

No field to land in: how three states’ water withdrawal forms make utility-supplied data centers illegible

Tommy N. Turner

Working paper, version 1.0 — 5 September 2026

Contents

Author note	1
Abstract	2
1. No field to land in	2
2. The exclusion in three states	5
3. What the forms ask	8
4. What the 2026 instruments did to the record	14
5. A field rather than a filer: what the record produces	20
6. Scope	25
7. Conclusion	27
Notes	28
Instruments and records cited	28
Appendix A. Claim-and-source table for section 3	30
Appendix B. Open items	37
About the author	39

Author note

Tommy N. Turner. Independent researcher. tommy@gofast.pro. ORCID 0009-0005-7422-9881.

Disclosure. The author serves on the advisory board of an Alfred P. Sloan Foundation-funded study at Emory University on data centers and the Southern energy buildout, for which he receives a token honorarium. The study had no role in this article, which was prepared independently and entirely from public sources.

Use of generative artificial intelligence. The author used a large language model (Claude, Anthropic) in preparing this article. It was used for retrieval and comparison of the public instruments cited, for editing under the author’s direction, and for mechanical checks of word counts, quotations and cross-references. Quotations from statutes, rules, bills, forms and agency reports were checked against the source docu-

ments named in the notes. The research question, analysis, findings and conclusions are the author's, who takes full responsibility for the content.

Status. This is a working paper. It is not under review at any journal and is not a preprint of a submitted article.

Abstract

Data centers in the United States often buy treated water from a public utility rather than pumping their own. Virginia and Tennessee treat such a facility, by express rule, as a customer rather than a withdrawer of water, and Georgia's surface water statute does the same, its groundwater clause being left open here, so the only report of its consumption that reaches the state is the utility's own. This article reads the reporting forms the three states prescribe, field by field, and shows that none of the four recurring forms, in the revisions read, provides a field built for a customer of this kind. Virginia's form records a sale of water between two waterworks and has no field for the other party. Tennessee's asks a buyer to name its source and asks a seller nothing about its buyers. Georgia's alone ask a seller to identify its buyer, and the field is built for another water system. The reading is of the published paper forms; the three states' electronic filing systems were not accessed. The finding is placed in the literature on how water use comes to be measured, or not, and on the legibility of water consumers to the state: the three states invert the western pattern Kroepsch describes, since the volume is measured and it is the recipient the record cannot see. The article closes with the 2026 record, in which Virginia's General Assembly added a field to the utility's report and left the definition of a withdrawer where it stood.

Keywords: water withdrawal reporting; data centers; public water supply; legibility; reporting forms; Virginia, Tennessee and Georgia (USA).

1. No field to land in

In Virginia and Tennessee a data center that buys treated water from a public utility does not count as a person who withdraws water; each state says so in an express clause of its withdrawal rules. In Georgia the surface water statute defines withdrawal in a way that excludes a customer at a tap, and the groundwater clause is less clear (§ 2). The consequence for the state's record is the subject of this article. The facility's consumption is metered at the point of delivery and billed, but the only report that reaches the state is the utility's own annual or monthly return, and on that return the facility does not appear. The article reads the returns themselves, field by field, to show why. Virginia's form records a sale of water between two waterworks

and provides no field for the name of the other one. Tennessee’s form asks a system that buys water to name its source and asks a system that sells water nothing about its buyers. Georgia’s forms alone ask a seller to identify its buyer, and the field is built for a public water system, which a data center is not.¹ In each state, then, a delivery to a customer that is not itself a water system is not so much excluded from the record as unprovided for on the form: no field is built to take it, and where a field might take a name, § 3.2 says what the form leaves unsettled.

The article speaks to two bodies of work. The first is the study of how water use comes to be measured or not. Kroepsch (2024) has shown that groundwater pumping in the western United States was left unmetered for a century by regimes that registered every pumper while declining to quantify what any of them pumped, a condition she describes as “produced, widened and maintained” rather than merely neglected.² Molle, Lankford and Lave (2024) have shown, across many settings, that a flow which does not fit the categories a record inherited from an earlier purpose is assigned to some other category and ceases to be seen.³ The second body of work concerns legibility, the term Hoefsloot, Richter, Martínez and Pfeffer (2023) take from Scott and gloss as the state’s simplification of what it governs into what it can record, and which they carry into the study of a water utility’s own data. The three eastern states examined here supply a case that runs the other way from Kroepsch’s: the volume is measured, and it is the recipient that the state’s record cannot see. That is the contribution. The illegibility is documented not by inference from outcomes but on the face of the forms, which can be read.

The reason to read them now is that all three legislatures addressed data center water in 2026. The Virginia General Assembly enacted a duty on a water user that supplies water offsite to report the volume it delivered to “a data center, as that term is defined in subdivision A 43 of § 58.1-3506, with an air permit issued by the Department”; the cited section is the Commonwealth’s classification of tangible personal property for local taxation, and subdivision A 43 is its data center class.⁴ The State Water Control Board implemented the duty by adding a subdivision to the reporting regulation, ef-

¹Set out at § 3.2, with the form-face and instruction text of each instrument. The public water system identifier is discussed there on the federal glossary definition.

²Adrienne C. Kroepsch, *Monitored but Not Metered: How Groundwater Pumping Has Evaded Accounting (and Accountability) in the Western United States*, 17 *Water Alternatives* 348, 348, 356 (2024).

³François Molle, Bruce Lankford & Rebecca Lave, *Water and the Politics of Quantification: A Programmatic Review*, 17 *Water Alternatives* 325, 333 (2024). Quoted at § 5. On legibility, Fenna I. Hoefsloot, Christine Richter, Javier Martínez & Karin Pfeffer, *The Datafication of Water Infrastructure and Its Implications for (Il)legible Water Consumers*, 44 *Urban Geography* 729, 732 (2023), citing James C. Scott, *Seeing Like a State* (1999 ed.); engaged at § 5.1.

⁴Va. Code § 58.1-3506 (“Other classifications of tangible personal property for taxation”), subdiv. A 43; Va. Code § 62.1-44.38(C), as amended by 2026 Va. Acts cc. 623 (H.B. 496) and 896 (S.B. 553), approved 13 April 2026, effective 1 January 2027; 9VAC25-200-40 B 3, adopted by the State Water Control Board 23 June 2026, published Va. Register vol. 42, iss. 26 (10 August 2026), effective 9 September 2026. Set out at § 4.1.

fective 9 September 2026; the duty itself begins on 1 January 2027.⁵ In Tennessee, the Senate Commerce and Labor Committee deferred a bill that would have required the same report from each utility serving a data center, published it monthly by facility, and joined it to a facility permit decided under a presumption that residential water access “take[s] precedence over industrial and speculative uses of water”.⁶ In Georgia, a scan of the General Assembly’s bill records by title keyword, described at § 4, found no data center water measure enacted. The scanned bills that reached water did so by prohibiting local governments from keeping usage confidential; one bill the scan reached but did not count would have placed a disclosure on the facility itself.⁷ Section 4 sets out each measure on its text. The article makes no claim about why any legislature or committee chose as it did.

1.1 Method and limits

The method is documentary. Each state’s exclusion of a utility’s customer from its withdrawal duty is quoted from the current codified statute or rule and, where a second rendering was available, compared against it (§ 2). Seven reporting instruments were read in full, field by field, including instructions, enumerated options and worked examples, in the revisions the table at § 3 states. The states’ electronic filing systems were not accessed, and their field lists were not located on the search § 3 describes. The 2026 measures are read from enrolled Acts, bill texts and posted bill histories, and for Georgia from the texts of nine of the 11 bills the scan identified, a term search of a tenth, and the caption and first reader summary of the eleventh (§ 4). Legislative history, case law and opinions of the Attorneys General were not searched in any of the three states. Every limit on a search is stated where the finding is made, and the principal ones are collected at § 6.

Three things the article does not establish are stated now. It does not show that any withdrawer, utility or facility acted unlawfully. It does not quantify the demand reaching data centers through utilities in any of the three states. And it does not claim that the pattern extends beyond the three states, the seven instruments, or the 2026 sessions.

Sources and evidence. Statutes and rules are quoted from the current codification named in the note, and where a second rendering was available the two were

⁵Va. Code § 58.1-3506 (“Other classifications of tangible personal property for taxation”), subdiv. A 43; Va. Code § 62.1-44.38(C), as amended by 2026 Va. Acts cc. 623 (H.B. 496) and 896 (S.B. 553), approved 13 April 2026, effective 1 January 2027; 9VAC25-200-40 B 3, adopted by the State Water Control Board 23 June 2026, published Va. Register vol. 42, iss. 26 (10 August 2026), effective 9 September 2026. Set out at § 4.1.

⁶Tenn. S.B. 2653, 114th Gen. Assemb. (2026), proposed Tenn. Code Ann. §§ 68-221-1404(c), -1407(a), (c); action history. Set out at § 4.3. Text from the General Assembly’s PDF, capitol.tn.gov/Bills/114/Bill/SB2653.pdf, downloaded 5 September 2026.

⁷Ga. S.B. 421 and S.B. 436, as introduced; H.B. 528, as introduced, and its status history. Texts held at legislative_2026_primary/. Set out at § 4.4.

compared and the comparison stated. Forms are quoted from the copy the issuing agency's own download server distributed on the date the note gives, and each form's revision is stated. Bills are quoted from the legislature's own PDF. Where a finding rests on a search that returned nothing, the scope of that search is stated beside the finding or in its note. Some notes give a working file path; it records where the retrieved copy is held and is not a citation. The claim-and-source table for section 3 at Appendix A grades each claim [P] where it rests on the primary instrument, [I] where a step is the author's inference, [P, negative] where a search of a named instrument found nothing, with the scope of that search in the same cell, and [NOT FOUND] where a record was not located. Open items are listed at Appendix B.

2. The exclusion in three states

Virginia and Tennessee place a purchaser of treated water outside the class their withdrawal duty describes by an express clause. Georgia does so on the surface water side by the ordinary meaning of a defined term; on the groundwater side its permit clause reaches a person who would "obtain, or utilize" ground waters, and whether that reaches a utility's customer is a question this article leaves open. The provisions are set out here once, with their bounds.

2.1 Virginia

Virginia's reporting regulation defines the regulated person by reference to the source. The text below is the definition as it stands from 9 September 2026; the version in force to 8 September differs in two words and is noted after it.

"User" means any person making a withdrawal of surface water or groundwater from an original source (e.g., a river, stream, lake, aquifer, or reservoir fed by any such water body), regardless of whether the user himself uses the water thus withdrawn or transfers it to another for use. The purchase of water from a waterworks by a customer of the waterworks does not constitute a withdrawal.⁸

Two clauses do the work and they run in opposite directions. The transfer clause keeps the utility inside the regime whatever it does with the water afterwards. The purchase clause places its customer outside.

The definition is unchanged in substance by the 2026 amendment, which altered the final clause from "a customer of it" to "a customer of the waterworks" and nothing else.⁹

⁸9VAC25-200-10, definition of "user," as amended effective September 9, 2026.

⁹*Id.*, and the version codified from November 28, 2018 to September 8, 2026. The change is a style edit replacing a pronoun with its antecedent; the two definitions are otherwise character-identical.

2.2 Tennessee

Tennessee's exclusion sits in a rule rather than in the Water Resources Information Act of 2002, and it reaches further than Virginia's. A rule of the Division of Water Resources, which administers the Act, provides that "the purchase of water from a utility by a customer, including other water utilities, does not constitute a withdrawal".¹⁰ Where Virginia's clause covers a waterworks customer, Tennessee's covers purchases between utilities as well.

The rule introduces that provision, with three others, as one of "those excluded by the Act". The other three correspond to statutory text.¹¹ No counterpart to the purchaser exclusion was located in the Act itself. That search covered the full text of Tennessee Code sections 69-7-301 through 69-7-307, and a term search of sections 69-7-308 and 69-7-309 for *purchase*, *customer*, *public water system*, *utility* and *withdraw*, returning no occurrences. It did not reach the 2012 rulemaking record, departmental guidance, Tennessee case law or opinions of the Attorney General, and no claim is made here about the department's authority to adopt the provision.

The registration form goes further than the rule. Its instruction sheet states that "[w]ater purchased from a utility or an industry is not required to be reported", adding a class the rule does not name, and the next sentence records that all entities withdrawing water, "whether required or excluded by the Water Resources Information Act of 2002, are encouraged to submit an annual Water Withdrawal Registration". The same form provides a source-type code for purchased water.¹²

2.3 Georgia

Georgia has no express exclusion in the instruments examined. On the surface water side the result follows from a definition. The Surface Water Use Act provides that "'Withdrawal' means the taking away of surface water from its natural course".¹³ A customer drawing treated water from a tap is not taking surface water from its natural course.

On the groundwater side the position is less clear, and this article does not resolve it. Code section 12-5-92 and Rule 391-3-2-.02 define no term "withdrawal"; the defined terms are monthly average, annual average and maximum day withdrawal, each measuring "water pumped by a water source or water system" and each expressed in gal-

¹⁰Tenn. Comp. R. & Regs. 0400-45-08-.03(4), quoted from the Secretary of State's compilation, original rule filed June 18, 2012, effective September 16, 2012, compared against a commercial rendering with no divergence in the provisions relied on.

¹¹*Id.* .03, introductory clause; Tenn. Code Ann. §§ 69-7-304(c), 69-7-304(d), 69-7-303(5).

¹²Tenn. Dep't of Env't & Conservation Form CN-1226 (Rev. 05-15), instruction sheet. The Department's download server distributed the same revision on 5 September 2026 (§ 6).

¹³Ga. Code Ann. § 12-5-31(a)(6), 2025 codification, compared against a second commercial rendering with the passage identical.

lons per day.¹⁴ But the operative clause is not framed on withdrawal alone. Code section 12-5-96(a)(1) provides that “[n]o person shall withdraw, obtain, or utilize ground waters in excess of 100,000 gallons per day for any purpose unless such person shall first obtain a permit therefor from the division”, and Rule 391-3-2-.03(1) repeats the three verbs.¹⁵ Whether a customer taking treated water from a groundwater-sourced utility “obtains” or “utilizes” ground waters within that clause is a question of construction this article does not answer. What can be said is that the measuring definitions attach to pumping, that a customer pumps nothing, and that nothing located applies the permit clause to a utility’s customer.

That account is bounded to those provisions and to Rule 391-3-6-.07, the surface water withdrawal rule, which contains no purchaser exclusion. Of the Ground Water Use Act’s 19 sections, seven were read in full and 12 were searched only for aggregation terms rather than for a definition of withdrawal.¹⁶ The search reached no county instrument, no departmental guidance, no Georgia case law and no opinion of the Attorney General. This article does not assert how a Georgia court or the Environmental Protection Division would decide the question.

2.4 The exclusion is not this article’s finding

The result described in this section is already public and this article does not present it as new.

The Congressional Research Service states it directly: water rights and access issues “would mainly come into play for self-supply ... rather than obtaining water from a public water system. Otherwise, conforming with state water rights and access requirements would be the responsibility of the water service provider that delivers the water to the data center”.¹⁷ A practitioner guide states it for Georgia, concluding that no state withdrawal permit is required of a data center connected to a municipal system because “the city or county holds the withdrawal permit, not the AI data center”, which “is just a customer”.¹⁸ Julie Cunningham, director of the Oklahoma Water Resources Board, has described the same mechanism in her own state: “they buy water as a customer of that system”.¹⁹ Georgia’s Environmental Protection Division has said

¹⁴Ga. Comp. R. & Regs. r. 391-3-2-.02(n), (o), (p). The rules are quoted from an Internet Archive capture of the Secretary of State’s compilation taken May 24, 2025, that page having returned HTTP 403 to direct retrieval, cross-checked against a live Cornell Legal Information Institute rendering and against a federal agency compilation current through rules filed August 10, 2023.

¹⁵Ga. Code Ann. § 12-5-96(a)(1); Ga. Comp. R. & Regs. r. 391-3-2-.03(1) (“withdraw, obtain or utilize ground water in excess of one hundred thousand (100,000) gallons per day for any purpose”).

¹⁶Ga. Code Ann. §§ 12-5-90 to 12-5-108.

¹⁷Cong. Rsch. Serv., *Data Centers and Water: Frequently Asked Questions*, R49057 (2026).

¹⁸Junde Liu, *Georgia Water and Environmental Permits for AI Data Centers*, Compute Law Blog (updated Aug. 3, 2026). Held at [web_sources/Liu_2026_ComputeLawBlog_Georgia_water_permits_AI_data_centers.txt](#), retrieved 5 September 2026. A practitioner guide, cited for the proposition that the point is already public.

¹⁹Juan Vassallo, *A Loophole Leaves Oklahoma Data Center Water Consump-*

the same to a newspaper. Its spokesperson wrote that “[d]ata centers are considered in a similar manner to any other standard customer of the municipal water system providing that service”, and that the Division “does not have a role in determining appropriate customers for municipal water providers”; she said that industrial-scale users supplied by municipal systems are “considered in the water demand forecasting process”, and the reporter recorded that the regional plan’s published industrial forecast “contains no data center category”.²⁰

It is also built into the leading national compilation of state withdrawal data, as a definition. Naseri and Marston, who assembled that compilation across 42 states, define a water user as an entity “required by state law to periodically report their self-supplied water withdrawal from surface water and/or groundwater”. Such withdrawal, they state, “only represents direct water withdrawals by users, not individual deliveries from a water distributor, such as an irrigation district or public water supplier”. They record the consequence for industries drawing on both: “our data may only represent a portion of their overall water use”.²¹

None of the works cited in this subsection asks what a state’s reporting forms do with a customer so placed, or what a legislature does when it notices. Sections 3 and 4 take those questions up.

3. What the forms ask

Section 2 established that Virginia and Tennessee place a purchaser of treated water outside the class their withdrawal duty describes, and that Georgia does so on the surface water side. This section asks what the states’ own reporting instruments collected before 2026, because that is the record in force when each legislature acted, and because a form, unlike a legislature’s reasons, can be read.

Seven instruments were read in full, field by field, including instructions, enumerated options and worked examples.

tion Largely Untracked, Investigate Midwest (July 14, 2026). Held at web_sources/Vassallo_2026_InvestigateMidwest_Oklahoma_data_center_water_loophole.txt, retrieved 5 September 2026.

²⁰Margaret Walker, *30 Data Centers Plan to Use Water from Ocmulgee River. What’s the Impact on Supply?*, The Telegraph (Macon, Ga.), Mar. 11, 2026 (updated Mar. 12, 2026), quoting Sara Lips, spokesperson, Ga. Env’t Prot. Div., by email. Held at web_sources/Walker_2026_MaconTelegraph_30_data_centers_Ocmulgee.txt. Liu, *supra* note 17, renders the same statement as “does not have a role in deciding which customers a municipal water provider may serve”; that is a paraphrase, and the newspaper’s text is quoted here.

²¹Md. Yunus Naseri & Landon T. Marston, *United States Water Withdrawals Database*, 12 Sci. Data art. 2022 (2025), doi 10.1038/s41597-025-06300-1, Methods, “Data collection.”

State	Instrument	Revision	Filed by
Tennessee	CN-1119, Water Pumpage Data Report	09-17	Public water systems, monthly
Tennessee	CN-1226, Water Withdrawal Registration	05-15	Registered withdrawers
Virginia	OWS-3N, Annual Water Withdrawal Reporting Form	eff. Dec. 1, 2018	Registered water users, annually
Virginia	Annual Water Withdrawal Reporting Registration Packet	Rev. Dec. 22, 2025	New registrants
Georgia	Monthly Groundwater Withdrawal Report, Version 3	Aug. 2025	Groundwater permit holders, monthly
Georgia	Monthly Water Withdrawal Report (Raw Water Intake Data)	Nov. 2015	Surface water permit holders, monthly
Georgia	Existing Water System Profile - Municipal	Apr. 2004	Municipal groundwater permit applicants

One bound governs the section and is restated at each claim that depends on it. These are the published paper instruments. Virginia’s Department of Environmental Quality states that its myDEQ portal “is the primary reporting method for Annual Water Withdrawal Reporting”, and Tennessee’s Department of Environment and Conservation requires submission through MyTDEC Forms.²² Neither system’s field list is publicly documented, on a search of both departments’ reporting pages, every resource linked from them, a 52-page portal guide, a public data dashboard and Tennessee’s 12 published portal guides.²³ Nothing here is a claim about what either system collects

²²Va. Dep’t of Env’t Quality, *Annual Water Withdrawal Reporting Registration Packet* (rev. Dec. 22, 2025); Va. Dep’t of Env’t Quality, *Water Withdrawal Reporting* page, retrieved Sept. 4, 2026; Tenn. Dep’t of Env’t & Conservation, *water withdrawal registration program* page, last modified Feb. 19, 2026.

²³Search conducted Sept. 4, 2026. **No public user guide, data dictionary, upload template, schema or application programming interface description enumerating the fields of either**

beyond what the regulation requires. What the regulation requires is a floor, and § 3.1 begins there.

3.1 Water is identified by source

Virginia's regulation states the minimum content of a report. The information "shall include the user's name, address, sources and locations of withdrawal, cumulative volume of water withdrawn each month of the calendar year, maximum day withdrawal and the month in which it occurred, and method of withdrawal measurement", on a form "as prescribed by the board".²⁴ Tennessee's annual renewal rule enumerates a near-identical list.²⁵ Neither enumeration names a recipient.

The prescribed forms organize themselves around the same category. Tennessee's CN-1119, filed monthly by public water systems, identifies water by source name and source type, its key reading "S=Surface Water, G=Ground Water, P=Purchased Water, E=Emergency Source".²⁶ Three of those are sources; the fourth is a flag, and the form's marginal note directs the filer to "[c]ircle source type (S, G, P) and Circle (E) if it is an emergency connection".²⁷ Georgia's groundwater form runs a daily grid across five columns headed Aquifer 1 to Aquifer 5.²⁸ Georgia's surface water form heads each of its five columns with a withdrawal permit identifier and a water source name.²⁹ Virginia's OWS-3N asks for a source type, a sub-type and a water source or well name.³⁰

Purchased water is itself a source type on Tennessee's CN-1119, so a public water system was located. Neither system's submission screens were accessed and no account was created.

²⁴9VAC25-200-40 B, text codified to September 8, 2026.

²⁵Tenn. Comp. R. & Regs. 0400-45-08-.05(2), requiring "the user's name, address, sources and locations of withdrawal, volume of water withdrawn each calendar month for the previous twelve months, maximum day withdrawal and the month in which it occurred, method of withdrawal measurement, and any change in volume or points of withdrawal."

²⁶Tenn. Dep't of Env't & Conservation Form CN-1119, *Water Pumpage Data Report* (Rev. 09-17), form face. **The instruction sheet restates the source type key in a different order and prints "Purchase Water" for the form face's "Purchased Water"; the form face is quoted here.** Form CN-1226 (Rev. 05-15), instruction sheet: "Indicate if water is from Ground (G), Surface (S), or Purchased (P) source."

²⁷Tenn. Dep't of Env't & Conservation Form CN-1119, *Water Pumpage Data Report* (Rev. 09-17), form face. **The instruction sheet restates the source type key in a different order and prints "Purchase Water" for the form face's "Purchased Water"; the form face is quoted here.** Form CN-1226 (Rev. 05-15), instruction sheet: "Indicate if water is from Ground (G), Surface (S), or Purchased (P) source."

²⁸Ga. Env't Prot. Div., *Monthly Groundwater Withdrawal Report, Version 3* (Aug. 2025), cells A46 to A50. Revision dates for the three Georgia instruments are those the Division prints beside each form on its Water Withdrawal Permitting Forms page (fetched 5 September 2026): August 2025, November 2015 and April 2004.

²⁹Ga. Env't Prot. Div., *Monthly Water Withdrawal Report (Raw Water Intake Data)* (rev. Nov. 2015), including the two worked example sheets distributed with it. "Identifier" as printed.

³⁰Va. Dep't of Env't Quality Form OWS-3N (eff. Dec. 1, 2018), instructions, "SOURCE TYPE," "SUB-TYPE" and "WATER SOURCE/WELL NAME."

system buying treated water from another utility records that it did so. The Department can see the transaction on that form. What follows is what the form does with the party at the other end of it.

3.2 Where a supplier names a buyer, the identifier is a utility's

The question that matters for a supplied facility is what a supplier's form asks about the party it delivers to, because the supplier is the filer and the facility is not. The three states answer it differently, and only one asks at all.

Virginia's form records a transfer without naming a counterparty. Source type includes "Transferred Water", defined as "water that is withdrawn by a waterworks owner or operator and transferred to another waterworks owner or operator. It is water bought or sold and is not a direct withdrawal from a source point".³¹ Action type includes Release, "reported by a wholesale waterworks ... the amount of finished or raw water sold by and released from a wholesale waterworks TO a recipient waterworks", and a Delivery counterpart recording the same volume as received.³² The form's identifier fields, including a Virginia Department of Health public water system identification number, are the filer's own; no field takes the other party's name or number.³³ What the form does is define the transaction as one between two waterworks. A filer reporting a Release is, by the definition it reports under, a wholesale waterworks releasing to a recipient waterworks.

Georgia's forms ask the supplier, and ask for a public water system. Its surface water form directs the filer to "[e]nter Public Water System Identifier for water bought or sold", labeling its rows "Sold Water to PWSID" and "Purchased Water from PWSID", and the worked examples distributed with it record purchases from two Georgia pub-

³¹*Id.*, instructions, "SOURCE TYPE" and "ACTION Type." **The form face prints three action values and the instructions list six, "Withdrawal, Delivery, Release, Return, System Delivery, or System Release."** The three relied on here are the first three. Return reaches withdrawals "returned (discharged) to the same waterbody"; the remaining two reach movements to or from a service area within a single waterworks. Neither identifies a recipient outside the filer's own system. The instructions render the last two as "In-System Delivery" and "In-System Release" later in the same instruction, without the prefix.

³²*Id.*, instructions, "SOURCE TYPE" and "ACTION Type." **The form face prints three action values and the instructions list six, "Withdrawal, Delivery, Release, Return, System Delivery, or System Release."** The three relied on here are the first three. Return reaches withdrawals "returned (discharged) to the same waterbody"; the remaining two reach movements to or from a service area within a single waterworks. Neither identifies a recipient outside the filer's own system. The instructions render the last two as "In-System Delivery" and "In-System Release" later in the same instruction, without the prefix.

³³*Id.*, instructions, "SOURCE TYPE" and "ACTION Type." **The form face prints three action values and the instructions list six, "Withdrawal, Delivery, Release, Return, System Delivery, or System Release."** The three relied on here are the first three. Return reaches withdrawals "returned (discharged) to the same waterbody"; the remaining two reach movements to or from a service area within a single waterworks. Neither identifies a recipient outside the filer's own system. The instructions render the last two as "In-System Delivery" and "In-System Release" later in the same instruction, without the prefix.

lic water system identifiers.³⁴ Its groundwater form directs the filer to “[r]eport Water Sold / Purchased : Enter the Public Water System ID Number for water sold and/or purchased”, and labels the entry rows beneath that instruction “System number/name:”.³⁵ The surface water form takes an identifier only. The groundwater form’s instruction asks for one, and its row label admits a name; what a filer might enter there for a buyer that is not a water system is not something the form settles.

Tennessee’s forms ask the buyer, not the seller. CN-1119 requires every source to be named and typed, so a public water system that purchases water names the seller in free text against the code “P”. The form asks nothing of a seller about its buyers. CN-1226, the registration form, likewise takes a source code of “Purchased (P)” from a withdrawer that buys.³⁶

On the supplier’s side of a transaction, therefore, the only forms in the three states that ask the supplier to identify a buyer are Georgia’s. What they ask for is a public water system: by identifier on the surface water form, and by identifier or name on the groundwater form’s row label. On the federal glossary definition adopted here, a public supplier is one that furnishes water “to at least 25 people” or has “a minimum of 15 connections”; a facility that buys its water is not one and holds no such identifier.³⁷ Virginia’s form defines the transaction as waterworks-to-waterworks and does not name the other party. Tennessee’s asks the seller nothing. On these instruments a sale to a computing facility is therefore not excluded so much as unrecordable: in Georgia because the field is built for a water system, and in the other two states because no field for the recipient exists.³⁸ The scope of that statement is the four recurring reporting forms, Tennessee’s CN-1119, Virginia’s OWS-3N and Georgia’s two monthly reports, together with Tennessee’s registration form CN-1226 for the Tennessee finding, in the revisions stated in the table above, read in full including instructions and worked examples. It does not reach any of the three states’ electronic systems, any permit-specific reporting condition, or any departmental guidance published separately.

³⁴Ga. Env’t Prot. Div., *Monthly Water Withdrawal Report (Raw Water Intake Data)* (rev. Nov. 2015), including the two worked example sheets distributed with it. “Identifier” as printed.

³⁵Ga. Env’t Prot. Div., *Monthly Groundwater Withdrawal Report, Version 3* (Aug. 2025), cells A46 to A50. Revision dates for the three Georgia instruments are those the Division prints beside each form on its Water Withdrawal Permitting Forms page (fetched 5 September 2026): August 2025, November 2015 and April 2004.

³⁶Tenn. Dep’t of Env’t & Conservation Form CN-1119, *Water Pumpage Data Report* (Rev. 09-17), form face. **The instruction sheet restates the source type key in a different order and prints “Purchase Water” for the form face’s “Purchased Water”; the form face is quoted here.** Form CN-1226 (Rev. 05-15), instruction sheet: “Indicate if water is from Ground (G), Surface (S), or Purchased (P) source.”

³⁷U.S. Geological Survey, *Water-Use Terminology*, entry “public-supply water use”: “water withdrawn by public and private water suppliers that furnish water to at least 25 people or have a minimum of 15 connections.” Page text retrieved 5 September 2026 and held at [bifurcation_lit/USGS_Water-Use_Terminology_2026-09-05.txt](#). **Whether a computing facility could in principle hold such an identifier under a state’s own waterworks definitions was not searched.**

³⁸Sources as at notes 26 and 27, and Form OWS-3N, *supra* note 28.

3.3 The use taxonomies classify the filer

Four use taxonomies appear across the three states' instruments and they do not correspond to one another.

Tennessee's CN-1226 asks a registered withdrawer to allocate its own withdrawal across 12 use classes summing to one hundred percent, and the underlying rule requires "[t]he use or uses for which the water withdrawn is applied".³⁹ Virginia's OWS-3N asks the filer to write in a category of use, the nine permissible values appearing only in the instructions and the form face carrying a bare write-in field.⁴⁰ Virginia's registration packet, revised in December 2025 and the most recent of the seven instruments, asks the filer instead to check one of seven facility water use types.⁴¹ Georgia's application profile counts service connections in five classes and divides metered sales into residential and non-residential.⁴²

None of the four contains a category for a data center, a computing facility or any comparable term. The scope of that statement is the four instruments named in this subsection, read in full, and it does not reach the Standard Industrial Classification which Virginia's form separately requires a filer to verify.⁴³ Three of the four classify the use the filer makes of the water rather than the use made by anyone the filer serves; a public water system writes in Public Water Supply. Georgia's application profile is the exception and is taken up next.

Two further Georgia instruments were read after the seven, outside the count above, and neither changes what it shows. The groundwater permit application's Part A (General System Information, revised August 2025) asks the applicant to classify its own use among sanitary facilities, central water supply, cooling water, process water and other, a fifth taxonomy of the same kind as the first three, and asks nothing about customers; Part B (Well Data, revised August 2008) asks about wells.⁴⁴

Georgia's profile shows what a class-level breakdown looks like when a state does collect one. It is filed once, with a permit application rather than as a recurring report, and it divides volume exactly once by reference to the buyer: metered residen-

³⁹Tenn. Dep't of Env't & Conservation Form CN-1226 (Rev. 05-15), Part B item 9; Tenn. Comp. R. & Regs. 0400-45-08-.05(1)(d) and -.08. **The form face and the instruction sheet state the twelve classes in materially different words; the form face is quoted here.**

⁴⁰Form OWS-3N, *supra* note 28, instructions, "CATEGORY (of use)." The nine values are Agriculture, Commercial, Fossil Power, Hydro Power, Agricultural Irrigation, Manufacturing, Mining, Nuclear Power and Public Water Supply.

⁴¹Va. Dep't of Env't Quality, *Annual Water Withdrawal Reporting Registration Packet* (rev. Dec. 22, 2025), "Facility Water Use Type."

⁴²Ga. Env't Prot. Div., *Existing Water System Profile — Municipal* (rev. Apr. 2004), sections C and E and footnote 2.

⁴³Form OWS-3N, *supra* note 28, instructions: "SIC reference - Verify that your facility is classified under the appropriate Standard Industrial Classification (SIC)."

⁴⁴Ga. Env't Prot. Div., *Application for a Permit to Use Groundwater, Part A – General System Information* (rev. Aug. 2025) and *Part B – Well Data* (rev. Aug. 2008), downloaded from the Division's Water Withdrawal Permitting Forms page on 5 September 2026 and held at [ga_forms/](#).

tial sales against metered non-residential sales, with the remainder falling into other metered sales, unmetered sales and unaccounted water.⁴⁵ A computing facility sits inside metered non-residential sales with every commercial, industrial, institutional and retail customer on the system. The United States Geological Survey adopted the same structure nationally, having estimated public supply deliveries by category through 1995 and published, from 2005, “estimates of deliveries for domestic use and a combined estimate of all other uses and system losses”.⁴⁶

3.4 What the record therefore held in 2026

Before any of the three legislatures acted, the recurring reporting forms identified water by source. Only Georgia’s asked a supplier to identify a buyer, and they asked for a public water system. None of the four recurring forms attributed a volume to a named recipient that was not itself a water system, on the scope stated at § 3.2. Where an instrument classifies use, it classifies the use the filer makes of the water, with Georgia’s application profile the single exception. Section 4 sets out what each legislature did with that record in 2026.

4. What the 2026 instruments did to the record

The record § 3 describes is the one each legislature had in front of it in 2026. This section sets out what each measure would have added to it, on the text of the measure: Virginia’s, which was enacted; Tennessee’s, which was deferred; and Georgia’s.

4.1 Virginia: a reporting duty on the supplier

Delegate Guzman carried House Bill 496 and Senator Srinivasan Senate Bill 553. The Governor approved both on 13 April 2026, as chapters 623 and 896 of the Acts of Assembly, effective 1 January 2027.⁴⁷ The two enrolled Acts are identical companions, so “two Acts” here is one measure enacted twice.

The Acts amend Code section 62.1-44.38(C). A water user already required to register withdrawal data, and which provides water to another person offsite, must include in its report the total volume of potable water and, reported separately, the total volume of reclaimed water provided each month for two categories. The first is “a data center,

⁴⁵Ga. Env’t Prot. Div., *Existing Water System Profile — Municipal* (rev. Apr. 2004), sections C and E and footnote 2.

⁴⁶U.S. Geological Survey, *Water-Use Terminology*, entry “public-supply deliveries,” under which the page lists, for “2005 and later: estimates of deliveries for domestic use and a combined estimate of all other uses and system losses.” Held at [bifurcation_lit/USGS_Water-Use_Terminology_2026-09-05.txt](#).

⁴⁷2026 Va. Acts cc. 623 (H.B. 496, Guzman) and 896 (S.B. 553, Srinivasan), approved Apr. 13, 2026. Enrolled texts retrieved Sept. 4, 2026.

as that term is defined in subdivision A 43 of § 58.1-3506, with an air permit issued by the Department”. The second, required only “to the extent available without utility billing system modifications”, comprises domestic purposes, commercial and industrial purposes “separately or combined as available”, and all other “non-categorized purposes”. Quarterly submission is permitted where monthly data is not available.⁴⁸

Neither Act directs the adoption of a regulation or a form; the duty rides on an existing permissive statute under which the Board “may, by regulation, require” the reporting of withdrawal information.⁴⁹ The State Water Control Board nonetheless adopted an implementing amendment on 23 June 2026, adding subdivision 9VAC25-200-40 B 3, published in the Virginia Register on 10 August 2026 and effective 9 September 2026.⁵⁰ The Department’s account of what the prior rule omitted states the point in its own words: “The existing regulation does not require the water withdrawal report to include the volume of water provided to another person offsite”.⁵¹

Two features of the rulemaking bear on what was chosen rather than on procedure. The action was exempt from Article 2 of the Administrative Process Act under Code section 2.2-4006 A 4 a, the exemption for regulations conforming to statutory change where the agency has no discretion, and no comment period was held.⁵² And the adopted text leaves the definition of user substantively intact, including the clause providing that the purchase of water from a waterworks by a customer of the waterworks does not constitute a withdrawal, whose only change is the replacement of “it” by “the waterworks”.⁵³ The Board added a subdivision to the list of reportable information and altered nothing about who is a withdrawer.

What the instrument replaced, on the registration side rather than the recurring report, was a checkbox. The Department’s registration packet asks whether the facility “send[s] water to or receive[s] water from another water system” and records that “[a] planner will follow up”; it captures no volume, no counterparty and no category.⁵⁴

⁴⁸Va. Code § 62.1-44.38(C), as amended, quoted from the enrolled text.

⁴⁹2026 Va. Acts cc. 623 and 896, enactment clauses, the second providing “[t]hat the provisions of this act shall become effective on January 1, 2027”; Va. Code § 62.1-44.38.

⁵⁰Va. State Water Control Bd., final adoption of amendments to 9VAC25-200, June 23, 2026, published Va. Register vol. 42, iss. 26 (Aug. 10, 2026), effective Sept. 9, 2026; and the Department’s Agency Background Document for that action. The reporting duty in subdivision B 3 begins January 1, 2027.

⁵¹Va. State Water Control Bd., final adoption of amendments to 9VAC25-200, June 23, 2026, published Va. Register vol. 42, iss. 26 (Aug. 10, 2026), effective Sept. 9, 2026; and the Department’s Agency Background Document for that action. The reporting duty in subdivision B 3 begins January 1, 2027.

⁵²Va. State Water Control Bd., final adoption of amendments to 9VAC25-200, June 23, 2026, published Va. Register vol. 42, iss. 26 (Aug. 10, 2026), effective Sept. 9, 2026; and the Department’s Agency Background Document for that action. The reporting duty in subdivision B 3 begins January 1, 2027.

⁵³9VAC25-200-10, definition of “user,” as adopted. See § 2.1.

⁵⁴Va. Dep’t of Env’t Quality, *Annual Water Withdrawal Reporting Registration Packet* (rev. Dec. 22, 2025). **The packet is a registration document rather than a recurring report, and this comparison is between the registration question and the new reporting duty rather than between two recurring instruments.**

4.2 Three limits on the Virginia instrument

The duty attaches to a supplier. It reaches a water user already obliged to register withdrawal data, and reports what that user provided offsite. Nothing in it requires a facility to report anything about itself, and a facility that withdraws for itself is outside it entirely.⁵⁵

The category is gated by an air permit. It reaches a data center “with an air permit issued by the Department”, so a facility without one falls outside the mandatory category whatever its consumption.⁵⁶ Whether that gate excludes facilities in operation is a question of fact about permit issuance that this note does not answer.⁵⁷

Every other category is conditional on billing software. Domestic, commercial and industrial, and non-categorized volumes are required only to the extent available without modifying a utility’s billing system.⁵⁸ The data center category carries no such qualifier: the one class the Act names is required whether or not the utility’s billing system carries it.

4.3 Tennessee: a bill deferred in committee

Senator Taylor and Representative Reneau carried Senate Bill 2653 and its identical House companion, House Bill 2392.⁵⁹ The bill would have done two things, where Virginia’s Acts did one.

It would have required a permit. No person could operate a data center in the state without one issued by a state board. The application would disclose, among other things, “the name of the body of water or groundwater source” and projected daily, peak and annual usage. It would also carry “[p]roof that the data center will not materially impair, degrade, deplete, contaminate, or adversely affect the availability, quality, reliability, pressure, or reasonable and beneficial use of water for residential or public purposes”. The operator would notify the board of any change in that information within thirty days for as long as the permit is valid.⁶⁰ The board named is the water and wastewater operator board of certification.⁶¹ The permit carried alloca-

⁵⁵Va. Code § 62.1-44.38(C), as amended, quoted from the enrolled text.

⁵⁶Va. Code § 62.1-44.38(C), as amended, quoted from the enrolled text.

⁵⁷No survey of air permits held by computing facilities in either state was undertaken. **A study in this research program records an instance in which the condition described one Virginia county site and not a second; it is not relied on here, and the underlying permit record would have to be cited before it could be.**

⁵⁸Va. Code § 62.1-44.38(C), as amended, quoted from the enrolled text.

⁵⁹Tenn. S.B. 2653 and H.B. 2392, 114th Gen. Assemb. (2026). S.B. 2653 text from the General Assembly’s PDF, capitol.tn.gov/Bills/114/Bill/SB2653.pdf, downloaded 5 September 2026; H.B. 2392 is its identical companion and is not separately quoted.

⁶⁰*Id.*, proposed Tenn. Code Ann. §§ 68-221-1402, -1403(a), (b)(5), (6), (11), (c), (d). The permit requirement reaches operators “including, but not limited to, data centers that source their water through municipal or private utilities.”

⁶¹*Id.*, proposed § 68-221-1402(2), defining “board” by reference to the board created by Tenn. Code

tion content that Virginia’s instrument does not. In deciding an application the board “shall presume that residential water access and the public need for water access take precedence over industrial and speculative uses of water”. It could deny or condition a permit on discharge grounds. Closed-loop systems were required “where technologically and economically feasible, while operating under the presumption that such systems are feasible”. And a data center could not “externalize water treatment, infrastructure expansion, or remediation costs onto public utilities or ratepayers”.⁶² The bill’s definition of a data center is gated by size and ownership, at “a power capacity of more than twenty megawatts (20 MW)” and “privately owned and operated”, the size limb being the analogue of Virginia’s air-permit gate.⁶³

And it would have imposed a supplier-side reporting duty of the same architecture as Virginia’s. On the start of operations the board would notify “each water utility providing service to the data center that the utility must report to the board the amount of water that it supplied or provided to the data center during the immediately preceding billing period”, within 30 days of the end of each billing cycle. The board would then “compile the data it receives ... into monthly reports that clearly state the most recently reported water use of each data center in this state”, and the department of environment and conservation would “publish and maintain” them “in a publicly available location on the department’s website”.⁶⁴

The reporting half is Virginia’s instrument with a shorter reporting interval. The permit half is an allocation instrument Virginia’s Acts have no counterpart to. Senate Bill 2653 was deferred twice in the Senate Commerce and Labor Committee and assigned to general subcommittee on 7 April 2026. House Bill 2392 was deferred three times in subcommittee and taken off notice on 18 March 2026. Neither received a floor vote, and the posted histories record no later action.⁶⁵

The recurring duty falls on the water utility serving the facility, so a self-supplied data center would have generated no report under that subsection. It would still have needed the permit, and it is a registrant under the existing rule if it withdraws an average of 10,000 gallons or more a day.⁶⁶ The bill’s body adds a new part to Title 68 of the Code and amends nothing in Title 69, chapter 7, where the registration statute sits, although its caption names that title. The rule carrying the purchaser exclusion

Ann. § 68-221-905.

⁶²*Id.*, proposed §§ 68-221-1403(b)(5), (6), (11), -1403(d), -1404(b), (c), -1406(a)(2), (b).

⁶³*Id.*, proposed § 68-221-1402(4), which also requires that the facility be “privately owned and operated.” Public Chapter 961, for its own electrical-infrastructure purposes, defines a data center by a projected peak electric demand of fifty megawatts or more; the two thresholds are not the same instrument.

⁶⁴*Id.*, proposed § 68-221-1407(a), (c).

⁶⁵Action histories from the General Assembly’s bill information pages, retrieved Sept. 4, 2026. **The posted histories record no floor vote. They do not establish that no hearing was held, and committee minutes and recordings were not examined.**

⁶⁶Tenn. Comp. R. & Regs. 0400-45-08-.05(1), which requires registration by a person withdrawing an average of ten thousand or more gallons of water per day.

is not a thing a bill amends directly, and nothing in the bill purports to reach it.⁶⁷

The Tennessee General Assembly did enact a data center statute in 2026, Public Chapter 961 (House Bill 1847). It contains no water provision. A term search of the enacted text returns no occurrence of water, withdraw, gallons, aquifer, groundwater or sewer, and its “[i]nfrastructure” is “electrical transmission and distribution facilities” owned by an electric utility or a municipality.⁶⁸

4.4 Georgia: bills that did not pass, and one outside the count

The Georgia General Assembly adjourned sine die on 3 April 2026 having enacted no data center water legislation, on a scan that selected records by title keyword.⁶⁹ Eleven data center bills failed across the biennium. The texts of nine of them were read; Senate Bill 410’s three versions were term-searched for the word water and returned none, and House Bill 1059’s text was not read. Two of the nine name water in their captions, and both reach it the same way. Senate Bill 421 provides that no “county, municipal corporation, authority, or other political subdivision of this state shall enter into any nondisclosure agreement or other similar contract” that prohibits it “from disclosing information related to the electricity usage or water usage, either consumptive or nonconsumptive, of any entity”. Senate Bill 436 carries the same section without the word authority, and a second section that would have suspended for one year the issuance of new sales-tax exemption certificates for high-technology data center equipment.⁷⁰ Neither requires reporting, sets a threshold or mandates measurement; each bars a contract not to disclose and compels no disclosure. None of the other seven texts read contains the word water.

One further bill was reached by the scan but is not counted among the 11, because the count is of bills whose subject the legislature states as data centers. House Bill 528 was introduced on 19 February 2025 and has no recorded action after 21 February

⁶⁷Tenn. S.B. 2653, caption (“AN ACT to amend Tennessee Code Annotated, Title 5; Title 6; Title 7; Title 10; Title 62; Title 65; Title 68 and Title 69”) and Section 1 (“Tennessee Code Annotated, Title 68, Chapter 221, is amended by adding”); the bill has two sections, the second its effective date. Term search of the text for “69-7” and “0400-45” returns no occurrence.

⁶⁸Tenn. Pub. Ch. 961 (H.B. 1847), signed May 7, 2026, public chapter assigned May 18, 2026. Term search of the enacted text conducted Sept. 4, 2026. The word utility occurs twenty-six times and every occurrence concerns electricity or public utility status.

⁶⁹Scan of every legislation record in the Georgia General Assembly’s 2025–2026 Regular Session and 2026 Special Session, Aug. 30, 2026, supplemented by bill status pages retrieved Sept. 4, 2026. **The scan selected records whose title contains “water,” “data center” or “high-technology,” so a bill reaching the subject without one of those words in its title is outside it.** The eleven are S.B. 34, H.B. 559, S.B. 408, S.B. 410, S.B. 421, S.B. 436, H.B. 1012, H.B. 1059, H.B. 1063, H.B. 1323 and H.B. 1387. **The sine die hour and the special session’s subject matter are search-derived and were not confirmed from the legislature’s own Journal.**

⁷⁰Ga. S.B. 421 (LC 56 0482, as introduced), § 2, proposed § 36-80-32; Ga. S.B. 436 (LC 56 0498, as introduced), §§ 1–2, proposed § 36-80-32 and § 48-8-3(68.1)(A.1). Texts downloaded from legis.ga.gov on 5 September 2026 and held at legislative_2026_primary/; read against the manuscript in GA_Bill_Texts_Read_2026-09-05.md.

2025. It would add a section to the revenue title defining a “high resource use facility” as one that “has, or in the case of a proposed or planned facility is reasonably anticipated to have, a peak energy load of 30 megawatts or greater”, and would require each such facility to file a disclosure report: existing facilities annually, proposed facilities before contracting for a tax incentive or applying for a permit to construct or operate. The report’s water items are “[t]he amount of water used annually measured in gallons”, the mean daily amount, the sources “including, but not limited to, rain water, treated water, well water, on-site reservoir, and gray water”, the annual discharge, and the quantity and method of pretreatment; the receiving department “shall publish each disclosure report on its public website”.⁷¹ The bill does not name data centers and does not amend the water title; the disclosure runs to “the department”, which the bill does not define, and is enforced through eligibility for tax incentives. It is the only measure among the ten Georgia texts read, its own included, that would have placed a water disclosure on the facility itself, and it is named here for that reason. The subject matter of four of the 11 was verified against the legislature’s status record; the recorded subjects of the other seven match their texts, save that the version of Senate Bill 34 on disk is a committee substitute addressing large-load electric contract terms and does not use the words data center.⁷²

4.5 The two instruments side by side

	Virginia: enacted by the General Assembly, implemented by the Board	Tennessee: deferred by the Senate Commerce and Labor Committee
Recurring duty to report the volume delivered	On the supplier, in the annual report due 31 January, monthly volumes for data centers with an air permit; other categories to the extent billing systems allow	On the supplier, to the board, within 30 days of each billing cycle, for every data center served

⁷¹Ga. H.B. 528 (LC 50 1124, as introduced, 2025), proposed § 48-1-11(a), (b), (d)(3), and the publication sentence; status history of three entries dated Feb. 19 to 21, 2025. Text held at legislative_2026_primary/. The bill leaves “the department” undefined and the cross-referenced Code sections were not opened.

⁷²Texts of S.B. 34 (Senate committee substitute), H.B. 559, S.B. 408, H.B. 1012, H.B. 1063 (committee substitute), H.B. 1323 and H.B. 1387, held at legislative_2026_primary/ and read on 5 September 2026; term counts for water, withdraw, gallon, groundwater and aquifer are zero in each. Ga. S.B. 410, three versions and fiscal note, term search for *water* returning no occurrences. **H.B. 1059’s text is not on disk. Status histories were retrieved for four of the eleven bills (S.B. 410, S.B. 421, S.B. 436 and H.B. 1059) and for H.B. 528, not for the session. For S.B. 34 and H.B. 1063 only committee substitutes were read.**

	Virginia: enacted by the General Assembly, implemented by the Board	Tennessee: deferred by the Senate Commerce and Labor Committee
Publication	Not required by facility; data “available to local governments and private interests”	Monthly by facility on the department’s website
Facility-side duty	None	Permit; application discloses source and projected usage, updated on change
Allocation content	None	Residential and public access presumed to take precedence; proof of no impairment; closed-loop presumption; no cost externalization
Gate	Air permit	20 MW, privately owned
Definition of a withdrawer	Unchanged in substance	Unchanged

Both instruments left the definition alone and placed the recurring reporting duty on the supplier. They differ in every other row, and the one that became law is the one whose facility-side and allocation rows read “none”.⁷³

5. A field rather than a filer: what the record produces

5.1 How a record leaves a measured volume unattributed

Kroepsch’s account of groundwater in the western United States asks “[h]ow did groundwater pumping become such a ‘black box’ and individual metering become the exception”, and answers that the condition was not an absence but a product, “produced, widened and maintained” over more than a century.⁷⁴ Prior appropriation systems, she finds, “quantified groundwater appropriators and made them legible to

⁷³Sources as at notes 40, 42, 43, 47, 49, 50, 51 and 54; the annual filing date is 9VAC25-200-40 B 1 (“by January 31 of each year”); the availability sentence is 9VAC25-200-20, quoted at § 5.4.

⁷⁴Adrianne C. Kroepsch, *Monitored but Not Metered: How Groundwater Pumping Has Evaded Accounting (and Accountability) in the Western United States*, 17 Water Alternatives 348, 348 (2024). Read in full.

the state ... but without quantifying the volumes of groundwater that should (or should not) be left in the subsurface”, so that metering “remained irrelevant”; her summary is that “regulations are focused on pumpers more than pumping”.⁷⁵

The three states here present the inverse configuration. The volume is quantified, metered at the point of delivery by a supplier with a commercial interest in the reading, and reported to the state inside the supplier’s own withdrawal. What is not made legible to the state is the recipient. On the instruments § 3 reads, and within the bounds stated there, the facility appears in no field, under no category, with no identifier. Kroepsch’s west had legible pumpers and unmeasured pumping; these states have measured delivery and an illegible recipient. The un-measurement is produced not by the absence of a meter but by the absence of a field that attributes the meter’s reading.

Molle, Lankford and Lave supply the general form. “[S]elective ignorance is commonplace”, they observe, and offer an instance from Uzbekistan in which administrators “failed to compute, in their statistics, the irrigated areas growing maize” because that “‘invisible second crop’ did not fit the categories inherited from the Soviet planned economy, which were centred on cotton”, and “also because the water flows received by maize fields were usually ascribed to ‘losses’ and poor management”.⁷⁶ A data center supplied by a utility does not fit the categories the three states’ forms carry, and its water is ascribed to public supply. The United States Geological Survey’s national compilation adopted the same structure from 2005, separating domestic deliveries and consigning every other class to “a combined estimate of all other uses and system losses”.⁷⁷

Hoefsloot, Richter, Martínez and Pfeffer take the term from Scott’s *Seeing Like a State* and gloss it as “the state-imposed processes of abstraction and simplification of real-world messiness to improve its management”, adding that “[l]egibility making, thus, involves the conscious selection of what is recorded and not recorded”.⁷⁸ Their study of Lima’s water utility supplies two observations of the same mechanism, operating between a utility and its customers rather than between a state and its utilities. Where a meter sits at the entry to a multi-family building, “the water consumption registered by SEDAPAL is that of the multi-family unit rather than the individual households”; and consumption “absent from the data used to manage the water

⁷⁵*Id.* at 356 and at 361, Table 1. **The final phrase is a table entry rather than a sentence of running prose, and is quoted as such.**

⁷⁶François Molle, Bruce Lankford & Rebecca Lave, *Water and the Politics of Quantification: A Programmatic Review*, 17 *Water Alternatives* 325, 333 (2024), citing Jozan (2012). Read in full. The phrase “invisible second crop” is Molle, Lankford and Lave’s rendering; Jozan’s work is in French and was not read.

⁷⁷U.S. Geological Survey, *Water-Use Terminology*, entry “public-supply deliveries.” See § 3.

⁷⁸Fenna I. Hoefsloot, Christine Richter, Javier Martínez & Karin Pfeffer, *The Datafication of Water Infrastructure and Its Implications for (Il)legible Water Consumers*, 44 *Urban Geography* 729, 732, 733 (2023), citing James C. Scott, *Seeing Like a State* (1999 ed.). Read in full from the authors’ open-access copy; Scott is cited as Hoefsloot and colleagues characterize him and was not read for this article.

infrastructure” is nonetheless present in policy documents, “grouped with other illegible water flows such as leakages and overflows under the category of non-revenue water”.⁷⁹ A party behind a single point of measurement is recorded as that point, and what the record does not differentiate acquires the label of the residual it falls into. Their categorization, they conclude, is “the result of the, sometimes arbitrary, choices made in the development of digital data technologies”.⁸⁰ Two differences bound the parallel. Their illegible consumers are the poorest, and their illegibility costs them rationing, price and quality; a utility-supplied data center is fully legible to its provider, illegible only to the state’s instrument, and pays nothing for it. And this article claims no strategy: Hoefsloot and colleagues write that maintaining illegibility “can be strategic” for a provider, and nothing in the three states’ records examined here speaks to intent.

What 2026 adds is the observation that when the Virginia General Assembly addressed the condition, it added a line to the supplier’s report and left the definition of a withdrawer, the category that produces the invisibility, where it stood. Tennessee’s bill would have left the definition where it stood as well. What each attached to the line is the subject of the rest of this section.

5.2 Information only, and information joined to allocation

The two instruments that reached the withdrawal record divide on whether they constrain a withdrawal. Virginia’s enacted duty requires a supplier to report a volume. On the text of the Acts and the regulation it does nothing else to the withdrawal regime: it sets no ceiling, imposes no curtailment, alters no allocation priority and changes no permit criterion. Tennessee’s deferred bill carried the same reporting duty and joined it to the permit § 4.3 describes, with its residential-access presumption, its proof-of-no-impairment requirement, its closed-loop presumption and its bar on externalizing costs to ratepayers.⁸¹ That is allocation content.

Neither measure used the allocation instruments its state’s water regime already held. Virginia has groundwater permit criteria and a statutory priority for human consumption (§ 5.5); Tennessee has an inter-basin transfer permit. Tennessee’s allocation content sat instead in a new permit from the operator certification board, outside the registration statute.⁸² In both states the recurring duty to report the delivered volume was placed on the supplier. No new measurement was needed, and the instruments show why. The supplier already files, already holds a meter at the

⁷⁹*Id.* at 741–742, 743.

⁸⁰*Id.* at 745; the “can be strategic” phrase is at 746.

⁸¹Tenn. S.B. 2653, 114th Gen. Assemb. (2026), proposed Tenn. Code Ann. §§ 68-221-1403(b)(11), -1404(c), -1406(a)(2), (b). See § 4.

⁸²Va. Code § 62.1-263 (human consumption priority, discussed at § 5.5) and 9VAC25-610 (groundwater withdrawal permits); Tenn. Code Ann. §§ 69-7-201 to 69-7-212 (Inter-Basin Water Transfer Act). None was amended by the 2026 measures examined; the statement reaches those instruments only.

point of delivery and a billing record keyed to the customer, and a duty placed on it requires no new measurement, only a new field, which is what 9VAC25-200-40 B 3 adds.⁸³ A recurring duty on the facility to report what it received would have required a new class of filer under the water statutes, and neither measure created one. The facility-side duties Tennessee proposed, disclosure of source and projected usage on the permit application, sat outside those statutes and were deferred with the rest.

5.3 What the enacted instrument's three limits exclude

Virginia's limits are visible on its text, and each excludes a class of facility.

The supplier-side design excludes the self-supplier. A facility that takes water from its own well or intake is a withdrawer already, and files under the existing regime if its withdrawal reaches the threshold, which in Virginia is an average of more than 10,000 gallons a day in any month. Section 4 records that Tennessee's reporting duty carried the same feature.⁸⁴ The instrument captures the facility whose demand was invisible because it was inside a utility's total, and does nothing about the facility whose demand was visible all along.

The air permit gate excludes the facility that has not obtained one. Whether any operating facility in Virginia falls into that class is a question of fact this article does not answer.⁸⁵ What the gate does establish is that the legislature identified a data center by reference to a permit issued under a different statute for a different purpose, rather than by reference to its water use. Tennessee's gate was power capacity, 20 MW, at a privately owned facility.⁸⁶

The billing-software condition excludes every category except data centers where the utility's system does not already carry it. The condition records that the information the Act requires was not generally held in the form the Act requires it, and the exemption of the data center category from that concession marks that class out. The General Assembly required the one class it named regardless of whether the utility could readily supply it.

5.4 Reporting to a regulator is not disclosure

The two reporting duties differ on a dimension the disclosure literature treats as decisive. Fung, Weil, Graham and Fagotto distinguish traditional regulatory reporting

⁸³9VAC25-200-40 B 3. See § 4.

⁸⁴See § 4; 9VAC25-200-30 A 1 (applicability to a user "whose average daily withdrawal during any single month exceeds 10,000 gallons per day").

⁸⁵No survey of air permits held by computing facilities in either state was undertaken. **A study in this research program records an instance in which the condition described one Virginia county site and not a second; it is not relied on here, and the underlying permit record would have to be cited before it could be.**

⁸⁶Tenn. S.B. 2653, proposed § 68-221-1402(4).

from targeted transparency. Under the first, information collected by agencies “has been intended for expert use”, and “most information has made a one-way trip to Washington or state capitals where most of it has remained scattered in government files”.⁸⁷ Under the second, information is structured and released so that users other than the regulator can act on it.

Virginia’s instrument is the first kind, with one qualification. The volume a supplier reports goes to the State Water Control Board, whose regulation states that the information is collected “for its use in preparing plans and programs for the management of water resources of the Commonwealth”, and that the data “are available to local governments and private interests to assist them in their own water supply planning”.⁸⁸ Availability to local governments and private interests is not publication by facility, and the characterization that follows is bounded by it. The Act contemplates public reporting by the Board and requires that reclaimed volumes not be aggregated with potable volumes in any such document; nothing in the Act or the regulation requires publication by facility, and whether the Board will publish is not established on anything located.⁸⁹

Tennessee’s bill was the second kind. The board would have compiled the utilities’ reports “into monthly reports that clearly state the most recently reported water use of each data center in this state”, and the department would have published and maintained them on its website.⁹⁰ Facility-level publication at monthly intervals is the design targeted transparency describes, and it was deferred with the permit.

Ben-Shahar and Schneider’s critique of mandated disclosure does not reach Virginia’s instrument: disclosures that “mainly target experts” fall, in their words, “outside our scope”, and among the few contexts in which disclosure to a sophisticated intermediary works they name “firms make environmental disclosures that government entities can use”.⁹¹ Their critique would reach Tennessee’s published monthly table, which was not enacted.

⁸⁷Archon Fung, David Weil, Mary Graham & Elena Fagotto, *The Political Economy of Transparency: What Makes Disclosure Policies Effective?*, Ash Institute for Democratic Governance and Innovation, Harvard University, working paper (2004), at 5. **The peer-reviewed version, David Weil et al., *The Effectiveness of Regulatory Disclosure Policies*, 25 J. Pol’y Analysis & Mgmt. 155 (2006), was not obtained; the working paper is cited as such and the two are not assumed to be identical.**

⁸⁸9VAC25-200-20.

⁸⁹2026 Va. Acts cc. 623 and 896, final sentence of the amended subsection: “Reclaimed water volumes shall not be aggregated with potable water volumes in any public reporting, summary, or planning document produced by the Board pursuant to this section.” **No implementing guidance has been located.**

⁹⁰Tenn. S.B. 2653, proposed § 68-221-1407(c). See § 4.

⁹¹Omri Ben-Shahar & Carl E. Schneider, *The Failure of Mandated Disclosure*, 159 U. Pa. L. Rev. 647, 659, 732 (2011). The second passage closes Part IV.A.1, whose subject is whether sophisticated readers act as agents for other disclosees, and adds that such contexts “are few and far between.”

5.5 What the agency says it lacks

The Virginia Department of Environmental Quality’s July 2026 report to the General Assembly, responding to Senate Joint Resolution 25, describes the record in the same terms. Data center water usage “is aggregated into annual water withdrawal reporting for the associated community water system”, and “[t]here is no publicly available comprehensive data source describing the groundwater-sourced portion of water withdrawals attributed to data centers”.⁹² Elsewhere the same report records that a statutory priority for human consumption cannot be applied to a municipal withdrawal without knowing how much of it serves people, and that “[d]ata from the utilities on the classification of their customers would be needed”. It asks the General Assembly to clarify by legislation how the priority is to be operationalized.⁹³ Those are statements by an agency about its own record, made after the General Assembly had enacted a supplier- side reporting line and before that line takes effect. They are not presented here as showing that any decision would come out differently under attribution. They show that the agency describes the record as § 3 describes it, and that the priority it says it cannot apply is the one Tennessee’s deferred bill would have written into a permit.

6. Scope

Three things are not claimed. The article does not say why any legislature chose as it did. A committee deferral records that a bill did not advance and nothing about the reasons, and no committee transcript, testimony, sponsor statement or lobbying record was examined in any of the three states.⁹⁴ The article does not say that attribution would change any facility’s consumption or any agency’s decision; no behavioral effect is established. And it does not say that Virginia’s instrument will produce facility-level information. The duty begins on 1 January 2027 and the first reports fall due on 31 January 2028. Whether the State Water Control Board will publish volumes by facility is not established on anything located.⁹⁵ The distinction § 5.4 draws between the two designs rests on their text, not on their operation.

⁹²Va. Dep’t of Env’t Quality, *Senate Joint Resolution No. 25: Groundwater Supply East of Interstate 95*, Report § 2.5.2, at 67 (July 2026), responding to S.J. Res. 25. Printed page 67; the PDF text layer places each page’s footer after its text, so a text search appears to put the passage on page 66. **The wording differs from the cognate passage in the Department’s Annual Water Resources Report § 4.3; the two are not interchangeable.**

⁹³*Id.* § 4.2.2, at 106 to 107, and Recommendation 3, discussing Va. Code § 62.1-263.

⁹⁴The legislative records examined are those § 4 cites: enrolled Acts, bill texts, bill histories, first reader summaries, and one fiscal note term-searched. No hearing was attended or transcribed.

⁹⁵9VAC25-200-40 B 1, as amended effective September 9, 2026, requires every nonexempt user to file “by January 31 of each year” for “the calendar year preceding”; the amendment renumbered the paragraph and did not alter the date. On publication, see § 5.4.

The strongest counterargument is that the exclusion is an accounting convention rather than a gap. If both the utility and its customer reported the same gallon, a state would count it twice, and the self-supplied category, as Naseri and Marston define it, counts no delivery.⁹⁶ The article accepts the point, which is why its claim concerns the forms rather than the exclusion. The measurement already exists, in a meter the utility installed and bills against. Whether that measurement enters a state record is a separate question from who holds the permit, and it is the forms, not the permit, that answer it.

Nothing is claimed about any other state. The facility-as-filer route was reached for elsewhere in 2026. The Congressional Research Service report cited at § 2 records two federal bills, one in each chamber, that would require data center operators to report to states or to the Environmental Protection Agency. It also records a Texas direction to its Public Utility Commission to survey data center water use.⁹⁷ None of the three was examined beyond that report. Georgia’s legislative record is stated at § 4 from the texts of nine of the 11 bills the scan identified; a tenth was term-searched, and for the eleventh only the caption and first reader summary were read. The two reaching water did so through nondisclosure agreements. One bill outside the 11 would have placed a water disclosure on every facility with a peak energy load of 30 megawatts or more, a class that reaches data centers of that size and excludes smaller ones.⁹⁸

The principal limits of the record itself are stated where each is made and are collected here; bounds that attach to a single note stay in that note. The claim about the forms reaches the four recurring forms among the seven instruments, in the revisions the table at § 3 states, read as published paper instruments. The field lists of the electronic filing systems were not located on the search § 3 describes, and no permit-specific reporting condition or separately published guidance was read. The 1990 text of Virginia’s reporting regulation was not retrieved. The 2018 amendment to its definitions, the only one the section’s historical note listed before the 2026 amendment, was adopted under the exemption for changes of style or form and altered a citation and a phrase; the purchaser clause carries no addition mark in the Register’s text of that amendment, so the clause stood before 2018 and, on the historical note, from the 1990 original.⁹⁹ The Board’s implementing guidance for the new subdivision

⁹⁶See § 2, quoting Naseri and Marston’s definition of a water user, and § 3 on the use taxonomies.

⁹⁷Cong. Rsch. Serv., *Data Centers and Water: Frequently Asked Questions*, R49057 (2026), listing S. 4213 and H.R. 9825, and describing the Texas survey. **Neither the bills nor the Texas direction was read.**

⁹⁸See § 4 and the notes there.

⁹⁹Va. Register of Regulations vol. 35, iss. 5 (29 October 2018), 9VAC25-200 (Final Regulation), effective 28 November 2018: Registrar’s notice claiming the exemption under Va. Code § 2.2-4006 A 3 “which excludes regulations that consist only of changes in style or form or corrections of technical errors”; summary, “The amendment corrects the citation of a referenced regulation.” The Register’s marked text was checked in a browser for addition and deletion markup on 5 September 2026: two deletions and one addition, “(9VAC25-31-10)”, none in the definition of “user.” Held at VA_Register_Vol35_Iss5_2018_9VAC25-

was not located on the Department’s water withdrawal reporting page as fetched on 5 September 2026, and the OWS-3N form DEQ’s reporting page linked as current on 5 September 2026 is still the December 2018 revision. Tennessee’s registration form is Revision 05-15, which is the revision the Department’s own download server distributed on 5 September 2026. No counterpart to the Tennessee rule’s purchaser exclusion was located in the Act, on a search bounded at § 2, and no claim is made about the department’s authority to adopt it. Whether Georgia’s groundwater permit clause reaches a utility’s customer is not resolved. In all three states, no case law, no opinion of an Attorney General and no departmental guidance beyond what is cited was searched. Every statement about what an instrument does is a statement about its text.

7. Conclusion

On the recurring water withdrawal reporting forms of Virginia, Tennessee and Georgia, in the revisions read here, a delivery of treated water to a data center has no field of its own, and the article has shown where in each state it fails to land. Virginia’s form records a transfer as a transaction between two waterworks and does not name the other party. Tennessee’s asks a buyer to name its source and asks the seller nothing. Georgia’s alone ask a supplier to name a buyer, and what they ask for is a public water system, which a data center, on the federal definition § 3 adopts, is not. Kroepsch’s western regimes made pumpers legible and left pumping unmeasured; the record examined here measures the delivery and leaves the recipient illegible, and the illegibility is produced by the form. When the Virginia General Assembly addressed that condition in 2026 it added a line to the supplier’s report and, on the text of its Acts, no duty on anyone else; the definition that keeps the customer from being a withdrawer was altered only by replacing “it” with “the waterworks”.¹⁰⁰ A Tennessee Senate committee deferred a bill that would have added the same line, published it monthly by facility, and joined it to a permit decided under a presumption that residential access takes precedence over industrial and speculative use. Section 5.3 states, on the text of the Acts, what the enacted instrument leaves outside the record: the self-supplier, the facility without an air permit, and every category the utility’s billing system does not already carry. The category that produces the condition is unchanged in Virginia and Tennessee, and no measure altering it was found in Georgia on the title-keyword scan section 4.4 describes. The one instrument that became law adds a field to the utility’s report. It does not add the facility to the class of persons who report. The Board will see a volume delivered to a class of customer; it will not see a customer.

200_Final.txt. 9VAC25-200-10, historical note.

¹⁰⁰See § 4.1 and § 2.1.

Notes

Instruments and records cited

Every item below is a public document. Statutes and rules are cited to the codification named in the note that relies on them; forms are cited to the revision the issuing agency distributed on the date given. Retrieval dates are those the notes state. Code sections that appear in the notes as proposed text — Tennessee’s §§ 68-221-1402 through -1407 and Georgia’s §§ 36-80-32, 48-1-11 and 48-8-3(68.1)(A.1) — are provisions of the bills listed here and are not separately enumerated; none was enacted.

Virginia

Va. Code § 2.2-4006 A 3 and A 4 a (exemptions from Article 2 of the Administrative Process Act) · § 58.1-3506, subdiv. A 43 · § 62.1-44.38 and § 62.1-44.38(C) as amended · § 62.1-263.

2026 Va. Acts ch. 623 (H.B. 496, Guzman) and ch. 896 (S.B. 553, Srinivasan), approved 13 April 2026, enrolled texts.

9VAC25-200-10 (definition of “user”), as amended effective 9 September 2026 and as codified from 28 November 2018 to 8 September 2026 · 9VAC25-200-20 · 9VAC25-200-30 A 1 · 9VAC25-200-40 B, B 1 and B 3 · 9VAC25-610 (groundwater withdrawal permits).

Virginia Register of Regulations vol. 35, iss. 5 (29 October 2018), 9VAC25-200 final regulation, with its marked text checked for addition and deletion markup · vol. 42, iss. 26 (10 August 2026), the 2026 final regulation.

State Water Control Board, final adoption of amendments to 9VAC25-200, 23 June 2026, and the Department’s Agency Background Document for that action.

Department of Environmental Quality: Form OWS-3N, *Annual Water Withdrawal Reporting Form* (effective 1 December 2018), form face and instructions · *Annual Water Withdrawal Reporting Registration Packet* (revised 22 December 2025) · Water Withdrawal Reporting page (retrieved 4 September 2026) · *Senate Joint Resolution No. 25: Groundwater Supply East of Interstate 95, Report* (July 2026).

Tennessee

Tenn. Code Ann. §§ 69-7-301 through 69-7-309, including § 69-7-303(5) and § 69-7-304(c) and (d) · §§ 69-7-201 through 69-7-212 (Inter-Basin Water Transfer Act) · §

68-221-905.

Tenn. Comp. R. & Regs. 0400-45-08-.03, including the introductory clause and .03(4) · -.05(1), (1)(d) and (2) · -.08. Quoted from the Secretary of State’s compilation, original rule filed 18 June 2012, effective 16 September 2012, compared against a commercial rendering.

S.B. 2653 and H.B. 2392, 114th General Assembly (2026), as introduced, with their posted action histories; S.B. 2653 text from the General Assembly’s PDF, downloaded 5 September 2026. Tenn. Pub. Ch. 961 (H.B. 1847), signed 7 May 2026.

Department of Environment and Conservation: Form CN-1119, *Water Pumpage Data Report* (Rev. 09-17), form face and instruction sheet · Form CN-1226, *Water Withdrawal Registration* (Rev. 05-15), form face and instruction sheet · water withdrawal registration program page (last modified 19 February 2026).

Georgia

Ga. Code Ann. § 12-5-31(a)(6) · §§ 12-5-90 through 12-5-108, including § 12-5-96(a)(1).

Ga. Comp. R. & Regs. r. 391-3-2-.02(n), (o) and (p) · r. 391-3-2-.03(1) · r. 391-3-6-.07. Quoted from an Internet Archive capture of the Secretary of State’s compilation taken 24 May 2025, cross-checked against a Cornell Legal Information Institute rendering and a federal agency compilation.

Environmental Protection Division: *Monthly Groundwater Withdrawal Report, Version 3* (August 2025) · *Monthly Water Withdrawal Report (Raw Water Intake Data)* (revised November 2015), with the two worked example sheets distributed with it · *Existing Water System Profile — Municipal* (revised April 2004) · *Application for a Permit to Use Groundwater, Part A – General System Information* (revised August 2025) and *Part B – Well Data* (revised August 2008) · Water Withdrawal Permitting Forms page (fetched 5 September 2026).

General Assembly, 2025–2026 Regular Session and 2026 Special Session: S.B. 34, H.B. 559, S.B. 408, S.B. 410, S.B. 421, S.B. 436, H.B. 1012, H.B. 1059, H.B. 1063, H.B. 1323 and H.B. 1387, with the reading of each stated at section 4.4 and Appendix B; and H.B. 528 (2025), as introduced, with its status history.

Federal

Congressional Research Service, *Data Centers and Water: Frequently Asked Questions*, R49057 (2026).

United States Geological Survey, *Water-Use Terminology*, entries “public-supply water use” and “public-supply deliveries”, page text retrieved 5 September 2026.

Published work relied on

Omri Ben-Shahar and Carl E. Schneider, *The Failure of Mandated Disclosure*, 159 U. Pa. L. Rev. 647 (2011) · Archon Fung, David Weil, Mary Graham and Elena Fagotto, *The Political Economy of Transparency* (Ash Institute working paper, 2004) · Fenna I. Hoefsloot, Christine Richter, Javier Martínez and Karin Pfeffer, *The Datafication of Water Infrastructure and Its Implications for (Il)legible Water Consumers*, 44 Urban Geography 729 (2023) · Adrienne C. Kroepsch, *Monitored but Not Metered*, 17 Water Alternatives 348 (2024) · François Molle, Bruce Lankford and Rebecca Lave, *Water and the Politics of Quantification*, 17 Water Alternatives 325 (2024) · Md. Yunus Naseri and Landon T. Marston, *United States Water Withdrawals Database*, 12 Scientific Data art. 2022 (2025).

Press and practitioner sources

Junde Liu, *Georgia Water and Environmental Permits for AI Data Centers*, Compute Law Blog (updated 3 August 2026) · Juan Vassallo, *A Loophole Leaves Oklahoma Data Center Water Consumption Largely Untracked*, Investigate Midwest (14 July 2026) · Margaret Walker, *30 Data Centers Plan to Use Water from Ocmulgee River. What's the Impact on Supply?*, The Telegraph (Macon, Georgia), 11 March 2026, updated 12 March 2026.

Appendix A. Claim-and-source table for section 3

Section 3 is the section the finding rests on, so its claims are tabulated here against the document each rests on. Grades follow the key at section 1.1. “Obtained” states whether the primary document is held on disk; where it is not, the row says what was used instead. Sections 1, 2 and 4 to 7 carry citation at the point of claim and have no claim table.

#	Claim in section 3	Document relied on	Grade	Obtained
A1	Seven instruments were read in full, field by field, in the revisions the table states	The seven forms and instruction sheets themselves	[P]	Yes; state_forms/ and ga_forms/

#	Claim in section 3	Document relied on	Grade	Obtained
A2	myDEQ is “the primary reporting method for Annual Water Withdrawal Reporting”; Tennessee requires MyTDEC Forms	DEQ Water Withdrawal Reporting page (ret. 4 Sept. 2026); TDEC registration program page (last modified 19 Feb. 2026)	[P]	Yes, as page text
A3	Neither electronic system’s field list is publicly documented	Search of both departments’ reporting pages, every linked resource, a 52-page portal guide, a public dashboard and Tennessee’s 12 portal guides, 4 Sept. 2026	[P, negative, searched]	Search record; no submission screen was accessed and no account created
A4	Virginia’s regulation states the minimum content of a report and names no recipient	9VAC25-200-40 B, codified to 8 Sept. 2026	[P]	Yes

#	Claim in section 3	Document relied on	Grade	Obtained
A5	Tennessee's annual renewal rule enumerates a near-identical list and names no recipient	Tenn. Comp. R. & Regs. 0400-45-08-.05(2)	[P]	Yes
A6	CN-1119 identifies water by source name and source type, key "S=Surface Water, G=Ground Water, P=Purchased Water, E=Emergency Source"	Form CN-1119 (Rev. 09-17), form face	[P]	Yes. The instruction sheet restates the key in a different order and prints "Purchase Water"; the form face is quoted
A7	Georgia's groundwater form runs a daily grid across columns headed Aquifer 1 to Aquifer 5	Monthly Groundwater Withdrawal Report, Version 3 (Aug. 2025)	[P]	Yes
A8	Georgia's surface water form heads each column with a permit identifier and a source name	Monthly Water Withdrawal Report (Raw Water Intake Data) (rev. Nov. 2015)	[P]	Yes, with the two worked example sheets

#	Claim in section 3	Document relied on	Grade	Obtained
A9	OWS-3N asks for source type, sub-type and a water source or well name	Form OWS-3N (eff. 1 Dec. 2018), instructions	[P]	Yes
A10	Virginia's form defines Transferred Water as water moved between two waterworks owners or operators	OWS-3N instructions, "SOURCE TYPE"	[P]	Yes, quoted
A11	Release and Delivery are action types recording a sale from a wholesale waterworks to a recipient waterworks	OWS-3N instructions, "ACTION Type"	[P]	Yes, quoted. The form face prints three action values and the instructions six; the three relied on are the first three
A12	OWS-3N's identifier fields, including the VDH public water system identification number, are the filer's own, and no field takes the other party's name or number	OWS-3N form face and instructions, read field by field	[P, negative on the instrument]	Yes. Read field by field against the form face and the instructions

#	Claim in section 3	Document relied on	Grade	Obtained
A13	Georgia's surface water form directs the filer to enter a Public Water System Identifier for water bought or sold, in rows labeled "Sold Water to PWSID" and "Purchased Water from PWSID"	Same form and its worked examples	[P]	Yes. "Identifier" as printed
A14	Georgia's groundwater form instruction asks for a Public Water System ID Number and its entry rows are labeled "System number/name:"	Monthly Groundwater Withdrawal Report, Version 3, cells A46 to A50	[P]	Yes
A15	What a filer might enter on that row for a buyer that is not a water system is not something the form settles	The row label and instruction, read together	[I], stated in the text as unresolved	The instrument is held; the question is one of construction and is left open

#	Claim in section 3	Document relied on	Grade	Obtained
A16	Tennessee's forms ask the buyer and ask the seller nothing about its buyers	CN-1119 form face; CN-1226 (Rev. 05-15) instruction sheet	[P, negative on both instruments]	Yes
A17	A public supplier is one furnishing water to at least 25 people or having a minimum of 15 connections. The inference drawn from it, that a facility buying its water is not one and holds no such identifier, is the author's and is bounded by A18	USGS <i>Water-Use Terminology</i> , entry "public-supply water use"	[P] for the definition; [I] for the inference	Yes; bifurcation_lit/USGS_Water_Use_Terminology_2026-09-05.txt. The entry relied on is "public-supply water use", not the glossary's separate "public water system" entry
A18	Whether a computing facility could in principle hold such an identifier under a state's own waterworks definitions	—	[NOT FOUND]	Not searched. Stated as a bound at note 30

#	Claim in section 3	Document relied on	Grade	Obtained
A19	Four use taxonomies appear across the instruments and none contains a category for a data center or comparable term	CN-1226 Part B item 9; OWS-3N instructions “CATEGORY (of use)”; DEQ registration packet (rev. 22 Dec. 2025) “Facility Water Use Type”; Georgia’s Existing Water System Profile — Municipal (rev. Apr. 2004)	[P, negative on the four instruments]	Yes. Bounded in the text; does not reach the SIC code OWS-3N separately requires a filer to verify
A20	Georgia’s profile divides volume once by reference to the buyer, metered residential against metered non-residential	Existing Water System Profile — Municipal, sections C and E and footnote 2	[P]	Yes
A21	The USGS national compilation adopted the same structure from 2005	<i>Water-Use Terminology</i> , entry “public-supply deliveries”	[P]	Yes

#	Claim in section 3	Document relied on	Grade	Obtained
A22	Part A asks the applicant to classify its own use among five classes and asks nothing about customers; Part B asks about wells	Application for a Permit to Use Groundwater, Part A (rev. Aug. 2025) and Part B (rev. Aug. 2008)	[P]	Yes; ga_forms/, downloaded 5 Sept. 2026. Read after the seven and outside that count

The bound that governs the section. Every claim above concerns the published paper instruments in the revisions the table at section 3 states. None reaches any of the three states’ electronic filing systems, any permit-specific reporting condition, or any departmental guidance published separately.

Appendix B. Open items

Each names what is not established and, where one exists, the document that would close it.

Instruments and the record.

1. **The 1990 text of Virginia’s reporting regulation (VR680-15-01) was not retrieved.** The purchaser clause is placed in the 1990 original by inference: the 2018 amendment was the only one the section’s historical note listed before 2026, it claimed the style-or-form exemption, and the Register’s marked text carries no addition mark on the purchaser sentence. The 1990 Register scan would confirm it directly.
2. **The State Water Control Board’s implementing guidance for 9VAC25-200-40 B 3 was not located** on the Department’s water withdrawal reporting page as fetched on 5 September 2026. The bound is that page and that date.
3. **The field lists of myDEQ and MyTDEC Forms were not located** on the search recorded at A3. Nothing in the article is a claim about what either system collects beyond what the regulation requires.
4. **The OWS-3N revision DEQ links as current on 5 September 2026 is still the December 2018 revision,** and Tennessee’s CN-1226 is Revision 05-15,

which is what the Department's own download server distributed on that date. Whether either agency holds an unpublished later revision is not established.

Georgia.

5. **Whether Georgia's groundwater permit clause reaches a utility's customer is unresolved.** The clause reaches a person who would "withdraw, obtain, or utilize" ground waters; the measuring definitions attach to pumping and a customer pumps nothing. No Georgia case law, Attorney General opinion or departmental guidance on the point was searched.
6. **House Bill 1059's text is not on disk;** only its caption and first reader summary were read. Senate Bill 410 was term-searched for *water* only, across three versions and a fiscal note, and those files are likewise not held on disk, so that negative rests on the search as run and not on a retained copy. Nine of the eleven texts were read in full and are held.
7. **Only committee substitutes were read for Senate Bill 34 and House Bill 1063.**
8. **Status histories were retrieved for four of the eleven bills and for House Bill 528, not for the session.** The sine die hour and the special session's subject matter are search-derived and were not confirmed from the legislature's own Journal.
9. **The bill scan selected records by title keyword** — "water," "data center" or "high-technology" — so a bill reaching the subject without one of those words in its title falls outside it.
10. **House Bill 528's cross-referenced Code sections were not opened,** and the bill leaves "the department" undefined.
11. **Twelve of the Ground Water Use Act's 19 sections were searched only for aggregation terms,** not read for a definition of withdrawal. Seven were read in full.
12. **Georgia's rules are quoted from an Internet Archive capture** of the Secretary of State's compilation taken 24 May 2025, that page having returned HTTP 403 to direct retrieval, cross-checked against a Cornell Legal Information Institute rendering and a federal agency compilation current through rules filed 10 August 2023. No later-filed rule was searched.
13. **Whether a computing facility could in principle hold a public water system identifier under a state's own waterworks definitions was not searched.** The article's statement that it holds none rests on the federal glossary definition, not on any state's definition of a waterworks.

Tennessee.

14. **No counterpart to the rule's purchaser exclusion was located in the Water Resources Information Act,** on the search bounded at section 2. The 2012 rulemaking record, departmental guidance, case law and Attorney General opin-

ions were not reached, and no claim is made about the department's authority to adopt the provision.

15. **Committee minutes and recordings were not examined.** The posted histories record no floor vote; they do not establish that no hearing was held.

Literature and secondary sources.

16. **Scott's *Seeing Like a State* was not read for this article.** It is cited as Hoefsloot and colleagues characterize it, and the gloss of legibility quoted at section 5.1 is theirs, at page 732, not Scott's.
17. **Weil et al. (2006), the peer-reviewed version of the Fung, Weil, Graham and Fagotto paper, was not obtained.** The 2004 working paper is cited as such and the two are not assumed identical.
18. **Jozan (2012) was not read.** It is in French; the "invisible second crop" phrase is Molle, Lankford and Lave's rendering.
19. **The two federal bills and the Texas survey direction recorded by the Congressional Research Service were not examined beyond that report.**

Facts not established.

20. **No survey of air permits held by computing facilities was undertaken** in Virginia or Tennessee, so whether the air-permit gate excludes any operating facility is not answered.
21. **In all three states, no case law, no Attorney General opinion, no departmental guidance beyond what is cited, and no legislative history was searched.**
22. **No agency was asked.** The article reads instruments. Three questions would change what it can say: what myDEQ and MyTDEC actually collect, what the Board intends to publish under the new subdivision, and what a Georgia filer is told to enter on the groundwater form's "System number/name:" row for a buyer that is not a water system.

About the author

Tommy N. Turner is an independent writer and policy analyst working from Williamsburg and Christiansburg, Virginia. He has thirty years of background in corporate banking and international banking consulting, holds an Emory MBA (Goizueta) and PMP certification, and writes citizen-focused policy reports and commentary on institutional behavior, risk, and public policy. His analysis of Virginia public affairs has appeared in the *Richmond Times-Dispatch*, the *Virginia Mercury*, the *Virginian-Pilot*, the *Roanoke Times*, *Cardinal News*, and *RTO Insider*.

Three companion papers read the same subject from the state side and are openly

deposited: *Declared, Not Measured*, on Georgia's groundwater permit trigger, doi 10.5281/zenodo.22240697; *A Line Drawn on a Highway*, on Virginia's groundwater management boundary and its grandfathered rivers, doi 10.5281/zenodo.22117147; and *The Aquifer Says No*, on the Department of Environmental Quality's Senate Joint Resolution 25 study, doi 10.5281/zenodo.21817721.

Contact: tommy@gofast.pro · ORCID 0009-0005-7422-9881