1. You contrasted a high-water-level year to another year. Any idea how these data compare generally? That is, was 2018 a “normal” beach-going year? What might 2020 (= Covid year) look like?
We found some beaches had more visitors in 2019 than 2018, while others fewer. Visitation was correlated with the size of the beach, in that beaches that lost more beach space to higher water levels in 2019, lost more visitors.

By 2020, water levels were coming down, and visitation was probably much higher on the beaches, following trends in Ohio and elsewhere towards higher levels of outdoor recreation.

2. Not sure if this came up in you research, but was there a downside to owning/operating a public beach for municipalities? Cost, other issues, etc.
This is a great question. We did not look at the costs of managing a beach. Having said that, given the $/acre values we found, which were substantial (greater than $50,000 per acre per year for all beaches, and greater than $100,00 per acre per year for many of them), I would be surprised if the costs of managing the beaches outweighed these benefits. However, this would be a good thing to investigate.

3. Great presentation! Many Ohio recreational boaters enjoy visiting Ohio beaches. Ohio last year saw the highest increase of registered boats in the last 20 years, according to data from the Ohio Department of Natural Resources. (cleveland.com/business/2022/03/2021-record-boating-year-for-ohio-industry-still-hot-two-years-into-the-pandemic.html) Any thoughts on economic impact waterborne (boaters) visitors may bring to Ohio beaches?

This is a really good point. For sure, visitation at beaches is augmented by the boaters visiting the beaches, especially around the Port Clinton, Sandusky area. We specifically did not estimate those visitors, and focused on counting only the people on the beach and in the water near the beach. There is probably some overlap in that we probably have overestimated driving visitors because undoubtedly our counts include some folks who visit by boat. However, we tried to minimize this by having clear maximum distances out from each beach to limit the number of boaters in our count.

It would be a good idea to also do a recreational boating survey in Ohio to assess the value of water activities for recreational boating. We recently conducted a survey of anglers in the state, which we’ll release shortly, but this is just anglers, not the broader set of recreational boaters.
4. Can you share a copy of the survey used? Journal articles about this research? PhD thesis?

The thesis from Michigan State University is Boudreaux, Gregory. 2021. “Economic Damages of Water Quality Warnings at Great Lake Beaches” Unpublished M.S. Thesis. Department of Agricultural and Resource Economics, Michigan State University. It is available on proquest (https://www-proquest-com.proxy.lib.ohio-state.edu/docview/2544818627), but you probably have to have library access to obtain it.


I can share both of these documents with anyone who would like to see them, but cannot post them myself. Just email me if you would like them (sohngen.1@osu.edu), and I can also put you I touch with Greg, who is getting is PhD at UC Davis now. The survey is shown in the thesis, and I’m happy to share that with anyone who would like a copy.

5. I think you mentioned that you would be looking at data on beach activity that dates earlier than 2018/19 - I think you said 2011? Will you be looking at how that activity has changed based on the changes to the lake? What else will you be looking to find out from that earlier data?

We are comparing these results to earlier results from a survey in 1997/1998, but there aren’t other data collections like this in the region to which we can compare, so that’s about the extent of what we can do. We would like to continue doing this in the future, pending research funding.

6. This is out of the scope of the study, but do you know how these costs for HABs compare to the total costs of HABs (e.g. for drinking water treatment, health impact, loss of natural resources and associated services)?

We have built up quite a few studies on the economic impacts of HABs in Lake Erie. Here are some of the citations (in addition to the ones above):


7. I know it's popular to express values spatially, but is it possible that 'better' (aka higher value) is due to greater acreage? How is this taken account of when calculating per acre values?

Good point. The per acre values are calculated as the total value determined by average value per trip times total visits, where average value per trip is a seasonal average for each beach. We haven't found congestion to be a particularly bad issue on these beaches, with the exception of east harbor in 2019, when beach size was seriously constrained. I don't think there is a strong relationship between beach size and the per acre value, but once I have measured all the beach sizes and compared it to the beach values, we'll have more information on that.

8. Did you separate those amenity values (swimming day, viewing day, sunbathing day)?

We did not separate out different types of recreation; it would have been good to do that. However, we did determine the proportion of each trip that was recreational beach visit proportion, and the values are weighted by that.

9. I think research shows that actual values vary quite a lot spatially? (especially between urban and nonurban areas)

Yes, there is a decent amount of variation across beaches. We need to spend more time with the results figuring out if there are any particular amenities driving those differences.

10. Will results be published soon so that we can use it for policy advocacy? If not, how do we best reference the work?

See answer to 4 above. We do have another paper in progress, but that is taking some time.

11. Do you think there's a significant potential in artificial expansion/construction of more beaches along the lake?

My guess is that it's hard to find places to expand public space along the Lake Erie shoreline, but these results definitely show that it's undoubtedly worthwhile in many places.

12. Beyond algal blooms and *E. coli*, how does beach litter, specifically plastics, impact tourism? Will people return to a beach where they sit, play and swim among plastics/litter?

Our enumerators provided descriptions of how they found the beaches, and trash was not a big issue. It seems that the beach managers are doing a really good job of keeping up with the likely large load of trash that is deposited on beaches, especially on weekends.