

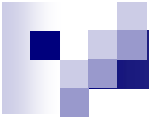
Water Use in Kane County

Scott C. Meyer, P.G.

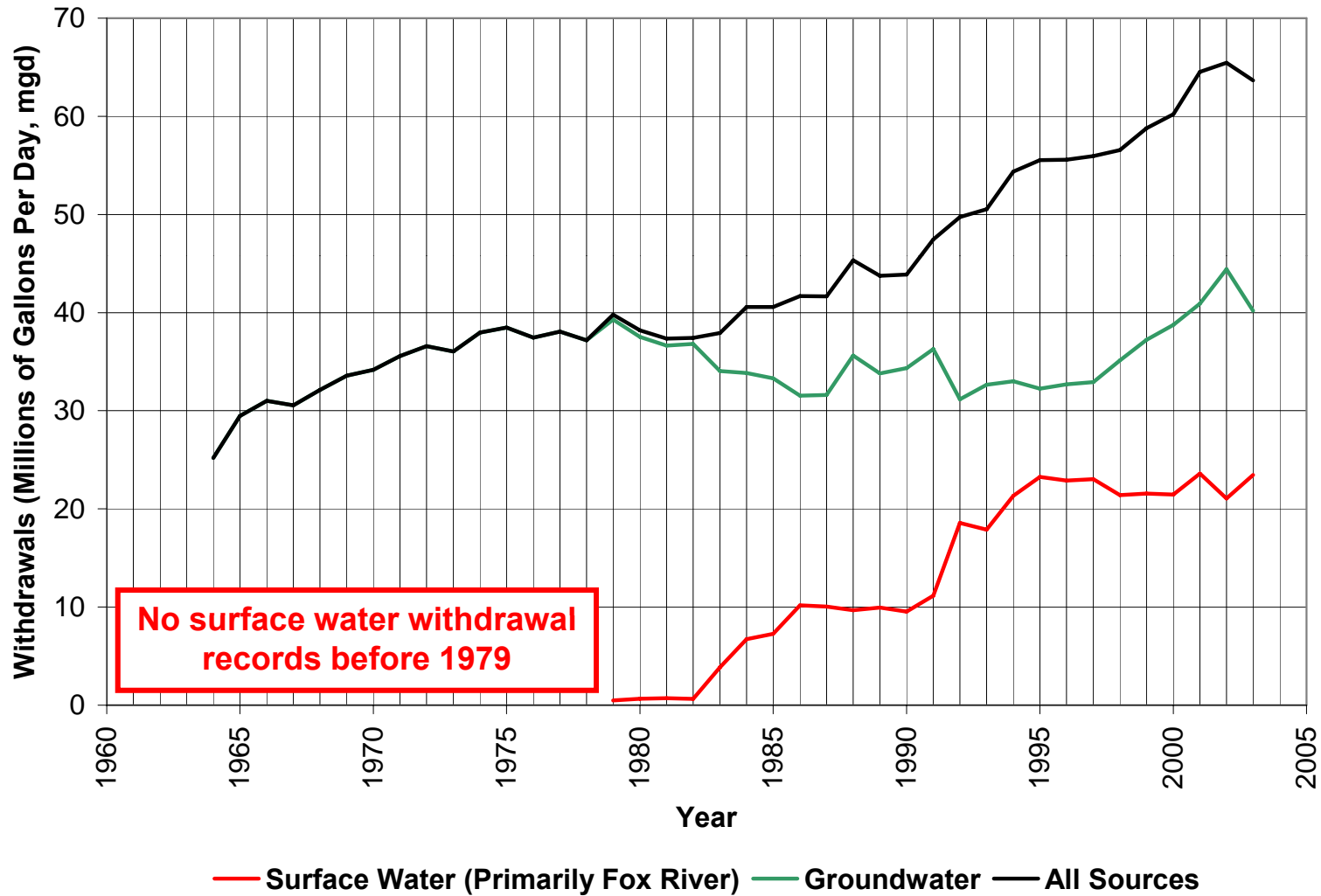
Illinois State Water Survey

Illinois Department of Natural Resources





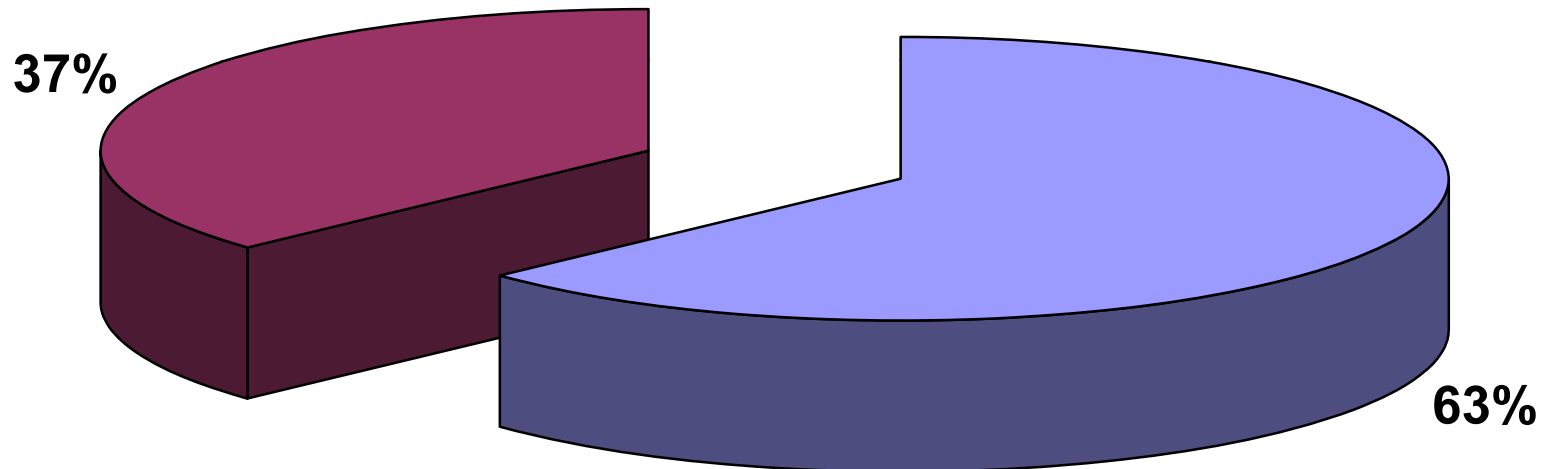
Withdrawals in Kane County by Source





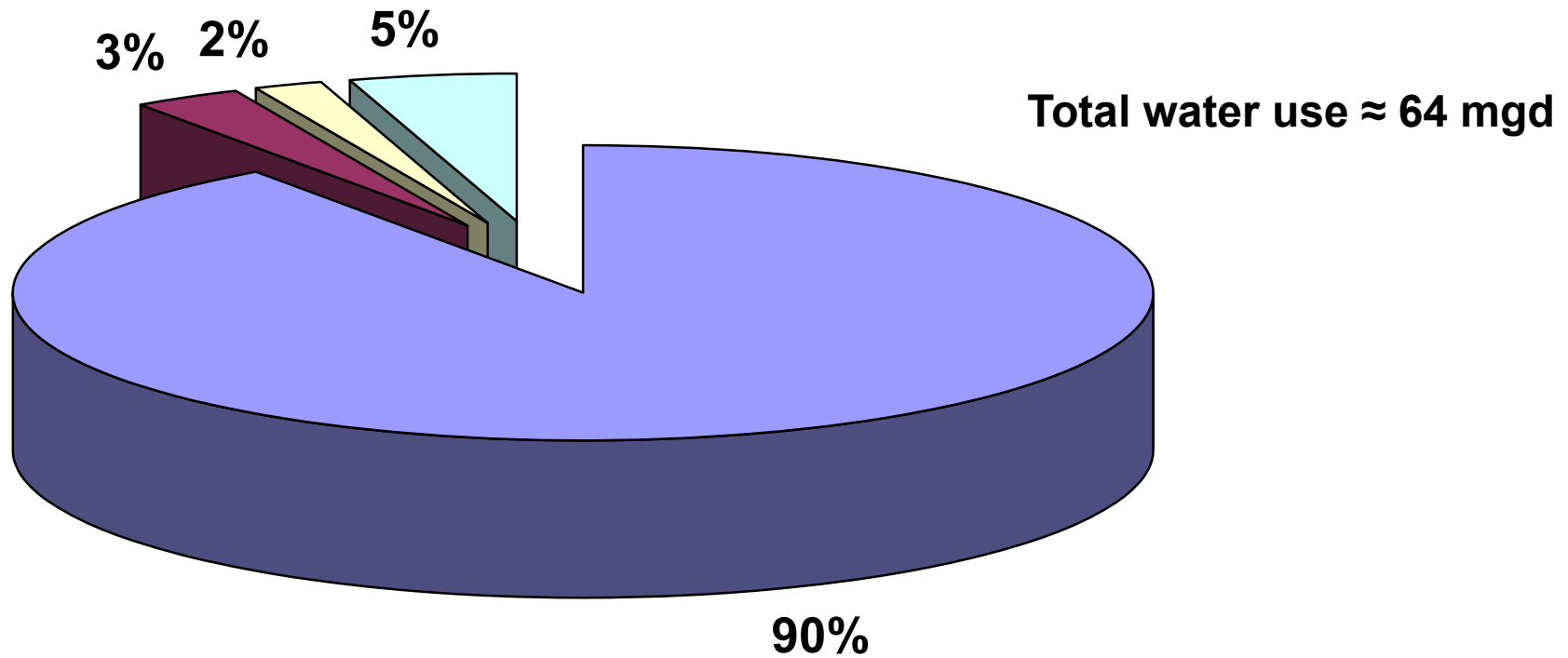
Withdrawals in Kane County by Source (2003)

Total water use \approx 64 mgd



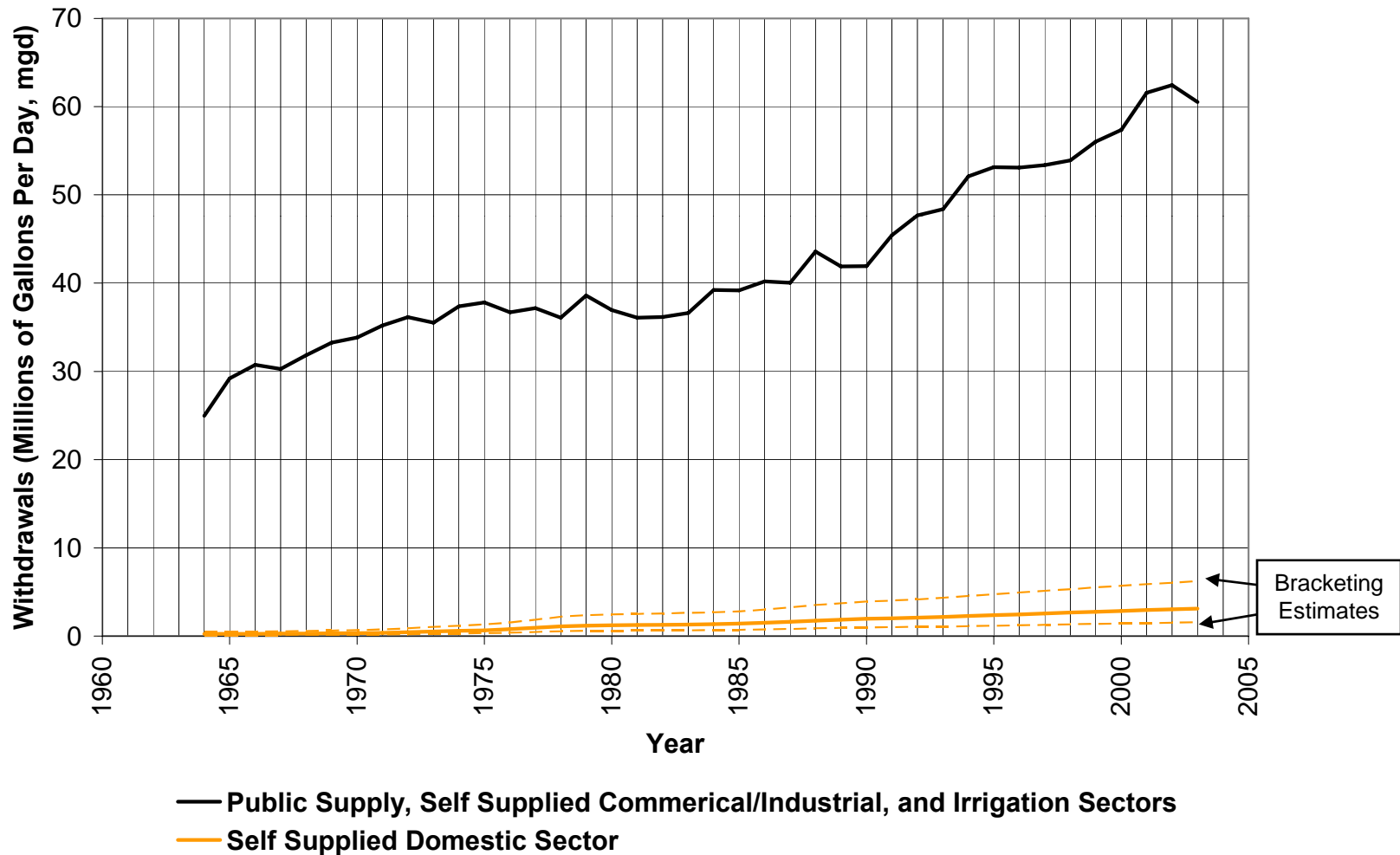
■ Groundwater ■ Surface Water (Primarily Fox River)

Withdrawals in Kane County by Sector (2003)



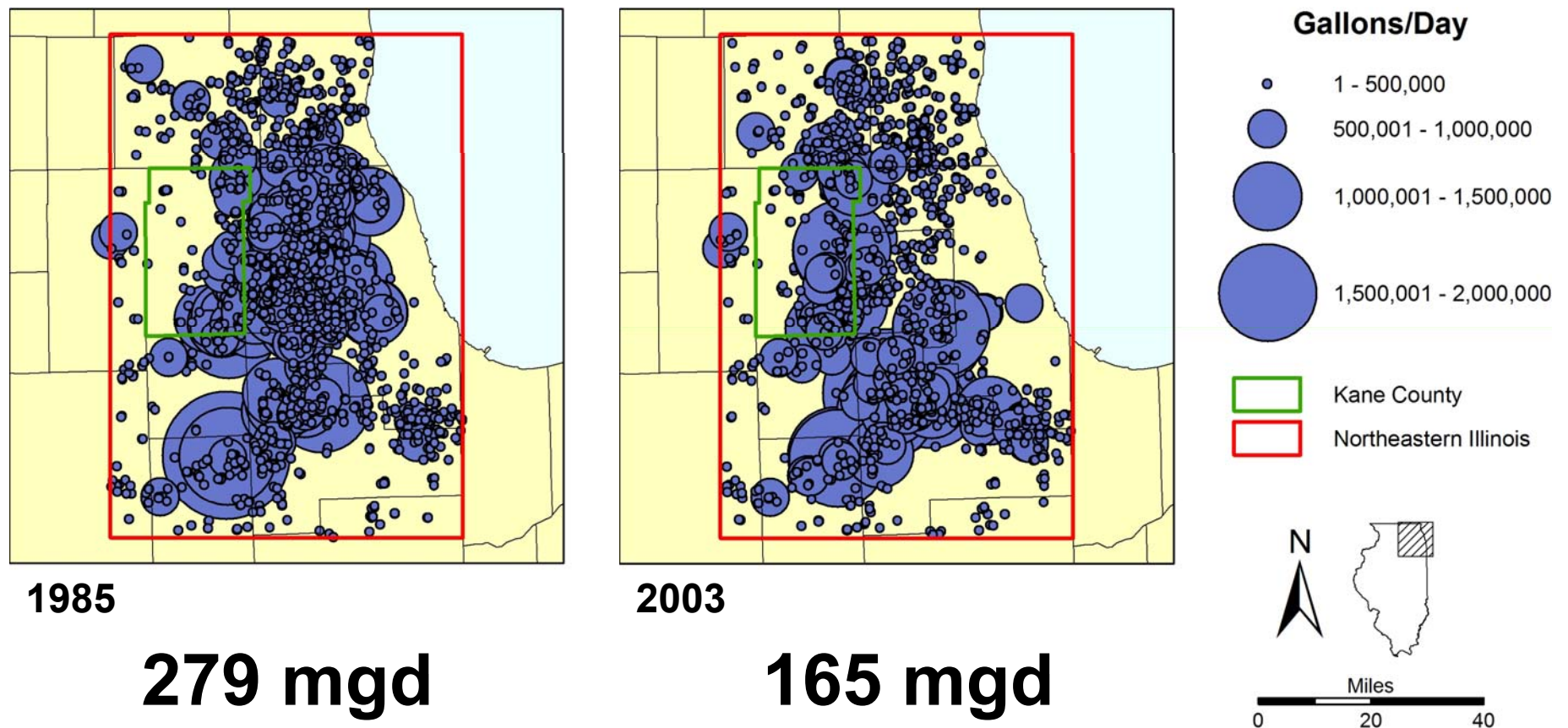
- Public Supply
- Self Supplied Commercial/Industrial
- Irrigation
- Self Supplied Domestic

Withdrawals in Kane County for Self-supplied Domestic Purposes



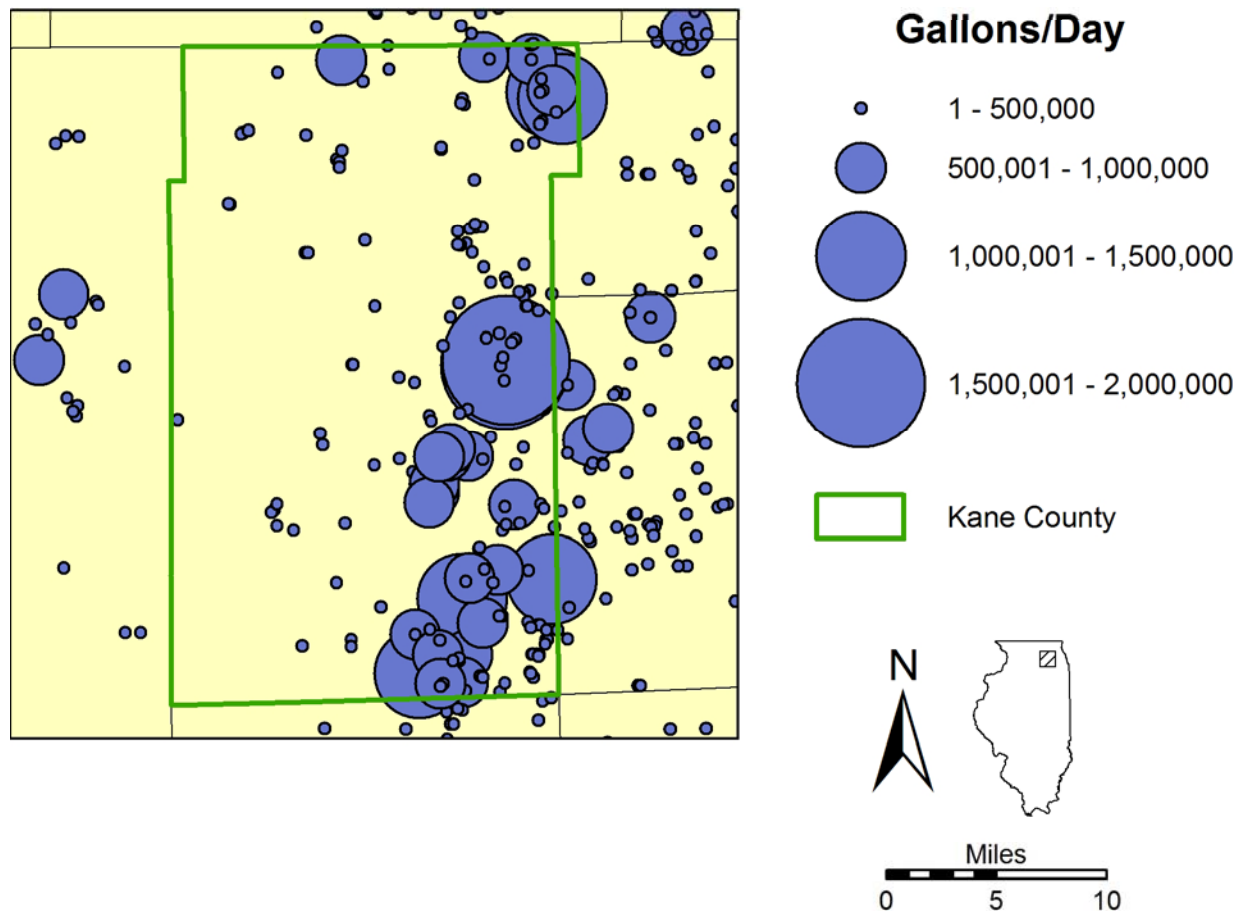
Groundwater Withdrawals in Northeastern Illinois (1985 and 2003)

Public Supply, Self-supplied Commercial/Industrial, and Irrigation Sectors



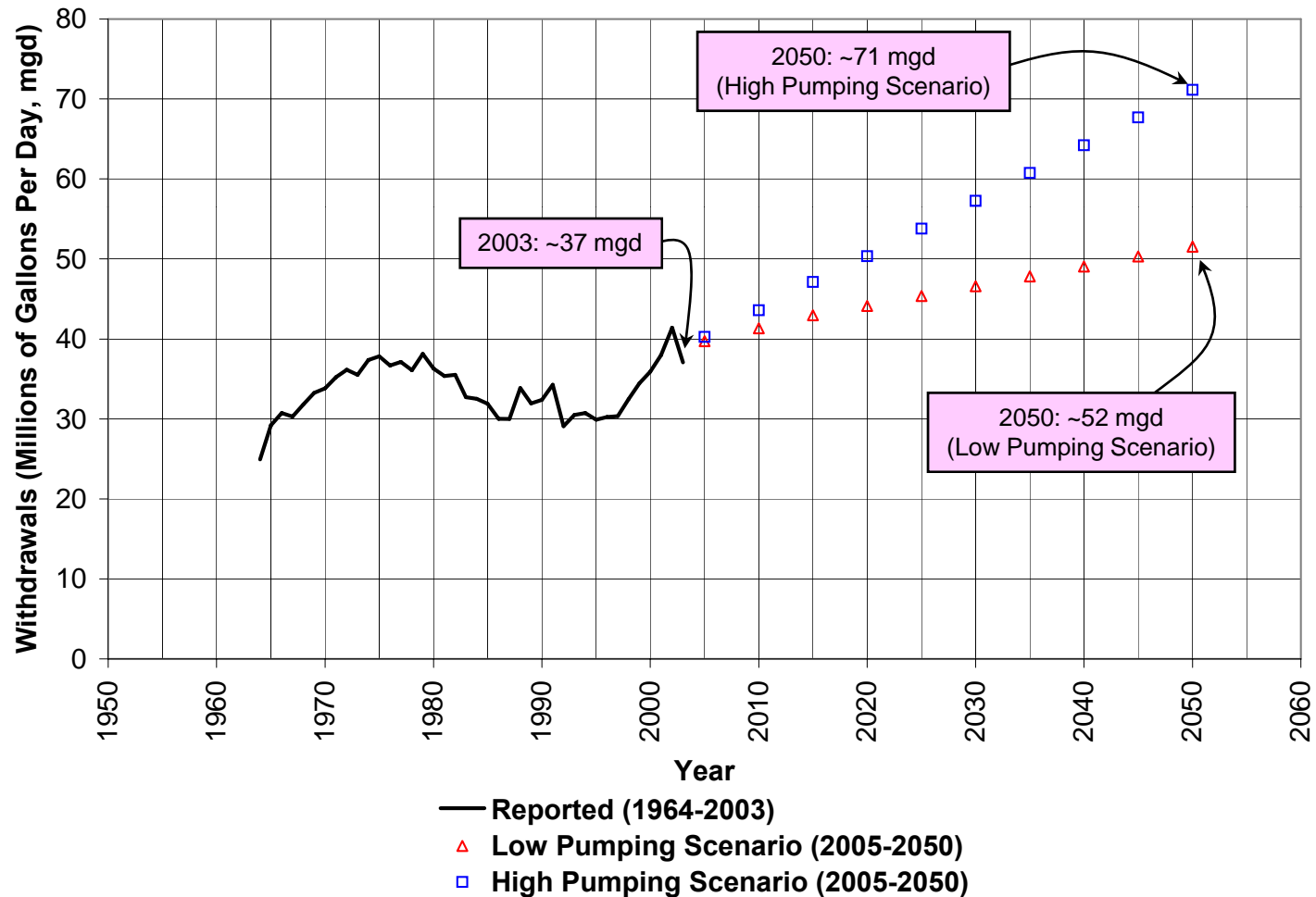
Groundwater Withdrawals in Kane County Area (2003)

Public Supply, Self-supplied Commercial/Industrial, and Irrigation Sectors



Groundwater Withdrawals in Kane County (2005-2050)

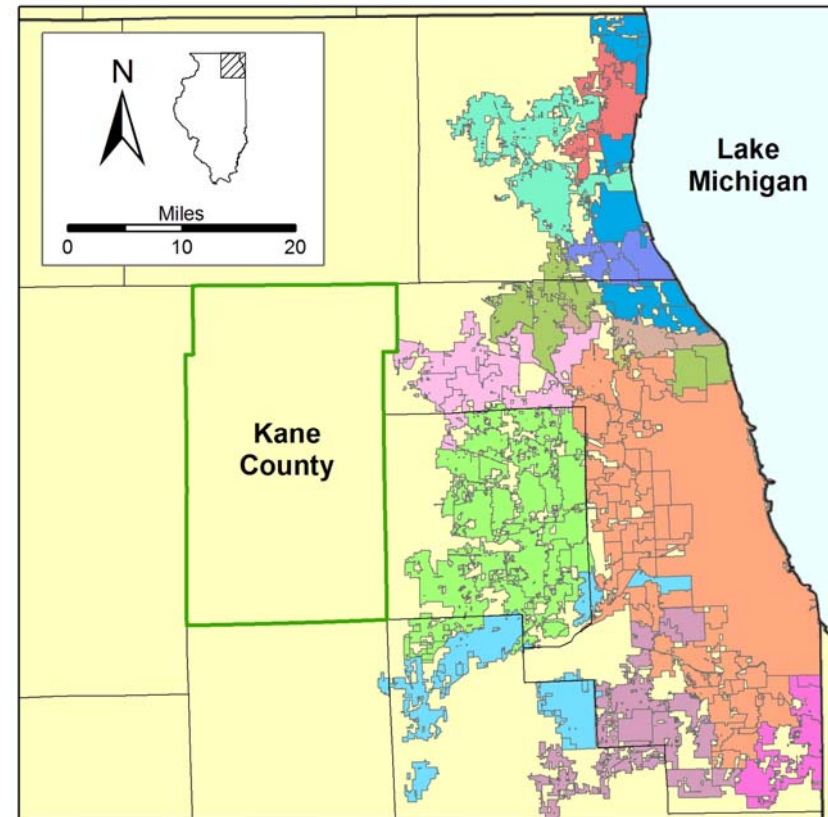
Public Supply, Self-supplied Commercial/Industrial, and Irrigation Sectors



Availability of Lake Michigan Water

- Limited in Illinois by a U.S. Supreme Court decree.
- Delivery to Kane County would be expensive.

Lake Michigan Service Area (2007)





Summary

- Total water use in Kane County increased from about 25 mgd in 1964 to about 64 mgd in 2003.
- Surface water withdrawals increased from less than 1 mgd before 1983 to over 20 mgd since 1993.
- Almost all surface withdrawals are accounted for by Aurora and Elgin use of the Fox River.
- About 90% of 2003 withdrawals was used for public water supplies.
- Self-supplied domestic withdrawals accounted for about 5% of total Kane County withdrawals in 2003, but most of this was returned to its source through septic systems.



Summary

- Groundwater use leveled out after Aurora and Elgin began using Fox River water, but it has generally increased since 1995.
- Groundwater withdrawals in northeastern Illinois declined and shifted south and west after the mid-1980s as Lake Michigan water was imported into suburban Lake, Cook, DuPage, and Will Counties.
- Groundwater withdrawals in Kane County are concentrated in the eastern one-third of the county.
- Lake Michigan is not expected to play a role in satisfying future water demand in Kane County.