Chappel Creek 2023 Mini Report Card



Chappel Creek is a 24 square mile watershed that begins in Huron County and empties into Lake Erie's Central Basin between the cities, Huron and Vermilion. The land use of this watershed consist of 58% agriculture, 9% urban, and 33% natural area. The natural areas are almost entirely forested land. The watershed is narrow along with a narrow floodplain. The Creek is on the USEPA's impaired waters list for not meeting aquatic life use due to excessive sediment, nutrients, and habitat alteration.



Collecting Data

Monthly water samples were collected and analyzed by volunteers and staff from Old Woman Creek Reserve and Erie Conservation District from April through November. These indicators are combined to develop the overall scores of individual sites and the overall watershed score. Macroinvertebrate sampling will begin in 2024.

Indicators of Stream Health



Nitrogen, monitored as *nitrate*, is found in fertilizer and untreated waste. In excess, this chemical can lead to algal blooms.



Phosphorus, monitored as *soluble reactive phosphorus*, is found in fertilizer and untreated waste. In excess, this chemical can lead to algal blooms.



Turbidity is a measure of cloudiness of the water typically caused by sediment-laden runoff. Excessive sediment in the water can clog fish gills and cover macroinvertebrate habitat and fish eggs.



Vital Sign Indicators are a collective of *pH*, *temperature*, *dissolved oxygen*, and *ammonia observations*. Like our blood pressure, these parameters can identify if a serious problem is present and if one fails the whole indicator fails.

Weather Observations

Observations collected from three CoCoRAHs. org stations revealed most monthly rainfall totals below 30 year averages with the exception of August, which doubled the average.

Number of sampling events impacted by storms

If you would like to explore our stream monitoring data, learn more about our local watersheds, and find ways to improve your creek scan the QR code below:



ErieConserves.org



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