From Waste to Wonder

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The Great Lakes are the world's largest surface freshwater system, containing approximately 21% of the world's surface fresh water supply. These expansive inland freshwater seas contain 84% of North America's surface freshwater and support a population of more than 30 million people.

Known as America's "Third Coast", The Great Lakes are an environmental treasure with a shoreline that measures over 10,000 miles. This vast freshwater network provides the Midwest with drinking water, food, economic opportunities and recreational activities, making it one of North America's greatest natural resources.

The Great Lakes Region was once the industrial core of the country, but as we know, the territory has suffered from dein-dustrialization, leaving these vast lakes lined with "Rust Belt" Cities that are scarred from shifting populations and industries that have migrated elsewhere.

From Waste to Wonder is an on-going design research studio that asks students to consider the architectural, cultural, economic and environmental issues tied to the wasted waterfronts of America's "Third Coast". Seen through an optimistic lens, these post-industrial environments present a tremendous set of opportunities.

Landscape Urbanism plays a major role in the way we understand and approach these urban issues. Students conduct intensive research at the start of the semester, producing a series of maps and infographics to better understand and explain the wasted waterfront conditions of The Great Lakes Region. Students work at a variety of scales as they explore ideas related to water remediation, urban vacancy and the reuse of urban infrastructure.

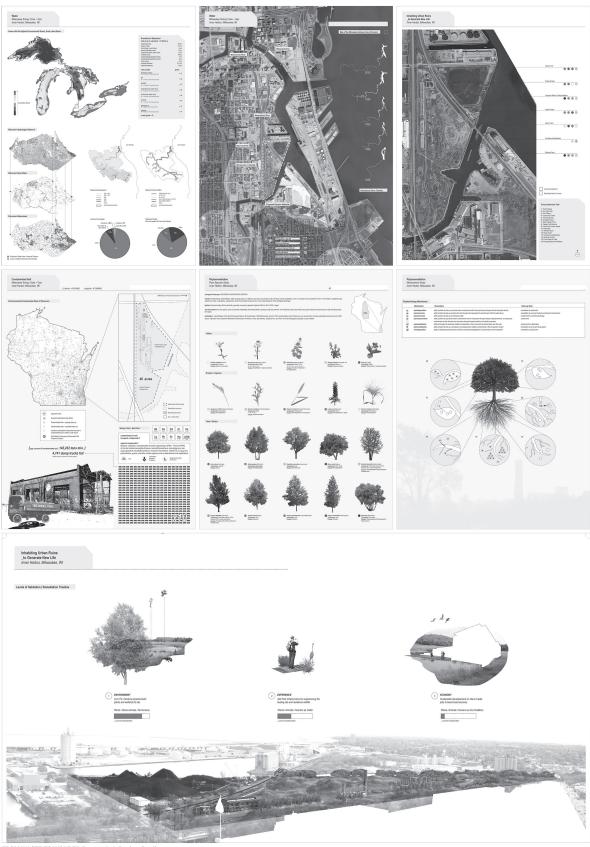
A series of precedents, from global to local are analyzed to understand how other designers have struggled with similar issues. Research and design focuses on hydrology, landscape, ecology, infrastructure and urban form. Students are challenged to synthesize the information they obtain throughout the first half of the semester to develop creative design strategies at the intersection of architecture, landscape and infrastructure. Student design proposals transform wasted waterfronts into productive urban environments that remediate the post-industrial landscape, provide educational opportunities and reinvigorate "Rust Belt" Cities.

NOTE

1. "The Great Lakes." *EPA: The United States Environmental Protection Agency*. N.p., 23 Oct. 2015. Web.

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FROM WASTE TO WONDER Research & Design Studio Re-Inhabiting the Ruin by Graduate Student Rachel Momenee