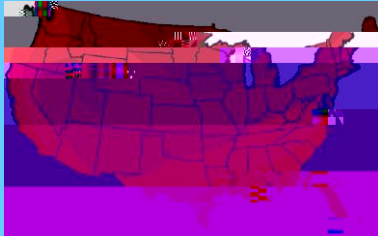


How Will Climate Change Affect Michigan's 3rd District?

If we act quickly, we can still choose the type of planet we leave to future generations. Among our choices are to 1) continue along our "Business as Usual" pathway, in which we slowly reduce carbon emissions, or 2) reduce carbon emissions much more rapidly, as pledged in the Paris Agreement, by using already available wind, solar, and other technologies. The comparisons below illustrate how these choices would affect Michigan's 3rd District. (All predictions are for the later decades of this century.)

Business as Usual

Warming of about 9.5 °F



Paris Agreement

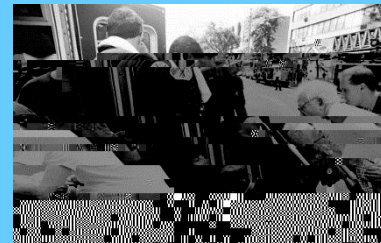
Warming of about 3.5 °F



The difference between today and the last ice age was about 9.5 °F in the other direction.

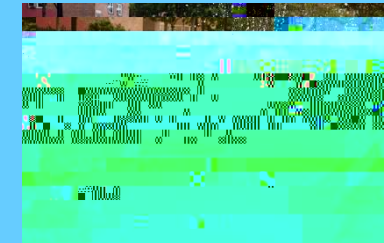
Business as Usual

About 23 Chicago 1995-like heat waves per decade (killed >700 people)



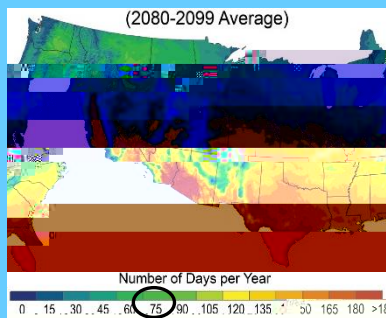
Paris Agreement

About 3 heat waves per decade like the one in Chicago in 1995

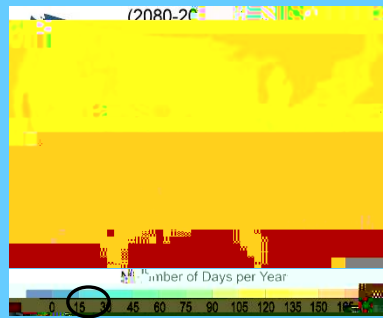


Historically, this was a once-in-a-century event.

About 75 days per year over 90 °F

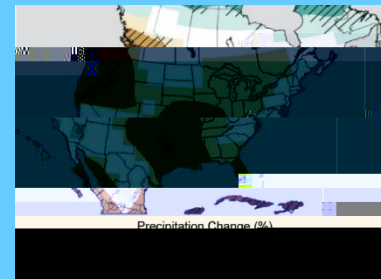


About 35 days per year over 90 °F

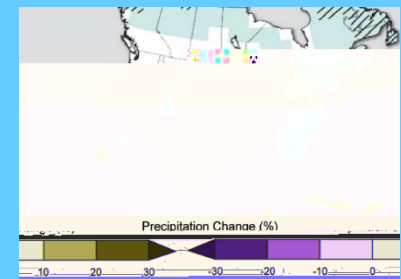


During the 20th century, Grand Rapids averaged about 3 days per year over 90 °F.

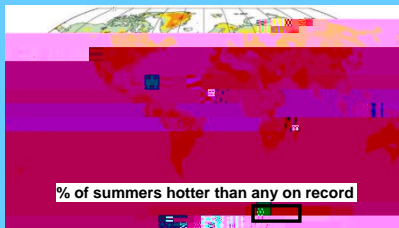
About 5% less rain in summer, when crops need it most



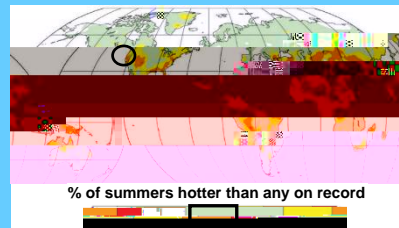
No change in summer rainfall



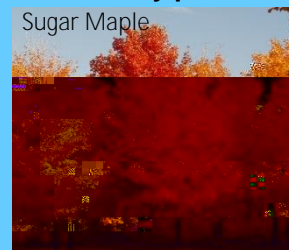
About 80% of summers hotter than our current record hot summer



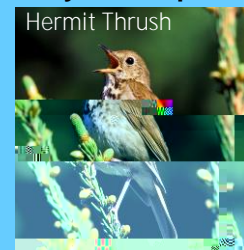
About 50% of summers hotter than our current record hot summer



Loss of many plant and animal species



Loss of many fewer species



If you would like more information, please feel free to contact Dr. David Karowe, WMU Professor of Biological Sciences, at david.karowe@wmich.edu or 269-387-5630