

ON TO 2050

Proposed ON TO 2050 Environment Recommendations

CMAP Land Use Committee
March 21, 2018

Environmental recommendation areas

- Manage and Conserve Energy and Water Resources
- Expand and Improve Parks and Open Space
- Promote Sustainable Local Food

Other environmental themes

- Greenhouse gas emission reductions, climate mitigation, brownfield remediation

A region prepared for climate change

- Plan for climate resilience
- Intensify climate mitigation efforts

Development practices that protect natural resources

- Improve natural resources through the redevelopment process
- Preserve and enhance key natural and agricultural areas

Integrated approach to water resources

- Manage stormwater to reduce flooding
- Protect and enhance the integrity of aquatic systems
- Coordinate shared water supply resources

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A region prepared for climate change

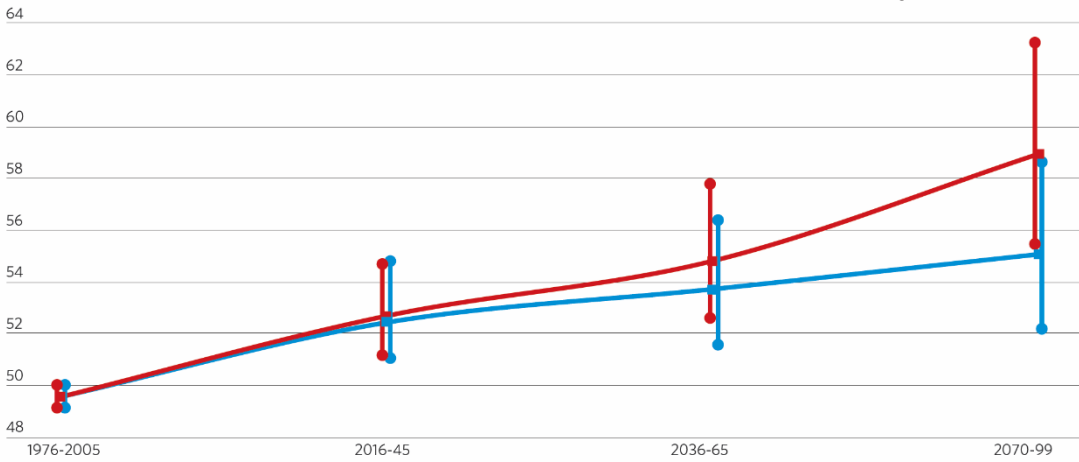
Plan for climate resilience

Intensify climate mitigation efforts

Climate change context

Range of projected daily average temperature, in degrees Fahrenheit, in northeastern Illinois

■ High-emissions scenario mean
■ Low-emissions scenario mean

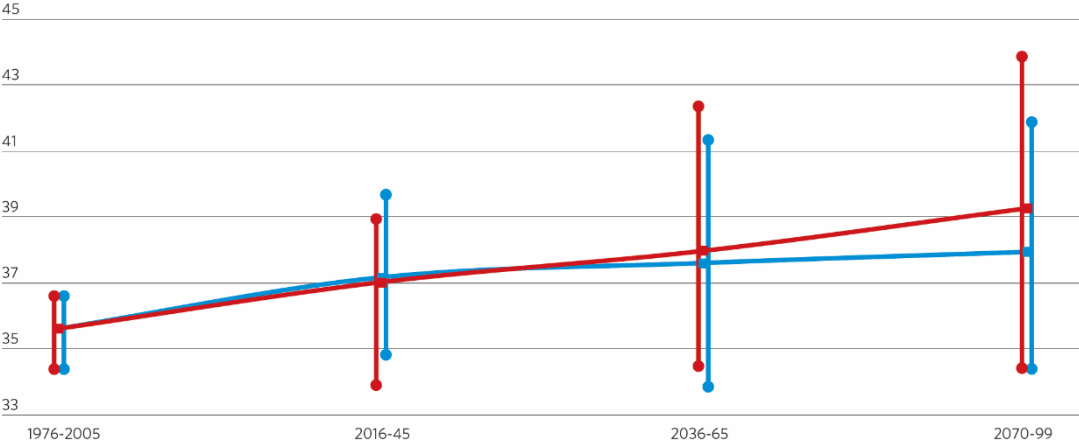


Note: Under a scenario that assumes emissions will continue to increase, regional temperatures are expected to increase by nine degrees Fahrenheit above historical levels. Under a lower emissions scenario, regional temperatures are expected to increase by five degrees above historical levels.

Source: D.W. Pierce, D. R. Cayan, and B. L. Thrasher, 2014: Statistical downscaling using Localized Constructed Analogs (LOCA). Journal of Hydrometeorology, 15, 2558-85.

Range of projected annual total precipitation, in inches, in northeastern Illinois

■ High-emissions scenario mean
■ Low-emissions scenario mean



Source: D.W. Pierce, D. R. Cayan, and B. L. Thrasher, 2014: Statistical downscaling using Localized Constructed Analogs (LOCA). Journal of Hydrometeorology, 15, 2558-85.

Plan for climate resilience

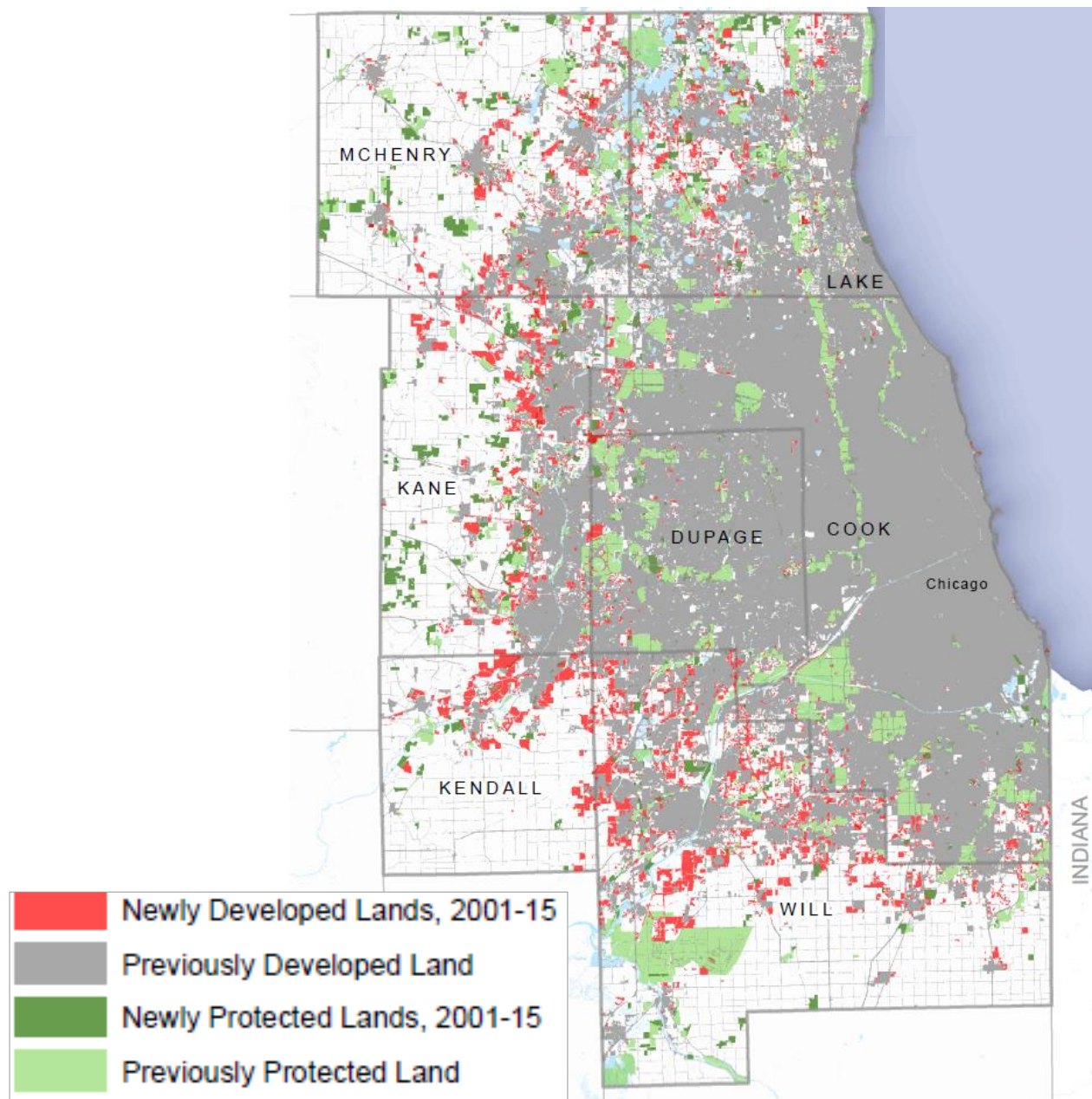
- Incorporate climate resilience and adaptation measures into planning and development
- Strengthen grey and green infrastructure to withstand climate change
- Improve the operational response to weather events to ensure mobility
- Create a more flexible and decentralized energy grid
- Diversify agricultural systems to promote resilience
- Explore a regional climate resilience platform to coordinate initiatives and provide data and resources

Development practices that protect natural resources

Improve natural resources through the redevelopment process

Preserve and enhance key natural and agricultural areas

Preservation context



Improve natural resources through redevelopment

- Apply environmental best practices
- Develop strategies for addressing environmental challenges in disinvested areas
- Increase community greening efforts

Preserve and enhance key natural and agricultural areas

- Identify high-priority natural areas and key agricultural lands
- Plan for the protection of agricultural and natural lands
- Prioritize and fund preservation and stewardship of critical lands
- Deploy sensitive development techniques in new development

Integrated approach to water resources

Manage stormwater to reduce flooding

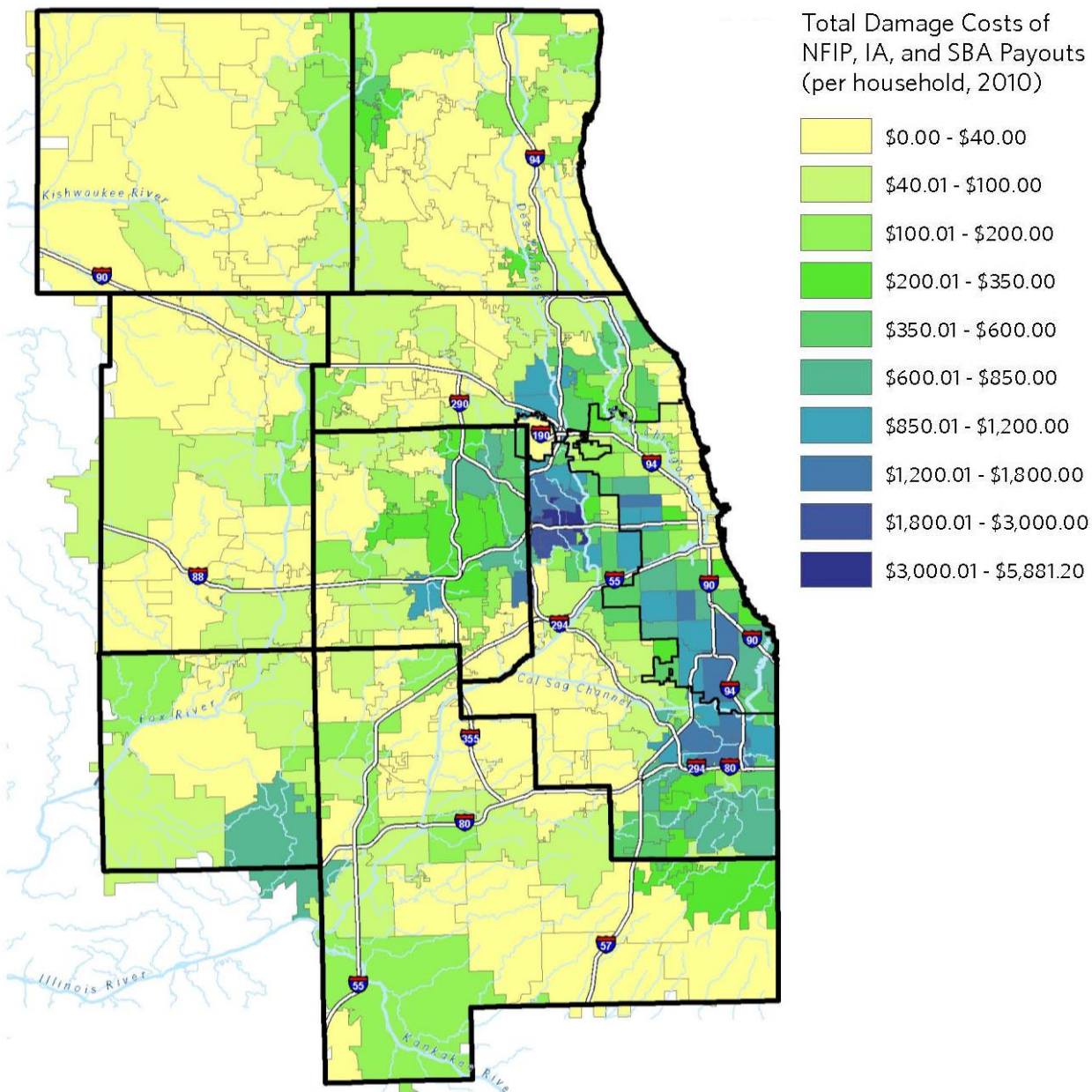
Protect and enhance the integrity of aquatic systems

Coordinate shared water supply resources

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Manage stormwater to reduce flooding

Flooding context



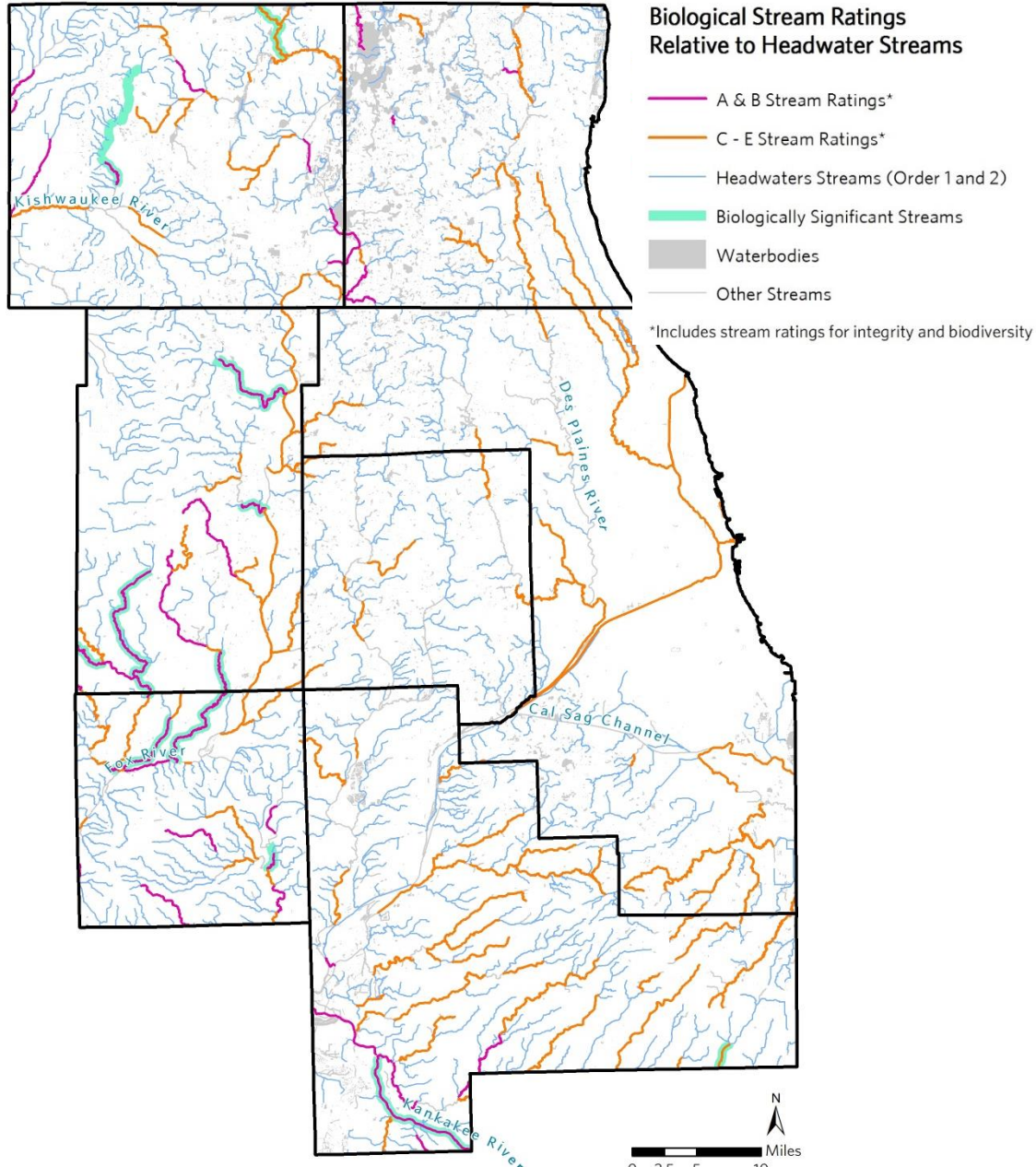
Manage stormwater to reduce flooding

- Identify and communicate flooding risk
- Advance planning and development techniques to reduce current and future risk
- Maintain and invest in grey and green infrastructure
- Address flooding vulnerability of critical transportation assets
- Integrate stormwater management into transportation projects

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Protect and enhance the integrity of aquatic systems

Water quality context



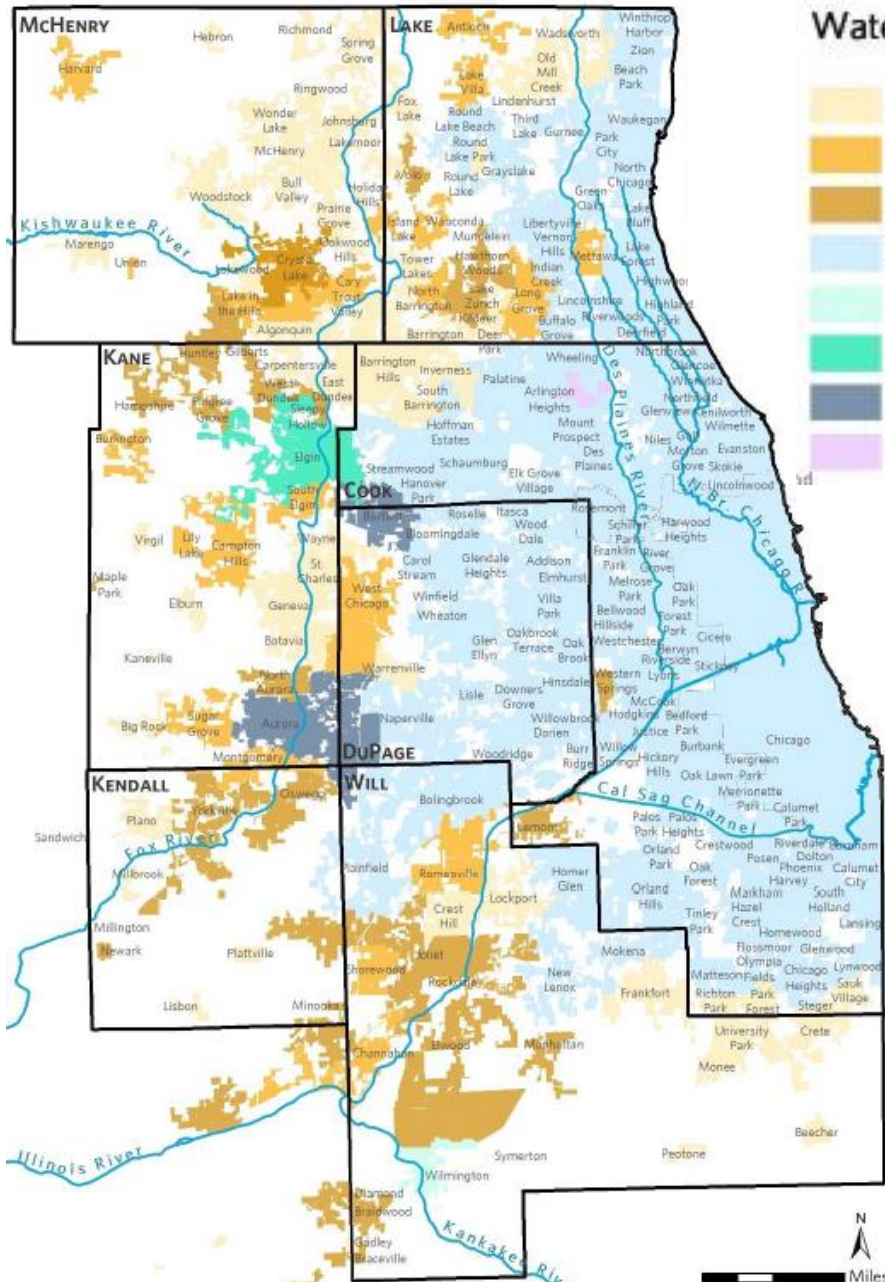
Protect and enhance the integrity of aquatic systems

- Improve water resource management and coordination
- Incorporate water resource management into local planning
- Create and implement multi-objective watershed plans
- Optimize water infrastructure investment
- Be a steward of Lake Michigan, the Great Lakes, and the Chicago Area Waterway System

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Coordinate shared water supply resources

Water supply context



Water Supply Sources by Community

- Groundwater, Shallow Bedrock/Glacial
- Mixed Groundwater Sources, Shallow/Sandstone
- Groundwater, Sandstone
- Surface Water, Lake Michigan
- Surface Water, Kankakee River
- Surface Water, Fox River
- Mixed Sources, Fox River/Groundwater
- Mixed Sources, Lake Michigan/Groundwater



Coordinate shared water supply resources

- Incorporate water supply and demand considerations into local and regional planning
- Strengthen regional water supply management
- Maintain drinking water infrastructure and manage demand

Next steps

- **March:** Full draft released for committee and partner review
- **April-May:** Revise and finalize the draft plan
- **June-August:** Release the plan for public comment

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Comments or questions?