Division of Water

Indiana Association of Soil and Water Conservation Districts



Gin Ranly, Outreach Program Director
Jordan Smithers, Senior Environmental Manager
Allison Mann, Water Use Program Coordinator
Kristi Cox, Hydrogeologist
Christina Spielbauer, Geologist



The Division of Water is responsible for the diverse tasks related to assessing and managing Indiana's most vital natural resource - water

- Permitting in floodways & on public freshwater lakes
- Groundwater assessments and availability
- Water rights & use: Water withdrawals and well construction
- Dam & levee Safety
- Conservancy Districts & Watershed Development Commissions
- Community assistance

Full list of statutes and rules that govern regulatory activities: dnr.IN.gov/water/statutes-and-rules



The Division of Water is responsible for the diverse tasks related to assessing and managing Indiana's most vital natural resource - water.

Our Stakeholders:

- Floodplain property owners & residents
- Public freshwater lake property owners & residents
- Groundwater users, well owners, well drillers, high-capacity pump owners and installers
- Dam owners & engineers
- Local government officials (Floodplain Administrators, planners, surveyors, etc.)
- Conservancy districts
- Anyone interested in groundwater, flooding, drought



Email Newsletters

Waterlines Express:

- Floodplains
- Lakes
- Groundwater
- Dams
- Engineers
- Conservancy Districts

Quarterly Waterlines: Floodplain Management & Community Assistance

Weekly Indiana Water and Soil Moisture Conditions



Indiana V Weekly D

The Indiana W Water's Resouresources. A ke between the direcommendate Lincoln. Their temperature, se

The <u>U.S. Drou</u> offers a valuab January 2000. long-term patte

In addition to a Conditions rep conditions, res provides flood can access the portal.



Thank you for subscribing to the Indiana DNR Division of Water's (DOW) monthly newsletter for engineers – *Flume*, and your interest in the division's mission to

proted Indian



Indiana Water and Soil Moisture Conditions
March 6, 2025

Data

The E

The state of Indiana generally received slightly below normal to above normal rainfall over the week of February 27-March 5, 2025. The state received 0.1"-1.0" of rain in much of the state and up to 3.0" of rain in the northwest. The state also received below normal snowfall over the week, with up to 1.25" of precipitation recorded in northern Indiana.



on.IN.gov/water-newsletters



THIS EVENT IS FOR:

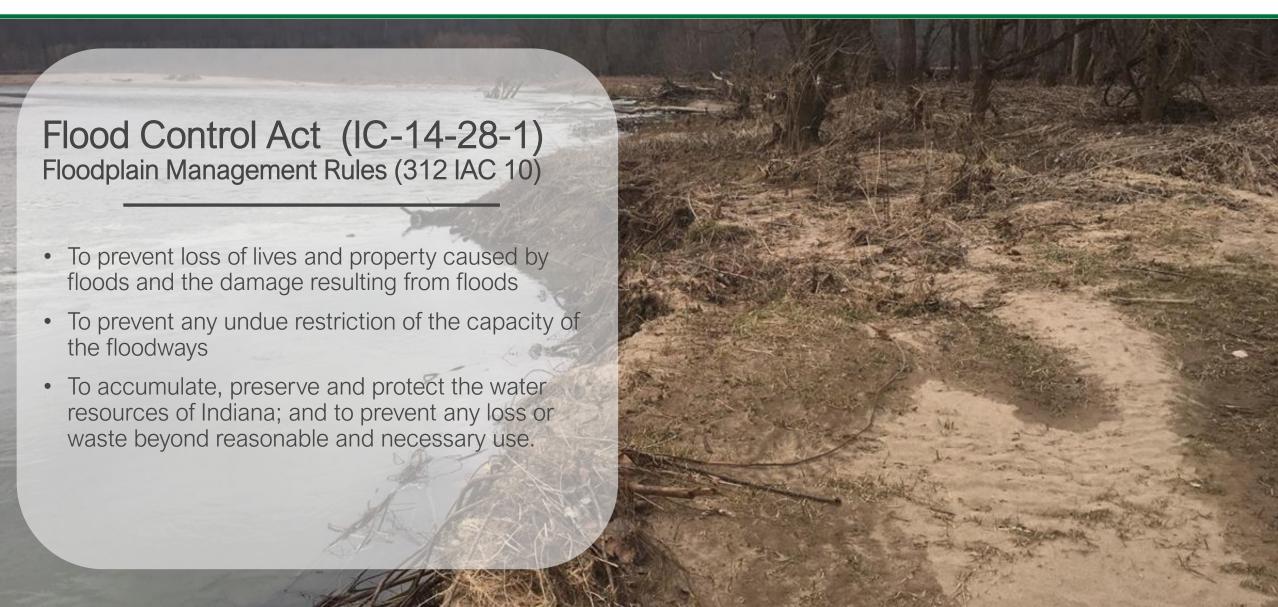
- People living and working in floodplains, along lakes
- County and municipal officials
- Conservancy districts and dam owners
- Planning and engineering professionals
- Private well owners
- All interested community members

Floodplains and Permitting



Jordan Smithers
Senior Environmental Manager
Division of Water

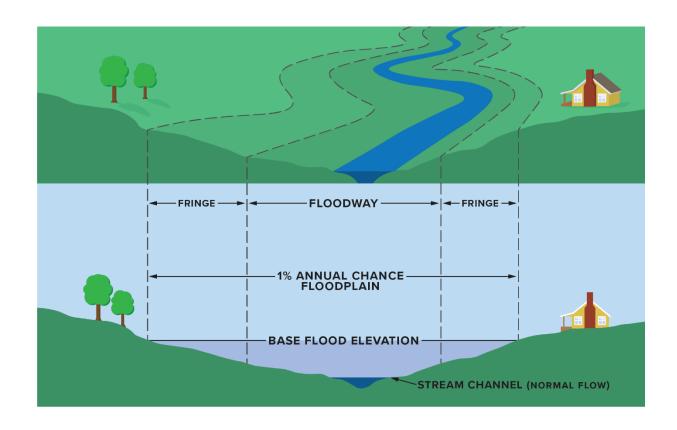






What is a Floodway?

- "Floodway", for purposes of IC 14-28-1, IC 14-28-3, and IC 14-34, means:
 - (1) the channel of a river or stream; and
 - (2) the parts of the flood plain adjoining the channel that are reasonably required to efficiently carry and discharge the flood water or flood flow of a river or stream.





DNR Jurisdiction

- Construction activities within floodway of all streams that have an upstream drainage area of ≥1 square mile.
- Construction activities include, but are not limited to:
 - Excavation
 - Fill
 - Erecting or maintaining a structure





General Licenses and Exemptions

- Specific exemptions and general licenses exist for certain projects, and if a project meets the requirements of the general license or exemption, then a formal permit is not required.
- Many general licenses and exemptions can proceed without coordination with the Division or written documentation; however, some specify that written notice or other coordination is needed.
- Common examples include:
 - Logjam Removal
 - Maintenance of crops, pastures, and parks
 - Wetland restoration
 - Outfall structures



Online Resources

- Division of Water Homepage
- Division of Water Online Research Center (DoWORC)
- Division of Water Unity database
- Waterways Website and Inquiry Request tool
- Indiana Floodplain Information Portal (INFIP)

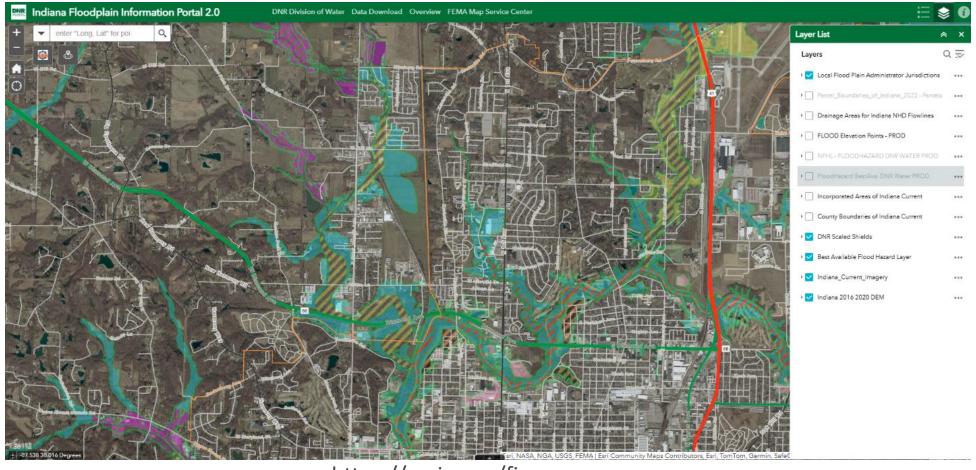


Indiana Floodplain Information Portal (INFIP)



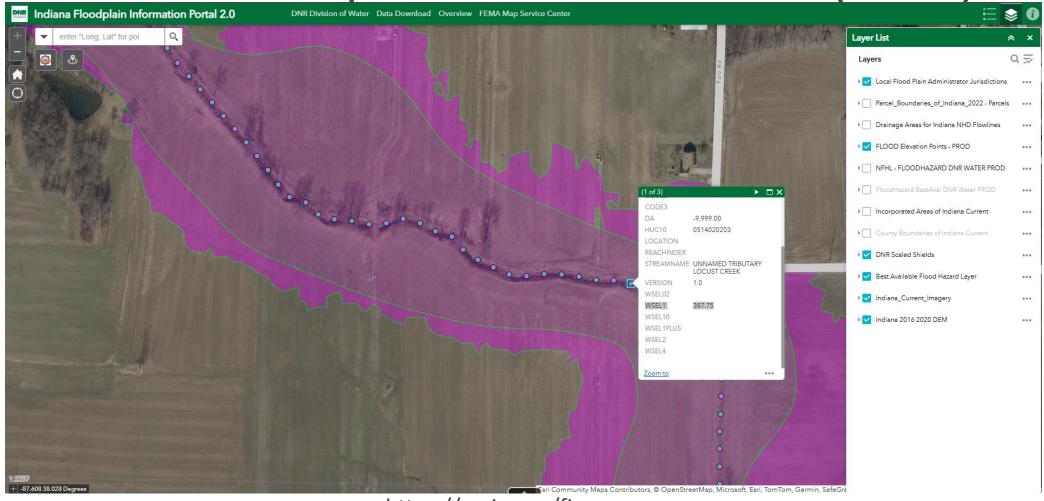


Indiana Floodplain Information Portal (INFIP)



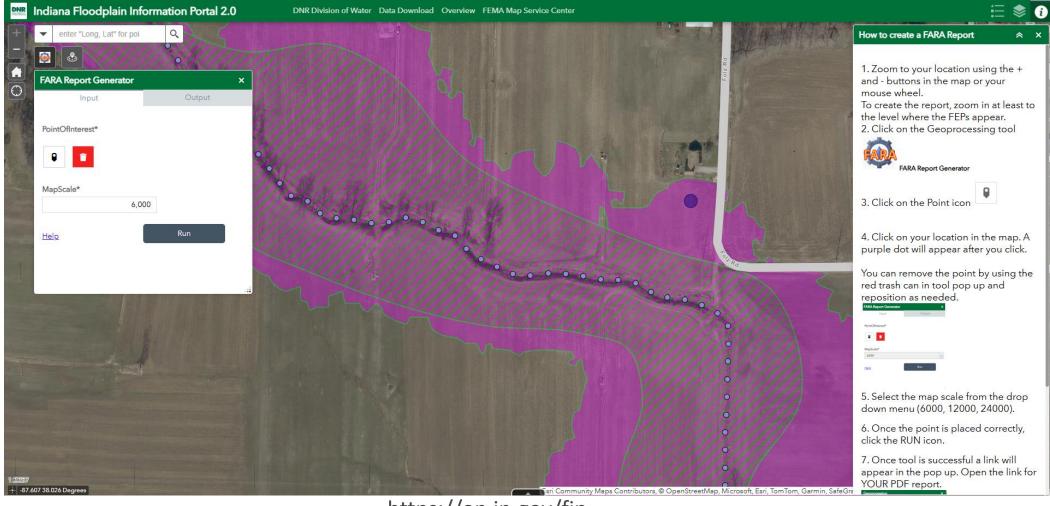


Indiana Floodplain Information Portal (INFIP)



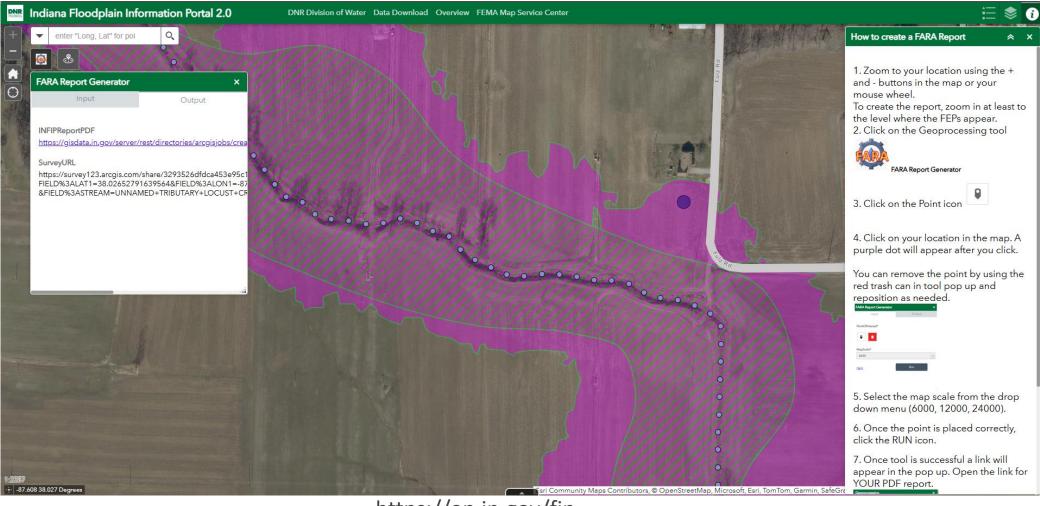


Indiana Floodplain Information Portal (INFIP)



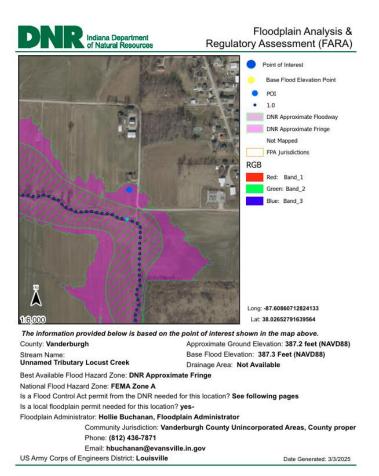


Indiana Floodplain Information Portal (INFIP)





Indiana Floodplain Information Portal (INFIP)



About the Floodplain Analysis and Regulatory Assessment (FARA):

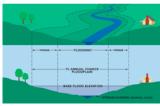
All streams have a floodplain, whether mapped or not. This FARA, and the information provided herein, is designed for sites along streams with a mapped floodplain that delineates the floodway portion of the floodplain; see the image below for a visual guide to the floodplain, floodway, and flood fringe. The information in this document was determined using an automated mapping tool. The DNR has high confidence in the tool, but there are scenarios where the floodplain information provided requires additional review from the DNR.

All streams in DNR jurisdiction (streams that have a drainage area one square mile or greater) are shown by a blue line on the map on page 1. However, a floodplain/floodway may or may not be mapped for every stream. In any of the following scenarios, or if you have more detailed floodplain information, use the link at the bottom of this page to request a staff review of the site. Please note that staff review may take several weeks to complete.

Scenarios that require additional DNR review

The base flood elevation on page 1 is not available

- The tool selects the nearest flood elevation point for a stream outside the floodplain associated with the point of interest
- There is not a delineated floodway for the stream nearest your point of interest
- The point of interest is along a stream without a mapped floodplain
- The point of interest is in a mapped floodplain of another stream, but the stream nearest the point of interest does not have a mapped floodplain with a floodway of its own



If DNR review is required, do not use this FARA for your site's determination.

If you have questions about DNR permitting requirements, you can contact DNR, Division of Water toll-free at 1-877-928-3755 and select option 1 to speak to a Technical Services staff member. You can also write to the division at water, inquiry@dnr.IN,gov or use the Indiana Waterways Inquiry Request tool at waterways.IN,gov to submit a permitting determination request to both DNR and the Indiana Department of Environmental Management at once.

We recommend keeping a copy of this FARA for your records as the DNR will not have a copy on file. For additional information on floodplain regulations please copy the following line into a web browser: https://countydataharvest.n.gov/DNR/INFIP Report, Backpgs.pdf

PATH TO COPY INTO WEB BROWSER TO COMPLETE SURVEY:

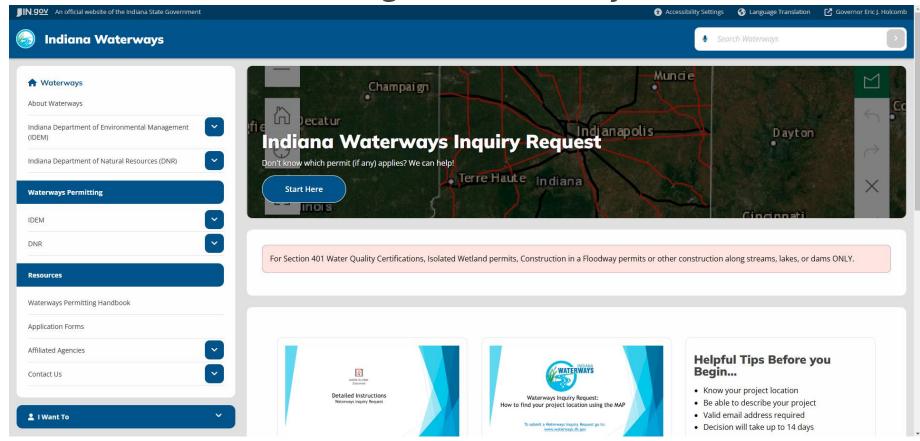
https://survey123.arcgis.com/share/3293526d/dca453e95c19b08h7bdcfb?? FIELD%3ALAT1=38.026527916395648FIELD%3ALON1=87.68660712824133&FIELD%3ADNR_PERMIT=See+following+ps &FIELD%3ASTREAM=UNNAMED+TRIBUTARY+LOCUST-CREEK&FIELD%3AINIT_DATE=03%2F03%2F2025&FIELD%3A

If the link above does not work, copy and paste the text above into a web browser to open the survey you will fill out and submit. If this does not work then send a copy of this FARA to infipinquiry@dnr.lN.gov and describe the reason you are requesting a staff review. Include your name and contact information so that staff can follow-up with you.



Indiana Waterways Inquiry Request

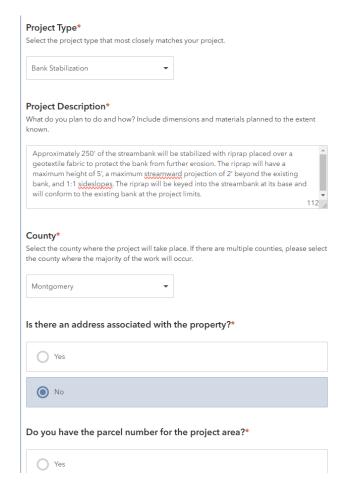
IN.gov/waterways





Indiana Waterways Inquiry Request

Certifications, Isolated Wetland permits, Construction in a Floodway permits, or other construction along streams, lakes, or dams only. Inquiry reviews will be completed by both agencies and submitters will receive feedback on which permit applications need to be submitted prior to beginning the project. The validity of this response is dependent on the submission of complete and accurate information. Additional information may be required. THIS IS NOT A PERMIT APPLICATION. If you understand this statement, please click 'I Understand' below to begin the form.* I Understand Please outline your Area of Disturbance on the map and answer the remaining questions below. For specific instructions: Full Instructions Project Location* 33 Z 23 C M Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, © OpenStreetMap, ... Perimeter: 248.86 Meters Area: 3,145.13 Sq meters





Indiana Waterways Inquiry Request

Yes	
● No	
What is the	e approximate acreage of disturbance for the project overa
See map abov	ve for acre value.
1⊵3 0.77	
	ve a Wetland Delineation Report verified by the U.S. Army ngineers?*
Yes	
O Yes	
	ure
Unsu List any otl property. Some exampl Delineation R	her completed evaluations of potential waters within the les include a Floodplain Analysis and Regulatory Assessment (FARA), a Wetla eport, or any other report identifying ditches, streams, floodplains, wetlands, er waterbodies on the property.

Lint any oth	and a supplication of material content in the
property.	ner completed evaluations of potential waters within the
Some example Delineation Re	es include a Floodplain Analysis and Regulatory Assessment (FARA), a Wetland aport, or any other report identifying ditches, streams, floodplains, wetlands, er waterbodies on the property.
FARA	
Do you hav	ve any development plans and/or drawings/pictures currently
Yes	
O No	
Have you r project?*	reached out to any other governmental agencies about your
Yes	
O No	
If yes, who	?
Floodplain A	Administrator, County SWCD



Indiana Waterways Inquiry Request

Waterway Inquiry Response

DNR Permits:

Based on the information you submitted for review, the following DNR permits WILL be required prior to beginning your project:

Flood Control Act, IC 14-28-1, Excavation, Fill, or Non-Residential construction, Application Fee: \$200

IDEM Permits:

If there is to be no permanent earth moving or placement of fill material below the Ordinary Highwater Mark, a Section 401 Water Quality Certification will not be required from IDEM.

DNR Specific Feedback

Any proposal to construct, excavate, or fill in or on the floodway of a stream or other flowing waterbody which has a drainage area greater than one square mile requires formal approval from the DNR, Division of Water under the Flood Control Act, IC 14-28-1. A permit application form and permit application assistance manual can be obtained from our website at: www.in.gov/dnr/water/2455.htm.

To access floodplain information for your site, you can visit the DNR's Floodplain Information Portal at www.infip.dnr.in.gov to obtain/verify required elevation information for any proposed structure or building on this site. Please contact your local Floodplain Administrator for local permit requirements.

IDEM Specific Feedback

Resources Present On Site

- A. Waterway resources appear likely to be present on the site including:
 - a. Wetlands
- B. The proposed activities may result in land-disturbing activities of one (1) acre or more; which may require permit coverage from the IDEM Stormwater Program.

Information Used for this Waterways Inquiry Response:

- A. The site appears to include streams or open water based on aerial photography, topographical Maps, evidence provided through the inquiry.
- B. The site includes soil types as determined from the USDA, Natural Resources Conservation Service Web Soil Survey that are identified as hydric soils or soils with hydric

Water Rights & Use



Allison Mann Water Use Program Coordinator



Water Rights and Use Section-Discussion Topics

- Well Drillers Law and Water Well Construction Standards under IC 25-39 and 312 IAC 13
- Significant Water Withdrawal Facility (SWWF) Registration and Annual Water Use Reporting under IC 14-25-7
- Groundwater and Surface Water Rights under IC 14-25-4 and IC 14-25-5

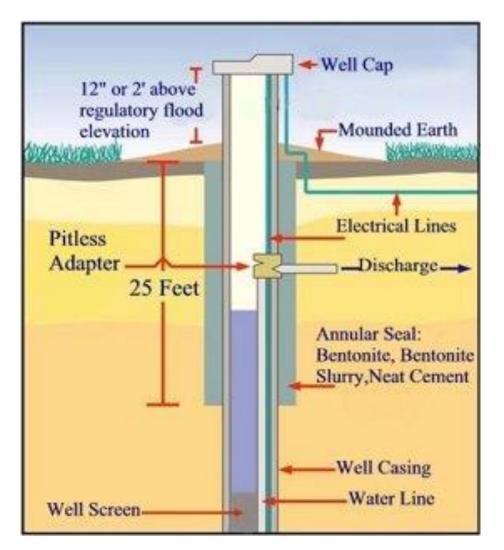


General History for Water Well Driller & Pump Installer Licensing

- 1959 IC 25-39 (Well Drillers Law) effective
- 1988 Law amended to require licensing and development of well construction standards (Rule 312 IAC 13)
- 2001/2003 Bills introduced to require pump installer licensing and/or continuing education
- 2010 SEA 356 Passed by legislature to require pump installer licensing and CE for well drillers and pump installers.



312 IAC 13: Well Construction Standards

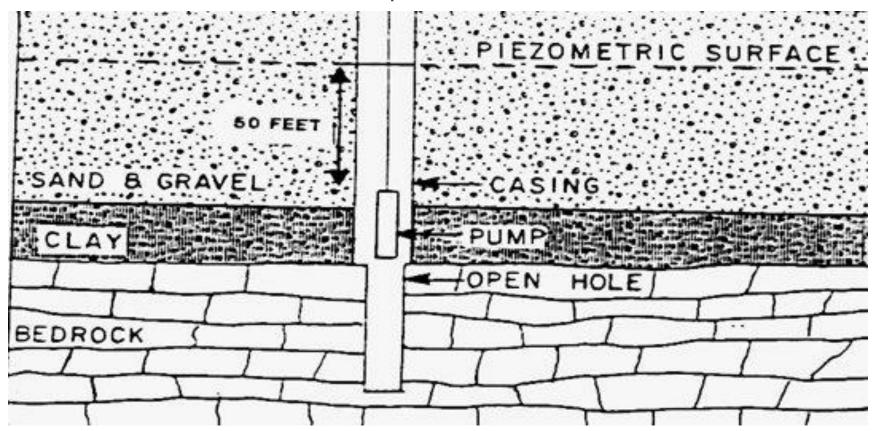


- 312 IAC 13 established minimum standards for procedures and materials used in the installation of water wells and water well pumping equipment
- Establishes standards for casing, grouting, screens, depth, and diameter.



Minimum Drawdown Requirements for Small Capacity Wells

- Unconsolidated Aquifers: 20 ft
- Bedrock Aquifers: 50 ft





Water Well Records

- Drillers are required to submit a Record of Water Well for every well and send it to the DOW within 30 days of the well being placed
- On the records well location, owner and driller names, well depth and materials, pump test results, grouting materials, and a log of subsurface geological formations.
- DOW maintains paper files and an online database of approximately 450,000 well records.



Water Well Record Database

- A well location
- B owner and driller names
- C well depth and materials
- D pump test results
- E grouting materials
- F log of subsurface geological formations

Indiana Department of Natural Resources

nana Department of Natural Resources

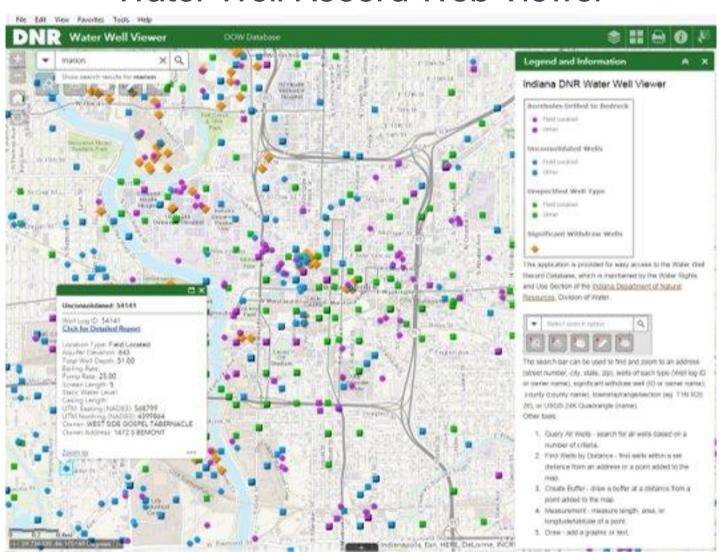
Record of Water Well

Indiana Department of Natural Resources

Page 1 of 2

	Reference Number Driving directions to well					Date completed	
	119925 A	GO TO FOW! BLOCK E OF HOUSE ON I	May 02, 1963				
	Owner-Contractor Owner Driller Operator	Name JOHN DATZMAN C & C WELL DRILLING WALTER H CORNELIUS		Address RR I FOWLER, IN RR 4 FOWLER, IN License: nuil	RR I FOWLER, IN RR 4 FOWLER, IN		
	Construction Details				S 600=2004		
	Well	Depth: 113.0 Pun Length: 111.0 Mat		lling method: Cable Too		Pump type: Water quality: Diameter: 4.0 Diameter: 3.75 Slot size: .25	
	Casing Screen			ap setting depth: terial: terial:	Diamete		
)	Weli Capacity Test	Capacity Test Type of test:		Test rate: gpm for hr	BailT hrs.	est rate; 15.0 gpm for 1.0	
		Drawdown:	ft.	Static water level: 52	.0 ft. Baile	r Drawdown 8.0 ft.	
	Grouting Information	n Material: Installation Method:			pth: from to mber of bags use	rd:	
	Well Abandonment	Scaling mate Installation I			epth: from to nmber of bags used:		
	Administrative	County: BEN Section: NW Grant Numb	of the SW of th	ne SW of Section 10	Township: 25N Range: 8W Topo map: FOWI		
		Field located			on: Sep 05, 19	967	
		Courthouse	ACC \$40.00 (1)		68:		
			repted w/o veri	fication by:	on: Lot number:		
		Ft W of EL:		Ft N of SL: 800.0	Ft E of WL: 200.0	Ft S of NL:	
		Ground elev		Depth to bedrock:	Bedrock elevation:	Aquifer elevation; 700.0	
		UTM Easting: 472700.0			UTM North	ag: 4496950.0	
	Well Log	Тор	Bottom	Formation			
	(0) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	0.0	6.0	BLACK SOIL			
		6.0	14.0	BLACK SOIL & CLAY MIX BLUE CLAY & SMALL GRAY			
		14.0	22.0			1	
		22.0	57.0	BLUE CLAY			
		57.0	69.0	DRY GRAV BR CLAY & GRAV MIX BR HARD PAN			
		69.0	71.0				
		71.0	76.0				
		76.0 81.0 BLUE CLAY SOFT		SOFT			
		81.0	92.0 WATER & SAND				

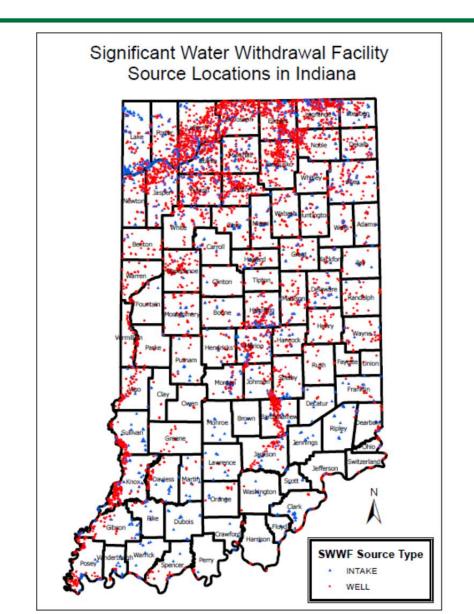
Water Well Record Web Viewer





Water Resource Management; IC 14-25-7

- Enacted in 1983
- Requires registration of all SWWFs (GW & SW)
- Facility defined as having greater than 100,000 GPD capability
- Capability is aggregate of all wells & intakes
- Annual water use reporting
- Approximately 4,300 SWWFs currently registered







2023 Indiana Registered SWWFs

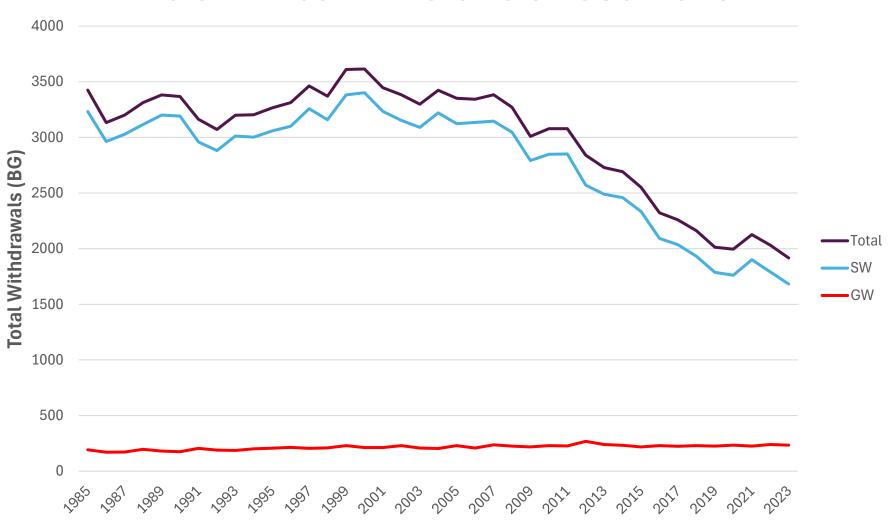
Water Use Code	Number of Facilities	Number of Wells	Number of Intakes	
EP	88	251	81	
IN	384	675	293	
IR	2893	4014	776	
MI	136	221	47	
PS	739	2252	60	
RU	59	153	10	
TOTAL	4299	7566	1267	



2023 State Totals							
	Withdrawals (BG)	Capacity (MGD)	Withdrawals vs Capacity	Current Number			
Surface Intakes	1682	16069	28.7%	1267			
Wells	234	6294	10.2%	7566			
TOTAL	1916	22363	23.5%	8833			
Facilities				4299			

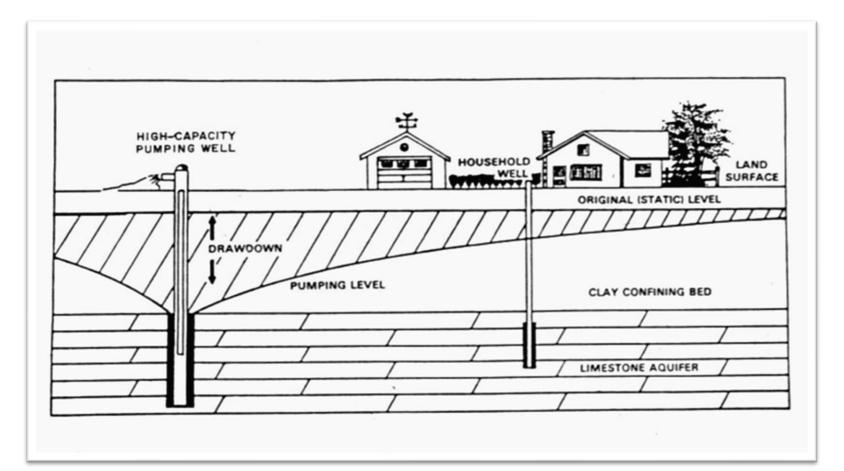


Total Annual Withdrawals 1985-2023





Emergency Regulation of Ground Water Rights; IC 14-25-4





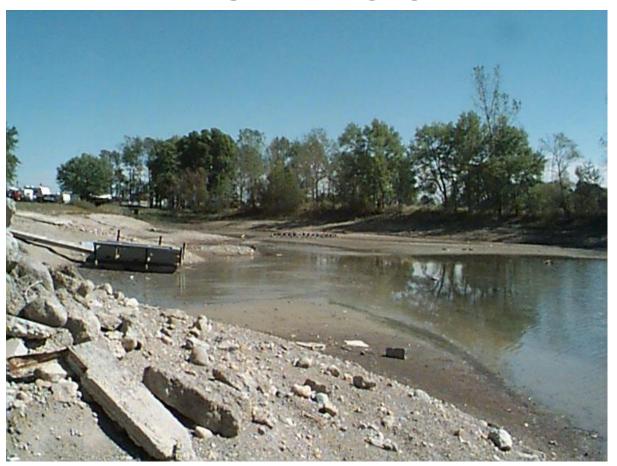


Indiana Code 14-25-4

- Provides for "Timely and Reasonable Compensation" to owners of small capacity wells affected by high-capacity groundwater pumping.
- Provides for restrictions on high-capacity groundwater pumping under certain conditions.



Emergency Regulation of Surface Water Rights; IC 14-25-5





Indiana Code 14-25-5

- Provides protection for owner of "freshwater lake" against SWWF pumping
- "Freshwater lake" defined as being: 1) 10 acres in size; 2) of natural origin; 3) originally constructed to retain water; and 4) existed at least 5 years before SWWF pumping
- DNR must document a significant lowering of the lake level by SWWF
- SWWF facility must be within ½ mile of freshwater lake
- Water level lowering must result in "Significant Environmental Harm" under Rule 312 IAC 11.5

Water Resource Assessment

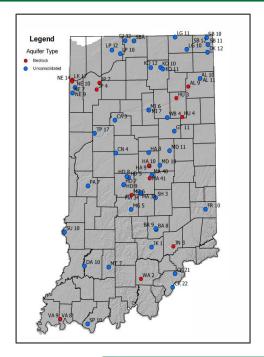


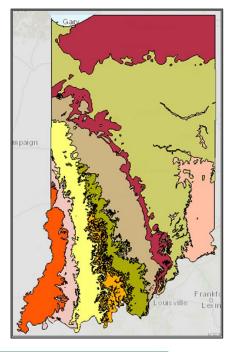
Kristiana Cox, Hydrogeologist Christina Spielbauer, Geologist

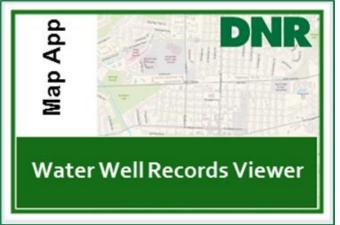


Resource Assessment Section

- IC 14-25-7-11
 - Continuing Assessment of Water Resources
- IC 14-25-8-1
 - May conduct applied research to improve the understanding and management of water resources
- Mapping Products
- Groundwater Monitoring Program
- Water Inquiries
- Monthly & Weekly Water Resource Summary



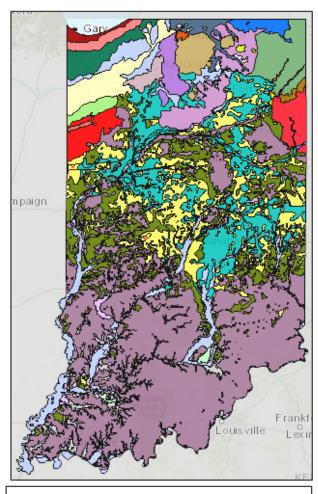




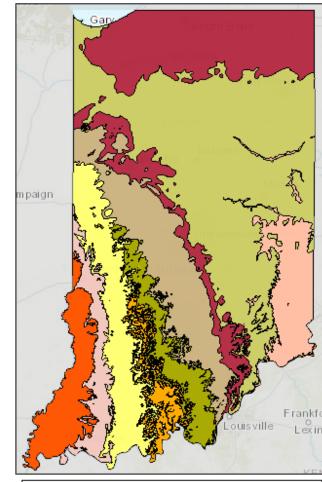


Aquifer Systems Mapping

- Information from groundwater well records, geological surveys, and other hydrogeological data.
- Final Products Include:
 - Separate maps for unconsolidated and bedrock aquifers
 - Text description of the aquifers
 - Registered significant water withdrawal facilities.
- Individual county maps with additional aquifer information and GIS files available on the website.



Unconsolidated Aquifer Systems

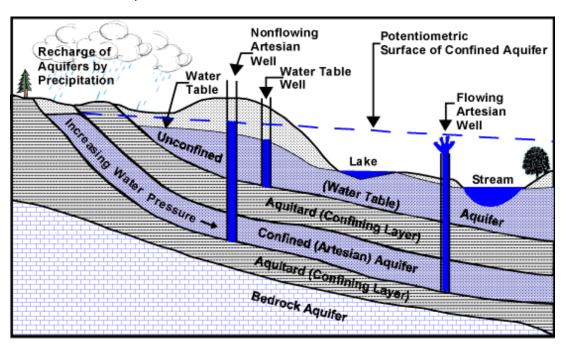


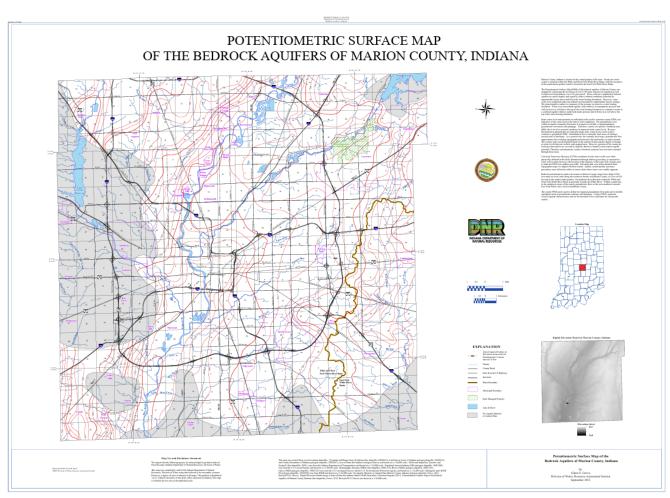
Bedrock Aquifer Systems



Potentiometric Surface Mapping

- Maps and digital coverage for unconsolidated and/or bedrock aquifers in individual counties
- Text description of characteristics
- GIS shapefiles used in the PDF version

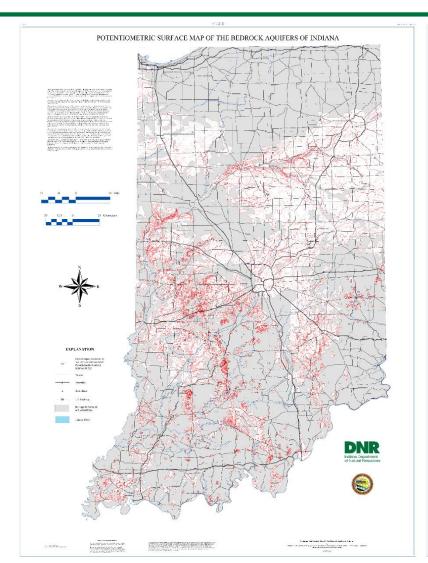


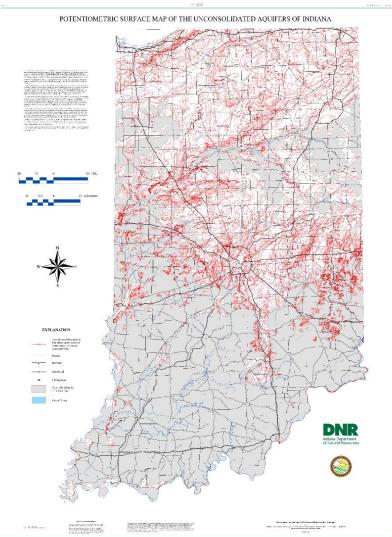




Potentiometric Surface Mapping

- Ultimately form a single consistent statewide map & GIS coverage
- To be viewed on DOW Web Applications and Indiana Map



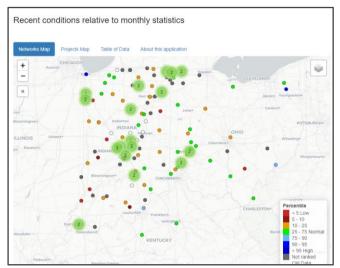


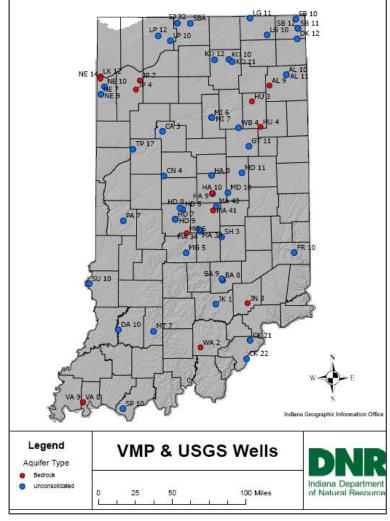


Groundwater Level Monitoring Program

- Collaborative effort with USGS (US Geological Survey)
- 60 wells in the DNR VMP (Volunteer Monitoring Program) and 50 real-time managed by USGS
- RA staff is responsible establishing and maintaining the wells and collecting quarterly data
- USGS receives the data and posts to the OKI (Ohio, Kentucky, Indiana)
 Groundwater website.



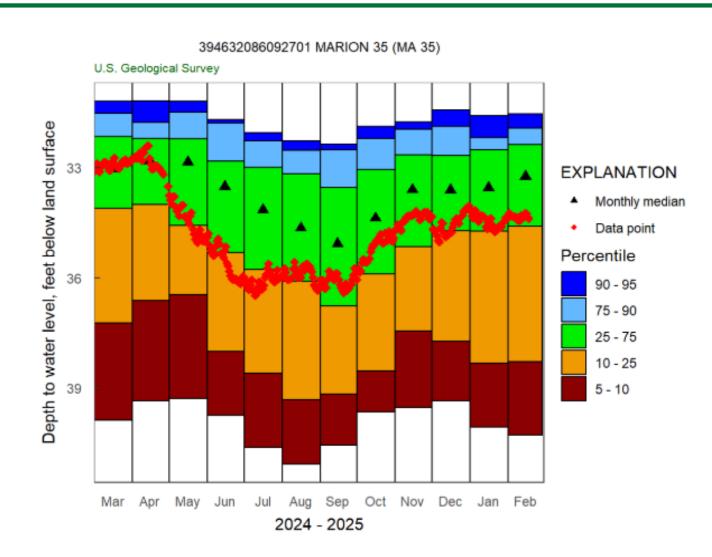






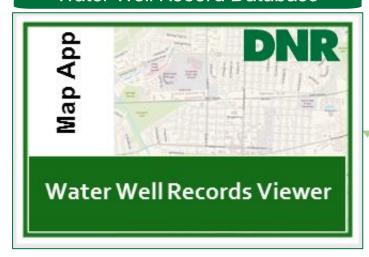
Groundwater Levels in Ohio, Kentucky, and Indiana

- USGS groundwater well data (partially funded by DNR)
- Trend Data Available
- Gives current water depth, highs, lows, etc.

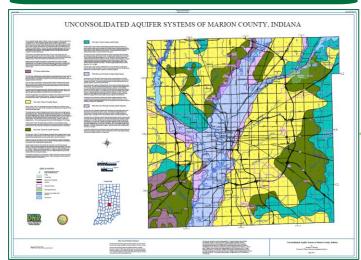




Water Well Record Database

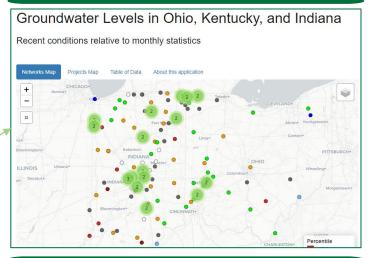


Aquifer Systems Maps

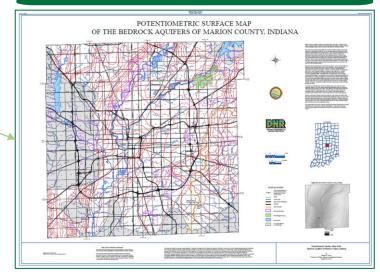


Using Our Products to Answer Water Questions Across the State

VMP or other wells if nearby

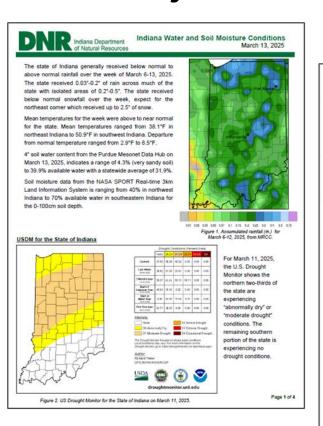


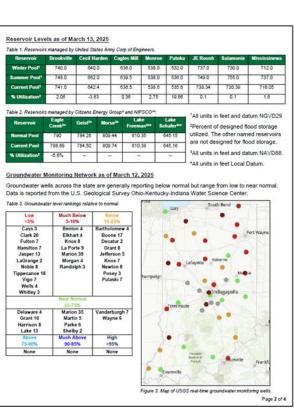
Potentiometric Surface Maps

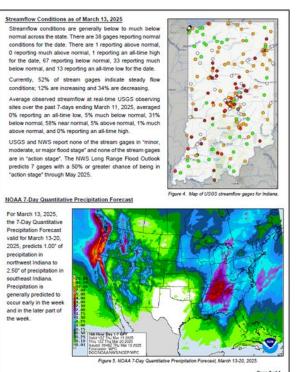


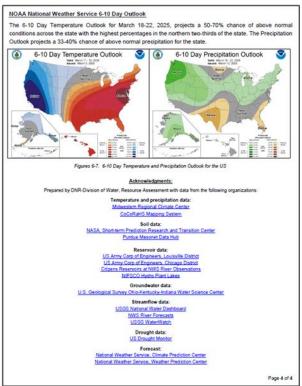


Weekly Summary: Indiana Water and Soil Moisture Conditions







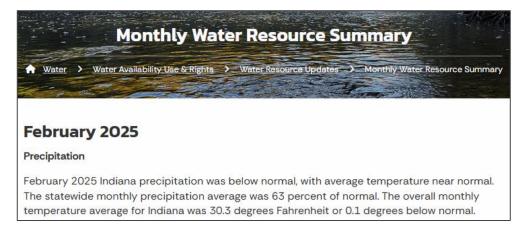


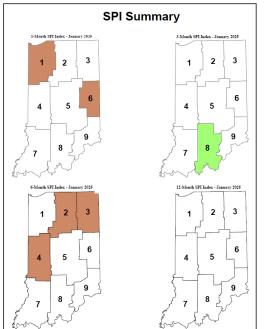
Monthly Water Resource Summary

- Current data compared to long-term climate trends.
- Including data for:
 - Precipitation
 - Standardized Precipitation Index (SPI)
 - U.S. Drought Monitor
 - Streamflow
 - Lake Michigan levels
 - Reservoirs levels
 - Groundwater levels

Table: Percent of Normal Precipitation

Climatic Division	Region of State	Normal Precipitation January (in)	Precipitation January (in)	Percent of Normal January
1	NW	2.38	0.88	37.0%
2	NC	2.57	1.24	48.2%
3	NE	2.50	1.25	50.0%
4	WC	2.82	1.09	38.7%
5	С	2.99	1.31	43.8%
6	EC	2.94	1.15	39.1%
7	SW	3.39	2.39	70.5%
8	SC	3.56	2.77	77.8%
9	SE	3.37	1.97	58.5%



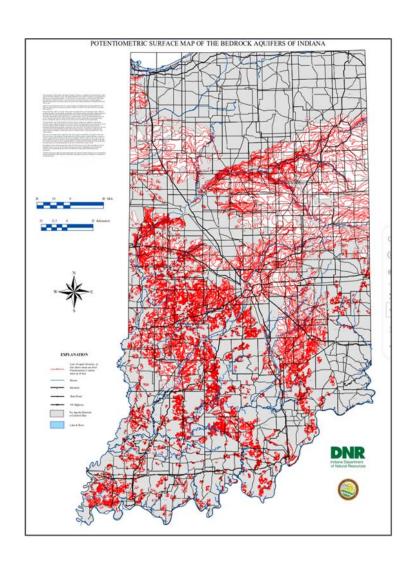






Upcoming Products

- Mappers, dashboards, enhanced web access to new and existing products:
 - Voluntary Monitoring Program Dashboard
 - Lake Level Dashboard
 - Aquifer Systems Story map
 - Statewide Unconsolidated and Bedrock Potentiometric GIS layers
- Recurring Products
 - Weekly: Indiana Water and Soil Moisture Conditions
 - Monthly Water Resource Summary



Questions?

Contact us:

water_inquiry@dnr.IN.gov 317-232-4160

