



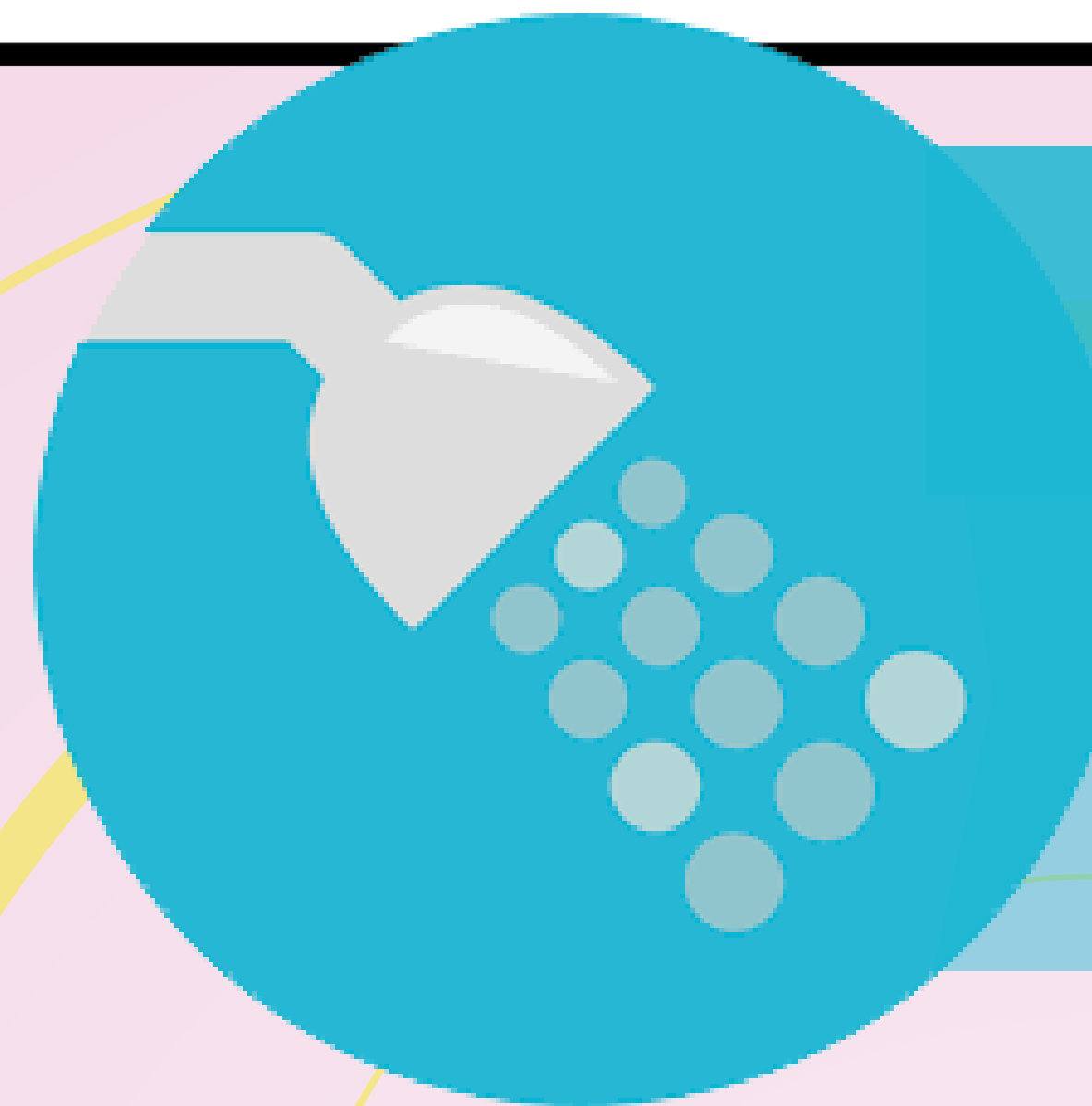
US Army Corps  
of Engineers  
Chicago District

Chicago Area Waterway System

Dredged Material Management Plan

# Why not treat the sediment?

Calumet River sediment  
contains metals, PCBs, other  
organic compounds  
(from combustion and oil)



**Chemical Extraction**  
(Use solvents to “wash”  
pollutants from the sediment)

Doesn't destroy the pollution;  
same solvents don't work for  
metals and organics.

## TYPES OF TREATMENT

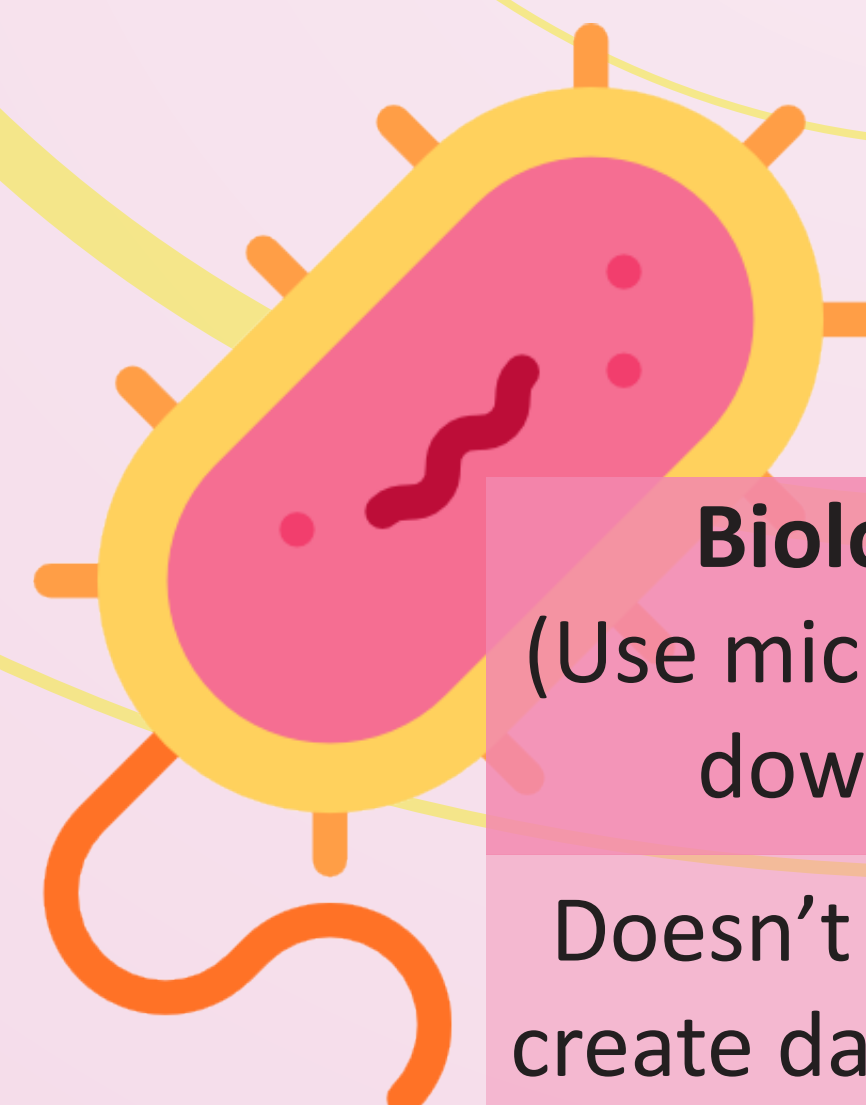


**Grain size separation**  
(Sieve out the clean sand for  
beneficial use)

Calumet sediment contains  
small pieces of slag and coke,  
which contaminate the sand  
fraction.

**Solidification/stabilization**  
(Immobilize the pollution by  
binding it into a concrete matrix,  
including making bricks or  
pavement)

Organics prevent hardening;  
only a small fraction of sediment  
can be used; pollution still  
remains in concrete – what  
happens in the future when  
we demo the site? Safe in  
residential areas?



**Biological Treatment**  
(Use microorganisms to break  
down the pollutants)

Doesn't work on metals; can  
create dangerous by-products;  
takes a long time and lots of  
handling of material.



**Combustion/Thermal Treatment**  
(Burn the contaminants)

Doesn't work on metals; creates  
air pollution and by-products  
(dioxins); leaves slag and ash for  
disposal

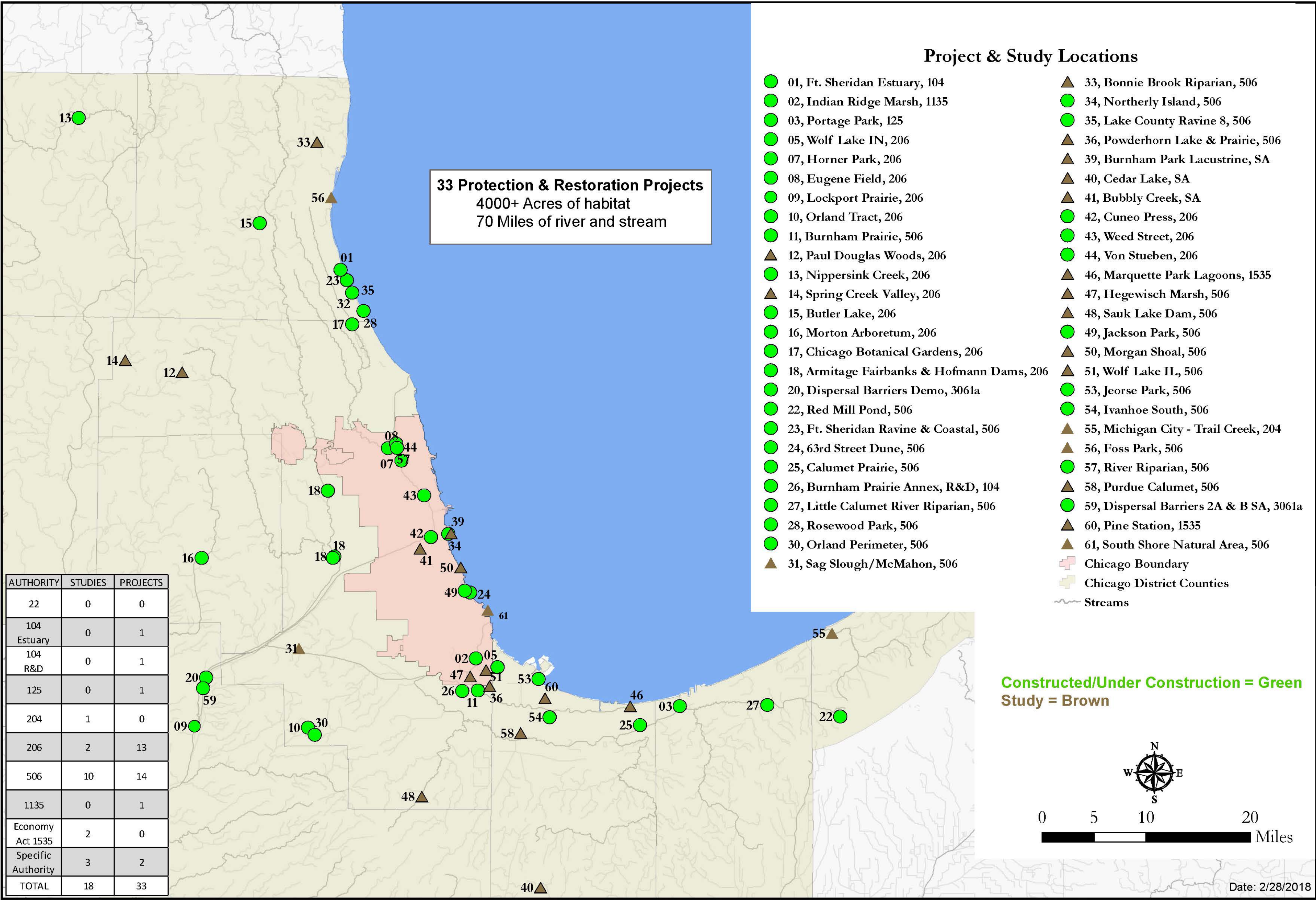




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# Chicago Area Waterway System Dredged Material Management Plan

# Ecosystem Restoration



Indian Ridge Marsh

Burnham Prairie

Wolf Lake

The Chicago District has completed, or is in the process of implementing, **33 habitat protection and restoration projects**. These projects account for:

- More than 4,000 acres of habitat
- More than 70 miles of river and stream.





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## Chicago Area Waterway System

## Dredged Material Management Plan

# Other safe Great Lakes CDFs



The Corps has constructed **47 CDFs around the Great Lakes since the 1960s** to manage dredged material in a way that protects human health and the environment.

There are **22 active CDFs in the Great Lakes**

Closed CDFs can be used for a variety of purposes. The Corps will hand over the facility to its non-federal partner once it is full. The non-federal sponsor ultimately determines the future use of the site and is responsible for ensuring that the cap is safely maintained.

**Examples of other post-closure uses around the Great Lakes include:**

- Marina expansion
- Wildlife area
- Parking lot
- Port and park expansion
- Landfill
- Airport expansion
- Recreation/park space
- Aggregate storage
- Dewatering/transfer site
- Small boat harbor