The Chicago River

Transformed, Exploited, and Abused – but Still Alive



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Sustainability Studies Program at RU Chicago River Student Congress 23 February 2013









The Des Plaines River in downtown Joliet, IL (2011)



Chicago's River



Upper North Branch of the Chicago River (Oct. 2012)







North Branch of the Chicago River (Spring 2010)







A chicken standing upon Bubbly Creek, c.1911 (Chicago Historical Society)







The Morton Salt Plant, North Branch of the Chicago River (Oct. 2011)



Reversed and Invaded

A river reversed, a problem created

The Chicago and Calumet rivers were once tiny waterways that trickled into Lake Michigan. Begining 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.





Sources: Great Lakes Fishery Commission

Source: Milwaukee Journal-Sentinel (2010)



Yet Still a Living Ecosystem



The North Branch, seen from Ronan Park (Oct. 2012)

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Conserving the River

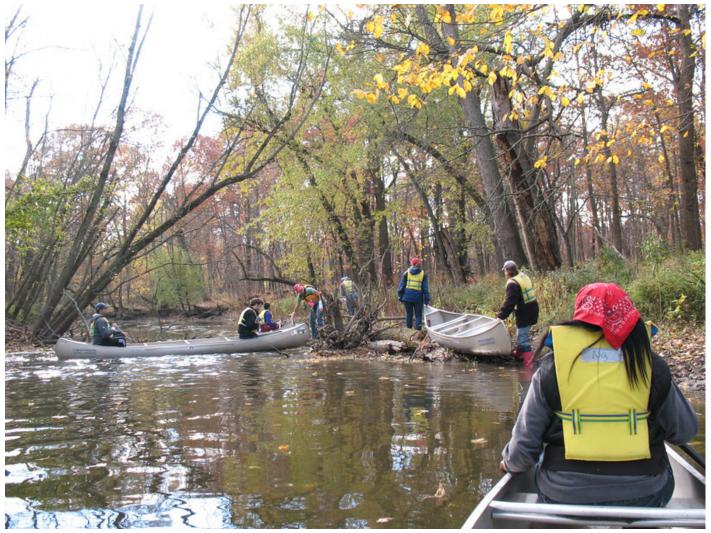


Understanding the river as a modified natural ecosystem (natural sciences)Developing water quality policies (social and natural sciences)Representing the river as a cultural resource (arts and humanities)Restoring the river: water quality, biodiversity, riparian zone vegetation, citizen access and recreation (all disciplines)

Cultivating a sense of place

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Canoeing the North Branch



Paddling the West Fork of the Upper North Branch: here we portage around a fallen tree, within the greenway of the Cook County Forest Preserve (October 2012)

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Canoeing the South Branch



Canoe trip down Bubbly Creek, an industrialized tributary of the South Branch of the Chicago River (May 2009)



Canoeing the Confluence



Heading south into the Loop where the branches meet; Wolf Point in the background (October 2011)



Temperature

pН

Turbidity

Dissolved oxygen (DO)

Nutrients (nitrate / phosphate

Bacterial indicators (coliform)

Using the Tools of Science



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

Emerging contaminants (pharmaceuticals, synthetic hormones, flame retardants)

Combined Sewage Outfall

Confluence of the North and South Branches (October 2011)



Creating Opportunities for Discovery



Identifying macro-invertebrates from the Chicago River's North Branch (May 2010)







Photo by Ryan Hodgson-Rigsbee ("The River" 2010)



Linking Land and River



Growing Power's Iron Street Farm, on the west bank of Bubbly Creek (2012)



Planting a Seed





Photo by Ryan Hodgson-Rigsbee ("The River" 2010)