



REPORT:

Proposed LEAP Project in Boone County Reveals Severe Deficiencies in Indiana's Water and Economic Development Policy

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Executive Summary

Public concern about the LEAP (Limitless Exploration/Advanced Pace) district adjacent to Lebanon in Boone County led CAC to investigate state water and economic development policy more thoroughly.

We find that:

- The shell-game with water to enable the LEAP district is fomenting public dissent and a water war, contrary to sound water policy.
- From a policy perspective, the state views water strictly as a tool for near-term, opportunistic economic development, not as a resource that requires strategic and systematic consideration to secure water availability for communities into the future and to ensure water bill affordability for ratepayers.
- The Indiana Economic Development Corporation (IEDC), essentially a privatized state agency with little to no accountability or transparency to policymakers or the public, must be reformed or abolished.
- The IEDC committed hundreds of millions of taxpayer dollars to land purchases, prior to ascertaining whether enough water resources would be available for the LEAP project.

The LEAP project and the Indiana Economic Development Corporation

The LEAP district is a 10,000-acre plot of productive farmland adjacent to Lebanon along Interstate 65 (I-65) that is to be converted into a massive industrial park. LEAP is perhaps the most expansive and expensive economic development project ever undertaken by the state.¹

The project is so water intensive that the current plan is to build two sets of pipeline infrastructure, as shown in Figure 1.

Figure 1. LEAP Pipeline Infrastructure

Pipeline Path	Est. Length	Purpose	Est. Cost (millions)
Lafayette to Lebanon	52 miles	Supply water to prospective microchip, data center, and other facilities	\$2,000
Indianapolis to Lebanon	50 miles	Supply water to Lebanon for purposes of supplying the Eli Lilly facilities	\$200 - \$400

But there are other issues that would add costs to local citizens and/or Central Indiana water and wastewater ratepayers as well as electric ratepayers that are explained below.

The LEAP project is sponsored and, up to this point, bankrolled by the Indiana Economic Development Corporation (IEDC) with taxpayer dollars. The IEDC, created by statute in 2005 under Governor Mitch Daniels, is essentially a privatized state agency that operates in secret, with little accountability or transparency, and no mechanism for public input. The IEDC has been shrouded in controversy since its inception due to its lack of transparency that is by legislative design.² The LEAP process demonstrates that the lack of transparency has continued and fomented public backlash against the project.

According to Citizens Water, “state officials” have been interested in economic development and concerned about “the lack of adequate water and groundwater resources along the I-65 corridor between Zionsville and Lafayette for some time.”³ Logistically, the LEAP district is desirable because it has access to a major interstate, it lies between the Research Park at Purdue University and the Indianapolis International Airport, and has access to plenty of land – that is, prime farmland.⁴ The Achilles heel for such large-scale development as envisioned by

¹ <https://www.wthr.com/article/news/investigations/13-investigates/indiana-spends-millions-lafayette-lebanon-pipeline-plan-wabash-river-boone-county/531-7537884e-3f88-418c-a539-5d944a3dba90>

² <https://www.wthr.com/article/news/local/inflated-numbers-secretive-contracts-surround-indiana-jobs/531-ab615819-dd36-45c8-9b40-be956bc7aca6> and <https://www.goodjobsfirst.org/wp-content/uploads/docs/pdf/scandalsnotjobs.pdf>

³ Verified Direct Testimony of Jeffrey A. Willman (June 29, 2023), https://iurc.portal.in.gov/entity/sharepointdocumentlocation/7a01165c-4117-ee11-8f6d-001dd8084f05/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45896_CRW%20et%20al_Exhibit%204_Clean_Willman_062923.pdf

⁴ <https://lebanon.in.gov/2022/12/08/mayor-gentry-shares-benefits-of-leap-district/>

IEDC for LEAP is the scarcity of ample surface water (major rivers) or groundwater in Boone County.

IEDC seeks water-intensive industries for LEAP

What makes LEAP development even more difficult are the water-intensive industries IEDC hopes to locate at the site.

The only firm that has committed to locating new facilities at the LEAP district as of December 2023 is Eli Lilly, which is locating two new manufacturing facilities at the site. To supply water to the facilities, Lebanon and the IEDC entered into a memorandum of understanding in 2022 whereby the IEDC would pay Lebanon to set aside about 860,000 gallons of water per day⁵ (equivalent to 56% of Lebanon's "current water capacity").⁶ At the time, Lilly initially planned a \$2.1 billion facility⁷ - later expanded to a \$3.7 billion facility.⁸ A larger facility would arguably have a greater impact on Lebanon's water supply.

A microchip manufacturer – as is the norm, the name not disclosed by IEDC - is eyeing Indiana's LEAP development as well as another Midwestern state to site a \$50 billion facility.⁹ Microchip facilities consist of microchip fabricators or fabs. An example is Intel's 700-acre campus, consisting of 4 fabs, in Ocotillo, Arizona.¹⁰ Just 1 of those fabs uses about 10.2 million gallons per day. A \$50 billion facility would consist of 4 or 5 fabs, using up to nearly 41 to 51 million gallons per day. Another example of the water-intensity of microchip fabrication is Taiwan-based TSMC that plans up to 5 fabs in Phoenix, Arizona, which, according to media reports, would use an estimated 35 million gallons per day.

IEDC states it is also luring a data center to the site.¹¹ Large data centers can use 1 to 5 million gallons per day.¹²

⁵ <https://lebanon.in.gov/2022/11/07/water-plan-for-eli-lilly-approved-phase-2-of-annexation-map-shared/>

⁶ https://www.reporter.net/news/local_news/city-council-approves-water-capacity-for-eli-lilly/article_a6511f98-5700-11ed-894f-af9ae382e8ef.html The article states, "The IEDC wants the city to set aside 860,000 million gallons of water per day and the same capacity for wastewater discharge, according to a memorandum of understanding between the IEDC and Lebanon Utilities. That's about 56% of the city's current water capacity and 39% of its wastewater capacity..."

⁷ <https://lebanon.in.gov/2022/11/07/water-plan-for-eli-lilly-approved-phase-2-of-annexation-map-shared/>

⁸ <https://www.wthr.com/article/money/business/eli-lilly-ups-investment-2-new-lebanon-manufacturing-sites-to-37-billion-indiana-boone-county/531-926d5754-ed0b-440c-a372-252c95f1afcf>

⁹ <https://www.ibj.com/articles/indiana-one-of-two-states-competing-for-50b-semiconductor-plant>

¹⁰ <https://www.azcentral.com/story/money/business/tech/2021/09/24/intels-20-billion-arizona-chip-factories-break-ground-chandler/5836524001/#>

¹¹ <https://www.ibj.com/articles/indiana-one-of-two-states-competing-for-50b-semiconductor-plant>

¹² <https://www.washingtonpost.com/climate-environment/2023/04/25/data-centers-drought-water-use/#>

If each of these firms committed to the district and the LEAP microchip campus is similar to Intel's facility, the amount of water they would use on a daily basis could be as much as 47 to nearly 56 million gallons per day, equivalent to the average water use of nearly 737,000 Hoosier residents.¹³ This does not include water required for new housing that is in-process.

And this voluminous amount of water is only the beginning for IEDC. The agency plans more development at LEAP that would eventually require 100 million gallons per day, equivalent to the average water use of about 1.3 million Hoosier residents.¹⁴ For comparison, the City of Lafayette withdraws between 10 to 17 million gallons per day.¹⁵

Water: The Achilles heel of the LEAP project

But where will IEDC get the water? IEDC recently disclosed to the public that it has settled on groundwater located approximately 35 miles away along the Wabash River, near Lafayette. True to form, it only recently disclosed its intent. Elected officials and local residents immediately raised legitimate concerns with this plan.

One reason for concern is that IEDC committed to the LEAP district and water-intensive industries prior to doing any water study on the impacts locally in and around Lafayette – including on individual wells, on crop irrigation, and downstream cities and towns.

IEDC assumed that there would be no impacts, as expressed by their consultant in October 2022.¹⁶ Since then, an initial analysis has been completed that, according to IEDC, shows positive results. However, the details have not been disclosed, and questions have been raised about the methodology by INTERA, IEDC's water consulting firm. While IEDC's consultant emphasizes that "existing water users" would not likely be impacted,¹⁷ there was no mention of future users either locally or downstream in terms of industrial or commercial development, increase in crop irrigation needs, or increasing population, which is concerning given that Tippecanoe County is the fourth fastest growing county in the state¹⁸.

Moreover, according to local sources, after four days of water testing completed in September 2023,¹⁹ to assess the volume of water that could sustainably be extracted from groundwater, several residents reported sulfurous water, gravel in their wells and gravel in their water heater

¹³ <https://www.neefusa.org/story/water/home-water-use-united-states#Indiana>

¹⁴ <https://www.neefusa.org/story/water/home-water-use-united-states#Indiana>

¹⁵ <https://news.yahoo.com/look-potential-impact-transferring-water-091700441.html?guccounter=1>

¹⁶ <https://www.insideindianabusiness.com/articles/wabash-river-could-be-solution-to-boone-countys-development-needs>

¹⁷ <https://www.insideindianabusiness.com/articles/wabash-river-could-be-solution-to-boone-countys-development-needs>

¹⁸ <https://cbs4indy.com/news/these-are-the-fastest-growing-counties-in-indiana/>

¹⁹ <https://www.iedc.in.gov/events/news/details/2023/09/21/iedc-releases-initial-results-from-water-study>

filters. None of these residents experienced these issues prior to the test drilling. Additionally, according to local sources, these negative impacts were not included in IEDC's report provided to elected officials.²⁰

In addition, a 2015 Purdue University analysis finds that “during the low flow months of July–October, wastewater discharges into the Wabash River basin contributed 82 to 121% of the stream flow,” meaning the entire volume of the water in the Wabash River is being used.²¹ Which begs the question: who will get water during times of water scarcity – Tippecanoe County residents and farmers and users downstream, or big business at LEAP?

Governor Eric Holcomb recently shifted “exclusive oversight” of INTERA’s ongoing water analysis of the Wabash aquifer’s ability to supply sufficient volumes to the LEAP district from the IEDC to the Indiana Finance Authority (IFA) and called for a more comprehensive study for Central Indiana.²² However, it remains to be seen if these inquiries will result in sound water policy for the state and an actual transparent public discourse on water policy, especially considering that the IFA is shielded from public records requests in the same fashion as the IEDC.

IEDC process foments backlash

IEDC’s process for developing LEAP has been conducted in the reverse order it should have followed.

County and state legislators in the Lafayette area are seeking a third-party review of the analysis of the IEDC initial water study,²³ and local legislators plan to file legislation to require a more systematic study prior to approvals for large water withdrawals.²⁴ The Cities of West Lafayette and Lafayette have adopted resolutions opposing LEAP.²⁵ Tippecanoe County recently passed a moratorium which will impose a nine-month ban on high-volume water withdrawals.²⁶

²⁰ E-mail, November 3, 2023.

²¹ <https://www.purdue.edu/newsroom/releases/2015/Q3/study-reveals-need-for-better-understanding-of-water-use.html>

²² https://www.ibj.com/articles/indiana-finance-authority-assumes-oversight-of-iedc-water-study?utm_source=news-update&utm_medium=newsletter&utm_campaign=2023-11-13&utm_id=45485179

²³ <https://www.wbaa.org/local-news/2023-09-22/tippecanoe-county-officials-want-third-party-review-after-state-finds-abundant-water-availability-for-water-withdrawals-to-lebanon>

²⁴ <https://www.ibj.com/articles/lafayette-area-officials-take-steps-to-protect-water-supply-as-iedc-considers-35-mile-pipeline>

²⁵ <https://www.insideindianabusiness.com/articles/west-lafayette-council-declares-opposition-to-water-pipeline> and https://www.wlfi.com/news/local/lafayette-city-council-votes-unanimously-to-oppose-leap-project/article_d70b36e6-7d01-11ee-b0e6-63f0642590b6.html

²⁶ <https://www.wishtv.com/news/i-team-8/tippecanoe-county-takes-action-to-stop-massive-water-withdrawal/>

City Councils in Attica²⁷ and Monticello²⁸ have recently adopted similar resolutions in opposition to LEAP.

While the LEAP project is almost wholly speculative in nature, IEDC has committed nearly \$1 billion in taxpayer funds already, tossing taxpayer money around like Wall Street speculators. Hundreds of millions of dollars, much of it for land purchases that far exceed the actual value of the land,²⁹ have been expended prior to the microchip firm or data center committing to locate in Boone County.

And, regardless of whether the microchip firm or the data center commits to the LEAP district, the IEDC plans to develop the massive site over time with the Wabash River aquifers appearing to be the only viable source of water for such large-scale development.³⁰

Figure 2. Taxpayer Dollars Committed to LEAP – So Far

Speculating with taxpayer dollars- in secret

The amount of taxpayer dollars committed by IEDC already is staggering – about \$972 million so far, as shown in Figure 2.³¹

Description	Cost (millions)
Land purchases (~1,000 acres), June 2023	\$ 122.0
Land purchases supporting potential data center (290 acres), June 2023	\$ 16.0
Land purchases for interchange supporting Eli Lilly (220 acres), June 2023	\$ 20.2
Land purchases (1,578 acres), September 2022-March 2023	\$ 126.0
Infrastructure Improvements (Road, Drainage)	\$ 38.0
Land purchases (1,577 acres), 2022	\$ 125.0
Payment to Lebanon Utilities for Eli Lilly's Water & Wastewater	\$ 21.2
Black & Veach contract assessing Lafayette to Lebanon pipeline costs and wastewater treatment plant for microchip campus	\$ 10.2
Citizens Water Pipeline from Indianapolis to LEAP for Eli Lilly	\$ 200.0
<i>Eli Lilly Manufacturing Facility</i>	
Training Grants	\$ 4.5
Redevelopment Tax Credits	\$ 17.1
Additional Subsidies	\$ 271.5
Total	\$ 971.7

²⁷ <https://twitter.com/jconline/status/1711738108985651310>

²⁸ https://www.newsbug.info/monticello_herald_journal/news/city-council-passes-resolutions-opposing-leap-and-carbon-sequestration/article_b24c5046-88a1-11ee-b3f6-33bdda5e1e04.html

²⁹ https://ag.purdue.edu/commercialag/home/wp-content/uploads/2023/08/2023-08-PAER_v2-1.pdf and <https://www.ibj.com/articles/state-budget-committee-approves-iedc-funding-requests> and <https://www.ibj.com/articles/iedc-paying-premium-for-farmland-for-boone-county-tech-district#:~:text=The%20IEDC%20spent%20more%20than,with%20farm%20buildings%20and%20silos.>

³⁰ <https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1000&context=climatetr> and <https://www.indianachamber.com/wp-content/uploads/2017/09/WaterStudyReport2014LoRes.pdf>

³¹ <https://www.wthr.com/article/news/investigations/13-investigates/indiana-spends-millions-lafayette-lebanon-pipeline-plan-wabash-river-boone-county/531-7537884e-3f88-418c-a539-5d944a3dba90>; <https://indianacapitalchronicle.com/2023/03/06/iedc-spends-126m-in-boone-county-land-purchases/>; <https://www.ibj.com/articles/state-budget-panel-weighs-risks-of-additional-200m-in-iedc-requests>; <https://fox59.com/indiana-news/plans-new-eli-lilly-facility-in-boone-county-move-forward/>; <https://www.indystar.com/story/news/local/indianapolis/2023/04/17/lilly-adds-1-6b-200-jobs-to-boone-county-project/70122119007/>; <https://www.ibj.com/articles/state-budget-panel-weighs-risks-of-additional-200m-in-iedc-requests>; and Verified Direct Testimony of Craig L. Jackson (June 29, 2023), https://iurc.portal.in.gov/entity/sharepointdocumentlocation/00b9e7d7-4017-ee11-8f6d-001dd8084f05/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45896_CRW%20et%20al_Exhibit%202_Clean_Jackson_062923.pdf

Underscoring the speculative nature of the LEAP project, the IEDC initially approached Citizens Water (the water utility in Indianapolis) to build and maintain water pipelines to Lebanon and the LEAP district to supply Eli Lilly. Citizens' initial study estimated the costs of the pipeline to be \$200 million (included in the figure above).³² The Indiana Finance Authority was to provide a loan from its water and wastewater revolving loan program, to be eventually paid off by the IEDC. The problem is that this initial engineering estimate does not provide the ultimate cost of the pipeline infrastructure – it could be 50 percent less or 100 percent more.³³

However, negotiations between IEDC and Citizens broke down. Citizens pulled its petition before state utility regulators, the Indiana Utility Regulatory Commission (IURC), to create a subsidiary to manage the LEAP pipeline infrastructure.³⁴ CAC believes this is due to money. In our estimation, the IEDC has over-extended itself, despite its \$1.2 billion slush fund appropriated in the 2023 legislative session.³⁵ (The IEDC has also been promising water to towns along the Lafayette-LEAP pipeline, without any analysis of cost or additional water withdrawals.³⁶)

The breakdown in negotiations means, at the moment, there may not be sufficient water supply for Eli Lilly (or Lebanon), which has already broken ground in the LEAP district on a larger \$3.7 billion facility to produce feedstock for pharmaceutical production.³⁷ Citizens was to supply 10 million gallons of water per day by 2027 to the LEAP district, “of which 1.35 million gallons as recoupment supply for the (Lebanon) Utility.”³⁸ With Lebanon providing its own local water resources to Eli Lilly, this may indicate that Lebanon's water supply may be stressed, if additional supply is not provided by Citizens or another Central Indiana utility.

³² Verified Direct Testimony of Craig L. Jackson (June 29, 2023), https://iurc.portal.in.gov/entity/sharepointdocumentlocation/00b9e7d7-4017-ee11-8f6d-001dd8084f05/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45896_CRW%20et%20al_Exhibit%202_Clean_Jackson_062923.pdf

³³ Verified Direct Testimony of Craig L. Jackson (June 29, 2023), https://iurc.portal.in.gov/entity/sharepointdocumentlocation/00b9e7d7-4017-ee11-8f6d-001dd8084f05/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45896_CRW%20et%20al_Exhibit%202_Clean_Jackson_062923.pdf

³⁴ Joint Petitioners' Notice of Voluntary Dismissal Without Prejudice (Oct. 5, 2023), https://iurc.portal.in.gov/entity/sharepointdocumentlocation/a1d35e1d-9663-ee11-be6e-001dd80bf130/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45896%20%20crw%20et%20al%20%20notice%20%206_10052023.pdf

³⁵ <https://www.ijb.com/articles/business-scores-some-sizable-legislative-wins>

³⁶ [https://indianacapitalchronicle.com/briefs/abundant-water-in-wabash-aquifer-for-leap-district-say-early-iedc-findings/#:~:text=\(IEDC\)%20announced%20Thursday.,could%20jeopardize%20their%20water%20supply.](https://indianacapitalchronicle.com/briefs/abundant-water-in-wabash-aquifer-for-leap-district-say-early-iedc-findings/#:~:text=(IEDC)%20announced%20Thursday.,could%20jeopardize%20their%20water%20supply.)

³⁷ <https://www.wthr.com/article/news/investigations/13-investigates/indiana-spends-millions-lafayette-lebanon-pipeline-plan-wabash-river-boone-county/531-7537884e-3f88-418c-a539-5d944a3dba90>

³⁸ Verified Direct Testimony of Craig L. Jackson (June 29, 2023), https://iurc.portal.in.gov/entity/sharepointdocumentlocation/00b9e7d7-4017-ee11-8f6d-001dd8084f05/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45896_CRW%20et%20al_Exhibit%202_Clean_Jackson_062923.pdf

In other words – and similar to water supply for the microchip campus and data center – IEDC pushed LEAP without a solid commitment from Citizens that, to its credit, emphasized many times in its memorandum of understanding with the IEDC and in its testimony before the IURC that it wanted to hold its ratepayers harmless for this endeavor.

However, Citizens still left wiggle room to charge its customers for costs incurred by its proposed Central Indiana subsidiary if the utility could not properly assign those costs to Lebanon. And Citizens still expresses continued support for the project and interest in building out water infrastructure to support LEAP, including serving customers “in the City of Indianapolis and other Central Indiana communities...”³⁹

The IEDC remained silent for much of its LEAP planning and negotiation process:

- WTHR news (channel 13) in Indianapolis was unable to secure a meeting with an IEDC official after months of requests.⁴⁰
- Information gathered from public information requests has been highly redacted.⁴¹
- A farmer reported that attorneys hired by IEDC who approached him to purchase land refused to disclose who they worked for or the reason behind the land purchase.⁴²

IEDC’s subterfuge does not end there. Lebanon officials, not IEDC, disclosed that IEDC was planning a large development in the area in March 2022 but only after months of inquiry.⁴³ And IEDC did not disclose that it planned on transferring water from the Lafayette area to the LEAP District until late July 2023, despite repeated inquiries.⁴⁴

LEAP becoming a financial quagmire – for taxpayers and ratepayers

There are other cost and logistical issues outstanding for LEAP.

³⁹ <https://www.ibj.com/articles/citizens-energy-seeks-to-withdraw-application-to-supply-water-to-leap-district>

⁴⁰ <https://www.wthr.com/article/news/investigations/13-investigates/initial-tests-lafayette-lebanon-water-pipeline-show-exciting-results/531-e978b71e-b968-49fb-8d5f-012e808155cc>

⁴¹ <https://www.wthr.com/article/news/investigations/13-investigates/initial-tests-lafayette-lebanon-water-pipeline-show-exciting-results/531-e978b71e-b968-49fb-8d5f-012e808155cc>

⁴² <https://www.insideindianabusiness.com/articles/wabash-river-could-be-solution-to-boone-countys-development-needs>

⁴³ <https://www.wrtv.com/news/local-news/boone-county-commissioners-confirm-mystery-development-but-state-provides-no-details>

⁴⁴ <https://indianahousedemocrats.org/news-media/campbell-reacts-to-the-transfer-of-water-from-tippecanoe-county-to-lebanon>

There has been no discussion of:

- How the purported \$2 billion for two pipelines from the Wabash basin to Lebanon will be paid for or who is going to manage it⁴⁵ – although CAC believes that it will be water ratepayers, most likely the ratepayers of Indiana American Water that owns the West Lafayette water utility and utilities in Hamilton County.
- How the thousands of tons of hazardous waste per year generated by the LEAP district, most notably the microchip campus, will be treated and disposed of. Microchip fabs are notorious for large volumes of hazardous waste generation, which “consists of heavy metals, solvents, and corrosive compounds in both solid and liquid forms.”⁴⁶ A single fab at the sprawling Ocotillo, AZ facility mentioned above generates about 36,000 tons of hazardous waste annually.⁴⁷
- Where the tens of millions of gallons of daily wastewater from the LEAP district will be sent. Microchip fabs pre-treat their water to remove as many toxics as possible.⁴⁸ That water is sent to local wastewater treatment plants. A portion could also be reused by the facility – although it must be highly purified for microchip assembly.⁴⁹

Initially, the thought was to send the wastewater to Eagle Creek reservoir, which means the water would be lost from the Wabash River entirely – transferred out of the basin.⁵⁰ It could also end up back in the Wabash as surface water, not returned to the aquifer, which would eventually degrade the aquifer.⁵¹ If not sent to Eagle Creek reservoir, a Purdue University expert suggested it could be sent down Sugar Creek, which enters the Wabash about 30 miles north of Terre Haute.⁵²

Given the limited capacity of creeks around Lebanon,⁵³ such volumes of wastewater could require more pipelines -- an additional, potentially high cost that has yet to be identified or addressed.

⁴⁵ <https://www.basedinlafayette.com/p/leap-pipeline-funding-decisions-on#:~:text=water%20pipeline%20concept%20estimated%20at,scheduled%20to%20start%20in%20January.>

⁴⁶ <https://blog.veolianorthamerica.com/chips-act-balancing-manufacturing-capacity-waste-generation#:~:text=Electronics%20manufacturing%20in%20general%2C%20and,both%20solid%20and%20liquid%20forms>

⁴⁷ <https://www.theguardian.com/environment/2021/sep/18/semiconductor-silicon-chips-carbon-footprint-climate>

⁴⁸ <https://www.nytimes.com/2022/04/08/technology/intel-chip-shortage.html>

⁴⁹ <https://www.nytimes.com/2022/04/08/technology/intel-chip-shortage.html>

⁵⁰ <https://secure.in.gov/apps/iedc/transparencyportal/viewtaxgrantloancontract/5ac468f49792ed11aad1001dd806af48>

⁵¹ <https://news.yahoo.com/look-potential-impact-transferring-water-091700441.html>

⁵² [https://en.wikipedia.org/wiki/Sugar_Creek_\(Wabash_River_tributary\)](https://en.wikipedia.org/wiki/Sugar_Creek_(Wabash_River_tributary))

⁵³ <https://news.yahoo.com/look-potential-impact-transferring-water-091700441.html>

In addition, microchip fabs consume enormous amounts of power. A single fab at the Ocotillo facility mentioned above demands 2,244,000 megawatt-hours annually,⁵⁴ enough to power 200,000 average Hoosier homes.⁵⁵ The population of Lebanon is about 18,000.

Using the Ocotillo example above, a microchip manufacturing campus with 4 fabricators could require almost 9 million megawatt-hours per year; and a 5-fab facility at more than 11 million megawatt-hours per year. This is the equivalent of 26 percent and 32 percent, respectively, of all residential electric utility customers in the state.⁵⁶

The high electric demand would certainly substantially add to a large microchip campus's water demand, as Indiana relies heavily on water-cooled power plants, such as coal and combined cycle natural gas plants. As to who would pay for the power and the infrastructure to deliver the power to LEAP, that has yet to be determined. Power would also have to be provided to Eli Lilly and the data center, which have substantial energy demands.

In addition to the high electric demand, these heavy industries will likely require natural gas for their facilities and industrial processes. Providing that gas to the LEAP district will also require substantial investments. As to who would pay for the gas infrastructure, that also has yet to be determined.

Thanks to the Indiana General Assembly's passage of the Transmission, Distribution, and Storage System Improvement Charges ("TDSIC") law⁵⁷, the IEDC was granted the authority to approve costs associated with a utility's TDSIC plan as a "targeted economic development project,"⁵⁸ forcing ratepayers to assume the burden of those costs. CAC suspects that it will be Hoosier electric and gas ratepayers that will get stuck with the tab for the infrastructure costs related to delivering gas and power to LEAP.

We need look no further than StarPlus Energy Project in Kokomo to support CAC's conclusion. This project is the joint venture between Samsung and Stellantis to build a \$2.5 billion electric-vehicle battery manufacturing facility in Kokomo.⁵⁹ NIPSCO gas ratepayers⁶⁰ and Duke Electric ratepayers⁶¹ throughout Indiana will both realize rate increases to subsidize this project.

⁵⁴ <https://www.theguardian.com/environment/2021/sep/18/semiconductor-silicon-chips-carbon-footprint-climate>

⁵⁵ https://www.eia.gov/electricity/sales_revenue_price/pdf/table5_a.pdf
(<https://www.eia.gov/electricity/data.php#sales>)

⁵⁶ https://www.eia.gov/electricity/sales_revenue_price/pdf/table_5A.pdf

⁵⁷ TDSIC was initially passed in 2013 through [SEA560](#), and then amended in 2019 through [HEA1470](#)

⁵⁸ <https://iga.in.gov/laws/2023/ic/titles/8#8-1-39-11>

⁵⁹ <https://www.insideindianabusiness.com/articles/stellantis-plans-2-5b-ev-battery-plant-1400-jobs-in-kokomo>

⁶⁰ https://iurc.portal.in.gov/_entity/sharepointdocumentlocation/36b55900-1956-ed11-bba2-001dd8070a7e/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45330TDSIC5S1_NIPSCO_Submission%20of%20IEDC%20Approval_10272022.pdf

⁶¹ PETITIONER'S ATTACHMENT 1-B (ES) IURC Cause No. 45647 TDSIC-2 S1,
https://iurc.portal.in.gov/_entity/sharepointdocumentlocation/4704188b-2e82-ee11-8178-001dd8065be9/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45647%20TDSIC%20%20S1_DEI_Direct%20Testimony%20of%20Erin%20Schneider_111023.pdf

Central Indiana water ratepayers have reason for concern

A big problem for IEDC is that now that Citizens has dropped out, at least for now, it needs to find another partner or renegotiate with Citizens to provide water for Eli Lilly. That other partner, CAC believes, would likely be Indiana American Water (IAW) that owns utilities in Hamilton and Tippecanoe Counties. IAW ratepayers should be concerned. Much of the estimated \$200 million cost for the pipelines to Lebanon for purposes of serving Eli Lilly could be shifted to them, since IEDC appears to be running short of funds. And that cost, as noted, could be double the \$200 million estimate at \$400 million.

As noted, Citizens remains interested in providing infrastructure and water to LEAP, which may put its ratepayers at risk for substantial rate increases as well.

CAC believes there are four undesirable alternatives that are likely being considered, all of which result in higher monthly water bills for Citizens or IAW ratepayers:

- IAW will finance the water infrastructure, imposing another substantial rate increase on its customers, with Citizens selling the water wholesale to IAW, or another utility, which could benefit Indianapolis ratepayers financially by applying the additional revenue to bill credits or reducing rates.
- IAW seeks rate increases on its customers in Central Indiana to finance the water infrastructure and uses its wellfields in Noblesville to supply water to LEAP, which would stress groundwater supplies in Hamilton County and possibly water supply in Indianapolis. (see below)
- IEDC provides a portion of funding to assist Citizens with paying for the water infrastructure to Lebanon, but Citizens imposes rate increases on its Indianapolis customers to pay for the rest.
- Similar to the authority granted the IEDC for electric and gas infrastructure projects, the legislature grants authority to the IEDC to approve utility water projects as “targeted economic development projects,” forcing ratepayers to assume the costs.

Of note, IAW ratepayers may also be on the hook for some or most of the \$2 billion estimated cost of water pipelines from Lafayette to Lebanon regardless. But IEDC has not disclosed who would pay for those pipelines – taxpayers, ratepayers, LEAP district businesses, or a combination.

Long-term water availability could be threatened in Central Indiana

Then the question becomes: Where will the Central Indiana water come from?

For the four undesirable alternatives above, the water would come from either Hamilton or Marion County for the LEAP district. In the case of water from Hamilton County, IAW uses water from its wellfields near Noblesville, which pull water from the aquifer upstream of Indianapolis along the White River, the very aquifer on which Indianapolis relies on heavily as a water source.

But this could stress water supplies in Hamilton and Marion Counties.

Hamilton County is the fastest growing county in the state.⁶² Population is expected to increase, and there is significant business development planned for the US Highway 31 corridor.⁶³ And the county historically has relied heavily on groundwater. The problem is that Central Indiana – the 9-county area consisting of Marion and surrounding counties – is known for limited groundwater supplies and low-flows in the White River.⁶⁴

IAW has conducted tests to determine the full capacity of its current wells and its test well. It is also running tests in its largest wellfield on the north side of Noblesville but has not disclosed results of those

tests. In reviewing its currently available data,⁶⁵ it appears that IAW can withdraw about 10.3 million gallons per day more than it did in 2020 from current wells and the test well for which it provided data (Figure 3). The

Figure 3. Estimated Available Water Capacity of Indiana American Water Wells

Location	Well	GPM	Available	GPM Total	GPM Available	GPD Available
Allisonville	1	1400	28.9%	1,969	569	819,443
Allisonville	2	800	33.3%	1,199	399	575,136
Riverwood	7	280	26.2%	379	99	143,141
Riverwood	8	370	52.8%	784	414	596,014
Forest Park	2	350	56.0%	795	445	641,455
Forest Park	4	600	3.9%	624	24	35,063
Forest Park	5	700	35.2%	1,080	380	547,556
White River North	1	2000	35.0%	3,077	1,077	1,550,769
White River North	9	2000	50.3%	4,024	2,024	2,914,769
White River Christian Church	TEST	1718	100.0%	1,718	1,718	2,473,920
Total					7,151	10,297,266

Source: Cause No. 45870, Attachment MHH-24, pp. 118-122 of 173 (2022 Capacity Evaluation)

⁶² <https://cbs4indy.com/news/these-are-the-fastest-growing-counties-in-indiana/>

⁶³ https://www.stats.indiana.edu/profiles/profiles.asp?scope_choice=a&county_changer=18057;
[https://www.hamiltoncounty.in.gov/Archive/ViewFile/Item/215;](https://www.hamiltoncounty.in.gov/Archive/ViewFile/Item/215) and <https://readthereporter.com/hamilton-county-breaks-ground-on-regional-utility-district/>

⁶⁴ <https://www.indianachamber.com/wp-content/uploads/2017/09/WaterStudyReport2014LoRes.pdf>

⁶⁵ Direct Testimony of Mathew H. Hobbs II, Attachment MHH - 16 Part 5 of 6:
[https://iurc.portal.in.gov/entity/sharepointdocumentlocation/2fd68668-09d0-ed11-b596-001dd8070a7e/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45870 Indiana%20American%20Water%20Company Petitioner%27s%20Exhibit%203%20Direct%20Testimony%20of%20Matthew%20H.%20Hobbs%20Part%206%20of%206_033123.pdf](https://iurc.portal.in.gov/entity/sharepointdocumentlocation/2fd68668-09d0-ed11-b596-001dd8070a7e/bb9c6bba-fd52-45ad-8e64-a444aef13c39?file=45870%20Indiana%20American%20Water%20Company%20Petitioner%27s%20Exhibit%203%20Direct%20Testimony%20of%20Matthew%20H.%20Hobbs%20Part%206%20of%206_033123.pdf)

10 million gallons per day for the Eli Lilly manufacturing facilities at LEAP district would essentially consume that entire volume of water.

As Marion County is the second-fastest growing county in the state,⁶⁶ sending large volumes of water from Indianapolis to Lebanon may eventually threaten the city's water supply over the long-term.

Importantly, the Indiana Chamber of Commerce noted in its 2014 report, "The expected growth could push both Hamilton County and Marion County into the highest (>1) category of potentially unsustainable withdrawal."⁶⁷

Indeed, Citizens says its recently built reservoir in Fishers will provide sufficient water supply for the region for only 15 years.⁶⁸

Water wars and good policy alternatives ignored

The state is viewing water solely as an economic development tool. This is short-sighted and opportunistic as it assumes that water can be shipped wherever and whenever needed, regardless of the near- and long-term interests of or impacts on communities and costs to taxpayers or ratepayers.

Indeed, the state set the stage for water wars through its own policy. In 2012, the Indiana General Assembly passed legislation removing groundwater from local control.⁶⁹ Whoever owns the land above the aquifer can take as much water as they want. There is no process, as shown by the LEAP project, to include local officials and the public about planning and water resource capacity. There is no water policy that would ensure water availability into the future and affordability for ratepayers.

Disconcertingly, the state is ignoring its own water studies led by the IURC and IFA at the direction of the General Assembly that provided guidance to achieve water sustainability and water bill affordability.

In its 2013 report, the IURC places emphasis on the concept of integrated water resources management (IWRM), noting that, typically, water management often focuses only on additional supply of water.⁷⁰ On the other hand, IURC states:⁷¹

⁶⁶ <https://cbs4indy.com/news/these-are-the-fastest-growing-counties-in-indiana/>

⁶⁷ <https://www.indianachamber.com/wp-content/uploads/2017/09/WaterStudyReport2014LoRes.pdf>

⁶⁸ <https://2545024.fs1.hubspotusercontent-na1.net/hubfs/2545024/site/reports/Sustainability%20Reports/Sustainability-Report-2021.pdf>

⁶⁹ <https://mckinneylaw.iu.edu/ilr/pdf/vol49p181.pdf>

⁷⁰ <https://www.in.gov/iurc/files/IURC-2013-Water-Utility-Resource-Report.pdf>

⁷¹ <https://www.in.gov/iurc/files/IURC-2013-Water-Utility-Resource-Report.pdf>

IWRM expands water utilities' options for securing adequate supplies. Instead of just installing a new well or surface water intake to meet new demands, *IWRM can be used* to determine whether water conservation, an aggressive leak detection program, or water reuse is cost effective and can supply the additional needed water. Unlike traditional groundwater and surface water supplies, these alternative options are not affected by climate variability and have minimal environmental impact. (Emphasis added).

Comprehensive water conservation measures and reducing leaks actually have profound, positive impacts on cost and water availability. For instance, due to the Massachusetts Water Resources Authority's "Long-Range Water Supply Program" implemented in 1987 that prioritized conservation and reducing leaks,⁷² the City of Boston used about the same amount of water in 2014 as it did in 1900.⁷³

Similarly, Las Vegas, has implemented conservation programs and water recycling (Las Vegas recycles all of its wastewater, treating it to near potable levels), achieving a 40% reduction in water use from 1989 to 2014, a drop in in water use of 29 billion gallons annually, even though from 2002 to 2012, population increased by 400,000, hotel rooms by 25,000, and tourists by 5 million.⁷⁴ By one estimate, leak detection efforts (Las Vegas has its own water lab) save "hundreds of millions of gallons each year."⁷⁵

Unfortunately, the Indiana Finance Authority and the State Chamber of Commerce water report in 2014 gives short shrift to water conservation, characterizing it solely as getting folks to reduce lawn watering during times of drought.⁷⁶

The IFA, in its 2016 report, does propose funding upgrades in water pipelines, estimating an initial cost, at the time, of \$2.3 billion.⁷⁷ Notably, the legislature appropriated about half that amount to the IEDC last session. The report also estimates that Indiana loses about 50 billion gallons annually due to leaks in pipelines, inaccurate meters, or stolen water⁷⁸ – although IFA says that most of the water mains in the state are at the end or nearly at the end of their lifetimes, which indicates that most of the water losses are from leaks from the water mains. IFA says that leak rates in Indiana range from 19-24% for all water utilities.⁷⁹

⁷² <https://www.mwra.com/comsupport/waterconservationmain.htm>

⁷³ <http://northendregionalreview.com/2015/05/28/bostonians-used-same-amount-of-water-in-2014-as-in-1900/>

⁷⁴ <https://www.hcn.org/issues/46.1/the-vegas-paradox>

⁷⁵ <https://www.hcn.org/issues/46.1/the-vegas-paradox>

⁷⁶ <https://www.in.gov/iurc/files/IFA-Report-October-2015-Evaluation-of-Water-Utility-Planning-in-IN.pdf> and <https://www.indianachamber.com/wp-content/uploads/2017/09/WaterStudyReport2014ExecSummary.pdf>

⁷⁷ <https://www.in.gov/ifa/files/IFA-Evaluation-of-Indianas-Water-Utilities-Report-11-18-2016.pdf>

⁷⁸ <https://www.in.gov/ifa/files/IFA-Evaluation-of-Indianas-Water-Utilities-Report-11-18-2016.pdf>

⁷⁹ <https://www.in.gov/ifa/files/IFA-Evaluation-of-Indianas-Water-Utilities-Report-11-18-2016.pdf>

If that is the case and with the understanding that Central Indiana withdraws about 132.8 billion gallons annually,⁸⁰ the region loses from about 25 billion to 32 billion gallons annually, or about 69 million gallons to more than 87 million gallons per day. IFA says additional withdrawals along the White River corridor could produce an additional 50 million gallons per day.⁸¹ But reducing leaks to 5-6%, like Las Vegas, would displace or substantially displace that amount.

In addition, the IURC warns that the state has no policy to prohibit interbasin transfers of water and urges caution and a systematic approach to ensure that such transfers does not pit one basin against another.⁸² The IURC states: “Without a procedure in place to proactively assess the impacts of withdrawals on stream flows and groundwater levels, the *water resources cannot be sustainably managed nor can the occurrence of water-use conflicts be minimized*, especially during droughts.”⁸³ (Emphasis added). The State Chamber of Commerce makes the point that water infrastructure buildouts should be “[s]trategic, not [o]ppportunistic,” in that impacts on water supply should be taken into account.⁸⁴

But the state has done nothing to create such policies and regulations, hence the growing conflict between Lafayette and Lebanon, caused by the IEDC’s “opportunistic” economic development model that includes creating more water supply in one county by removing it from another county.

This violates the important concept of regionalization brought up in IFA’s 2015 report.⁸⁵ IFA explains regionalization as a cooperative effort between utilities. IFA and others have found, such as the nonprofit Rural Community Assistance Project, that cooperation between smaller water utilities or purchase by nearby larger utilities (e.g. municipal utilities) would reduce costs and enhance financial capacity to deal with pipeline infrastructure. Also, sharing water resources and joint water infrastructure funding (such as for wastewater treatment) accomplishes these goals.

A follow-up IFA study in 2016 found that “*collaborative planning* has already begun among *neighboring* utilities in some areas of the state.”⁸⁶ (Emphasis added). The operative terms are “collaborative” and “neighboring,” not the way IEDC has apparently redefined the term as planning interbasin transfers of water for tens of miles without notifying and requesting the support of local officials and the public first.

Another important integrated water resources management (IWRM) concept is public participation. The idea of true public participation was jettisoned after the 2013 IURC report.

⁸⁰ <https://www.in.gov/ifa/regional-water-studies/central-indiana-water-study/>

⁸¹ <https://www.in.gov/ifa/regional-water-studies/central-indiana-water-study/>

⁸² <https://www.in.gov/iurc/files/IURC-2013-Water-Utility-Resource-Report.pdf>

⁸³ <https://www.in.gov/iurc/files/IURC-2013-Water-Utility-Resource-Report.pdf>

⁸⁴ <https://www.indianachamber.com/wp-content/uploads/2017/09/WaterStudyReport2014LoRes.pdf>

⁸⁵ <https://www.in.gov/iurc/files/IFA-Report-October-2015-Evaluation-of-Water-Utility-Planning-in-IN.pdf>

⁸⁶ <https://www.in.gov/iurc/files/IFA-Report-October-2015-Evaluation-of-Water-Utility-Planning-in-IN.pdf>

The IFA emphasizes educating the public about the importance of “water resources and infrastructure,”⁸⁷ which the response in Lafayette to the LEAP project indicates the public already understands. The public does not like to be presented with a *fait accompli* with respect to decisions about their water. The public expects the state to consider their concerns, a more than reasonable expectation. The public wants to and should be involved upfront in water resource and policy decisions.

It is unclear whether handing IFA the responsibility for overseeing the LEAP water studies instead of IEDC, will set the state on a course of securing water resources into the future while ensuring affordable water rates and public involvement in those decisions – or if water availability will remain strictly a near-term economic development consideration.

Conclusions and Recommendations

The saga of the LEAP project reveals many troublesome issues with respect to state economic development and water policy.

Water policy has become a subset of economic development policy, not treated as an essential resource that must be available and whose service costs must be affordable.

Ignoring previous studies with respect to the limitation on water resources and sound proposals for developing a rational water policy, the IEDC has embarked on a purely supply-side approach. This has created a water resource shell-game that will ultimately diminish water resources, increase costs to ratepayers, and foment water wars between communities and regions.

Ultimately, with the IEDC driving the water policy ship, water management policy is being discussed and formulated in secret with no public input. There is no forum or mechanism to allow for a detailed, systematic, rational discussion open to the public about water policy, which is critical for many applications – not just near-term, speculative opportunities for economic development.

Also, it appears that IEDC is angling to shift some or a substantial portion of the costs to ratepayers for the water infrastructure to supply the LEAP district from Indianapolis or Hamilton County, while remaining silent on how the costs of the pipelines from Lafayette to Lebanon will be paid for. Given the enormous cost of the project, the IEDC may seek additional funding in future legislative sessions, in addition to the real possibility of utility ratepayers subsidizing the LEAP project.

⁸⁷ <https://www.in.gov/iurc/files/IFA-Report-October-2015-Evaluation-of-Water-Utility-Planning-in-IN.pdf>

We recommend the following:

- The LEAP project should be put on hold indefinitely or proceed only with the Eli Lilly facilities if transparent, reliable studies show transferring water from Hamilton or Marion County will not impair water availability in those counties into the future.
- If the Eli Lilly facilities move forward, Eli Lilly should pay for the portion of water infrastructure and water supply required for its facilities.
- The state, with meaningful opportunities for public involvement, should adopt integrated water resource management (IWRM) principles and formulate strong policies around those.
- Part of developing sustainable water policy should include determining how to approach utility rate design coupled with comprehensive conservation measures, in a balanced approach that protects the interests of customers, addresses the acute bill affordability challenges faced by low-income customers, and allows utilities to maintain financial stability.
- As an initial step, the General Assembly should adopt the concept behind the legislation proposed by area Lafayette legislators to impose a modicum of structure to large water withdrawals.
- As an additional initial step, the General Assembly should return groundwater resources to local control in order to foster cooperation between neighboring utilities (regionalization) and stem water wars between communities and regions.
- Funding for water infrastructure should come from taxpayers, not utility ratepayers, if the infrastructure envisioned is shown to benefit the public. That way, utilities do not earn a profit off these public projects. This is what was proposed by IFA and what was envisioned in the initial agreement between Citizens Water and IEDC.
- The General Assembly should either replace the IEDC with a transparent department of commerce or significantly reform the IEDC to inject transparency and public participation upfront, without compromising sensitive negotiations. In either case, the state must engage the public early on about economic development and water usage. Having those discussions and disclosing the type of business, scale, and cost of the development to taxpayers and/or ratepayers would not divulge the specifics of the negotiations.
- The state should begin the process of reviewing current production systems in agriculture, manufacturing, and power generation, prioritizing economically efficient means of reducing or eliminating pollution of surface water and groundwater (whether that pollution is airborne, landfilled, or directly discharged into water ways) and reducing overall water usage to ensure future availability and enhance public health efforts.