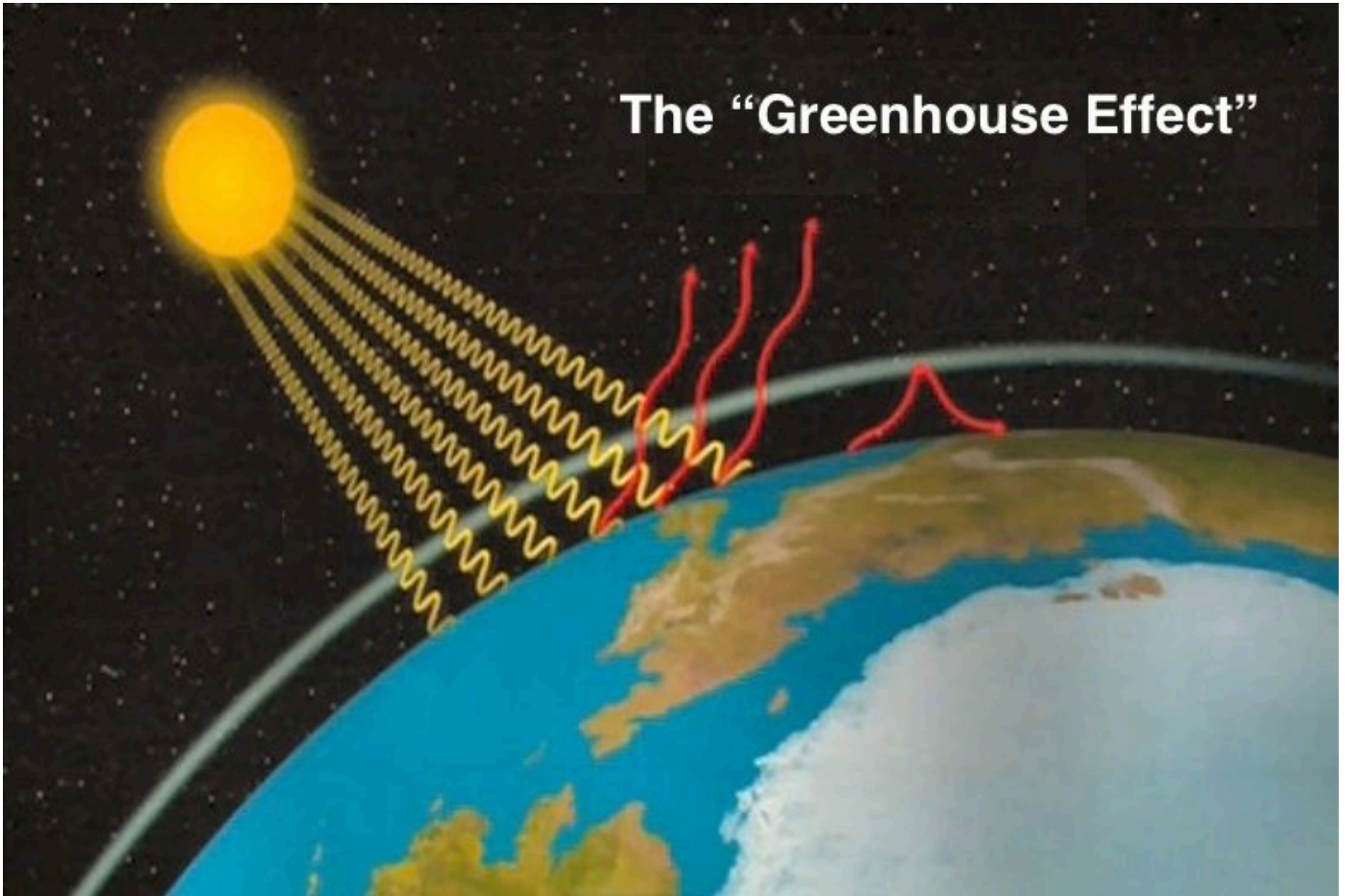


Reducing Carbon Emissions



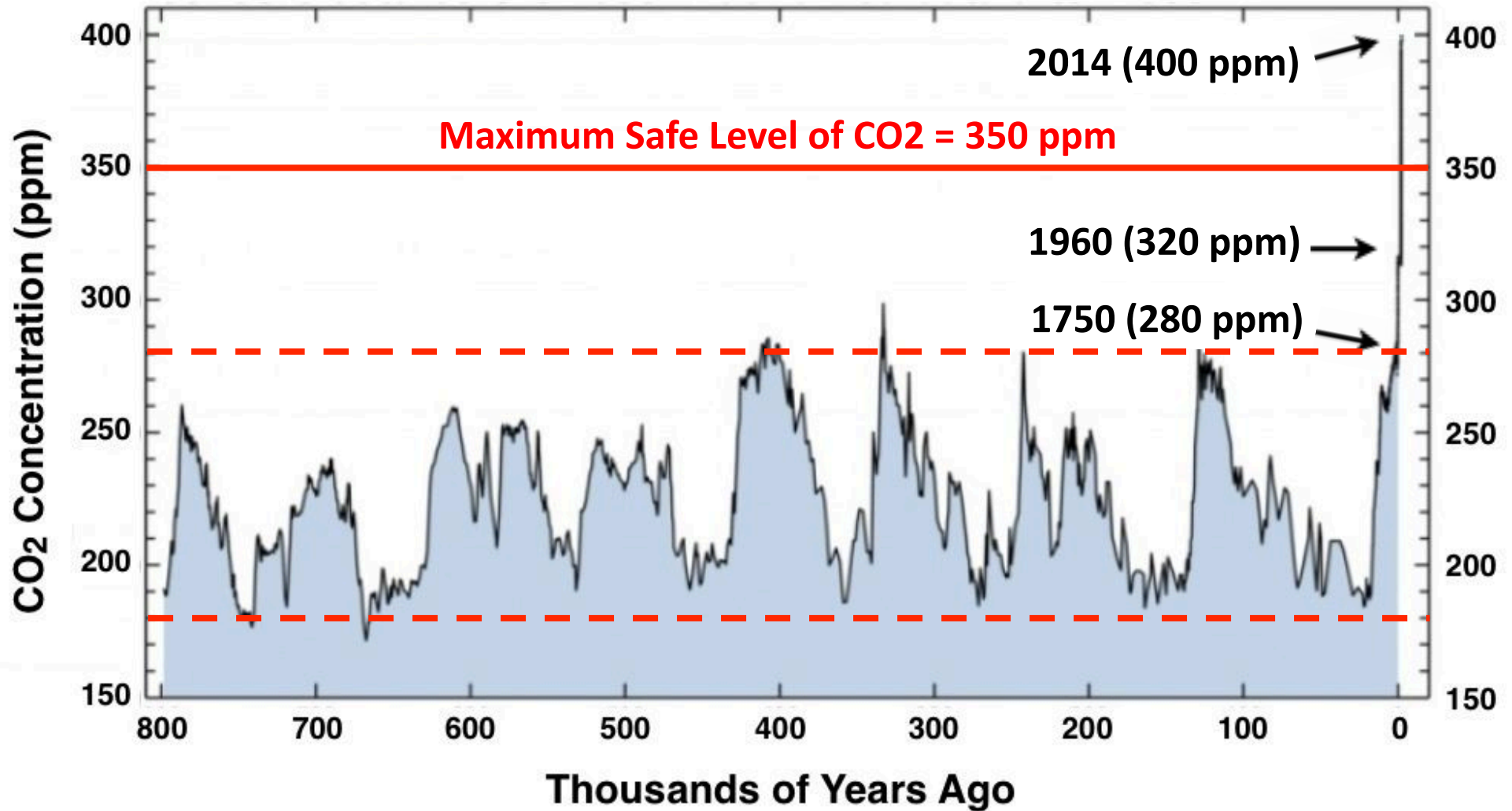
Town Meeting – May 5, 2014

The “Greenhouse Effect”



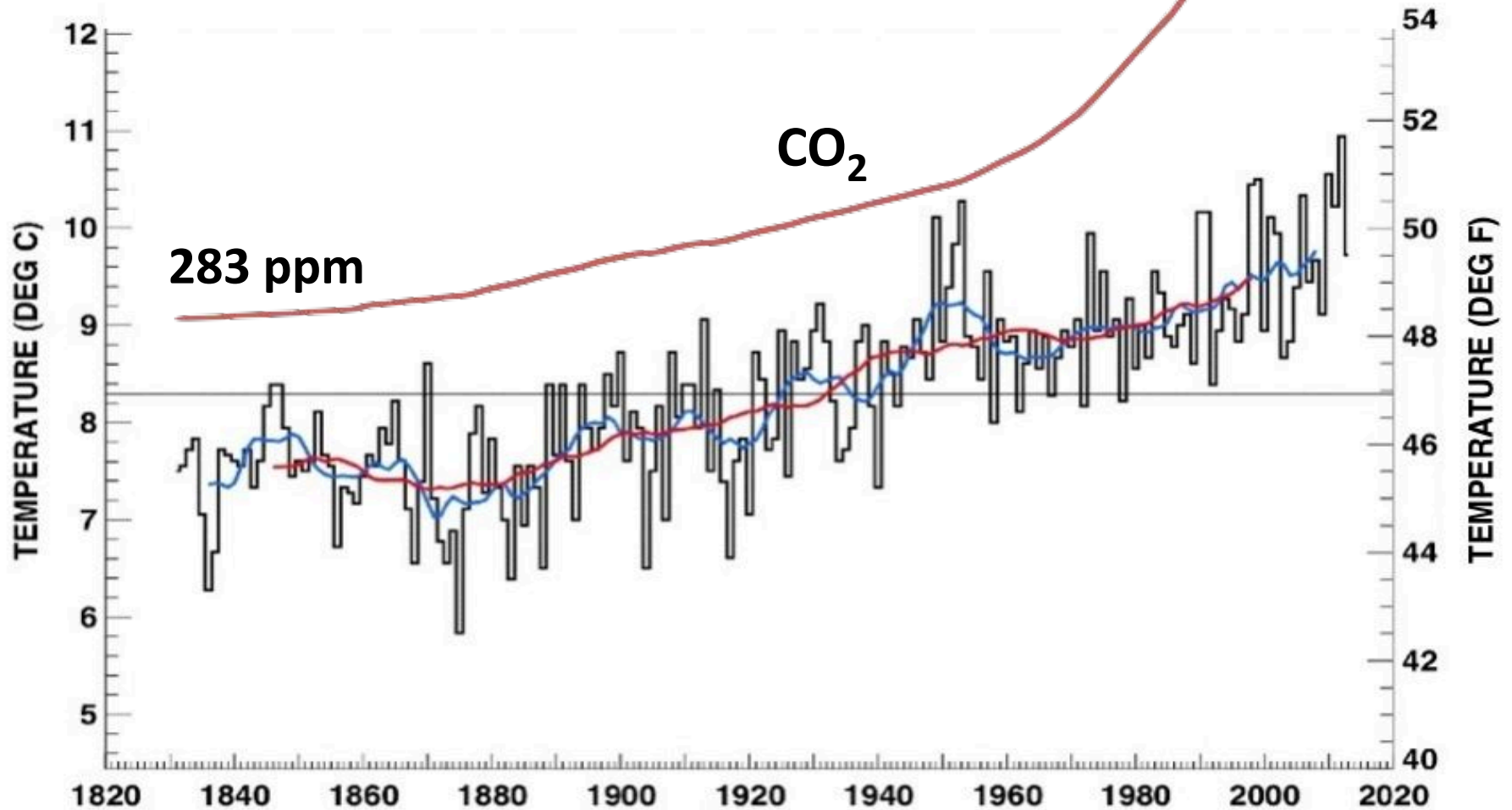
Greenhouse gases such as CO₂ trap heat, causing the earth to warm.

CO₂ Levels: 800,000 Years Ago to Present



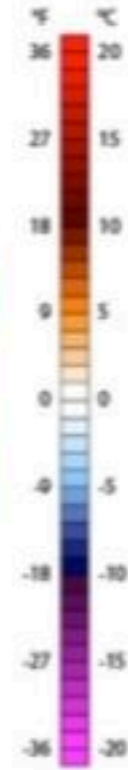
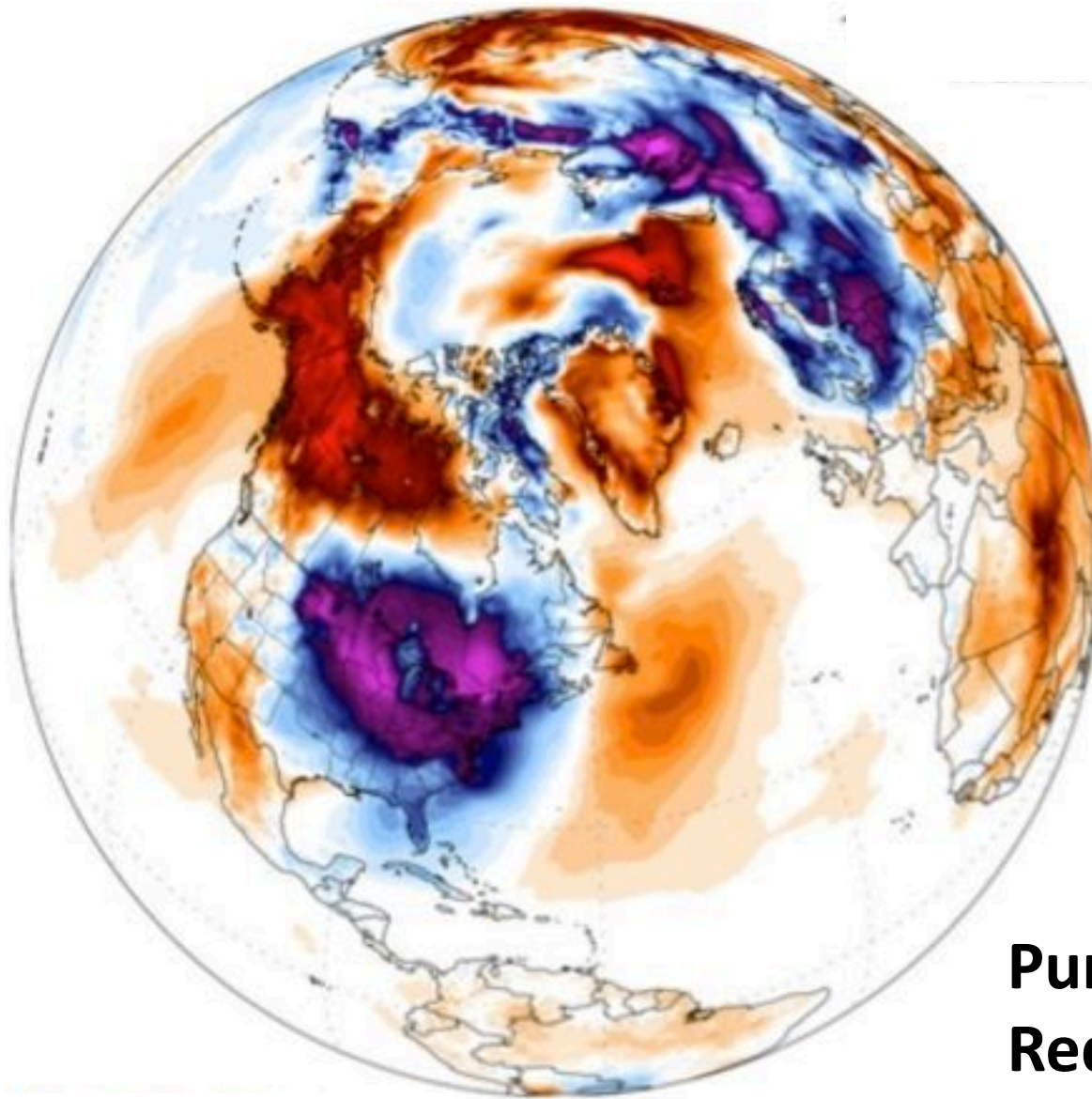
For 800,000 years, CO₂ oscillated between 180 ppm and 280 ppm. CO₂ is now higher than the safe level of 350 ppm, and rising fast.

Blue Hill Observatory Annual Temperature 1831 - 2013



Rising CO₂ is driving up temperatures.

**Temperature
Jan. 23, 2014**



**Purple = below average.
Red = above average.**

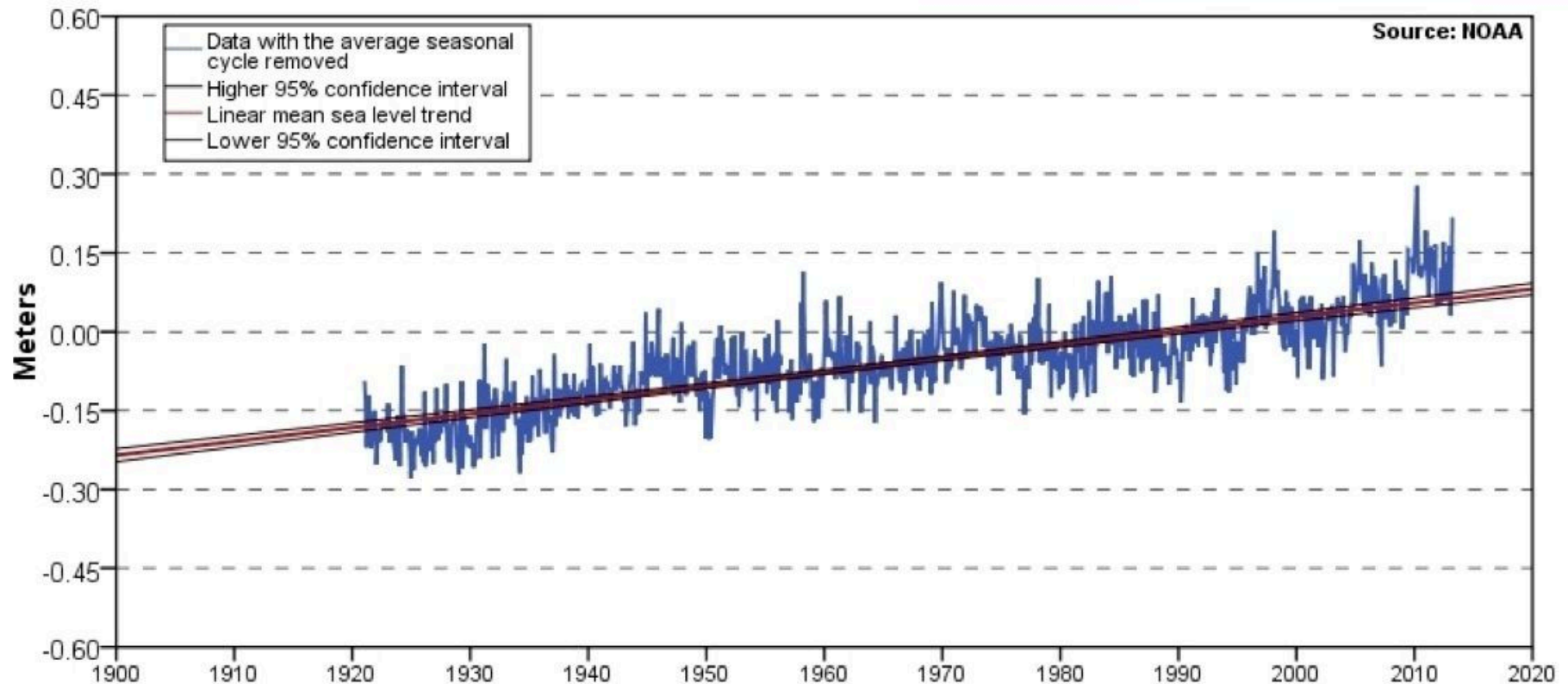
While Sharon froze this winter, Alaska baked.

Warming temperatures are causing polar ice to melt.



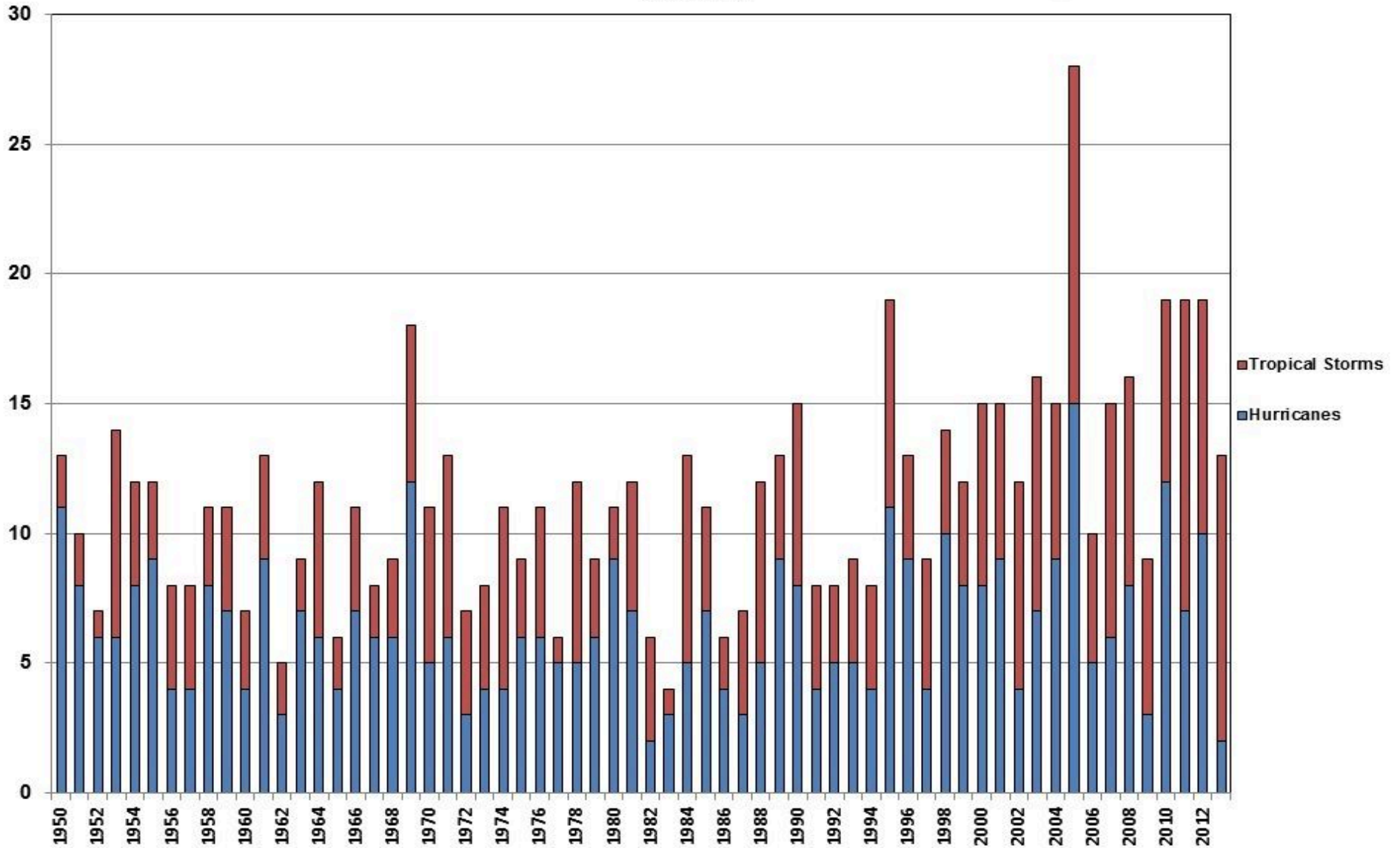
Mean Sea Level Trend Boston, MA

Avg: + 2.63 mm/year



2011: + 2.77 mm 2012: + 2.79 mm 2013: + 2.80 mm

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



Major storms are becoming more frequent.



Scituate, MA March 13, 2013

**The destructive power of major storms
is amplified by higher sea levels.**



**Flooded NYC subway
Hurricane Sandy, Oct. 2012**

**Sharon's commuter economy depends
on the economic vitality of Boston.
Boston is vulnerable to sea level rise.**



Drought in agricultural areas affects food prices in Sharon.



WE'RE HERE

400PPM

**WE NEED TO
GET BELOW:**

350PPM

**CO₂ in the atmosphere
(Annual Average)**

**The Massachusetts legislature passed
the Global Warming Solutions Act in 2008.**

**It calls for a whopping 80% reduction
in CO₂ emissions by 2050.**



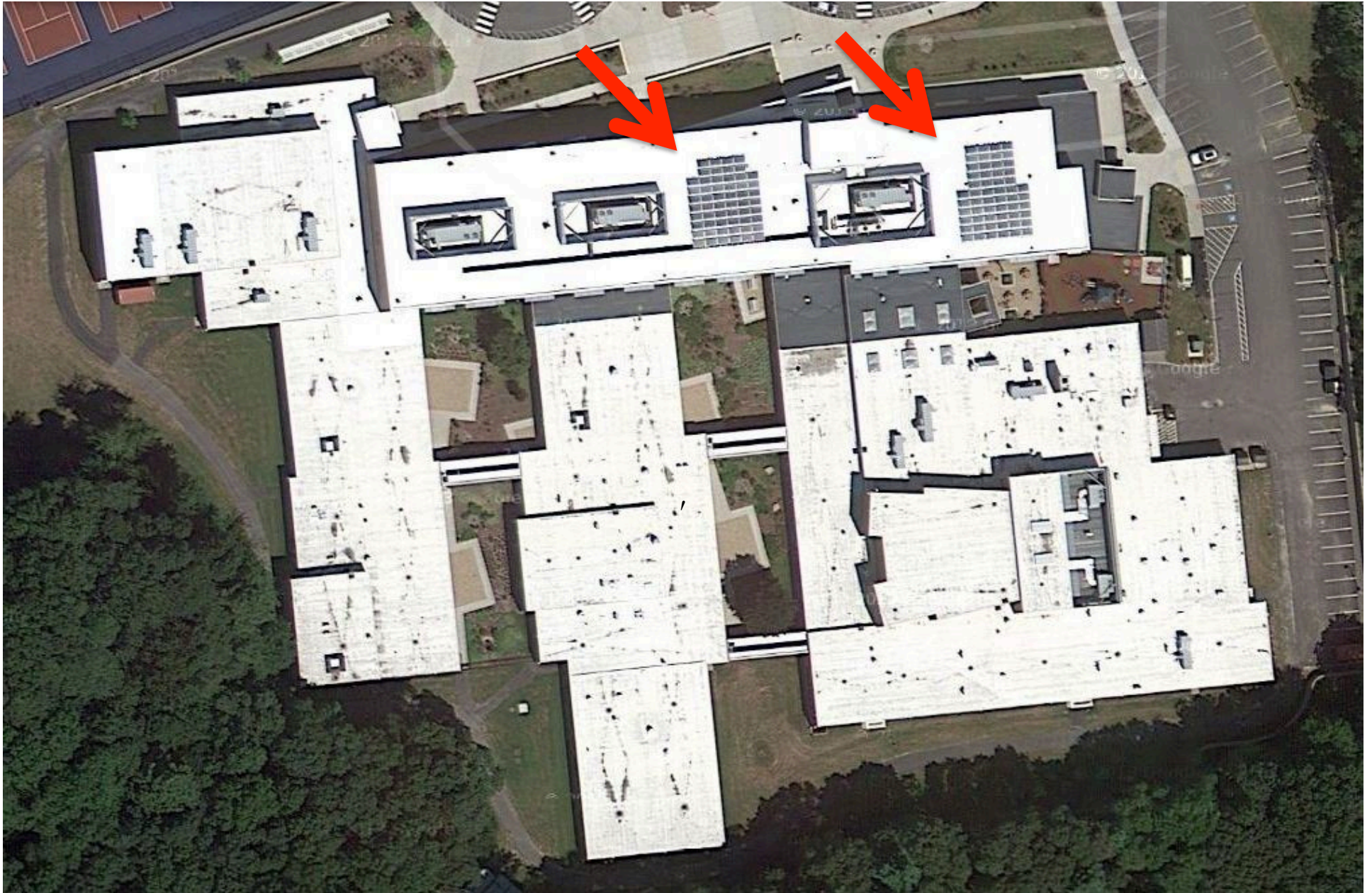
Creating a sustainable future will require changes in every household and every town.



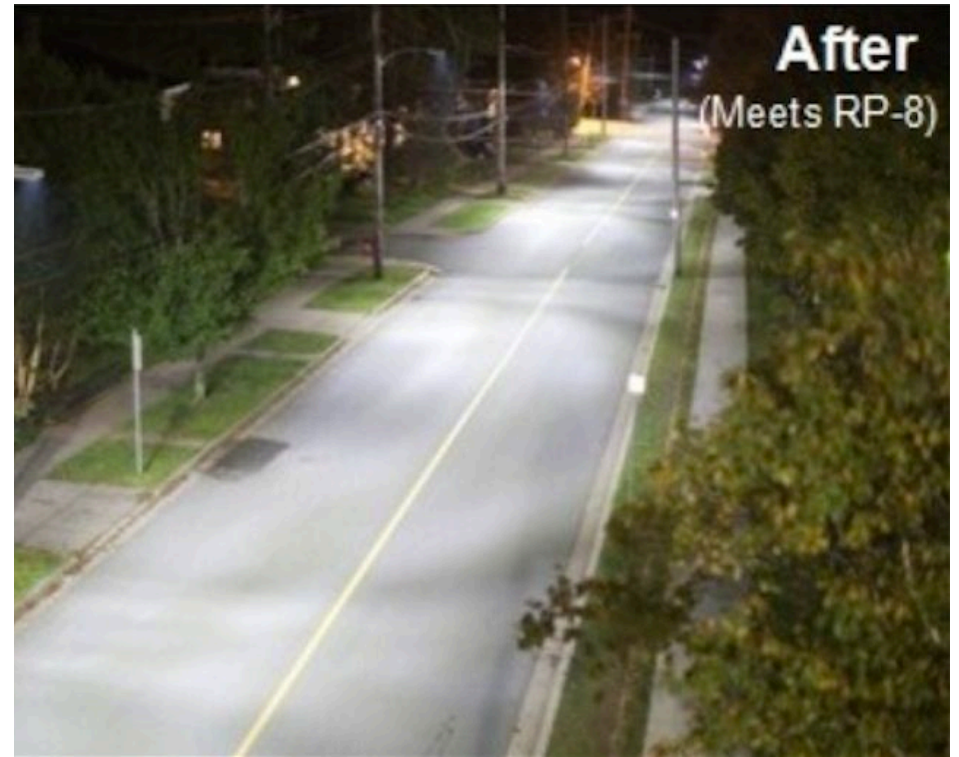
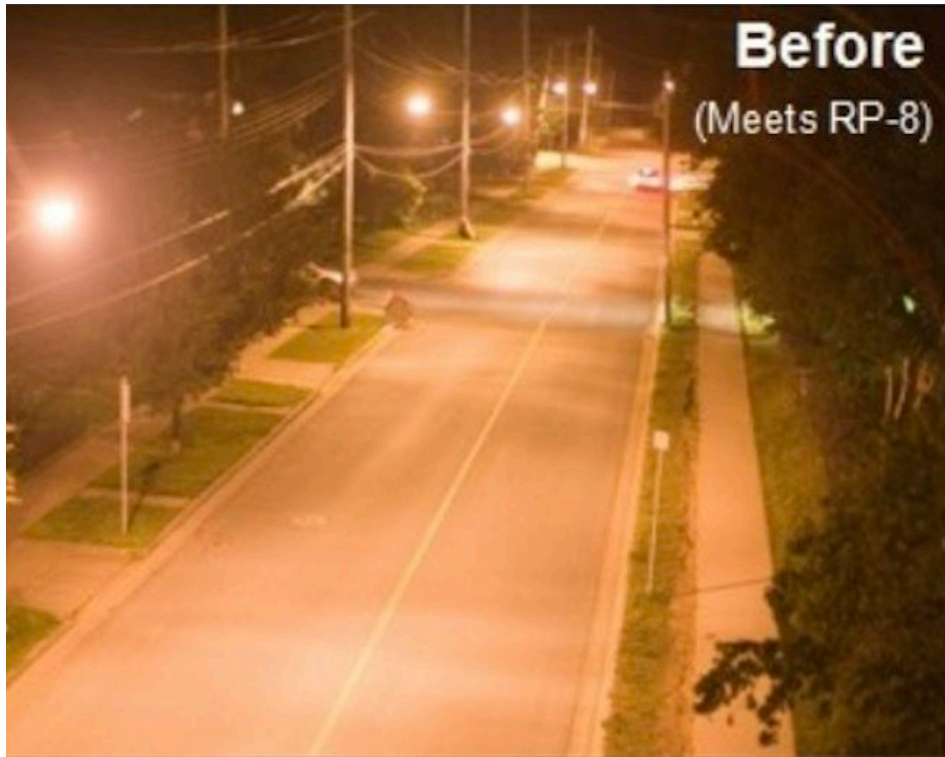
Fortunately, cost-effective technology is available to reduce carbon emissions.



The 112 solar panels at the Sharon Middle School have produced 72,000 KWHs worth over \$14,000, and kept over 43 tons of CO2 out of the atmosphere in the two years since they were installed.

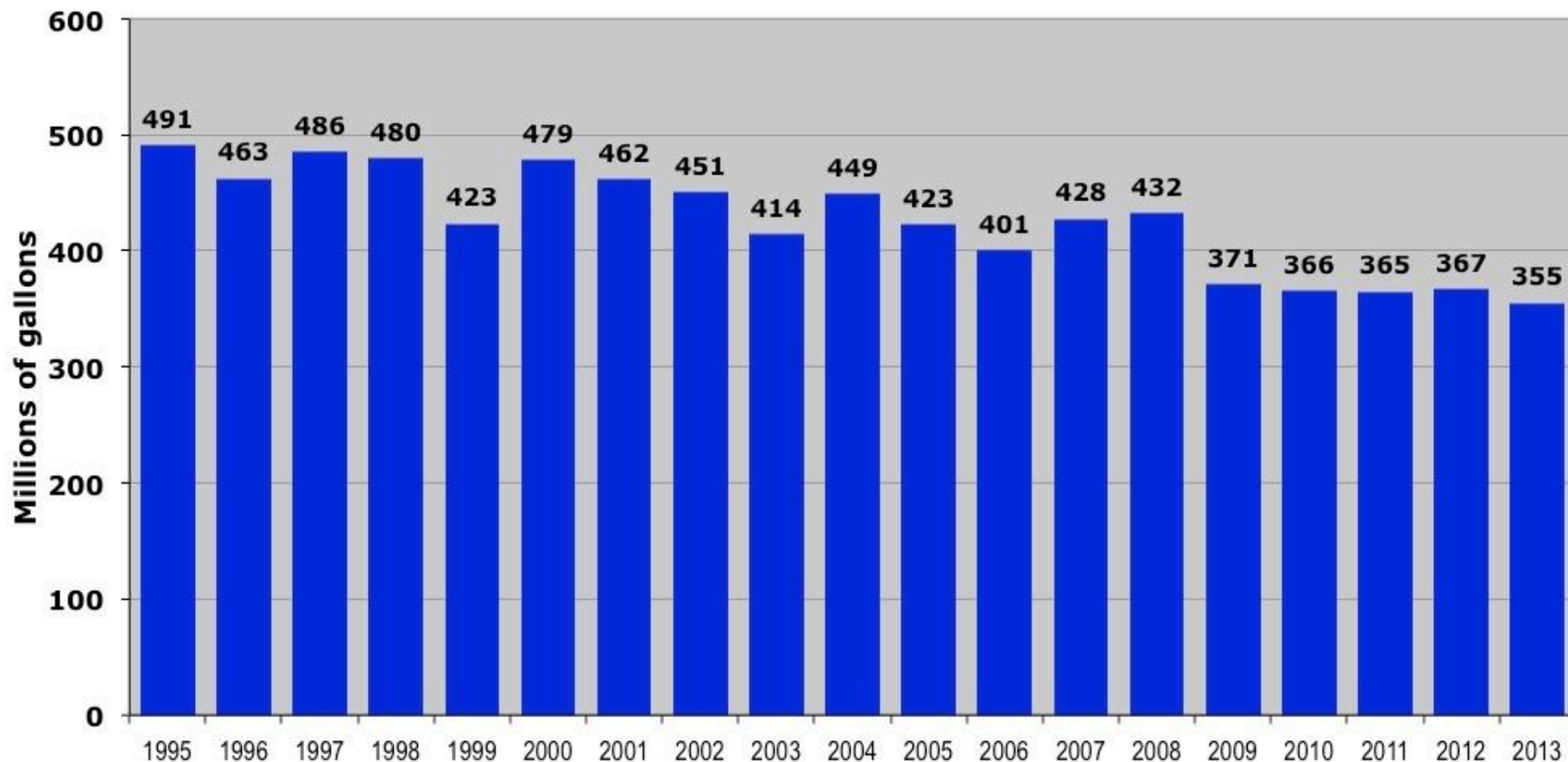


Solar panels occupy only a small fraction of the Middle School roof. Sharon's four other schools lack solar panels.



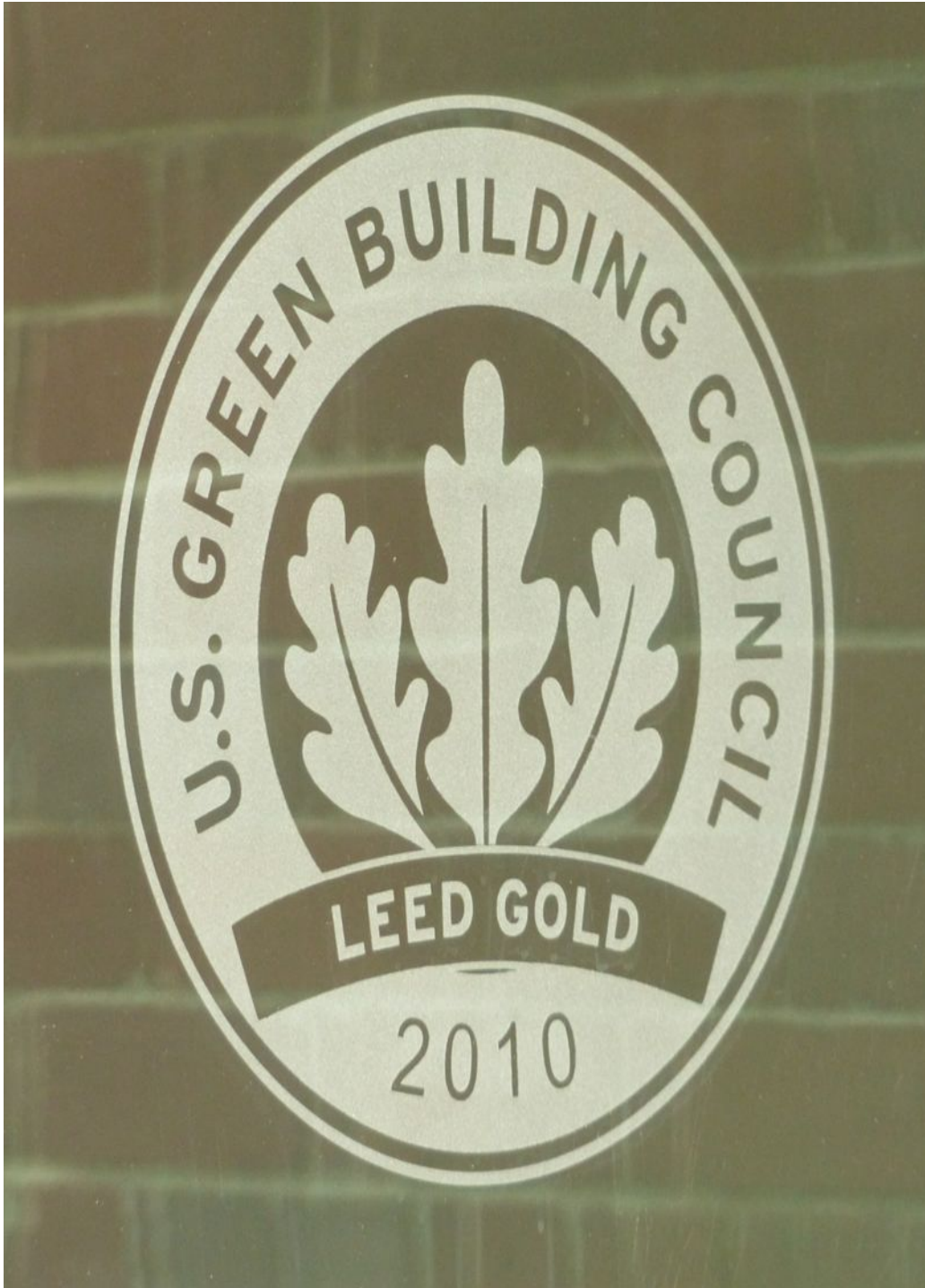
Sharon recently replaced 1,655 street lamps with more efficient LED lamps that greatly reduce the cost of electricity, and provide better illumination.

Sharon's Residential Water Use*



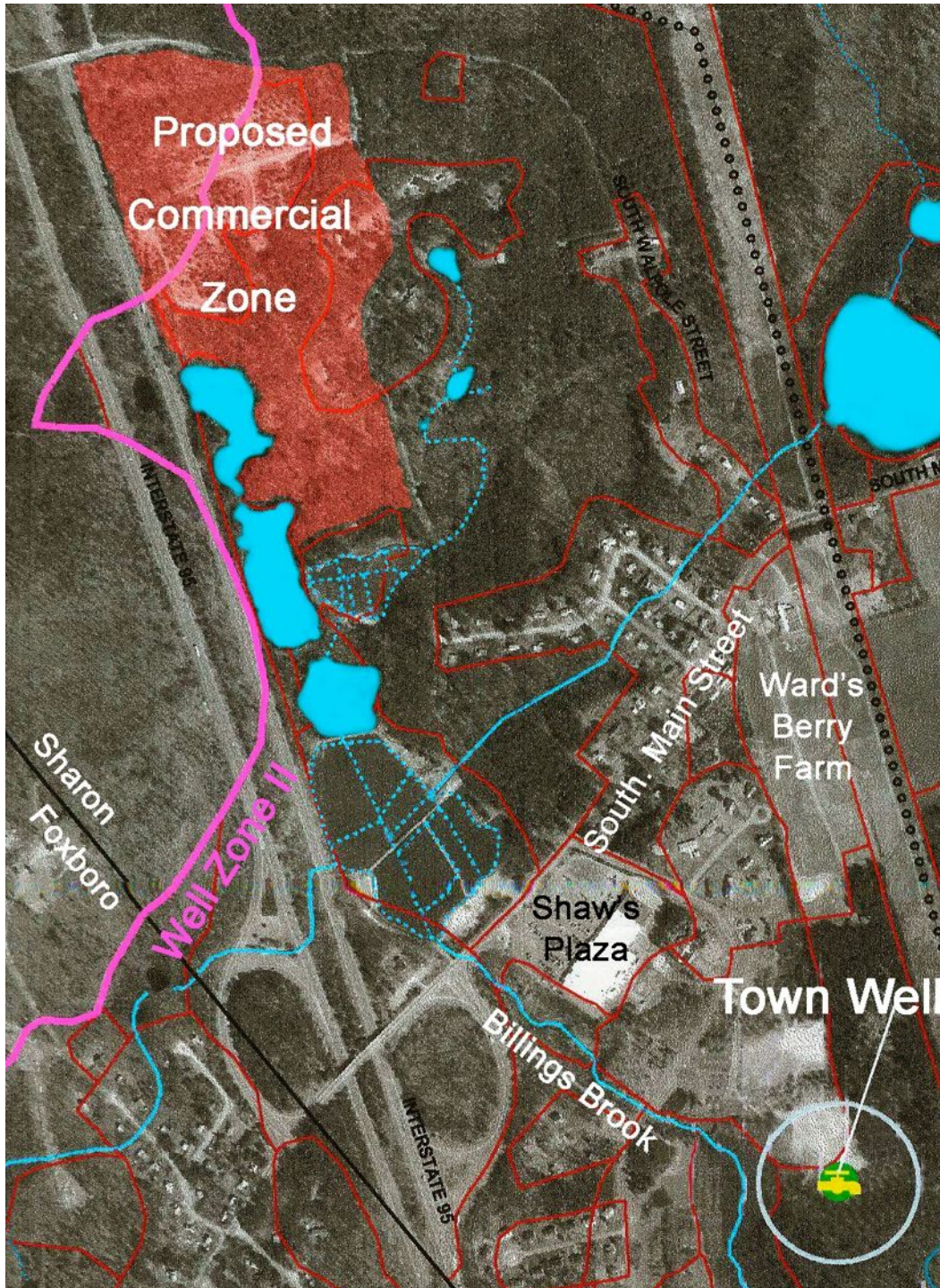
*from Annual Statistical Reports

Sharon conserves over 100 million gallons of water per year, saving about \$30,000 worth of electricity and \$40,000 worth of treatment chemicals. Water conservation also avoids the multi-million-dollar cost of importing MWRA water, and keeps at least 100 tons of CO₂ out of the atmosphere.



Some developers are willing to negotiate sustainability into their projects.

The Wilber School apartments are LEED certified at the Gold level, thanks in part to the Wilber School Redevelopment Committee.



The developers of Sharon Commons agreed to contribute \$400,000 to promote water conservation elsewhere in town, in order to accommodate their own water needs.



These examples show how Sharon can reduce carbon emissions and save money. They are a good start, but we have a long way to go to create a sustainable future for our children.

Please vote YES on Article 23 to encourage our elected and appointed leaders to take carbon emissions into account as they make decisions affecting the future of our community.

Article 23 - Sharon Town Meeting - May 5, 2014

To see if the town 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.