

# DEFIANCE, OHIO

## A SMALL CITY WITH A BIG RESPONSIBILITY

Confluence of Maumee & Auglaize Rivers

Miami & Erie Canal - Great Black Swamp

Native American History

Significant Location: Catalyst for Lake Erie



DEFIANCE  
*a great place to live*



# WHY DEFIANCE, OHIO?

**Maumee River is largest in Great Lakes Region:**

- Over 4 Million Acres
- 6600 Sq. Miles
- 85% Ag. Land Use

**Strategically located:**

85% of Maumee River nutrient loading passes through Defiance, Ohio\*

\*All Except Lower Maumee Watershed



# HARMFUL ALGAL BLOOMS (HABS) IN THE GREAT LAKES



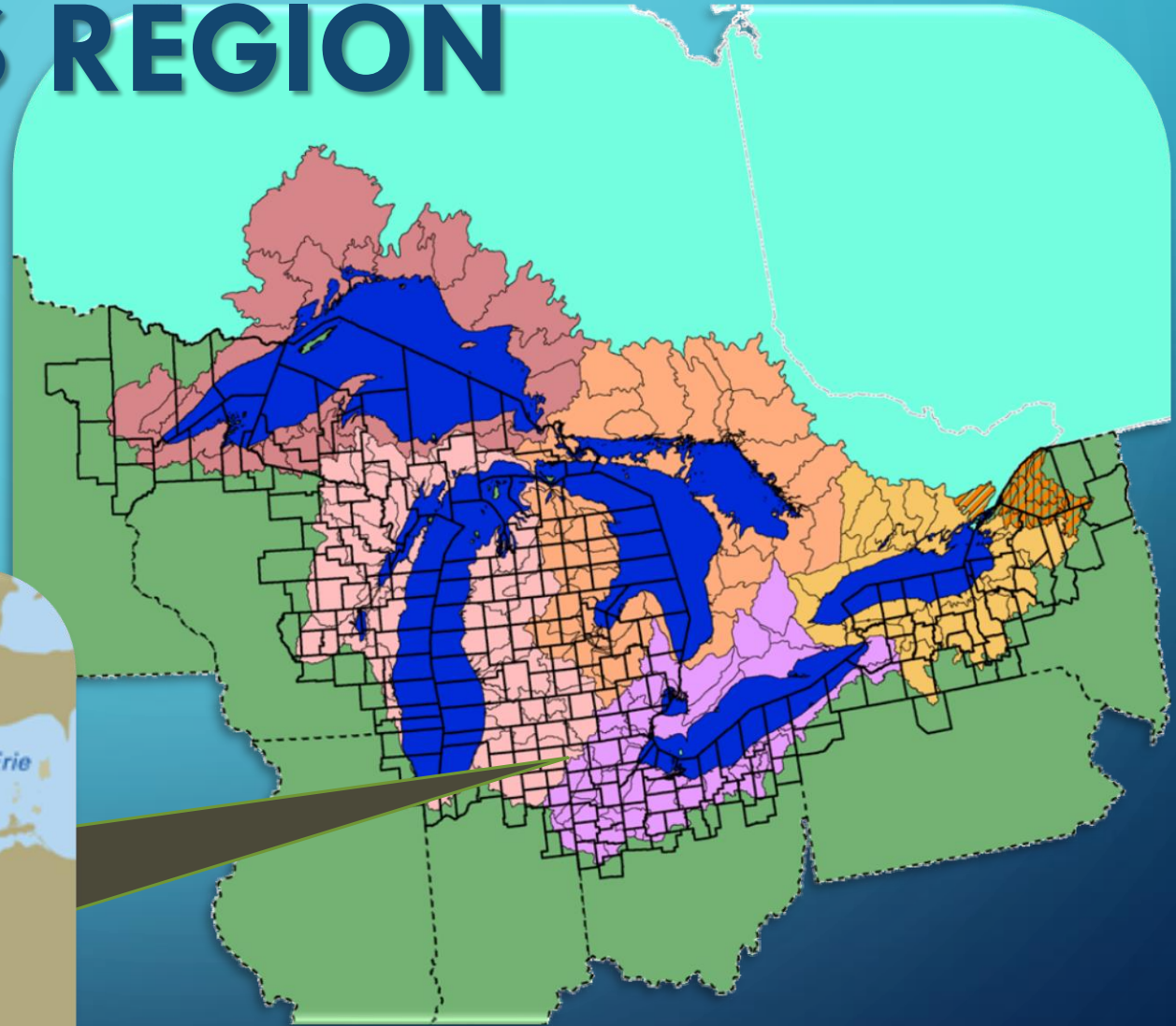
- 20% of the world's fresh water
- Drinking water for 48 million people



# GREAT LAKES REGION

8 states & 2 provinces

\* If it were a country it would be the 3<sup>rd</sup> largest economy in the world.

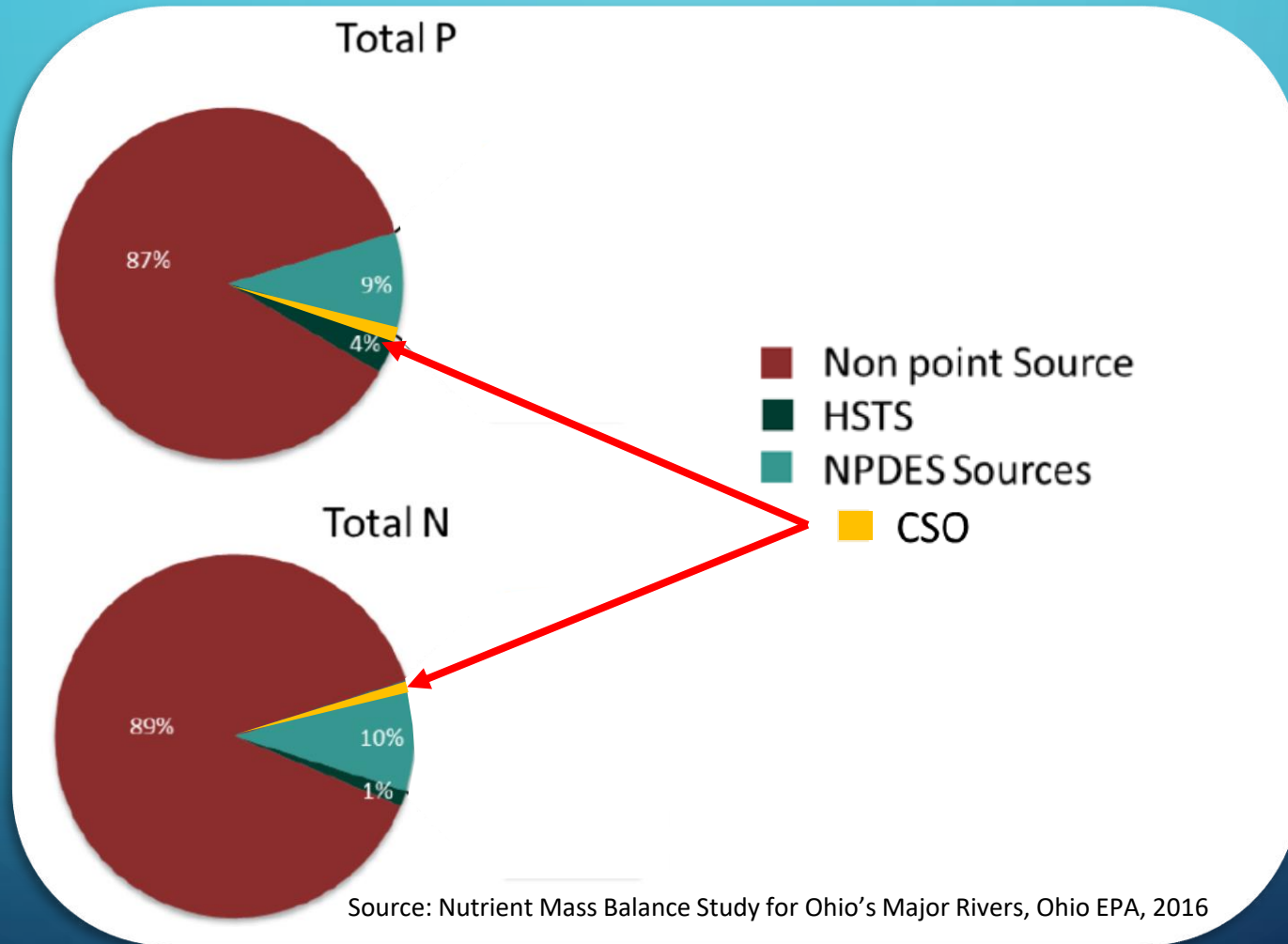


# DEFIANCE MUNICIPAL RESPONSIBILITY

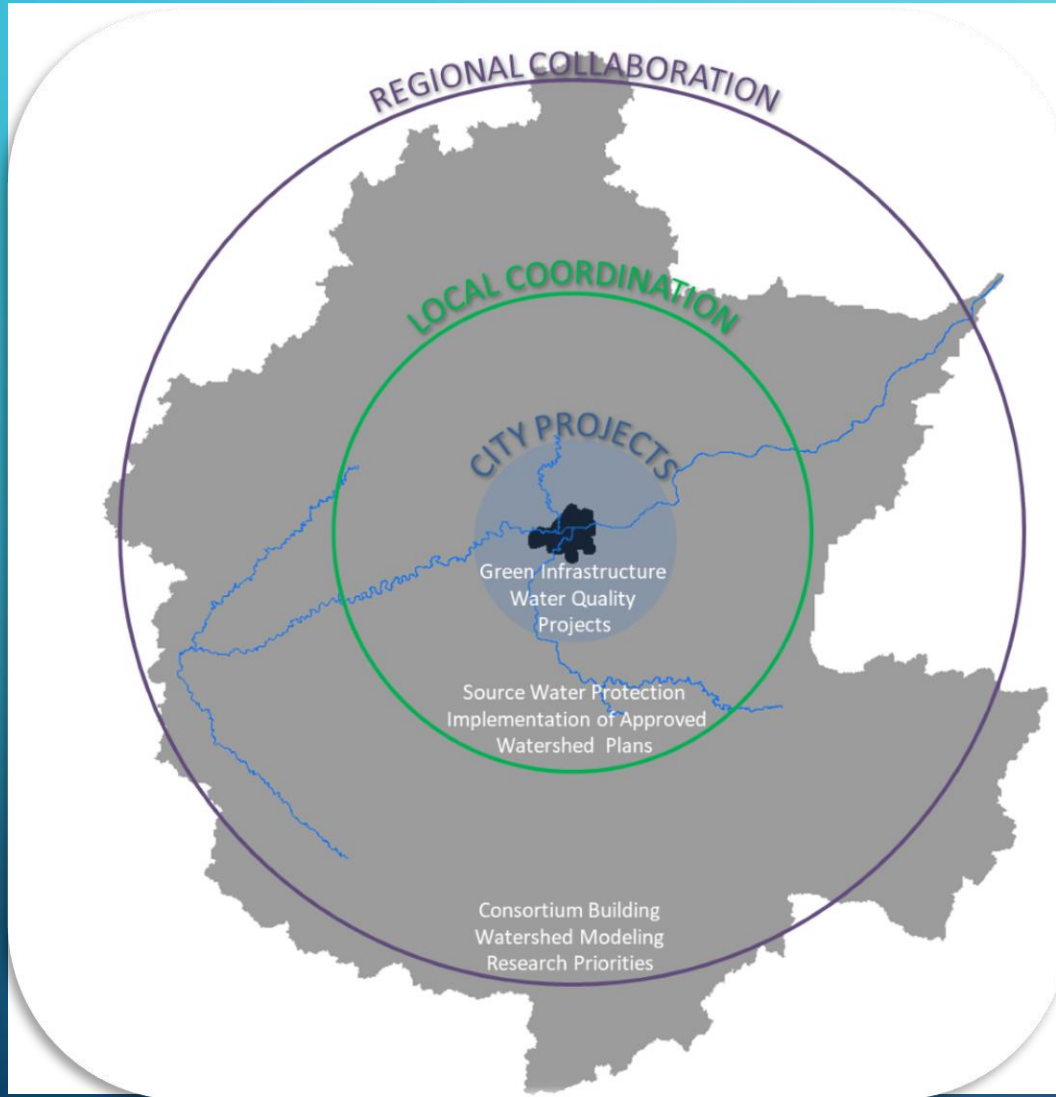
- Maumee River is the sole source of City of Defiance drinking water
- City continually working to improve quality of drinking water
- Maumee River Basin Governments = \$1 Billion CSO Spending
- Shift to Integrated Planning = More Impactful Spending
- Traditional LTCP vs. Integrated Watershed Improvement Plan
- Regional Collaboration – University + Government



# COMBINED SEWER OVERFLOW (CSO) 1% OF THE NUTRIENT PROBLEM



# WATERSHED PLANNING



**Collaboration:** Leveraging and aligning resources for mutual benefit

**Innovation:** Partners ready to tackle an existing problem in a new way

**Robust Digital Technology Cluster:** Opportunity for regional impact and long-term sustainability

# IF YOU CAN'T MEASURE IT... YOU CAN'T MANAGE IT

- City of Defiance “Smart Sewers”
- Using real-time monitors and dashboard as a decision-making tool for CSO improvements
- Apply to Watershed Planning Efforts



# SMART SOLUTIONS REQUIRE RESOURCES

- Collaborative planning and decision-making for a regional knowledge and action network
- Improved Connectivity
  - automation
  - effective data collection





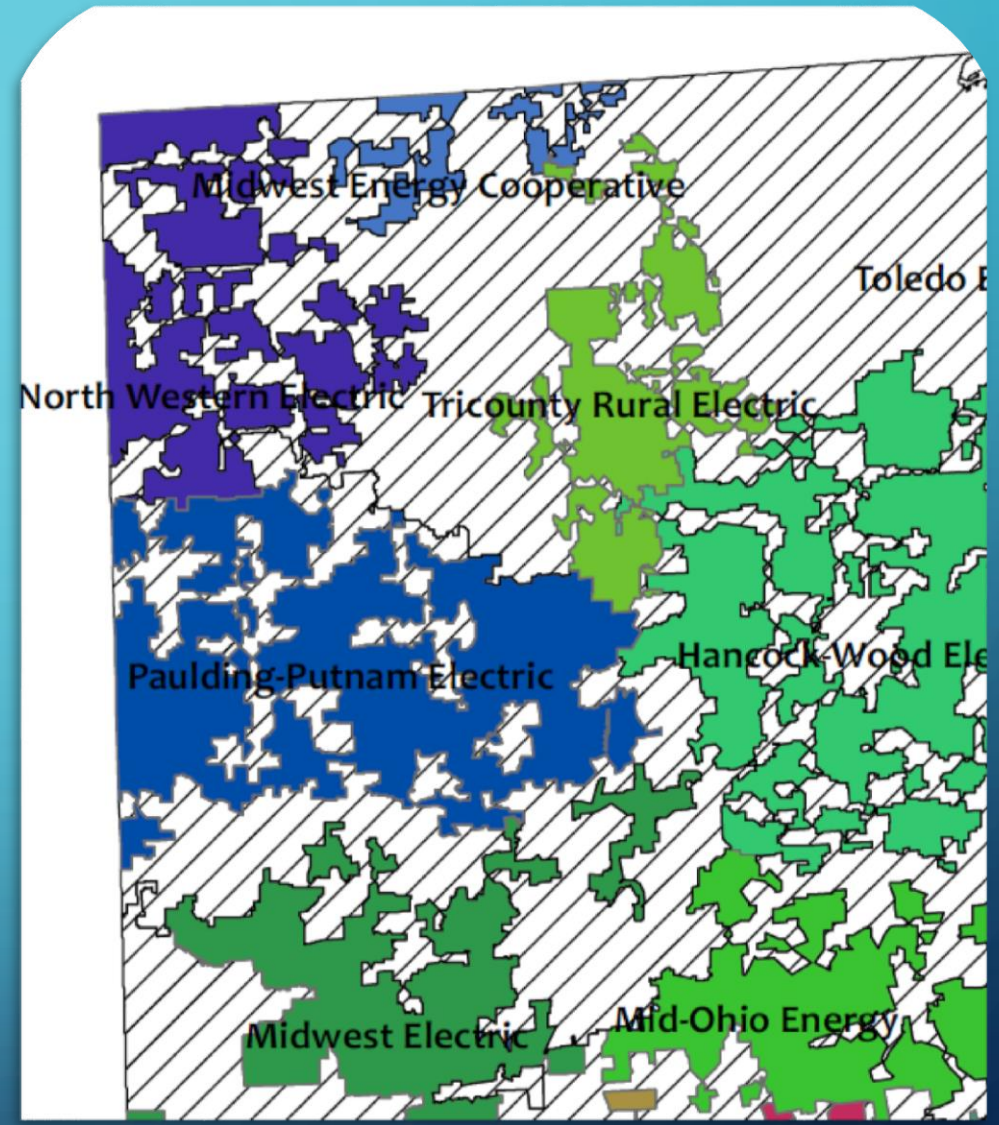
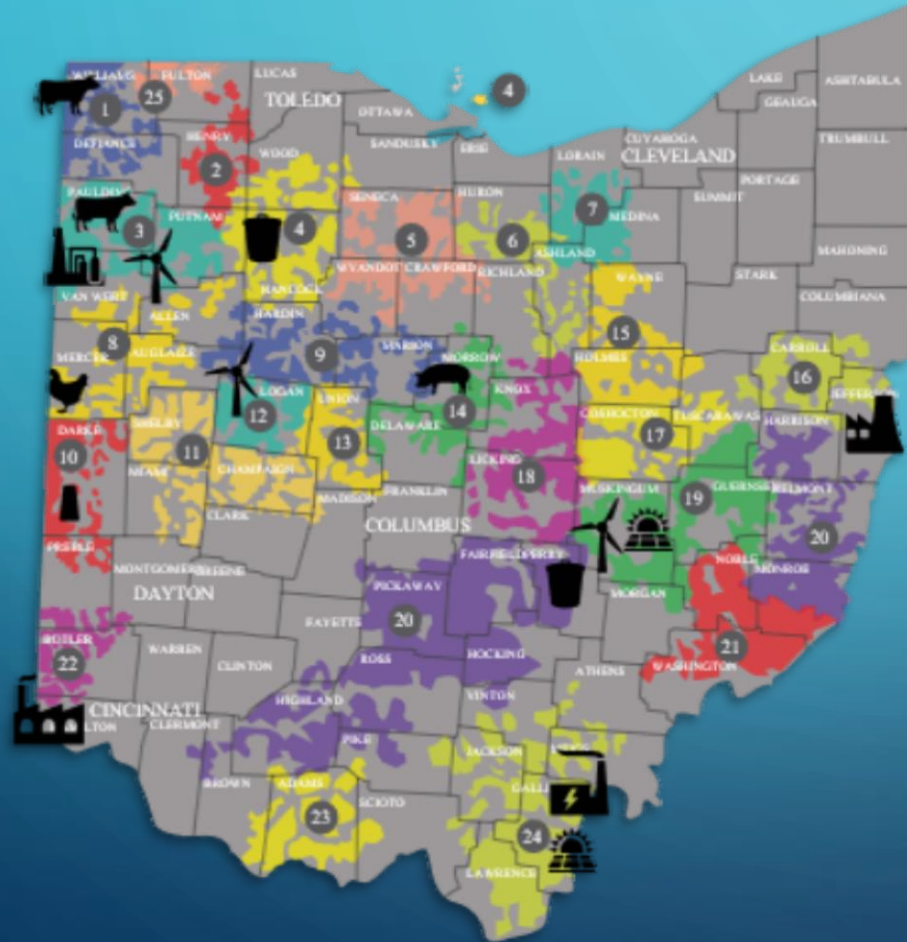
*Defiance County*

# Rural Broadband Initiative

- Commissioner Ryan Mack
- Focus on Precision Agriculture
- Better Connectivity for Last Mile – Fiber to the Farm
- Dr. Gallardo: Purdue Center for Regional Development
  - Digital Inclusivity Study

Transition to REGIONAL STUDY

# REGIONAL ELECTRIC CO-OPS ARE A NATURAL PARTNER

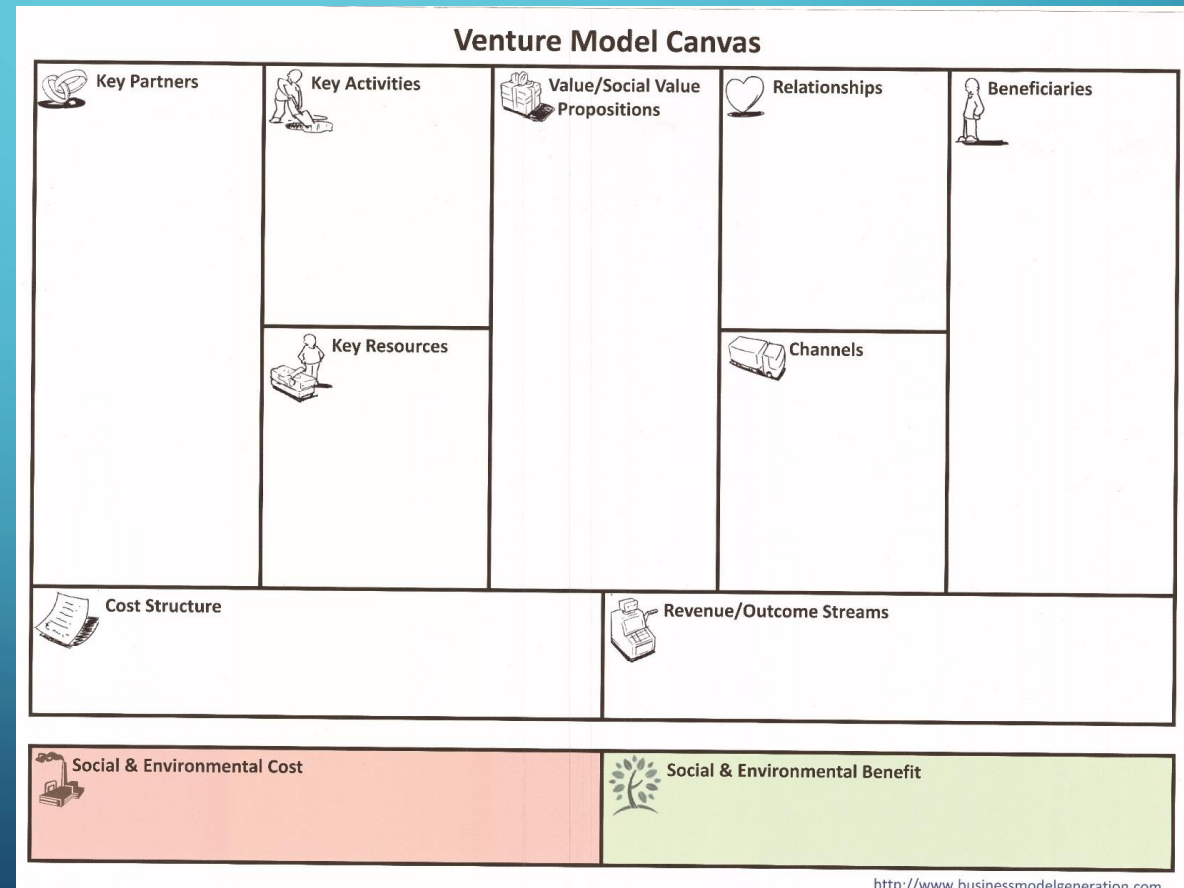


# HOW DO WE ACCOMPLISH THIS?

## KEY PARTNERS: BUILDING A PROCESS AND PLATFORM

NATIONAL SCIENCE  
FOUNDATION (NSF)  
PLANNING GRANT

Council of the  
Great Lakes Region

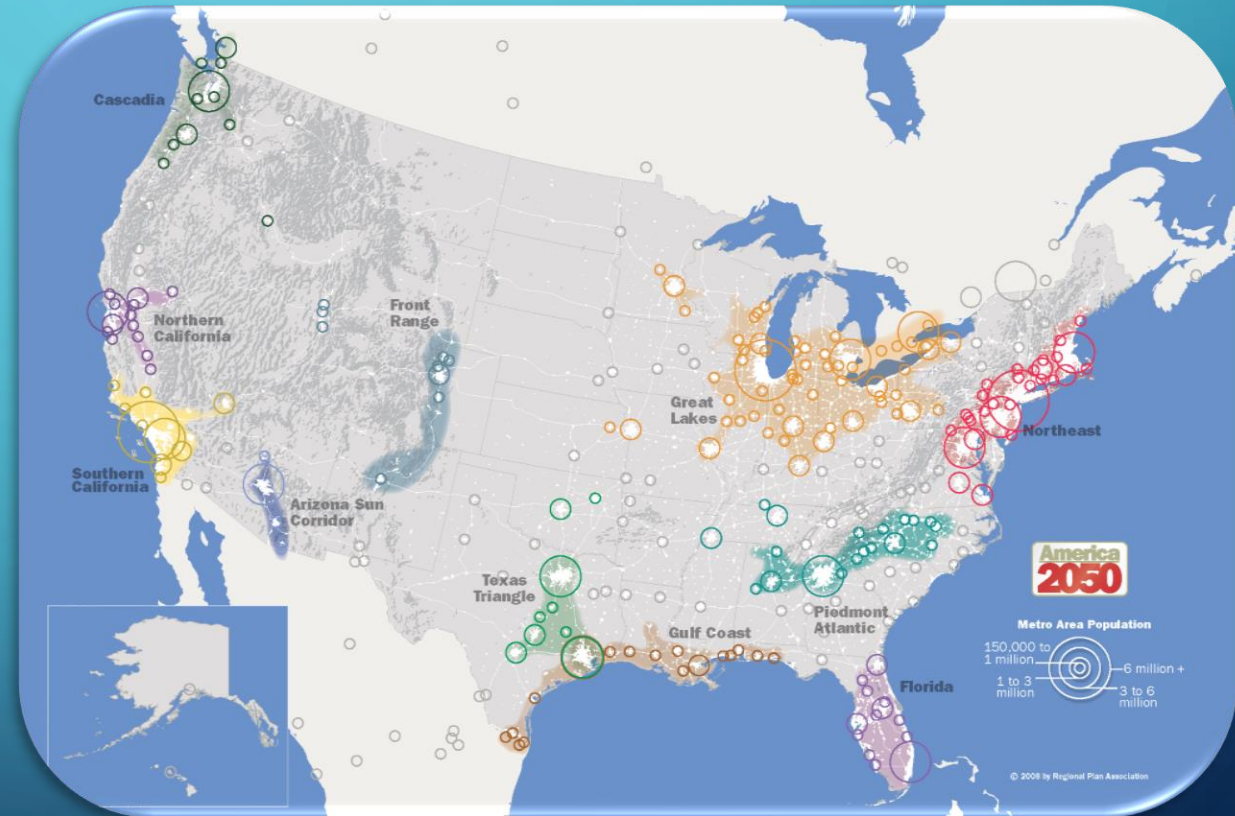




# EMERGING MEGAREGIONS: AMERICA 2050

## Layers of Relationships based on Common Interests:

- Economic Expansion
- Natural Resources
- Policy Decisions
- Role of Defiance, Ohio in the Great Lakes Region



Opportunity to  
harness the power  
of technology  
toward  
water-quality  
solutions for  
the Region

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