

# Mapping Conservation Opportunities to Benefit Traditionally Underserved Communities

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## Social Factors in the Chesapeake Bay Watershed

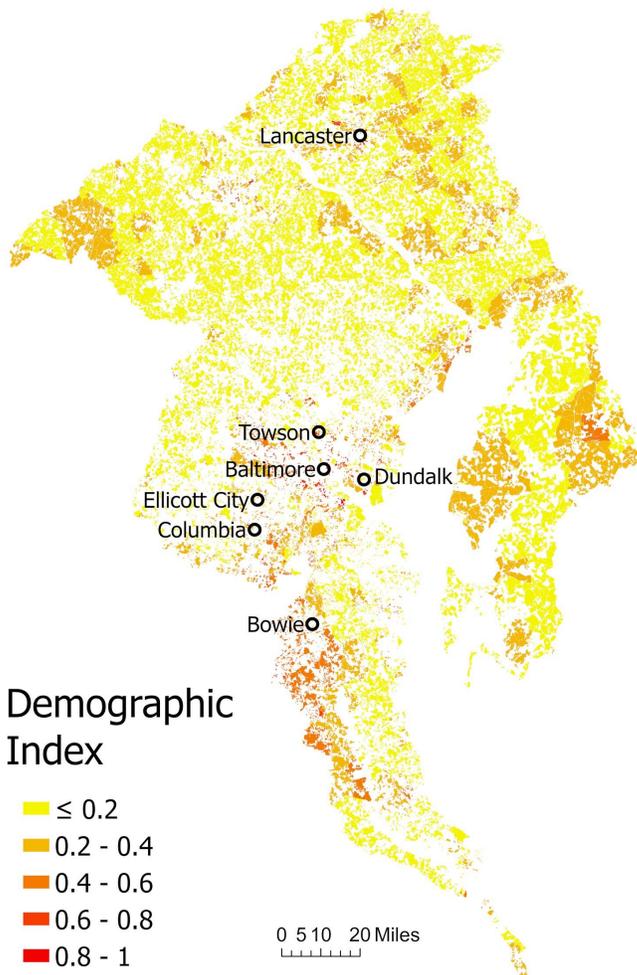
Both the climate crisis and the COVID-19 pandemic have shown disproportionate impacts on people of color, low-income, and/or indigenous communities (Lee, 2021; Plumber, 2020). Since the 1994 Executive Order 12898, environmental justice has been incorporated into governmental affairs (Lee, 2021). Census data has been frequently used to assess regions' demographic characteristics as they relate with environmental justice analysis (Villa et al., 2020). Incorporating census data provides the tools to mathematically and scientifically quantify disproportionate impacts and systemic racism throughout the Chesapeake Bay Watershed (Lee, 2021).



Activists marching in NYC on Sept. 20, 2020.  
Credit: Steve Sanchez / Pacific Press / LightRocket via Getty Images / NBC News

## The Relationship of Conservation and Social Factors

Protecting ecosystems intentionally provides an opportunity for simultaneous ecological and social benefits. Large-scale conservation initiatives can incorporate environmental justice into the planning process for conservation efforts. Incorporating demographic data representing traditionally underserved communities into land conservation provides the opportunity to recognize environmental justice as a topic worthy to inspire action.



## Spatial Analysis to Support Conservation of Areas with Co-Benefits

The Environmental Protection Agency created the EJSCREEN to visualize environmental justice, with the most recent update in 2020 (EJSCREEN, 2020). Its demographic index averages the percent of low-income households and the percent minority households by census block group. We assigned scores representing benefits to these traditionally underserved communities. Parcels in census block groups with low percents of low income and people of color received scores closer to 0, and those with higher percentages resulted in parcel scores closer to 1. This highlighted areas with high potential for social benefits alongside ecological conservation and restoration efforts.

## References

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- Plumer, B. and Popovich, N. 24 Aug 2020. "How Decades of Racist Housing Policy Left Neighborhoods Sweltering." *The New York Times*, [www.nytimes.com/interactive/2020/08/24/climate/racism-redlining-cities-global-warming.html](http://www.nytimes.com/interactive/2020/08/24/climate/racism-redlining-cities-global-warming.html).
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