



# FOX RIVER CORRIDOR PLAN FROM BURTONS BRIDGE TO FOX BLUFF

Kate Evasic and Kelsey Pudlock, Chicago Metropolitan Agency for Planning  
Fox River Ecosystem Partnership | November 13, 2019

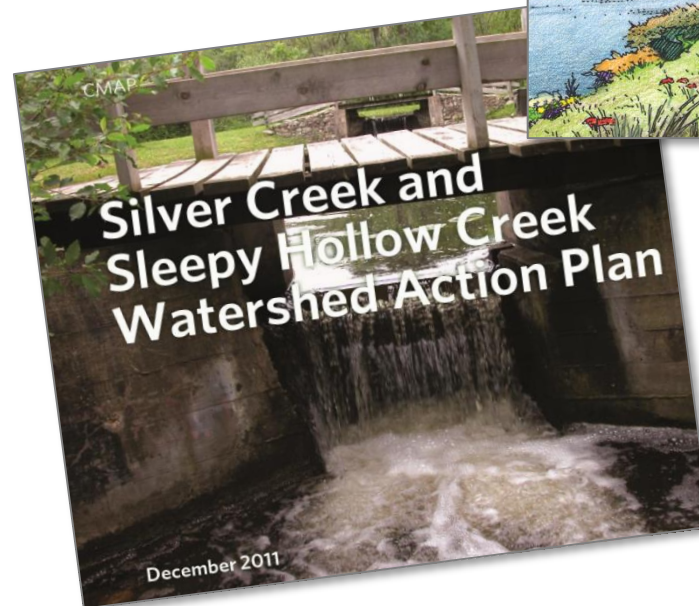
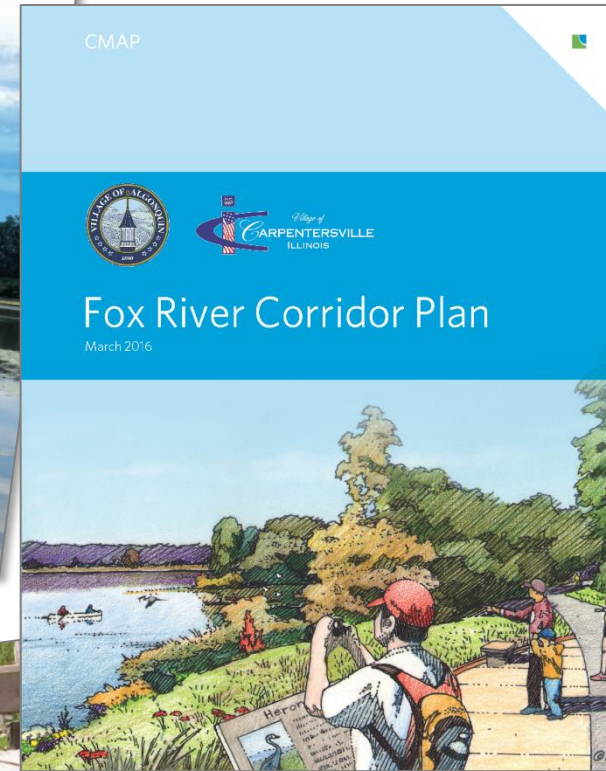
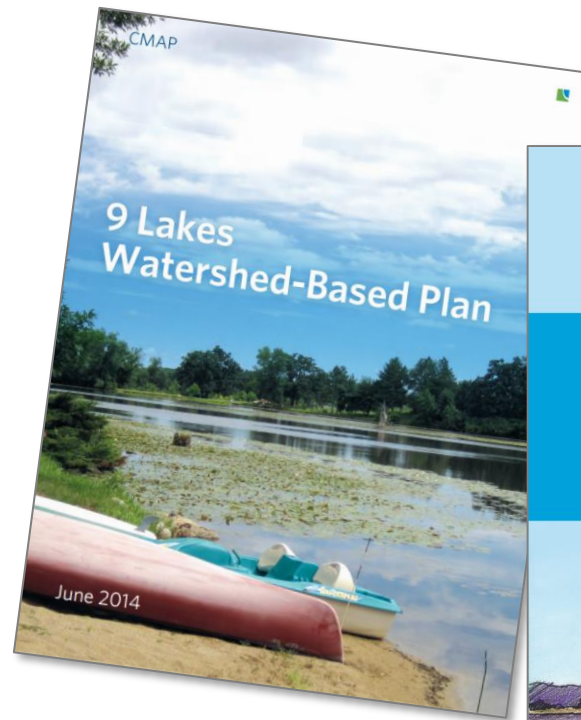


- Planning process
- Climate vulnerability assessment
- Recommendations
- Implementation and future work

## AGENDA



# PREVIOUS PLANNING EFFORTS



CMAP



## Fox River Corridor Plan from Burtons Bridge to Fox Bluff

September 2018 - DRAFT

**Establishes a vision for the next 10 to 15 years.**

**Outline the steps needed to meet that goal.**

**Builds on existing plans, water trail.**

**Helps set priorities, coordinate decision-making, and obtain grants.**

# THE FOX RIVER CORRIDOR PLAN



# The Fox River Watershed



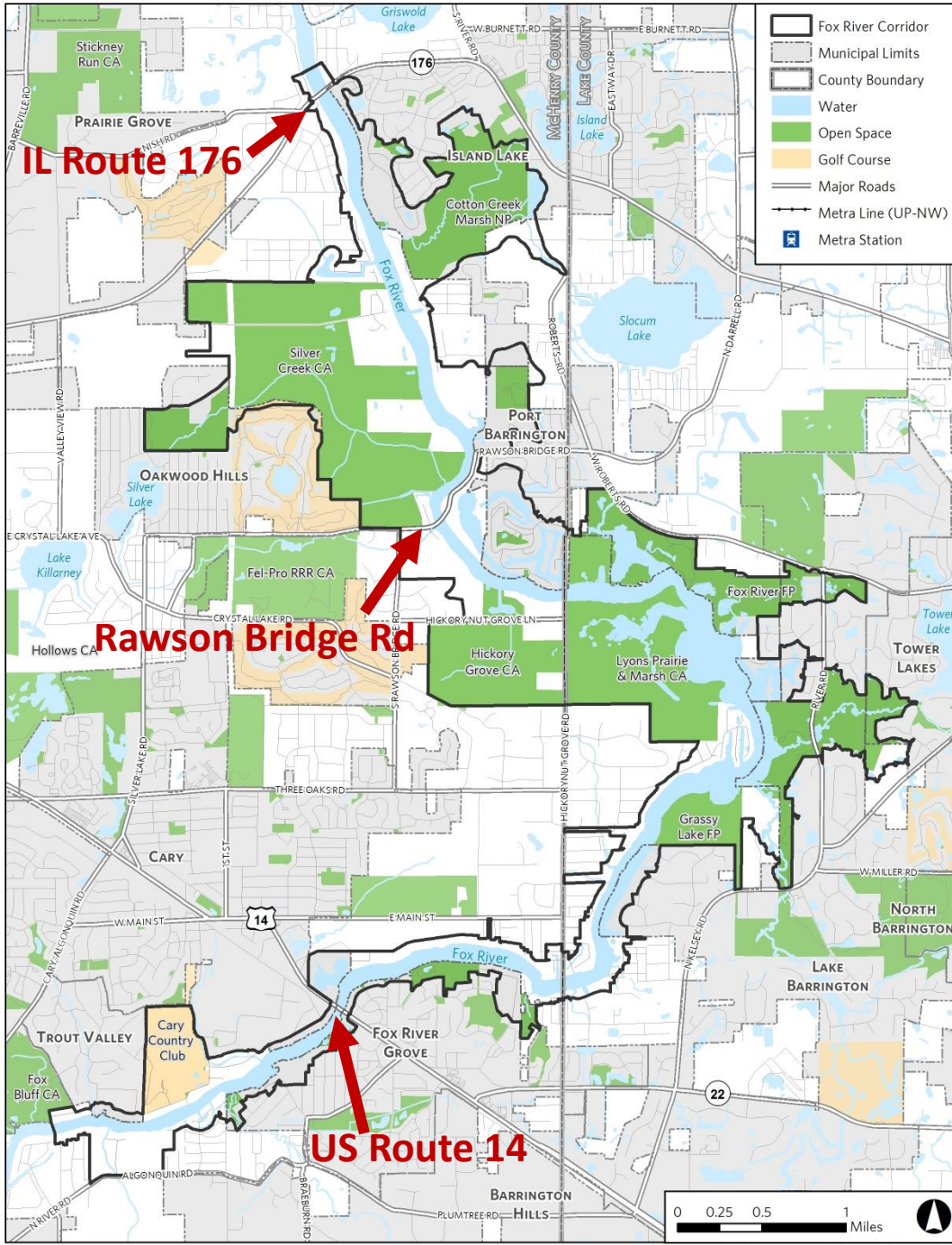
# THE FOX RIVER CORRIDOR PLAN STUDY AREA

Fox River Corridor  
 Fox River Watershed

**Watershed Facts:**

- Area: 2658 Square Miles
- Headwaters: Colgate, WI
- Confluence: Ottawa, IL
- River Length: 223 miles
- Population: 1 Million +
- Mainstem Dams: 16
- Mainstem WWTP Dischargers: 32

Prepared By:  
 R. Lamb for the Fox River Study Group, Inc.  
 January 2013  
 Data Sources: IL Geospatial Data Clearinghouse; IEPA,  
 USGS, Wisconsin DNR, ESRI



- Burtons Bridge
- Cary
- Fox River Grove
- Island Lake
- Lake Barrington
- Oakwood Hills
- Port Barrington
- Trout Valley
- Cary Country Club
- Cotton Creek Marsh
- Fox River FP
- Grassy Lake FP
- Hickory Grove CA
- Lyons Prairie & Marsh CA
- Silver Creek CA
- Wagner Fen



# Collaboration between CMAP and McHenry County Planning & Development



**Funding: Federal Highway Administration,  
Illinois EPA, NOAA, among others**

## **Steering Committee:**

**Cary Park District**

**Environmental Defenders of McHenry  
County**

**Flint/Spring Creek Watershed Partnership**

**Fox River Study Group**

**Fox Waterway Agency**

**Illinois DNR**

**Lake County**

**Lake County Forest Preserves**

**McHenry County**

**McHenry County Bicycle Advocates**

**McHenry County Conservation District**

**Village of Cary**

**Village of Fox River Grove**

**Village of Lake Barrington**

**Village of Oakwood Hills**

**Village of Port Barrington**

**Village of Trout Valley**

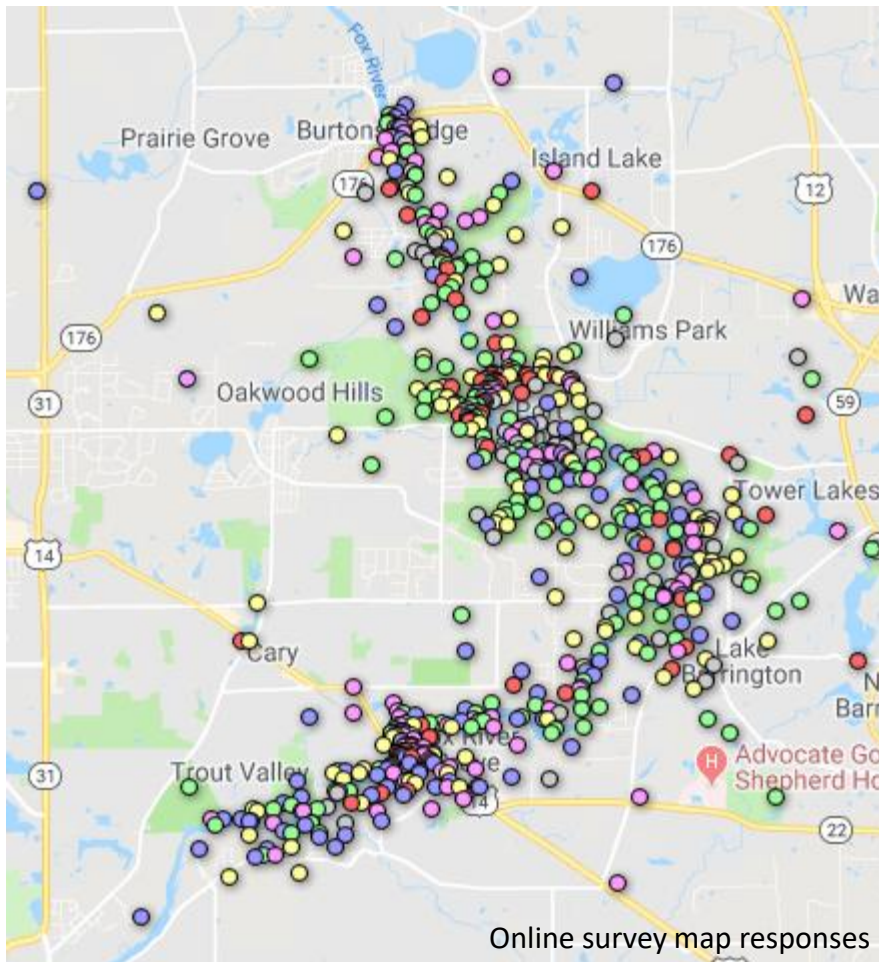
**Visit McHenry County**

# THE FOX RIVER CORRIDOR PLAN

<b>June 2015</b>	Applied to CMAP's LTA program
<b>Sep. 2016</b>	Project kickoff
<b>Mar. 2017</b>	Public meeting #1
<b>Sep. 2017</b>	Public meeting #2
<b>Oct. 2017</b>	Existing conditions report released
<b>July 2018</b>	Draft plan released for review
<b>Aug. 2018</b>	Public meeting #3 and public comment

## **PROJECT TIMELINE**





**Steering committee**  
**Stakeholder interviews**  
**Online survey**  
**Public meetings (3)**  
*Total participants = 465*

**Cary Main Street Fest**

**Fox River Summit**

**McHenry County Water  
Forum**

**COMMUNITY  
ENGAGEMENT**



# COMMUNITY ENGAGEMENT

## Broad themes:

- Preserve the scenic beauty and environment
- Balance a mix of activities
- Provide more public riverfront access, but no river trail
- Attract more family-friendly businesses and activities





## COMMUNITY ENGAGEMENT

### Top five ideas from public visioning workshop:

1. Sediment management & dredging
2. Boater safety education
3. Water quality & environmental education
4. Stormwater management
5. Keep river as a local resource



## Fox River Corridor in McHenry and Lake Counties



Existing Conditions Overview  
October 2017

# EXISTING CONDITIONS REPORT

**Community Outreach**

**Water Quality and  
Flooding**

**Open Space, Habitat,  
and Recreation**

**Transportation and  
Access**

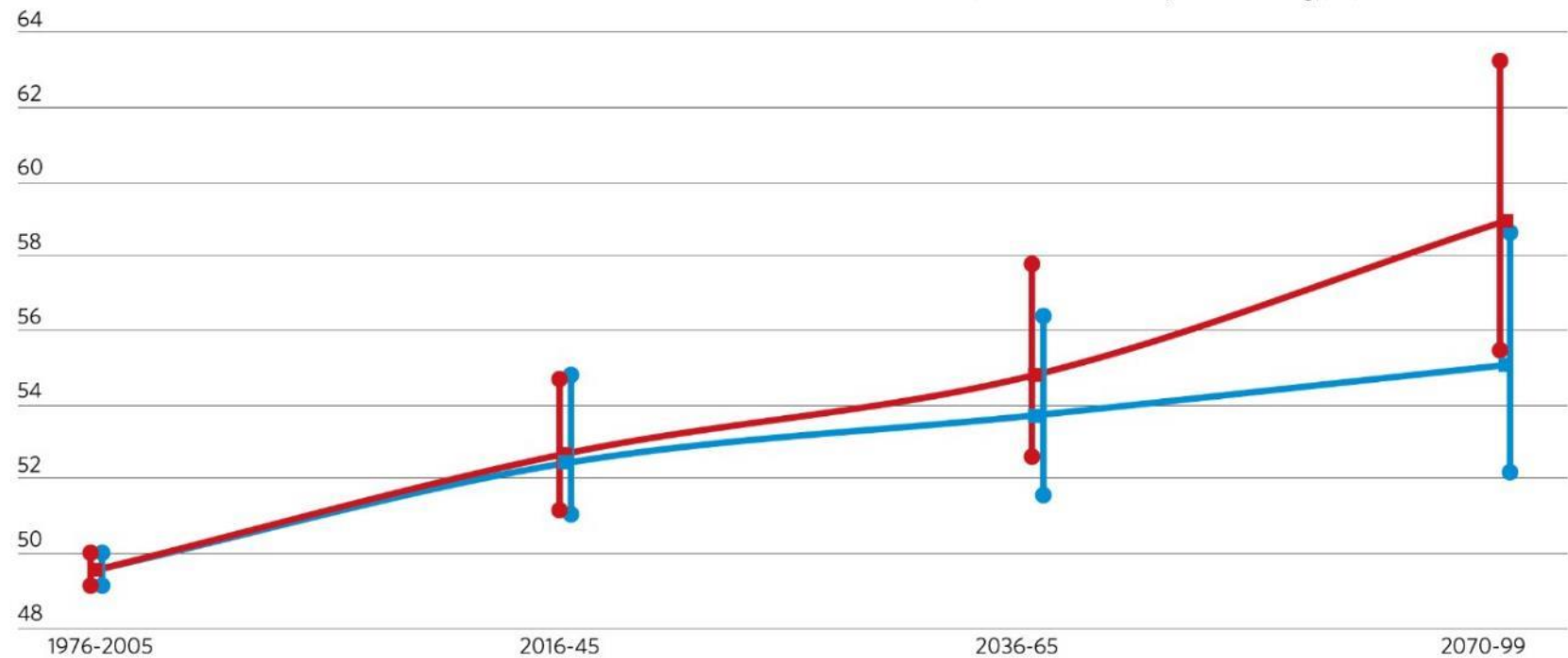
**Economic Development**

**Climate Vulnerability**



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

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



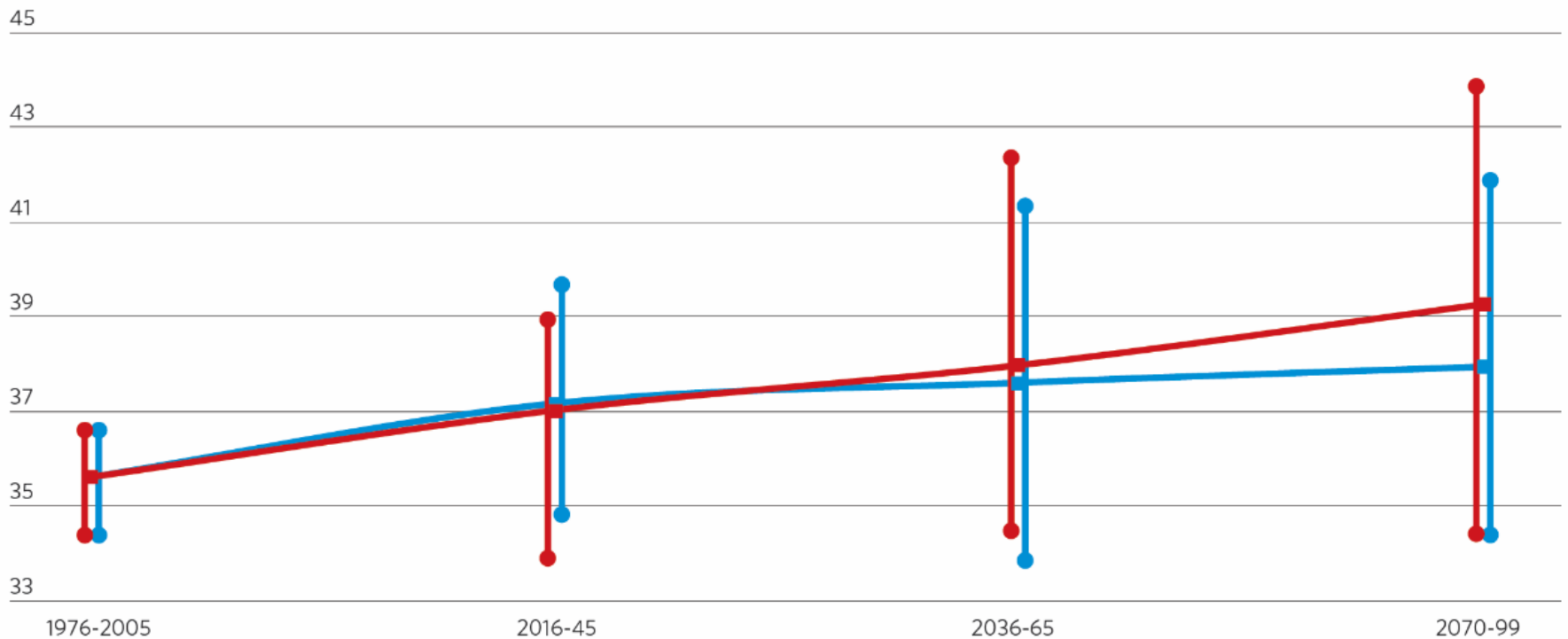
Note: Under a scenario that assumes emissions will continue to increase, regional temperatures are expected to increase by nine degrees Fahrenheit above historical levels. Under a lower emissions scenario, regional temperatures are expected to increase by five degrees above historical levels.

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

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.

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





Climate change  
science

Local  
planning

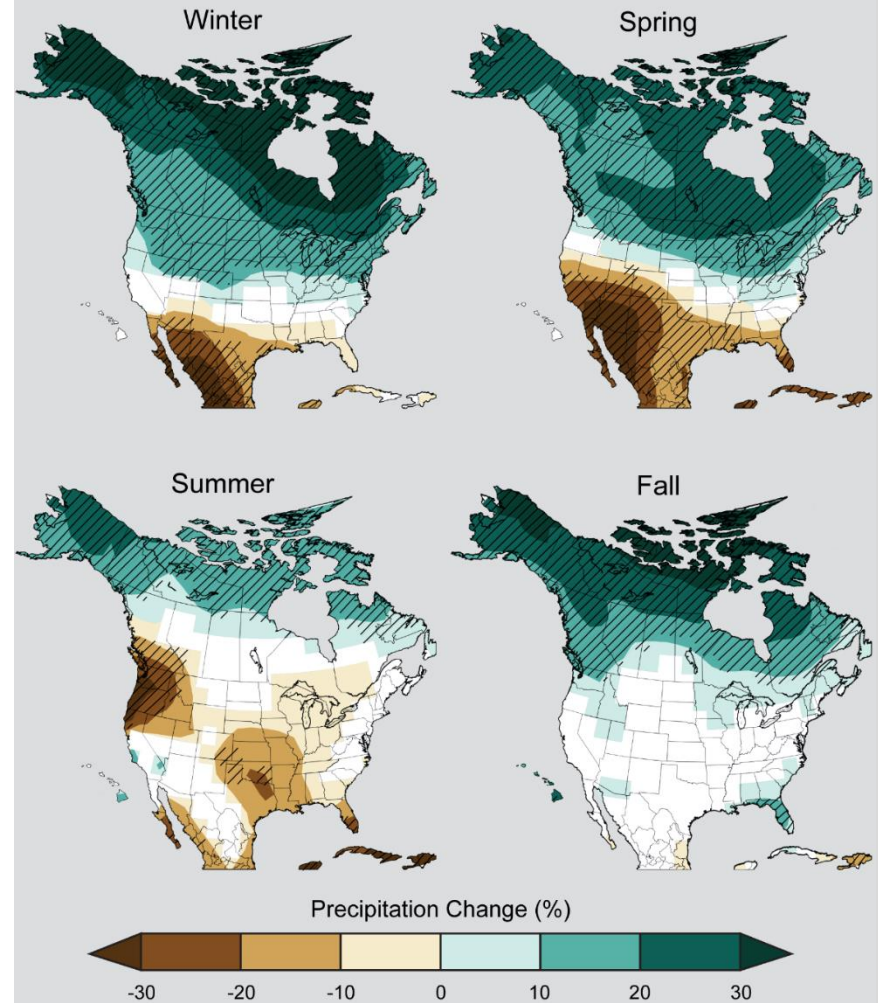
Data  
availability

Local  
capacity

# CLIMATE SCIENCE AND LOCAL PLANNING

## Projected Precipitation Change by Season

### Higher Emissions (A2)





## CLIMATE SCIENCE AND LOCAL PLANNING

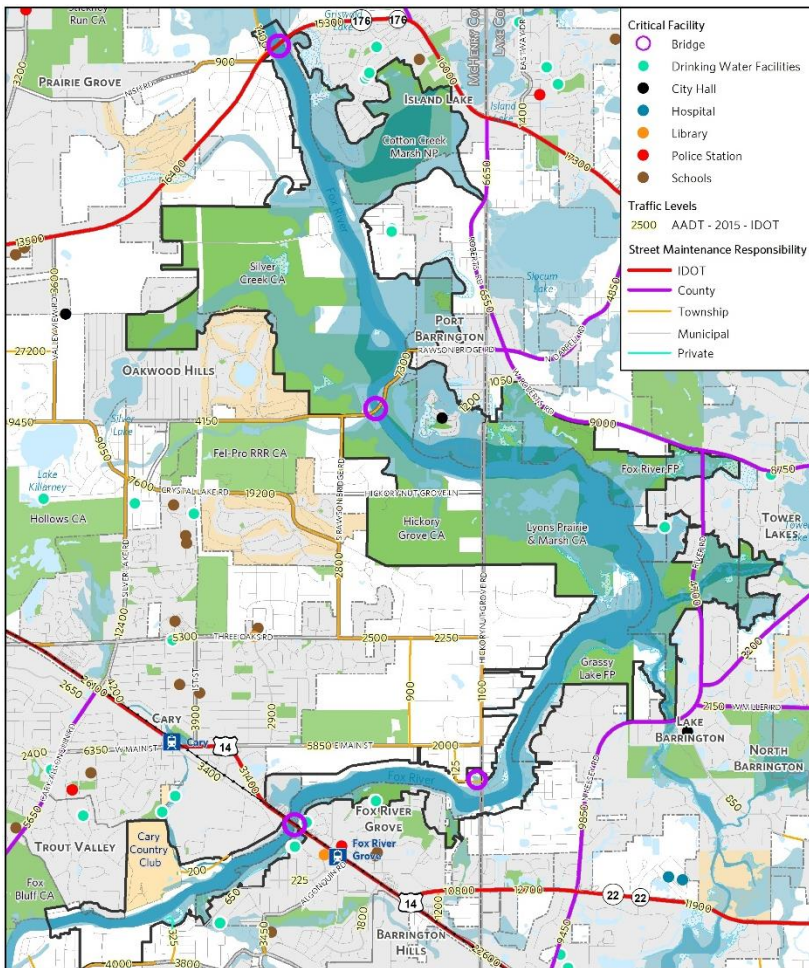
- Funded by NOAA's Sectoral Applications Research Program (SARP)
- Partners:
  - American Planning Association (APA)
  - Illinois State Water Survey (ISWS)





## CLIMATE SCIENCE AND LOCAL PLANNING

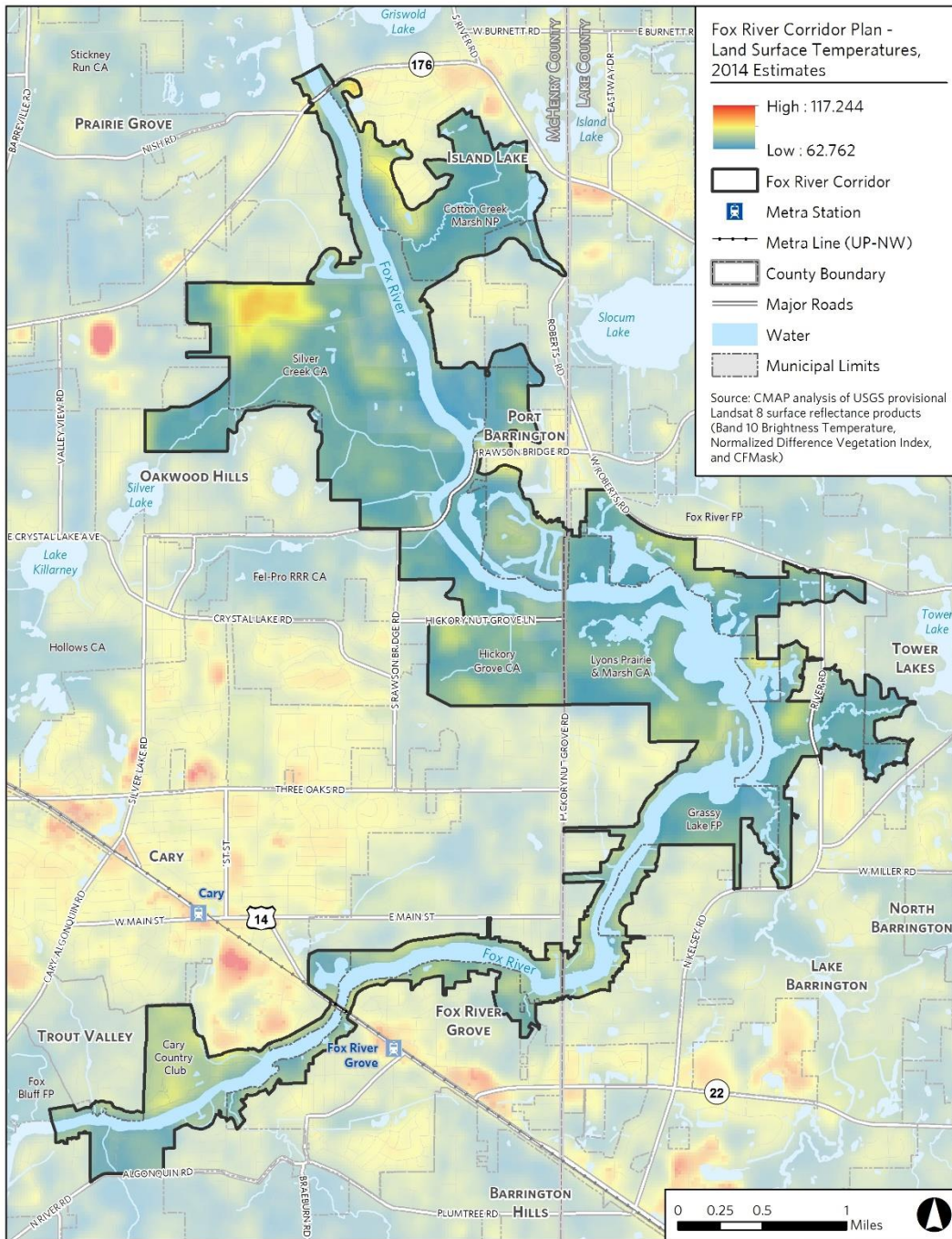
- Fox River Corridor –  
One of five pilot  
communities
- Climate vulnerability  
assessments



- Key findings
- Climate and natural hazards
- Vulnerability and risk assessment
  1. Critical infrastructure
  2. Social vulnerability
  3. Economic impacts
- Looking Forward

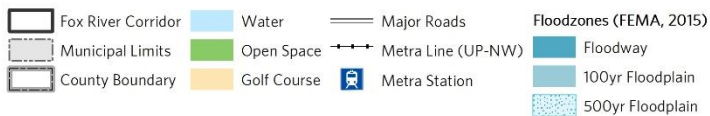
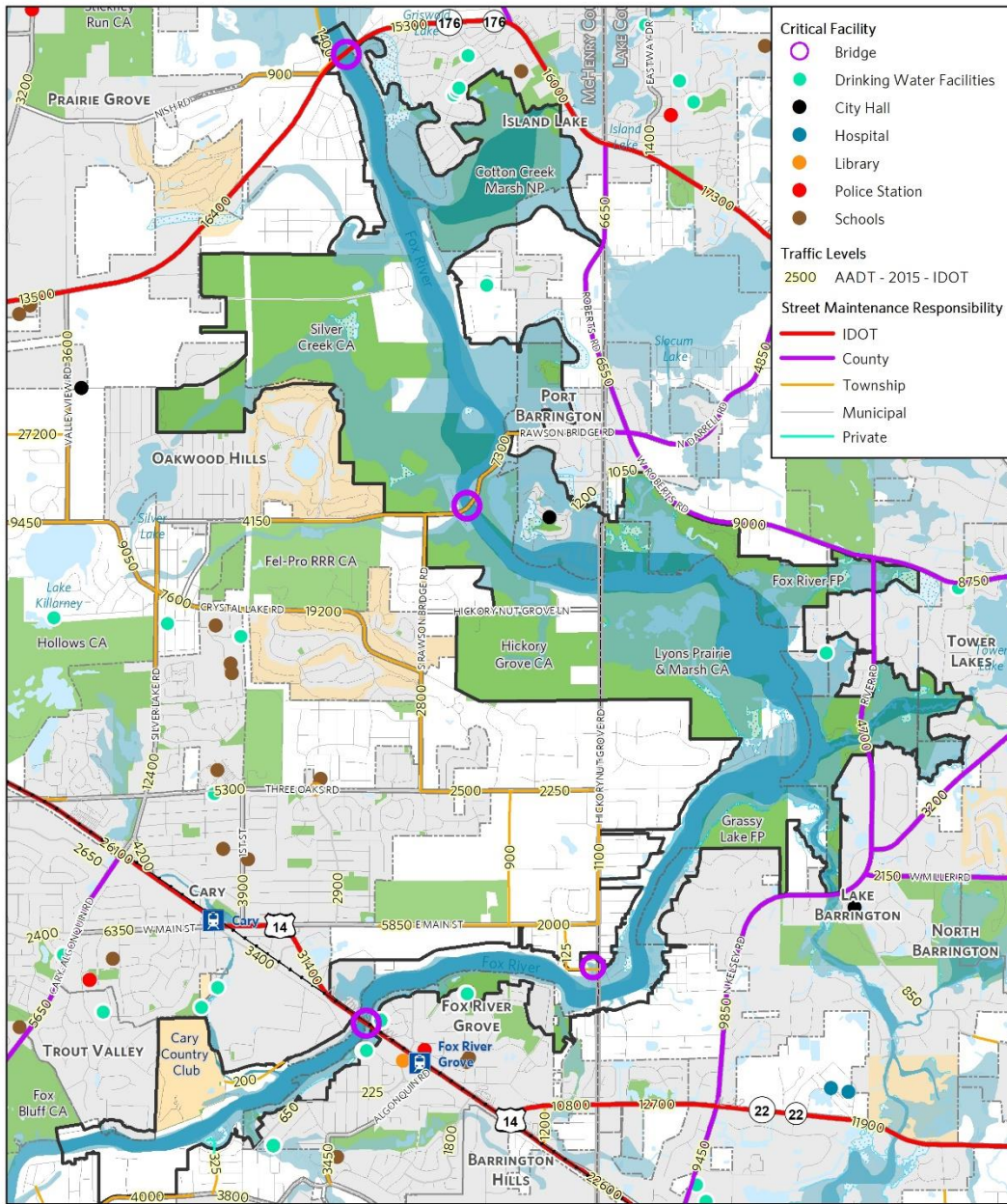
# VULNERABILITY ASSESSMENT





## Climate and natural hazards –

- Flooding
- Drought
- Severe Storms
- Snow and ice
- Extreme heat

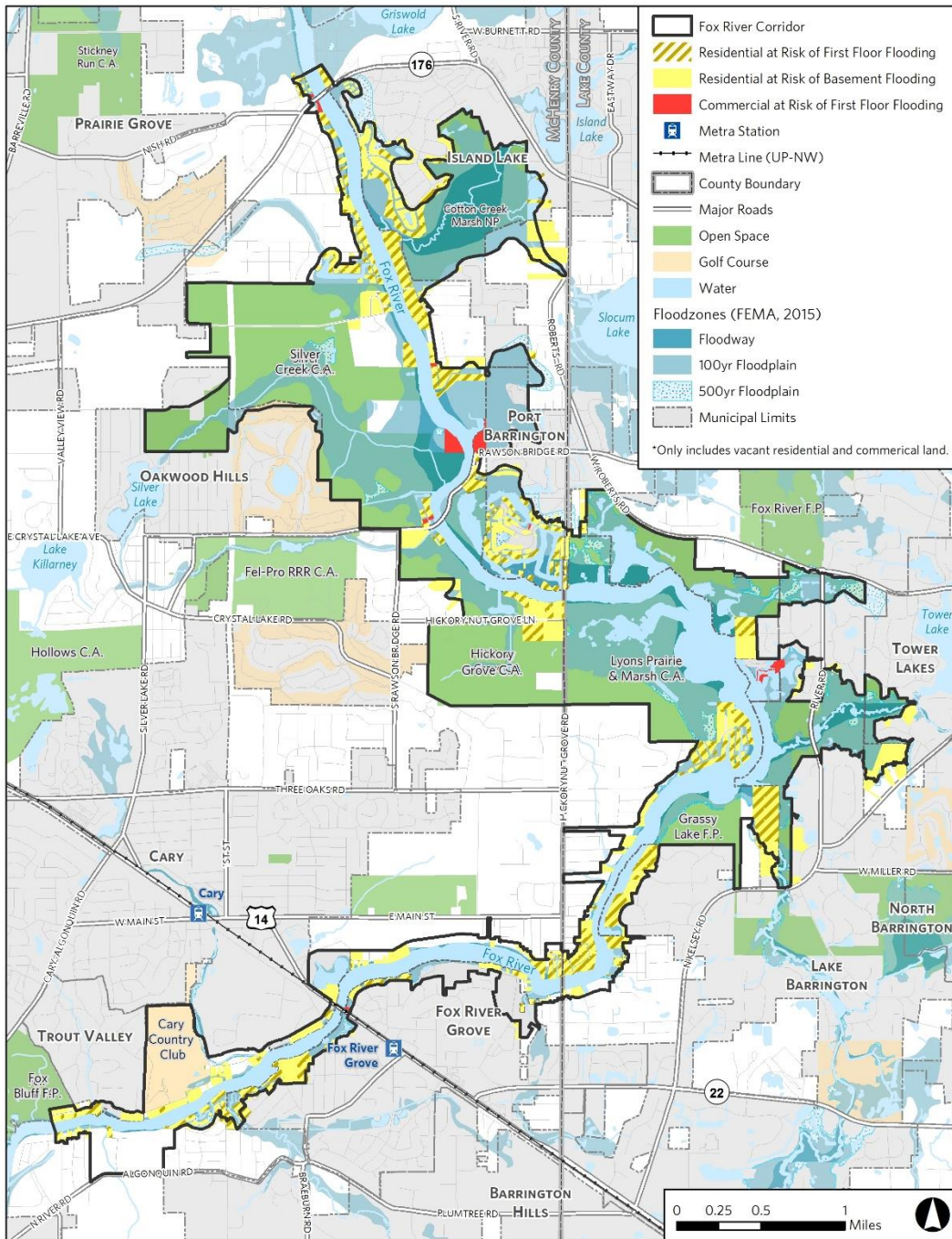


Chicago Metropolitan Agency for Planning, 2017

## Vulnerability and risk assessment –

- Critical infrastructure
- Economic impacts
- Social vulnerability





## Key findings –

- Overbank flooding





## Key findings –

- Overbank flooding
- River/business closures



## Key findings –

- Groundwater shortages
- Degraded ecosystems & habitat





## Looking forward—

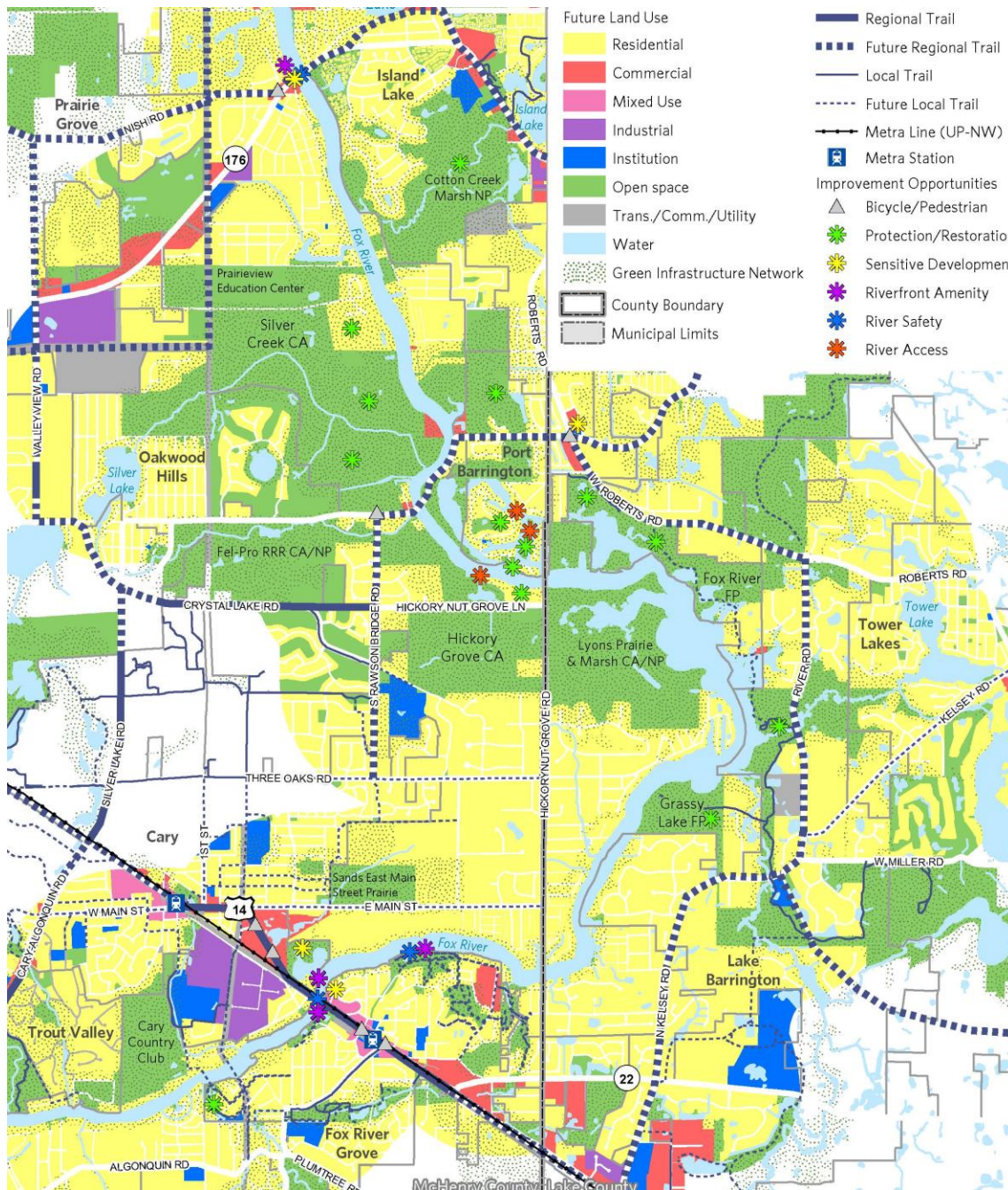
- Flood mitigation & recovery
- Stormwater management & erosion control
- Natural resources management
- Regional coordination



# Questions?

- Create a **healthy, safe, and accessible** river environment.
- **Balance the preservation and recreational use** of the Fox River and connected natural areas.
- Foster a culture of appreciation and **stewardship** among residents, businesses, and river users.
- Preserve the area's **rural and local character**.
- Enhance the **vibrancy** of the riverfront and nearby commercial and downtown areas.
- Protect high quality and diverse **habitats**.
- Strengthen **resilience** to the effects of climate change to better withstand floods, droughts, and other impacts.

## GUIDING PRINCIPLES FOR THE PLAN



## Framework Plan:

- Future land use
- Green infrastructure
- Bikeways
- Improvement opportunities



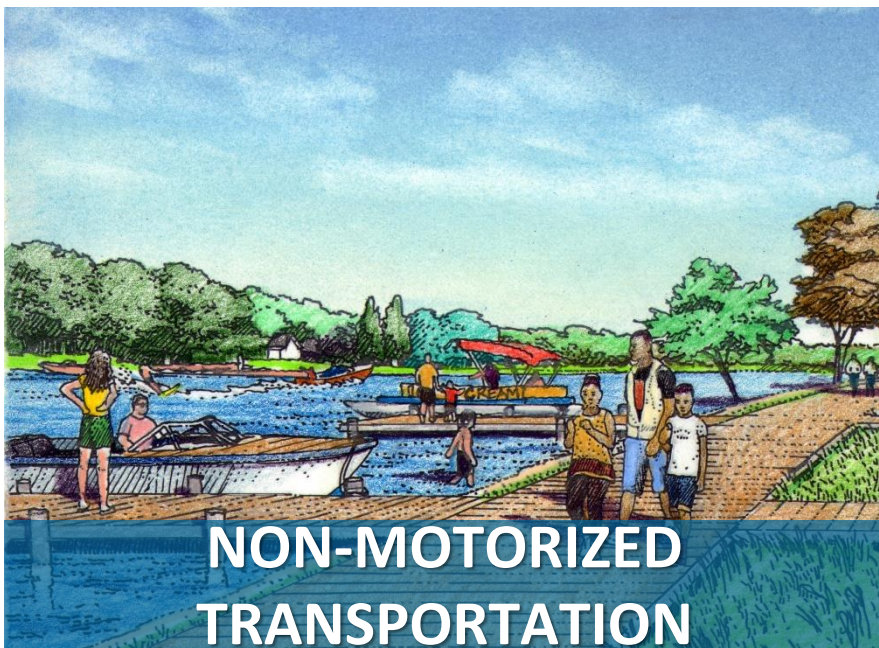
# PLAN RECOMMENDATION AREAS



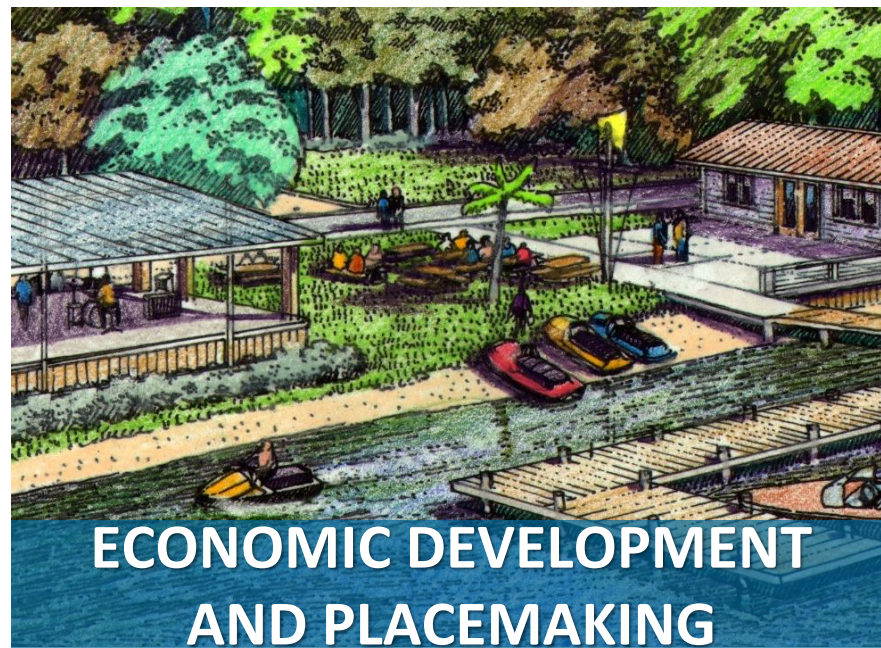
**NATURAL RESOURCES**



**RECREATION AND OPEN SPACE**



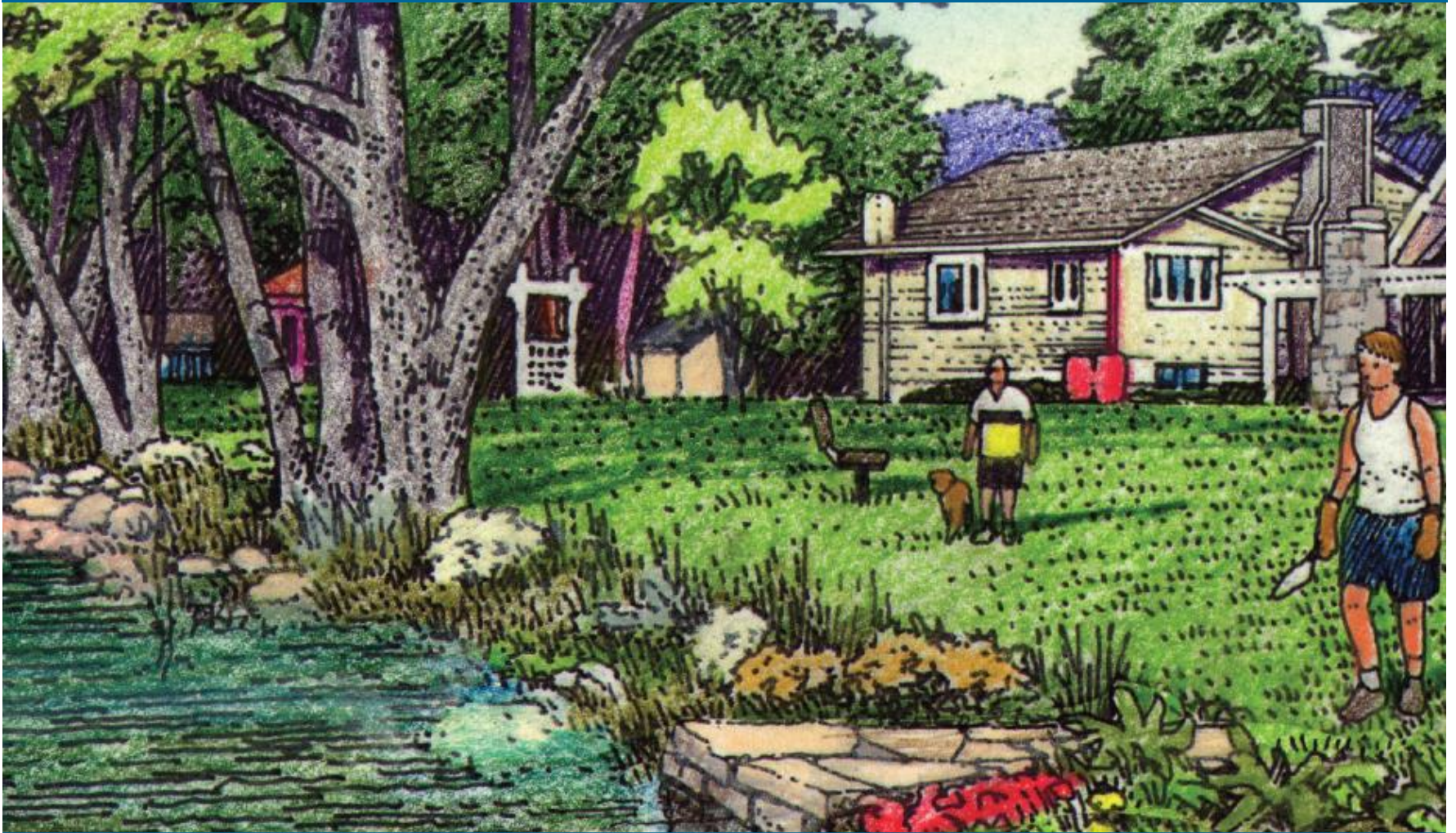
**NON-MOTORIZED  
TRANSPORTATION**



**ECONOMIC DEVELOPMENT  
AND PLACEMAKING**



# NATURAL RESOURCES



The Fox River corridor will achieve a healthy, clean, diverse, and connected system of natural resources that is appreciated and protected for its ecological value and better able to withstand the impacts of climate change.



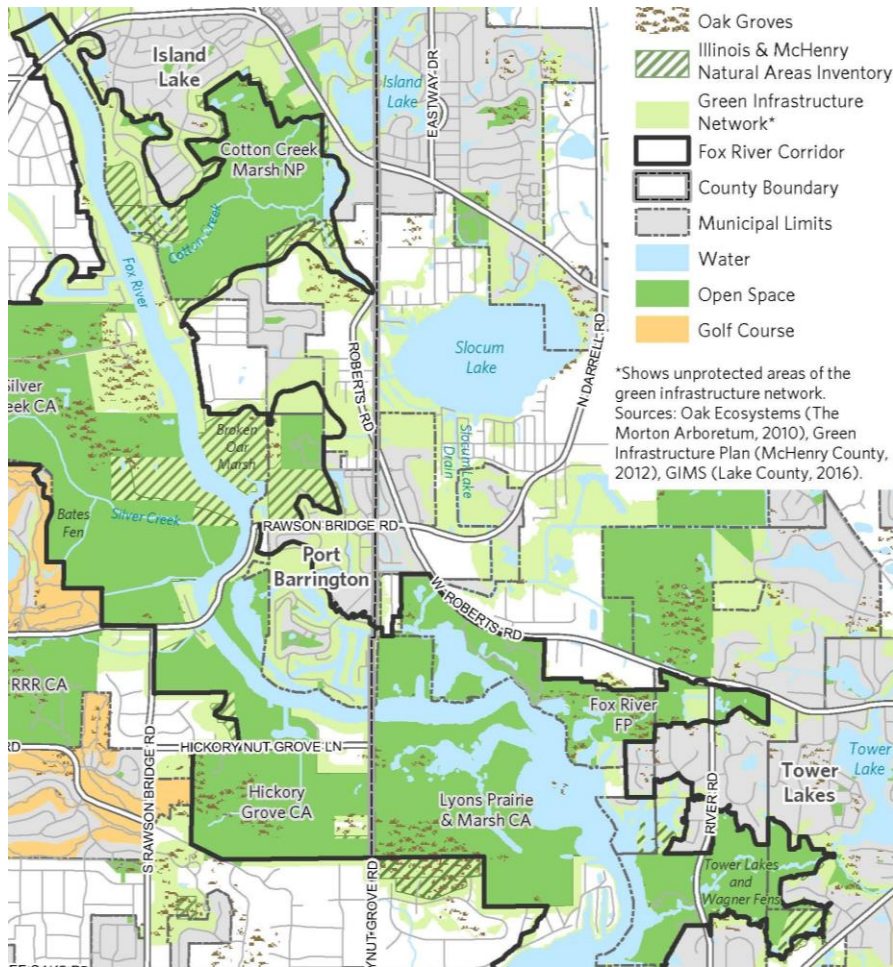


- Support existing groups
- Tailor outreach

**COLLABORATE TO  
LEVERAGE RESOURCES  
AND MAXIMIZE IMPACT**



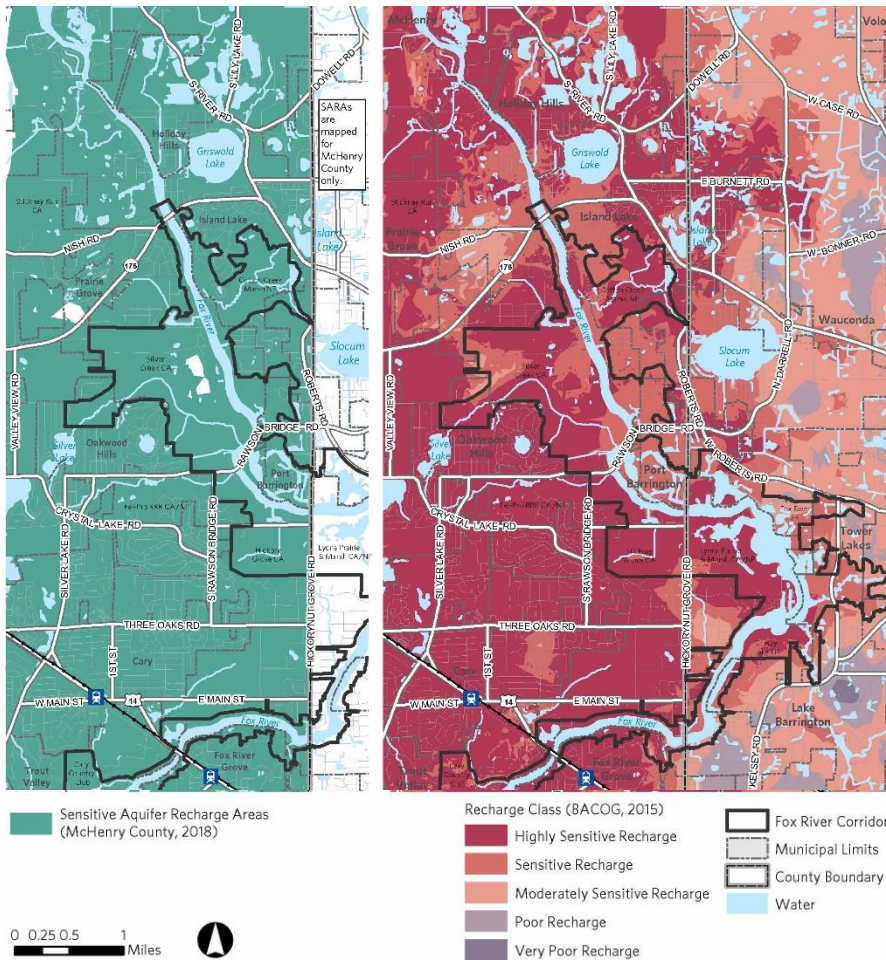




- Strengthen local ordinances and plans.
- Target green infrastructure expansion and management.
- Improve stormwater management and erosion control.



**PROTECT AND RESTORE  
GREEN INFRASTRUCTURE**



- Sensitive aquifer recharge areas (SARA) and BACOG aquifer sensitivity
- Groundwater protection and water conservation ordinances

**MAINTAIN AND ENGANCE  
GROUNDWATER RESOURCES**



# RECREATION AND OPEN SPACE



The Fox River corridor will balance recreation and natural resources protection to offer a safe, clean, and accessible environment for residents and visitors to enjoy throughout the year.





**PARTICIPATE IN THE  
FABULOUS FOX  
WATER TRAIL INITIATIVE**

- **Community engagement**
- **Access point identification and improvement**
- **Safety enhancements / education**
- **Branding and marketing**

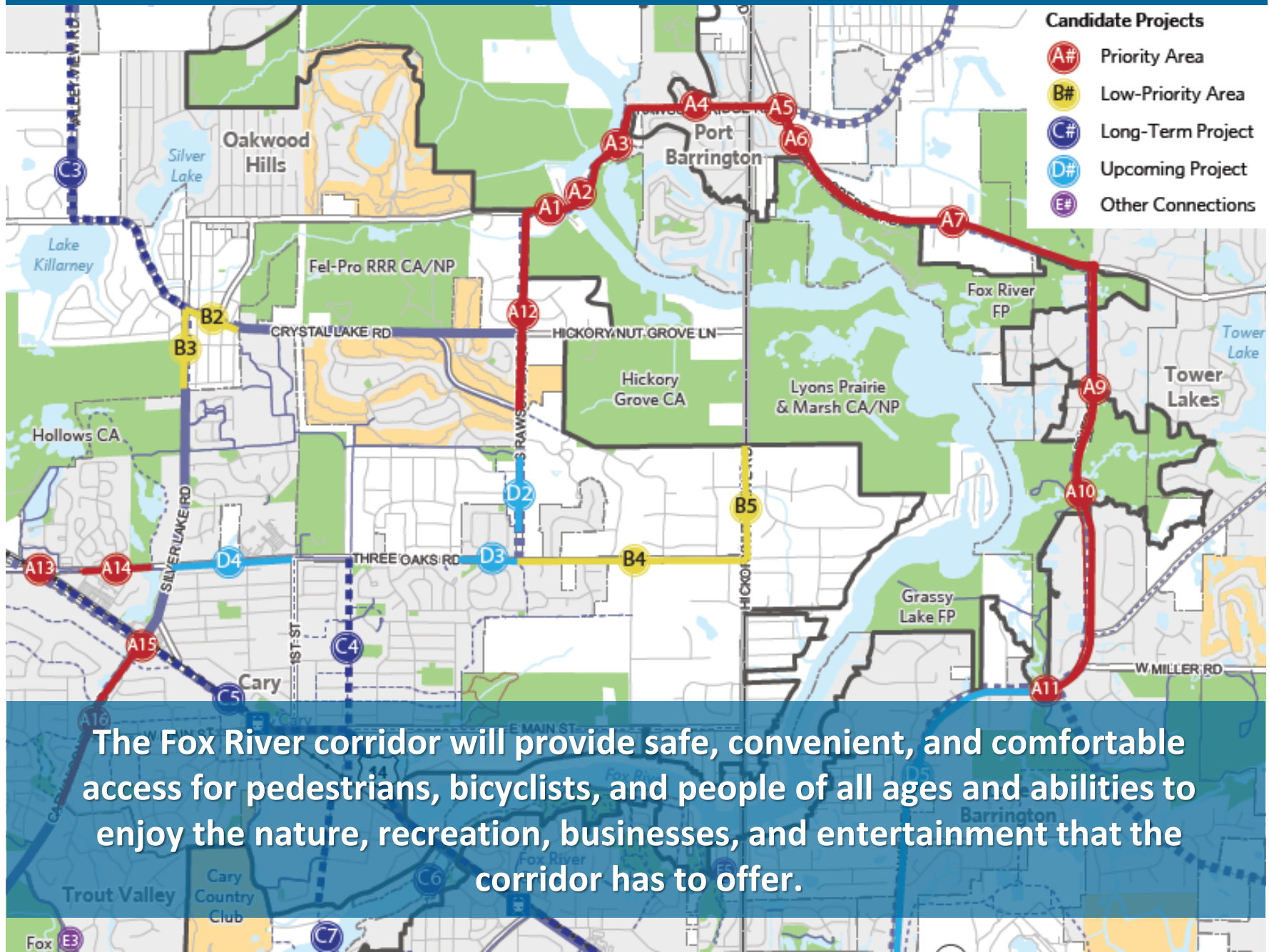


## **IMPROVE SAFETY FOR ALL RIVER USERS**

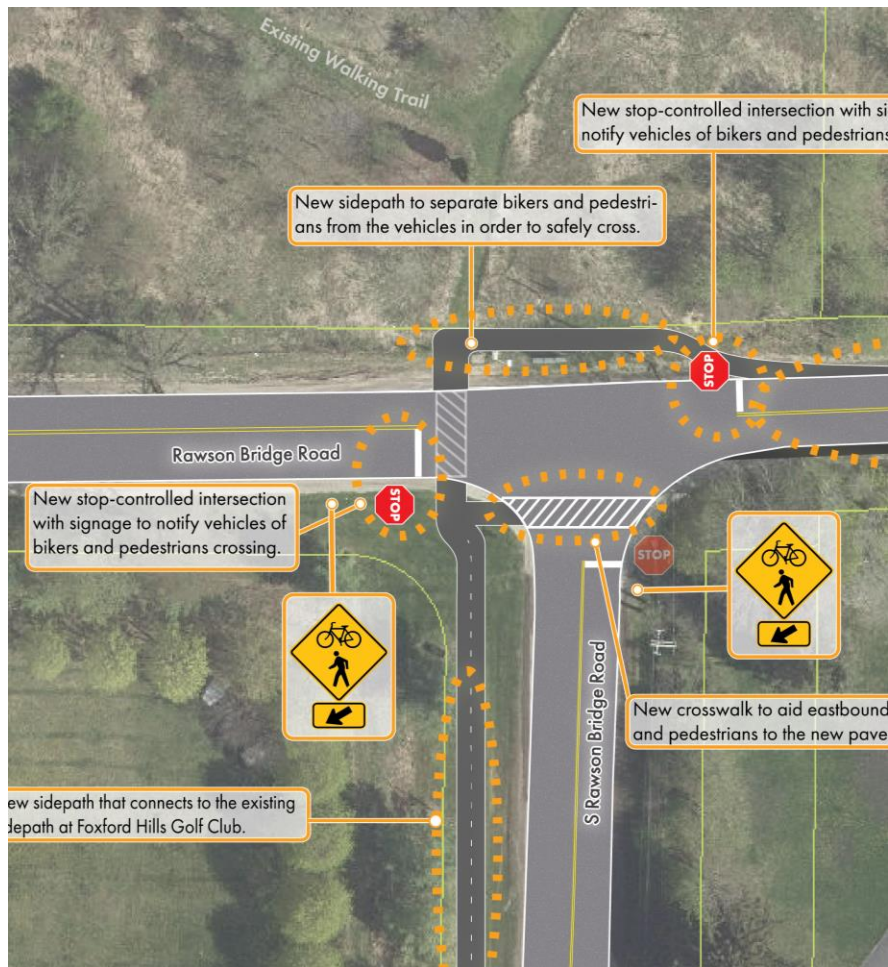
- **Safety education**
- **Coordination among enforcement agencies**
- **Any establishment of safety/“no-wake” zones should be led by the communities with public input**



# NON-MOTORIZED TRANSPORTATION



The Fox River corridor will provide safe, convenient, and comfortable access for pedestrians, bicyclists, and people of all ages and abilities to enjoy the nature, recreation, businesses, and entertainment that the corridor has to offer.



## EXPAND THE BICYCLE AND PEDESTRIAN NETWORK

### Priority Areas

- Rawson Bridge Road\*
- South Rawson Bridge Road\*
- Rawson/Roberts intersection
- Kelsey Road
- Three Oaks Road
- Cary Algonquin Road

*\*Plan provides concept plans and cost estimates for improvements*



# ECONOMIC DEVELOPMENT/PLACEMAKING



The Fox River will be a primary gateway into corridor communities, creating a vibrant and unique place that leverages river recreation, placemaking, and sensitive development opportunities to expand the local economy.





- Preserve floodplains and wetlands
- Reduce stormwater runoff
- Improve aquatic habitat
- Provide river access /recreation
- Provide infrastructure for people biking and walking

**PURSUE RIVER-ORIENTED  
ECONOMIC DEVELOPMENT**



# Questions?

**How can we  
promote  
implementation?**

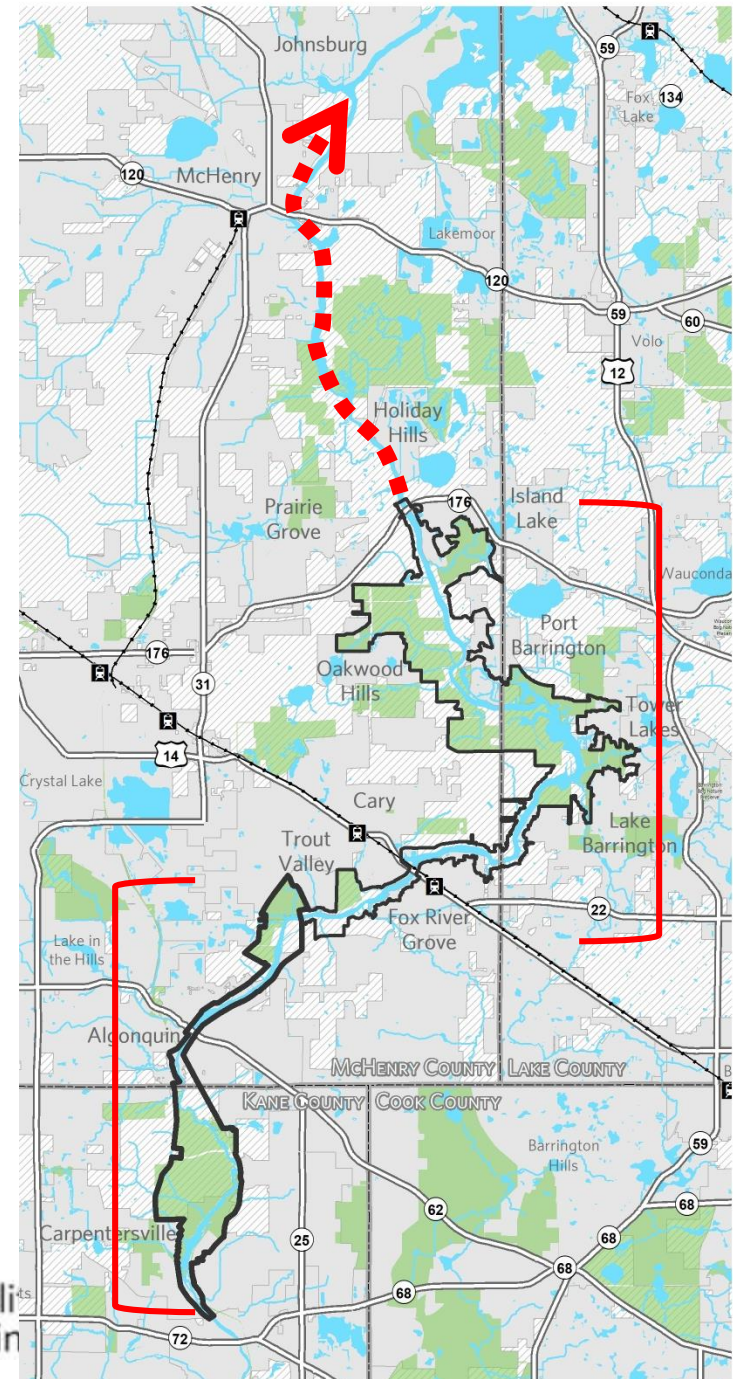
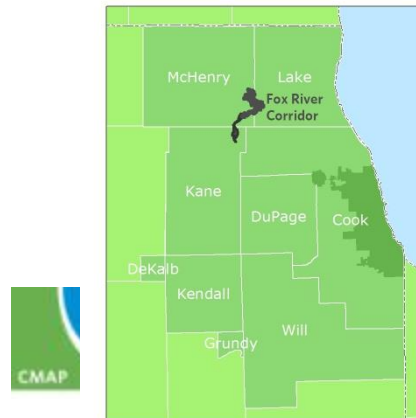


# Planning upstream

2016: Algonquin and Carpentersville

2018: Burtons Bridge to Fox Bluff

Upcoming: Johnsburg to Burtons Bridge



# Burtons Bridge to Johnsburg

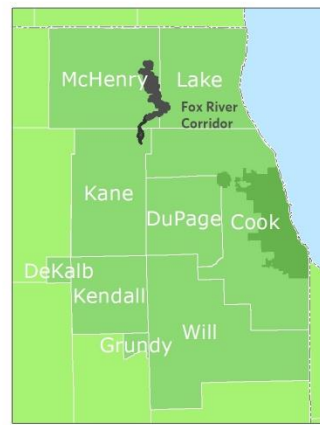
McHenry County P&D

City of McHenry

Village of Johnsburg

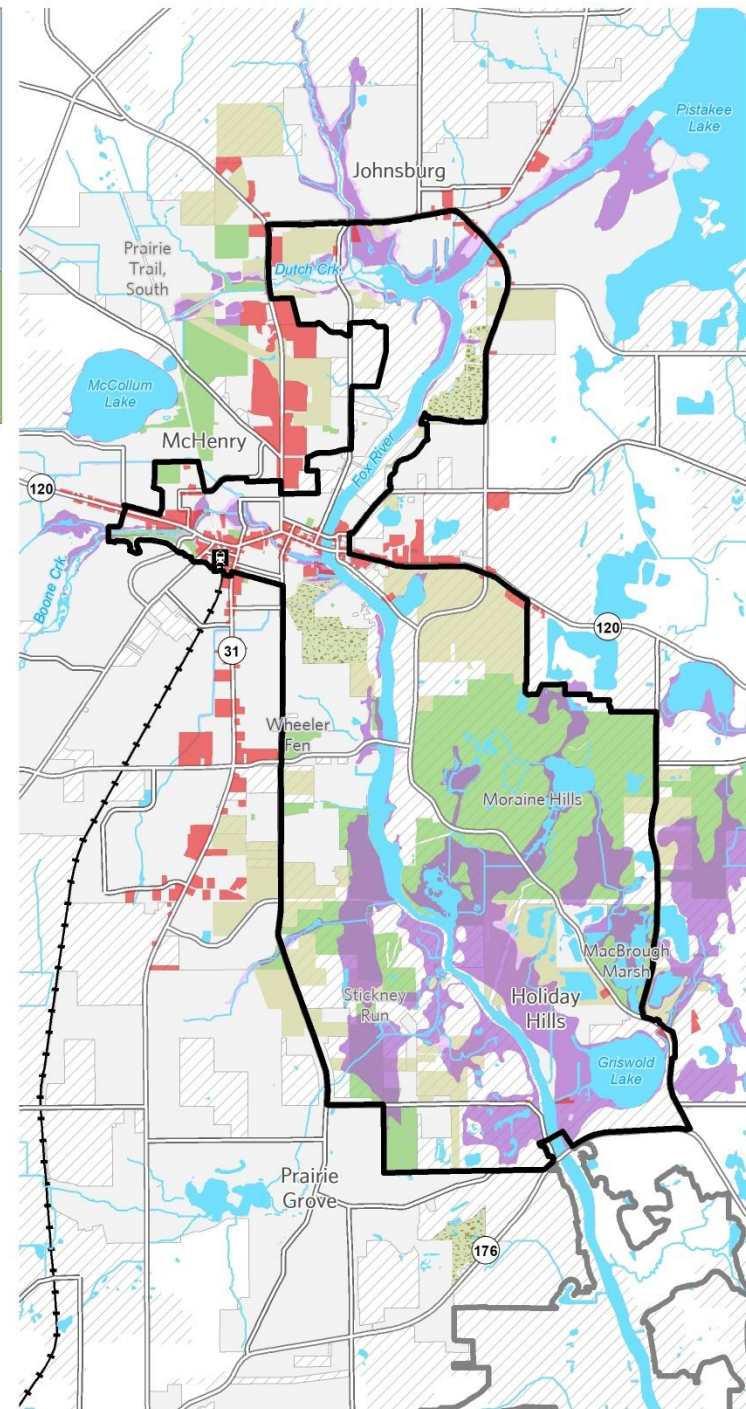
Village of Holiday Hills

IDNR



## Fox River Corridor Plan Proposed Study Area

- Proposed Study Area
- Past Fox River Study Area
- Floodzones
  - 100-yr Floodplain
  - 500-yr Floodplain
- Land Use (relevant selection)
  - Commercial
  - Open Space
  - Golf Course
  - Agriculture





**What should we  
consider in the next  
stretch?**



**THANK YOU!**

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