Global Warming and Climate Change **(Global Warming Handouts.docx)**

St Mary's Chapel Course
Bruce Parker
May 18, 2014

Handouts

Introduction

Glossary of Climate Change Terms

How fast is the Earth warming?

Carbon Budget (Specifies how much of our fossil fuel reserves we can burn to limit temperature increases to 2° C)

Four major publications this year:

- The U.S. National Academy of Sciences and The Royal Society "*Climate Change: Evidence & Causes*," February 2014
    - Table of contents – Q&A and The Basics of Climate Change
    - How will climate change in the future? (Page B8)
- AAAS – What We Know – The Reality, Risks, and Response to Climate Change **(**March 2014)
- IPCC
- National Climate Assessment

Sea Level Rise

Earth System Tipping Points (http://yosemite.epa.gov/ee/epa/eerm.nsf/vwAN/EE-0564-112.pdf/$file/EE-0564-112.pdf)

CCDataCenter.Org

What Needs to Be Done

Carbon Footprint Calculator

Environmental Organizations in the DC Area Working on Climate Change

Citizens' Climate Lobby

Appendices

Radiative Forcing (What's causing the warming?)

Climate Sensitivity (Determines how warm it will get)

Representative Concentration Pathways (RCP) (Scenarios for future emissions)

- RCP 2.6 Aggressive Emission Reductions
- RCP 8.5 Business As Usual

Earth Will Cross the Climate Danger Threshold by 2036 (Michael Mann – Scientific American Mar 18, 2014)

Ocean Acidification

The "Climate Debate"

What is your tipping point?