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Pricing Great Lakes Water to Reflect its Value

WaterSmart Innovations Conference

Las Vegas, Nevada

October 7, 2010

Pricing Great Lakes Water to
Reflect its Value



The Road Map

1. The Great Lakes Overview
 - A. Water Resource Status
 - B. Regional Management Framework
 - C. Water Conservation Activities
2. Value of Great Lakes Water Initiative
3. The Wisconsin Experience

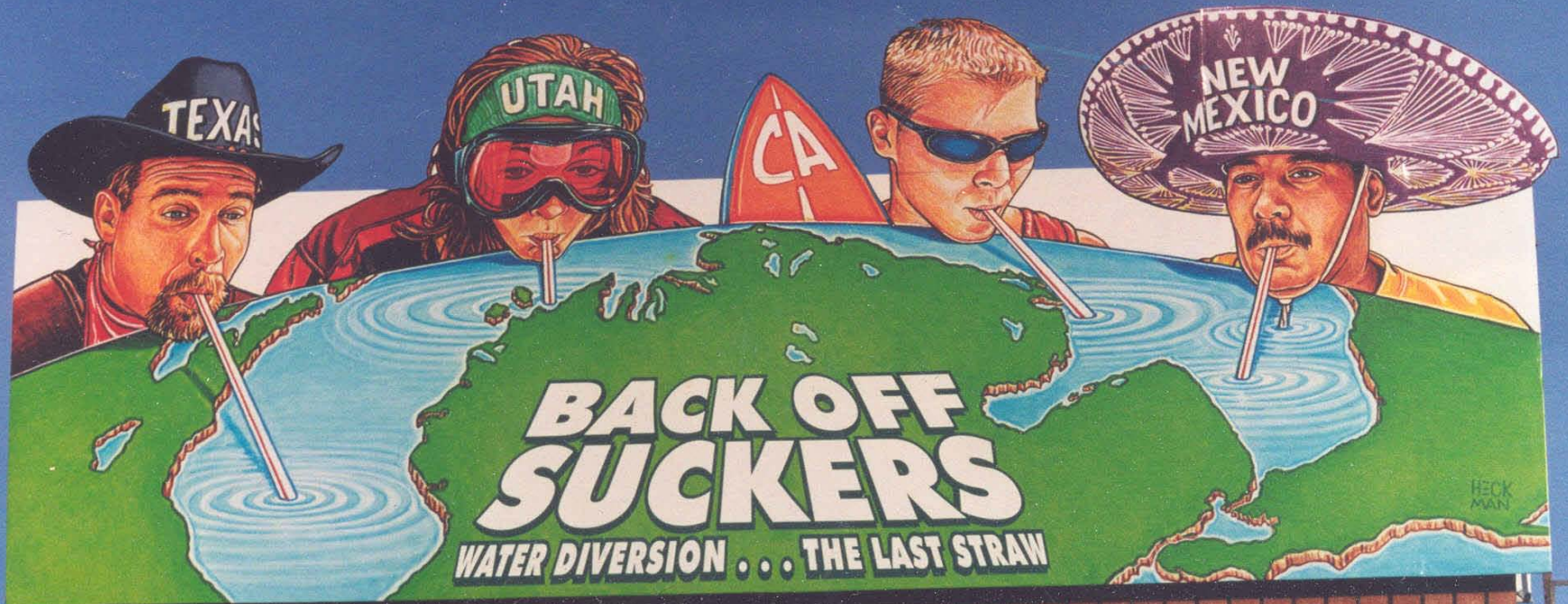
“When it comes to water,
the past is no longer a
reliable guide to the future”

-From *Water: Adapting to the New Normal*
by Sandral Postal

- 94,000 mi²
- 6 quadrillion gal
- 20% of the
World's supply



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INFINITY

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A History of Bi-national Management

- Boundary Waters Treaty of 1909 between Great Britain and the United States
- 1983 Task Force on Water Diversion and Great Lakes Institutions
- Great Lakes Charter of 1985
- 2001 Annex to the Great Lakes Charter
- Great Lakes-St. Lawrence River Water Resources Compact/ Agreement

Compact Requirements

By Dec. 8, 2008, states must:

- Be ready to review proposed exceptions for diversions
- Create Compact Council and begin organization

Within one year, states must:

- Submit progress report on programs and list of baseline volumes

Within two years, states must:

- Develop conservation and efficiency goals, implement a program, and promote conservation measures

Compact Requirements

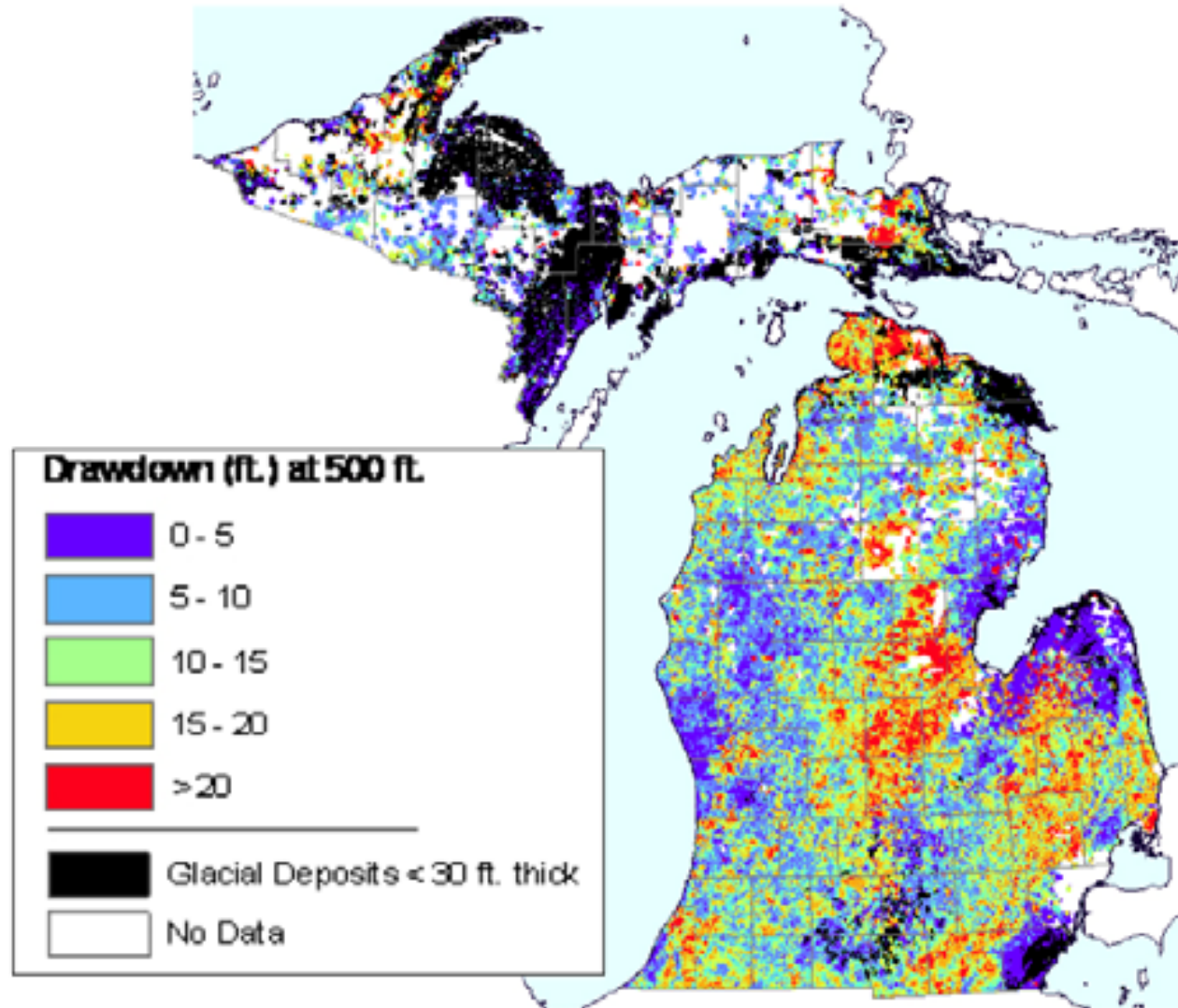
Within five years, states must:

- Develop a water management program for new or increased in-basin withdrawals and consumptive uses
- Give states and provinces notice of consumptive use proposals of 5 mgd or greater
- Maintain a water resources inventory
- Create a registration program for persons who withdraw 100,000 gpd or more, or divert water of any amount
- Collectively conduct an assessment of cumulative impacts of water uses

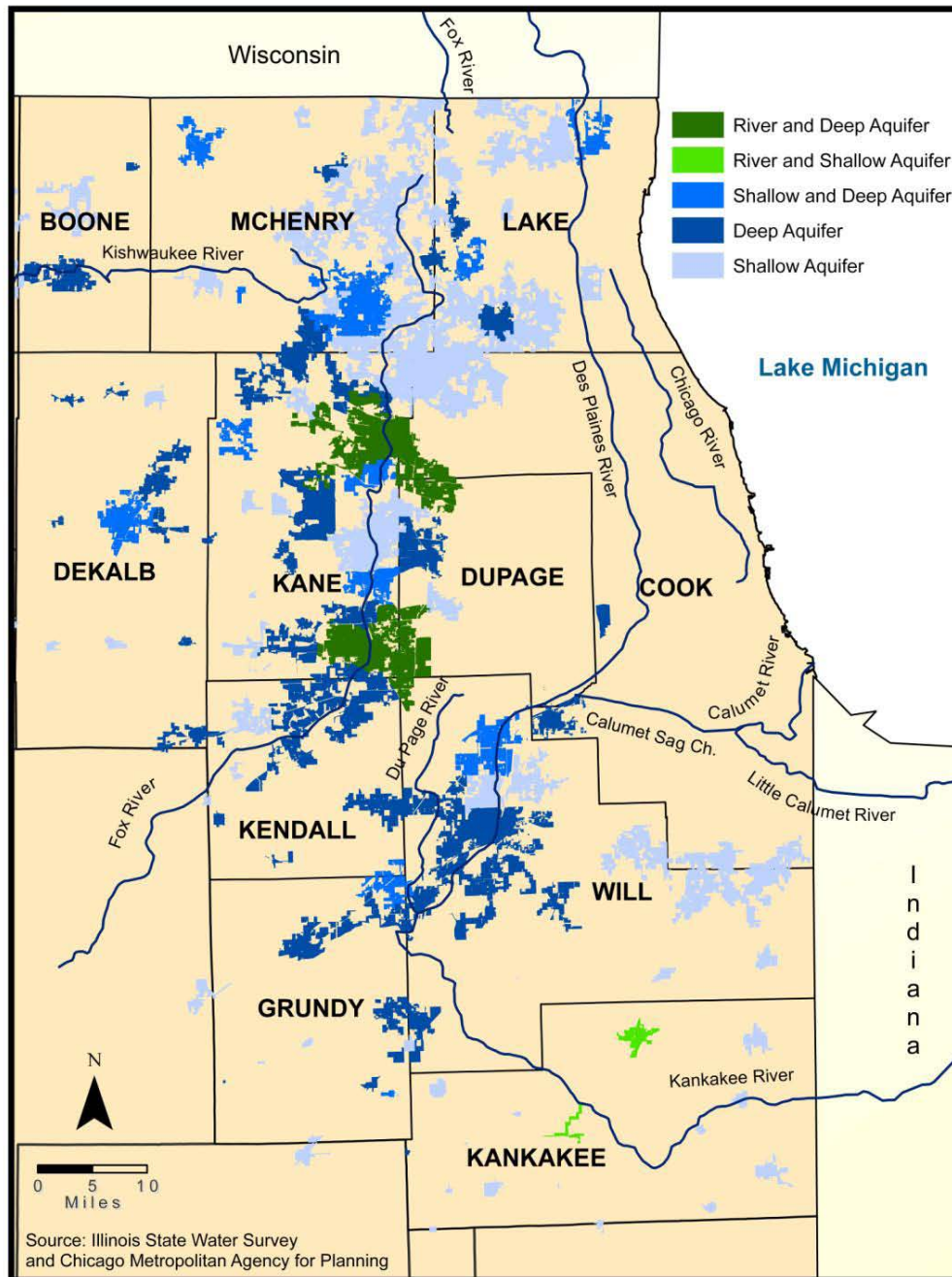
Compact Standard

- Return of water to source watershed less consumptive use
- No significant individual or cumulative adverse resource impacts
- Incorporation of environmentally sound & economically feasible water conservation measures
- Compliance with all applicable laws
- Reasonable use
 - Balances efficiency; economic, social, and environmental effects; supply potential of source; avoidance/mitigation of impacts; restoration plan if any

Drawdown from Glacial Aquifers



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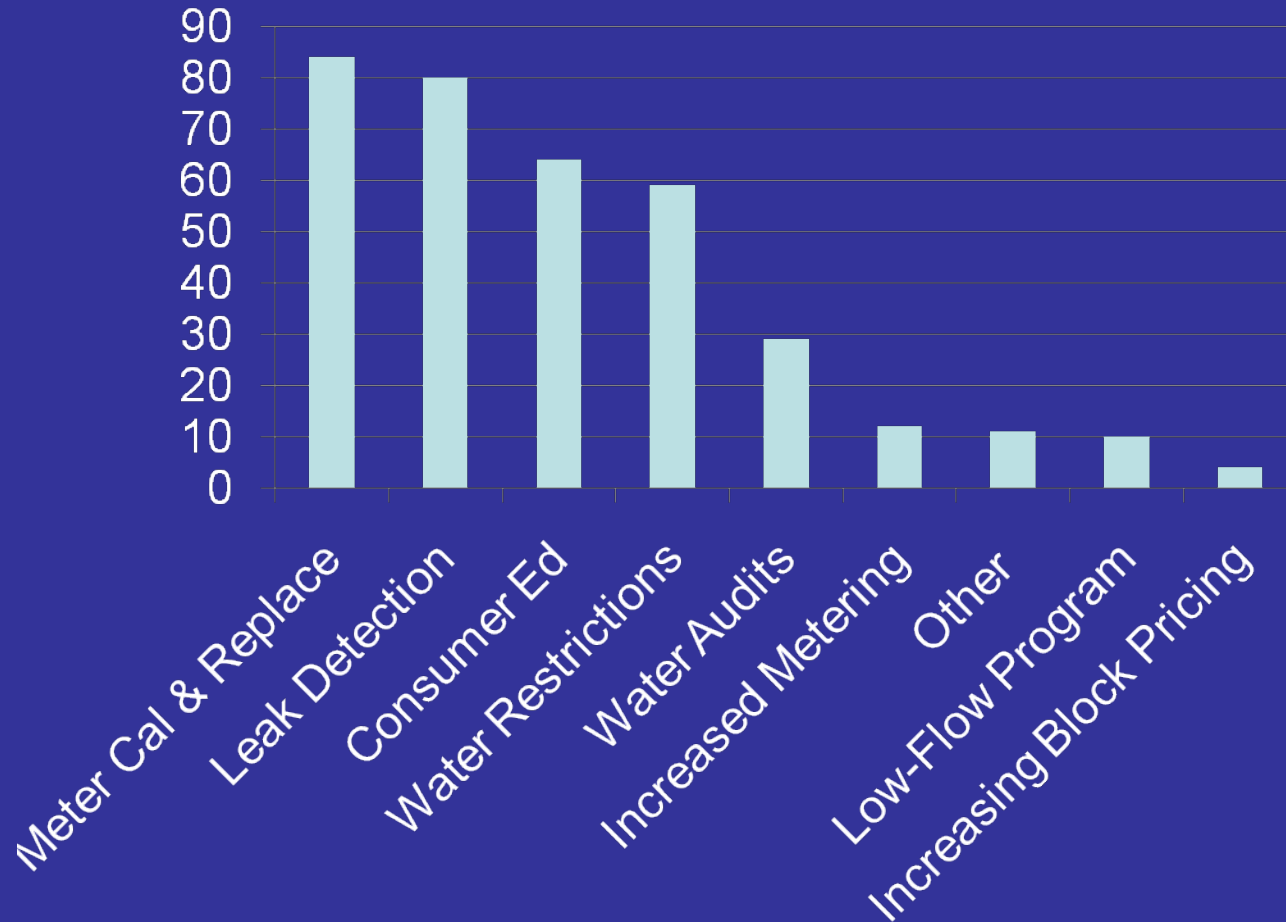
Increasing Population Declining Groundwater

Conservation Efforts in the Great Lakes Region

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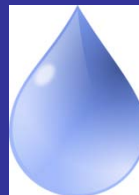
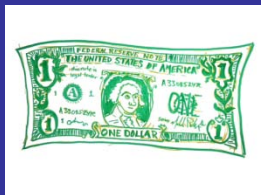


Water Conservation in the Great Lakes, 2004



Perspectives on Water Conservation:
The Great Lakes Experience

The Great Lakes Commission's Value of the Great Lakes Water Initiative



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Meet the VGLWI Project Team

Advisors

U.S. Geological Survey
Minnesota Dept. of Natural Resources
Wisconsin Public Services Commission
Institute for Fisheries Research
Great Lakes-St. Lawrence Cities Initiative
Michigan State University
Michigan Tech University
Yale University
Milwaukee Water Works
City of Ann Arbor
American Water Works Association, MN Chapter
Milwaukee Riverkeepers
The Nature Conservancy
Great Lakes Environmental Law Center

Core Team

Michigan State University
Alliance for Water Efficiency
Alliance for the Great Lakes
Great Lakes Commission

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Hypothesis

Water revenue structures that more closely reflect the full cost of water production and use are an effective tool that will reduce cumulative water use impacts under the proper conditions



Questions to Answer

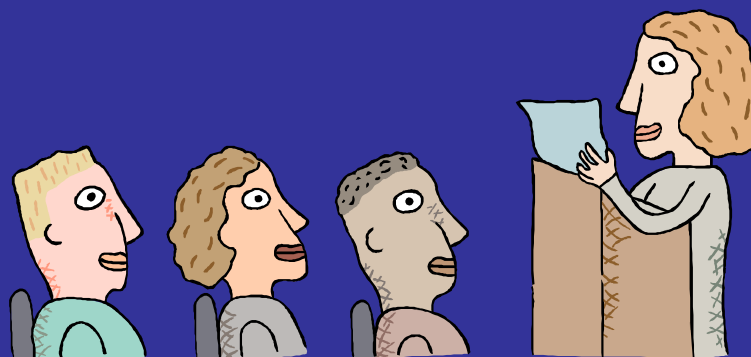
- What is the importance of energy costs in a water bill?
- Does use reflect the full costs of providing water, including ecological costs?
- Is the cost of providing water to consumers fully transparent?
- If not, how can an efficiency-oriented rate structure be used to increase the transparency or water pricing?
- Will an efficiency-oriented revenue structure incentivize a change in behavior in the Great Lakes basin?
- What are the relative impacts of various pricing features of a water revenue structure?

More Questions to Answer

- What kind of ecosystem outcomes will result from conservation or efficient use of water?
- Which areas in the Great Lakes basin are more vulnerable to changes in water supply, and therefore, more likely to show ecological benefits from water conservation?
- Does an institutional framework (such as state regulatory program) for water utilities lead to more efficient use and conservation of Great Lakes water?

The Audience

- Rate setting officials
 - Local elected
 - State level public service/ commerce commissions
- State regulators, water managers and legislators
- Water Utilities



Work Plan

1. Conduct an initial meeting of the Project Team
2. Conduct a lit. review
3. Identify sub-watersheds in the GL basin
4. Survey & analyze financial drivers to rate setting
5. Conduct 2-3 workshops across the basin
6. Conduct a feasibility analysis
7. Develop recommendations toward pricing water to achieve ecosystem outcomes
8. Synthesize info into a feasibility report
9. Disseminate feasibility report & other project deliverables
10. Design a follow-on demonstration project (i.e., project proposal)

Survey and Analysis of Financial Driver for Water Rate Setting

Lead: Jan Beecher, Michigan State University

Contributor: Ed Glatfelter, Alliance for the Great Lakes

Deliverables:

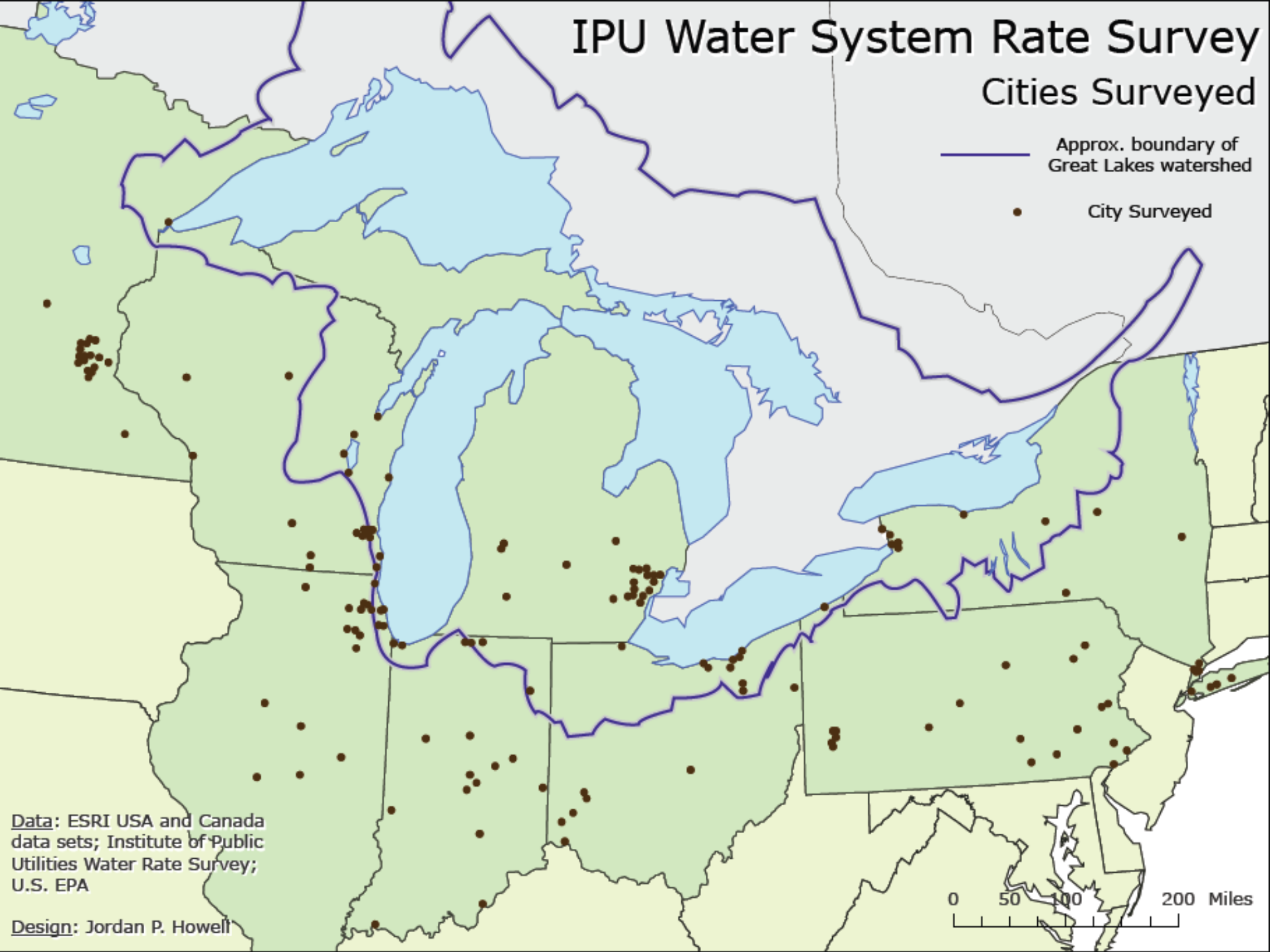
- Dataset of financial information from Great Lakes Utilities
- Briefing Paper: Financial drivers to rate setting in the Great Lakes

IPU Water System Rate Survey

Cities Surveyed

— Approx. boundary of Great Lakes watershed

• City Surveyed



Data: ESRI USA and Canada data sets; Institute of Public Utilities Water Rate Survey; U.S. EPA

Design: Jordan P. Howell

Preliminary Survey Findings

- 75% rates were readily available on the utility website.
- The highest quality reporting is from Wisconsin
- Majority follow a uniform or decreasing block.
- Minnesota has more increasing block rates
- 6 are seasonal rates.

Workshops for Community Officials

Lead: Mary Ann Dickinson, Alliance for Water Efficiency

PURPOSE:

1. Better understand rationale for current water pricing
 - Regulation, politics, culture
2. Identify state and provincial regs/policies for
 - water rates and other revenue streams
3. Identify and external economic drivers for pricing



Racine, WI
November 8

Ann Arbor, MI
October 12

Buffalo, NY
November 10

Project Outcomes

- Recommendations for overcoming barriers
- Ideas for future pilot study location

For more information

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