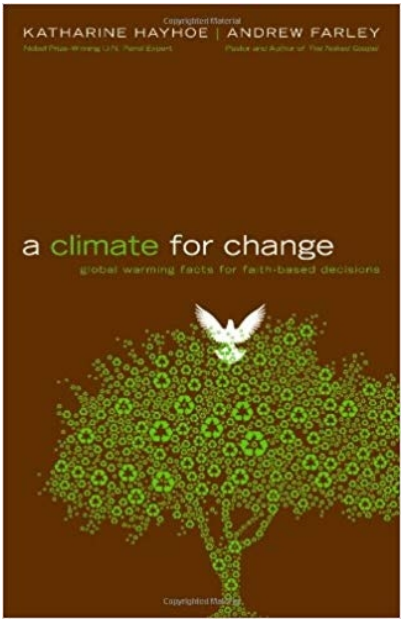
Dr. Katharine Hayhoe visited Alaska last week and spoke about climate change and relations to energy needs in our state. Hayhoe is an atmospheric scientist who studies what climate change means for people and the natural environment, and helps communities adapt. She is a professor at Texas Tech University, directs its Climate Science Center and has served as a lead author for the last three U.S. National Climate Assessments (*see next page*).

Hayhoe has received multiple awards for her ability to speak about climate change in an accessible and respectful way to a wide variety of audiences, including those who have questions about climate change and people of faith, given her background as an Evangelical Christian, and with communities working to understand how to adapt to climate change.

She writes and produces a PBS series, Global Weirding: Climate, Politics and Religion.

In A Climate for Change: Global Warming Facts for Faith-Based Decisions, Hahyhoe shows why Christians should be living in a sustainable menner, and the consequences of doing so. The book explains the science underlying global warming, the impact that human activities have on it, and how our Christian faith should play a significant role in guiding our opinions and actions on this important issue.



In 2014, Dr. Katherine Hayhoe was named one of the 100 most influential people in the world by *TIME*, and one of 100 global thinkers by *Foreign Policy*. In 2015, the *Huffington Post* named her as one of the top 10 leaders reshaping the environmental movement.

With significant reductions in emissions, global temperature increase could be limited to 3.6°F (2°C) or less compared to preindustrial temperatures. Without significant reductions, annual average global temperatures could increase by 9°F (5°C) or more by the end of this century compared to preindustrial temperatures.

The climate change resulting from human-caused emissions of carbon dioxide will persist for the long-term, including:

- warming and acidifying oceans;
- rising global sea levels; and,
- in the United States,
  - increasing temperatures,
  - increasing annual precipitation in the north and east,
  - decreasing annual precipitation in the south and west,
  - increased hurricane rainfall and intensity, and
  - increases in coastal flooding.

In the Arctic, annual average temperatures have increased more than twice as fast as the global average, accompanied by thawing permafrost and loss of sea ice and glacier mass. Arctic-wide glacial and sea ice loss is expected to continue; by mid-century, it is very likely that the Arctic will be nearly free of sea ice in late summer. Permafrost is expected to continue to thaw over the coming century as well, and the carbon dioxide and methane released from thawing permafrost has the potential to amplify human-induced warming, possibly significantly.

Some key findings from the U.S. National Climate Assessment [2018]

U.S. Global Change Research Program