

# Northwest Indiana 2040 Comprehensive Regional Plan Update

Environment & Green Infrastructure

Joe Exl

Kathy Luther

September 4, 2014

# 2040 CRP - Environmental Goals

- Managed growth that protects farmland, environmentally sensitive areas and important ecosystems\*\*
- Reduced flooding risks and improved water quality
- Improved air quality
- Clean land

**\*\* Managed growth is an over-arching goal of the CRP, much emphasis on this topic is in Chapter 1. Growth and Conservation. For our chapter we focus on the ecological resources and ecosystem services**

# Current Topic Areas

- Water Resources
- Water Supply
- Green Infrastructure
- Air Quality
- Brownfields

# Within each topic area

- Current Status – change if new data since 2011
- Existing Programs
- Plan and Policy Recommendations
- Best Management Practices/Measures
- Performance Measures
- Implementation
  - NIRPC Actions
  - Partnerships

## WATER RESOURCES

	Currently	Comments?
Current Status	<ul style="list-style-type: none"> <li>• Lakes and streams</li> <li>• Wetlands</li> <li>• Floodplains</li> <li>• Aquifers</li> <li>• Watershed management</li> </ul>	AOC/Dredging ERC for GW Watershed Boundary fix Beef up floodplain section
Existing Programs	<ul style="list-style-type: none"> <li>• IDEM Section 319 Program</li> <li>• IDNR Lake &amp; River Enhancement (LARE)</li> <li>• USDA Farm Bill Programs</li> </ul>	Levee In-lieu Fee Waters of the US Coastal LMAP Include floodplain/protection programs
Best Practices	<ul style="list-style-type: none"> <li>• Riparian buffer preservation</li> <li>• Wetland restoration</li> <li>• Stream daylighting</li> <li>• Post-construction storm water practices</li> </ul>	Septics Woody Debris

## WATER RESOURCES

	Currently	Comments?
Performance Measures	<ul style="list-style-type: none"> <li>• Miles of impaired stream</li> <li>• Acres of wetland gain/loss</li> <li>• # of watershed plans and \$ leveraged</li> </ul>	Chandra stuff AOC Model Ordinances Comm. In flood ins. Program Flood loss
Implementation		
NIRPC	<ul style="list-style-type: none"> <li>• Develop “model” ordinances</li> <li>• Engage in watershed planning initiatives</li> <li>• Maintain NWI Watershed Management Framework</li> <li>• Education &amp; technical support on storm water practices</li> </ul>	septic
Partners	<ul style="list-style-type: none"> <li>• Work w/ local governments &amp; nonprofit/advocacy groups to fill in watershed planning gaps</li> <li>• Increase capacity for watershed management</li> <li>• Support academic institutions in long-term monitoring programs</li> </ul>	

# Water Withdrawal, Consumption, and Supply

	What's in there now	Comments?
Current Status	Water Withdrawals: by county and sector Consumptive Use : by sector Per Capita Daily Use Public Water Supply(PWS) capacity	Whitman study
Existing Programs	Sig. Water Withdrawal(SWWF) Registration Wellhead Protection Source Water Planning GL Compact Groundwater Quality Standards	DNR efficiency rules
Best Practices	Green Building Practices Water Conservation Planning Water Efficiency Building Codes Water Efficiency BMPs for Irrigators	Water recycling

# Water Withdrawal, Consumption, and Supply

	What's in there now	Comments?
Performance Measures	PWS Per capita use	infrastructure
Implementation-		
NIRPC	Model water conservation ordinances Public Education	
Partners	Public Education Water system audits Adopt ordinances	



# Benefits of Green Infrastructure Network Approach

- Cleaner air and water
- Healthier people, land and ecosystems
- Better connectivity for fish and wildlife conservation
- Safer, more cost-effective public infrastructure
- Higher property values and more efficient project development
- Enhanced climate resiliency
- More sustainable energy, land and resource consumption
- Improved quality of life

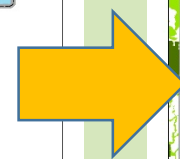
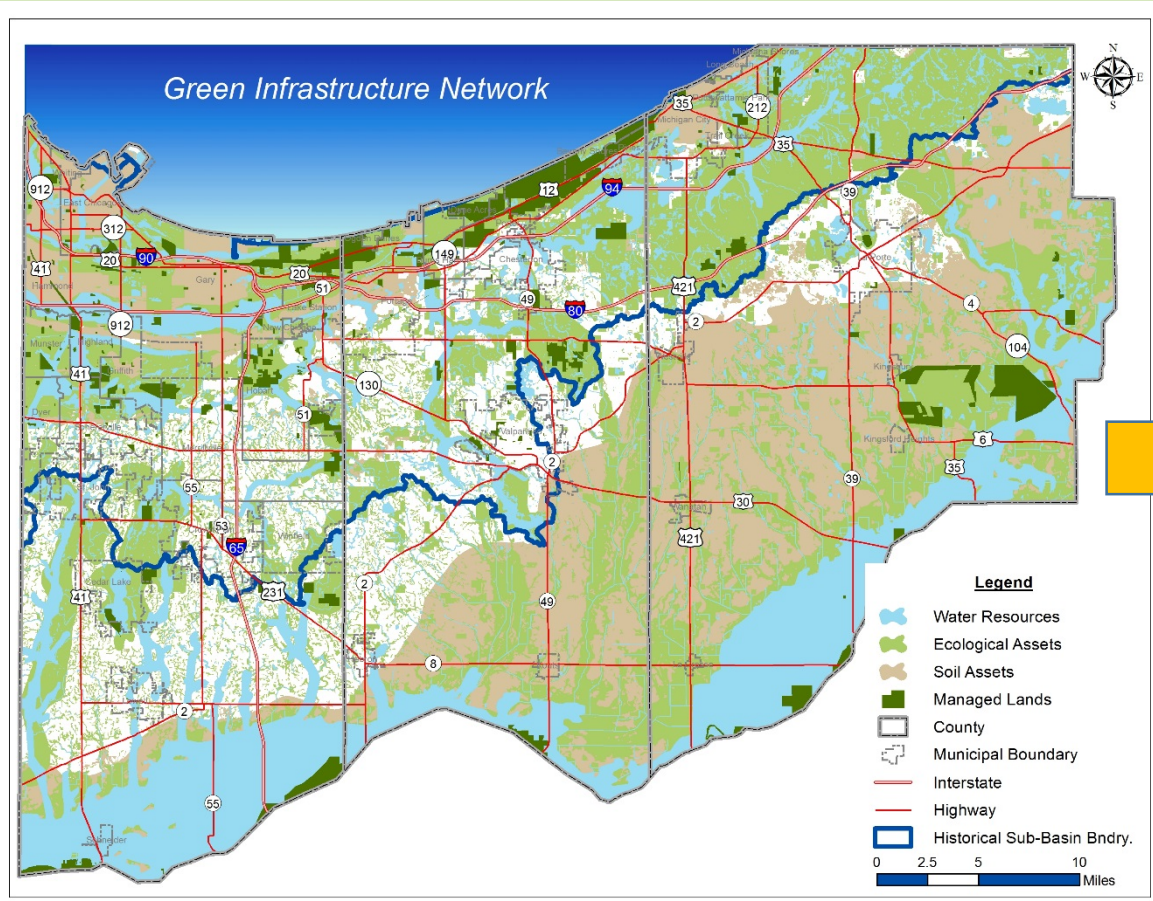
# Green Infrastructure

	Currently	Comments?
Current Status	<ul style="list-style-type: none"><li>• Managed lands</li><li>• Regional open space</li><li>• Forestlands</li><li>• Biodiversity and wildlife habitat</li><li>• Prime agricultural lands</li></ul>	
Existing Programs	<ul style="list-style-type: none"><li>• IDNR Urban Forestry Program</li><li>• USDA Farm Bill Programs</li><li>• Local Land Trusts</li></ul>	MS4 BMPs
Best Practices	<ul style="list-style-type: none"><li>• Urban forestry</li><li>• Porter County UDO open space standards</li><li>• Urban agriculture &amp; community gardens</li></ul>	Ecosystem services (cost)

## Green Infrastructure

	Currently	Comments?
Performance Measures	<ul style="list-style-type: none"> <li>• Total acres of public and private managed or conservation lands</li> <li>• Forest fragmentation (acres)</li> <li>• # of Tree Cities</li> <li>• Acres of agricultural land loss/gain</li> </ul>	
Implementation		
NIRPC	<ul style="list-style-type: none"> <li>• Develop “model” ordinances</li> <li>• Collect and maintain “best practices” information</li> <li>• Provide technical assistance to revise ordinances and develop standards/ guidelines</li> <li>• Maximize opportunities in transportation planning</li> <li>• Maintain/ update green infrastructure map</li> </ul>	MS4 BMP Data???
Partners	<ul style="list-style-type: none"> <li>• Align and seek compatibility in county land use regulations w/ 2040 CRP</li> <li>• Pursue coordinated open space acquisition</li> <li>• Facilitate effective management of privately held open space</li> </ul>	

# Green Infrastructure Map



# Air Quality

	What's in there now	Comments?
Current Status	NAAQS Air Toxics	New studies? EPA Unclassifiable designation? Illiana
Existing Programs	AQ Conformity Diesel-Wise Indiana Midwest Diesel Initiative Alternative Fuels SIP Public Ed Vehicle Emission Testing	
Best Practices	Idle Reduction Diesel Retrofit Clean Fuels Complete Streets Transit/Pedestrian friendly development	

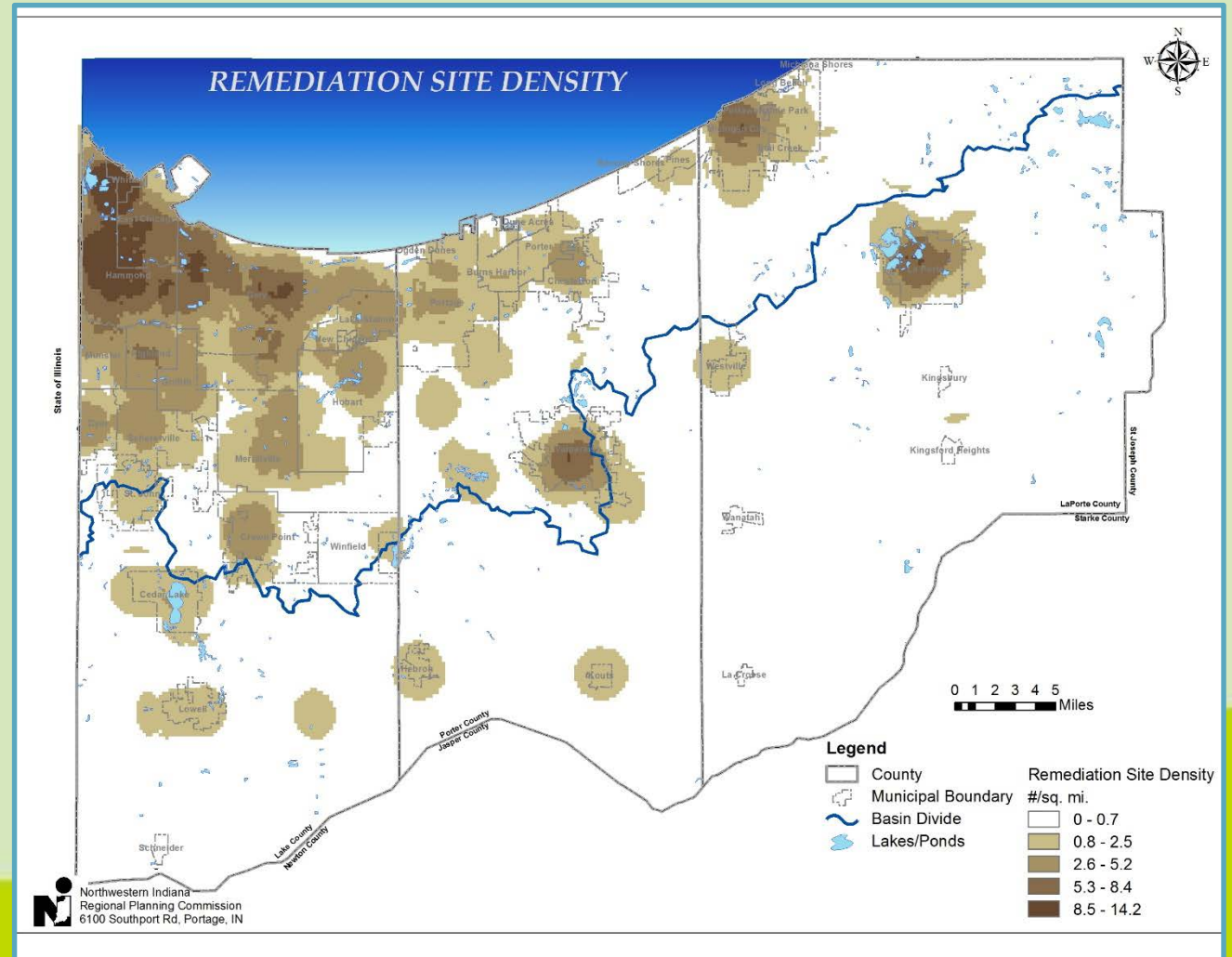
# Air Quality

	What's in there now	Comments?
Performance Measures		Ozone, PM 2.5 Health measures Action days? Carbon emissions
Implementation-		
NIRPC	AQ Conformity CMAQ Funding Public Education Gas Can Exchange NIRPC Complete Streets Policy Creating Livable Communities Program Rideshare	
Partnerships	Idle Reduction Alt Fuels Fleet Education Diesel Retrofit SEPs	

# Brownfields

Brownfields are Cross linked with Chapter 1: Growth and Conservation, particularly recommendations relating to Smarter Land Use Decisions and reinvesting in Urban Core Communities

Chapter 1 places the highest priority for development areas on municipal infill, redevelopment of underutilized buildings and infrastructure, and investments within the Urban Core Communities of Gary, Hammond, East Chicago, and Michigan City.



# Brownfields

	What's in there now	Comments?
Current Status	Remediation Site Density Remediation Sites by Program	
Existing Programs	CERCLIS (Superfund) State Cleanup Brownfields Voluntary Remediation Program Leaking Underground Storage Tanks	RLF ERC & ord.
Best Practices	Mitigation and Reuse of Brownfield sites in Core Communities Public Private Partnerships Incentives Urban Farms	ERC & ord.



# Brownfields

	What's in there now	Comments?
Performance Measures		Clean ups Economic # of assessments
Implementation-		
NIRPC	Livable Centers Program Provide Guidance	
Partnerships	Pursue an aggressive brownfield remediation strategy Establish brownfield redevelopment incentives	

# Accomplishments

- Staff review of potential environmental impacts associated with transportation projects
- Partner support letters- grants to implement CRP actions
- Watershed management technical assistance
- Deep River Portage Burns Waterway Initiative
- MS4 operator training workshops
- Septic system working group
- NWI Brownfield Coalition
- Solar Ready II

# Additional Priorities for Update?

What can we do with:

Limited Resources

Limited Authority

How much can partners help?

# Climate Change??

## Elements of NIRPC Climate Change Policy

- Request local universities and partners to scale down global climate models in NWI
- EJ issues
- AQ Public Ed – focus on actions that reduce carbon emissions in addition to NAAQS
- Become a resource of information for local governments
- Promote Green Infrastructure

# Climate Change

	What's in there now	Comments?
Current Status		Incorp. Into each chpt
Existing Programs	Green Infrastructure Air Quality Stormwater Management/Flood reduction	
Best Practices		MC climate resil.
Performance Measures		
Implementation		

# Energy

## **Regional Energy Planning is a developing field.**

- Included now in the Air Quality Section, primarily with focus on Alternative Fuels
- Some mention in sections on Green Building/Environmental Implementation
  - Facilitate use of alternative energy
- NIRPC in partnership with SSCC is funded for municipal Solar Readiness training
- SSCC with NIPSCO is promoting Electric Vehicle Charging Stations
- NIPSCO continuing Energy Conservation programs
- State Energy Plan in development
- Federal GHG Emission Reduction Targets

# Environment Stakeholder/Public Meetings

Tuesday

September 16

2:00 – 4:00 pm

Purdue North Central

Library-Student-Faculty Bldg 002

Wednesday

October 29

1:00 pm – 3:00 pm

4:00 pm – 6:00 pm

Merrillville Town Hall

7820 Broadway