

Annual Chicago Joe Memorial Scholarship

Michael G. McIntosh

Central Michigan University

Economics Department

July 31, 2021

In the United States, few wetland environments have remained unchanged by human interference (Souch et al., 1998). Indiana wetlands were quite prominent during the original surveys taken between 1799 and 1843 (DNR). However, starting in the year 1884, many Indiana wetlands were destroyed due to farming and the growth of cities. Specifically, the previously largest inland wetland of North America, the Grand Kankakee Marsh (Sidle et al., 2000), was in Indiana. As a result, this paper aims to explain the importance of preserving Indiana wetlands and the impact of SB 389.

Indiana wetlands have been significantly impacted by urbanization and agricultural development through the years. More recently, Indiana SB 389 was passed and will harm Indiana wetlands by decreasing protections. For instance, Indiana wetlands suffer drainage and ditching difficulties that have the potential to dramatically change periods of surface saturation and water levels (Souch et al., 1998). Variations in water levels of near-lake environments can alter water flow which has direct consequences on pollutant/bacterial transportation and nutrient dynamics (Souch et al., 1998). For instance, in 1917, unregulated dredging, straightening rivers, tiling, and ditching led to Beaver Lake shrinking from its original 28,500 acres to 10,000 acres. While today Beaver Lake only exists in historical archives. In addition, wetlands function as natural water filters. In Indiana, the wetland ecosystem absorbs excess inorganic and organic nutrients from farm fertilizer and septic runoff, filters sediments, and traps harmful pesticides along with some heavy metals (Wetlands, 2020). Furthermore, roughly 900 species of vertebrate animals require wetland habitats during a period of their life, while 35 percent of all rare and endangered species are dependent on wetlands. In Indiana, sixty wetland-dependent animals are endangered, threatened, or of special concern (Wetlands, 2020).

In conclusion, the continued destruction of Indiana wetlands through SB 389 will harm Indiana's ecosystems. SB 389 will also further harm endangered animals. Hoosiers should work to resend SB 389 to preserve our wetlands.

References

Nature Preserves. (2021, January 29). *Indiana wetlands*. Nature Preserves.

<https://www.in.gov/dnr/nature-preserves/indiana-wetlands/>.

Sidle, W. C., Arihood, L., & Bayless, R. (2000). ISOTOPE hydrology dynamics of RIVERINE wetlands in THE KANKAKEE WATERSHED, INDIANA. *Journal of the American Water Resources Association*, 36(4), 771–790. <https://doi.org/10.1111/j.1752-1688.2000.tb04305.x>

South, C., Susan, C., Grimmond, B., & Wolfe, C. P. (1998). Evapotranspiration rates from wetlands with different Disturbance histories: Indiana Dunes National Lakeshore. *Wetlands*, 18(2), 216–229. <https://doi.org/10.1007/bf03161657>

The Status of Wetlands in Indiana. Indiana Department of Natural Resources. (2021). <https://www.in.gov/dnr/fish-and-wildlife/files/statusof.pdf>.