



AMINA I. POLLARD

UNITED STATES

Leader of the National Lakes Assessment (NLA) at the U.S. Environmental Protection Agency, a project that provides public information on the health of lakes, ponds, and reservoirs across the United States.

She studies the environmental controls on the biological assemblages in lakes, with special interest in eutrophication and brownification.

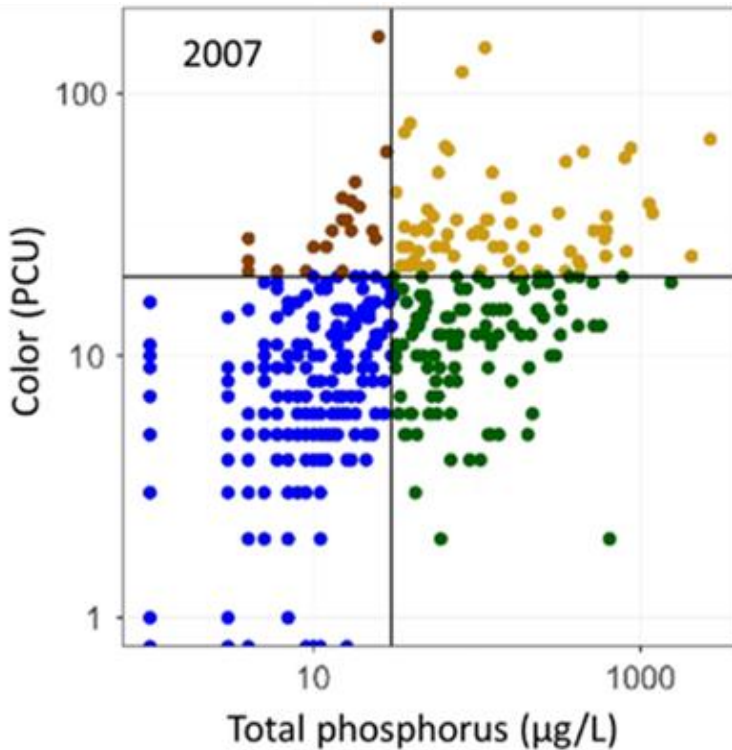
As leader of NLA, she also works at the interface of science and policy.

HERSTORY

In 2018, she became the first African-American woman to give a plenary talk at the Annual Meeting of the Association for the Sciences of Limnology and Oceanography.

EUTROPHICATION & BROWNIFICATION

Classification of water bodies as a function of nutrients and chromophoric (colored) dissolved organic matter (CDOM) concentrations:



Oligotrophic (blue)

Low nutrients and CDOM

Eutrophic (green)

High nutrients and low CDOM

Dystrophic (brown)

Low nutrients and high CDOM

Mixotrophic (murky)

High of nutrients and CDOM

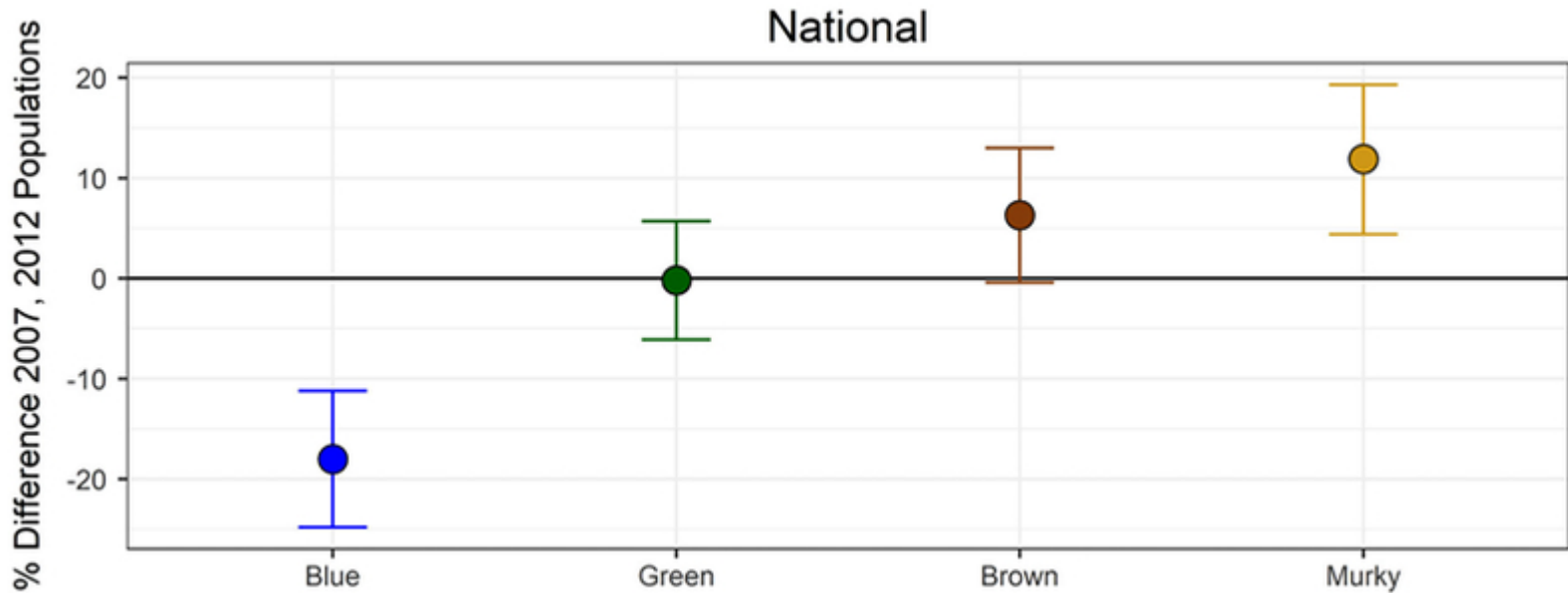
EUTROPHICATION & BROWNIFICATION

Eutrophication.

Process by which a water body becomes overly enriched with nutrients.

Brownification.

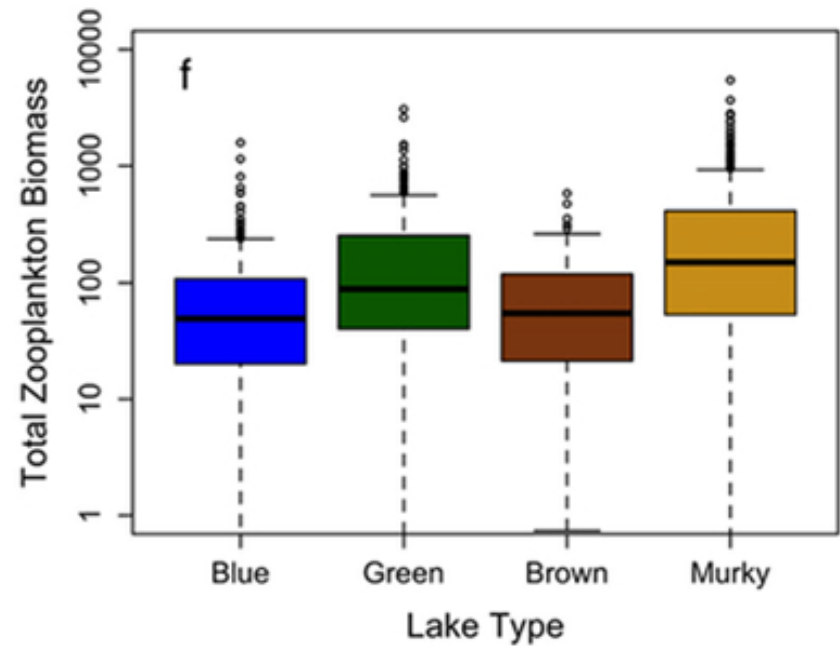
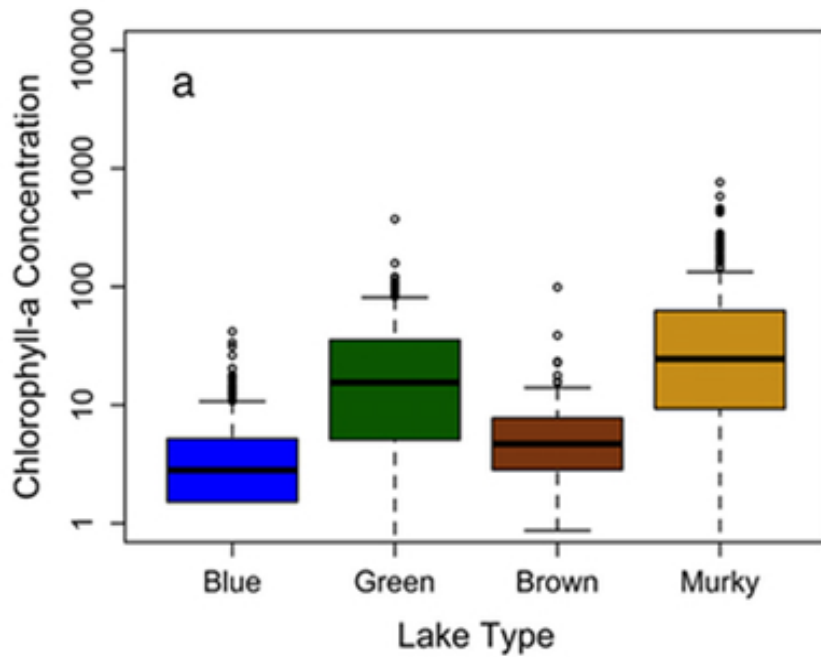
Process by which a water body become overly enriched with CDOM.



EUTROPHICATION & BROWNIFICATION

Eutrophication & Brownification affect:

1. Algae biomass (blooms)
2. Transfer of energy up to the food web



RELEVANT CONTRIBUTIONS

Pollard, A. I., Hampton, S. E., Leech, D. M. (2018). The promise and potential of continental-scale limnology using the U.S. Environmental Protection Agency's National Lakes Assessment. *Limnology and Oceanography Bulletin*, 27, 36–41.

Leech, D. M., **Pollard, A. I.**, Labou, S. G., Hampton, S. E. (2018). Fewer blue lakes and more murky lakes across the continental U.S.: Implications for planktonic food webs. *Limnology and Oceanography*, 63, 2661–2680.

Stoddard, J. L., van Sickle, J., Herlihy, A. T., Brahney, J., Paulsen, S., Peck, D. V., Mitchell, R., **Pollard, A. I.** (2016). Continental-scale increase in lake and stream phosphorus: Are oligotrophic systems disappearing in the United States? *Environmental Science & Technology*, 50, 3409–3415.

Pollard, A. I., Reed, T. (2004). Benthic invertebrate assemblage change following dam removal in a Wisconsin stream. *Hydrobiologia*, 513, 51–58.

LOOKING
FOR MORE?

You can find more information about her story and research at:

http://en.wikipedia.org/wiki/Amina_Pollard

<http://www.epa.gov/national-aquatic-resource-surveys/nla>