Fluid Geographies: LIQUID PLANS FOR THE MISSOURI RIVER BASIN

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[Detail] Map of the Sloan Plan for the Missouri River Basin. Source: U.S. Bureau of Reclamation, 1944.

OVERVIEW

Covering over 500,000 square miles and extending across ten U.S. states and two Canadian provinces, the *Missouri River Basin* is one of the most important interior watersheds of North America. In addition to holding a wealth of natural resources, the basin provides nearly half of U.S. wheat, a quarter of its grain corn, and holds a third of its cattle with an annual value of \$100 billion. The basin has been drastically altered during the 20th century for the purposes of flood control, water supply, irrigation, energy developments, navigation, and recreation. In the process of these physical transformations many indigenous communities were violently displaced.

A number of recent events, including the Missouri River Flood of 2011, record droughts in 2012, and protests surrounding the construction of the North Dakota Access Pipeline in 2016, have underlined a growing need to reevaluate how natural resources are managed. This becomes the charge for the studio, which will organize itself as the *Missouri Valley Authority*—a trans-boundary and visionary agency directed to coordinate and rethink the relationships between competing land uses and developments within the basin.

The studio questions the designer's role and agency in operating, representing and (re)designing issues at the scale of the watershed—and how this can be translated and implemented at a site scale. We will engage the work of early regionalists, including John Wesley Powell, Patrick Geddes, Benton MacKaye, Lewis Mumford and Warren H. Manning. In particular, we will deploy MacKaye's notion of *"liquid planning"*—organizational strategies whose boundaries and networks are porous and flexible in order to accommodate the spatial and temporal complexities of landscape, infrastructure, urbanism and ecology.

The first half of the semester involves design research into the cultural, environmental, economic and spatial conditions that have emerged, or were erased, over the past century in the Missouri River Basin. Attention will be given to the relationships among water, energy, food and infrastructure networks with indigenous and colonial ways of life. This historic understanding provides the foundation for exploring alternative spatial configurations and protocols for reorganizing the territory, which will be the focus of the second half of the semester.

The studio aims to produce provocative proposals that balance form-making with the implementation and orchestration of scenarios and spatial processes over time. This means students will have to negotiate when and where to exert, or relinquish, control in order to generate desired outcomes. Collectively, the work seeks to contribute to discussions surrounding the means and implications of designing at the watershed scale, and how this knowledge can be applied to territories around the globe with similar challenges.