River Stories
Representing (and Restoring) the Chicago River through Story, Science, and Service

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The Chicago River:
Modified, polluted, degraded . . . but alive

Stories of History:
Waste, transformation, and the urban landscape

Stories of Science:
Ecology, water quality, and community engagement

Stories of Personal Connection:
Exploring, restoring, and writing the river
Rusted: North Branch of the Chicago River, as it flows through the Irene Hernandez Forest Preserve on Chicago’s NW Side (Spring 2010)
In recovery: the North Branch, seen from Ronan Park, Chicago (Oct. 2012)
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Postcard depiction of the mouth of the Chicago River
Chicago in 1857 (Chicago Historical Society)
Postcard depiction of the mouth of the Chicago River, c. 1906
Bubbly Creek, c.1911 (Chicago Historical Society)
A river reversed, a problem created

The Chicago and Calumet rivers were once tiny waterways that trickled into Lake Michigan. Beginning in 1900 the city dug a series of canals that reversed their flows so they could carry the city's waste into the Mississippi River basin, and away from the lake — the city's drinking water source. A push is now under way to engineer a system to re-establish the natural hydrological divide between Lake Michigan and the Mississippi.

Chicago area river flow, circa: 1900

Mississippi River basin

Joins other water bodies, eventually emptying into the Mississippi River just north of St. Louis

Great Lakes basin

Sources: Great Lakes Fishery Commission

Chicago's current river flow

Area where Des Plaines River and Ship canal run side-by-side

Chicago Sanitary and Ship Canal

Electric fish barrier area

Sources: Great Lakes Fishery Commission

Source: Milwaukee Journal-Sentinel, 2010
Wastewater infrastructure: the Stickney Wastewater Treatment Plant, the world's largest such facility (MWRD)
Water as waste sink: Combined Sewage Outfall, Bubbly Creek (M. Bryson)
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Stories of Science: Ecology, water quality, and community engagement

Stories of Personal Connection: Exploring, restoring, and writing the river
Assessing Water Quality (Chemistry)

Temperature

pH

Turbidity

Dissolved oxygen (DO)

Nutrients (nitrate, phosphate)

Bacterial indicators (total coliform)

Metals and organic contaminants (lead, copper, benzene, PCBs, hexavalent chromium)

Emerging contaminants (pharmaceuticals, synthetic hormones, flame retardants)
Assessing Water Quality (Biology)

Sampling macro-invertebrate benthos in the North Branch, May 2010 (M. Bryson)
Engaging the Community thru Science

Identifying macro-invertebrates from the North Branch, May 2010 (M. Bryson)
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Exploration: Canoeing the River

RU canoe trips on the Chicago River, 2009- (M. Bryson)
Mouth of Bubbly Creek, May 2009 (M. Bryson)
Cleaning up Bubbly Creek's shoreline, April 2017 (M. Bryson)
Trash washed up on Bubbly Creek's shoreline, April 2017 (M. Bryson)
Gratitude: Bubbly Creek shoreline, April 2017 (M. Bryson)
Student Water Stories

The Water in Schaumburg Project
Schaumburg's Sustainable Future
Fall 2011

Urban Nature Essay
SUST 390 Writing Urban Nature
2015-

Water Body Essay Assignment
SUST 220 Water
2016-

Schaumburg's Sustainable Future

A Sustainability Studies Project at Roosevelt University

Salt Creek Watershed

by Tom Hareland, Angela Lebron-Cola, and Mary Beth Radeck
(December 2011)