TODAY

FUTURE

Lake Michigan

During large storms, **RACINE AVE PUMPING STATION** sends untreated, raw sewage and rainwater directly into Bubbly Creek.

A post-industrial landscape blocks public access to the riverfront.

Water pumped from Lake Michigan

Water flows into Lake Michigan

Research and technology developed to clean the river produce new jobs and industries.

Recreation returns to the river

19th century industrial infrastructure is adapted for new technologies.

PHOSPHORUS RECOVERY PLANT

BIODIGESTERS use bacteria to breakdown organic matter and create a closed loop of energy, water, food, and waste.

WATER

BIOGAS

OUT

FERTILIZER

IN

RAW SEWAGE

FOOD WASTE

STORM WATER

COMBINED SEWER AND STORMWATER SYSTEM

Existing hard edge infrastructure is steep, high, and unstable.

Decomposing animal remains produce **METHANE AND HYDROGEN SULFIDE BUBBLES** that, even today, rise to the surface.

RAW SEWAGE settles on the riverbed following a Combined Sewer Overflow (CSO).

FINE GRAIN, ORGANIC REMAINS of animal waste (carcasses, hair, and offal) date back to Chicago's days as the "Hog Butcher for the World".

Samples of non-native **SILTY SEDIMENT** contain elevated levels of toxins and heavy metals.

"CHICAGO HARDPAN," as it's called by engineers, is a dense layer of sediment compacted by retreating glaciers over 19,000 years ago.

Despite our seemingly abundant water resources, regional **AQUIFERS** have been significantly depleted.

PEBBLE BED

WETLAND PLANTS filter stormwater and provide wildlife habitat.

SAND

RIVER ROCK

QUARRIED STONE

RESTORED SUBSTRATE is stepped to form terraces for wetland plantings.

CRUSHED LIMESTONE allows stormwater to permeate and recharge shallow aquifers.

Contaminated sediment is excavated and remediated off-site.

GLACIAL TILL is a pebbly clay mix formed 17,500 years ago.

Chicago was able to thrive in part thanks to its **SILURIAN BEDROCK** foundation. At Stearns Quarry in Bridgeport, stone and lime (an essential ingredient in concrete) were extracted from the rock and shipped downtown and beyond along the South Branch of the Chicago River.

Studio Gang