

Autumn leaves in the dunes. Photo by Stephen Sostaric.



Chapter III: **Environment & Green Infrastructure**

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Overview

The environment is one of the three pillars often recognized at the foundation to building a sustainable and vibrant future. Its importance was recognized by Northwest Indiana residents throughout the public input process NIRPC engaged in to develop the *2040 Comprehensive Regional Plan* (2040 CRP). Environmental planning is also one of the core functions assigned to NIRPC by the state of Indiana in the 2003 enabling legislation amendment. The environmental focus of the 2040 CRP can be best envisioned as an overarching network of green infrastructure for the region (Figure III-1).

While the ecosystem approach helps to protect the ecological integrity of our region, a green infrastructure approach focuses on planning to maintain and enhance the many valuable services and functions that the natural environment provides to the economy and the residents of the region. This approach enables the evaluation of land use decisions and conservation opportunities based on their practical value and focus on the cost effectiveness of protecting the environment and using environmentally based approaches to solving human problems. This Update Companion to the 2040 CRP Green Infrastructure Network incorporates new information on the quantifiable dollar values associated with these services.

In this latest update of the 2040 CRP, NIRPC transitions from the Green Infrastructure Network identified in the 2011 2040 CRP to the more refined Chicago Wilderness Green Infrastructure Vision 2.1 (GIV 2.1). GIV 2.1 was developed in 2012 with data and input from region conservation stakeholders to focus on landscape functionality. This refinement still captures the convergence of an Ecosystem Approach, Green Infrastructure Approach, and the Urban Revitalization and Livable Communities strategies that are described at length in the Growth and Conservation chapter. Establishing a network of green infrastructure that co-exists with urban development and the transportation network, will consist of agricultural and natural

areas that merit protection connected by well-buffered streams, trails and recreational open space. The results of this combined approach include:

- Local Watershed Management Plans:
 - Little Calumet River East Branch- Save the Dunes, est. 2015
 - Deep River-Portage Burns Waterway- NIRPC, est. 2015
- Indiana Wetland Program Plan – IDEM, 2014 DRAFT
- Indiana Comprehensive Wildlife Strategy – Indiana Department of Natural Resources (IDNR), 2015 DRAFT
- Chicago Wilderness Green Infrastructure Vision 2.1 - Chicago Wilderness, 2012
- Chicago Wilderness Green Infrastructure Vision 2.3 Ecosystem Service Valuation- NIRPC, 2015

The chapter ahead provides an update of current conditions and progress on implementation of recommended strategies to make more effective use of existing resources and pursue new opportunities. A new framework to start understanding the status of regional solid waste and recycling activities is added, as this was not included in the original 2040 CRP. Many of the initiatives and goals in this chapter will require the commitment and participation of many partner organizations and member governments to realize.

An ecosystem approach requires looking beyond project boundaries, specific pollutants or species, regulatory programs and checklists.

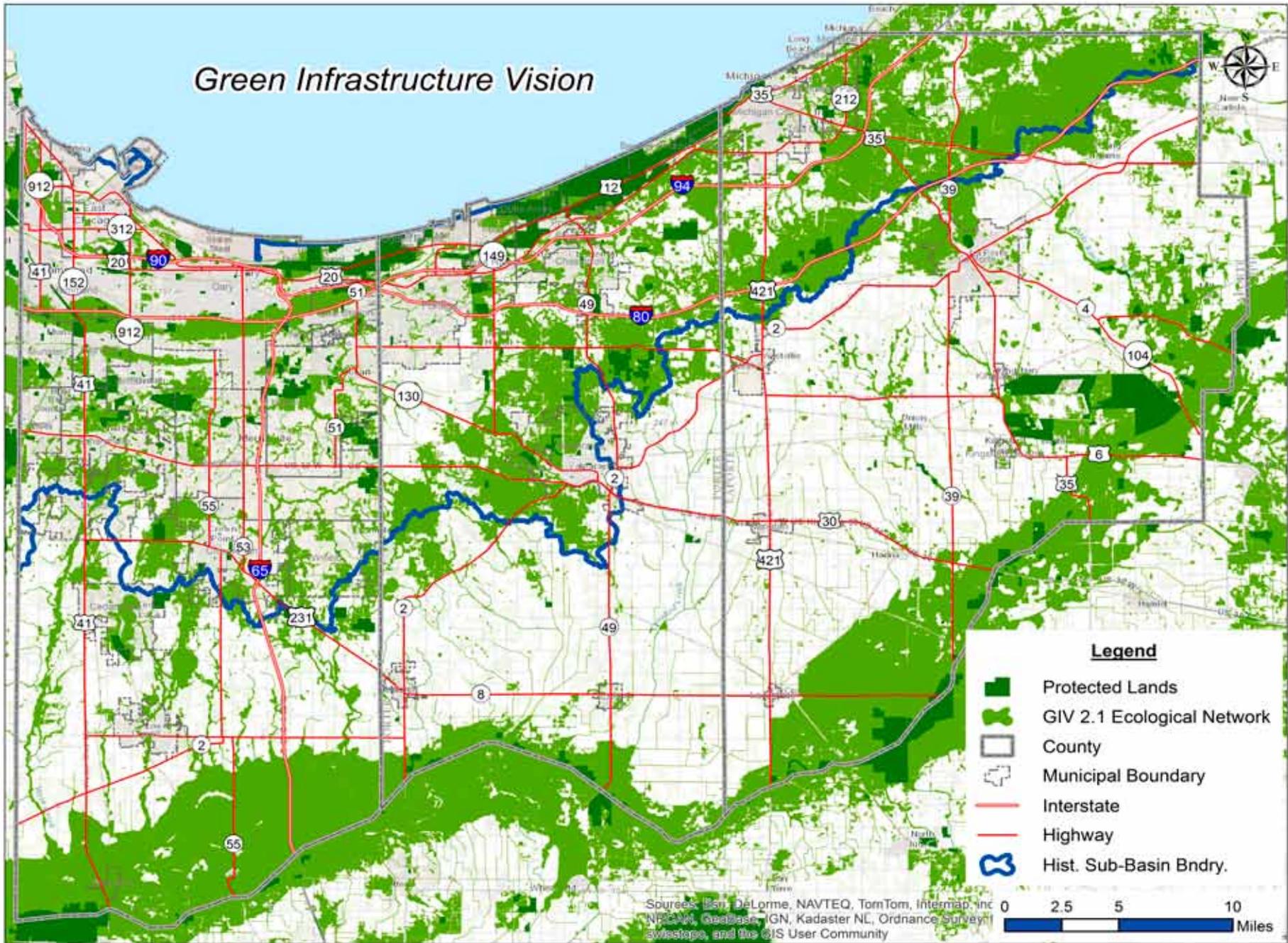


Figure III-1 Green Infrastructure Vision, Chicago Wilderness GIV 2.1

Water Resources

Lakes & Streams

The Impaired Waters map has been updated to reflect the Indiana Department of Environmental Management (IDEM) 2014 draft 303(d) list (Figure III-3). This list is required to include all waterbodies that data indicates do not meet both numerical chemical water quality standards and narrative standards such as “fishable” and “swimmable.” The new list identifies nearly 1,500 miles of streams and three square miles of lakes as “impaired.” The 303(d) list is heavily influenced by the amount of sampling data available for waters in the state. The substantial increase in impaired stream miles from 622 on the 2008 list to 1,500 now is primarily due to new information collected by IDEM in the Deep River Portage Burns Waterway in support of Total Maximum Daily Load and Watershed Management Plan development.

The IDEM Office of Water Quality updates this list every two years, identifying the waters that do not or are not expected to meet water quality standards as required by the Clean Water Act. The most common impairment for our region’s waterways is E. coli, which is an indicator of fecal contamination. Potential sources of E. coli can vary by watershed, but in general include combined or sanitary sewer overflows, failing septic systems and pet and livestock waste. Each year, elevated E. coli levels result in swimming advisories and closures along the Lake Michigan shoreline. Another water quality concern is those stream segments in which a fish consumption advisory is in place. This is especially true for low-income areas, such as Environmental Justice zones, where subsistence fishing may be more prevalent.

Despite these impairments, rivers and streams provide valuable economic services to the region. An ecosystem services valuation study completed for NIRPC by the Conservation Fund in 2015 indicated lakes within Northwest Indiana’s GIV ecological network provide an

estimated economic benefit of \$37,000/acre/year for water flow regulation/flood control. Streams and riparian areas provide another \$6,500/acre/year for water flow regulation/flood control. Lakes provide \$566/acre/year for groundwater recharge.

Wetlands

Wetlands within Northwest Indiana’s GIV ecological network provide an estimated economic benefit of \$22,000/acre/year for water flow regulation/flood control, \$4,300/acre/year for water purification, and \$660/acre/year for groundwater recharge to Northwest Indiana based on the Ecosystem Services Valuation Report (2015) completed for NIRPC by the Conservation Fund.

Floodplains

The Indiana Department of Natural Resources (IDNR) updated the 100 year flood plain maps in 2014, which is reflected in the updated Water Resources Map. This change is also reflected in the Development Suitability analysis presented in previous chapters. Floodplains must be preserved from development and used only for compatible, beneficial uses. Protection of cropland must be weighed with the value of floodwater storage. Areas where floodplains can be restored should be a high priority, especially in the Lake Michigan watershed.

Floodplains within Northwest Indiana’s GIV ecological network provide an estimated \$4,806/acre/year economic benefit for groundwater recharge. Additionally, they benefit fish and wildlife resources by providing nesting and feeding areas.

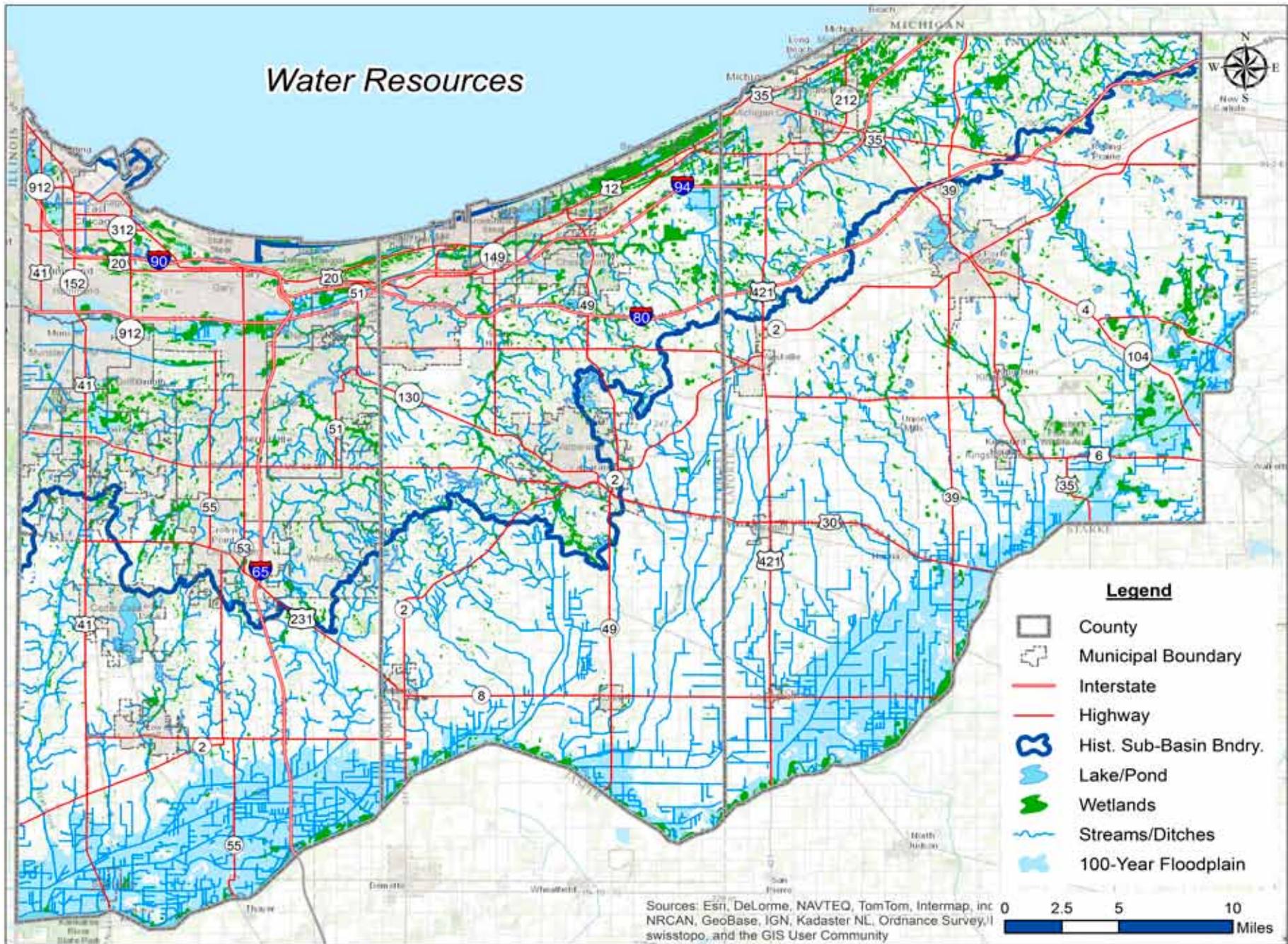


Figure III-2: Surface Water Resources of Northwest Indiana, NIRPC GIS Database 2015

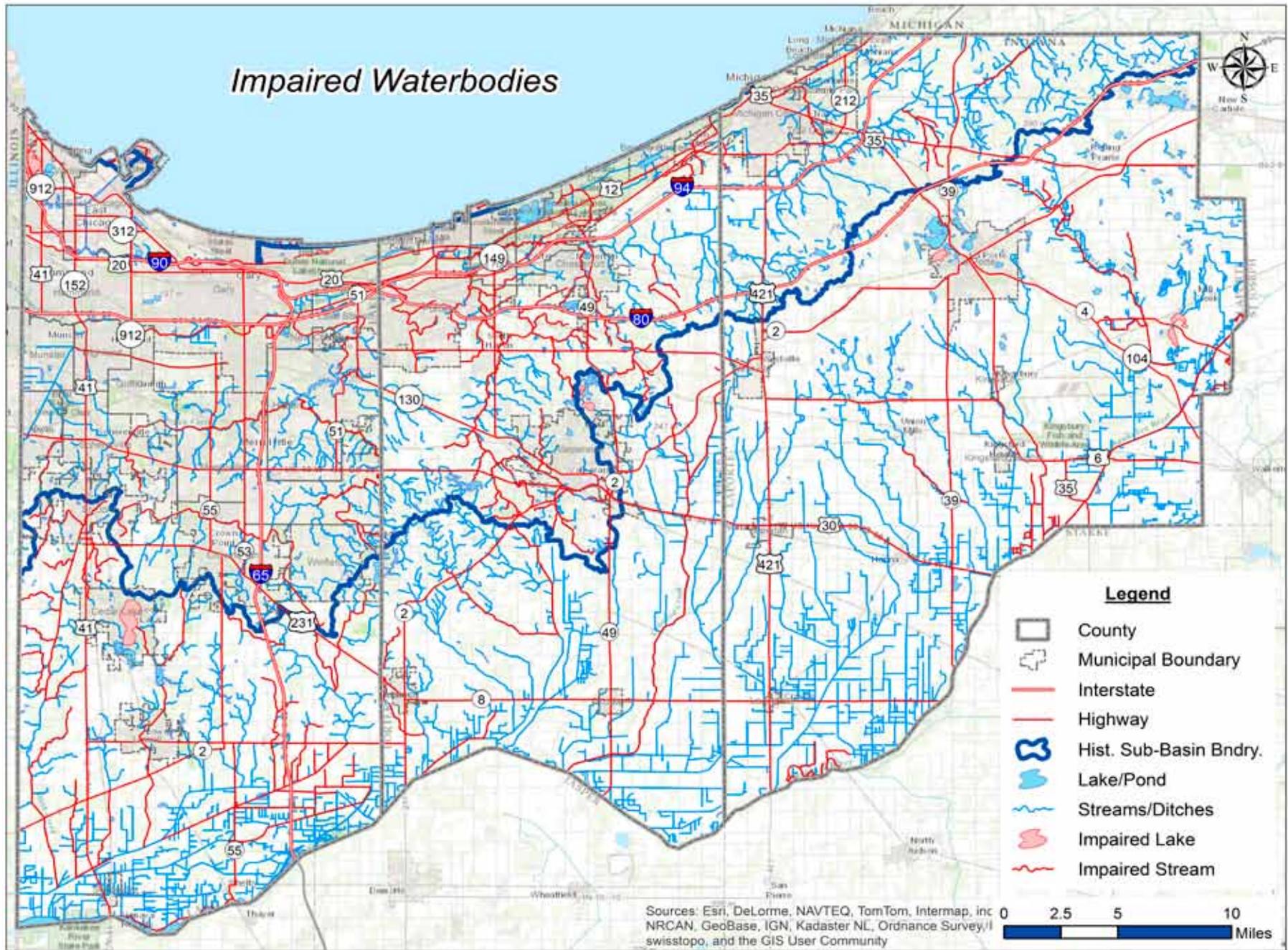


Figure III-3: Impaired Water Bodies, Indiana Department of Environmental Management Draft 2014 303(d) List

Water Withdrawal, Consumption & Supply

Charts and discussion are updated to reflect additional data collected by IDNR through 2014.

The Great Lakes Water Consumption Coefficients Table (Table III-1) is updated to reflect data on Great Lakes Water consumption rates presented in a 2008 United States Geological Survey Publication. An additional discussion of key points is identified in a 2014 water resources report released by the Indiana Chamber of Commerce.

IDNR Significant Water Withdrawal data from 2010 through 2013 was added

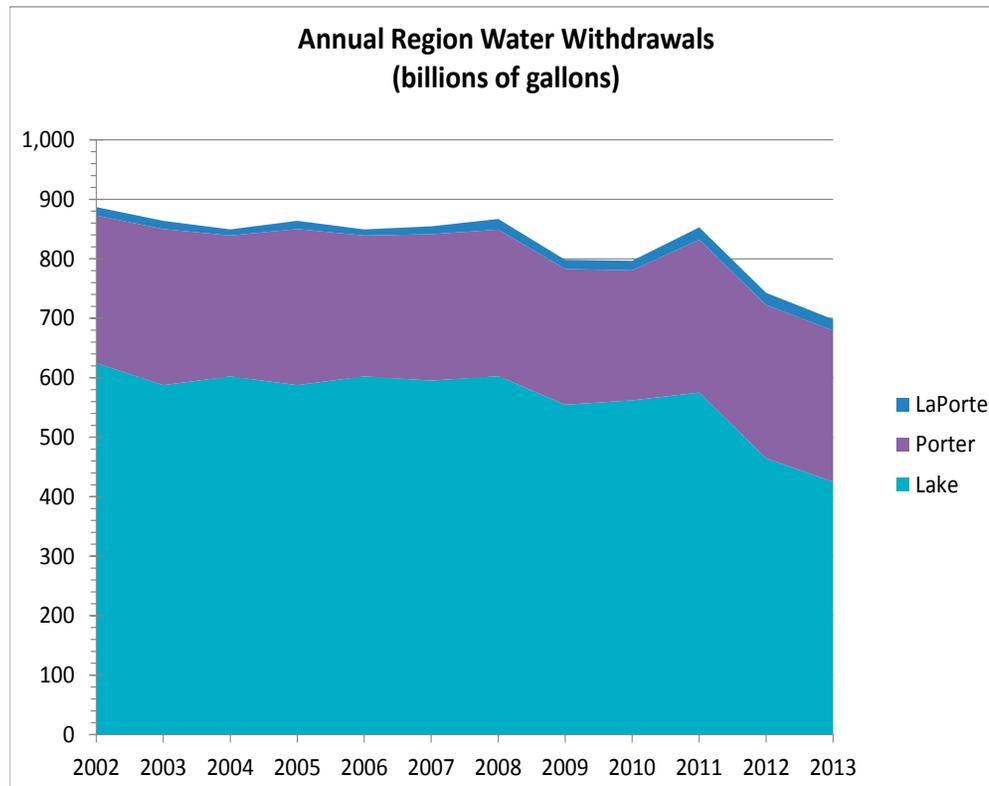


Figure III-4: Trends in Significant Water Withdrawals by County

to previous analysis of 2002-2009 information, providing a full decade for trend analysis. Overall, a look at county-level data in Figure III-4 shows a general decrease, primarily in Lake County. This can be largely attributed to the closure of the State Line Energy facility in April of 2012.

Significant Water Withdrawals include all registered water users with capacity to pump 100,000 gallons per day from either wells or surface intakes. IDNR categorizes users by various sectors of the economy. Those relevant to Northwest Indiana are described below.

- **Energy production** – Power generation, cooling water, oil recovery
- **Industry** – Process water, cooling water, mineral extraction and quarry dewatering, waste assimilation
- **Irrigation** – Crop and golf course irrigation, farm field drainage, agricultural services
- **Miscellaneous** – Fire protection, amusement parks, construction dewatering, dust control, pollution abatement, hydrostatic testing, recreational field drainage
- **Public Water Supply** – Drinking water, sanitary facilities
- **Rural use** – Livestock, fisheries

Great Lakes Regional Water Consumption Coefficients	
Sector	Consumptive Rate
Electricity Production	2%
Industrial	10%
Irrigation	90%
Public Water Supply	12%
Livestock (Rural)	83%

Table III-1: Great Lakes Consumption Rates

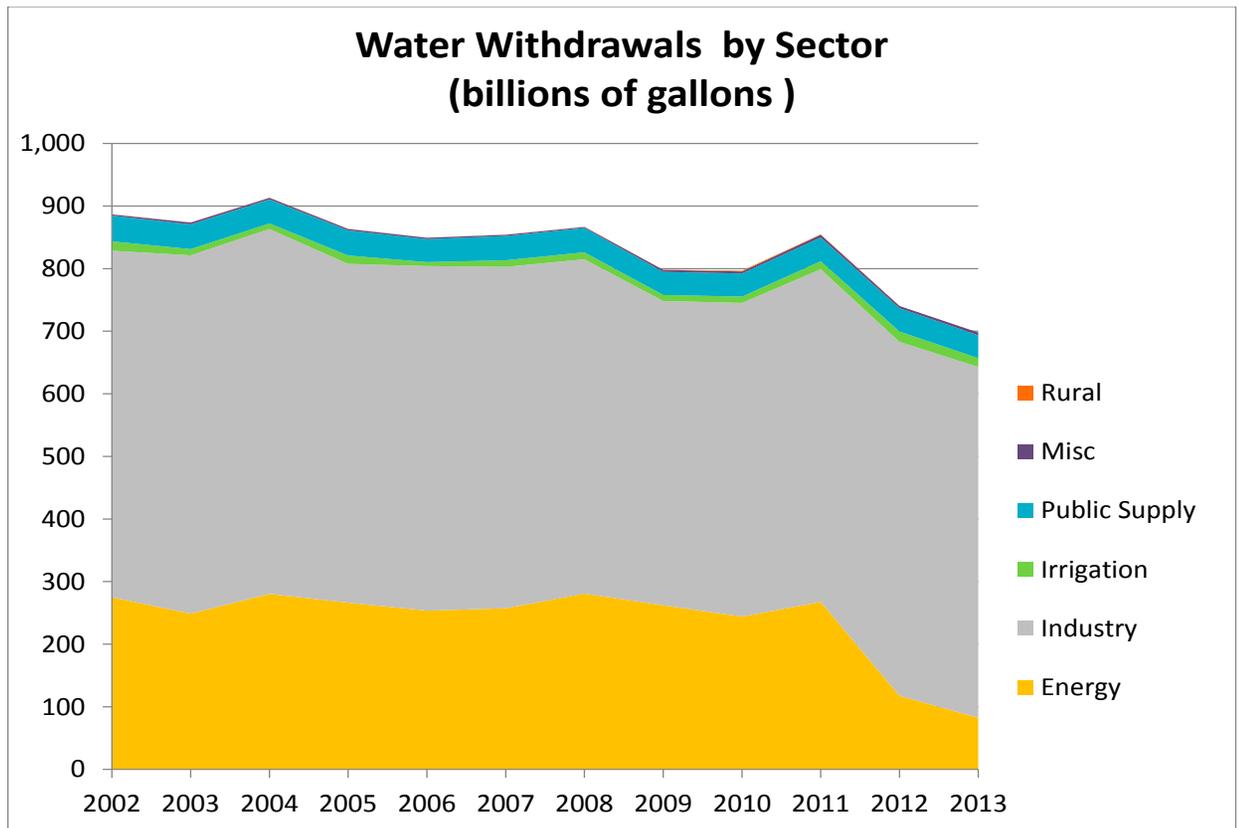


Figure III-5 Surface Water Resources of Northwest Indiana, NIRPC GIS Databases. 2010

Most categories do not show any significant trends during the 2002 to 2012 period, with the notable exception of energy production. In Northwest Indiana this category includes NIPSCO, two BP Whiting Refinery pumps, Stateline Energy, and the Westville Correctional Facility. The closure of State Line Energy in April of 2012 resulted in a 69% reduction in water withdrawal from that sector. This caused total water withdrawals in the region to be 19% lower in 2013 than the previous decade annual average. Industrial withdrawals appeared to be declining in the mid to late 2000s, but have since rebounded, as shown in Figure III-5.

Figure III-6 shows that “Industry” used by far the largest percentage of the water withdrawn in 2013. “Energy production” remains in second, but is a much smaller piece of the total than in previous years due to the closing of State Line Energy. “Public water supply”, which includes residential, commercial and institutional use, would be a distant third. The large quantity of noncontact cooling water used daily by the large refinery and integrated steel mills in our region likely sets it apart from other parts of the state in this regard. It is important to remember that much of this is non-consumptive use, and is returned to our local waters. If we want to maintain or reduce water withdrawals in our region, this data would suggest that our priorities for conservation should be industry.

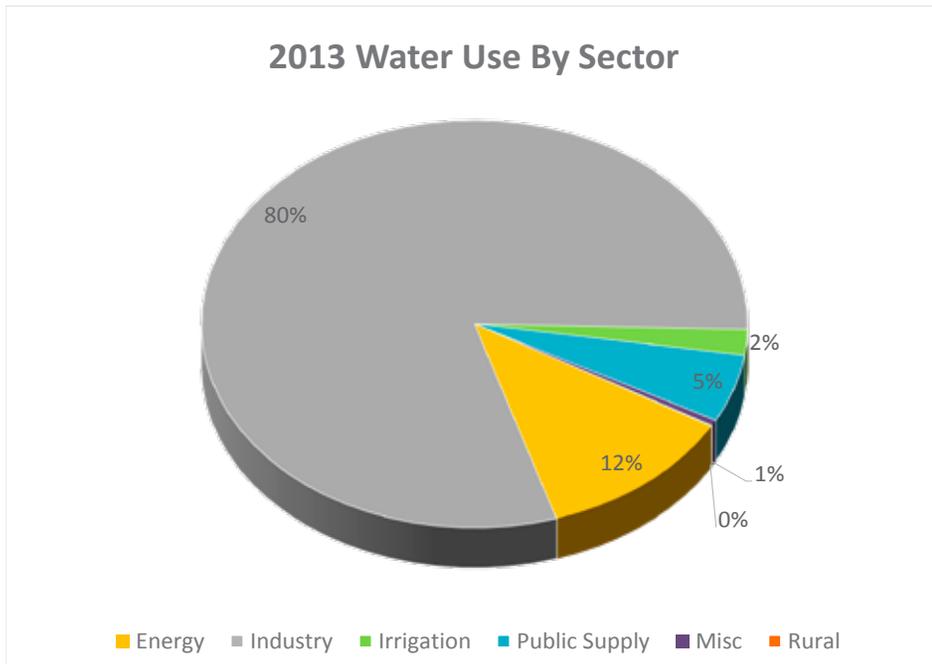


Figure III-6: Northwest Indiana Significant Water Withdrawal by Sector

Based on 2013 Census Bureau population estimates for municipalities, and 2010 unincorporated population statistics, approximately 85% of the population of the three counties lived in the Lake Michigan basin, a 2% increase from 2008. In Lake County that percentage remains 92%. Access to Lake Michigan surface and groundwater resources becomes complicated in communities outside of that basin, requiring approval from all eight Great Lakes States.

Existing registered water uses in the Great Lakes Basin will be authorized for use at their current withdrawal capability. Employing water conservation practices can enable existing users to create spare capacity to allow for economic growth. All proposals for new or increased water withdrawals must incorporate sound and economically feasible water conservation and efficiency measures in order to minimize the waste of water within the Great Lakes Basin. Indiana’s implementation of the The Great Lakes Compact establishes that conservation and efficiency programs for the basin are voluntary and have been outlined in IDNR’s “Report on Indiana Water Use Efficiency and

Conservation.” Voluntary water conservation and efficiency programs also will be encouraged statewide by the IDNR⁴.

Water withdrawals are important, but perhaps more important to the long-term sustainability of our water supply is the amount of water that is actually removed from the system by its use versus that which is returned to streams, ditches and aquifers. While this sounds simple in practice, it is a complicated topic that differs by sector, facility, scale, geology, and weather. For example, water pumped from Lake Michigan that evaporates from a cooling water facility might be calculated as a consumptive use by the facility because it is not returned to the water body through a regulated outfall; however, in reality this water may condense and fall back on the lake as rain. Conversely, water loss through leakage from public water supply pipes also would be calculated as a consumptive use, although this water may in effect be recharging valuable groundwater aquifers. Water that is incorporated into products that may then be exported from the basin or sold and used within it also makes this a highly challenging factor to quantify. A summary of consumptive water use data from the Great Lakes published by the US Geological Survey⁵ was used to estimate the region’s actual consumption of water. In general, Indiana uses consumptive use coefficients to calculate water return rates for use categories as shown in Table III-1.

Applying these factors to the 2013 Water Withdrawal data reflects a somewhat different picture as to which sectors have the biggest impact on local water resources. The 698 billion gallons of water pumped in the region during that year was 155 billion gallons, or 18% less than the last year State Line Energy was in full operation. However, overall consumptive water use reduction was only 3.6%. Of the current large scale uses (private wells are not tracked), 89% of the water pumped from the Lake and the ground is being returned to the

4 Indiana Department of Natural Resources Water Use Section, Significant Water Withdrawal Facility Data Reports.

5 USGS Fact Sheet 2008-3032. Consumptive Water Use in the Great Lakes Basin. April 2008.

environment – ideally after appropriate treatment. Note that the sectors with the lowest return rate are agriculture uses such as irrigation and livestock. This is because much of the water use in that sector is absorbed by plants and released to the atmosphere in evapotranspiration, or is incorporated into animals and their products, such as milk. Figure III-7 shows the relative percentage of consumptive use by category.

A 2014 Study released by the Indiana Chamber of Commerce⁶ reported that we do have abundant water supplies in Northwest Indiana. The sector most likely to experience increasing water demand is agricultural irrigation. This is being driven largely by market forces that offer a high return on investment for row crop irrigation, and the value of insurance against dry periods.

⁶ Indiana Chamber of Commerce “Water and Economic Development in Indiana: Modernizing the State’s Approach to A Critical Resource”. August 2014.

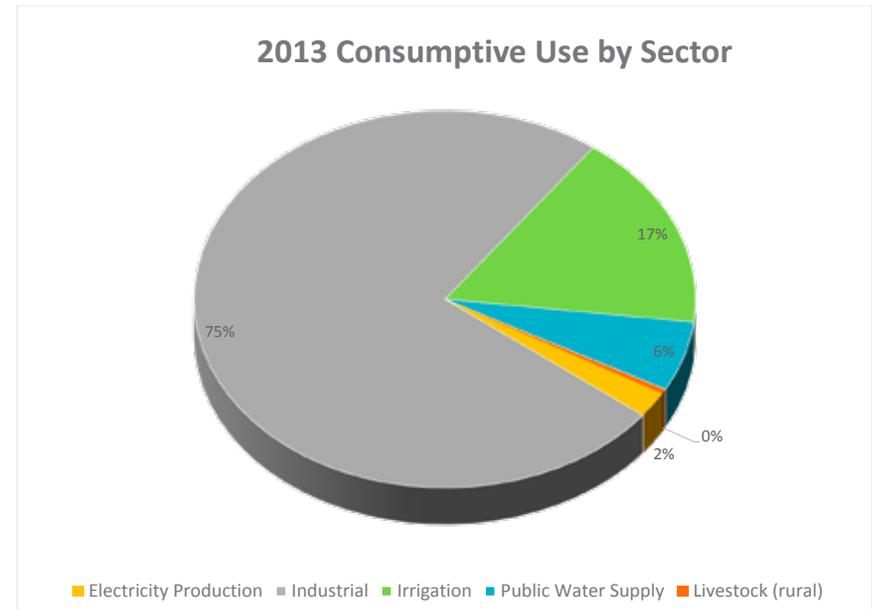


Table III-7: NWI Consumptive Water Use by Sector

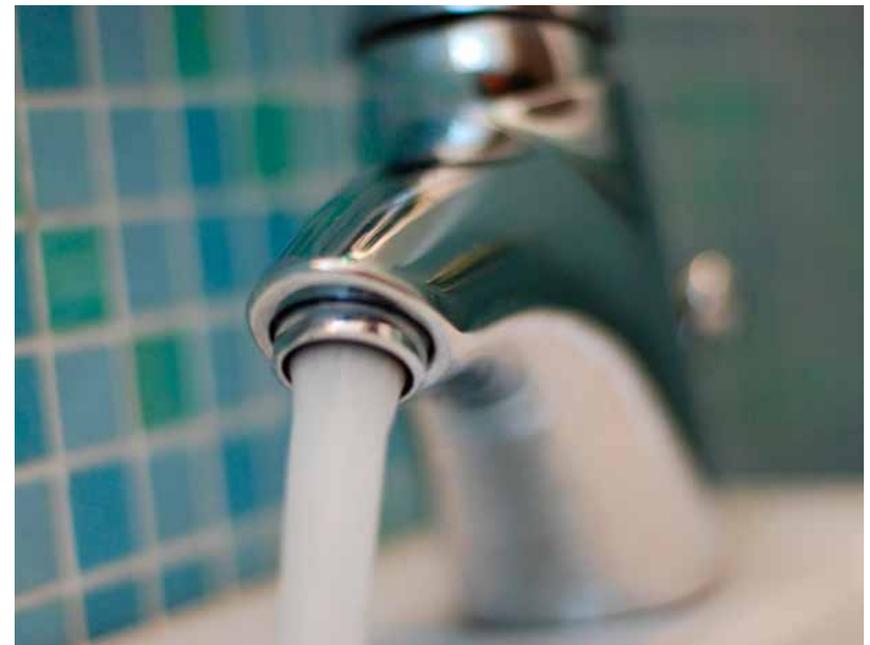


Photo by Peter Dutton, via Flickr. CC BY 2.0 License.

Wastewater Treatment

Progress has been made in Combined Sewer Overflow control. While more than 40 CSO points remain within Northwest Indiana as documented on the EPA's *EnviroMapper for Water* website, many are stored for treatment, but for the greatest storm events - and are receiving direct treatment even then. The highest concentrations of CSOs exist on the Grand Calumet River and West Branch of the Little Calumet River. In all but a few cases, the CSOs discharge into waters included on the Indiana 303(d) List of Impaired Waterbodies, and therefore are likely one of possibly many contributing factors to their impairment.

CSO communities are required by IDEM to develop Long Term Control Plans (LTCP). In Northwest Indiana, these communities include Chesterton, Crown Point, East Chicago, Gary, Hammond, LaPorte, Lowell, Michigan City and Valparaiso. Table III-2 provides a summary of progress on CSO LTCP to date in the region. Of nine CSO Communities, seven have submitted approved plans, and three of those have completed all construction projects and have fully implemented plans. The remaining four with approved plans have numerous projects completed or underway. Should all construction projects be completed according to scheduled projections in their plans, all LTCP for these four communities should be completed by 2020. Not surprisingly, the greatest official need identified by facilities in Northwest Indiana was for CSO correction, with more than \$800 million to prevent or control the periodic discharge of mixed storm water and untreated wastewater.

CSO Control Status in Northwest Indiana					
Number of CSO Communities	LCTP Submitted	LCTP Approved	# Fully Implemented	#Partially Completed	# Projects Remaining
9	7	7	3	4	10

Table III-2: CSO Control Status in NWI



Wastewater Treatment Plant. Photo by Montgomery County Planning Commission, via Flickr, CC BY-SA 2.0 License.

Green Infrastructure

Managed Lands

The Indiana Department of Natural Resources (IDNR) released an updated “Managed Lands” dataset in 2012. The new information shows that there are approximately 294 natural or recreational areas within Northwest Indiana that are owned or managed by local, state or federal agencies, and non-profit organizations (Figure III-8). While this appears to be a reduction of 21 managed areas, a closer look at the data shows the opposite has occurred. Based on data obtained from INDR’s managed lands dataset, there are approximately 39,500 public and 3,100 private acres of managed open space in the entire NIRPC three-county region, which is a total increase of 6,500 acres.

Prime Agricultural Lands

Indiana currently ranks second in the nation in total acreage of prime farmland being lost at the rate of 100,000 acres/year or 10 acres/hour. Between 2006 and 2010, nearly 5 square miles of agricultural land was converted to developed land uses in Lake, Porter and LaPorte counties. This represents an annualized rate of 1.25 square miles per year. The previous decade of 1996 to 2006 reported conversion of 13 square miles, or approximately 0.76 square miles per year.



Red Mill County Park in LaPorte County. Photo by Stephen Sostaric.



Door Prairie in LaPorte County. Photo by Tom Gill via Flickr, CC BY-NC-ND 2.0 License.

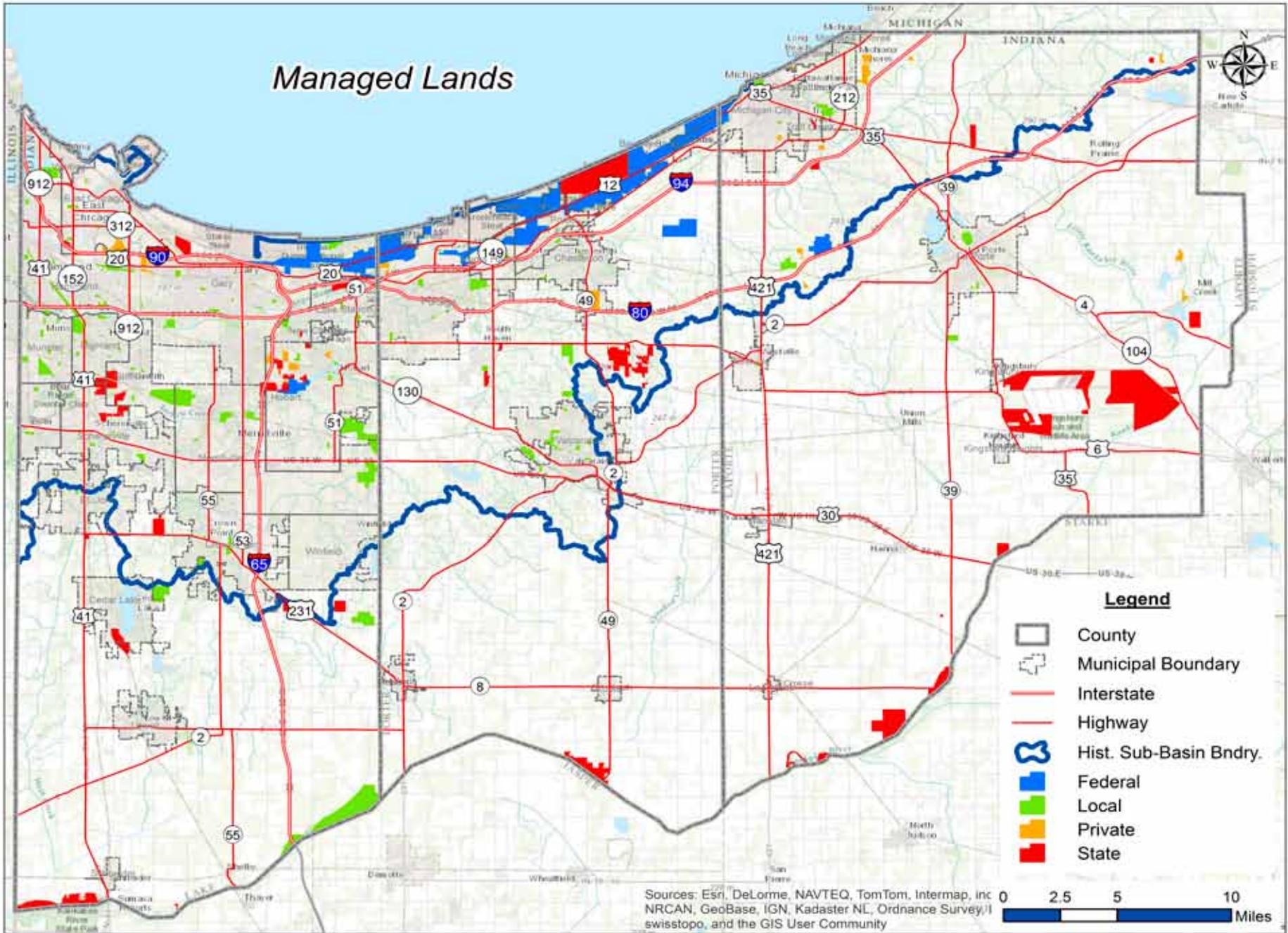


Figure III-8: Managed Lands Ownership, Indiana Department of Natural Resources, 2012

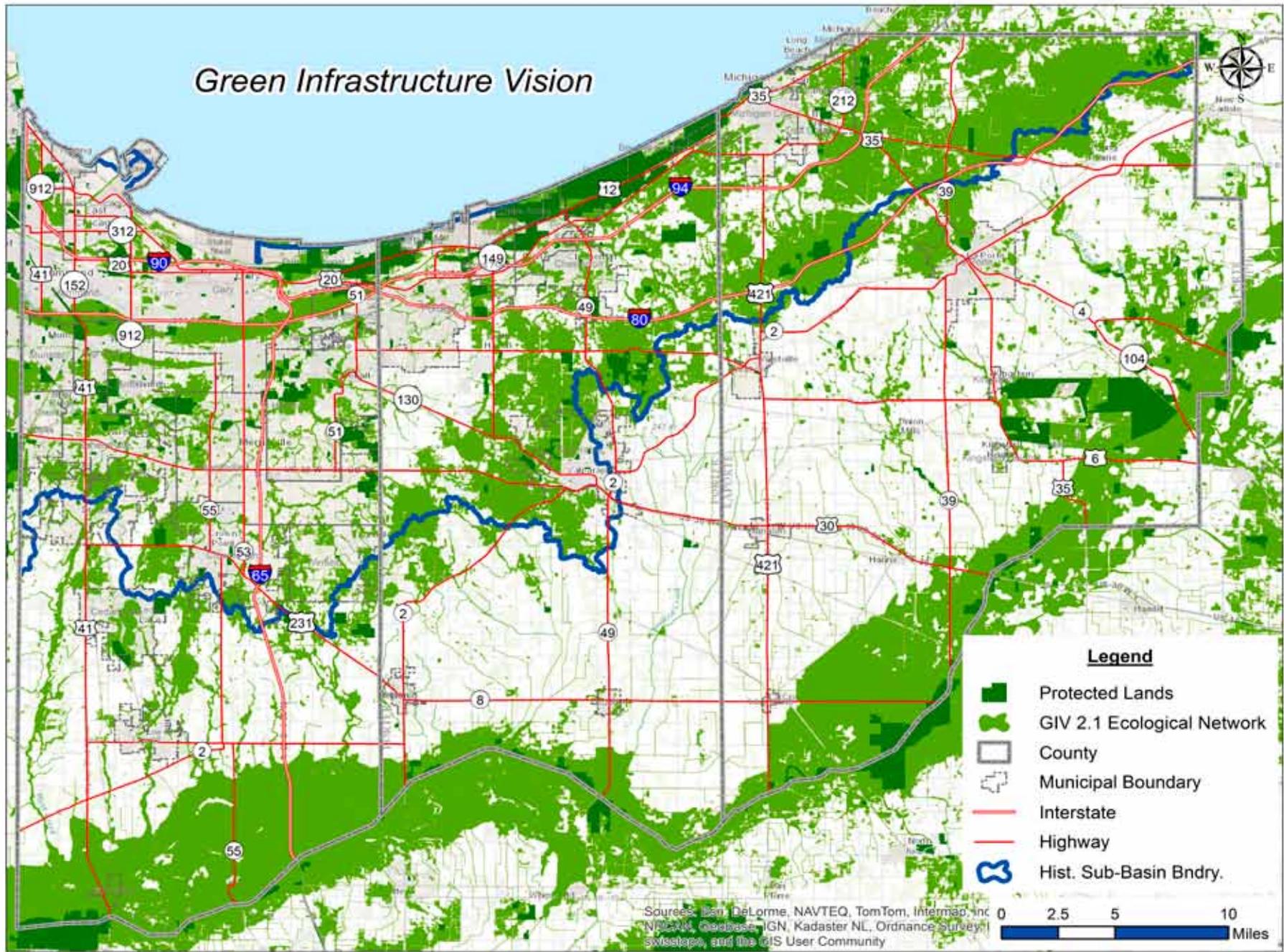


Figure III-9: Green Infrastructure Vision, Chicago Wilderness GIV 2.1

Air Quality

There are many aspects of air quality that are important to the environment, health, and quality of life of our region residents. Clean air is vital to the productivity of people, land and businesses in Northwest Indiana. Poor air quality can cause a wide variety of health problems, contributing to premature death from cardiovascular and respiratory diseases such as asthma. These problems are often worse in poor urban communities. Air pollution comes from many different sources such as factories, power plants, dry cleaners, cars, buses, trucks, windblown dust, and even fires. It can harm plant life, causing negative impacts on our natural areas, forests, and farms. Air quality problems can also be a barrier to economic development. Failure to meet, or be designated by EPA as meeting National Ambient Air Quality Standards (NAAQS), places additional costs for air emission permitting, treatment, and compliance on manufacturing facilities that might choose to locate here.

Air quality continues to improve in the region. Significant investment by local industries in pollution reduction to comply with federal and state regulation of air emissions has contributed to this improvement. Other significant contributors to this progress include implementation of vapor recovery requirements on area gas stations, mandatory vehicle emission testing, and congestion mitigation and air quality improvement in transportation planning.

National Ambient Air Quality Attainment Status

Within the context of air quality, the most important driver of improvements and most heavily measured and reported on with regard to attainment of the NAAQS. The federal government established the NAAQS for six criteria air pollutants, all of which, in concentrations above certain levels, have adverse effects on human health. These criteria pollutants include: carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), ozone (O₃), particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}). NAAQS attainment status achievements are one of the strongest demonstrations of air quality improvement over time. Table III-3 shows the years in which attainment of ambient air quality standards was achieved in Northwest Indiana

counties that were previously designated in non-attainment for each of the various pollutants.

In 2012, IDEM petitioned the US EPA to redesignate Lake and Porter Counties in attainment of the 2008 Ozone standard based on monitoring data. However, EPA denied this petition in 2014 based on monitoring data in Illinois because Lake and Porter counties are part of the Chicago-IL non-attainment area.

Also, on December 14, 2012, the US EPA strengthened the annual primary standard for the pollutant Fine Particulate Matter, (PM_{2.5}) down to 12 micrograms per cubic meter (µg/m³). Attainment of the 2012 annual primary and secondary PM_{2.5} standards are determined by evaluating the three-year average of the annual arithmetic mean PM_{2.5} concentration at each monitoring site in the area. In 2015, US EPA declared Lake and Porter Counties as unclassifiable for this standard due to technical data collection issues.

What does all of this mean for the region? Despite the visible and measurably vast improvements in air quality, we are not in the clear. Our region must remain committed to ongoing efforts to maintain the progress we have made and continue to improve our air quality. New and expanded manufacturing operations in our region still face additional permitting and emission control requirements. Transportation projects must continue to demonstrate that they meet regional air pollution budgets. Residents will continue to endure vehicle emission testing, a small inconvenience for healthier air. For purposes of regulatory requirements, transportation planning, and all other activities that impact our air, the region continues to operate as a non-attainment area for the foreseeable future.

Pollutant	Year Attained		
	Lake	Porter	LaPorte
(NL = Never Listed)			
Carbon Monoxide (CO)	2000	2000	NL
Nitrogen Dioxide (NO2)	NL	NL	NL
Sulfur Dioxide(SO2)	2005	NL	1997
Lead (Pb)	NL	NL	NL
Ozone 8 Hour Std (1997)	2010	2010	2007
Ozone Revoked 1 hour Std (Revoked)	2008	2008	NL
Ozone 8 Hour Std (2008)	*	*	NL
Particulate Matter (PM 10)	2003	NL	NL
Fine Particulate Matter (PM 2.5) 1997 Std.	2012	2012	NL
Fine Particulate Matter (PM 2.5) 2006 Std	NL	NL	NL
Fine Particulate Matter (PM 2.5) 2012 Std	UNCL	UNCL	NL

Table III-3: CSO Control Status in NWI

NL = Not Listed means that this area was never found to be in non-attainment for this pollutant.

UNCL = U.S. EPA has determined that this area is unclassifiable due to insufficient information

* Redesignation petition and maintenance plan for Lake and Porter Counties was submitted to U.S. EPA on 12/5/12. On 12/10/14, U.S. EPA denied the redesignation petition and maintenance plan

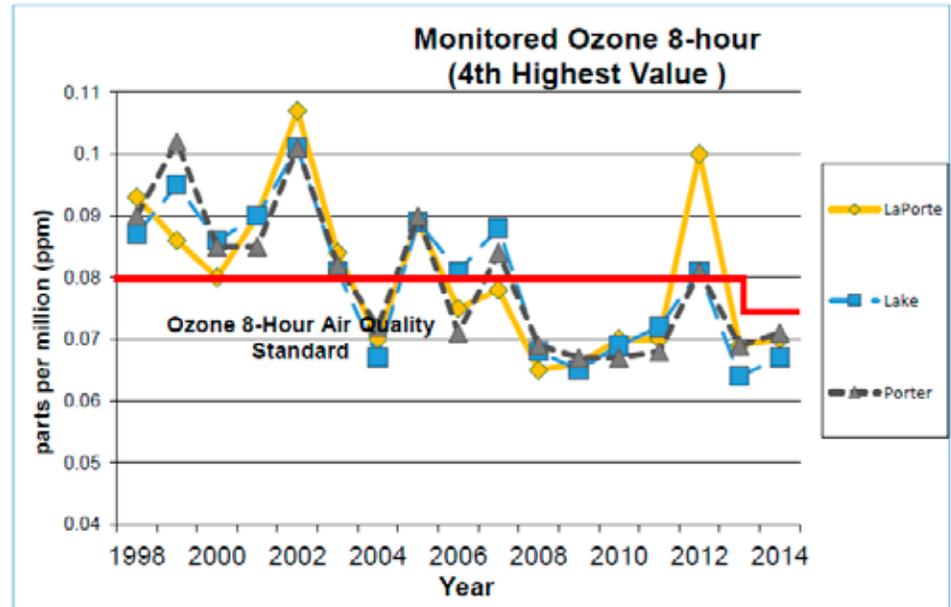


Figure III-10: Monitored Ozone 8-hour

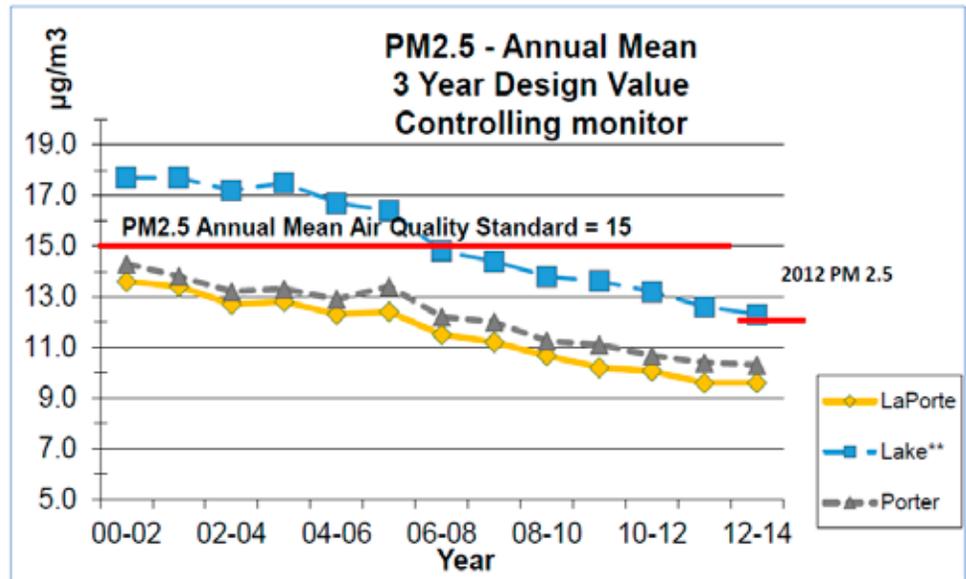


Figure III-11: PM 2.5 Annual Mean

** Data presented from Lake County control sites is from IDEM PM2.5 Annual Reports. However, technical concerns regarding data collected at Lake County PM 2.5 monitors have been flagged as unusable for purposes of determining attainment. As a result, US EPA has listed Lake and Porter Counties as “Unclassifiable” for the 2012 PM 2.5 standard.

Brownfields

Many people may think of brownfields as abandoned gas stations or shuttered factories. The term “brownfield” is defined by the US EPA as “real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.” In this usage, brownfields can be a catch-all phrase for any land or building that is vacant, unused, or underutilized, but that previously had some urban use in or around it. Older buildings that are in use, but find their resale opportunities constrained by the presence of asbestos or lead paint, can be brownfields. Parkland, vacant lots, or unsecured buildings in urban areas with visible evidence of open dumping, old foundations, or nearby industrial use can be brownfields. The term brownfield may also be applied specifically to sites which have been cleaned up using state or federal brownfield program funding.

A number of cleanup programs have evolved over the years to assess and, where necessary, clean up contaminated sites, facilities and properties. Cleanups may be done by the US EPA, other federal agencies, states or municipalities, companies or parties responsible for the contamination, or other organizations. They may be funded by various levels of government, private parties and other organizations. Cleanup requirements, including reporting requirements, vary by program and sometimes even within a program, and not all information is reported to, or available to, the US EPA. In some cases, a particularly piece of property is impacted by more than one program. In other cases, a spill, or other contamination, may be cleaned up by an active facility that continues to operate - so that the site has no impact on the health of the people or economy of the surrounding community.

Figure III12 visually depicts the general concentration of documented brownfield and remediation sites in northwest Indiana. Some of the highest concentrations occur within Environmental Justice zones. These sites may be in various stages of the remediation process. The map serves to provide a historical overview of industrial operations, and to a lesser extent historic commercial operations, that have resulted in contamination issues that must now be addressed.

It is important to realize that this documentation represents only those contaminated sites that have been identified, verified, and enrolled in some type of state or federal regulatory or funded clean-up program. An unknown number of additional properties may be impacted by the presence or perception of contamination. Many sites represented on the map may be properties that have already been cleaned-up and even returned to productive use. Others may have been cleaned-up to reduce public risk, but retain strict development restrictions that limit their potential future use.



Abandoned industrial property in East Chicago. Photo by Mitch Barloga

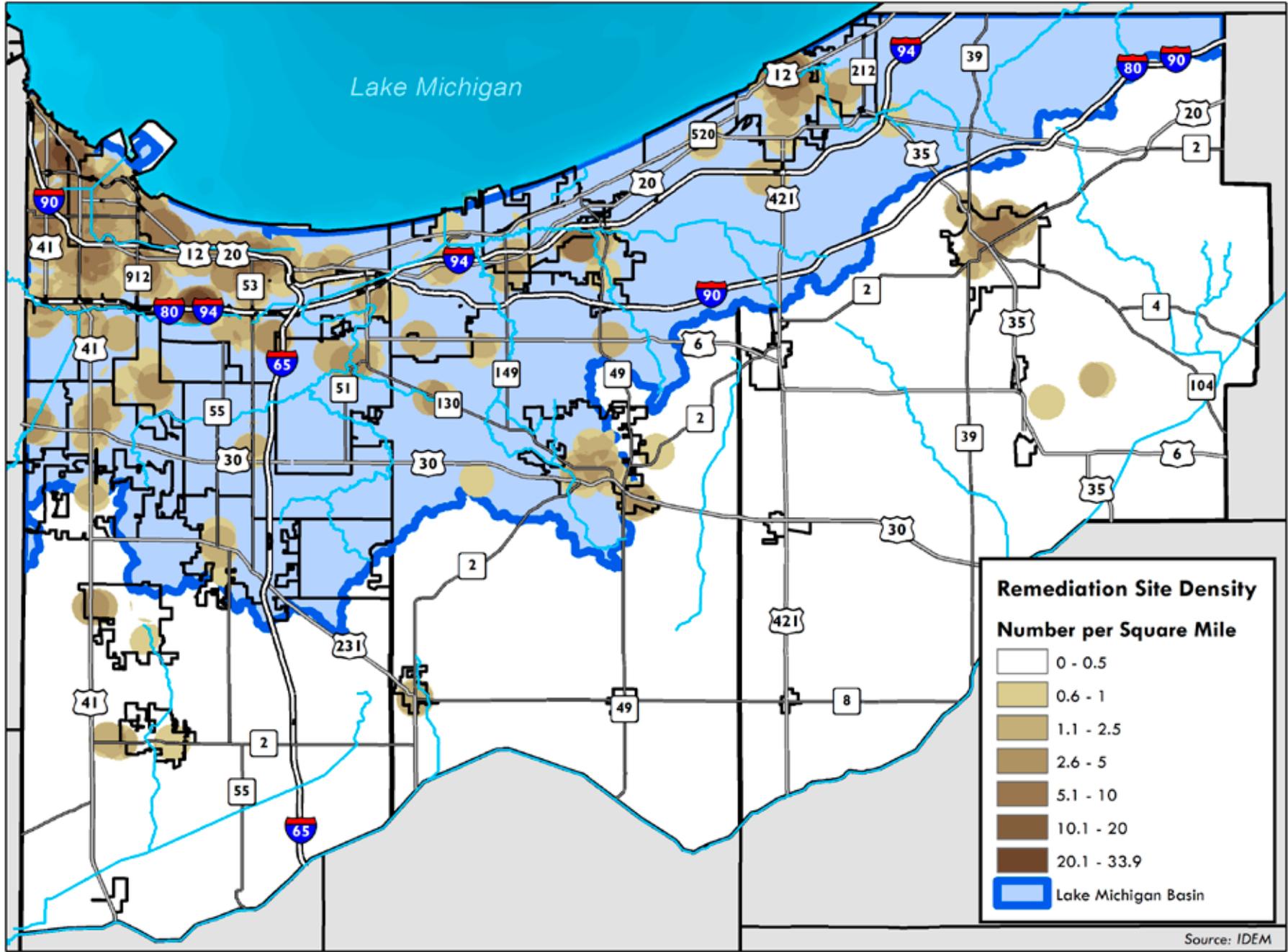


Figure III-12: Remediation Site Density, NIRPC Analysis, 2015

Implementation

NIRPC Actions: Implementation Examples:

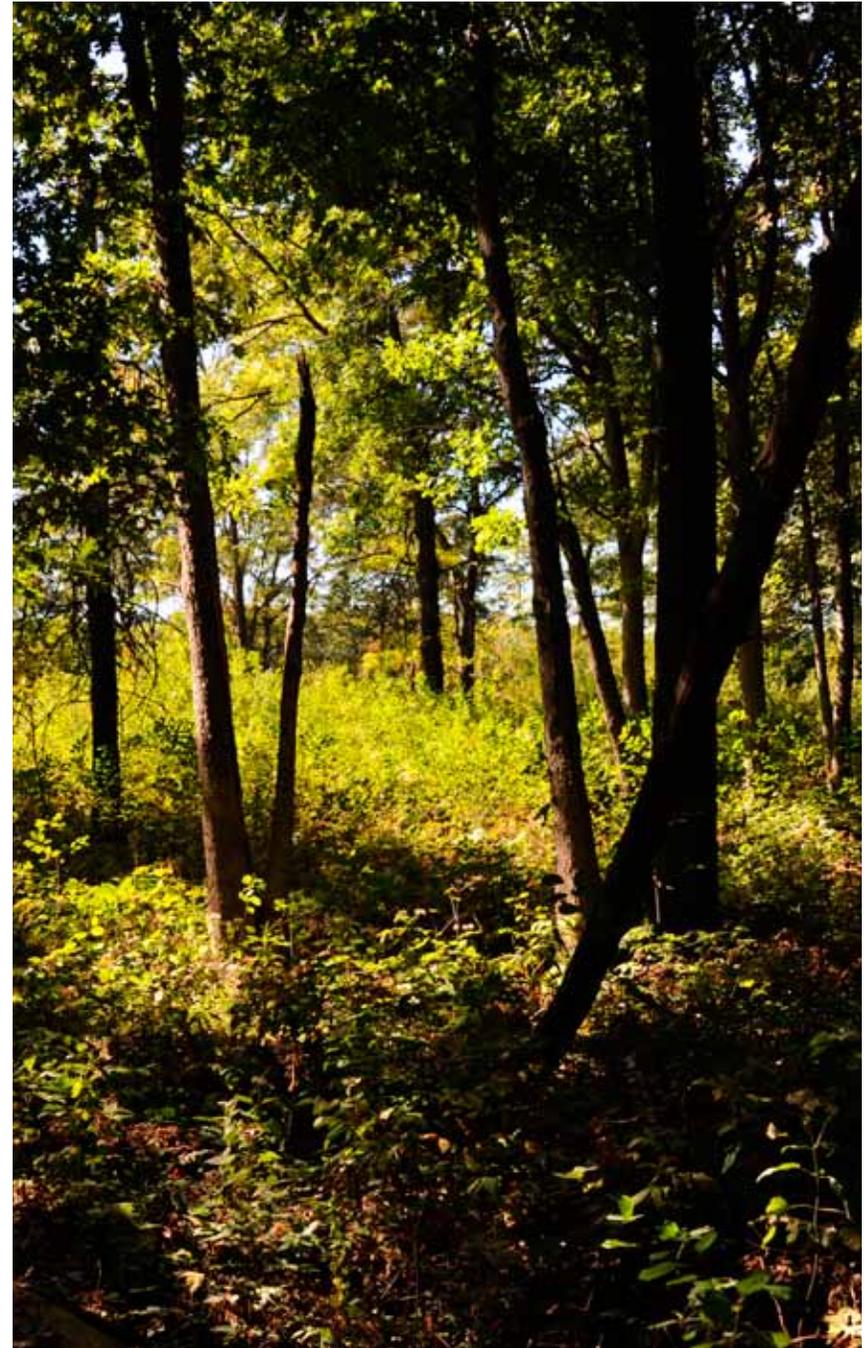
1. Encourage, review and comment on proposed open space acquisitions as requested, in particular as they relate to the Greenway Infrastructure Network.
 - **Implementation Action:** NIRPC has provided recommendations to the Illiana Expressway Corridor Team regarding priority areas for mitigation and acquisition.
2. Maximize all opportunities to protect the environment in the transportation planning program
 - **Implementation Action:** NIRPC continues to explore and encourage utilization of Federal Highway Transportation Funding Programs for all environmental activities that may be eligible under federal guidance. NIRPC created guidance and an application for utilizing Transportation Alternatives Funding in transportation stormwater mitigation, wildlife habitat connectivity, and invasive species management.
3. Provide technical assistance to revise codes and develop standards/guidelines
 - NIRPC has secured funding to provide technical assistance to communities regarding solar photovoltaic (the process of converting light to electricity) practices, standards, and codes.
 - NIRPC has conducted workshops into best practices such as Green Streets and Alleys.
4. Collect and maintain current “best practices” information, including economic benefits and local successful examples of open space protection, private sector “green” development, and “green” municipal practices (hybrid fleet vehicles, natural de-icing agents, etc.). Encourage use of the information through easily available distribution.
 - NIRPC secured funding and contracted with the Conservation Fund to extend an ecosystem services valuation study conducted for the



Rooftop solar panels at Porter County Career & Technical Center.
Photo by Ty Warner.

- Chicago Metropolitan Agency for Planning (CMAP). As a result, this update can include additional details relaying the economic benefits of green infrastructure, water resources, and other aspects of Northwest Indiana’s natural environment.
5. Develop “model” code and development regulation concepts to address the following:
 - Facilitating use of alternative energy sources- wind, solar, geothermal, etc.
 - NIRPC has secured funding to provide technical assistance and model ordinances to communities regarding best solar photovoltaic practices.

6. Implement the Greenways & Blueways Plan components of the Green Infrastructure Network, in particular improving north-south linkages for species mobility and linking the trail network to local parks and recreation facilities
 - Approximately 63 stream miles are open for paddling on the Kankakee Water Trail.
 - An update on the *Greenways and Blueways Plan* coming in Spring of 2016
7. Engage in watershed scale planning initiatives, in particular for the watersheds that do not yet have a watershed management plan in place, including:
 - NIRPC has secured funding and is in the process of working with stakeholders to develop and implement a Watershed Management Plan through the Deep River Portage Burns Waterway Initiative.
 - NIRPC's Senior Water Resources Planner contributes technical support to all ongoing watershed planning efforts throughout Northwest Indiana.
8. To the extent possible, track local codes and regulations with the 2040 CRP to support the Green Infrastructure Network in both land use pattern and site development practices.
9. Maintain and update the Green Infrastructure Vision network map and encourage partners to assist with updates.
 - NIRPC Participated in the Chicago Wilderness GIV 2.1 planning project. As a result, the Green Infrastructure Vision map is updated to incorporate enhanced functional assessment of natural areas and connecting corridors in the region.



Oak Ridge Prairie in Lake County. Photo by Stephen Sostaric.