



Chicago Metropolitan
Agency for Planning

***Northwest Water Planning Alliance:
from
Intergovernmental Agreement to
Collaboration***

Tim Loftus, Ph.D.
Water Resource Planner

Environ. and Natural Resources Comm.
November 5, 2014

Water 2050

Northeastern Illinois Regional Water Supply/Demand Plan

March 2010



N O R T H W E S T W A T E R P L A N N I N G A L L I A N C E

Contract Report 2012-03

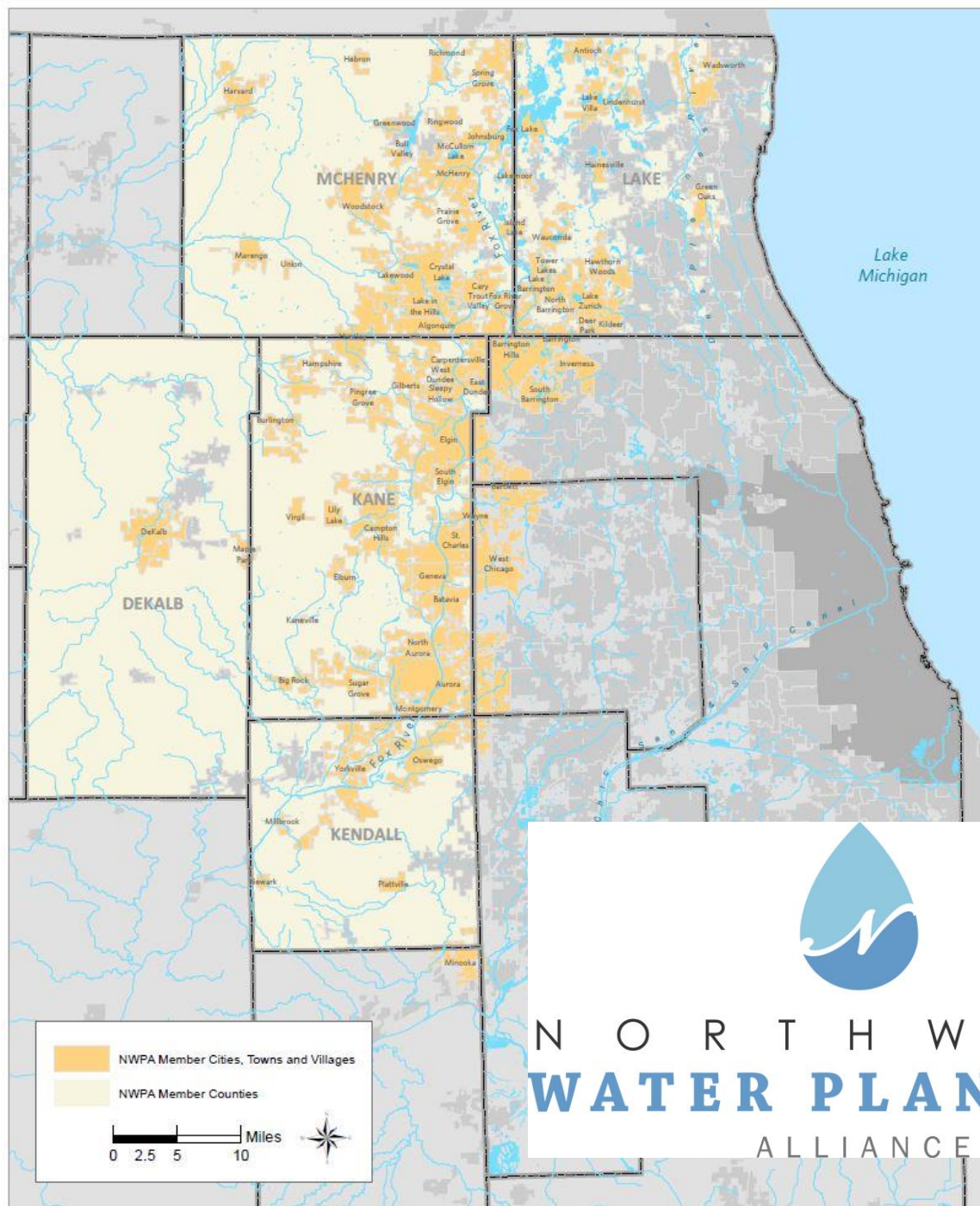
Northeastern Illinois Water Supply Planning Investigations: Opportunities and Challenges of Meeting Water Demand in Northeastern Illinois

Scott C. Meyer, H. Allen Wehrmann, H. Vernon Knapp, Yu-Feng Lin,
F. Edward Glatfelter, James R. Angel, Jason F. Thomason, Daniel A. Injerd



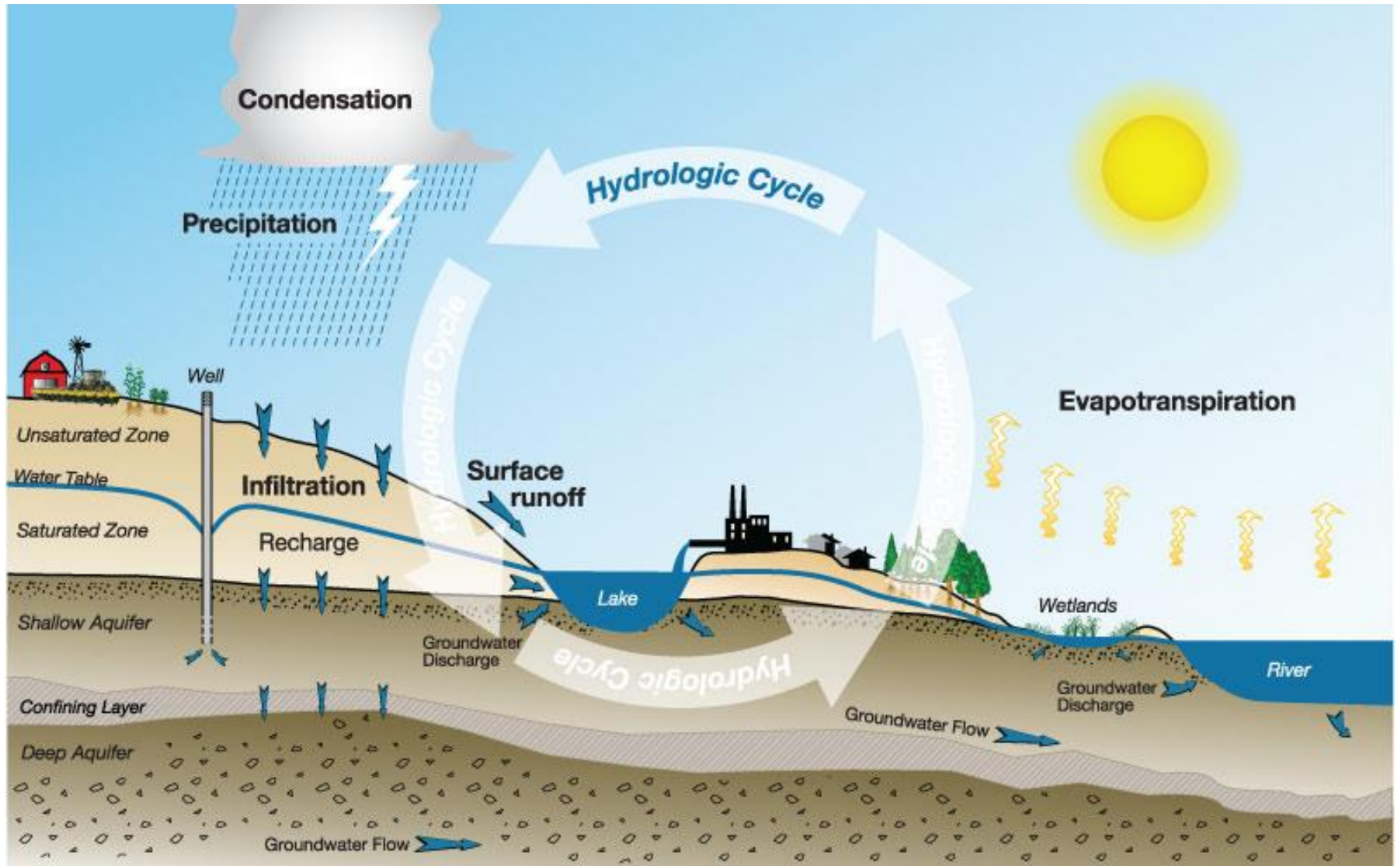
Mission Statement

The Northwest Water Planning Alliance (NWPA), formed by intergovernmental agreement, seeks to collaboratively plan for and steward our shared river and groundwater resources to ensure a sustainable water supply for the people, economy, environment, and future generations.



N O R T H W E S T
WATER PLANNING
 ALLIANCE

The Hydrologic Cycle



NWPA Governance

Technical Advisory Committee



Executive Committee



Recommendations to members



Member implementation ... *voluntary but wise!*

NWPA Accomplishments

- * WaterSense Partnership Program
33 members and counting ...



NWPA Accomplishments

* WaterSense Partnership Program

* Resource Commitments

- Monthly TAC meetings,
- bimonthly EC meetings,
- Staff support provided by:

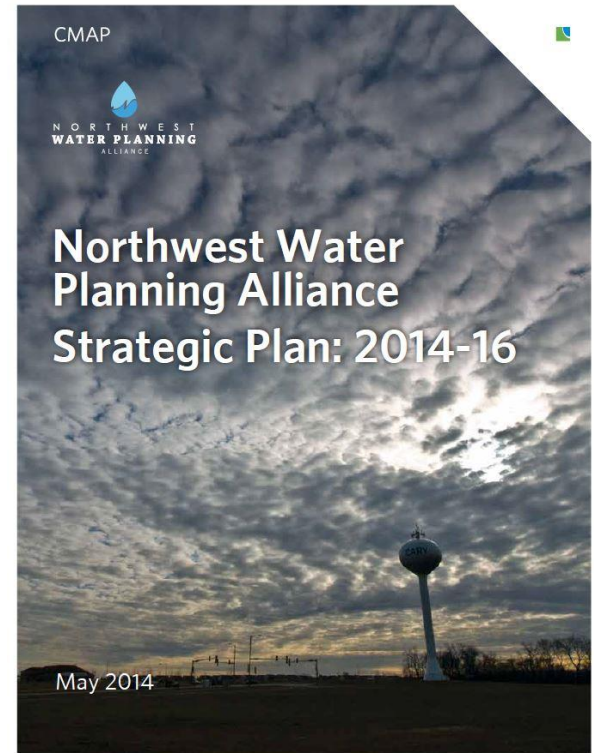


Metropolitan **Planning Council**

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NWPA Accomplishments

- * Outdoor watering ordinance (6)
see website:
<http://www.nwpa.us/>
- * 2014-2016 Strategic Plan
- * Recognized by IDNR and IEPA!



Strategic Plan 2014-2016

3 Goals –

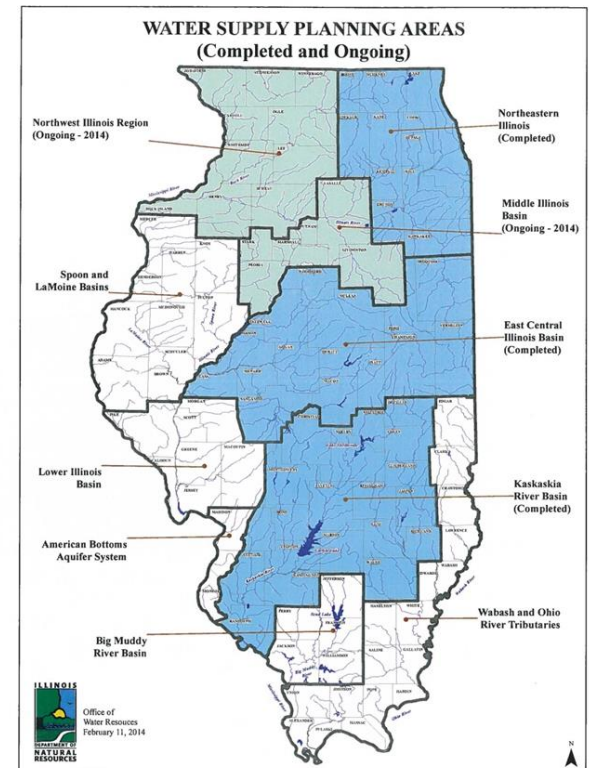
- * Build the **organizational capacity** to achieve mission.
 - * Provide **education and outreach** to raise awareness of the value of water as a finite asset.
 - * Develop **sustainable water-use policies and practices** that are widely adopted and protective of water supplies.
-

Goal B: Education & Outreach

Develop and deliver presentations to member boards, councils, and others

2014 priority topics:

- * raise awareness of the NWPA!
 - * data sharing to build capacity
 - * outdoor-watering ordinance
 - * NWPA role in regional planning
-



Protecting a Shared Resource

Requires your cooperation!

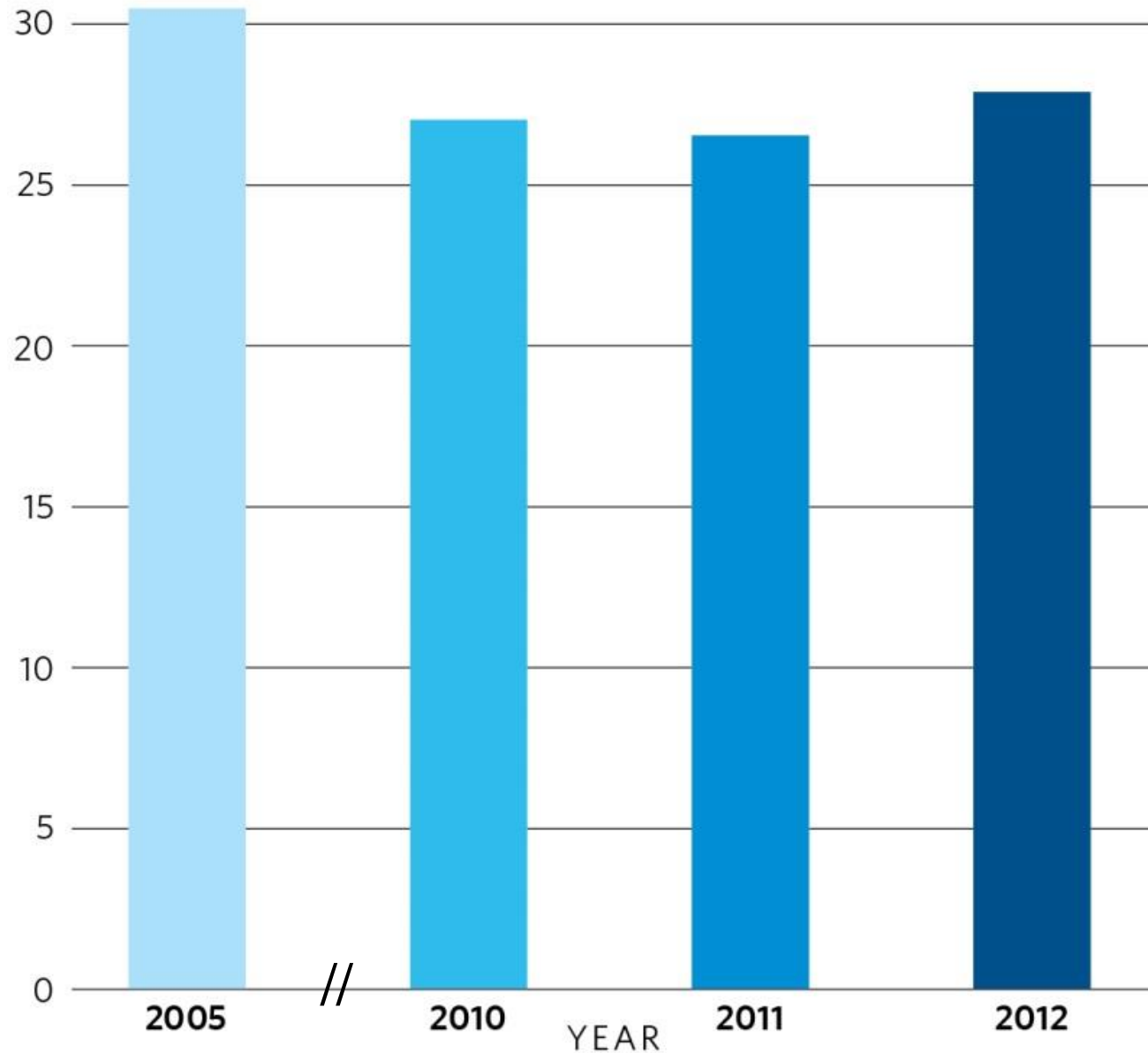
NEW Monthly online water-use reporting tool

- * satisfies your annual IWIP obligation
 - * allows collective tracking of change/trends
 - * enables NWPA to make informed recommendations!
-

NWPA Water-Use Reporting

- Aurora
 - Barrington
 - Bartlett
 - Batavia
 - Crystal Lake
 - Elburn
 - Elgin
 - Fox River Grove
 - Geneva
- | | |
|--|----------------------|
| Harvard | Montgomery |
| Hebron | Newark |
| Hinckley | North Aurora |
| <i>Lake Co. PW – Brooks Farm Subdivision</i> | |
| Lake in the Hills | Oswego |
| Lake Barrington | Sugar Grove |
| Lake Villa | <i>Providence at</i> |
| Lake Zurich | <i>Painted Lakes</i> |
| McHenry | |
-

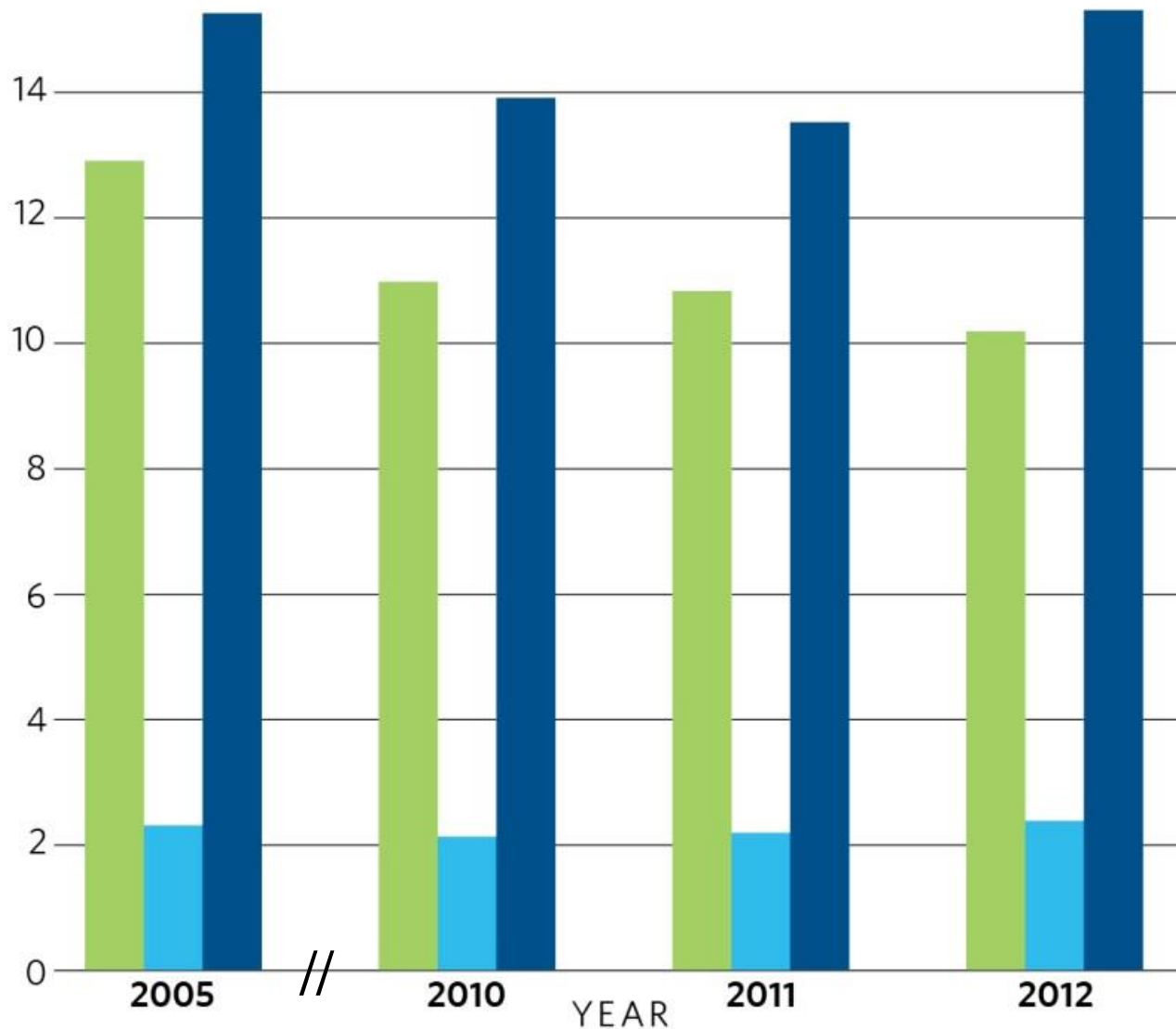
Total groundwater withdrawals, by Northwest Water Planning Alliance communities, billions of gallons of water



Source: Illinois Water Inventory Program, Illinois State Water Survey.

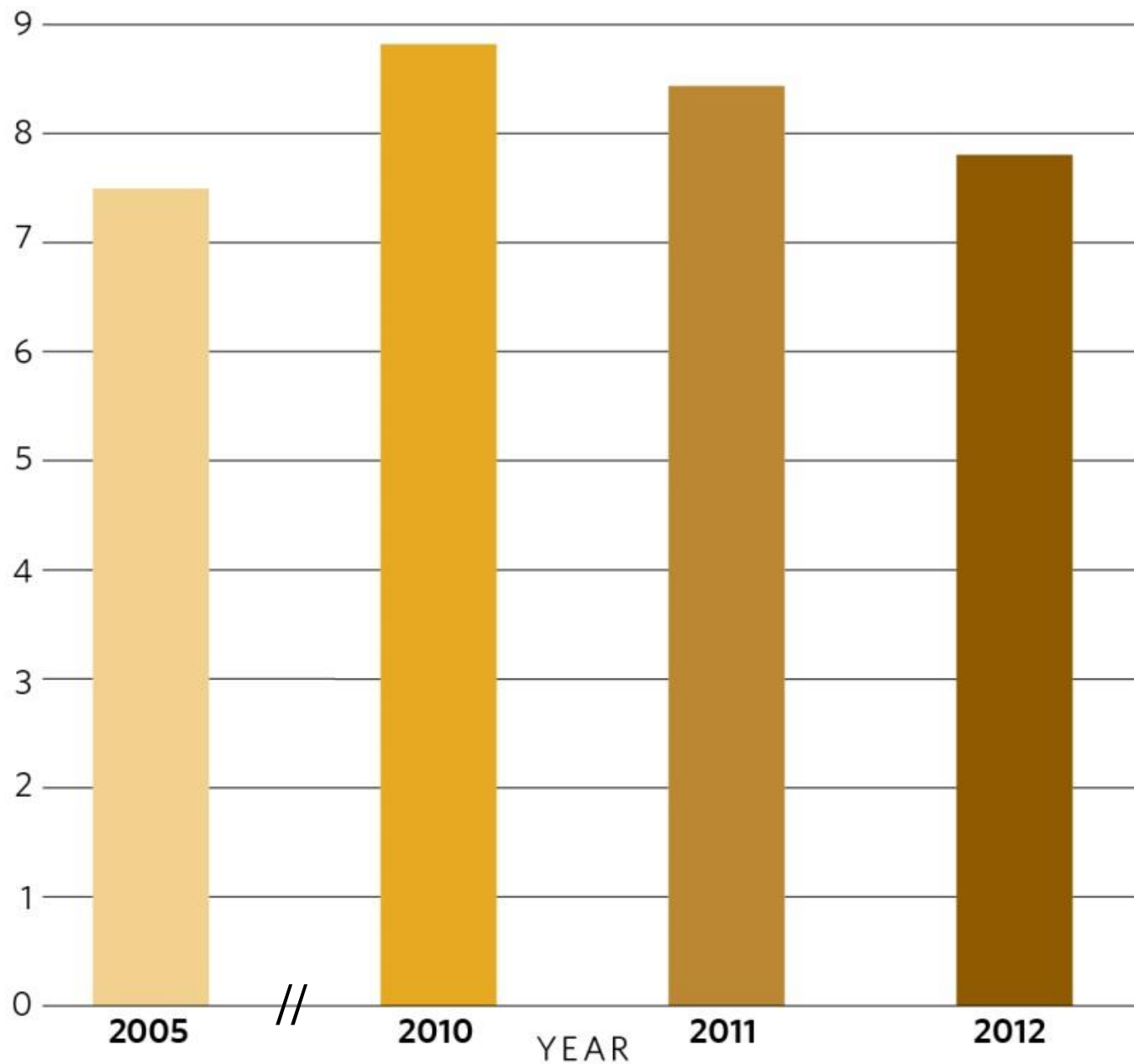
Withdrawals reported by groundwater source by Northwest Water Planning Alliance communities, *billions of gallons of water*

UNCONSOLIDATED SHALLOW DEEP



Source: Illinois Water Inventory Program, Illinois State Water Survey.

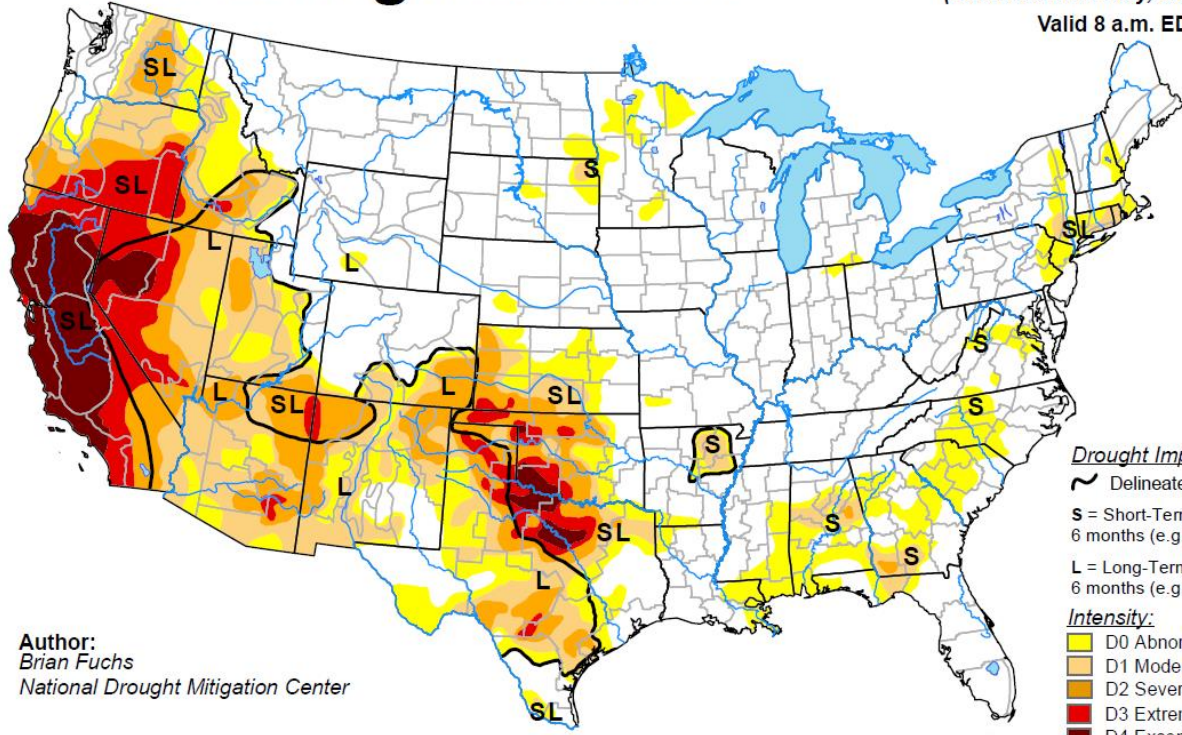
Fox River withdrawals by Aurora and Elgin, billions of gallons of water



Source: Illinois Water Inventory Program, Illinois State Water Survey.

U.S. Drought Monitor

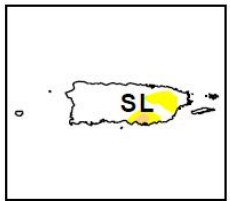
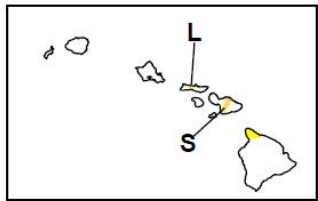
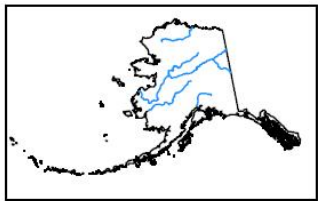
October 28, 2014
 (Released Thursday, Oct. 30, 2014)
 Valid 8 a.m. EDT



Author:
 Brian Fuchs
 National Drought Mitigation Center

- Drought Impact Types:
- ~ Delineates dominant impacts
 - S** = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
 - L** = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
- Intensity:
- D0 Abnormally Dry
 - D1 Moderate Drought
 - D2 Severe Drought
 - D3 Extreme Drought
 - D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



<http://droughtmonitor.unl.edu/>

Outdoor Watering

Follow the NWPA *color-code* recommendation!

- * **green** = **no drought condition, abnormally dry**
odd/even watering between 6 - 9:00 a.m./p.m.,
exemptions for new lawns
 - * **yellow** = **moderate-severe drought**
use of sprinkler systems prohibited,
exempted uses still allowed
 - * **red** = **extreme-exceptional drought**
all outdoor use prohibited
-

Outreach Cards Available!



Landscape Water Conservation

- 1) Water lawns no more than 1 inch / week incl. rain.
- 2) Water based on lawn's appearance not schedule.
- 3) Let your lawn go dormant during dry spells watering deeply (1-1.5 in.) once per four weeks.
- 4) Group plants by their watering needs.
- 5) Use native plants to reduce water use by 20-50%.

Is your lawn a water guzzler?

ts!

more than 50% of commercial and residential irrigation water use goes to waste due to overwatering, evaporation, or runoff?

You can help by...

Following your local water usage and restriction ordinance. If your community does not have one, please consider watering your lawn no more than twice a week, before 10:00 a.m. or after 6:00 p.m

Thank you for doing your part to help ensure that our community and neighboring communities have a clean and reliable water source now and for future generations!

For more information, visit www.epa.gov/WaterSense



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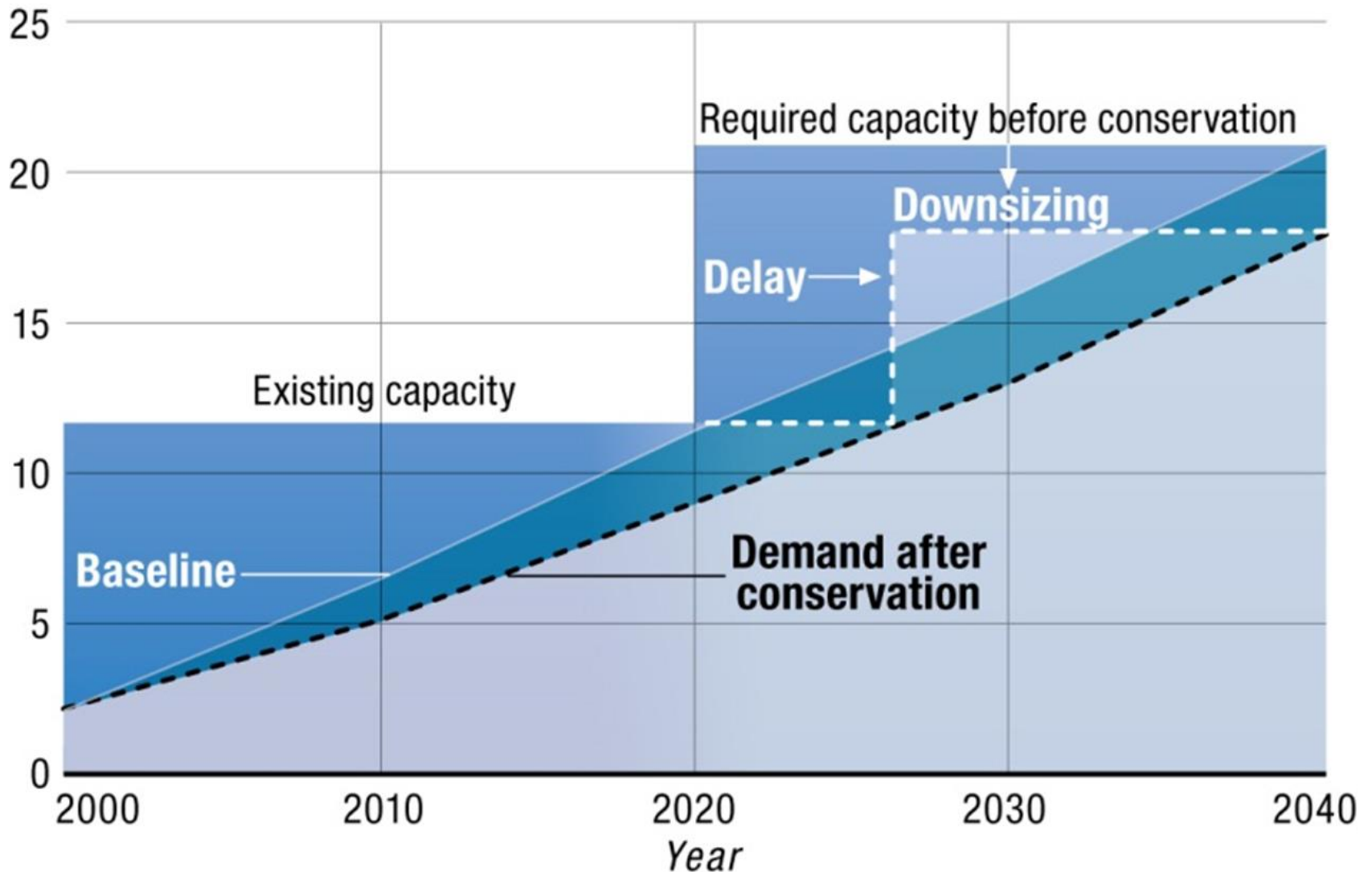


W A T E R
2050



Example of delaying or downsizing a capital facility,

peak demand/capacity in millions gallons per day



Source: American Water Works Association, 2006. Water Conservation Programs – A Planning Manual. AWWA Manual M52, First Edition, page 75.

Partners with Prairie Research Institute

- * Developing an estimate of groundwater supply.
 - * Improving water-use reporting for input to the Illinois Water Inventory Program (IWIP). *NWPA reporting a pilot for broader web-based reporting.*
 - * Need to expand groundwater level monitoring network, esp. in deep bedrock aquifer.
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N O R T H W E S T
WATER PLANNING
A L L I A N C E

Please participate
in the stewardship of
your shared water resources!

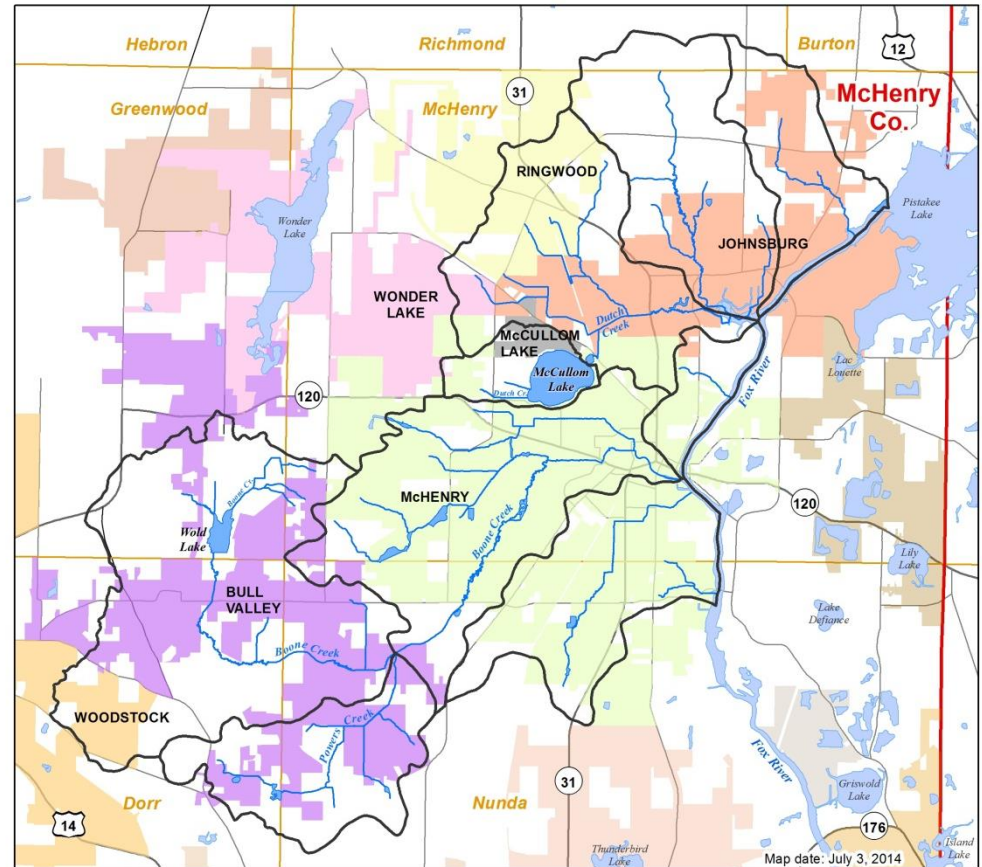


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NORTHWEST WATER PLANNING ALLIANCE

Boone-Dutch Creek Watershed Planning



Thank you!

Questions??



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