

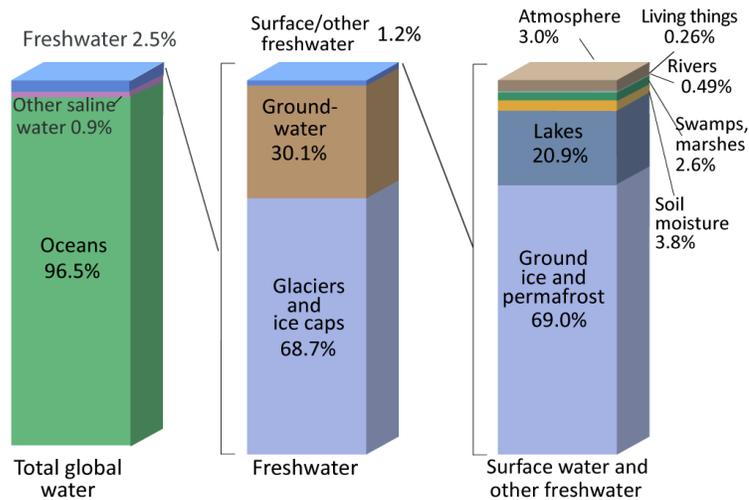
HIGH-CAPACITY WELLS: A SURVEY OF GROUNDWATER WITHDRAWAL RIGHTS AND REGULATIONS

LINDA REID, JD

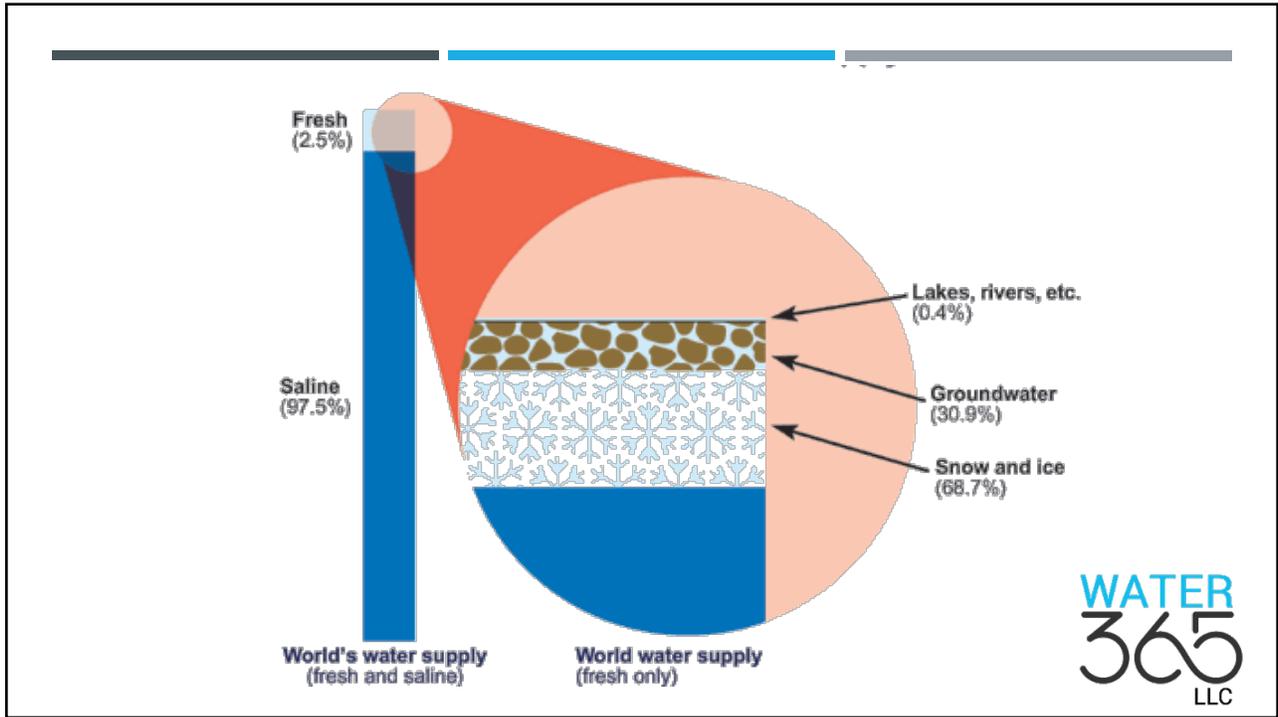


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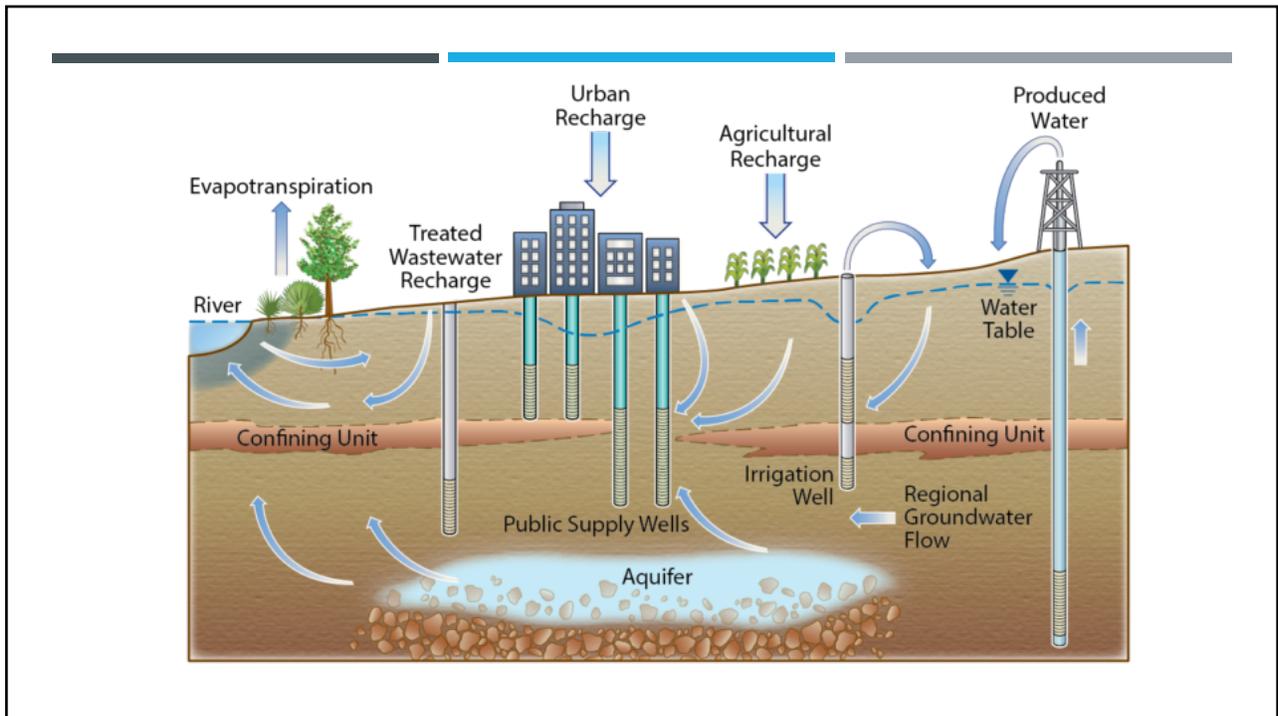
GROUNDWATER REPRESENTS A CRITICAL PORTION OF THE FRESHWATER SUPPLY



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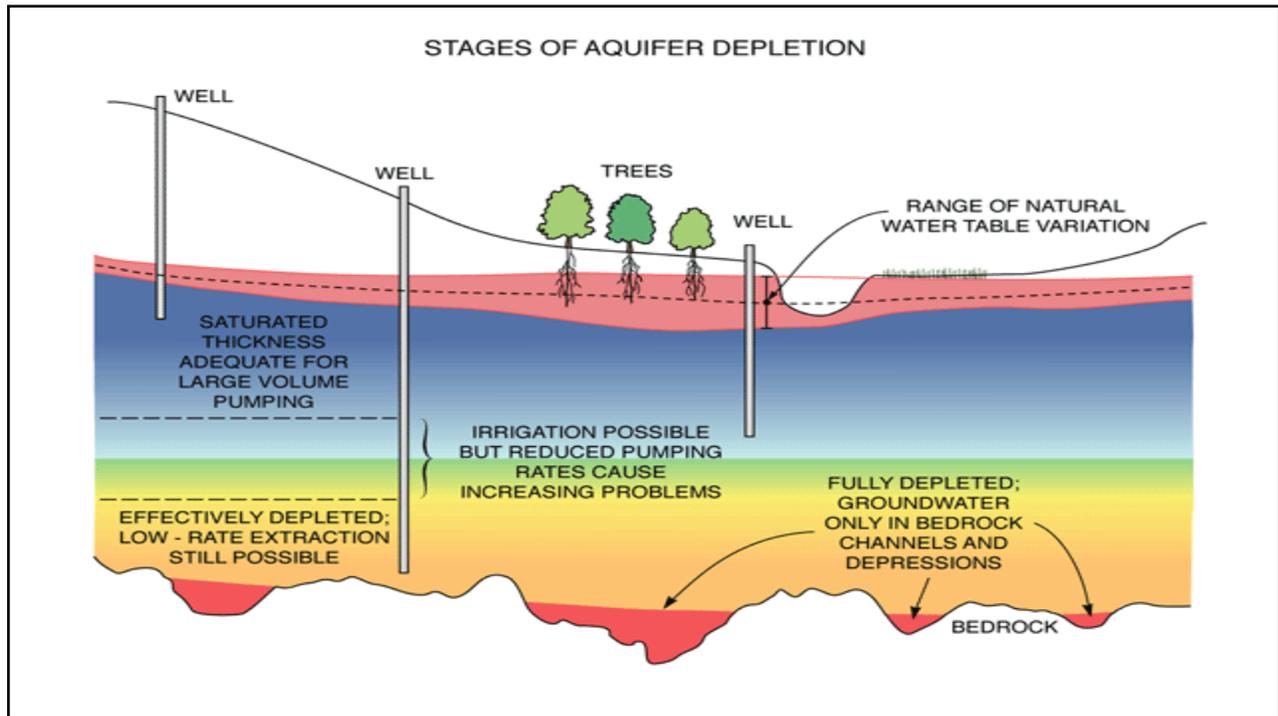
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UNITED STATES GROUNDWATER LAW AND POLICY IS HIGHLY FRAGMENTED

- Lack of overarching federal framework that addresses groundwater and high-capacity wells.
- Water rights are determined primarily at the state level.
- States rules reflect more than a single theory of groundwater rights.
- Existing policy trails the science.

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THE FEDERAL GOVERNMENT PLAYS A LIMITED ROLE IN GROUNDWATER ALLOCATION

- The federal government is generally authorized to act in the public's interest to protect water *quality*.
- Historically, the Clean Water Act (1972) has not been applied to groundwater issues.
- Lack of clarity often leads to more questions than answers.
- Federal agencies can assist states through assessments and information on groundwater trends.



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STATES GENERALLY FOLLOW ONE OF FIVE DOCTRINES OF GROUNDWATER LAW

States regulate groundwater rights through application of common law, state statutes and regulations, or judicial precedent.

- Absolute ownership
- Reasonable use
- Correlative rights
- Restatement of Torts Reasonable Use
- Prior Appropriation



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KEY ASPECTS OF GROUNDWATER ALLOCATION DOCTRINES

Groundwater Allocation	Basis of Right	Withdrawal Amount	Liability	Off-tract Use
Absolute Ownership	Land ownership	Unlimited	No, unless malicious or wasteful	Yes
Reasonable Use	Land ownership	“Reasonable” for beneficial use	Yes, if unreasonable amount or off-tract use	No
Correlative Rights	Land ownership	Proportional share based on ratio of land owned overlying aquifer	Yes, if exceeding share and injurious	No, unless surplus
Restatement of Torts Reasonable Use	Land ownership	“Reasonable” for beneficial use	Yes, if unreasonable amount and injurious	Yes, if reasonable and no harm
Prior Appropriation	“First in time, first in right”	Specific amount based on priority for beneficial use	No, unless interfering with reasonable pumping level of other users	Yes

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UNDER THE ABSOLUTE OWNERSHIP DOCTRINE, LANDOWNERS HAVE AN UNLIMITED RIGHT TO WITHDRAW ANY WATER BENEATH THEIR LAND

- Oldest and simplest doctrine.
- Gives landowners unlimited right to withdraw.
- Many early adopters have moved away from this rule.
- Removes possibility for legal action if an individual is harmed by a neighbors use.
- Some states enacted registration or permitting to prevent unregulated withdrawals.

CT, GA, IN, LA, ME, MA, MS, RI, TX



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TEXAS (ABSOLUTE OWNERSHIP)

- Only state that adheres to absolute ownership in its traditional form.
- Groundwater is property of the owner of land – treated much like a mineral, oil, or gas.
- Permit required for large withdrawals via local groundwater conservation districts (GCDs).
- GCDs cannot regulate wells extracting less than 25,000 gallons/day.



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THE REASONABLE USE RULE MODIFIES THE ABSOLUTE OWNERSHIP DOCTRINE

- Similar to Absolute Ownership with the additional qualifier that groundwater use is “reasonable.”
- Reasonable use = groundwater extractions that are not wasteful or for off-site use.
- Landowner may still make unlimited withdrawals.
- Offers legal remedy for landowner affected by use found to be unreasonable.

AL, AZ, AR, **CA, FL, IL, KY, MD, MO, NE, NH, *NJ, NY, NC, **OK, PA, **TN, VA, WV

**Common law unclear*

***Also follows Correlative Rights*

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ARIZONA (REASONABLE USE)

- Over pumping and mining has led to significant problems in Arizona
- Historically Arizona has relied on reasonable use
- *Bristor v. Cheatham*, 255 P.2d 173 (1953).
- Groundwater Management Act (GMA) introduced in 1980 to sustain groundwater



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THE CORRELATIVE RIGHTS DOCTRINE REQUIRES AN EQUITABLE SHARING OF GROUNDWATER AMONG LANDOWNERS

- Landowner is permitted to withdraw a reasonable amount of groundwater in relation to the amount of land owned over the aquifer.
- Water use rights are correlative, or coequal, limited to a “fair and just proportion of underlying supply.”
- State legislature or judiciary may proportionally reduce all rights in event of water deficit.
- Does not permit use that interferes with the use of water of adjacent landowners.

**CA, DE, HI, IA, **NE, MN *NJ, **OK, **TN, VT

*Common law unclear

**Also follows Reasonable Use Rule



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CALIFORNIA (CORRELATIVE RIGHTS)

- Correlative rights doctrine first applied in *Katz v. Walkinshaw*
- Property rights allow any individual to drill a well and extract their correlative share
- O’Leary v. Herbert introduces application of reasonable use
- Surplus groundwater may be used on land that does not overly the aquifer



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THE RESTATEMENT (SECOND) OF TORTS COMBINES ABSOLUTE OWNERSHIP WITH REASONABLE USE

- Adds consideration to the nature of competing uses and the relative burdens imposed on groundwater users.
- Attempts to provide specific criteria for comparing reasonableness and competing uses.
- Imposes liability for withdrawals that unreasonably affect other users.

MI, OH, WI



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WISCONSIN (RESTATEMENT OF TORTS)

- General set of requirements for all wells and additional requirements for HCW.
- Additional permits and review for HCW:
 - Groundwater protection areas
 - Water loss greater than 95%
 - Potential for significant environmental impact
- Restatement Position adopted in *State v. Michaels Pipelin Co.*, 63 Wis. 2d 278 (1974),
- Recent back and forth regarding high-capacity well regulation.



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UNDER PRIOR APPROPRIATION THE FIRST PERSON TO USE WATER HAS THE BEST LEGAL RIGHTS

- “first in time, first in right”
- Protects investments in wells and business interests.
- Right holder is permitted to pump as much groundwater as can be put to beneficial use.
- Multiple users of a groundwater source are subject to a priority system.
- Groundwater belongs to the state, who can place conditions on withdrawals to protect supply and other users’ rights.

AK, CO, ID, KS, MT, NV, NM, ND, OR, SD, UT, WA, WY



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COLORADO (PRIOR APPROPRIATION)

- Groundwater withdrawals by private wells and public supply systems serve an estimated 20% of state population.
- Groundwater Management Act enacted in 1965.
- Created Groundwater Commission with authority to designate groundwater basins and subject to state regulation.
- Designated basins require permitting for HCW.



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MANAGING GROUNDWATER WITHDRAWALS – LEGAL AUTHORITY

- Tend towards legislative reform in groundwater management policies, but the process has been disorganized
- Groundwater statutes evolved independently from surface water statutes due to the complexity of groundwater as a resource
- Legal source of authority for securing a water use right varies by state
 - Common Law
 - Statutory and regulatory schemes



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WELL MANAGEMENT

- Registration
- Permitting
- Adjudication



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WELL REGISTRATION

- 30 states that have some type of registration requirement
 - Breakdown by common law doctrine:
 - Absolute dominion: 6 states
 - Reasonable use: 13 states
 - Correlative rights: 2 states
 - Restatement of Torts (Second) § 858: 3
 - Prior appropriation: 5
 - Reasonable use/correlative rights: 1
 - States without common law: 1



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COMMON WELL REGULATION EXEMPTIONS

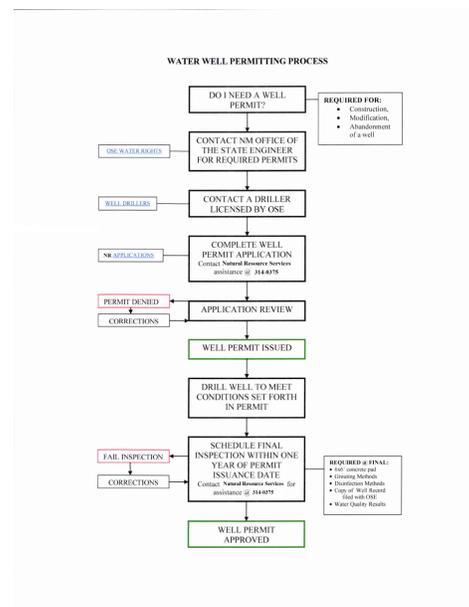
- Agricultural uses (KY, NJ, NC, TN, WV)
- Domestic uses: This typically requires that the well be on a property that serves a single family, or a small number of families, and that the water be used for non-commercial purposes (AR, KY, MI, SC)
- Existing uses (AR, NE, NJ, NY)
- Emergency uses (NH, NY, SC, TN)
- Temporary withdrawals (AL, MI, NH, TN)



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PERMITTING

- The majority of states (44) have some type of permitting scheme in place.
 - Before construction , before use, or before diversion
 - Permit requirements differ by state



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COMMON WELL PERMITTING EXEMPTIONS

- Withdrawals for domestic purposes
- Withdrawals for agricultural purposes
- Emergency withdrawals
- Temporary or nonrecurring withdrawals
- Certain existing water rights may be grandfathered in so as to not require a permit



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ADJUDICATION



Vested rights typically require adjudication, where the court decrees the existence of the right.



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MONITORING AND REPORTING

- For Registered Wells
 - the vast majority of states with registration procedures require that registrants submit reports
- For Permitted Wells
 - some states require all groundwater users who have obtained a permit to report certain information

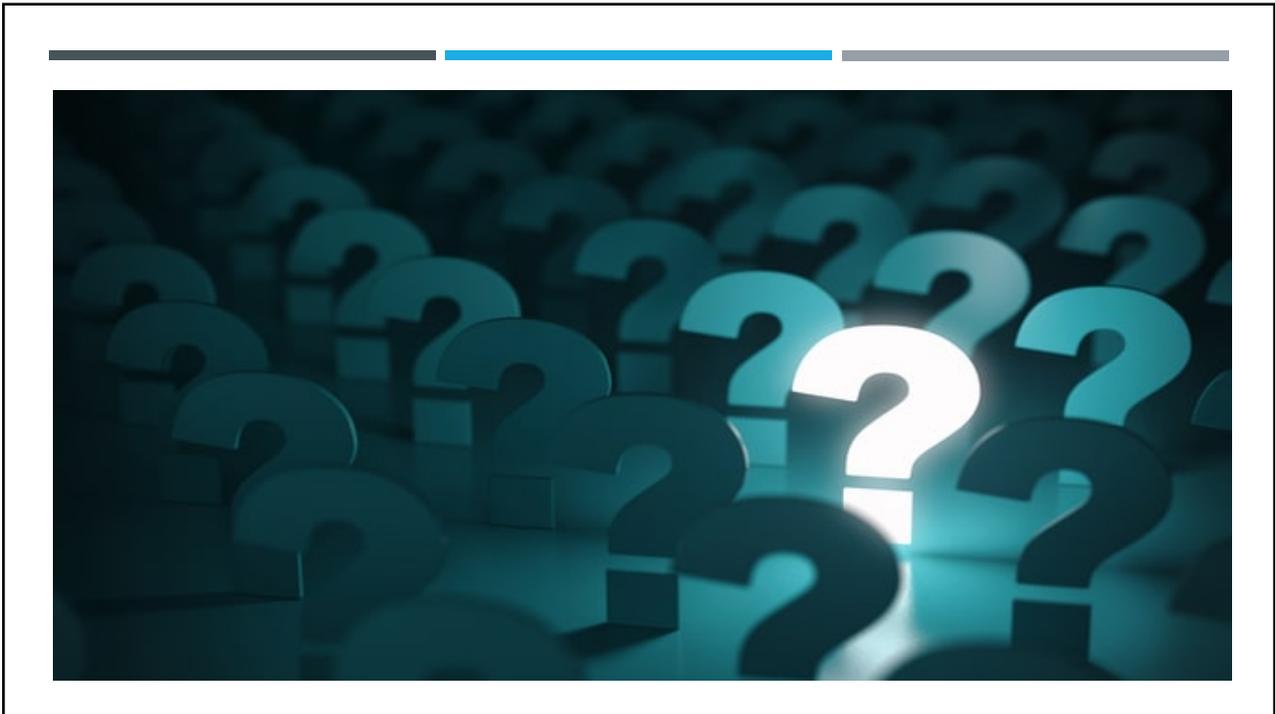
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THE GREAT LAKES COMPACT



- The Great Lakes Compact is an international agreement as to how new or increased surface water or groundwater withdrawals from the Great Lakes basins will be regulated.

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GROUNDWATER RESEARCH STUDY

- Comprehensive review of state and tribal groundwater management, including an analysis of current law, policy, and practice that highlights the key policies and tools needed for sustainable management of groundwater in six Great Lakes states



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COMPONENTS OF ANALYSIS

WHAT: Diagnostic of capacities and gaps within states of MN, WI, MI, IL, IN, OH and native tribes in these regions.

Hydrogeologic data	Technical Management Framework	Groundwater Governance Structure	Legal Resource and Precedent	Informal Power Structure
Where is the water?	How do we manage the water?	Who sets the management rules?	What legal tools exist?	What is missing from our analysis?

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