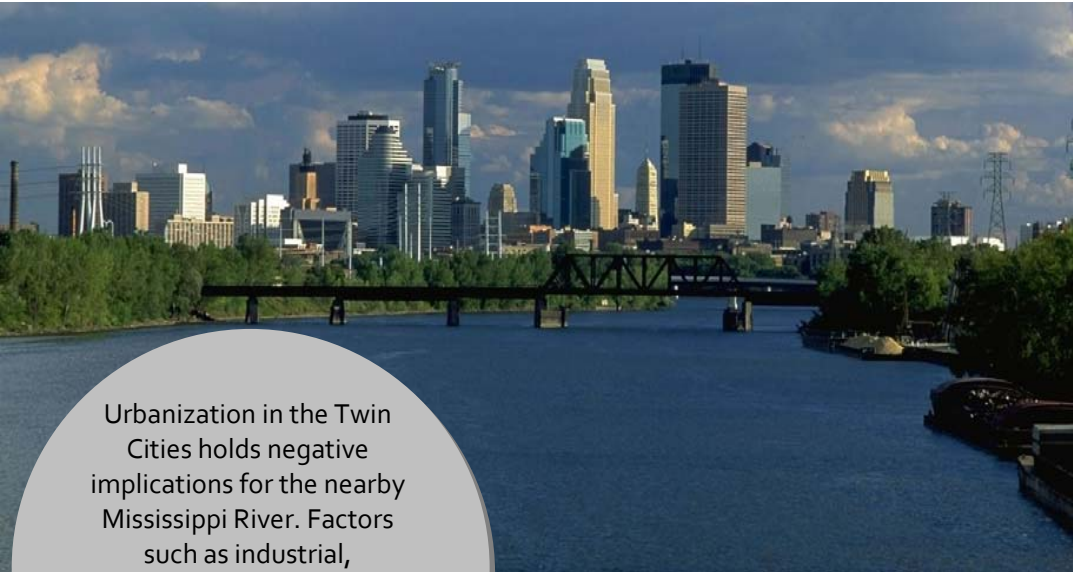


URBANIZATION ALONG THE MISSISSIPPI

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Urbanization in the Twin Cities holds negative implications for the nearby Mississippi River. Factors such as industrial, residential, and energy development and transportation all play a role in impacting one of this country's historical water bodies.

RESIDENTIAL DEVELOPMENT

When residential development occurs along a river and in the surrounding watershed there are a series of predictable effects:

- Loss of vegetation and habitat for land and air species
- Loss of soil due to water and wind erosion, loss of water absorption
- Increased water pollution due to urban runoff

POWER DEVELOPMENT

Xcel Power Company ran three coal power plants in the Twin Cities throughout the last century, two of which were located directly on the Mississippi River. Its recent decision to convert from coal to natural gas will be positively impact the water quality of the Mississippi in several ways:

- Emissions of CO₂, SO₂, NO_x and particulates, matter which acidifies and affects the growth of organisms, will be significantly lowered
- Mercury, which causes a range of defects in both animals and humans, will be completely eliminated from the emission process



INDUSTRIAL DEVELOPMENT

Since around 1854, industrialization in the Twin Cities has heavily polluted the Mississippi River. Although industrial uses have declined, they still greatly affect the quality of water in the Mississippi. One such facility, 3M Cottage Grove, has added both point and non-point source pollution since its establishment in 1947.

- PCF chemicals, known to cause cancer in animals, have been released into the water, causing concern for human and environmental health.



TRANSPORTATION

The main spans of Minneapolis' I-35W bridge collapsed into the Mississippi River on August 1, 2007. The environmental impacts and political outcomes of this bridge's operation, site, and failure reflect both transportation's effects on the river. Examples include but are not limited to:

- Implementation of the Stormwater Pollution Prevention Plan
- Construction of a replacement bridge with various environmental benefits
- Air and water quality monitoring by MWMO

