



**[Indiana Conservation Partnership](#)**

**2014 Conservation Accomplishments and  
Nutrient and Sediment Load Reductions Report**

**May 20, 2015**

***The Partnership is comprised of eight Indiana agencies and organizations who share a common goal of promoting conservation. To that end, the mission of the Indiana Conservation Partnership is to provide technical, financial and educational assistance needed to implement economically and environmentally compatible land and water stewardship decisions, practices and technologies.***

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This document along with information about Indiana’s Nutrient Reduction Strategy can be found online at <http://www.in.gov/isda/2991.htm>.

## Indiana Conservation Partnership:



[Indiana Conservation Partnership - http://icp.iaswcd.org/](http://icp.iaswcd.org/)



INDIANA ASSOCIATION OF  
soil and water conservation  
DISTRICTS

[Indiana Association of Soil and Water Conservation Districts and our 92 SWCDs - http://iaswcd.org/](http://iaswcd.org/)



[Indiana Department of Environmental Management - http://www.in.gov/idem/](http://www.in.gov/idem/)



[Indiana Department of Natural Resources - http://www.in.gov/dnr/](http://www.in.gov/dnr/)



[ISDA Division of Soil Conservation - http://www.in.gov/isda/2342.htm](http://www.in.gov/isda/2342.htm)



[Purdue Cooperative Extension Service - https://www.extension.purdue.edu](https://www.extension.purdue.edu)



[State Soil Conservation Board - http://www.in.gov/isda/2361.htm](http://www.in.gov/isda/2361.htm)



[USDA Farm Service Agency -](http://www.fsa.usda.gov/FSA/stateoffapp?mystate=in&area=home&subject=landing&topic=landing)

<http://www.fsa.usda.gov/FSA/stateoffapp?mystate=in&area=home&subject=landing&topic=landing>



United States Department of Agriculture  
Natural Resources Conservation Service

[USDA Natural Resources Conservation Service - http://www.nrcs.usda.gov/wps/portal/nrcs/site/in/home/](http://www.nrcs.usda.gov/wps/portal/nrcs/site/in/home/)

## Introduction:

The Indiana Conservation Partnership is comprised of eight Indiana agencies and organizations who share a common goal of promoting conservation. To that end, the mission of the Indiana Conservation Partnership is to provide technical, financial and educational assistance needed to implement economically and environmentally compatible land and water stewardship decisions, practices and technologies.

In 2013, members of the Indiana Conservation Partnership (ICP) began using the United States Environmental Protection Agency's (USEPA) Region 5 Nutrient Load Reduction Model to determine the impact of installed conservation practices implemented by the ICP Conservation Implementation Teams on Indiana's water quality. The ICP adopted the Region 5 Nutrient Load Reduction Model to analyze conservation practices funded by state programs such as the Indiana State Department of Agriculture's Clean Water Indiana Program and the Indiana Department of Natural Resources' Lake and River Enhancement Program, as well as federally funded programs including EPA's Section-319 Program and USDA's Farm Bill Programs.

A federal furlough and the late passage of the 2014 Farm Bill resulted in a decrease in installed practices for calendar year 2014. Enrollments for many of the Farm Bill programs including CRP and EQIP were delayed resulting in a shorter window for planning, surveying and construction of conservation practices to occur. Even with the long delay, the ICP Conservation Delivery Teams installed 21,012 conservation practices. A total of 11,365 of those practices could be analyzed using the Region 5 Nutrient Load Reduction Model, which estimated annual reductions of sediment, as well as nitrogen and phosphorus tied to sediment erosion (pages 12-14). These reductions continue for the life of the practices modeled (e.g., grassed waterways are designed to be 10-year practices, while cover crops are 1-year practices, established annually).

**Reductions in dissolved nutrients, such as dissolved reactive phosphorus (DRP) and nitrate (NO<sub>3</sub>), are not accounted for by the Region 5 Model.** The remaining ICP practices were not modeled because they were not associated with sediment loss, or were not covered by the EPA Region 5 Model. This effort represents ICP-assisted conservation in Indiana. **Data does not include the many unassisted practices designed and installed solely by a private landowner without ICP assistance.**

New in 2014, are the introduction of cumulative nutrient load reduction analyses based upon 2013 and 2014 sediment, nitrogen, and phosphorus load reductions per HUC 8 watersheds (pages 15-17). The analysis encompassed a breakdown of 2013 and 2014 conservation practices by lifespan including 1, 5, 10, 15, 20 and 40 years (according to USDA-NRCS Field Office Technical Guide). For example, grassed waterways are designed to be 10-year practices, while cover crops are 1-year practices, established annually. The maps reflect all of the practices, minus the 2013 practices with a lifespan of one year (10,533), totaling 15,042 practices.

Indiana is the only state in the country to adopt a model among so many partners to estimate conservation impact on a statewide scale. As part of Indiana's Nutrient Reduction Strategy, this modeling effort illustrates the continued success and challenges of conservation and serves as a tool to help set watershed priority and reduction targets, manage conservation resources, and to further stakeholder involvement at all levels of government within and across Indiana.

2013 and 2014 Conservation Accomplishments Comparison					
	Practices Installed	Region 5 Model Analyses	Sediment (tons/year)	Phosphorus (lbs./year)	Nitrogen (lbs./year)
CY2013	30,502	15,332	1,661,636	1,469,926	2,780,790
CY2014	21,012	11,365	996,762	1,137,921	2,120,554

*Four practices which were analyzed in 2013 including brush management, drainage water management, sand filters and waste treatment were no longer analyzed in 2014. In an effort to keep data consistent, these practices were not included in the 2013-14 cumulative analysis. The Region 5 Model captures nutrient load reductions tied to sediment, and these specific practices do not fit this criterion.*

## Methodology:

The Indiana State Department of Agriculture's (ISDA) use of the EPA Region 5 load reduction model to estimate Nutrient and Sediment load reductions in Indiana is part of a collective effort by the Indiana Conservation Partnership (ICP) <http://icp.iaswcd.org/> to generate a comprehensive statewide picture of voluntary conservation impact across the state. Cooperation in this effort by local, state and federal partners in the ICP allows for conservation tracking and load reduction estimation at an order of magnitude greater than any single agency or entity could achieve alone. The ICP utilizes the end products of this process to establish baselines and measure load reduction trends by watershed for each calendar year, allowing for prioritization of workload and staffing needs, all while serving as a tangible component of the Indiana Nutrient Reduction Strategy.

The collection of practice data for the model is the first step in this effort. Several members of the ICP participate on this front end, which makes the Division of Soil Conservation's (hereafter referred to as the Division) use of the model and subsequent mapping possible. Practice information from several sources is consolidated by our Accountability and Technology Program Manager and then run through the model by Division field staff<sup>1</sup>. These data include Clean Water Indiana and the Conservation Reserve Enhancement Program conservation tracking data in Microsoft SharePoint (ISDA, Soil and Water Conservation Districts), practice data from Farm Bill programs (NRCS/FSA), practice data from EPA-319 funded projects (IDEM) and practice data from the Lake and River Enhancement program (IDNR).<sup>2</sup> It should be noted that data not related to the Region 5 model is also consolidated in this way, though it is instead published in reports online.<sup>3</sup> These include tillage transect data and ICP financial reports. For utilizing the Region 5 model, practice data from ICP partners is collated into an Annual ICP Conservation Accomplishments datasheet, which included Best Management Practice (BMP) types, practice locations, measurements and other necessary attributes to enter into the Region 5 model. Practice data are then divided up by county and assigned to Division staff (4-6 assigned counties each).<sup>4</sup> By distributing workload on a county basis, practice data can be run through the model by Division staff on a manageable timeline. All practices within a given calendar year are modeled with maps and reports generated in March of the following year.

As practice reduction estimates are completed in the model by Division staff, the nitrogen, phosphorus and sediment load reduction numbers are entered back into the Annual ICP Conservation Accomplishment datasheet.<sup>5</sup> Once completed, the Accountability and Technology Program Manager lays over watershed or county layers in GIS with practice locations and their respective nutrient and sediment reductions. In this way, a cumulative picture of

<sup>1</sup> All Division staff are trained to use the Region 5 Model with initial instruction of the Model as well as refresher training and Q&A. A [training webinar](#) has been completed for new and existing users of the model, which illustrates examples and explains the equations behind the model's function(s). The Division of Soil Conservation Team Leaders also developed a guidance document for the Region 5 Model, which serves to maintain consistency in the Model's use and to reduce and avoid human error where possible. The guidance document includes specific practice notes and comments, and includes a tab to assist with the "coverage factor" in the model.

<sup>2</sup> This data collection process is represented with the green boxes at the top of the ICP Workload Accountability Data flow chart.

<sup>3</sup> Represented in the yellow rectangular boxes in the Workload Accountability flow chart. These are published on ISDA and ICP websites (small purple rectangle, lower left quadrant of the Workload Accountability flow chart).

<sup>4</sup> Represented in the two small orange circles on the Workload Accountability flow chart.

<sup>5</sup> Represented in the two small orange circles on the Workload Accountability flow chart.

conservation impact is created at watershed scales.<sup>6</sup> Value ranges are assigned for load reduction to illustrate the load reductions across the state by watershed at the HUC-8 level.

## **Conclusion:**

The primary value in partnership adoption of the EPA Region 5 model lies in benchmarking conservation impact and management of conservation resources across the state. As an additional result, the Indiana State Department of Agriculture has tied Key Performance Indicators and conservation goals to the Indiana State Office of Management and Budget. Use of the model for tracking impacts and goals has also had an internal benefit for ISDA; an atmosphere of healthy competition has arisen amongst field staff, who are eager to show positive water quality and sedimentation impacts in their respective watersheds. On a larger scale, The Indiana Conservation Partnership utilizes this model to set program/project goals, quantify impacts and estimate load reductions before a project ever begins.

Future plans include placing a dollar value on the amount of nitrogen and phosphorus kept on the land based on values provided by ongoing Water Quality Trading Projects and fertilizer costs. In addition, USEPA (Region 5) is currently updating the model to include fifteen more Best Management Practices (BMPs) as well as a water quantity component. In the future, estimates of water volumes kept on the landscape from various practices would help to assess and manage water quantity conservation efforts at county and watershed scales, both in times of drought and flooding. As these components of the model become available, ISDA and its partners intend to utilize them to their fullest possible potential within the partnership.

Future improvements may also include working with EPA to relate Indiana load reduction data to the spatial extent of the Gulf of Mexico Dead zone (a Hypoxia Task Force goal), modeling carbon sequestration impact, overlaying farmer social survey indicator data, incorporating data from other Indiana projects like INField Advantage: <http://infieldadvantage.org> and the Tillage Transect Survey, in addition to highlighting specific load reductions for significant Indiana water bodies like drinking water reservoirs.

The Indiana Conservation Partnership plans to continue utilizing the Region 5 Model and methodology for future years to come. The partners encourage other organizations to share their data as well. With the goal to assemble similar reports in March of each year.

## **Acknowledgement:**

The Indiana Conservation Partnership would like to thank the United States Environmental Protection Agency (USEPA), both in Region 5 and Washington DC for their continued support and validation of Indiana's Conservation Accomplishments and Load Reduction Modeling Process. The Indiana Conservation Partnership hopes to continue to grow this collaboration with USEPA going forward to build further upon this process so the many benefits and trends of voluntary conservation projects can be shared in a timely and transparent manner.

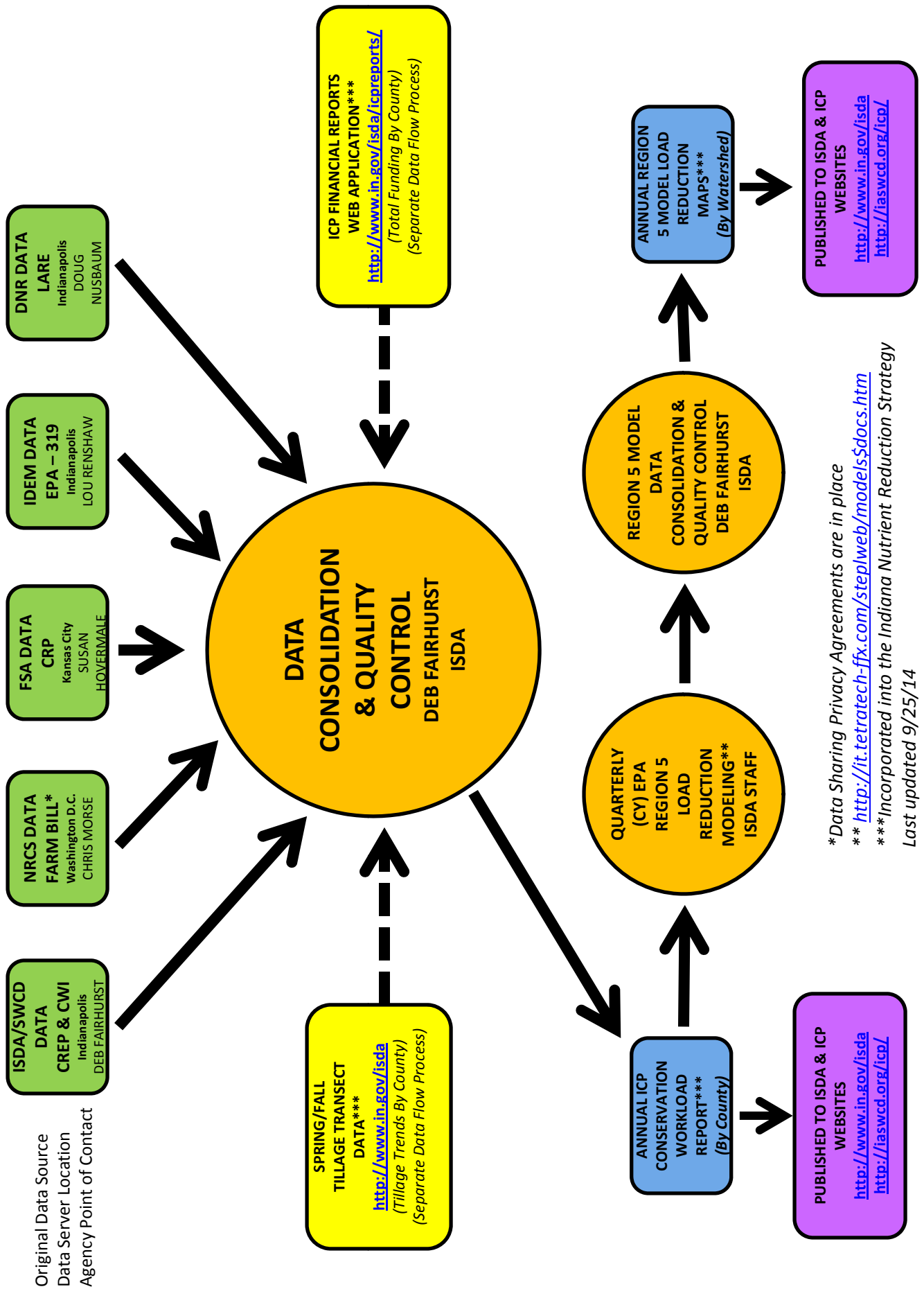
## **Region 5 Model Training Webinar:**

[What Is the Region 5 Model and How Do You Use It?](https://engineering.purdue.edu/watersheds/webinars/Region5/)

<https://engineering.purdue.edu/watersheds/webinars/Region5/>

<sup>6</sup> Represented in the small blue rectangle in the lower right quadrant of the Workload Accountability flow chart.

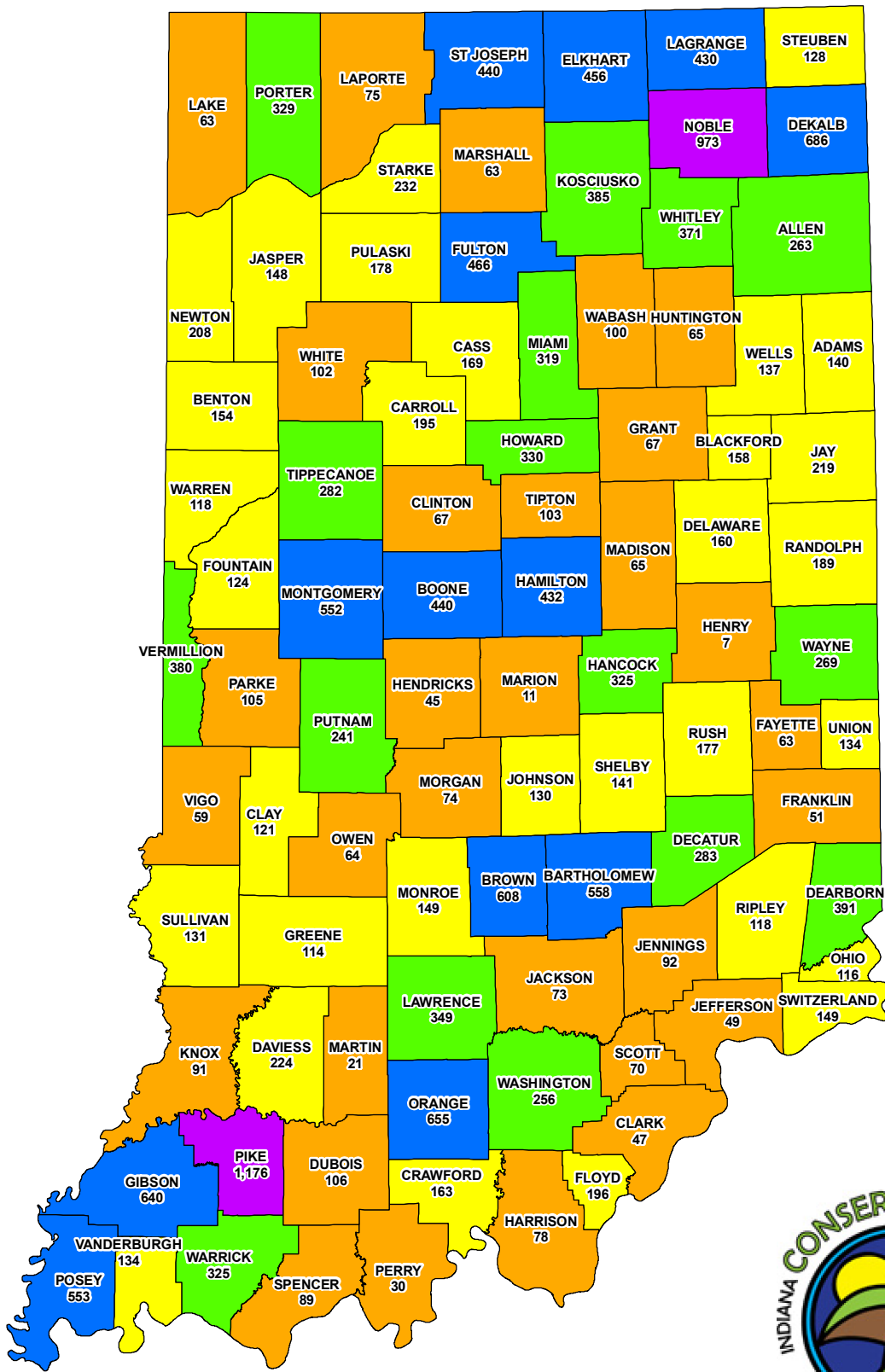
# Indiana Conservation Partnership Annual (CY) Workload Accountability Data Flow



\*Data Sharing Privacy Agreements are in place  
 \*\* <http://it.tetrattech-ffx.com/step/web/models/docs.htm>  
 \*\*\* Incorporated into the Indiana Nutrient Reduction Strategy  
 Last updated 9/25/14

# 2014 Indiana Conservation Accomplishments

Implemented by Indiana Conservation Partnership



January 1 thru December 31, 2014  
 Conservation Practices Completed - 21,012  
 Conservation Practices Underway - 1,076

## 2014 Conservation Accomplishments

Data: Provided by Indiana State Department of Agriculture, Indiana Department of Environmental Management, Indiana Department of Natural Resources, Indiana's Soil and Water Conservations Districts and USDA Natural Resources Conservation Service.

### Total Practices

- 7 - 106
- 114 - 232
- 241 - 391
- 430 - 686
- 973 - 1,176

March 20, 2015  
 Deb Fairhurst, ISDA Program Manager



## 2014 County Breakdown of Conservation Practices by Program

COUNTY	AWEP	CREP	CRP	CSP	CWI	EQIP	EWP	GRP	IDEM	LARE	INFA	OTHER	WHIP	WRP	TOTAL
ADAMS	0	0	25	0	0	100	0	0	0	0	9	0	0	6	140
ALLEN	0	0	0	41	0	167	0	0	0	0	24	0	31	0	263
BARTHOLOMEW	0	0	0	0	0	528	0	0	26	0	4	0	0	0	558
BENTON	0	0	16	0	10	123	0	0	0	0	5	0	0	0	154
BLACKFORD	0	0	0	0	0	156	0	0	0	0	2	0	0	0	158
BOONE	0	0	21	0	0	388	0	0	0	0	23	0	8	0	440
BROWN	0	0	0	0	0	601	0	0	0	0	0	0	7	0	608
CARROLL	0	0	0	0	0	177	0	0	0	0	14	3	1	0	195
CASS	0	0	3	6	0	149	0	0	0	0	9	0	2	0	169
CLARK	0	0	0	0	6	19	0	0	15	0	0	0	7	0	47
CLAY	0	0	51	0	0	33	0	0	0	0	9	0	28	0	121
CLINTON	0	0	0	0	0	16	0	0	4	0	25	0	22	0	67
CRAWFORD	0	0	0	0	11	152	0	0	0	0	0	0	0	0	163
DAVISS	0	1	0	0	0	214	0	0	0	0	6	0	3	0	224
DEARBORN	0	0	0	0	2	362	0	0	19	0	1	1	6	0	391
DECATUR	0	0	24	20	0	226	0	0	0	0	13	0	0	0	283
DEKALB	6	0	1	0	14	657	0	0	1	0	2	0	5	0	686
DELAWARE	0	0	0	0	0	137	0	0	0	0	21	0	2	0	160
DUBOIS	0	0	0	0	0	83	0	0	2	0	21	0	0	0	106
ELKHART	230	0	16	42	0	166	0	0	0	0	1	0	0	1	456
FAYETTE	0	0	4	0	0	58	0	0	0	0	0	0	1	0	63
FLOYD	0	0	0	0	0	196	0	0	0	0	0	0	0	0	196
FOUNTAIN	0	0	74	0	0	31	0	0	0	0	14	0	5	0	124
FRANKLIN	0	0	1	0	0	49	0	0	0	0	1	0	0	0	51
FULTON	0	0	4	0	45	284	0	0	0	0	22	111	0	0	466
GIBSON	0	0	0	0	112	505	0	0	2	0	16	0	5	0	640
GRANT	0	0	2	0	0	64	0	0	0	0	1	0	0	0	67
GREENE	0	0	2	0	0	93	0	0	1	0	4	0	14	0	114
HAMILTON	0	0	0	0	0	381	0	0	22	0	21	7	1	0	432
HANCOCK	0	0	0	18	0	304	0	0	3	0	0	0	0	0	325
HARRISON	0	0	4	0	0	74	0	0	0	0	0	0	0	0	78
HENDRICKS	0	0	0	0	0	34	0	0	0	0	8	0	3	0	45
HENRY	0	0	0	0	0	6	0	0	0	0	1	0	0	0	7
HOWARD	0	0	37	0	0	263	0	0	0	0	22	0	8	0	330
HUNTINGTON	0	5	0	14	0	46	0	0	0	0	0	0	0	0	65
JACKSON	0	3	0	0	4	57	0	0	0	0	0	0	9	0	73
JASPER	0	0	25	0	14	71	0	0	1	0	31	6	0	0	148
JAY	0	0	12	0	0	206	0	0	0	0	1	0	0	0	219
JEFFERSON	0	0	0	0	0	43	0	0	6	0	0	0	0	0	49
JENNINGS	0	0	4	0	8	48	0	0	0	0	6	25	1	0	92
JOHNSON	0	0	30	34	0	66	0	0	0	0	0	0	0	0	130
KNOX	0	0	14	0	0	34	0	0	0	0	10	0	33	0	91
KOSCIUSKO	107	11	0	0	0	53	0	0	10	30	22	0	152	0	385
LAGRANGE	366	0	0	0	0	41	0	0	13	0	0	0	10	0	430
LAKE	0	0	3	0	3	47	0	0	0	1	0	9	0	0	63
LAPORTE	12	0	11	0	0	40	0	0	1	0	3	0	2	6	75
LAWRENCE	0	1	0	0	9	258	0	0	0	0	9	0	72	0	349
MADISON	0	2	0	1	5	43	0	0	1	0	13	0	0	0	65
MARION	0	1	0	0	0	2	0	0	7	0	0	0	1	0	11
MARSHALL	0	0	0	0	0	24	0	0	0	2	0	37	0	0	63
MARTIN	0	0	0	0	0	19	0	0	0	0	0	0	2	0	21
MIAMI	0	0	56	0	20	224	0	0	4	0	1	3	11	0	319
MONROE	0	0	0	1	0	148	0	0	0	0	0	0	0	0	149
MONTGOMERY	0	0	226	0	0	278	0	0	0	0	3	0	45	0	552
MORGAN	0	2	24	0	6	42	0	0	0	0	0	0	0	0	74
NEWTON	0	0	0	0	20	186	0	0	1	0	0	1	0	0	208
NOBLE	305	0	158	92	0	333	0	0	3	30	44	0	8	0	973
OHIO	0	0	0	0	4	112	0	0	0	0	0	0	0	0	116
ORANGE	0	0	0	0	0	619	0	0	36	0	0	0	0	0	655
OWEN	0	0	21	0	0	42	0	0	0	0	1	0	0	0	64
PARKE	0	1	51	0	0	25	0	0	0	0	20	0	8	0	105
PERRY	0	0	0	0	2	9	0	0	0	0	0	0	19	0	30

## 2014 County Breakdown of Conservation Practices by Program

COUNTY	AWEP	CREP	CRP	CSP	CWI	EQIP	EWP	GRP	IDEM	LARE	INFA	OTHER	WHIP	WRP	TOTAL
PIKE	0	0	0	0	76	1060	0	0	0	0	5	0	35	0	1,176
PORTER	0	0	8	0	1	290	0	0	0	0	22	0	8	0	329
POSEY	0	0	5	0	0	483	0	0	0	0	17	0	48	0	553
PULASKI	0	0	23	0	61	55	0	0	0	0	39	0	0	0	178
PUTNAM	0	0	146	0	0	49	0	0	0	0	44	2	0	0	241
RANDOLPH	0	0	90	0	0	91	0	0	0	0	8	0	0	0	189
RIPLEY	0	0	2	0	0	107	0	0	7	0	1	1	0	0	118
RUSH	0	0	0	164	0	13	0	0	0	0	0	0	0	0	177
SCOTT	0	0	0	0	5	64	0	0	0	0	0	0	1	0	70
SHELBY	0	0	0	0	0	139	0	0	1	0	1	0	0	0	141
SPENCER	0	0	10	0	1	46	0	0	0	0	2	0	30	0	89
ST JOSEPH	3	0	14	6	0	402	0	4	0	2	1	0	0	8	440
STARKE	0	2	0	0	0	223	0	0	0	0	0	0	0	7	232
STEUBEN	95	0	0	0	4	23	0	0	1	0	0	0	5	0	128
SULLIVAN	0	0	0	1	0	97	0	0	5	0	16	0	12	0	131
SWITZERLAND	0	0	0	0	1	109	0	0	17	0	0	16	6	0	149
TIPPECANOE	0	0	8	0	0	232	0	0	18	0	5	0	9	10	282
TIPTON	0	0	14	0	0	64	0	0	0	0	25	0	0	0	103
UNION	0	0	0	0	0	134	0	0	0	0	0	0	0	0	134
VANDEBURGH	0	0	0	0	22	103	0	0	0	0	9	0	0	0	134
VERMILLION	0	0	4	0	0	359	0	0	0	0	17	0	0	0	380
VIGO	0	6	3	0	0	28	0	0	0	0	6	0	6	10	59
WABASH	0	3	1	0	28	56	0	0	6	0	1	0	5	0	100
WARREN	0	0	16	0	0	84	0	0	0	0	7	0	4	7	118
WARRICK	0	0	0	0	20	282	0	0	0	0	14	0	9	0	325
WASHINGTON	0	2	76	0	22	122	1	0	25	0	0	0	8	0	256
WAYNE	0	0	11	0	0	253	0	0	0	0	0	0	5	0	269
WELLS	0	0	10	0	9	110	0	0	0	0	3	0	5	0	137
WHITE	0	0	0	0	0	101	0	0	0	0	1	0	0	0	102
WHITLEY	45	0	10	0	2	261	0	0	14	0	14	0	25	0	371
<b>TOTAL</b>	<b>1,169</b>	<b>40</b>	<b>1,371</b>	<b>440</b>	<b>547</b>	<b>15,352</b>	<b>1</b>	<b>4</b>	<b>272</b>	<b>65</b>	<b>721</b>	<b>222</b>	<b>753</b>	<b>55</b>	<b>21,012</b>

## Indiana Conservation Partnership Initiatives – Program Descriptions

### **ACEP - [Agricultural Conservation Easement Program](#)**

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/easements/acep/>

The USDA Agriculture Conservation Program provides financial and technical assistance to help conserve agricultural lands and wetlands and their related benefits. Under the Agricultural Land Easements component, NRCS helps Indian tribes, state and local governments and non-governmental organizations protect working agricultural lands and limit non-agricultural uses of the land. Under the Wetlands Reserve Easements component, NRCS helps to restore, protect and enhance enrolled wetlands.

### **AWEP – [Agricultural Water Enhancement Program](#)**

<http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/awep/>

The USDA Agricultural Water Enhancement Program (AWEP) is a voluntary conservation initiative that provides financial and technical assistance to agricultural producers to implement agricultural water enhancement activities on agricultural land for the purposes of conserving surface and ground water and improving water quality.

### **CREP – [Conservation Reserve Enhancement Program](#)**

<http://www.in.gov/isda/2377.htm>

The Conservation Reserve Enhancement Program (CREP) is a federal-state natural resources conservation program that addresses agricultural-related environmental concerns at the state and national level. CREP participants receive financial incentives to voluntarily enroll in the Conservation Reserve Program (CRP) in contracts of 14 to 15 years. Participants remove cropland from agricultural production and convert the land to native grasses, trees and other vegetation.

### **CRP - [Conservation Reserve Program](#)**

<http://www.fsa.usda.gov/programs-and-services/conservation-programs/conservation-reserve-program/index>

The USDA Conservation Reserve Program is a land conservation program administered by the Farm Service Agency (FSA). In exchange for a yearly rental payment, farmers enrolled in the program agree to remove environmentally sensitive land from agricultural production and plant species that will improve environmental health and quality. Contracts for land enrolled in CRP are 10-15 years in length. The long-term goal of the program is to re-establish valuable land cover to help improve water quality, prevent soil erosion, and reduce loss of wildlife habitat.

### **CSP - [Conservation Stewardship Program](#)**

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/in/programs/financial/csp/>

The USDA Conservation Stewardship Program is a voluntary program that encourages agricultural producers to improve conservation systems by improving, maintaining, and managing existing conservation activities and undertaking additional conservation activities. The Natural Resources Conservation Service administers this program and provides financial and technical assistance to eligible producers.

**CWI – [Clean Water Indiana Program](http://www.in.gov/isda/2379.htm)**

<http://www.in.gov/isda/2379.htm>

The Clean Water Indiana Program was established to provide financial assistance to landowners and conservation groups. The financial assistance supports the implementation of conservation practices which will reduce nonpoint sources of water pollution through education, technical assistance, training, and cost sharing programs. The CWI fund is administered by the Division of Soil Conservation under the direction of the State Soil Conservation Board.

**EQIP - [Environmental Quality Incentives Program](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/in/programs/?cid=nrcs144p2_031015)**

[http://www.nrcs.usda.gov/wps/portal/nrcs/detail/in/programs/?cid=nrcs144p2\\_031015](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/in/programs/?cid=nrcs144p2_031015)

The USDA Environmental Quality Incentive Program is a voluntary conservation program that helps agricultural producers in a manner that promotes agricultural production and environmental quality as compatible goals. Through EQIP, farmers and ranchers receive financial and technical assistance to implement structural and management conservation practices that optimize environmental benefits on working agricultural land.

**EWP – [Emergency Watershed Protection](http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp/)**

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp/>

The USDA Natural Resources Conservation Service (NRCS) administers the Emergency Watershed Protection (EWP) Program, which responds to emergencies created by natural disasters. It is not necessary for a national emergency to be declared for an area to be eligible for assistance.

**GRP - [Grasslands Reserve Program](http://www.fsa.usda.gov/programs-and-services/conservation-programs/grassland-reserve/index)**

<http://www.fsa.usda.gov/programs-and-services/conservation-programs/grassland-reserve/index>

The goal of the Grasslands Reserve Program is to prevent grazing and pasture land from being converted into cropland, used for urban development, or developed for other non-grazing uses. Participants in the program voluntarily limit future development of their grazing and pasture land, while still being able to use the land for livestock grazing and activities related to forage and seed production. Participation in GRP may also entail restrictions on activities during the nesting season of certain bird species that are in decline or protected under Federal or state law.

**IDEM Section 205j - [Clean Water Act Section 205\(j\)](http://www.in.gov/idem/nps/2525.htm)**

<http://www.in.gov/idem/nps/2525.htm>

The federal Clean Water Act Section 205(j) provides funding for water quality management planning. Funds are to be used to determine the nature, extent and sources of point and nonpoint source water pollution problems and to develop plans to resolve these problems.

**IDEM Section 319 – [Clean Water Act Section 319\(h\)](http://www.in.gov/idem/nps/2524.htm)**

<http://www.in.gov/idem/nps/2524.htm>

The federal Clean Water Act Section 319(h) grant program provides funding for various types of projects that work to reduce nonpoint source water pollution identified in the [Indiana State Nonpoint Source Management Plan](#). Funds may be used to conduct assessments, to develop and implement watershed management plans, to provide technical assistance, to demonstrate new technology and to provide education and outreach. Entities eligible for funding include nonprofit organizations, universities, and local, State or Federal government agencies. A forty (40) percent non-federal in-kind or cash match of the total project cost must be provided.

**INFA – [INfield Advantage](http://infieldadvantage.org/)**

<http://infieldadvantage.org/>

The INfield Advantage is a group of crop producers interested in economics, stewardship, and reducing their environmental footprint. The goal of INfield Advantage is to advance two critical components to driving improved farm-level performance:

- 1) access to and education on the use of effective, affordable tools and strategies to assess and verify on-farm environmental and economic performance and
- 2) coordination of data collection, analysis, and feedback to farmers using these tools at the individual farm level and in aggregate across multiple farms in a geographic region.

**LARE – [Lake and River Enhancement Program](http://www.in.gov/dnr/fishwild/2364.htm)**

<http://www.in.gov/dnr/fishwild/2364.htm>

The goal of the Division of Fish and Wildlife's Lake and River Enhancement Section is to protect and enhance aquatic habitat for fish and wildlife, to insure the continued viability of Indiana's publicly accessible lakes and streams for multiple uses, including recreational opportunities. This is accomplished through measures that reduce non-point sediment and nutrient pollution of surface waters to a level that meets or surpasses state water quality standards.

**WHIP – [Wildlife Habitat Incentive Program](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/in/programs/?cid=nrcs144p2_031021)**

[http://www.nrcs.usda.gov/wps/portal/nrcs/detail/in/programs/?cid=nrcs144p2\\_031021](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/in/programs/?cid=nrcs144p2_031021)

The USDA Wildlife Habitat Incentive Program is a voluntary program for people who want to develop and improve wildlife habitat primarily on private land. Through WHIP USDA's Natural Resources Conservation Service provides both technical assistance and up to 75 percent cost-share assistance to establish and improve fish and wildlife habitat. WHIP agreements between NRCS and the participant generally last from 5 to 10 years from the date the agreement is signed.

**WRP – [Wetlands Reserve Program](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/in/newsroom/releases/?cid=nrcs144p2_031028)**

[http://www.nrcs.usda.gov/wps/portal/nrcs/detail/in/newsroom/releases/?cid=nrcs144p2\\_031028](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/in/newsroom/releases/?cid=nrcs144p2_031028)

The USDA Wetlands Reserve Program is the Nation's premier wetlands restoration program. It is a voluntary program that offers landowners the means and the opportunity to protect, restore, and enhance wetlands on their property. The USDA Natural Resources Conservation Service (NRCS) manages the program as well as provides technical and financial support to help landowners that participate in WRP.

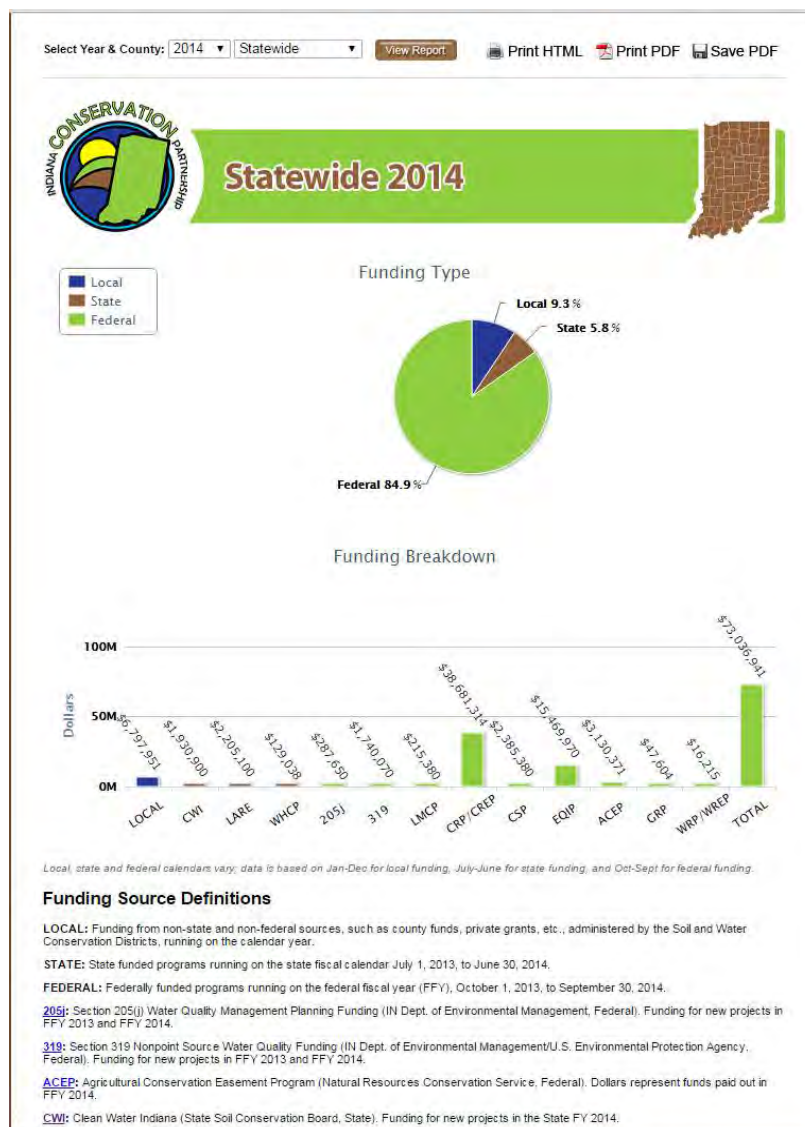
## Indiana Conservation Partnership Websites:

[Indiana Conservation Partnership \(http://icp.iaswcd.org/\)](http://icp.iaswcd.org/)

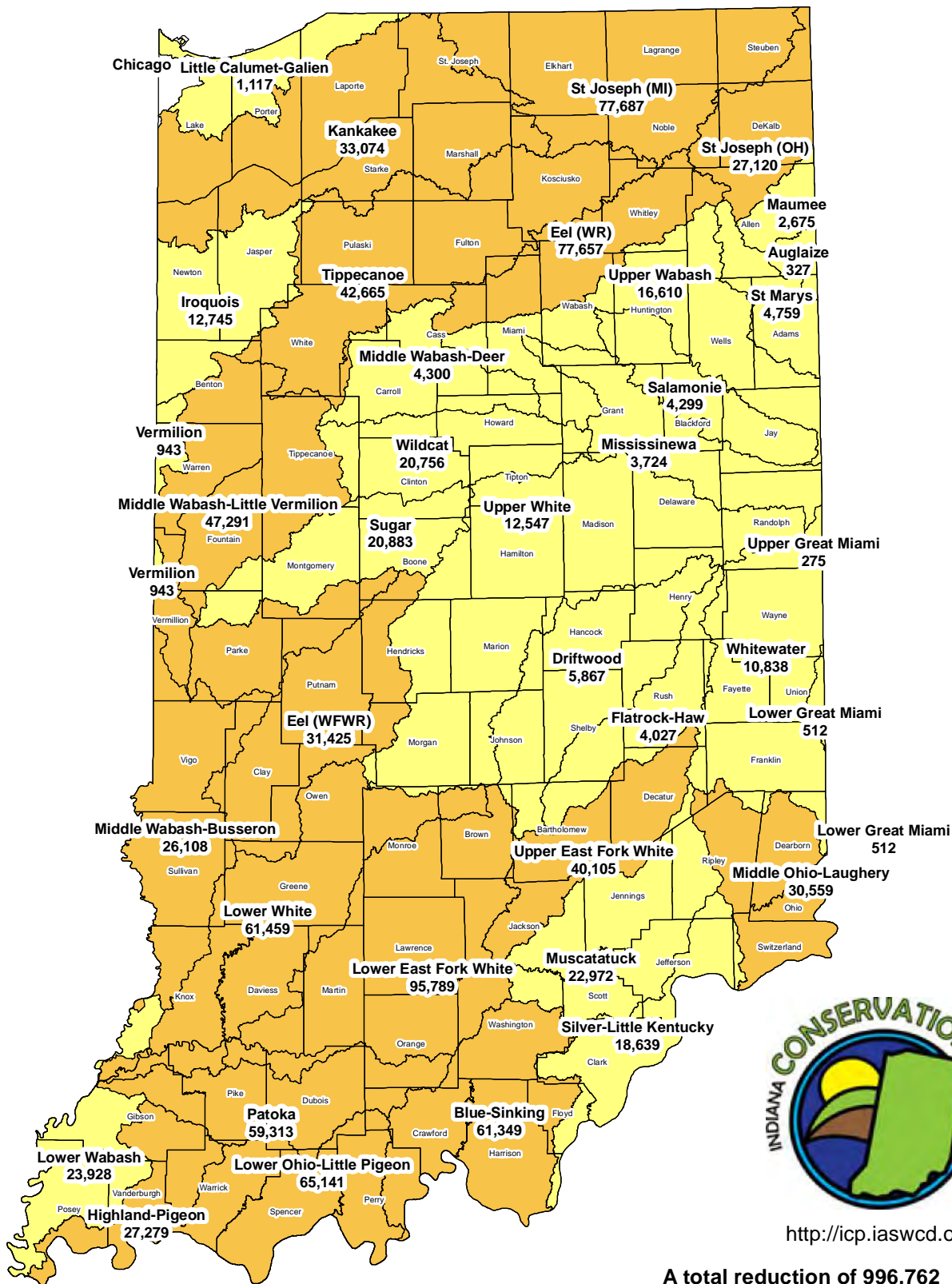
The Partnership is comprised of eight Indiana agencies and organizations who share a common goal of promoting conservation. To that end, the mission of the Indiana Conservation Partnership is to provide technical, financial and educational assistance needed to implement economically and environmentally compatible land and water stewardship decisions, practices and technologies.

[Indiana Conservation Partnership Reports \(http://www.in.gov/isda/icpreports\)](http://www.in.gov/isda/icpreports)

Here you can find statewide and county level information on conservation investments made with local, state and federal funding. You can view funding levels, funding specific programs and counties, and county level success stories for Soil and Water Conservation Districts. The statewide information page and each county page can be printed as a pdf document. Shown below is a screenshot of the 2014 Statewide Report.



# 2014 Nutrient Load Reductions Sediment



<http://icp.iaswcd.org/>

**A total reduction of 996,762 tons of sediment statewide.**

### Sediment Reductions (tons/year)

- 275 - 25,000
- 25,001 - 100,000
- No Reported Reductions

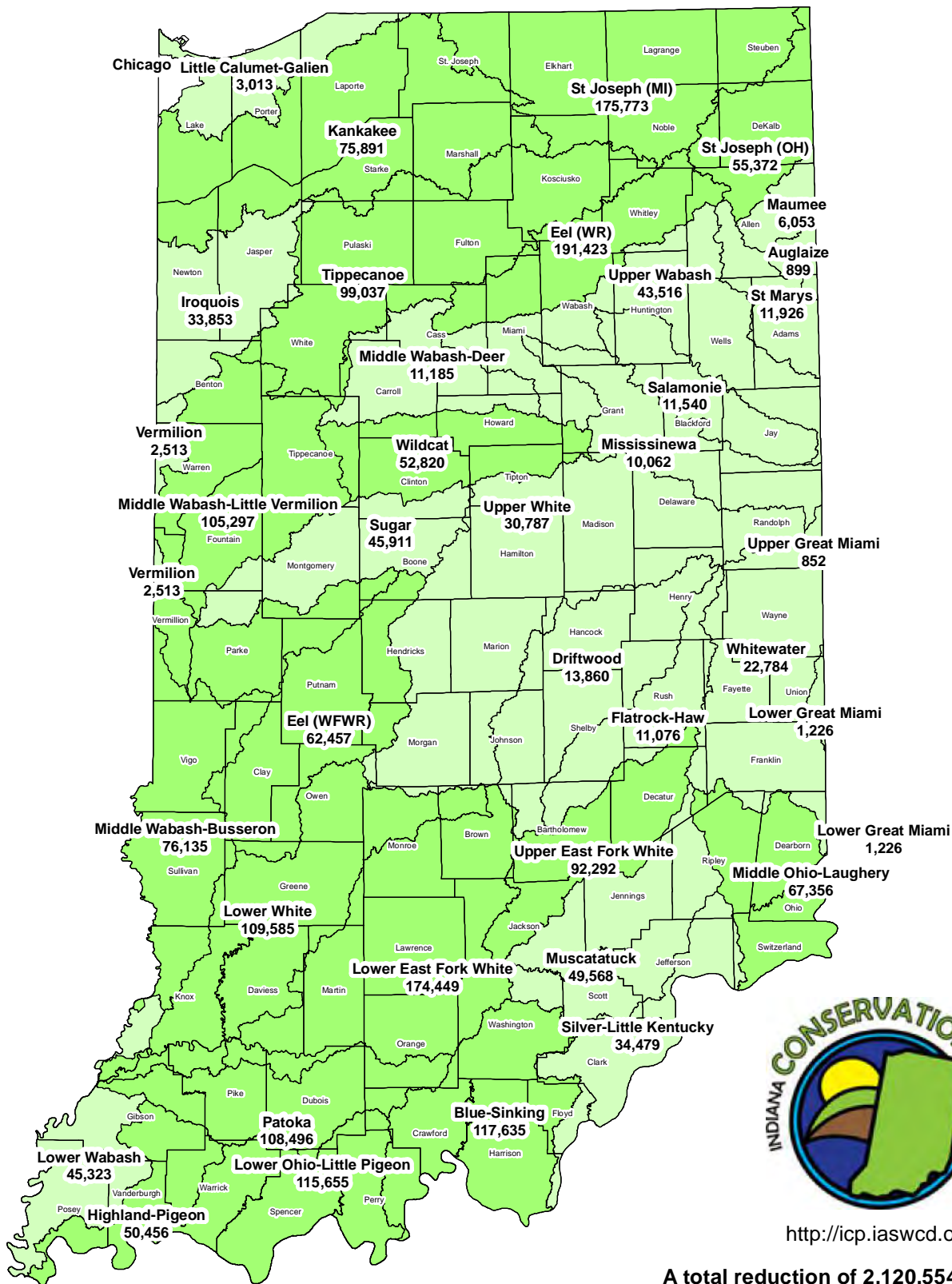
Based on Region 5 Model analyses conducted on 11,365 conservation practices installed by the Indiana Conservation Partnership January 2014 thru December 2014. This effort does not include the many unassisted practices designed and installed solely by a private landowner without ICP assistance.

Reductions in dissolved nutrients, such as dissolved reactive phosphorus (DRP) and nitrate (NO<sub>3</sub>), are not accounted for by the Region 5 Model.

April 7, 2015  
Deb Fairhurst, ISDA Program Manager



# 2014 Nutrient Load Reductions Nitrogen



<http://icp.iaswcd.org/>

**A total reduction of 2,120,554 pounds of nitrogen statewide.**

### Nitrogen Reduction (lbs./year)

- 1 - 50,000
- 50,001 - 200,000
- No Reported Reductions

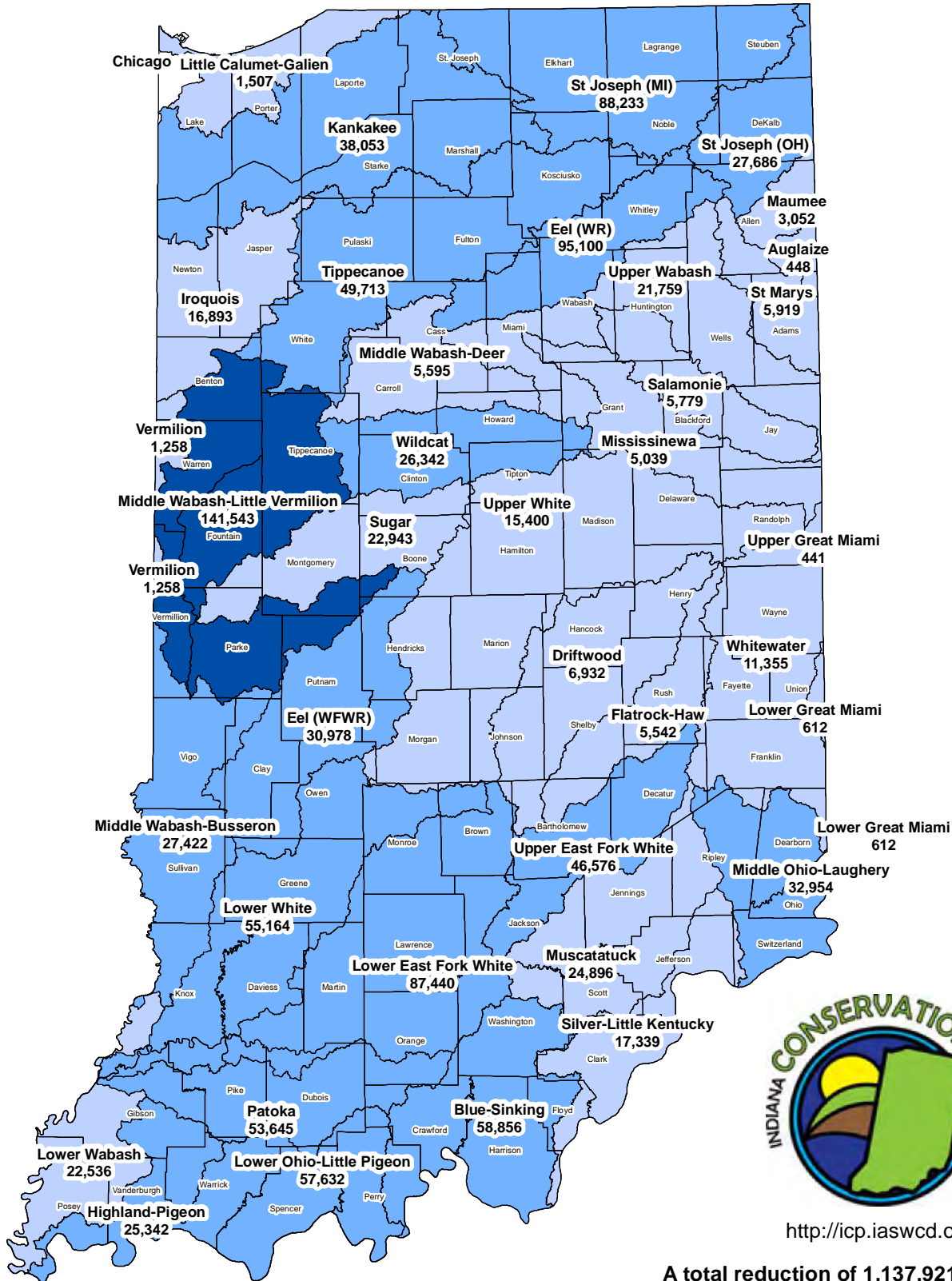
Based on Region 5 Model analyses conducted on 11,365 conservation practices installed by the Indiana Conservation Partnership January 2014 thru December 2014. This effort does not include the many unassisted practices designed and installed solely by a private landowner without ICP assistance.

Reductions in dissolved nutrients, such as dissolved reactive phosphorus (DRP) and nitrate (NO3), are not accounted for by the Region 5 Model.

April 7, 2015  
Deb Fairhurst, ISDA Program Manager







# 2014 Nutrient Load Reductions Phosphorus



<http://icp.iaswcd.org/>

**A total reduction of 1,137,921 pounds of phosphorus statewide.**

### Phosphorus Reduction (lbs./year)

-  441 - 25,000
-  25,001 - 100,000
-  100,001 - 175,000
-  No Reported Reductions

Based on Region 5 Model analyses conducted on 11,365 conservation practices installed by the Indiana Conservation Partnership January 2014 thru December 2014. This effort does not include the many unassisted practices designed and installed solely by a private landowner without ICP assistance.

Reductions in dissolved nutrients, such as dissolved reactive phosphorus (DRP) and nitrate (NO<sub>3</sub>), are not accounted for by the Region 5 Model.

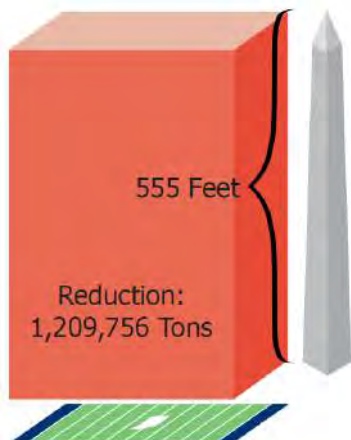
April 7, 2015  
Deb Fairhurst, ISDA Program Manager

# 2013-14 Cumulative Nutrient Load Reductions: Sediment



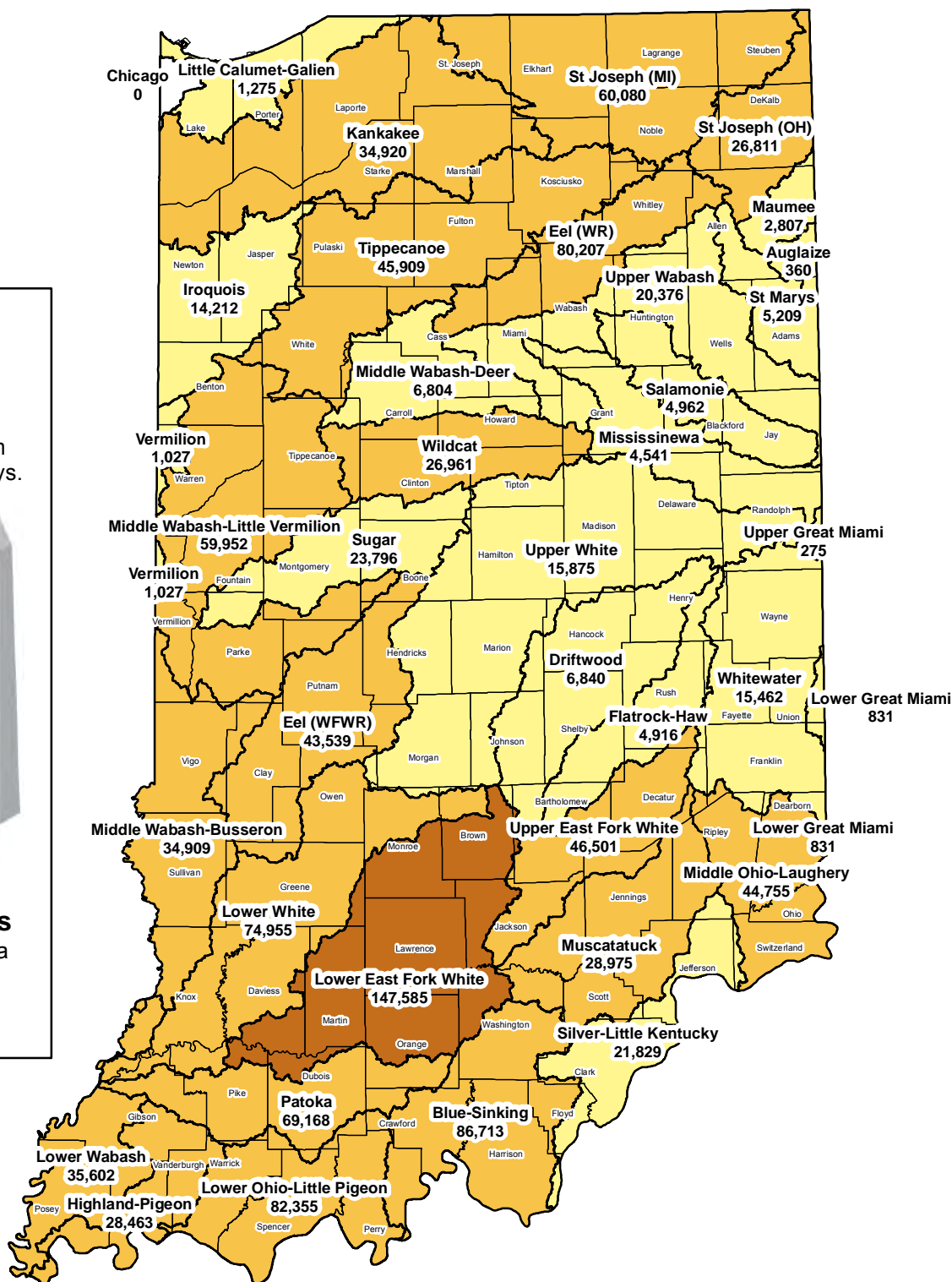
<http://icp.iaswcd.org/>

Since 2013, voluntary conservation efforts from private landowners in Indiana with support from the ICP have reduced nutrients and sediment from entering Indiana's waterways.



## Sediment Reductions

A football field covered to a depth of 560 feet, which is taller than the Washington Monument.



A total reduction of 1,209,756 tons of sediment statewide.

## Sediment Reduction (tons)

- 1 - 25,000
- 25,001 - 100,000
- 100,001 - 175,000
- No Reported Reductions

Based on Region 5 Model analyses conducted on 15,042 conservation practices installed by the Indiana Conservation Partnership January 2013 thru December 2014. This effort does not include the many unassisted practices designed and installed solely by a private landowner without ICP assistance.

Reductions in dissolved nutrients, such as dissolved reactive phosphorus (DRP) and nitrate (NO<sub>3</sub>), are not accounted for by the Region 5 Model.

May 18, 2015  
 Deb Fairhurst, ISDA Program Manager

2013 and 2014 Sediment Load Reductions by HUC8 Watersheds

2013 SEDIMENT LOAD REDUCTIONS										
HUC8	HUC8 NAME	1YR2013	5YR2013	10YR2013	15YR2013	20YR2013	TOTAL			
04040001	Little Calumet-Gallen	347	13	124	21	0	505			
04050001	St. Joseph (MI)	73,788	1,406	453	185	26	75,858			
04100003	St. Joseph (OH)	47,085	139	142	32	0	47,398			
04100004	St. Marys	4,532	225	181	44	0	4,982			
04100005	Maumee	3,572	0	102	30	0	3,704			
04100007	Auglaize	21	28	5	0	0	54			
05080001	Upper Great Miami	0	0	0	0	0	0			
05080002	Lower Great Miami	512	41	18	25	235	831			
05080003	Whitewater	17,085	711	1,619	291	2,004	21,710			
05090203	Middle Ohio-Laughery	21,750	1,962	3,645	194	7,056	34,607			
05120101	Upper Wabash	19,893	402	2,704	660	0	23,659			
05120102	Salamonie	4,795	27	484	152	0	5,458			
05120103	Mississinewa	965	275	517	25	0	1,782			
05120104	Eel (WR)	72,645	798	1,309	607	0	75,360			
05120105	Middle Wabash-Deer	6,109	699	1,779	27	0	8,614			
05120106	Tippicanoe	33,127	1,139	451	968	226	35,912			
05120107	Wildcat	22,858	2,272	3,703	366	0	29,200			
05120108	Middle Wabash-Little Vermillion	43,576	1,315	9,857	1,490	0	56,238			
05120109	Vermillion	2,253	0	78	6	0	2,337			
05120110	Sugar	5,795	1,358	1,524	31	0	8,708			
05120111	Middle Wabash-Busseron	32,432	3,014	4,122	1,665	0	41,233			
05120113	Lower Wabash	15,577	4,531	2,270	4,214	0	26,592			
05120201	Upper White	10,382	307	1,978	243	0	12,910			
05120202	Lower White	71,492	11,097	1,209	1,161	29	84,988			
05120203	Eel (WFWR)	36,491	2,714	8,619	781	0	48,604			
05120204	Driftwood	7,609	227	333	256	157	8,582			
05120205	Flatrock-Haw	4,815	106	379	84	320	5,704			
05120206	Upper East Fork White	32,971	761	4,870	765	0	39,367			
05120207	Muscatatuck	35,112	2,314	2,770	527	80	40,803			
05120208	Lower East Fork White	190,835	42,461	3,757	4,563	57	241,673			
05120209	Patoka	17,107	3,940	2,921	2,637	357	26,962			
05140101	Silver-Little Kentucky	20,772	4,291	1,103	114	147	26,426			
05140104	Blue-Sinking	122,863	20,478	1,926	2,030	27	147,324			
05140201	Lower Ohio-Little Pigeon	97,127	11,864	2,755	82	231	112,059			
05140202	Highland-Pigeon	28,999	598	383	203	0	30,183			
07120001	Kankakee	11,904	689	696	507	0	13,796			
07120002	Iroquois	2,234	8	0	1,459	0	3,701			
07120003	Chicago	199	0	0	0	0	199			

NOTE: 2013 1YR LOAD REDUCTIONS ARE NOT INCLUDED IN THE 2013-14 CUMULATIVE NUTRIENT LOAD REDUCTION ANALYSIS

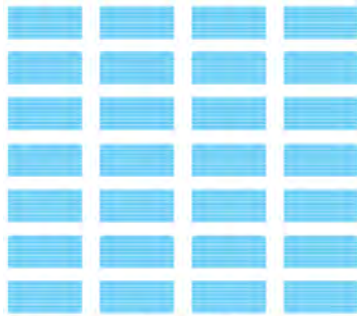
2014 SEDIMENT LOAD REDUCTIONS										
HUC8	HUC8 NAME	1YR2014	5YR2014	10YR2014	15YR2014	20YR2014	TOTAL			
04040001	Little Calumet-Gallen	1,104	2	9	2	0	1,117			
04050001	St. Joseph (MI)	56,189	1,112	64	208	438	58,010			
04100003	St. Joseph (OH)	25,763	299	46	390	0	26,498			
04100004	St. Marys	3,305	66	1,349	39	0	4,759			
04100005	Maumee	2,675	0	0	0	0	2,675			
04100007	Auglaize	327	0	0	0	0	327			
05080001	Upper Great Miami	266	9	0	0	0	275			
05080002	Lower Great Miami	512	0	0	0	0	512			
05080003	Whitewater	8,061	142	2,262	82	291	10,838			
05090203	Middle Ohio-Laughery	21,282	5,232	4,967	6	411	31,898			
05120101	Upper Wabash	14,859	93	1,551	107	0	16,610			
05120102	Salamonie	4,299	0	0	0	0	4,299			
05120103	Mississinewa	2,843	54	771	56	0	3,724			
05120104	Eel (WR)	76,507	450	308	228	0	77,493			
05120105	Middle Wabash-Deer	3,967	253	59	21	0	4,300			
05120106	Tippicanoe	40,416	52	117	658	1,882	43,125			
05120107	Wildcat	19,258	141	1,195	18	7	20,619			
05120108	Middle Wabash-Little Vermillion	31,762	286	14,230	839	174	47,291			
05120109	Vermillion	943	0	0	0	0	943			
05120110	Sugar	7,350	360	13,148	25	0	20,883			
05120111	Middle Wabash-Busseron	24,136	896	430	646	0	26,108			
05120113	Lower Wabash	24,110	68	409	0	0	24,587			
05120201	Upper White	9,886	1,015	2,085	350	12	13,348			
05120202	Lower White	53,339	6,648	1,472	0	0	61,459			
05120203	Eel (WFWR)	23,684	4,132	3,399	210	0	31,425			
05120204	Driftwood	5,703	0	126	38	0	5,867			
05120205	Flatrock-Haw	3,944	4	26	0	53	4,027			
05120206	Upper East Fork White	36,875	198	2,882	150	0	40,105			
05120207	Muscatatuck	21,198	1,832	211	43	0	23,284			
05120208	Lower East Fork White	75,392	18,740	1,778	684	153	96,747			
05120209	Patoka	55,772	253	2,725	179	384	59,313			
05140101	Silver-Little Kentucky	11,968	155	3,255	56	740	16,175			
05140104	Blue-Sinking	56,007	4,269	1,847	104	25	62,252			
05140201	Lower Ohio-Little Pigeon	64,012	2,287	944	180	0	67,423			
05140202	Highland-Pigeon	27,060	201	12	6	0	27,279			
07120001	Kankakee	31,997	213	651	167	0	33,028			
07120002	Iroquois	12,651	31	2	61	0	12,745			
07120003	Chicago	0	0	0	0	0	0			

# 2013-14 Cumulative Nutrient Load Reductions: Nitrogen



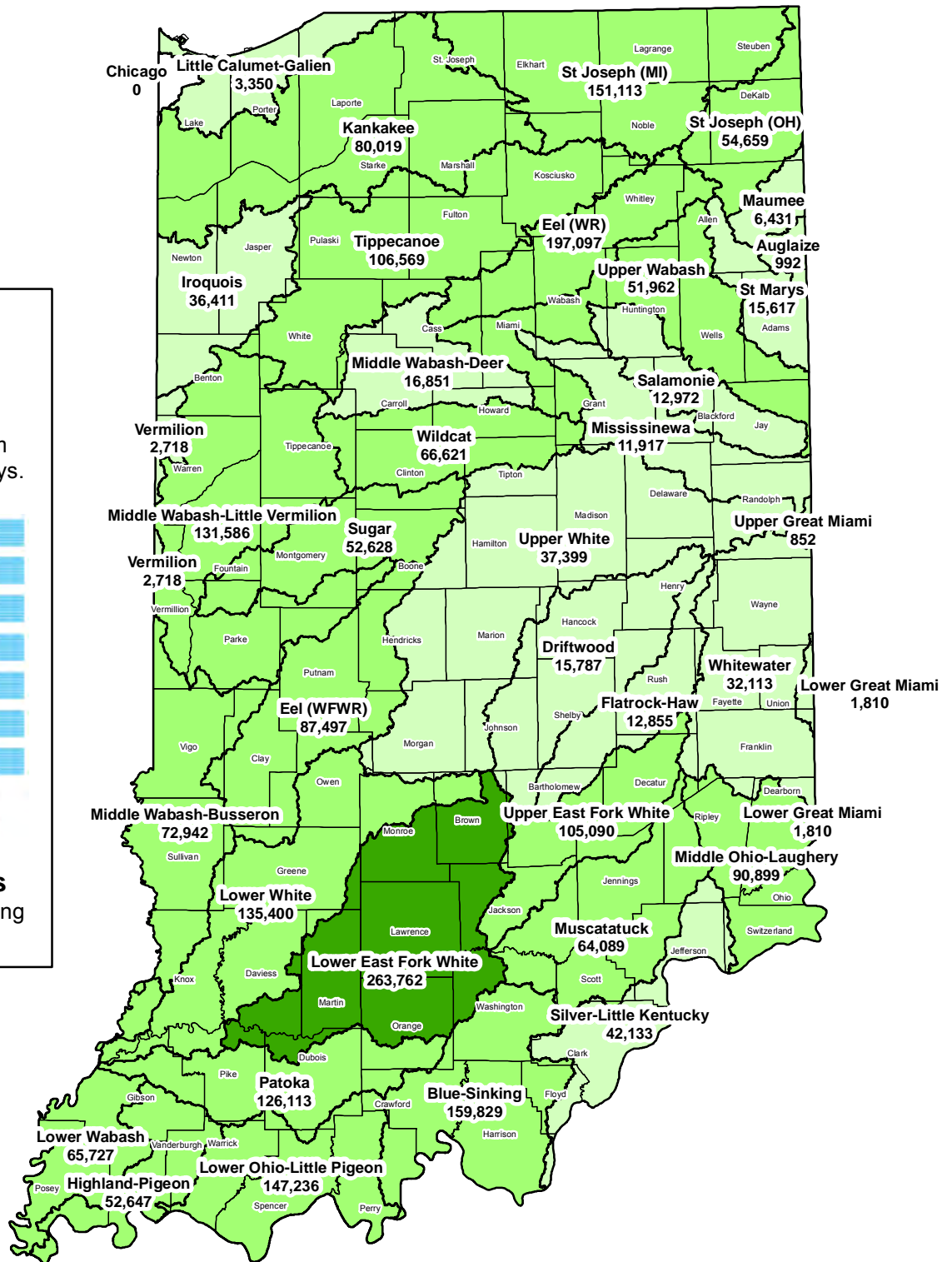
<http://icp.iaswcd.org/>

Since 2013, voluntary conservation efforts from private landowners in Indiana with support from the ICP have reduced nutrients and sediment from entering Indiana's waterways.



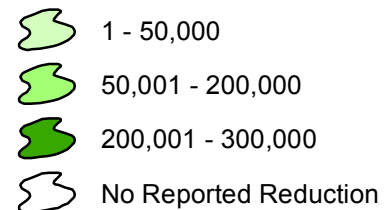
Reduction:  
2,513,693 Pounds

**Nitrogen Reductions**  
28.5 Olympic-size swimming pools



A total reduction of 2,513,693 pounds of nitrogen statewide.

## Nitrogen Reduction (pounds)



Based on Region 5 Model analyses conducted on 15,042 conservation practices installed by the Indiana Conservation Partnership January 2013 thru December 2014. This effort does not include the many unassisted practices designed and installed solely by a private landowner without ICP assistance.

Reductions in dissolved nutrients, such as dissolved reactive phosphorus (DRP) and nitrate (NO<sub>3</sub>), are not accounted for by the Region 5 Model.

May 18, 2015  
Deb Fairhurst, ISDA Program Manager

2013 and 2014 Nitrogen Load Reductions by HUC8 Watersheds

2013 NITROGEN LOAD REDUCTIONS										
HUC8	HUC8 NAME	1YR2013	5YR2013	10YR2023	15YR2028	20YR2033	TOTAL			
04040001	Little Calumet-Galien	1,021	36	249	52	0	1,358			
04050001	St. Joseph (MI)	168,760	3,358	903	9,691	44	182,757			
04100003	St. Joseph (OH)	102,879	336	250	65	0	103,530			
04100004	St. Marys	13,051	764	393	2,534	0	16,742			
04100005	Maumee	8,358	0	205	173	0	8,736			
04100007	Auglaize	53	85	8	0	0	146			
05080001	Upper Great Miami	0	0	0	0	0	0			
05080002	Lower Great Miami	1,226	95	35	42	412	1,810			
05080003	Whitewater	40,310	1,738	3,298	572	3,721	49,639			
05090203	Middle Ohio-Laughery	48,360	3,960	6,221	344	11,384	70,269			
05120101	Upper Wabash	55,193	1,065	5,499	1,882	0	63,639			
05120102	Salamonie	14,241	85	999	348	0	15,673			
05120103	Mississinewa	2,651	741	1,064	50	0	4,506			
05120104	Eel (WR)	178,379	2,066	2,544	1,760	0	184,749			
05120105	Middle Wabash-Deer	16,072	1,967	3,646	53	0	21,738			
05120106	Tippicanoe	76,568	2,413	866	2,594	417	82,858			
05120107	Wildcat	61,253	6,043	7,321	968	0	75,585			
05120108	Middle Wabash-Little Vermillion	100,110	3,347	18,852	4,091	0	126,399			
05120109	Vermillion	5,575	0	196	8	0	5,779			
05120110	Sugar	14,749	3,598	3,048	70	0	21,466			
05120111	Middle Wabash-Busseron	87,081	6,631	8,132	3,348	0	105,192			
05120113	Lower Wabash	30,410	7,469	3,984	7,866	0	49,729			
05120201	Upper White	26,125	869	3,825	656	0	31,474			
05120202	Lower White	127,828	21,787	1,974	2,015	39	153,643			
05120203	Eel (WFWR)	74,869	5,900	17,524	1,616	0	99,909			
05120204	Driftwood	19,252	439	665	510	313	21,179			
05120205	Flatrock-Haw	12,255	257	672	210	640	14,034			
05120206	Upper East Fork White	76,842	1,845	9,365	1,588	0	89,640			
05120207	Muscatatuck	72,673	5,571	6,912	1,163	175	86,494			
05120208	Lower East Fork White	300,778	74,230	7,154	6,832	76	389,070			
05120209	Patoka	27,081	6,577	4,952	5,375	714	44,698			
05140101	Silver-Little Kentucky	41,476	9,284	2,085	233	283	53,362			
05140104	Blue-Sinking	190,458	34,391	2,807	3,069	42	230,767			
05140201	Lower Ohio-Little Pigeon	155,014	22,589	4,731	216	463	183,013			
05140202	Highland-Pigeon	47,867	1,029	769	393	0	50,057			
07120001	Kankakee	27,721	1,476	1,311	1,445	0	31,953			
07120002	Iroquois	7,347	26	0	2,533	0	9,906			
07120003	Chicago	288	0	0	0	0	288			

NOTE: 2013 1YR LOAD REDUCTIONS ARE NOT INCLUDED IN THE 2013-14 CUMULATIVE NUTRIENT LOAD REDUCTION ANALYSIS

2014 NITROGEN LOAD REDUCTIONS										
HUC8	HUC8 NAME	1YR2014	5YR2019	10YR2024	15YR2029	20YR2034	TOTAL			
04040001	Little Calumet-Galien	2,987	6	16	4	0	3,013			
04050001	St. Joseph (MI)	123,812	2,389	7,896	2,825	195	137,117			
04100003	St. Joseph (OH)	52,289	722	88	909	0	54,008			
04100004	St. Marys	8,924	188	2,737	77	0	11,926			
04100005	Maumee	6,053	0	0	0	0	6,053			
04100007	Auglaize	899	0	0	0	0	899			
05080001	Upper Great Miami	835	17	0	0	0	852			
05080002	Lower Great Miami	1,226	0	0	0	0	1,226			
05080003	Whitewater	17,431	312	4,117	343	581	22,784			
05090203	Middle Ohio-Laughery	48,753	8,157	10,739	461	880	68,990			
05120101	Upper Wabash	40,005	280	2,998	233	0	43,516			
05120102	Salamonie	11,540	0	0	0	0	11,540			
05120103	Mississinewa	8,090	160	1,650	162	0	10,062			
05120104	Eel (WR)	188,558	1,085	594	490	0	190,727			
05120105	Middle Wabash-Deer	10,306	709	128	42	0	11,185			
05120106	Tippicanoe	93,300	154	1,079	1,647	4,099	100,279			
05120107	Wildcat	49,425	375	2,385	91	14	52,290			
05120108	Middle Wabash-Little Vermillion	72,494	673	29,084	2,693	353	105,297			
05120109	Vermillion	2,513	0	0	0	0	2,513			
05120110	Sugar	18,732	878	26,248	53	0	45,911			
05120111	Middle Wabash-Busseron	50,603	2,005	784	1,440	0	54,832			
05120113	Lower Wabash	45,497	147	764	0	0	46,408			
05120201	Upper White	25,189	2,127	3,967	736	31	32,050			
05120202	Lower White	94,984	12,251	2,350	0	0	109,585			
05120203	Eel (WFWR)	46,744	8,200	7,058	456	0	62,457			
05120204	Driftwood	13,524	0	258	78	0	13,860			
05120205	Flatrock-Haw	10,928	9	33	0	106	11,076			
05120206	Upper East Fork White	85,748	462	5,798	284	0	92,292			
05120207	Muscatatuck	45,989	3,718	476	85	0	50,268			
05120208	Lower East Fork White	135,990	35,285	2,710	1,222	262	175,469			
05120209	Patoka	101,570	444	5,375	339	768	108,496			
05140101	Silver-Little Kentucky	23,372	351	4,931	112	1,482	30,248			
05140104	Blue-Sinking	107,796	8,919	2,584	182	39	119,520			
05140201	Lower Ohio-Little Pigeon	112,811	4,713	1,400	313	0	119,237			
05140202	Highland-Pigeon	50,006	420	18	12	0	50,456			
07120001	Kankakee	73,722	478	1,264	323	0	75,787			
07120002	Iroquois	33,562	105	65	121	0	33,853			
07120003	Chicago	0	0	0	0	0	0			

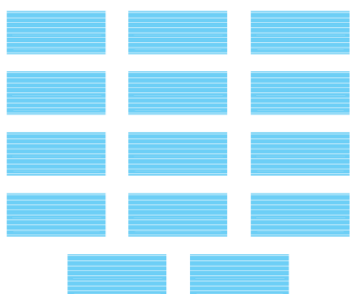


# 2013-14 Cumulative Nutrient Load Reductions: Phosphorus



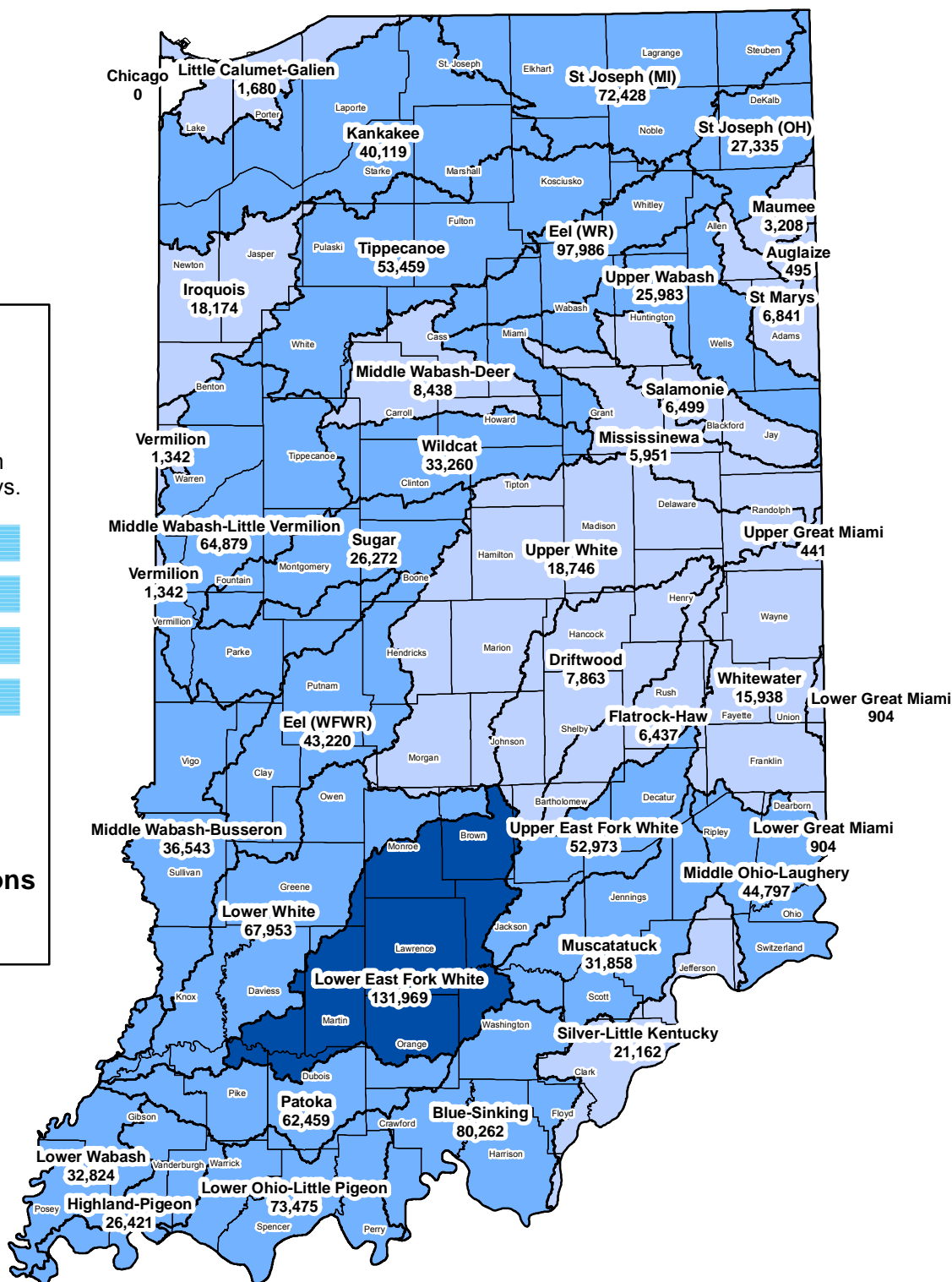
<http://icp.iaswcd.org/>

Since 2013, voluntary conservation efforts from private landowners in Indiana with support from the ICP have reduced nutrients and sediment from entering Indiana's waterways.



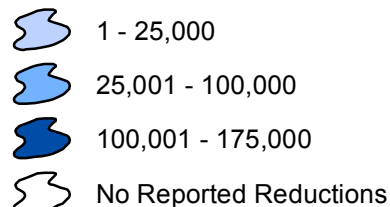
Reduction:  
1,250,592 Pounds

**Phosphorus Reductions**  
14 Olympic-size swimming pools



A total reduction of 1,250,592 pounds of phosphorus statewide.

## Phosphorus Reduction (pounds)



Based on Region 5 Model analyses conducted on 15,042 conservation practices installed by the Indiana Conservation Partnership January 2013 thru December 2014. This effort does not include the many unassisted practices designed and installed solely by a private landowner without ICP assistance.

Reductions in dissolved nutrients, such as dissolved reactive phosphorus (DRP) and nitrate (NO<sub>3</sub>), are not accounted for by the Region 5 Model.

May 18, 2015  
Deb Fairhurst, ISDA Program Manager

2013 and 2014 Sediment Load Reductions by HUC8 Watersheds

2013 PHOSPHORUS LOAD REDUCTIONS										
HUC8	HUC8 NAME	1YR2013	5YR2013	10YR2013	15YR2013	20YR2013	20YR2013	20YR2013	TOTAL	TOTAL
04040001	Little Calumet-Galien	518	18	128	27	0	691	0	691	0
04050001	St. Joseph (MI)	83,460	1,678	452	1,889	22	87,501	22	87,501	22
04100003	St. Joseph (OH)	51,444	170	129	33	0	51,776	0	51,776	0
04100004	St. Marys	6,534	383	197	342	0	7,456	0	7,456	0
04100005	Maumee	4,182	0	102	54	0	4,338	0	4,338	0
04100007	Auglaize	27	43	4	0	0	74	0	74	0
05080001	Upper Great Miami	0	0	0	0	0	0	0	0	0
05080002	Lower Great Miami	612	47	17	21	207	904	207	904	207
05080003	Whitewater	20,229	835	1,607	284	1,858	24,812	1,858	24,812	1,858
05090203	Middle Ohio-Laughery	25,681	1,978	3,107	172	5,687	36,625	5,687	36,625	5,687
05120101	Upper Wabash	27,768	530	2,748	947	0	31,993	0	31,993	0
05120102	Salamonie	7,192	43	502	175	0	7,912	0	7,912	0
05120103	Mississinewa	1,270	370	517	25	0	2,182	0	2,182	0
05120104	Eel (WR)	88,462	1,036	1,273	877	0	91,648	0	91,648	0
05120105	Middle Wabash-Deer	8,279	992	1,825	27	0	11,123	0	11,123	0
05120106	Tippicanoe	38,265	1,212	433	1,315	209	41,435	209	41,435	209
05120107	Wildcat	30,574	3,057	3,645	497	0	37,773	0	37,773	0
05120108	Middle Wabash-Little Vermillion	50,854	1,650	9,142	2,028	0	63,674	0	63,674	0
05120109	Vermillion	2,957	0	78	6	0	3,041	0	3,041	0
05120110	Sugar	7,388	1,778	1,520	31	0	10,717	0	10,717	0
05120111	Middle Wabash-Busseron	35,078	3,315	4,112	1,694	0	44,199	0	44,199	0
05120113	Lower Wabash	14,890	3,808	1,984	3,954	0	24,636	0	24,636	0
05120201	Upper White	13,081	440	1,920	320	0	15,761	0	15,761	0
05120202	Lower White	65,145	10,777	984	1,009	19	77,933	19	77,933	19
05120203	Eel (WFWR)	37,425	2,885	8,541	817	0	49,667	0	49,667	0
05120204	Driftwood	9,643	189	329	256	157	10,574	157	10,574	157
05120205	Flatrock-Haw	5,854	129	338	108	320	6,749	320	6,749	320
05120206	Upper East Fork White	38,467	922	4,680	795	0	44,864	0	44,864	0
05120207	Muscatatuck	36,817	2,790	3,152	584	87	43,430	87	43,430	87
05120208	Lower East Fork White	149,030	38,030	2,489	3,417	38	193,004	38	193,004	38
05120209	Patoka	13,702	3,296	2,474	2,687	357	22,517	357	22,517	357
05140101	Silver-Little Kentucky	20,843	4,642	1,038	116	142	26,780	142	26,780	142
05140104	Blue-Sinking	95,470	17,481	1,425	1,539	21	115,936	21	115,936	21
05140201	Lower Ohio-Little Pigeon	76,210	11,313	2,378	63	231	90,195	231	90,195	231
05140202	Highland-Pigeon	23,607	500	383	196	0	24,687	0	24,687	0
07120001	Kankakee	13,930	738	658	721	0	16,047	0	16,047	0
07120002	Iroquois	3,702	14	0	1,266	0	4,982	0	4,982	0
07120003	Chicago	140	0	0	0	0	140	0	140	0

NOTE: 2013 1YR LOAD REDUCTIONS ARE NOT INCLUDED IN THE 2013-14 CUMULATIVE NUTRIENT LOAD REDUCTION ANALYSIS

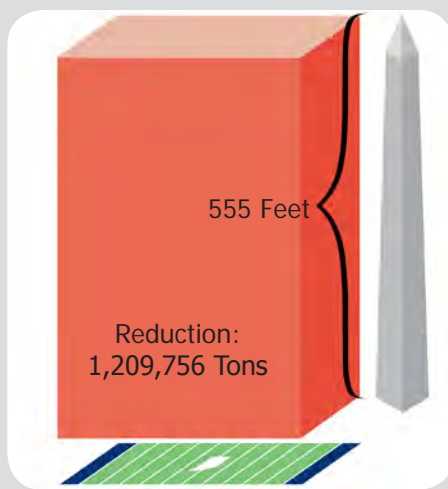
2014 PHOSPHORUS LOAD REDUCTIONS										
HUC8	HUC8 NAME	1YR2014	5YR2014	10YR2014	15YR2014	20YR2014	20YR2014	20YR2014	TOTAL	TOTAL
04040001	Little Calumet-Galien	1,494	3	8	2	0	1,507	0	1,507	0
04050001	St. Joseph (MI)	61,837	1,195	1,604	718	3,033	68,387	3,033	68,387	3,033
04100003	St. Joseph (OH)	26,142	362	45	454	0	27,003	0	27,003	0
04100004	St. Marys	4,418	95	1,367	39	0	5,919	0	5,919	0
04100005	Maumee	3,052	0	0	0	0	3,052	0	3,052	0
04100007	Auglaize	448	0	0	0	0	448	0	448	0
05080001	Upper Great Miami	418	23	0	0	0	441	0	441	0
05080002	Lower Great Miami	612	0	0	0	0	612	0	612	0
05080003	Whitewater	8,714	155	2,061	134	291	11,355	291	11,355	291
05090203	Middle Ohio-Laughery	24,323	4,156	4,808	120	446	33,853	446	33,853	446
05120101	Upper Wabash	19,998	140	1,503	118	0	21,759	0	21,759	0
05120102	Salamonie	5,779	0	0	0	0	5,779	0	5,779	0
05120103	Mississinewa	4,050	82	825	82	0	5,039	0	5,039	0
05120104	Eel (WR)	93,715	543	296	246	0	94,800	0	94,800	0
05120105	Middle Wabash-Deer	5,157	353	64	21	0	5,595	0	5,595	0
05120106	Tippicanoe	46,795	74	550	822	2,048	50,289	2,048	50,289	2,048
05120107	Wildcat	24,645	187	1,196	25	7	26,060	7	26,060	7
05120108	Middle Wabash-Little Vermillion	36,260	325	14,375	925	175	52,059	175	52,059	175
05120109	Vermillion	1,258	0	0	0	0	1,258	0	1,258	0
05120110	Sugar	9,394	426	13,096	27	0	22,943	0	22,943	0
05120111	Middle Wabash-Busseron	25,277	1,007	407	731	0	27,422	0	27,422	0
05120113	Lower Wabash	22,624	74	380	0	0	23,078	0	23,078	0
05120201	Upper White	12,601	1,070	2,010	373	13	16,067	13	16,067	13
05120202	Lower White	47,750	6,258	1,156	0	0	55,164	0	55,164	0
05120203	Eel (WFWR)	23,442	3,998	3,332	205	0	30,978	0	30,978	0
05120204	Driftwood	6,764	0	129	39	0	6,932	0	6,932	0
05120205	Flatrock-Haw	5,468	5	16	0	53	5,542	53	5,542	53
05120206	Upper East Fork White	43,310	232	2,893	141	0	46,576	0	46,576	0
05120207	Muscatatuck	23,007	1,958	238	42	0	25,245	0	25,245	0
05120208	Lower East Fork White	68,281	17,612	1,356	614	132	87,995	132	87,995	132
05120209	Patoka	50,199	221	2,670	171	384	53,645	384	53,645	384
05140101	Silver-Little Kentucky	11,789	176	2,462	56	741	15,225	741	15,225	741
05140104	Blue-Sinking	53,960	4,452	1,275	90	19	59,796	19	59,796	19
05140201	Lower Ohio-Little Pigeon	56,234	2,405	696	155	0	59,490	0	59,490	0
05140202	Highland-Pigeon	25,117	210	9	6	0	25,342	0	25,342	0
07120001	Kankakee	36,965	240	635	162	0	38,002	0	38,002	0
07120002	Iroquois	16,757	51	24	61	0	16,893	0	16,893	0
07120003	Chicago	0	0	0	0	0	0	0	0	0

# Indiana Nutrient and Sediment Load Reductions

Voluntary conservation efforts from private landowners in Indiana with support from the Indiana Conservation Partnership have reduced nutrients and sediment from entering Indiana's waterways. The figures below represent these efforts since 2013.

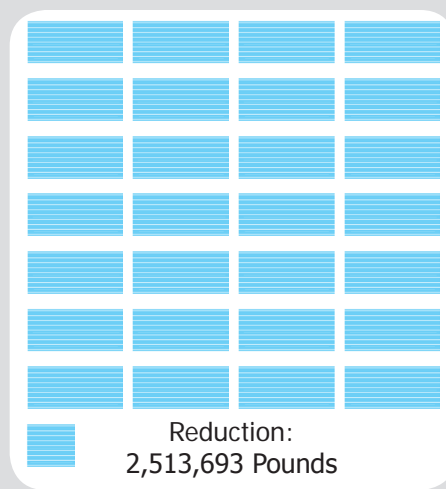
## Sediment

A football field covered to a depth of 560 feet, which is taller than the Washington Monument



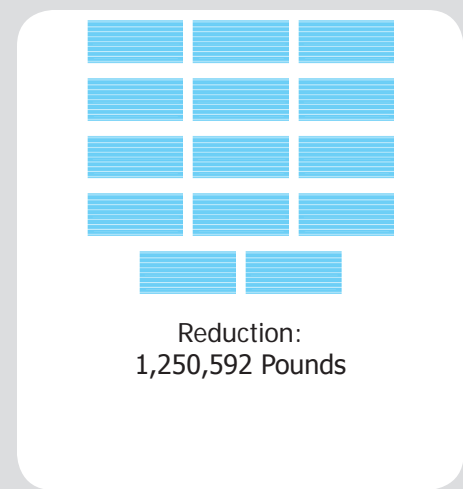
## Nitrogen

28.5 Olympic-size swimming pools



## Phosphorus

14 Olympic-size swimming pools



## Top Conservation Practices in Indiana

By quantity of practices installed and reduction per practice:

- No Till
- Reduced Tillage
- Cover Crops
- Grassed Waterways
- Wetland Enhancement
- Filter Strips
- Nutrient Management
- Riparian Buffers

For more information about conservation practices visit: [nrcs.usda.gov](http://nrcs.usda.gov)

## Indiana Conservation Partnership (ICP)

Data is collected by Indiana Conservation Partnership Agencies and aggregated using the USEPA's Region 5 Model to show total nutrient and sediment reductions.



INDIANA ASSOCIATION OF  
soil and water conservation  
DISTRICTS



United States Department of Agriculture  
Natural Resources Conservation Service



INDIANA DEPARTMENT OF  
NATURAL RESOURCES



[icp.iaswcd.org/](http://icp.iaswcd.org/)



With Support From:



For more information about Indiana's Nutrient Reduction Strategy, please see [isda.in.gov](http://isda.in.gov)





# Indiana Conservation Partnership Region 5 Model Load Reductions



## Introduction

The Indiana Conservation Partnership is comprised of eight Indiana agencies and organizations who share a common goal of promoting conservation. To that end, the mission of the Indiana Conservation Partnership is to provide technical, financial and educational assistance needed to implement economically and environmentally compatible land and water stewardship decisions, practices and technologies.

In 2013, members of the Indiana Conservation Partnership (ICP) began using the Environmental Protection Agency's (EPA) Region 5 Nutrient Load Reduction Model to determine the impact of installed conservation practices implemented by the ICP Conservation Delivery Teams on Indiana's water quality.

The ICP adopted the Region 5 Nutrient Load Reduction Model to analyze conservation practices funded by state programs such as the Indiana State Department of Agriculture's Clean Water Indiana Program and the Indiana Department of Natural Resources' Lake and River Enhancement Program, as well as federally funded programs including EPA's Section-319 Program and USDA's Farm Bill Program.

The Region 5 Nutrient Load Reduction Model estimates annual reductions of sediment, as well as nitrogen and phosphorus tied to sediment erosion (brown, green and blue maps, respectively). These reductions continue for the life of the practices modeled (e.g., grassed waterways are designed to be 10-year practices, while cover crops are 1-year practices, established annually). Reductions in dissolved nutrients, such as dissolved reactive phosphorus (DRP) and nitrate (NO<sub>3</sub>), are not accounted for by the Region 5 Nutrient Load Reduction Model. In addition, ICP conservation practices not associated with sediment loss, or not covered by the Region 5 Nutrient Load Reduction Model, are not analyzed.

This effort does not include the many unassisted practices designed and installed solely by a private landowner without ICP assistance.

Indiana is the only state in the country to adopt a model among so many partners to estimate conservation impact on a statewide scale. As part of Indiana's Nutrient Reduction Strategy, this modeling effort illustrates the continued success and challenges of conservation and serves as a tool to help set watershed priority and reduction targets, manage conservation resources, and to further stakeholder involvement at all levels of government within and across Indiana.

For more information about Indiana's Nutrient Reduction Strategy, visit the Indiana State Department of Agriculture's website at <http://www.in.gov/isa/2991.htm>.

## Data Provided By:



United States Department of Agriculture

ICP Website: <http://www.in.gov/isa>  
IDEM Website: <http://www.in.gov/idem>  
DNR Website: <http://www.in.gov/dnr>  
USDA Website: <http://www.usda.gov/programs/partnership/index.html>

## Analysis Conducted By:

Deb Fairhurst, ISDA Program Manager  
May 19, 2015

## 2014 Indiana Conservation Accomplishments

Implemented by Indiana Conservation Partnership



January 1 thru December 31, 2014  
Conservation Practices Completed: 21,012  
Conservation Practices Underway: 1,178

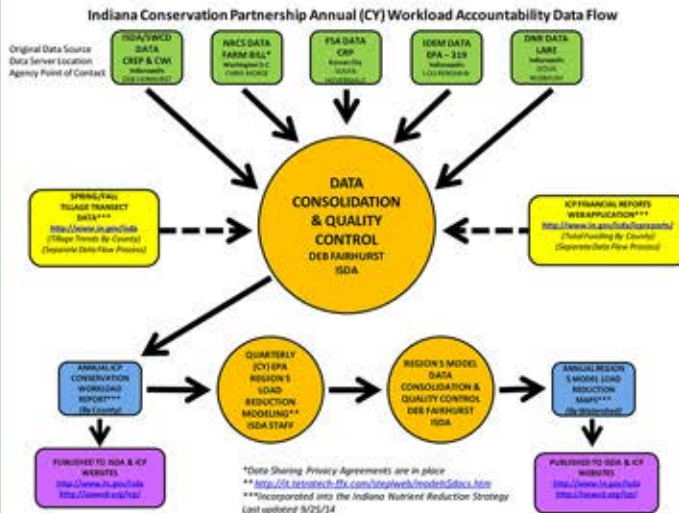
Data Provided by Indiana State Department of Agriculture, Indiana Department of Environmental Management, Indiana Department of Natural Resources, Indiana Soil and Water Conservation Districts and USDA Natural Resources Conservation Service.

May 19, 2015  
Deb Fairhurst, ISDA Program Manager

## 2014 Conservation Accomplishments



## Methodology



\*Data Sharing Privacy Agreements are in place  
\*\* <http://www.in.gov/isa>  
\*\*\* Incorporated into the Indiana Nutrient Reduction Strategy  
Last updated 8/25/14

## 2013-14 Cumulative Nutrient Load Reductions

Sediment



Based on Region 5 Model analysis conducted on 15,042 conservation practices installed by the Indiana Conservation Partnership January 2013 thru December 2014. This effort does not include the many unassisted practices designed and installed solely by a private landowner without ICP assistance.  
Reductions in dissolved nutrients, such as dissolved reactive phosphorus (DRP) and nitrate (NO<sub>3</sub>), are not accounted for by the Region 5 Model.  
May 19, 2015  
Deb Fairhurst, ISDA Program Manager

A total reduction of 1,209,798 tons of sediment statewide.  
Sediment Reduction (tons)  
1 - 25,000  
25,001 - 100,000  
100,001 - 175,000  
No Reported Reductions

## 2013-14 Cumulative Nutrient Load Reductions

Nitrogen



Based on Region 5 Model analysis conducted on 15,042 conservation practices installed by the Indiana Conservation Partnership January 2013 thru December 2014. This effort does not include the many unassisted practices designed and installed solely by a private landowner without ICP assistance.  
Reductions in dissolved nutrients, such as dissolved reactive phosphorus (DRP) and nitrate (NO<sub>3</sub>), are not accounted for by the Region 5 Model.  
May 19, 2015  
Deb Fairhurst, ISDA Program Manager

A total reduction of 2,813,883 pounds of nitrogen statewide.  
Nitrogen Reduction (pounds)  
1 - 50,000  
50,001 - 200,000  
200,001 - 300,000  
No Reported Reduction

## 2013-14 Cumulative Nutrient Load Reductions

Phosphorus



Based on Region 5 Model analysis conducted on 15,042 conservation practices installed by the Indiana Conservation Partnership January 2013 thru December 2014. This effort does not include the many unassisted practices designed and installed solely by a private landowner without ICP assistance.  
Reductions in dissolved nutrients, such as dissolved reactive phosphorus (DRP) and nitrate (NO<sub>3</sub>), are not accounted for by the Region 5 Model.  
May 19, 2015  
Deb Fairhurst, ISDA Program Manager

A total reduction of 1,290,992 pounds of phosphorus statewide.  
Phosphorus Reduction (pounds)  
1 - 25,000  
25,001 - 100,000  
100,001 - 175,000  
No Reported Reductions