

A HOOSIER MODEL FOR REGIONAL WATER SECURITY

*A Framework for Topographic Governance, Local Autonomy, and
Sustainable Economic Growth*

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Table of Contents

Executive Summary	2
Introduction: The Imperative for Reform	2
I. Organizational Structure: The Regional Boundary Framework	3
II. Regional Water Management District Boards & Appointment Architecture	3
A. Urban/Municipal Representation	3
B. Rural/Agricultural Representation	4
C. Technical Expertise	5
III. Division of Responsibilities: RWMD Boards vs. Indiana Department of Water	5
A. Operational Responsibilities of the Local RWMD Board	5
B. Centralized Technical Responsibilities of the IDW	6
IV. Local Funding Architecture: The Watershed Protection Fee	7
Financial Illustration: The Sugar Creek Sub-Basin	9
V. State-Level Funding Framework	10
VI. Inter-Agency Financial Alignment & Fund Governance	11
VII. Advanced Policy Enhancements & Regulatory Safeguards	11
A. Inter-Basin Water Transfer & Appellate Protocol	11
B. Geologically Customized Regulatory Mandates	13
C. Statutory Home Rule Protections	13
D. Technical Infrastructure & Automated Observation Grid	14
VIII. Executive Conclusion: The Case for Balanced Water Security	15
Indiana's HUC Sub-Basins (Maps)	16

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EXECUTIVE SUMMARY

Indiana's economic future depends directly on its water security. The rapid expansion of advanced manufacturing hubs, heavy industrial facilities, and hyperscale data centers has introduced unprecedented volume demands on the state's primary aquifers. At the same time, localized residential wells and agricultural operations face growing risks from uncoordinated regional drawdowns.

The current regulatory framework—relying heavily on fragmented, single-county political boundaries—is structurally incapable of managing macro-level hydrological resources. Water flows according to topography, not political lines.

This proposal establishes a comprehensive framework to transition Indiana's water governance into a self-sustaining, hydrologically aligned model. By creating regional districts at the watershed level, leveraging existing financial institutions, and resolving local governance stalemates through a clear statutory appointment mechanism, this act protects local resources while supporting sustainable statewide economic growth.

INTRODUCTION: THE IMPERATIVE FOR REFORM

Indiana stands at a critical infrastructure crossroads. For over a century, the state's abundant water resources were viewed as functionally infinite, managed comfortably by a patchwork of localized municipal utilities, county commissioners, and regional drainage boards. However, the modern economic landscape has fundamentally fractured this baseline assumption.

The convergence of three macro-trends has pushed our legacy water governance system past its structural breaking point:

1. **The Rise of High-Volume Industrial Demands:** Population growth and agricultural irrigation have previously been the primary drivers of long-term water demand. The recent development of advanced manufacturing corridors, large-scale biotechnology facilities, and hyperscale digital data centers has shifted localized municipal water needs from a linear utility model to an exponential, high-capacity extraction dynamic.
2. **Hydrological Vulnerability of Shared Aquifers:** Groundwater resources do not respect political subdivisions. A major industrial drawdown in one county can create a widening cone of depression that lowers water tables, reduces static pressure, and dries up residential or agricultural wells multiple jurisdictions away.
3. **Fragmented Administrative Authority:** Currently, no single local entity has the geographical scope or the technical data necessary to manage a shared aquifer system. When local units act in isolation to maximize economic development within their specific borders, they inadvertently create an uncoordinated regional race to the bottom for groundwater resources.
- **Hydrological Alignment:** Political boundaries must yield to natural topography. Governance structures must mirror the actual physical boundaries of the watersheds and subterranean aquifers they are tasked with protecting.

- **Data-Driven Proportionality:** Regulatory interventions, water allocations, and funding mechanisms must be governed by objective, real-time scientific telemetry rather than political influence or municipal size.
- **Automatic Conflict Resolution:** To prevent administrative paralysis, local governance deadlocks must trigger predictable, non-political statutory fallback mechanisms that ensure continuous stewardship of the resource.
- **Preservation of Local Autonomy (Home Rule):** While resource monitoring and wholesale capacity allocation must be managed regionally, the ownership, retail rate-setting, and day-to-day operation of municipal utilities must remain strictly in local hands.

I. ORGANIZATIONAL STRUCTURE: THE REGIONAL BOUNDARY FRAMEWORK

To align public policy with the natural flow of water, the state shall mandate the creation of Regional Water Management Districts (RWMDs) organized according to the Hydrologic Unit Code 8 (HUC-8) sub-basins established by the United States Geological Survey (USGS)¹. Minor variations based on local conditions may be appropriate. See maps attached

- **Topographic Boundaries:** Rather than using county or municipal limits, governance boundaries will follow the natural contours of Indiana's 39 distinct sub-basins. This ensures that a single regional entity oversees the entire geographical area impacting a shared aquifer or river system.
- **Averaging the Scale:** An average Indiana sub-basin spans approximately 500,000 to 1,000,000 acres, intersects 5 to 8 counties, and encompasses between 70,000 and 1 million residents depending on the region's density.
- **Statutory Mandate:** RWMDs will be established via state legislative mandate, requiring all counties and municipalities within a designated sub-basin to participate in a single, unified resource-management framework.

II. THE REGIONAL WATER MANAGEMENT DISTRICT BOARDS & APPOINTMENT ARCHITECTURE

To balance the competing interests of expanding urban industrial hubs and traditional rural agricultural communities, each sub-basin district shall be governed by a seven-member Regional Water Management District Board.

The board's structural balance relies on a strict statutory selection process designed to resolve local stalemates automatically. The 7 seats are divided into three distinct functional categories:

A. Urban/Municipal Representation (3 Seats)

¹ U.S. Geological Survey, 2023, *National Hydrography Dataset (NHD) Best Resolution for Indiana: USGS Hydrologic Unit Code (HUC-8) Sub-basin Boundary Dataset*. Available via the National Map Viewer.

These seats represent the infrastructure, delivery, and economic growth of the district. They are filled by utility executives or municipal leaders based on objective volume metrics rather than political selection:

- The Capacity-Based Tiering Rule: In any given sub-basin, all public, municipal, conservancy district, and investor-owned water utilities are ranked annually by their total aggregate average daily volume withdrawn specifically within that sub-basin's physical HUC-8 boundaries. For utilities operating multi-basin networks, SWWF intake data shall be aggregated strictly by physical withdrawal point within the sub-basin, rather than by total system-wide capacity across jurisdictions.
- Automatic Appointment: The lead executive (or local operational manager designated by the utility) of the top three highest-capacity water systems within that sub-basin automatically inherits these three seats. For investor-owned or multi-system utilities representation is tied specifically to the operating system and infrastructure assets located within the sub-basin boundaries, ensuring the board member possesses direct, localized operational authority over those specific withdrawal points.
 - The Multi-Utility Coalition Provision (More than 3 Utilities): If a sub-basin contains more than three utilities, the remaining lower-volume utilities collectively form a *Secondary Utility Advisory Council*. This council elects one representative to serve as a non-voting technical liaison to the main Regional Water Management District Board, ensuring smaller municipal operations maintain a direct line of communication regarding regional aquifer pressures.
 - Single or Dual Utility Provision: If a sub-basin contains less than three utilities, the highest-volume utility receives a second appointment to the Regional Water Management District Board.

B. Rural/Agricultural Representation (3 Seats)

These seats are reserved for active agricultural producers and rural landholders, ensuring that agricultural GDP and residential well pressure is vigorously defended. Because a sub-basin intersects multiple counties, the appointments are governed by a strict rotational system to prevent inter-county deadlocks:

- The Ag-Density Rule: The three seats are assigned to the three counties that hold the highest percentage of agricultural use within that specific sub-basin boundary². The County Commissioners of those three leading counties each make one appointment.
- The Statutory Disagreement Settle-Point: If the County Commissioners within a designated county cannot agree on their single appointment within 45 days of a vacancy, or if multiple border counties deadlock over regional representation, the appointment power automatically defaults to the County Extension Agent of the land-grant university (Purdue University). The Extension Agent must appoint an active, local agricultural producer from the designated county within 15 days, removing the decision entirely from local political friction.

² USDA-NASS, 2022 Census of Agriculture: Indiana State and County Data, Volume 1, Geographic Area Series, Part 14 (AC-22-A-14).

C. The Technical Expertise (1 Seat)

- The Hydrogeologist Seat: The final seat is reserved for a licensed Professional Geologist (LPG) specializing in hydrogeology or a registered Professional Engineer (PE) with demonstrated expertise in water-resource management and regional hydrogeology.
 - Conflict-of-Interest Safeguards: To ensure total objectivity, this member must function as an independent technical expert. The appointee may not be a direct employee, officer, or active retained consultant for any water utility, agricultural lobby, or commercial applicant currently operating or applying for allocation permits within that sub-basin.
- Selection Process: This individual is jointly selected by a majority vote of the six urban and rural board members. If the six members split 3-3 and fail to choose the technical member within 30 days of the board's formation, the selection automatically defaults to the State Geologist at the Indiana Geological and Water Survey, who will appoint a qualified regional expert to fill the vacancy.

III. DIVISION OF RESPONSIBILITIES: RWMD BOARDS VS. THE INDIANA DEPARTMENT OF WATER

To prevent bureaucratic gridlock and maximize operational efficiency, this act establishes a crisp, bright-line division of labor between the local Regional Water Management District (RWMD) Boards and the state-level Indiana Department of Water (IDW). While the existing DNR Division of Water plays a vital role in natural resource conservation, flood control, and environmental permitting, modern regional water governance demands a dedicated entity focused exclusively on macro-hydrogeological modeling, infrastructure integration, and industrial growth alignment. Creating a standalone IDW consolidates fragmented oversight across state agencies (DNR, IDEM, IFA) into a single, specialized technical authority focused strictly on long-term water security and economic resilience.

The core operational philosophy splits governance into two functions: Local Field Stewardship versus Statewide Technical Aggregation.

A. Operational Responsibilities of the Local RWMD Boards

The RWMD Boards serve as the frontline defenders and managers of their specific sub-basins. They handle the execution of local resource strategies, field monitoring, and localized development clearance. Their explicit statutory duties include:

1. Deployment and Maintenance of the Observation Grid: The RWMD Board oversees and maintains a sub-basin observation grid designed to feed real-time telemetry into the state hydrological model. To maximize fiscal efficiency, this grid integrates newly installed monitoring wells with existing hydrologic infrastructure—including USGS stream gages, DNR observation wells, municipal monitoring sites, and regional weather stations—creating a unified multi-source data stream for the entire sub-basin.
2. Reviewing High-Capacity Utility and Commercial Allocations: The board has primary jurisdiction to review any local economic development project or municipal utility expansion requiring high-

capacity water withdrawal. They evaluate the project against the specific localized conditions of the sub-basin.

3. **Local Capital Allocation & Seed Project Funding:** Utilizing the locally collected Watershed Protection Fee, the RWMD Board identifies and finances regional infrastructure efficiency enhancements, such as fixing municipal distribution leaks, funding agricultural water-recycling programs, or purchasing aquifer-recharge conservation easements.
4. **Local Aquifer Defense:** The board is charged to represent the collective water rights of its residential, agricultural, and municipal constituents. If external entities or neighboring districts propose actions that jeopardize local water table stability, the RWMD Board acts as the primary legal and administrative representative for the sub-basin.

B. Centralized Technical Responsibilities of the IDW

The Indiana Department of Water (IDW) operates as a standalone executive branch department of state government, led by a Governor-appointed Agency Head. The IDW does not manage local infrastructure or collect local user fees; instead, it acts as the supreme scientific and regulatory authority for the state. Its explicit duties are managed through two specialized divisions:

- **The Division of Aquifer Modeling:**
 - **3D Master Map Synthesis:** This division hosts and maintains the definitive, cloud-based 3D subterranean hydrological model of Indiana's entire aquifer network. It continuously aggregates the raw telemetry data streaming from all 39 sub-basin observation grids.
 - **Macro Stress-Testing:** It provides advanced computational stress-testing services. While a local board notes real-time changes, the IDW runs the massive multi-variable predictive algorithms required to determine the 20-year impact of a major manufacturing development.
- **The Division of Compliance and Telemetry:**
 - **Standardization and Calibration:** This division sets the mandatory engineering standards for all monitoring equipment used by the RWMD boards, ensuring data uniformity statewide.
 - **Appellate Arbitrator for Inter-Basin Conflicts:** The IDW acts as the centralized dispute adjudicator. When multiple RWMD boards clash over border aquifer drawdowns or proposed inter-basin transfers, the IDW Agency Head reviews the scientific models from both districts and issues a final, binding regulatory determination.
 - **Federal Funding Pipeline Coordinator:** The IDW manages the Technical Project Priority List (PPL), serving as the state-level gatekeeper that certifies regional infrastructure projects for federal EPA grants, State Revolving Funds (SRF), and Water Infrastructure Assistance Fund (WIAF) capital allocation.

IV. LOCAL FUNDING ARCHITECTURE: THE WATERSHED PROTECTION FEE

To maintain strict fiscal discipline and prevent the creation of new property tax burdens, regional operations shall be funded exclusively through a localized Watershed Protection Fee. This mechanism functions strictly as a resource-preservation user fee, legally isolated from the state general fund and municipal tax levies.

To ensure total transparency and lean public operations, the fund is subject to a strict Statutory Efficiency Mandate: administrative and overhead costs (including consulting, legal, and operational salaries) are legally capped at a maximum of 30% of annual fee revenues. A minimum of 70% of all generated revenues must be directly reinvested into local, tangible water security infrastructure projects, field capital, and direct aquifer protection efforts.

The fee structure scales equitably across four distinct tiers, ensuring that those who rely on the watershed directly fund its technical protection, processed seamlessly through existing collection avenues to prevent administrative bloat:

- Tier 1: Agricultural Resource Fee — \$1.00 per active agricultural acre per year. This fee funds groundwater tracking and gives local agricultural interests a well-capitalized legal entity to protect their underlying asset value. To eliminate standalone administrative costs, this fee shall be processed via a dedicated Watershed Assessment Rider appended directly to existing semi-annual county property tax bills, operating identically to the established framework for regulated drains (the "ditch tax")³.
- Tier 2: Base Residential Unit Fee — \$1.00 per household unit per year. This fee shall be appended to property parcel tax bills as a non-tax user fee rider via the county billing software, mirroring the collection efficiency of legacy local infrastructure assessments.
- Tier 3: Groundwater User Premium — \$10.00 per active private well per year. To protect local health departments from billing overhead, departments will transmit their well permit registries to the County Auditor. The Auditor will map the permits to property parcel numbers, allowing the \$10.00 premium to be automatically collected via the automated county tax billing cycle. This revenue is strictly earmarked for localized aquifer monitoring and the legal defense of residential well pressure against industrial drawdown interference.
- Tier 4: Commercial and Industrial Capacity Fee — To close localized regulatory gaps, businesses connected to public utilities shall pay \$1.00 per year per assigned Equivalent Dwelling Unit (EDU) based on a standard of 500 gallons per day per unit, processed via existing municipal utility billing line items. To ensure equity for off-grid operations in unincorporated areas without requiring expensive water meters, non-utility commercial entities utilizing localized private wells pumping below the high-capacity threshold (under 100,000 gallons per day) shall be assessed a flat annual fee via the standard county property tax assessment rider based on a two-tier capacity bracket:

³ Indiana Code § 36-9-27 et seq. (The Indiana Drainage Code: County Drainage Boards and Regulated Drains).

- Small Off-Grid Commercial (Estimated capacity under 25,000 gallons per day / 50 EDUs): \$25.00 per year.
- Large Off-Grid Commercial (Estimated capacity between 25,000 and 100,000 gallons per day / 50 to 200 EDUs): \$100.00 per year.

Cross-Boundary Assessment Protocol: To ensure equitable collection without double taxation where parcels, utility service areas, or commercial facilities cross HUC-8 boundaries, fees shall be allocated according to the following administrative standards:

- Parcel-Based Fees (Tiers 1, 2, & 3): County Auditors shall utilize standard GIS overlay mapping to assign property parcels. For agricultural land (Tier 1) straddling sub-basin lines, acreages are calculated pro-rata per HUC-8 boundary. For residential units and private wells (Tiers 2 & 3), the fee is assessed based on the primary physical location of the principal structure or wellhead.
- Utility & Commercial Accounts (Tier 4): For municipal or investor-owned utilities whose service territories span multiple districts, Tier 4 EDUs are billed based on the physical location of the service connection/meter. For off-grid commercial facilities, assessments are tied to the physical wellhead location extracting the groundwater.

While the RWMDs monitor and regulate the resource, they *do not* replace the traditional municipal utility bonding process. Instead, the RWMD's role is to issue a technical "Prioritized Capital Endorsement" that fast-tracks the local municipality's application for existing state low-interest loan programs (like the IFA's State Revolving Fund) to execute the actual brick-and-mortar infrastructure upgrades.

Financial Illustration: The Sugar Creek Sub-Basin

To demonstrate the fiscal sustainability of this model, we can examine its application to the Sugar Creek Sub-Basin, the specific hydrological district encompassing the City of Lebanon, along with portions of Boone, Montgomery, and Clinton counties.

Revenue Tier	Sub-Basin Metric (Estimated)	Annual Fee	Projected Revenue
Tier 1: Agriculture	480,000 Cultivated Acres	\$1.00 / Acre	\$480,000
Tier 2: Residential	65,000 Household Units	\$1.00 / Unit	\$65,000
Tier 3: Private Residential Wells	~13,000 Estimated Active Wells	\$10.00 / Well	\$130,000
Tier 4a: Utility Served Commercial	45,000 Active EDUs	\$1.00/EDU	\$45,000
Tier 4b: Small Off-Grid Commercial	600 Small Businesses	\$25.00 Flat	\$15,000
Tier 4c: Large Off-Grid Commercial/Light Industrial	150 Large Businesses	\$100.00 Flat	\$15,000
Total Estimated Revenue			\$750,000

*All Sub-Basin Metrics are Estimated⁴

This regional fund ensures that the Sugar Creek Regional Water Management District Board can afford independent engineering firms, execute continuous aquifer stress testing, and scientifically protect local well pressures without requiring state general fund assistance. Applying the 30/70 rule to this adjusted \$750,000 baseline, a maximum of \$225,000 would cover all regional engineering, legal, and operational overhead, while a minimum of \$525,000 would be cleanly injected directly into tangible local water security projects annually.

⁴ Estimated baselines derived from: Indiana Department of Local Government Finance, Property Tax Management System (Land Class Codes); Indiana Department of Natural Resources, Division of Water (Water Well Record Database); and U.S. Census Bureau, TIGER/Line Shapefiles.

V. STATE-LEVEL FUNDING FRAMEWORK

To support the macro-level operations of the IDW without drawing from the State General Fund, the department's administrative engine will operate via a self-sustaining, tri-tiered dedicated revenue model managed by the Agency Head:

1. **Statutory Revenue Realignment (Base Operations):** The department's core administrative and technical payroll shall be funded via a nominal 0.5% dedication of the state cigarette tax revenue, utilizing the exact structural precedent established under *IC § 6-7-1-29*⁵ for Clean Water Indiana. This ensures long-term operational predictability without expanding the state's tax footprint.
2. **Industrial Regulatory Oversight Surcharges (Monitoring):** The department shall establish a tiered structure of statutory permitting and annual compliance verification fees levied exclusively on Significant Water Withdrawal Facilities (SWWFs) capable of pumping greater than 100,000 gallons per day⁶. Residential wells, small business operations, and standard agricultural use are statutorily exempt. This shifts the engineering cost of heavy industrial drawdown monitoring entirely onto the high-volume commercial entities creating that data-tracking burden.
3. **Centralized Fee-for-Service Technical Modeling (Scaling):** When a local Regional Water Management District Board, municipal utility, or private developer requires an advanced, site-specific aquifer stress-test or regional impact simulation to clear an expansion, the IDW shall execute the technical modeling on a fee-for-service basis. These modeling fees are restricted to an enterprise fund dedicated solely to upgrading state-wide hydrological sensor networks and computing infrastructure.
4. **High-Volume Withdrawal Surcharges & Technical Monitoring Allocations:** To support statewide hydrogeological modeling, automated data-tracking infrastructure, and regional aquifer capacity assessments, the Indiana Department of Water (IDW) shall assess a dedicated monitoring surcharge focused exclusively on high-volume water consumers. Standard residential wells, small business operations, and non-commercial agricultural uses are statutorily exempt. To ensure equity between self-supplied industrial operations and those connected to public infrastructure, the IDW shall structure high-volume assessments across two operational tracks:
 - **Direct Extractors (Self-Supplied SWWFs):** Facilities operating private wellfields or surface water intakes capable of pumping greater than 100,000 gallons per day (pursuant to *IC § 14-25-7-15*) shall be assessed directly by the IDW based on registered withdrawal capacity and metered sub-basin drawdown impact.
 - **Utility-Served High-Volume Industrial Demands:** For large industrial or commercial users who receive water directly from a municipal or investor-owned utility rather than operating private wellfields, the surcharge applies to utility accounts maintaining average daily consumption exceeding 100,000 gallons per day. Utilities shall collect this assessment as an Equivalent Demand Unit (EDU) pass-through on the end-user's

⁵ Indiana Code § 6-7-1-29 (Cigarette Tax; Cigarette Tax Fund; allocation of revenues to Clean Water Indiana).

⁶ Indiana Code § 14-25-7-15 (Registration and reporting requirements for Significant Water Withdrawal Facilities).

statement and remit the funds directly to the State Water Management Fund administered by the IDW.

- Policy Safeguard: Utility-served industrial surcharges must be billed directly to the high-volume end-user account. Municipal utilities are statutorily prohibited from distributing or blending these IDW monitoring surcharges across their general residential or small commercial rate classes.

VI. INTER-AGENCY FINANCIAL ALIGNMENT & FUND GOVERNANCE

To preserve the State of Indiana's premier municipal bonding capacity and eliminate bureaucratic duplication, fund management shall operate via a collaborative framework that separates technical stewardship from financial administration:

- Retention of IFA Fiscal Trusteeship: The Indiana Finance Authority (IFA) shall retain exclusive statutory custody, management, and underwriting responsibility for the Drinking Water and Clean Water State Revolving Fund (SRF) programs and the Water Infrastructure Assistance Fund (WIAF). This ensures continuous compliance with federal EPA capitalization guidelines and protects existing credit covenants with institutional bondholders.
- IDW as Technical Gatekeeper: The IDW shall serve as the sole technical authority for project validation. The Agency Head shall establish a specialized *Regional Water Security Project Priority List (PPL)*. No municipal utility or local Regional Water Management District Board may access SRF regionalization interest rate discounts or WIAF capital loans without a formal *Certificate of Hydrological Compatibility* issued by the department.
- Statutory Earmark for Local Organization: The WIAF statute shall be amended to create a restricted *Regional Management District Startup Account*. Upon formal certification by the IDW Agency Head that a sub-basin has successfully established its multi-county Regional Water Management District Board, the IFA shall automatically disburse a one-time, non-recurring \$250,000 baseline organizational seed grant from this account to fund initial engineering procurement and localized data mapping.

VII. ADVANCED POLICY ENHANCEMENTS & REGULATORY SAFEGUARDS

A. Inter-Basin Water Transfer & Appellate Protocol

The physical transfer of groundwater or surface water across sub-basin boundaries introduces severe economic and environmental vulnerabilities to the originating basin. To manage this, a data-driven transfer protocol is established:

1. Dual-Basin Review Requirement: Any new or expanded project proposing a net Inter-Basin Transfer exceeding an average daily volume of 500,000 gallons per day (GPD) must secure a *Certificate of Environmental Compatibility* from both the originating Regional Water Management District Board and the receiving board.

- Statutory Definition: An *Inter-Basin Transfer* is defined as the physical diversion or piping of surface water or groundwater from its originating HUC-8 sub-basin into a different sub-basin where the water is consumed or discharged without being returned to the originating hydrological system.
 - Grandfathered Operational Baseline: Existing utility interconnections, regional distribution networks, and inter-basin transfers operational are grandfathered at their established historical maximum daily volumes. Dual-basin review is triggered only when a utility or developer proposes a system expansion or new intake that increases net out-of-basin transfers beyond their established historical baseline by more than 500,000 GPD.
2. Export-Impact Surcharge: The receiving entity shall pay a mandatory "Watershed Export Fee" of \$0.05 per 1,000 gallons on the net unreturned volume transferred out of the originating sub-basin. This revenue is remitted directly into the originating district's infrastructure fund to pay for localized aquifer replenishment and monitoring.
 - Regional Resilience Exemptions: To encourage utility interconnection and system redundancy, the Watershed Export Fee shall not apply to:
 - a. Emergency Mutual Aid: Temporary transfers initiated during system outages, main breaks, contamination events, or declared drought emergencies.
 - b. Balanced Reciprocal Interchanges: Seasonal or operational water exchanges where net annual volumes transferred between adjacent utility systems neutralize (net-zero balance).
 - c. Grandfathered Baseline Allocations: Transfers occurring within historical volume thresholds.
 3. The Departmental Final Approval & Appellate Mechanism: The IDW Agency Head retains ultimate veto and final approval authority over all macro-transfers.
 4. Inter-District Appeal Process: If an originating board denies a transfer request, or conversely, if a downstream board believes a neighboring district's internal pumping approvals will negatively impact their shared border aquifer, the aggrieved board may file a formal Administrative Petition for Review with the department.
 - Upon filing, the IDW Agency Head shall issue a 90-day stay on the project.
 - The department's hydrogeological staff will run independent, localized 3D impact simulations.
 - The Agency Head will issue a final, binding administrative ruling to approve, modify, or permanently veto the transfer based strictly on resource sustainability metrics.
 5. Baseline Grandfathering and Cooperative Reduction: For economic stability, existing permitted users are grandfathered at their current historical 5-year average usage baseline to protect their past capital investments. However, if the RWMD's telemetry proves the aquifer is entering a state of critical deficit, the board is empowered to implement proportional, district-wide conservation percentages during peak drought periods, ensuring everyone shares the

stewardship burden equitably. existing inter-basin agreements and transfers are grandfathered in.

B. Geologically Customized Regulatory Mandates

Recognizing that Indiana's subsurface geology requires fundamentally different management strategies, the regulatory framework divides operational priorities based on the state's natural geological split:

- The Glaciated Northern Region: Regional Water Management District Boards operating within deep sand-and-gravel glacial aquifers shall focus their regulatory efforts on Volumetric Quantity and Drawdown Limits. Their primary mandate is tracking the cumulative cone of depression caused by heavy industrial, municipal, and agricultural pumping.
- The Southern Karst Region: While the statewide objectives of ensuring long-term water availability, aquifer yield, and resource allocation security, Regional Water Management District Boards operating in unglaciated, fractured limestone topography shall focus their regulatory efforts on Groundwater Quality and Contamination Velocity. Because surface water enters karst aquifers rapidly through sinkholes and disappearing streams with zero natural filtration, these boards could implement enhanced oversight regarding regional stormwater runoff controls and fast-response spill containment protocols.

C. Statutory Home Rule Protections

To preserve local autonomy under Indiana's Home Rule Act (*IC § 36-1-3*), the jurisdiction of a Regional Water Management District Board is strictly defined and capped to prevent bureaucratic overreach into local municipal and county affairs:

- Retail and Operational Autonomy: Boards are statutorily prohibited from setting municipal utility retail water/sewer rates, managing local distribution infrastructure, or intervening in individual utility personnel decisions. RWMD Board's authority is strictly restricted to *wholesale aquifer capacity management*. The RWMD can tell a local utility how much total water is safely available for extraction from the shared resource, but the local utility retains 100% control over how it prices that water to its retail customers, how it manages its internal treatment plants, and where it runs its local distribution lines.
- Land-Use Zoning Carve-Out: The board possesses zero local zoning or land-use planning authority. Local government units retain full control over local comprehensive plans and zoning boards. However, the board serves as the regional hydrogeological review body issuing a *wholesale Certificate of Hydrological Compatibility* based on verified local sub-basin capacity.
 - Integration with IC § 14-25-7-15 (SWWF Framework): Under current state law, SWWF registration functions primarily as a reporting inventory. This Act modifies the SWWF process by requiring high-capacity withdrawal applications (exceeding 100,000 GPD) to secure a *Certificate of Hydrological Compatibility* prior to active DNR/IDW SWWF permit issuance or local site-plan approval.
 - Zoning Interaction Safeguard: If a proposed project fails to secure a Certificate due to unmitigated aquifer depletion or lack of localized water availability, local Plan

Commissions and Boards of Zoning Appeals are statutorily prohibited from granting variances or approval for the high-capacity water-dependent use.

D. Technical Infrastructure & Automated Observation Grid

To ensure all local and state appellate decisions are backed by best available science, each Regional Water Management District Board must deploy a standardized data gathering network within 18 months of organization:

1. **Standardized Monitoring Grid:** Utilizing a portion of the state's \$250,000 initial seed grant, each district shall establish a unified sub-basin monitoring grid. To maximize fiscal efficiency, districts shall first integrate existing hydrologic infrastructure—including USGS stream gages, Indiana DNR observation wells, municipal monitoring sites, and weather stations—before allocating capital to construct new telemetry-equipped observation wells in unmonitored high-capacity industrial zones or sensitive agricultural borders. Monitoring protocols must aggregate both groundwater elevation telemetry and streamflow gage data to capture surface-water/groundwater interactions, recharge rates, and seasonal baseflow depletion across the sub-basin.
2. **Automated Telemetry & Open-Access Data Integration:** Observation wells and integrated gages shall be equipped with automated digital data loggers tracking groundwater levels, static head elevations, and volumetric discharge. To optimize battery performance, field telemetry costs, and network bandwidth, data shall be logged continuously at fixed intervals and transmitted via scheduled automated intervals (e.g., daily or sub-daily) directly to the open-access IDW statewide 3D aquifer mapping database. IDW shall establish unified data formatting and QA/QC validation protocols across all reporting districts. All validated hydrogeological data shall be published to a publicly accessible web portal, ensuring transparent, standardized data availability for local boards, agricultural stakeholders, and industry while eliminating manual logging errors and self-reporting bias.

VIII. EXECUTIVE CONCLUSION: THE CASE FOR BALANCED WATER SECURITY

The proposed framework offers a decisive structural solution to a challenge that can no longer be managed by temporary local workarounds. By aligning Indiana's water governance with our actual physical topography, this proposal replaces administrative gridlock with predictable, science-driven coordination.

This model successfully reconciles our state's most critical competing priorities: it safeguards the foundational investments of municipal utilities, preserves the resource baseline and land values of agricultural communities, and establishes the clear, objective certainty required to attract transformational economic development. Furthermore, by structuring self-sustaining revenue mechanisms and leveraging the existing financial strength of the Indiana Finance Authority, this framework achieves long-term operational sustainability without generating new public debt or shifting burdens onto general taxpayers.

Ultimately, water management is not a zero-sum choice between economic growth and resource conservation. Through the unified partnership of local Regional Water Management District Boards and the technical expertise of the Indiana Department of Water, Indiana can aggressively expand its industrial and technological horizon while permanently safeguarding the local communities that sustain it.

Indiana's HUC 8 Sub-Basins:

North



Central



South

