

the results of the 2020 presidential election or the results of any other federal, state, or local election. Plaintiffs' claims instead concern the more ordinary, yet no less critical, interest in safeguarding the credibility and reliability of Georgia's elections.

Plaintiffs are multiple Georgia voters and the Coalition for Good Governance ("CGG"), a nonprofit organization dedicated to government accountability and the protection of constitutional rights. They argue that Georgia's electronic in-person voting system violates the individual plaintiffs' and CGG members' right to vote, to due process, and to equal protection under the First and Fourteenth Amendments to the United States Constitution. They therefore ask the Court to stop Georgia's use of its electronic in-person voting system so that it can be replaced with a hand-marked paper ballot system.

At trial, Defendants renewed their long-running argument that the Court lacks jurisdiction over Plaintiffs' claims because Plaintiffs do not have standing to pursue them. Standing is a legal doctrine drawn from Article III of the Constitution that limits the power of the federal courts. It prohibits courts from exercising jurisdiction over a plaintiff's legal claim unless the plaintiff establishes, among other things, that they have suffered (or will likely suffer) an injury to a legally protected right or interest, which a court order can remedy.

Although Plaintiffs weathered similar standing challenges during earlier stages of this case, circumstances have changed. First, the Supreme Court has more clearly defined the legal requirements for standing. Second, Plaintiffs face a higher

evidentiary burden to establish standing at trial than they did at earlier stages of this case—for example, by proceeding to trial, Plaintiffs no longer benefit from the favorable standards of review that helped them rebut Defendants’ pretrial motions on standing. Finally, the injuries supporting Plaintiffs’ standing argument have evolved.

At trial, Plaintiffs argued that they have standing to pursue their claims because Georgia’s electronic voting system harms the individual Plaintiffs and CGG members in two ways. First, they argue that the voting system makes it impossible for these voters to verify that the QR codes on their printed ballots, which are used to tabulate their votes, accurately reflect the ballot selections they made on the voting machines. In support of this alleged injury, Plaintiffs elicited expert testimony regarding how hackers could exploit the election system’s cybersecurity vulnerabilities to manipulate ballot QR codes. Because QR codes are not human readable, these voters cannot confirm that the data in the QR code reflects their selections, rather than an error or manipulated voting data.

Second, Plaintiffs argue that these voters are injured by having to complete the burdensome process of reviewing their ballot selections twice: once on the voting machine screen and again by verifying the limited information on their printed ballot. Plaintiffs emphasize that while the printed ballot lists their selections, it omits other key information, such as the names of the other candidates and a full description of each race or ballot question.

After lengthy consideration of the parties' arguments and voluminous trial evidence, the Court concludes that Plaintiffs lack standing to pursue their claims because neither of these asserted injuries constitute an invasion of a *legally protected* interest under governing precedent.

First, Plaintiffs do not claim that Georgia's use of a QR code for the tabulation of in-person ballots prevents the individual Plaintiffs or the CGG members from voting, dilutes their votes, or prevents their votes from being counted. They instead claim that because the voting system tabulates their votes by scanning an indecipherable QR code on their printed ballots, they are unable to verify that the QR code that is tabulated accurately captures the selections that they made on the voting machine. Second, Plaintiffs' evidence of the burdens imposed by the voting system's ballot-review process reflects that, although some voters may find the voting process challenging, it is not by itself an obstacle to a voter's casting of their ballot. Because neither of these alleged injuries implicate established legally protected interests, the Court must find that Plaintiffs do not have standing. The Court thus lacks jurisdiction to consider the merits of Plaintiffs' claims and must dismiss this case.

Although Plaintiffs have not ultimately prevailed on their legal claims, their work has identified substantial concerns about the administration, maintenance, and security of Georgia's electronic in-person voting system, including those described by their expert witness, Dr. Alex Halderman. These investigative and educational efforts have prompted meaningful legislative action to bolster the

transparency and accountability of Georgia’s voting systems. Thus, while this lawsuit must now come to an end, the impact of Plaintiffs’ important work will endure.

I. BACKGROUND¹

A. The BMD System

This lawsuit challenges the constitutionality of the electric, computerized voting system used for in-person voting in Georgia. When it was originally filed in 2017, Plaintiffs challenged Georgia’s use of its old electronic voting system, the Direct Recording Electronic (“DRE”) system and software that dated back to 2002 and had not been upgraded. *See Curling v. Kemp*, 334 F. Supp. 3d 1303 (N.D. Ga. 2018); *Curling v. Raffensperger*, 403 F. Supp. 3d 1311, 1319 (N.D. Ga. 2019); *Curling v. Raffensperger*, 397 F. Supp. 3d 1334 (N.D. Ga. 2019). The parties litigated the DRE system’s constitutionality over several years, with the Court ultimately enjoining the State’s use of the DRE system in August 2019. *See Curling v. Raffensperger*, 702 F. Supp. 3d 1303, 1324–29 (Nov. 10, 2023) (recounting litigation history).²

¹ Because the Court ultimately concludes that Plaintiffs have not established that they have standing to pursue their claims, it lacks jurisdiction to consider the merits of their claims—including by engaging in fact finding. *See F.D.A. v. Alliance for Hippocratic Medicine*, 602 U.S. 367, 378 (2024); *Bochese v. Town of Ponce Inlet*, 405 F.3d 964, 974–75 (11th Cir. 2005). Thus, the following constitutes a recitation of the relevant procedural history, trial evidence, and legal arguments. It should not be construed as findings of fact.

² The Court’s summary judgment order provides a detailed account of this litigation history, including the fulsome evidence presented at both the 2018 and 2019 preliminary injunction hearings. For a full review, the Court directs the reader to that order, *see* 702 F. Supp. 3d at 1324–29, as well as the preliminary injunction orders themselves. (Docs. 309, 579).

But earlier that year, the Georgia State Legislature initiated the replacement of the DRE system by passing House Bill No. 316 (“HB 316”), which was signed into law in April 2019. *See* 2019 Ga Laws Act 24. The legislation required that all Georgia elections:

be conducted with the use of scanning ballots marked by electronic ballot markers and tabulated using ballot scanners for voting at the polls and for absentee ballots cast in person . . . provided, however, that such electronic ballot markers shall produce paper ballots which are marked with the elector’s choices in a format readable by the elector.

O.C.G.A. § 21-2-300(a). It added that election equipment “shall be the same in each county” and “shall be provided to each county by the state, as determined by the Secretary of State.” *Id.*³ To avoid delay, the legislation called for the new ballot marking device system to be implemented, “[a]s soon as possible, once such equipment is certified by the Secretary of State as safe and practicable for use.” *Id.*

After accepting bids for election systems complying with HB 316, the Secretary of State awarded the contract to Dominion Voting Systems in July 2019. *See* (Dominion Contract, Curling Pls. Ex. 47); (Trial Tr. Vol. 5A, Doc. 1836 at 235:16–21 (Sterling)). The Dominion ballot-marking-device voting system (“the BMD system”) includes the following equipment and associated services:

- Touchscreen Ballot Marking Devices (“BMDs”);
- BMD Printers;

³ But in any primary or election “in which the use of voting equipment is impossible or impracticable,” the election “may be conducted by paper ballot” as arranged by the county superintendent. O.C.G.A. § 21-2-281 (referencing O.C.G.A. § 21-2-334)).

- The Democracy Suite Election Management System including all hardware and software components;
- ImageCast Precinct Tabulators (“ICP scanner”);
- ImageCast Central Scanners (“ICC Scanner”);
- Molded Plastic Ballot Boxes; and
- Electronic Pollbooks.

(*Id.* at ECF 50–66). Georgia has used the BMD system for in-person voting in all elections since the 2020 election cycle.

B. The Voter Experience

1. Election Day Voting

A voter uses the following process to vote in person on election day using the BMD system.

First, the voter checks in at their precinct, receives a voter access card, and inserts it into the BMD. (Trial Tr. Vol. 12, Doc. 1843 at 12 (M. Barnes)). The access card contains a signature key for the election and a ballot activation code. (*Id.*) Once the voter’s ballot is activated, they make their selections on the BMD’s touchscreen. (*Id.* at 11 (M. Barnes)). The voter may then review their selections on the BMD screen, before directing the BMD Printer to print their ballot. (Trial Tr. Vol. 2, Doc. 1833 at 18–19 (Price)). The printed paper ballot contains human-readable text listing the voter’s selections and an unencrypted QR code containing a record of their selections. (*Id.*); *see* (Curling Pls. Ex. 425, (Halderman Report) at ECF 20). The voter can read the human-readable text on the printout but not the data contained in the QR code. (Trial Tr. Vol. 7B, Doc. 1838 at 156 (Halderman));

(Trial Tr. Vol. 8A, Doc. 1839 at 154–55 (Missett)); (Trial Tr. Vol. 2, Doc. 1833 at 19 (Price)).

The voter then feeds the printed ballot into the precinct’s ICP scanner, which tabulates their vote based only on the data extracted from the QR code. *See* (Trial Tr. Vol. 11, Doc. 1842 at 22 (Evans)); (Trial Tr. Vol. 7B, Doc. 1838 at 156–57 (Halderman)); *see also* (Curling Pls. Ex. 425 (Halderman Report) at ECF 13–14)).⁴ After the polls close, each ICP scanner is directed to print the poll tape showing the vote tallies. (Trial Tr. Vol. 7B, Doc. 1838 at 186 (Halderman)).

2. Early Voting

Rather than voting in person on election day, Georgians can vote early in person or by mail-in absentee ballot.

For in-person early voting, the voter goes through essentially the same BMD voting process as voters casting their ballot in person on election day. *See* (Trial Tr. Vol. 11, Doc. 1842 at 23 (Evans)). But for absentee voting, a voter requests a hand-marked paper absentee ballot, which they receive by mail. (*Id.* at 27 (Evans)). Once the absentee ballot arrives, the voter fills it out and returns it to an official drop box or to their county elections office. (*Id.* at 27 (Evans)). Upon receiving a completed absentee ballot, county election officials verify the voter’s information, confirm that the voter was issued the absentee ballot, and—if the information is correct—

⁴ The ICP scanner creates a digital image of the front and back pages of the voter’s ballot and includes a third page showing how the scanner interpreted the information on those two pages. (Trial Tr. Vol. 12, Doc. 1843 at 13 (Barnes)).

accept the ballot. (*Id.* at 28 (Evans)). Once accepted, the ballot is put into a batch, and all ballots in the batch are fed into the ICC scanner for tabulation. (*Id.*).

C. Security Concerns About the BMD System

At trial, Plaintiffs presented expert evidence on the BMD system's vulnerabilities. An extensive 2021 report by University of Michigan computer scientist and professor Dr. J. Alex Halderman⁵ outlined how the BMD system could be targeted for outside manipulation. (Curling Pls. Ex. 425 (Halderman Report)).⁶ Among other things, Dr. Halderman found that an attacker could potentially alter ballot QR codes to modify voter selections, install malware on BMDs, manipulate smart cards, alter audit logs, and obtain county-wide BMD passwords. (*Id.* at 5–6).

Regarding the ballot QR codes, Dr. Halderman emphasized that although “attackers can alter the QR codes on printed ballots to modify voters’ selections,” voters “have no practical way to confirm that the QR codes match their intent,” even though the QR codes “are the only part of the ballot that the scanners count.” (*Id.* at 5–6). His report first explained how attackers could manipulate the unencrypted QR code on voters’ ballots by installing malware on the ordinary laser printers that are attached to BMD machines to print voters’ completed ballots. *See*

⁵ Dr. Halderman's research focuses on computer security and privacy. (*See* Halderman CV, Curling Pls. Ex. 93 at 26–53).

⁶ The Court has previously listed Dr. Halderman's significant qualifications and expertise in the area of cybersecurity. *See, e.g., Curling et al.*, 2023 WL 7463462, at *3. Defendants do not challenge Dr. Halderman's expertise.

(*id.* at 21–26). He next outlined how malware could be installed onto the BMD machine to change the data in the QR codes before they are sent to the printer. *See* (*id.* at 35–36). The result would be that the data in the QR code—and accordingly, the vote counted by the ICP scanner—reflects the fraudulent choices of the attacker, rather than the voter’s selections. (*Id.*). Further, an attacker could try to hide his work by programing the malware to only alter the ballots’ QR codes and not the human-readable text that is reviewed by voters and used for election audits. *See* (*id.*).

In early 2022, Dr. Halderman’s Report and findings were shared with the Cybersecurity and Infrastructure Security Agency (“CISA”), a component of the U.S. Department of Homeland Security. *See* (Trial Tr. Vol. 7B at 129–30 (Halderman)). CISA issued a June 2022 public advisory that confirmed and validated Dr. Halderman’s findings about vulnerabilities in the BMD system. (Curling Pls. Ex. 89, CISA Advisory). In it, CISA lists nine BMD vulnerabilities that can be exploited by bad actors, including by the installation of malware or the forging of poll worker, voter, and technician smart cards. (*Id.*). Like Dr. Halderman, CISA found that malware could be spread to BMDs through removable media or a county’s Dominion Election Management System (“EMS”).⁷ (*Id.*).

At trial, Dr. Halderman testified about his findings and simulated “attacks” to demonstrate how voting equipment and software could be manipulated. For

⁷ The EMS is a collection of servers and computers that operate the Dominion voting software. (Curling Pls. Ex. 425 at 49).

example, he showed that BMDs can be attacked by sticking a ballpoint pen in the back of the machine to reboot the BMD in safe mode, which can allow an attacker to gain access to election files and manipulate the machine. (Tr. Vol. 7B, Doc. 1838 at 141–49 (Halderman)). Dr. Halderman also demonstrated attacks that employ a forged technician card or the installation of vote-flipping malware using a USB device. *See (id.* at 160–62, 169–70, 173–74, 177–81, 184–87 (Halderman)).

Next, Plaintiffs presented evidence of potential vulnerabilities in the Poll Pads that precincts use to check in voters. Since Poll Pads are connected to the internet, (Trial Tr. Vol. 5A, Doc. 1836 at 211 (Sterling)), Plaintiffs assert that an attacker may be able to manipulate the voter access cards that are generated by the Poll Pads and inserted by voters into the BMDs.

Finally, Plaintiffs introduced evidence of a serious security breach that occurred in Coffee County, Georgia in the aftermath of the 2020 election. Dr. Halderman testified that the breach in Coffee County has increased the risk to future elections using the BMD system because it resulted in election software and data being distributed to unauthorized recipients both within the United States and abroad. *See* (Trial Tr., Vol. 8A Doc. 1839 at 120–21 (Halderman)).

D. The Plaintiffs, Their Claims & Their Asserted Injuries

1. The Plaintiffs & Their Claims

There are three sets of Plaintiffs in this case. The “Curling Plaintiffs” include three individuals: Donna Curling, Donna Price, and Jeffrey Schoenberg. The “Coalition Plaintiffs” include one organization, the Coalition for Good Governance

“CGG”), and three individuals: Laura Digges, William Digges, and Megan Missett (the “Individual CGG Plaintiffs”).⁸ On the eve of trial, Ricardo Davis separated from the other Individual CGG Plaintiffs and retained new counsel to pursue a separate trial strategy.⁹ *See* (Docs. 1737, 1764); *see also* (Doc. 1749 at 10). Although he obtained separate trial counsel, Davis’s legal claims under the operative pleadings remain at core the same as the other Coalition Plaintiffs.

Four claims survived summary judgment and were presented at trial. *See* (Summary Judgment Order, Doc. 1705 at 134 (denying summary judgment on Counts III and IV of Curling Plaintiffs’ Third Amended Complaint and Counts I and II of Coalition Plaintiffs’ First Supplemental Amended Complaint)). The Curling Plaintiffs claim that the BMD system violates their rights under the Fourteenth Amendment’s Due Process Clause and Equal Protection Clause. *See* (Curling Pl. TAC, Doc. 267 ¶¶ 113–32); (Pretrial Order, Doc. 1728 at 13). And the Coalition Plaintiffs claim that the BMD system unlawfully burdens CGG members’ right to vote under the First and Fourteenth Amendments and violates the

⁸ Multiple Plaintiffs and CGG members have computer science or information technology (commonly referred to as “IT”) experience in their educational or professional lives. *See* (Trial Tr. Vol. 2, Doc. 1833 at 9–10 (Price) (testifying that she worked in the IT department at Emory University)); (*id.* at 48–49 (Nakamura) (testifying that she has a degree in computer science from Wellesley College)); (Trial Tr. Vol. 1, Doc. 1832 at 113 (Martin) (testifying about her career and experience as a software engineer, and her multiple mathematics and science degrees)).

⁹ Besides these eight named Plaintiffs, members of CGG also provided relevant testimony at trial. Those CGG members include Aileen Nakamura, Rhonda Martin, and Jeanne Dufort. The executive director of CGG, Marilyn Marks, also testified.

Fourteenth Amendment's equal protection clause. *See* (Coalition Pl. FSAC, Doc. 268 ¶¶ 221–37); (Pretrial Order, Doc. 1728 at 13–14).

2. Plaintiffs' Alleged Injuries

As this litigation progressed over the last seven years, Plaintiffs' alleged injuries evolved in response to changes to Georgia's voting systems and the effects of various court orders. The theories of injury that Plaintiffs pursued at trial are somewhat narrower than those originally alleged in the operative pleadings.

i. Curling and Individual CGG Plaintiffs

First, the Curling and Coalition Plaintiffs¹⁰ assert that the individual plaintiffs and the CGG members are harmed by their inability to review the contents of the QR code on their printed BMD ballots, which makes it impossible to verify that their votes will be “counted as cast.” *See* (Pls. Proposed Findings, Doc. 1822 ¶ 76); (Trial Tr. Vol. 1, Doc. 1832 at 18–19 (Opening Arguments)); (Trial Tr. Vol. 17, Doc. 1848 at 11–12, 55, 167 (Closing Arguments)). Plaintiffs emphasize that by using the phrase “counted as cast,” they are not referencing a voter's ability to know how their ballot will be tabulated, but rather “the ability of the voter to verify that the vote of record that will be tabulated is in fact an accurate record of the

¹⁰ Although he retained separate trial counsel, Ricardo Davis did not clearly state in his briefing or trial arguments that he is asserting different injuries from the other Individual CGG Plaintiffs. And his Proposed Findings of Fact and Conclusions of Law do not address the issue of standing. *See* (Doc. 1823). In light of this, and the Court's directive that Davis was not permitted to use his last-minute change in counsel to “inject . . . new narrative[s] for Defendants to defend against” at trial, *see* (Doc. 1749 at 11), the Court does not construe his trial arguments or briefing as asserting separate theories of injury. Thus, for the purposes of the Court's standing analysis, Davis is viewed as asserting the same injuries as the other Individual CGG Plaintiffs.

voter's selections made on the touchscreen.” (Pls. Proposed Findings, Doc. 1822 ¶ 76 n.9); *see also* (Trial Tr. Vol. 17, Doc. 1848 at 167 (Closing Arguments) (stating that Plaintiffs' asserted injury is not that the voter is unable to know if their ballot is counted accurately but that “the voter has no way to know if the ballot of record reflects their selections” because the QR code is not human readable.

For example, Plaintiff Shoenberg testified that because the QR code is what is used for tabulation, and because humans cannot read the QR code, he has no way to verify that his ballot reflects his selections when it is read by the ICP scanner. (Trial Tr. Vol. 1, Doc. 1832 at 72 (Shoenberg)). Plaintiff Price similarly testified that “the ballots are not voter verified because they have a QR code” that is used for tabulation. *See* (Trial Tr. Vol. 2, Doc. 1833 at 16–17 (Price)). They allege that this harm is exacerbated by the security vulnerabilities of the of the BMD system. *See, e.g.*, (Trial Tr. Vol. 17, Doc. 1848 at 9 (Closing Arguments)).

Second, the Curling and Coalition Plaintiffs claim that the individual Plaintiffs and CGG members are harmed by “having to go through the burdensome and difficult mandatory process of reviewing their BMD ballots twice, once on screen in the software application and again after the ballot is printed.” (Pls. Proposed Findings, Doc. 1822 ¶¶ 77); *see* (Trial Tr. Vol. 1, Doc. 1832 at 19–21 (Opening Statement)); (Trial Tr. Vol. 17, Doc. 1848 at 10–12, 55–56 (Closing Arguments)). They claim that reviewing the small human-readable text on a voter's printed ballot is a particularly “difficult cognitive task” that requires “memorizing the entire ballot” because the printed ballot only lists a voter's selections, not the

full details of the race or ballot question. *See* (Pls. Proposed Findings, Doc. 1822 ¶¶ 77, 174); (Trial Tr. Vol. 17, Doc. 1848 at 11–12, 55–56 (Closing Arguments)); (Trial Tr. Vol. 8A, Doc. 1839 at 154–55 (Missett) (testifying that there are many contests, and the printouts do not include all information)); (Trial Tr. Vol. 2, Doc. 1833 at 19 (Price) (testifying that the text is small and sometimes illegible)).^{11 12}

ii. Coalition for Good Governance

CGG asserts a separate organizational injury. It claims that it has been forced to divert resources away from its preferred organizational public interest activities to oppose Georgia’s use of the unconstitutional BMD system for in-person voting. *See* (Trial Tr. Vol. 17, Doc. 1848 at 53–54 (Closing Arguments)); (Pls. Proposed Findings, Doc. 1822 ¶ 48). This diversion is purportedly aimed at protecting CGG members from the two previously mentioned injuries. First, they argue that the CGG members are unable to review the contents of the QR code,

¹¹ At trial and in their Proposed Findings of Fact and Conclusions of Law, the Curling and Coalition Plaintiffs also alleged that CGG Members were harmed by not being able to cast their vote by secret ballot due to the BMD’s large touchscreen displays. *See* (Pls. Proposed Findings, Doc. 1822 ¶ 78); (Trial Tr. Vol. 17 Doc. 1848 at 55 (Closing Arguments)). The Court need not consider this asserted injury, as it ruled at summary judgment that “this ballot secrecy component of Coalition Plaintiffs’ claims cannot proceed to trial.” (Summary Judgment Order, Doc. 1705 at 127).

¹² These plaintiffs also claim in their Proposed Findings of Fact and Conclusions of Law that “the requirement for in-person voters to use printed BMD ballots containing unreadable QR codes for tabulation, which make it impossible for in-person voters to verify and, if needed, correct their selections,” violates the Help America Vote Act (“HAVA”). (Pls. Proposed Findings, Doc. 1822 ¶ 80). The Court need not consider this argument because, among other things, Plaintiffs did not plead a HAVA claim in their Complaint, and it is well established that “HAVA creates no private cause of action.” *Bellitto v. Snipes*, 935 F.3d 1192, 1202 (11th Cir. 2019); *Georgia Voter All. v. Fulton Cnty.*, 499 F. Supp. 3d 1250, 1256 (N.D. Ga. 2020).

leaving them unable to verify whether the printed BMD ballot “accurately captures their selections.” *See* (Pls. Proposed Findings, Doc. 1822 ¶¶ 48–49, 76). Second, they argue that CGG members “also experience the non-speculative injury of having to go through the burdensome and difficult mandatory process of reviewing their BMD ballots twice.” *See id.* (Pls. Proposed Findings, Doc. 1822 ¶¶ 48–49, 77).

CGG’s mission concerns the protection of constitutional liberties—including First Amendment, due process, and equal protection rights—as well as issues involving government transparency and elections. *See* (Trial Tr. Vol. 1, Doc. 1832 at 115 (Martin)). CGG thus presented testimony explaining how it has expended significant funds and staff resources in its efforts to educate voters about use of the system, to investigate and document the cybersecurity problems posed by the BMD system and its implementation, to gather information regarding the operating of the BMD system, and to oppose Georgia’s use of the BMD system. *See (id.* at 151–52 (Martin)); (Trial Tr. Vol. 15, Doc. 1846 at 162 (Marks)); *see also* (Coalition Pl. Ex. 6). This work has required a major diversion of CGG’s resources and program commitments. *Id.* Because of the staff, time, money, and resources required by these efforts, CGG claims that it has been unable to engage in other endeavors consistent with its mission. *See* (Trial Tr. Vol. 1, Doc. 1832 at 120–24 (Martin)); (Trial Tr. Vol. 15, Doc. 1846 at 161–62 (Marks)).

E. Defendants

Plaintiffs sue the Georgia Secretary of State, Brad Raffensperger, and the members of the Georgia State Election Board (“SEB”) in their official capacities.

The Secretary of State (“the Secretary”) is a constitutional officer elected by Georgia voters every four years, Ga. Const. Art. 5, Sec. 3, Par. 1, whereas the five-member SEB was created by the General Assembly, O.C.G.A. § 21-2-30(a),(c).

The Secretary is the State’s “chief election official” under the Help America Vote Act of 2002 (“HAVA”). *See* O.C.G.A. § 21-2-50.2(a). Among other things, the Secretary is tasked with approving or discontinuing the use of Georgia’s voting systems, *see* O.C.G.A. §§ 21-2-379.2(a), 21-2-379.2(b), 21-2-368(a), 21-2-368(b); determining what voting equipment is used in Georgia’s elections and providing uniform voting equipment to the counties, *see* O.C.G.A. § 21-2-300; and certifying all voting equipment used by counties, *see* (Secretary’s 30(b)(6) Dep., Doc. 1645 at 198–99).

Under Georgia law, the SEB is tasked with promulgating rules and regulations to obtain uniformity in election practices. O.C.G.A. § 21-2-31. Additionally, the SEB is tasked with investigating—or authorizing the Secretary’s Office to investigate—issues in the administration of election laws, including fraud and irregularities. *Id.* The SEB may also take other actions that it determines to be “conducive to the fair, legal, and orderly” conduct of elections. *Id.*

F. Plaintiffs’ Requested Relief

As relief, Plaintiffs ask the Court to enjoin Defendants from using the BMD system as the standard method for in-person voting in Georgia. *See* (Pls. Proposed Findings, Doc. 1822 at 147). Alternatively, Plaintiffs ask the Court to: (1) order Defendants to develop a genuine, robust, and actionable backup plan to deploy

hand-marked paper ballots for statewide elections if the BMD system becomes impossible or impracticable to use; (2) enjoin Defendants from preventing counties from choosing to use hand-marked paper ballots under O.C.G.A. §§ 21-2-281 and 21-2-334; (3) complete the mitigation measures that CISA advised in June 2022; (4) direct county superintendents to prohibit the use of equipment that has broken or missing security seals; and (5) direct county superintendents to ensure that each BMD undergoes appropriate testing to ensure that it will correctly record and tabulate every vote cast. *See* (Pls. Proposed Findings, Doc. 1822 at 30 & n.8, 147–50).

G. Developments Since Trial

After the trial in this case concluded, the Georgia General Assembly enacted Senate Bill 189 (“SB 189”). *See* (Doc. 1851 at 1); (SB 189, Doc. 1851-1). The law makes the following changes to Georgia election laws:

- Under Section 6 of SB 189, counties can use hand-marked paper ballots for certain special elections with small numbers of voters (fewer than 5,000 registered electors), as of January 1, 2025;
- Under Section 7 of SB 189, the text portion of the BMD printout (as opposed to the QR code) is the “official vote for purposes of vote tabulation” and auditing, beginning July 1, 2026;
- The same section, Section 7 of SB 189, effectively eliminates the use of QR codes in Georgia elections, beginning July 1, 2026;
- Section 10 of SB 189 creates a process for providing scanned ballot images in response to open records requests, beginning January 1, 2025;

- Section 11 of SB 189 requires the Secretary’s Office to create a pilot program to audit ballot images that verify only the human-readable portion of the ballot.

See (SB 189, Doc. 1851-1).

In the same legislative session, Georgia also enacted House Bill 974 (“HB 974”). The law adds new audit requirements, clarifies that county officials may conduct additional audits, and sets minimum requirements for scanning ballot images. *See* (HB 974 §§ 3–6, Doc. 1851-2 at 2–6).

II. LEGAL ANALYSIS

A. Standing

Like many election cases, this case turns on “one of the most fundamental principles of the federal courts: our limited jurisdiction.” *Wood v. Raffensperger*, 981 F.3d 1307, 1313 (11th Cir. 2020). Before considering the merits of Plaintiffs’ claims, the Court is required to address the threshold question of whether Plaintiffs have standing to sue under Article III of the Constitution. *F.D.A. v. Alliance for Hippocratic Med.*, 602 U.S. 367, 378 (2024).

As explained below, because Plaintiffs fail to prove that Georgia’s use of the BMD system has caused or is likely to cause them to suffer a legally cognizable injury, this Court lacks jurisdiction to consider the merits of their claims. *See Wood*, 981 F.3d at 1314; *see also Sierra v. City of Hallandale Beach, Fla.*, 996 F.3d 1110, 1115 (11th Cir. 2021) (“Our precedent is clear that a court cannot rule on the merits of a case after finding that the plaintiff lacks standing.”).

1. Legal Standard

Article III limits the jurisdiction of the federal courts to “cases” and “controversies.” *Alliance for Hippocratic Medicine*, 602 U.S. at 378. This case-or-controversy requirement defines the courts’ role in our system of separated powers and prevents courts from operating “as an open forum for citizens ‘to press general complaints about the way in which government goes about its business.’” *Id.* (quoting *Allen v. Wright*, 468 U.S. 737, 760 (1984)); *see also Clapper v. Amnesty Int’l USA*, 568 U.S. 398, 408 (2013) (“The law of Article III standing, which is built on separation-of-powers principles, serves to prevent the judicial process from being used to usurp the powers of the political branches.”).

“One element of the case-or-controversy requirement is that plaintiffs must establish that they have standing to sue.” *Clapper*, 568 U.S. at 408 (cleaned up). Plaintiffs not only bear the burden of establishing standing at the time they file the complaint but also of maintaining it throughout the litigation. *See Carney v. Adams*, 592 U.S. 53, 59–60 (2020). Standing must be established for each claim and each form of relief that is sought. *Town of Chester, N.Y. v. Laroe Estates, Inc.*, 581 U.S. 433, 439 (2017) (citing *Davis v. F.E.C.*, 554 U.S. 724, 734 (2008)).

To establish standing, plaintiffs must demonstrate (1) that they have suffered or will likely suffer an injury in fact, (2) that the injury was likely caused or will likely be caused by the defendant, and (3) that the injury is likely to be redressed by the requested judicial relief. *Alliance for Hippocratic Medicine*, 602 U.S. at 380; *see Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560–61 (1992). These

elements are respectively referred to as the injury-in-fact requirement, the causation requirement, and the traceability requirement. *See id.* at 380–81.

“Because the elements of standing ‘are not mere pleading requirements but rather an indispensable part of the plaintiff’s case, each element must be supported . . . with the manner and degree of evidence required at the successive stages of the litigation.’” *Jacobson v. Fla. Sec’y of State*, 974 F.3d 1236, 1245 (11th Cir. 2020) (quoting *Lujan*, 504 U.S. at 561). Where, as here, a case proceeds to trial, “the facts necessary to establish standing ‘must be supported adequately by the evidence adduced at trial.’” *Jacobson*, 874 F.3d at 1245 (quoting *Lujan*, 504 U.S. at 561); *see also Gill v. Whitford*, 585 U.S. 48, 69 (2018) (“The facts necessary to establish standing, however, must not only be alleged at the pleading stage, but also proved at trial.”).

The first standing requirement, injury in fact, “screens out plaintiffs who might have only a general legal, moral, ideological, or policy objection to a particular government action.” *Alliance for Hippocratic Medicine*, 602 U.S. at 381. It does so by requiring that the purported injury is (a) “concrete,” meaning real and not abstract; (b) “particularized,” meaning that it affects “the plaintiff in a personal and individual way,” rather than being a generalized grievance; and (c) “actual or imminent, not speculative,” meaning that the injury has already occurred or will likely occur soon. *Id.* (citations omitted).

An injury is sufficiently concrete for standing purposes, if it constitutes an “invasion of a legally protected interest.” *See Spokeo, Inc. v. Robins*, 578 U.S. 330,

339 (2016) (quoting *Lujan*, 504 U.S. at 560). If the alleged harm does not infringe on a cognizable legal right or interest, it is too abstract to confer standing. *See Koziara v. City of Casselberry*, 392 F.3d 1302, 1305 (11th Cir. 2004); *see also Vermont Agency of Nat. Res. v. U.S. ex rel. Stevens*, 529 U.S. 765, 772 (2000) (stating that to constitute a legally cognizable injury, plaintiff’s stated “interest must consist of obtaining compensation for, or preventing, the violation of a legally protected right.”); *Bochese v. Town of Ponce Inlet*, 405 F.3d 964, 980 (11th Cir. 2005) (citation omitted) (“No legally cognizable injury arises unless an interest is protected by statute or otherwise.”).

2. Discussion

Plaintiffs argue that Georgia’s use of the BMD system for in-person voting injures the individual Plaintiffs and CGG members in two ways—both of which concern voters’ ability to review their BMD ballots.

As previously explained, after a voter makes their selections on the BMD touchscreen, they may review their selections on the screen before printing their paper ballot. (Trial Tr. Vol. 2, Doc. 1833, at 18 (Price)). The printed ballot includes a QR code and human-readable text that lists the voter’s selections, but not information like the names of other candidates or a full description of each race or ballot question. *See (id.* at 19 (Price)); (Trial Tr. Vol. 7B, Doc. 1838 at 156 (Halderman)). The voter may review the human-readable text on the printout but is not able to review the voting data in the QR code. (*Id.*). The voter then inserts their printed ballot into the precinct’s ICP scanner, and the scanner tabulates their

votes solely using data in the ballot's QR code. (Trial Tr. Vol. 7B, Doc. 1838 at 156–157 (Halderman)); (Trial Tr. Vol. 11, Doc. 1842 at 22 (Evans)); *see also* (Curling Pls. Ex. 425 (Halderman Report) at ECF 13–14)).

Plaintiffs claim that this system injures the individual Plaintiffs and CGG members by (1) preventing them from verifying that data in the QR code on their printed ballot, which is scanned for tabulation, accurately reflects their vote; and (2) requiring them to undertake the burdensome process of reviewing their selections on the BMD screen and again in the small, incomplete human-readable text on their printed ballot. *See* (Pls. Proposed Findings, Doc. 1822 ¶¶ 76 & n.9, 77); (Trial Tr. Vol. 17, Doc. 1848 at 11–12, 55–56).

Upon lengthy consideration of the trial evidence, the Court finds that Plaintiffs lack standing to pursue their claims because neither of these alleged injuries constitute an “invasion of a legally protected interest.” *See Spokeo*, 578 U.S. at 339 (citation omitted). Although Plaintiffs have capably, thoughtfully, and diligently pursued their opposition to Georgia's use of the BMD system, the Court cannot consider the merits of their claims without such a legally cognizable injury. *See Valley Forge Christian College v. Americans United for Separation of Church & State, Inc.*, 454 U.S. 464, 472–73 (1982); *see also Burdick v. Kennedy*, 700 F. App'x 984, 986 (11th Cir. 2017) (quoting *Valley Forge*, 454 U.S. at 486) (“[S]tanding is not measured by the intensity of the litigant's interest or the fervor of his advocacy.”).

i. Individual Plaintiffs' Standing

Plaintiffs first assert that the inability of the individual Plaintiffs and the CGG members to verify the contents of the QR code on their printed BMD ballots alone constitutes a legally cognizable injury.

Although “[t]he Supreme Court has long recognized that burdens on voters implicate fundamental First and Fourteenth Amendment rights,” *Democratic Exec. Comm. of Fla. v. Lee*, 915 F.3d 1312, 1319 (11th Cir. 2019), Plaintiffs cite no case supporting a judicially enforceable interest in their ability to verify the contents of their BMD ballots’ QR codes. Plaintiffs instead base this theory of harm on the principle that the right to vote includes “the right to have one’s vote counted.” *See Reynolds v. Sims*, 377 U.S. 533, 554–55 (1964); *see also* (Trial Tr. Vol. 17 Doc. 1848 at 8–9 (citing *Reynolds* as the basis for this theory of harm)); (Pls. Proposed Findings, Doc. 1822 ¶ 18 (citing *Reynolds* as the basis for the right to cast one’s vote and to have it counted)).

But Plaintiffs’ theory of harm does not implicate this well-established principle. Plaintiffs do not claim that Georgia’s use of a QR code for the tabulation of BMD ballots prevents the individual Plaintiffs or the CGG members from voting, dilutes their vote, or will prevent their vote from being accurately counted. *See Reynolds*, 377 U.S. at 555. Rather, Plaintiffs’ more modest claim is that that they are unable to verify the data in the QR codes on their printed ballots, which is scanned as their vote of record for tabulation. *See* (Trial Tr. Vol. 1, Doc. 1832 at 18–19 (Opening Arguments)); (Trial Tr. Vol. 17, Doc. 1848 at 11–12, 55, 167 (Closing

Arguments)); *see also* (Pls. Proposed Findings, Doc. 1822 ¶ 76 & n.9 (stating that the harm alleged is that, due to the QR code, voters are unable “to verify that the vote of record that will be tabulated is in fact an accurate record of the . . . selections [they] made on the touchscreen” of the BMD)).

To be sure, Plaintiff’s alleged injury “is phrased in constitutional terms.” *Valley Forge*, 454 U.S. at 485–86. However, this injury is unlike any that the Supreme Court or the Eleventh Circuit have recognized as a legally cognizable harm to voting or associational rights. *See Jacobson*, 974 F.3d at 1261–62. Based on the standing arguments, the Court is therefore unable to conclude that the injuries identified by Plaintiffs at trial fall within “the zone of interests to be protected” by the First or Fourteenth Amendments. *See Valley Forge*, 454 U.S. at 475 (quoting *Association of Data Processing Service Orgs. v. Camp*, 397 U.S. 150, 153 (1970)).

The individual Plaintiffs’ second theory of harm is similarly insufficient. In somewhat of an inverse of their first asserted injury, they claim that the process by which voters *can* review their BMD ballot selections is unconstitutionally burdensome. Specifically, they assert that the individual Plaintiffs and CGG members are harmed by “having to go through the burdensome and difficult mandatory process of reviewing their BMD ballots twice, once on screen in the software application and again after the ballot is printed.” (Pls. Proposed Findings, Doc. 1822 ¶ 77); *see* (Trial Tr. Vol. 1, Doc. 1832 at 19–21 (Opening Statement)); (Trial Tr. Vol. 17, Doc. 1848 at 10–12, 55–56 (Closing Arguments)). The Court

understands that Plaintiffs strongly dislike the available methods for reviewing BMD ballots and find them less effective and user-friendly than the process for reviewing hand-marked paper ballots. But, once again, Plaintiffs fail to connect this alleged injury to the invasion of a legally cognizable voting or associational right. *See, e.g., Reynolds*, 377 U.S. at 555; *Jacobson*, 974 F.3d at 1261–62.

The limited evidence Plaintiffs presented regarding the alleged burdens of the BMD system’s multi-step review process reflects that, although some find the process challenging, they do not claim that it is an obstacle to casting a vote. *See* (Trial Tr. Vol. 2, Doc. 1833 at 50, 56–57 (Nakamura)); (Trial Tr. Vol. 8A, Doc. 1839 at 155 (Missett)). Instead, the testimony largely focuses on the frustration that—unlike hand-marked paper ballots—printed BMD ballots do not include a full description of each ballot contest next to the voter’s selections, making it more difficult to verify their ballot selections. *See (id.)*.

Although the BMD system’s ballot review process could certainly be more user-friendly, federal courts are unable to address every critique of a state’s chosen voting system. “Election laws will invariably impose some burden upon individual voters,” and the judiciary is only empowered to consider those challenges that involve harm to voters’ cognizable legal rights. *See Burdick v. Takushi*, 504 U.S. 428, 433–34 (1992). Because the individual Plaintiffs have not shown that their alleged “injuries” implicate legally protected interests—rather than mere policy disagreements—they cannot serve as the basis for standing. *See Spokeo*, 578 U.S. at 339; *cf. Schulz v. Kellner*, 2011 WL 2669456, at *6 (N.D.N.Y. July 7, 2011)

(holding that because voters do not have “a legally protected interest in having their votes counted manually and in full public view,” a violation of that interest could not serve as a legally cognizable injury for standing purposes).

ii. CGG’s Standing

a. CGG’s Law-of-the-Case Argument

Before next jumping into the substance of CGG’s standing argument, the Court addresses CGG’s threshold argument under the law-of-the-case doctrine. At trial, CGG argued that its standing as an organizational plaintiff was established under the law-of-the-case doctrine because the Eleventh Circuit recognized its standing to challenge Georgia’s voting systems in its opinion regarding the September 2020 Preliminary Injunction Order. *See* (Doc. Trial Tr. Vol. 17 1848 at 57 (Closing Arguments)); (Pls. Proposed Findings, Doc. 1822 ¶ 57 n.7); (Trial Tr. Vol. 17, Doc. 1848 at 57)). CGG’s position is incorrect for several reasons.

First, a plaintiff bears the burden of establishing that standing exists not only at the commencement of the lawsuit but at each successive stage of litigation. *See Jacobson*, 974 F.3d at 1245 (citing *Lujan*, 504 U.S. at 561). The law-of-the-case doctrine does not allow the Court or the parties to ignore that fundamental jurisdictional obligation.

Second, the law-of-the-case doctrine does not “require rigid adherence to rulings made at an earlier stage of a case in all circumstances.” *Murphy v. F.D.I.C.*, 208 F.3d 959, 966 (11th Cir. 2000). In fact, the doctrine does not apply where, as here, the prior ruling was made at an earlier stage in the litigation where the factual

record and the inferences that the court was permitted to draw were different. *See Jackson v. State of Alabama State Tenure Comm’n*, 405 F.3d 1276, 1283 (11th Cir. 2005) (“When the record changes, which is to say when the evidence and the inferences that may be drawn from it change, the issue presented changes as well.”); *see also Silva v. Baptist Health S. Fla., Inc.*, 838 F. App’x 376, 383 (11th Cir. 2020) (“Law of the case does not apply in this situation because the district court based its standing decision on a different record than did this Court when addressing the propriety of summary judgment.”).

Third, it is unclear how law-of-the-case doctrine would apply to CGG’s standing at this juncture since its theory of injury—*i.e.*, the harm to CGG members that its diversion of resources is meant to prevent—changed between the time of the Eleventh Circuit’s 2022 ruling and trial. The injuries presented to the Eleventh Circuit were that Poll Pad malfunctions and the printing date of Georgia’s paper pollbook backups led to long voting lines and voter disenfranchisement. *See Curling v. Raffensperger*, 50 F.4th 1114, 1123–24 (11th Cir. 2022). The Eleventh Circuit never addressed Plaintiffs’ current theories of injury.

For all of these reasons, Plaintiffs cannot rely on the law-of-the-case doctrine to establish CGG’s organizational standing.

b. Diversion of Resources

The Court now turns to CGG’s substantive standing argument. CGG asserts its own injury as an organizational plaintiff by claiming that it has been forced to divert resources away from its preferred activities to oppose Georgia’s use of the

BMD system. *See* (Doc. Trial Tr. Vol. 17 1848 at 53–54 (Closing Arguments)); (Pls. Proposed Findings, Doc. 1822 ¶¶ 48, 50–57). CGG states that this diversion aims to protect its members from the previously mentioned injuries of (1) being unable to verify that their printed ballot’s QR code accurately reflects their selections and (2) bearing the burden of the BMD system’s two-step ballot review procedure. *See* (Pls. Proposed Findings, Doc. 1822 ¶¶ 48–49 (citing the injuries listed in Section II(B)(1)(a) as those from which it seeks to protect its members)).

“An organization can establish standing in two ways: (1) through its members (i.e., associational standing) and (2) through its own injury in fact that satisfies the traceability and redressability elements” (i.e., standing in its own right). *Ga. Ass’n of Latino Elected Officials, Inc. (“GALEO”) v. Gwinnett Cnty. Bd. of Registration & Elections*, 36 F.4th 1100, 1114 (11th Cir. 2022). When, as here, an organizational plaintiff asserts standing in its own right, it must “satisfy the usual standards for injury in fact, causation, and redressability that apply to individuals.” *Alliance for Hippocratic Medicine*, 602 U.S. at 394.

An organization can establish an injury in fact under a diversion of resources theory. *GALEO*, 36 F.4th at 1114 (citing *Jacobson*, 974 F.3d at 1249–50); *Fair Fight Action, Inc. v. Raffensperger*, 634 F. Supp. 3d 1128, 1177 (N.D. Ga. 2022). “Under this theory, an organization has standing ‘if the defendant’s illegal acts impair its ability to engage in its projects by forcing the organization to divert resources to counteract those illegal acts.’” *GALEO*, 36 F.4th at 1114 (quoting *Jacobson*, 974 F.3d at 1250). But the organizational plaintiff must “explain where

it would have to ‘divert resources away *from* in order to spend additional resources on combating’ the effects of the defendant’s alleged conduct.” *GALEO*, 36 F.4th at 1114 (quoting *Jacobson*, 974 F.3d at 1250) (emphasis original).

“Although an organization can establish standing under a diversion-of-resources theory, it cannot do so by inflicting harm on itself to address its members’ fears of hypothetical future harm that is not certainly impending.” *City of S. Miami v. Governor*, 65 F.4th 631, 638 (11th Cir. 2023) (cleaned up); see *All. for Hippocratic Med.*, 602 U.S. at 394. Instead, to prove injury in fact based on an organization’s diversion of resources, “the organizational plaintiff must prove *both* that it has diverted its resources *and* that the injury to the identifiable community that the organization seeks to protect is itself a legally cognizable Article III injury that is closely connected to the diversion.” *City of Miami*, 65 F.4th at 638–39 (emphasis original).

Here, CGG has not proven that it suffered an Article III injury in its own right because, as discussed in Section III(A)(2)(iii), *supra*, the two injuries from which CGG seeks to protect its members are not “legally cognizable Article III injuries.” See *City of Miami*, 65 F.4th at 638–39.

To be sure, CGG did establish that its mission concerns protecting constitutional liberties, as well as improving elections and government transparency. (Trial Tr. Vol. 1, Doc. 1832 at 115 (Martin)). And it presented testimony that outlined how it diverted significant resources from its other organizational endeavors to both oppose Georgia’s use of the BMD system and

investigate what it viewed as the most serious voting and cybersecurity issues posed by the BMD system. *See (id. at 120–24, 151 (Martin))*; (Trial Tr. Vol. 15, Doc. 1846 at 161–62 (Marks)).

Yet “the diversion of resources, standing alone, does not suffice to establish standing.” *City of S. Miami*, 65 F.4th at 639; *see Alliance for Hippocratic Medicine*, 602 U.S. at 395. To be sure, CGG expended significant resources in investigating Georgia’s use of the BMD system, educating the public, and opposing the system’s continued use. However, CGG did not establish that this resource diversion was closely connected to protecting its members from a “legally cognizable Article III injury.” *See id. at 638–39*. It therefore lacks standing to pursue its claims as an organizational plaintiff in this case under a diversion-of-resources theory.

III. CONCLUSION

Over the past seven years, Plaintiffs have demonstrated many times over their dedication to ensuring that Georgia’s elections are conducted in a transparent, safe, and reliable manner. They have expended significant time and resources to educate the public about the risks of BMD system and the DRE system before it.

At trial, Plaintiffs presented substantial evidence supporting their deeply held concerns about the administration, maintenance, and security of the BMD system. These are undoubtedly concerns of long-term public import. Yet under Article III of the Constitution, “legal, moral, ideological and policy objections” do

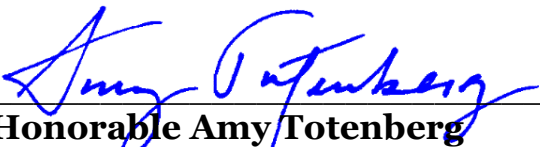
not alone “establish a justiciable case or controversy in federal court.” *Alliance for Hippocratic Medicine*, 602 U.S. at 396. Ultimately, Plaintiffs failed to establish at trial that Georgia’s continued use of the BMD system will likely cause them to suffer a legally cognizable injury. The Court therefore lacks jurisdiction to consider the merits of Plaintiffs’ claims.

Although Plaintiffs have not prevailed in this court of law, their advocacy has helped spark real legislative action. In the months after trial, Georgia enacted legislation that, in part, addresses issues at the heart of Plaintiffs’ claims. For example, Section 7 of SB 189 promises to effectively eliminate QR codes on BMD ballots and instead use the human-readable text on a voter’s printed ballot for tabulation and auditing purposes. *See* (SB 189, Doc. 1851-1). These measures—slated to take effect on July 1, 2026—will require funding and further government action to implement.¹³ If these legislative measures are ultimately funded and implemented, they are the type of timely legislative action that can bolster public confidence in the management and security of Georgia’s voting system. Through litigation and other means, Plaintiffs no doubt played a part in prompting these changes.

¹³ Georgia clearly retains the power to regulate its own elections. *See Burdick*, 504 U.S. at 433. Although the Court may identify constitutional deficiencies with the existing voting system, it lacks the power to prescribe voting systems to supplant those enacted by the state legislature. *See Curling v. Raffensperger*, 702 F. Supp. 3d 1303, 1314 (N.D. Ga. 2023).

As Plaintiffs do not have standing, the Court lacks jurisdiction to consider the merits of Plaintiffs' claims. This case is therefore **DISMISSED**, and the Clerk is **DIRECTED** to close this case.

IT IS SO ORDERED this 31st day of March, 2025.



Honorable Amy Totenberg
United States District