



Introduction to Climate Change

**Elizabeth Wiseman-
Chase, GROW
Commissioner**

The climate crisis is the defining challenge of our generation. Scientists are clear about the reality of climate change and with devastating storms, dangerous floods, melting glaciers, and rising seas becoming increasingly regular facts of life, it's more critical than ever that we begin to start working on solutions together.

The simple fact is that climate change throws natural systems out of balance – to often devastating effects. What does that mean? Here's a quick overview of what's causing our climate to change and the crisis unfolding in front of our eyes.

When we talk about climate change, we're talking about the changes scientists have seen in long-term temperature, precipitation, and wind patterns, thanks to higher levels of greenhouse gases in the atmosphere. Some of the clear signs of climate change are rising average temperatures around the world, more frequent and devastating storms and floods in some parts of the world, increasingly long drought, glaciers melting at record paces, and rising sea levels.

The Greenhouse Gas Effect

Greenhouse gases are the primary cause for our planets warming. Carbon dioxide and other gases are released as a result of human activities such as burning fossil fuels for electricity, industry, and transportation. More gases in the atmosphere means more of the sun's energy gets trapped in heat. Things keep getting hotter and hotter. Extreme weather events occur as a result of the shifting climate. Burning fossil fuels isn't the only thing contributing to rising levels of carbon dioxide.

Deforestation – cutting down trees on a large scale for fuel, land, or other purposes – leads to more greenhouse gases in the atmosphere as more trees are burned and fewer are in the ground to absorb excess carbon.


Why should we care?

The simple fact is that global temperature rise throws natural systems out of balance. We are already beginning to see what a warmer future has in store for us:

- Rainstorms, severe droughts, powerful tropical cyclones, extreme heat waves.
- Rising sea levels (projected to rise another 1 to 4 feet by 2100).
- Displacement of nearly half of the world's population.
- Flooding coastal areas literally swallowing entire islands.
- Populations of animals dying out.

The climate crisis has real and dangerous impacts on public health as well. This is especially true for the most vulnerable among us – children, the elderly, and the poor – who are at the most risk from heat stress, air pollution, and extreme weather events. And unless we act, we could see these impacts become even more pronounced in the very near future. Do we want our children, our grandchildren, and everyone who comes after to live in a world devastated by the climate crisis? Or do we want to be the generation that discovered the courage to act and rose to solve the greatest challenge humanity has ever faced?

It's our choice. Please join us to learn more:



**The Climate
Reality Project**

Sat. July 29th
**9:00 am to
10:30 am**

**“Our Climate
Crisis”**
with Kent Taylor

**Westchester
Village Hall
Boardroom
10300 Roosevelt**

Topics include:

- **The Scientific consensus surrounding anthropogenic global warming**
- **Statistical and observational evidence in support**
- **The negative “Tipping Points” we are rapidly approaching**
- **The impacts a warming planet will have on our civilization**
- **The remarkable achievements seen in renewable energy and its economic advantages**
- **The promising future awaiting if we can increase this momentum**