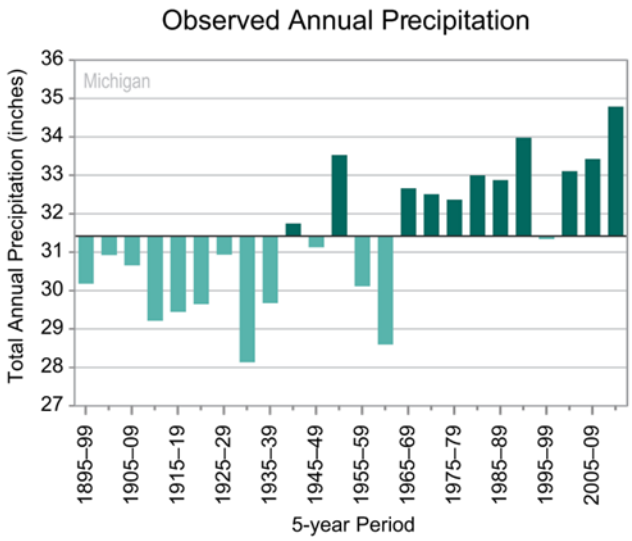
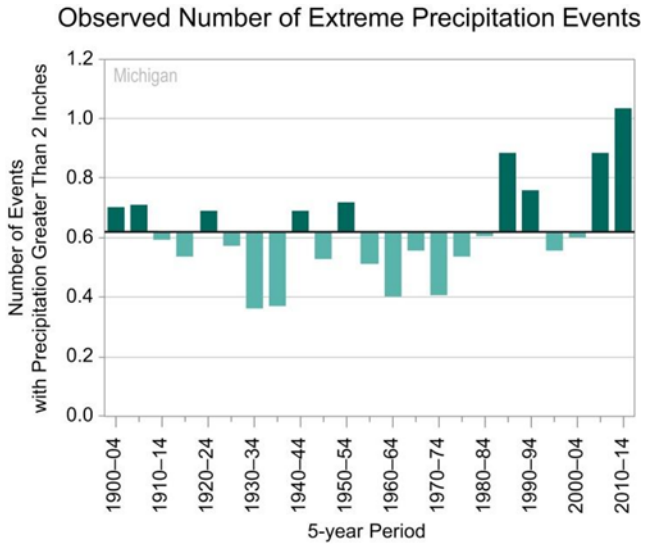
CLEAN WATER

Topline Asks

1. Once state law is updated, would you support Oakland County requiring all cities and townships within the George W. Kuhn Basin to have stormwater utilities that will incentivize conservation?
2. Do you support Oakland County requiring government properties to use at least 50% native plants and provide additional financial incentives to homeowners who use native plantings in green infrastructure projects, facilitating the development of urban wildlife corridors?
3. Should Oakland County advocate for adequate funding to ensure inspection and cleanup of toxic sites? How so?
4. If the state fails to pass a sanitary code, will you support Oakland County passing a countywide code that can act as a model for the state to follow?

Climate Change is Water Change A warming planet will have serious effects on the water cycle, which can have adverse effects on our health and economy. The Great Lakes are currently experiencing a period of record-high water levels, in part as a result of the extreme rain and wet conditions the region has experienced in recent years. According to the NOAA National Centers for Environmental Information's State Climate Summary for Michigan, "changes in seasonal and multi-year precipitation, evaporation, and temperature can affect water levels in the Great Lakes, causing serious environmental and socioeconomic impacts" and increased precipitation raises the risk of springtime flooding, which could cause delayed planting and reduced yields. Michigan has observed a number record of extreme precipitation events in the last 10 years. [1]





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Water Infrastructure

Threats loom large over the future of water infrastructure in Michigan. However, with the right policies, we can create a better, cleaner state. Right now, climate change threatens our stormwater infrastructure with increased rainfall events. The public funds required to preserve water quality under a business-as-usual scenario will be onerous, making it difficult for governments and households to adapt. Flooding will increase, and be damaging to homes. A FEMA report reveals that just an inch of flooding can cost the average homeowner $27,000. [2] When multiplied across the broader economy, this can have a significant effect. Over the last half century, average annual precipitation in most of the Midwest has already increased by 5 to 10 percent. But rainfall during the four wettest days of the year has increased by about 35 percent. [3] Our infrastructure was not designed to handle these drastic shifts in precipitation patterns.

- According to the Michigan Blue Economy Report, a project of researchers at Grand Valley State and the Michigan Economic Center at Prima Civitas: “Collectively (and conservatively) our Michigan “Blue Economy” already provides roughly 1 in 5, or nearly one million Michigan jobs, and $60 billion in annual economic impact.” [4]
- Floods from increased precipitation can do economic damage to the state’s economic output. The floods of 2014 in Detroit are an example of the threat of increased precipitation, accounting for 60% of the year’s water damage in the United States at $1.8 Billion in direct flood damages. [5]
- From National Climate Assessment: “Flooding can affect the integrity and diversity of aquatic ecosystems. Flooding also causes major human and economic consequences by inundating urban and agricultural land and by disrupting navigation in the region’s roads, rivers, and reservoirs. For example, the 2008 flooding in the Midwest caused 24 deaths, $15 billion in losses via reduced agricultural yields, and closure of key transportation routes.” [6]
- Native plants increase biodiversity in human environments and can be integrated into green infrastructure to maximize benefits to the environment. Native plants are also less recourse-intensive, helping to save water and energy costs.

Septic Code

- E. coli is a major bacterial pollutant in Michigan’s water. While E. coli is commonly talked about in reference to combined sewer overflows and large-scale agricultural operations, there is another major source of E. coli in our water that every state in the country other than Michigan has worked to eliminate — leaking and failing septic systems. [7]
- Michigan is currently the only state that does not require regular inspections of septic systems, and the problem is only getting worse with time. Septic systems are generally found in rural areas where municipal sewer systems don’t exist, or in older homes that were built prior to the municipal sewer systems that now serve two thirds of Michigan families. Eleven out of Michigan’s 83 counties currently have established septic codes which are administered by county health departments. [8]

Reference Links

1. https://statesummaries.ncics.org/chapter/mi/
2. https://www.stabenow.senate.gov/imo/media/doc/Climate%20Crisis%20Report.pdf
3. https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-mi.pdf
4. http://michiganblueeconomy.org/wp-content/uploads/2015/03/Michigan-Blue-Economy-Report.pdf
5. https://www.weather.gov/media/water/WY14%20Flood%20Loss%20Summary.pdf
6. https://nca2014.globalchange.gov/report/regions/midwest
7. https://www.cleanwateraction.org/features/michigan%E2%80%99s-aging-septic-systems
8. Ibid.