

County: Porter/Lake

Watershed ID:
HUC 10 – 0404000110

Acres: 41,544

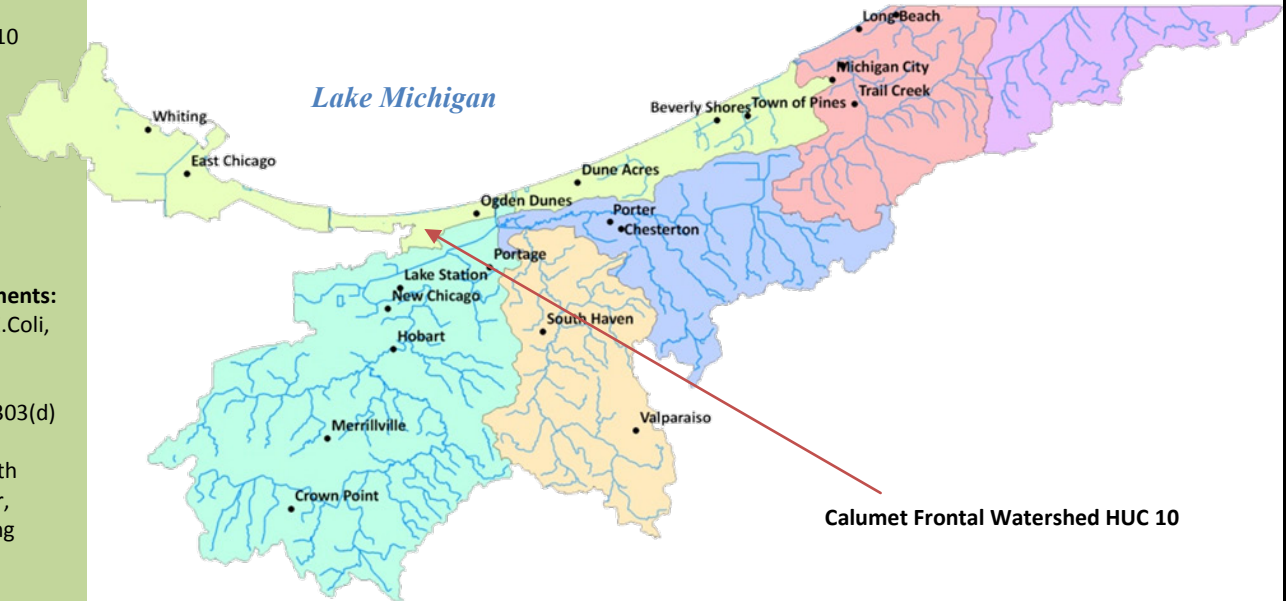
Waterway Miles: 80

**Impaired Waterway
Miles:** 53.23, 67%

State Listed Impairments:
FCA-FG, FCA-PCBS, E.Coli,
biotic communities,
Oil/Grease
Source: IDEM 2008 303(d)

Major Streams: South
Branch, Galena River,
Spring Creek, Dowling
Creek

The Lake Michigan Coastal Program supports coordination and partnerships among local, state, and federal agencies and local organizations for the protection and sustainable use of natural and cultural resources in the Lake Michigan region. The Little Calumet-Galien Watershed, encompassing the entire area below, is the focus of the coastal program's Nonpoint Source Pollution control efforts.



Calumet Frontal Watershed HUC 10

Management Efforts in the Watershed

Dunes Creek Watershed Management Plan

Year: 2006

Hydrologic Unit Code (HUC): Plan completed at the 10-digit level. 0404000110

Plan Coordinator: Save the Dunes Conservation Fund

Contact Information: 444 Barker Rd. Michigan City, IN 46360

Phone: 219-879-3937 Fax: 219-872-4875 Email: water@savedunes.org

Available at: http://www.savedunes.org/water_program/water_program/

Goal 1: Reduce nutrient and sediment by 20% by 2016.

Goal 2: Reduce pathogen concentrations to meet the state standard by 2016.

Goal 3: Improve stakeholder and public involvement.

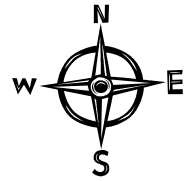
Goal 4: Improve biotic communities by 2016 so that they are partially supporting.

Goal 5: Reduce TDS and chloride concentrations to meet Indiana State Standard.

Biotic Communities: In 2002 and 2004 the Indiana Department of Environmental Management identified Dunes Creek as impaired for biotic communities. Biotic communities include all the interacting organisms living together in the same habitat. Macroinvertebrates, or animals without backbones, make up much of the aquatic biotic community in rivers and streams. They are important indicators of water quality because some species are tolerant of pollution while others are intolerant. Therefore, the presence of intolerant species may indicate higher water quality. Water quality sampling results indicated an impaired biotic community within much of the watershed. Mitigation activities identified in the plan include restoring and managing stream bank habitat, and improving flow dynamics.

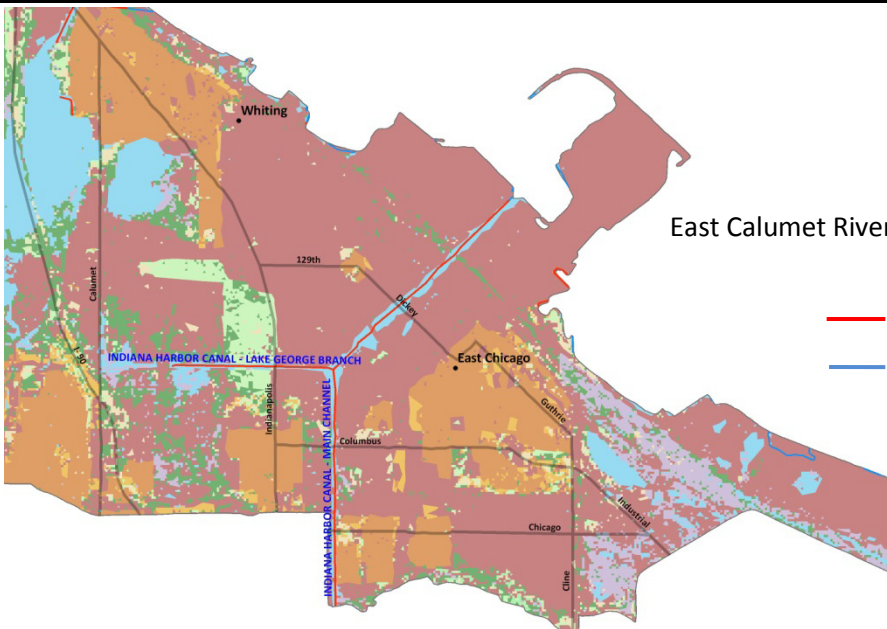
E.coli: E.coli is a bacteria associated with the intestinal tract of warm-blooded animals. The presence of E.coli in water is a strong indication of the presence of sewage or animal waste contamination. Sources of E. coli can be, but are not limited to, runoff from animal pastures and livestock pens, poorly functioning septic systems, runoff from areas with high concentrations of pet waste, combined sewer systems (a sewer receiving both intercepted surface runoff and municipal sewage), illicit discharges, and natural wildlife. E.coli is widely used as an indicator of the potential presence of waterborne disease causing (pathogenic) bacteria and viruses. Water quality samples indicated that E. coli concentrations in the Dunes Creek Watershed exceeded the Indiana state standard with concentrations ranging from 1.1 to 28 times the standard. Activities to mitigate E.coli in the plan include the remediation of failing septic systems, educating and working with residents to prevent future problems with failing septic systems, reducing agriculture sources of E.coli, and improving wastewater treatment at state park treatment facility.

Chloride: Chloride from road salt is a common pollutant in stormwater runoff throughout the Midwest, since various forms of salt are applied to roads for controlling icy, slippery road conditions. In the Dunes Creek Watershed, high levels of chloride were noted in water near the roadways. Mitigation activities identified in the plan include a further investigation of the source of chloride concentrations.

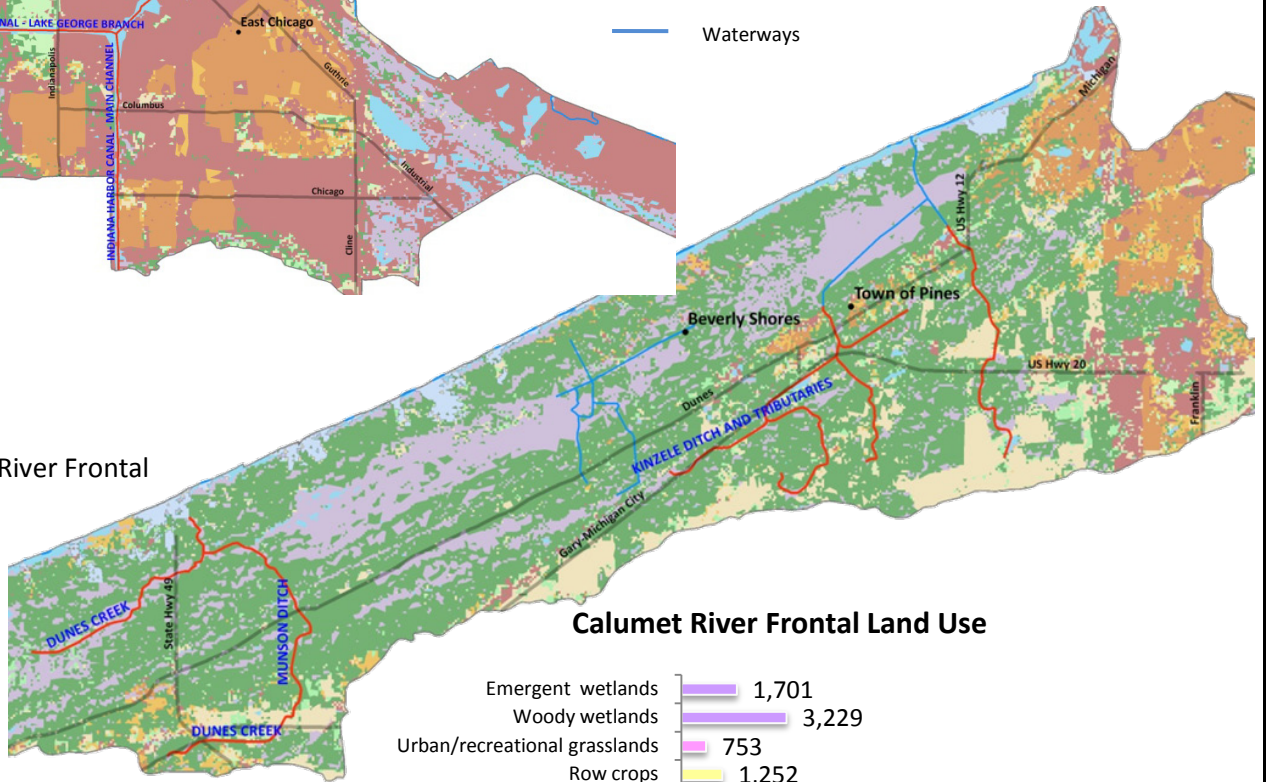


East Calumet River Frontal

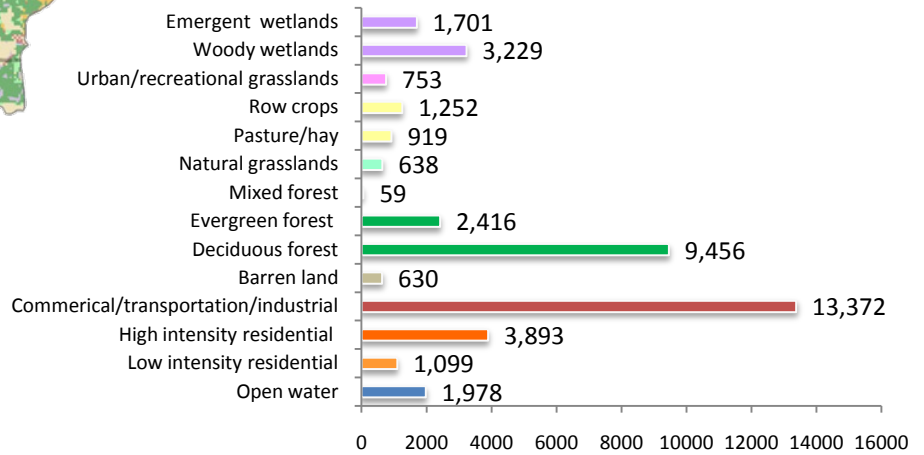
- State listed impaired waterways
- Waterways



West Calumet River Frontal



Calumet River Frontal Land Use



Hydrologic Unit Code 12

Cal. River Frontal:

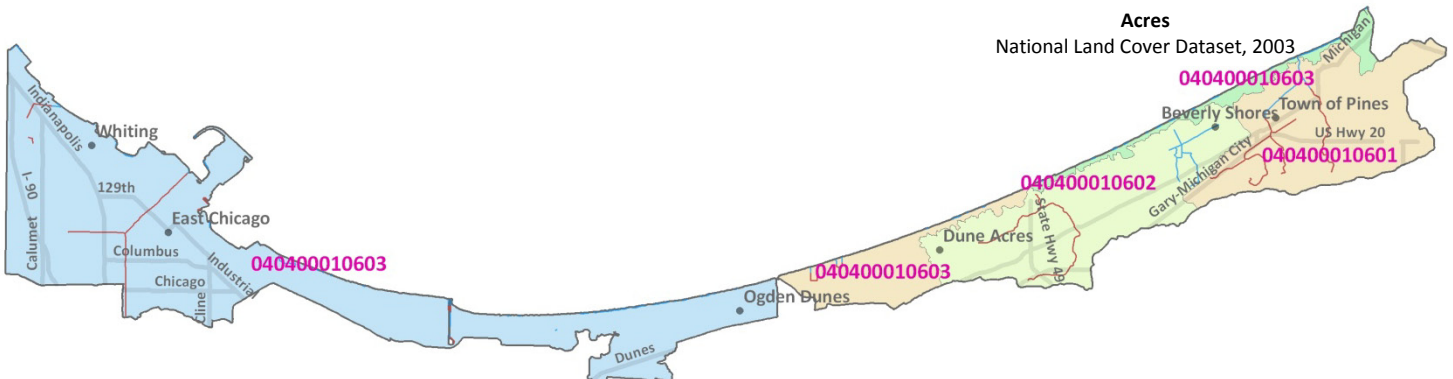
- 040400010603

Dunes Creek:

- 040400010602

Kintzele Ditch

- 040400010601



Indiana Lake Michigan Coastal Program
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<http://www.in.gov/dnr/lakemich/>