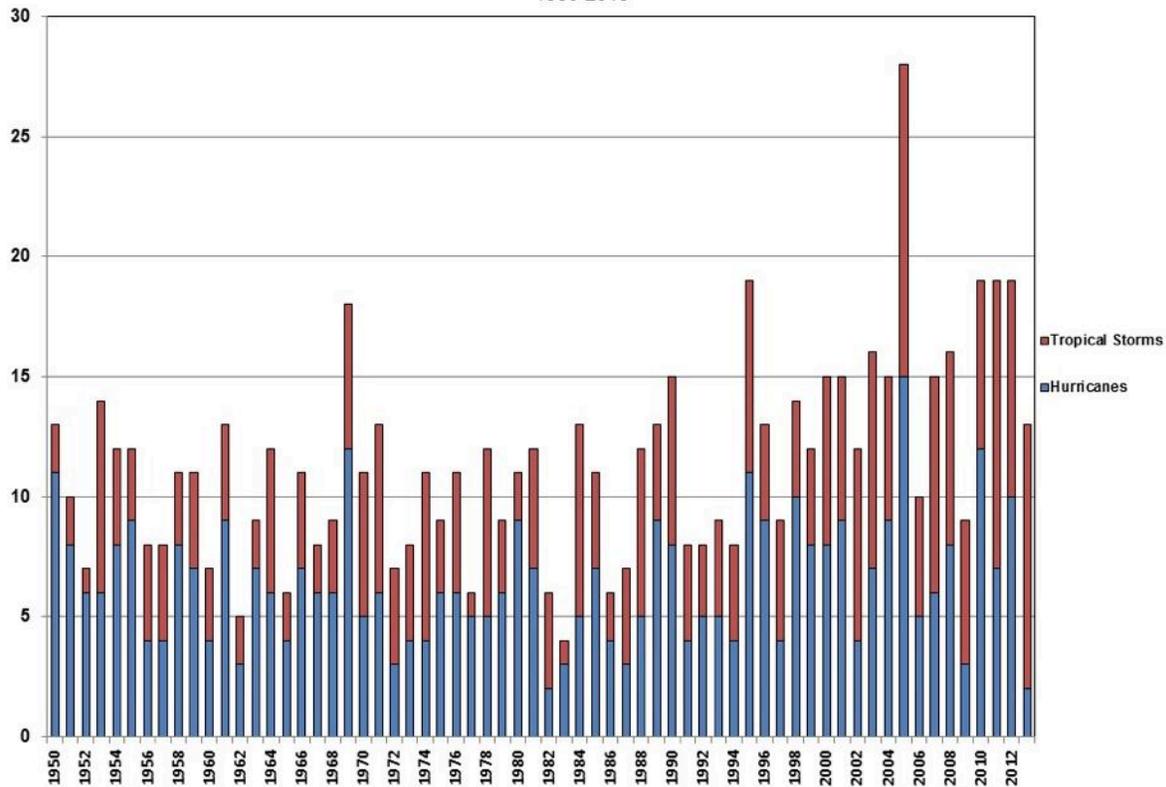
Mean Sea Level Trend Boston, MA Avg: + 2.63 mm/year



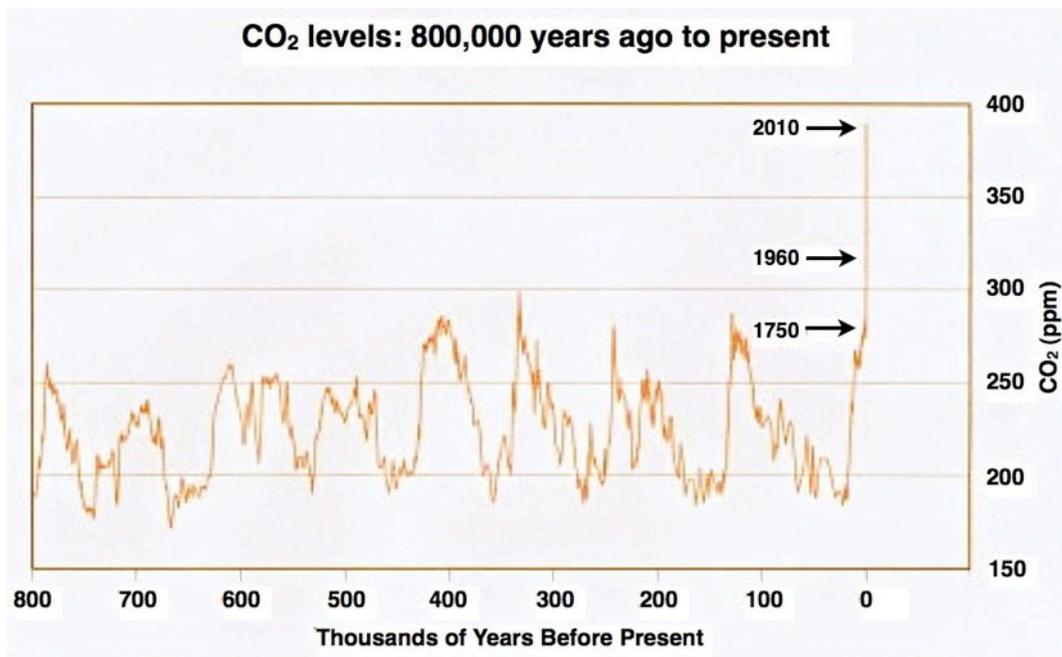
2010: + 2.74 mm 2011: + 2.77 mm 2012: + 2.79 mm

Higher sea levels amplify the destructive power of major storms, which are becoming more frequent as the atmosphere heats up. There have been 15 or more tropical storms and hurricanes in the North Atlantic in 10 of the past 14 years. There were only three such years in the half-century from 1950 to 1999 (see below). If Boston takes a direct hit from a powerful hurricane like Katrina or Sandy, it could have devastating consequences for the entire region, including Sharon.

North Atlantic Basin
Number of Tropical Storms and Hurricanes
 1950-2013



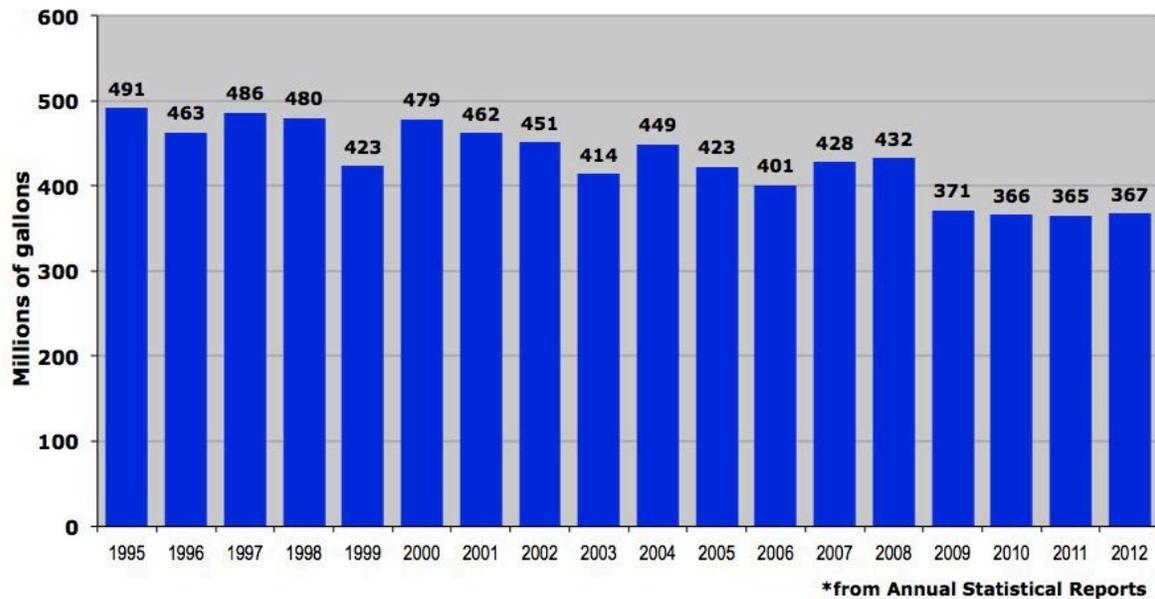
Climate change is caused by a buildup of greenhouse gases such as CO₂ in the atmosphere. Many scientists have said that the maximum safe level of CO₂ is 350 ppm (see: <http://350.org/about/science/>). CO₂ reached 400 ppm for the first time last year, and it's rising at an accelerating rate—currently over 2 ppm per year (see: <http://www.esrl.noaa.gov/gmd/ccgg/trends/>). If the polar ice caps melt and the tundra thaws, releasing methane, we might not be able to bring global warming under control. That would have catastrophic consequences.



The solution lies in reducing carbon emissions through energy conservation, using clean energy instead of fossil fuel, and sequestering carbon. The Massachusetts Global Warming Solutions Act of 2008 calls for a whopping 80% reduction in greenhouse gas emissions by 2050!

Relatively affluent communities like Sharon have a special obligation and opportunity to lead by example. Sharon has already reduced its water use by over 20%, saving about \$30,000 per year worth of electricity just for pumping our town wells. That is keeping tons of CO2 out of the atmosphere. Nevertheless, if every Sharon household were to use water as efficiently as the 500 most efficient households in town, Sharon's current water usage could be cut in half.

Sharon's Residential Water Use*



Sharon's Atlantic White Cedar Swamp purifies and stores much of the town's drinking water. Decomposing organic matter in the soil has been releasing greenhouse gases into the atmosphere. Water conservation and restoration efforts are gradually improving this situation.



Figure 14. Exposed AWC roots indicate severe soil subsidence near the ditch.

Source: http://www.townofsharon.net/sites/sharonma/files/file/file/sharongcs_progress_report_june2012absfinal.pdf

As a current member of the Water Management Advisory Committee (WMAC), and a past member of the Planning Board, I have seen how local officials can make a difference. Here are a few examples:

- When the developers of the Sharon Commons mall wanted to connect to the town's water supply, representatives of the WMAC, the Sharon Energy Advisory Committee, and the Conservation Commission negotiated a \$400,000 contribution to conserve water elsewhere in town to compensate for their additional demand, plus an additional \$250,000 for restoration of the Cedar Swamp.
- When the developers of the Sharon Commons mall asked the Planning Board for permission to remove trees to widen Old Post Road, a Planning Board member organized volunteers to count the trees to be removed, and got the developers to contribute \$60,000 to the Town's tree fund to plant trees elsewhere in town. As they grow, the new trees will sequester carbon.



The amount of compensation for planting new trees was based on the count of trees to be removed.

- When the Sharon Middle School was renovated, the School Committee insisted on green features such as solar panels. The digital display in the school lobby of the power produced by those solar panels also serves to educate the next generation about clean energy, and encourage residents to install solar panels on their own homes.

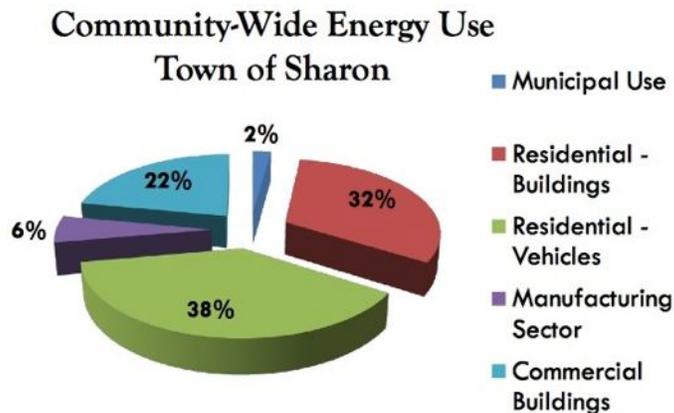




- When the Wilber School was renovated, the Wilber School Redevelopment Committee negotiated with a developer to include enough green features to qualify for LEED certification at the “Gold” level.

The cost of clean energy is trending downward. The cost of fossil fuels, on the other hand, can be expected to rise as finite supplies are used up, especially if a carbon tax is imposed to reflect the cost of global warming caused by burning fossil fuels. Sharon’s municipal and school buildings should develop clean energy sources such as solar panels, install better insulation, switch to more efficient lights, and purchase more fuel-efficient vehicles. In the long run, lower utility bills offset the initial cost of these investments.

Unfortunately, the Sharon Energy Advisory Committee has stopped meeting. It should start meeting again on a regular basis, and other town officials should take their recommendations seriously. Sharon should join 123 other towns in the Commonwealth and become a Green Community to become eligible for state grants and subsidies. Sharon should adopt the stretch building code, and require water and energy efficiency in all new buildings. Town officials should aggressively seek opportunities to partner with state agencies and private companies to find cost-effective ways to reduce the town’s carbon footprint.



Source: http://www.mapc.org/sites/default/files/2011-DLTA_Sharon-Energy-Baseline-Report_Case-Studies_122311.pdf

The proposed Town Meeting resolution is non-binding, and merely encourages town officials to prioritize energy efficiency and clean energy. However, this approach can be effective. For example, in the wake of the March 2007 Town Meeting vote on the Sharon Commons mall, when only one side was heard before voting, a resolution was passed encouraging the Town Moderator to hear both sides of every issue before allowing a question to be called. Since then, the Town Moderator has always allowed both sides to speak before entertaining a motion to call a question.

We elect our town officials to serve our best interests, and we should trust them to do that. However, business as usual will lead to a climate catastrophe. I hope you will support this resolution at Town Meeting on May 5, 2014 as a way to focus attention on what we as a community can do to help create a safer, more sustainable future for our children, and set a good example for other communities.

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