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Martin E. Walter*, Department of Mathematics, Campus Box 395, University of Colorado, Boulder, CO 80309. *Current Civilization Plus Climate Change Equals Collapse*. Preliminary report.

We need to change the fundamental structure of our so-called "modern" civilization if it is to survive. For example, industrial agriculture is said to convert "fossil fuels into food" via its extensive reliance on natural gas, oil and coal for fertilizers, pesticides, transportation, refrigeration. But burning fossil carbon needs to be phased out as quickly as possible. Growing populations concentrated in regions susceptible to extreme weather events imply more frequent and devastating losses. Mathematics plays a basic role in understanding the forces of change and in optimizing our response. (Received September 04, 2016)