

United States Court of Appeals
for the Fifth Circuit

United States Court of Appeals
Fifth Circuit

FILED

May 21, 2025

Lyle W. Cayce
Clerk

No. 24-60084

DEEP SOUTH CENTER FOR ENVIRONMENTAL JUSTICE; HEALTHY
GULF; ALLIANCE FOR AFFORDABLE ENERGY,

Petitioners,

versus

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY; LEE
ZELDIN, *Administrator, United States Environmental Protection Agency,*

Respondents.

Petition for Review of an Order of the
Environmental Protection Agency
Agency No. 89 Fed. Reg. 703

Before GRAVES, ENGELHARDT, and OLDHAM, *Circuit Judges.*

ANDREW S. OLDHAM, *Circuit Judge:*

In 2024, the Environmental Protection Agency granted the State of Louisiana primary enforcement authority over a class of underground carbon sequestration wells. Three environmental organizations petitioned for review of the final rule granting that authorization. All three lack standing. We therefore dismiss the petition.

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I

The Safe Drinking Water Act (“SDWA”) protects the Nation’s drinking water. *See* 42 U.S.C. § 300f *et seq.* Among other things, the Act seeks to prevent pollution of underground sources of drinking water (“USDWs”). *See id.* § 300h *et seq.* This case concerns underground injection control (“UIC”) wells used for geologic sequestration of carbon dioxide (“CO₂”). With apologies for that alphabet soup, we proceed as follows. We (A) begin with an overview of UIC wells and carbon sequestration. We then (B) describe the statutory and regulatory scheme applicable to Class VI wells. Finally, we (C) describe the rulemaking that gave rise to this petition.

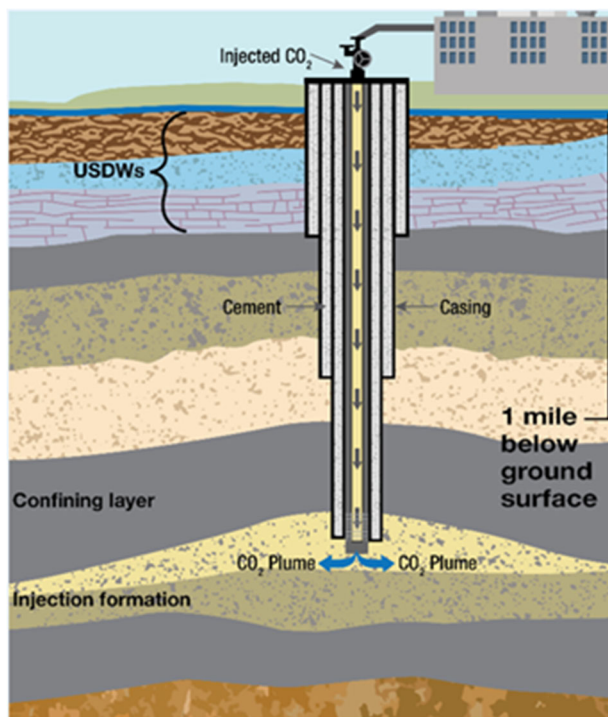
A

UIC wells are shafts drilled into porous geological formations to inject fluids for long-term storage or disposal. Pursuant to the SDWA, EPA has designated six classes of injection wells, each storing different materials and each subject to different regulatory requirements. *See* 40 C.F.R. § 144.6 (2024). In 2010, EPA promulgated regulations establishing the newest class of wells, Class VI. *See* Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide (CO₂) Geologic Sequestration (GS) Wells, 75 Fed. Reg. 77230 (Dec. 10, 2010) [hereinafter Federal Requirements]. Class VI wells are “used for geologic sequestration of carbon dioxide.” 40 C.F.R. § 144.6(f).

Carbon sequestration aims to capture CO₂ from stationary emissions sources and permanently trap it thousands of feet underground to reduce atmospheric greenhouse gases. Emitted CO₂ is captured as a gas, then compressed using high temperatures and pressure into a “supercritical state.” JA170. Supercritical carbon dioxide is a “relatively dense fluid” that “exists in a state between liquid and gas.” JA108, 170. That fluid is then injected into Class VI wells with the goal of permanent storage. Underground, the high

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pressure maintains the carbon dioxide's supercritical state and compresses it into geologic pore spaces. Layers of impermeable rock prevent the CO₂ from seeping through more porous layers into underground drinking water sources.



Class VI — Wells Used for Geologic Sequestration of Carbon Dioxide, EPA (Mar. 28, 2025), <https://perma.cc/7S8Y-A5Z3>.

Because carbon sequestration risks contaminating USDWs, Class VI wells must meet exacting technical standards. Supercritical carbon dioxide exhibits several characteristics that require care in its handling and storage. First, it is highly buoyant. So it is more likely to escape containment in the event of faults, fractures, or structural problems with the well. Federal Requirements, *supra*, at 77234. Second, it is highly corrosive. So when it comes into contact with water, it can “cause leaching and mobilization of . . . contaminants” and degrade well materials over time. *Id.* at 77234–35, 77261.

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Third, its injection requires high pressure that can “compromise the integrity of the well.” *Id.* at 77261. Fourth and finally, it is highly contaminated. Because injected CO₂ comes from emitted waste, it typically contains chemicals that would pollute any subsurface drinking water. *See id.* at 77235.

B

Because carbon sequestration poses so many risks to drinking water, Class VI wells are subject to extensive safety requirements throughout their entire life cycle—from siting and permitting to injection, monitoring, and closure.

At the permitting stage, Class VI well proposals must include, *inter alia*, information about surface and subsurface geologic features, 40 C.F.R. § 146.82(a)(1)–(6); operational proposals, *id.* § 146.82(a)(7); plans for a “pre-operational formation testing program,” *id.* § 146.82(a)(8); and an “emergency and remedial response plan,” *id.* § 146.82(a)(19). Once a permit issues, well owners and operators must follow detailed technical specifications and subject wells to “continuous monitoring.” *Id.* § 146.86(a)(3). During drilling and construction, and before operation, federal regulations also impose extensive surveying and testing requirements to ensure injection is safe. *Id.* § 146.87. And once operation commences, Class VI wells must comply with ongoing requirements that include monitoring, emergency systems, and pressure regulations. *See id.* § 146.88. Any mechanical problems trigger EPA scrutiny until the operator can “[r]estore and demonstrate mechanical integrity” to the agency. *Id.* § 146.88(f)(4). Operators must also submit reports semiannually and within 24 hours or 30 days of certain triggering events. *Id.* § 146.91.

When injection is complete, operators must comply with EPA’s closure standards and propose a detailed plan to plug and seal the well in partnership with the agency. *Id.* § 146.92. Upon a showing of non-endangerment

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to any USDW, the facility may be decommissioned. *See id.* § 146.93(b). Federal law establishes a default period of 50 years for post-injection monitoring, but “an alternative post-injection site care timeframe” may be “appropriate,” if it “ensures non-endangerment of USDWs.” *Id.* § 146.93(c).

Beyond these default federal regulations, the SDWA also creates a scheme of cooperative federalism to regulate UIC wells. States may assume primary enforcement responsibility (“primacy”) if they obtain EPA approval, 42 U.S.C. § 300h-1(b), and adopt a regulatory regime that meets minimum federal requirements, *see id.* § 300h. If a State chooses not to adopt its own UIC program, EPA regulations apply. *Id.* § 300h-1(c). And even when States assume primacy, EPA remains responsible for monitoring the program and ensuring compliance with federal law. *See, e.g., id.* § 300h-2(a)(1). In its 2021 Infrastructure Investment and Jobs Act, Congress expressed its support for States assuming primacy over Class VI wells by authorizing a \$50 million grant program to defray their costs. *See* Pub. L. No. 117-58, § 40306, 135 Stat. 429, 1002 (2021) (codified at 42 U.S.C. § 300h-9(c)).

C

Louisiana has had primacy over Class I–V wells since 1982. State of Louisiana Underground Injection Control Program; Class VI Primacy, 89 Fed. Reg. 703, 704 (Jan. 5, 2024) [hereinafter Louisiana Class VI Primacy Final Rule]. In 2021, the State applied for primacy over Class VI wells. *Ibid.* The State hoped to leverage its “familiarity and expertise” with its “own priorities, needs, geology, past and competing subsurface activities, and specific risks” to run its own UIC program effectively. Louisiana Br. at 10.

The State held a rulemaking subject to public comment under the Louisiana Administrative Procedure Act and promulgated a package of proposed regulations. *See* LA. ADMIN. CODE tit. 43, pt. XVII, § 3601 *et seq* (2021). The State submitted its proposal to EPA, conducted a public hearing,

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and opened a second public comment period. After responding to the 33 comments submitted, Louisiana finalized its application package and formally submitted its application to EPA. *See* Louisiana Class VI Primacy Final Rule, *supra*, at 704–05.

Upon receiving Louisiana’s proposal, EPA announced a proposed rule granting the State primacy and opened its own public comment period pursuant to 42 U.S.C. § 300h-1(b). *See* State of Louisiana Underground Injection Control Program; Class VI Program Revision Application, 88 Fed. Reg. 28450 (May 4, 2023). EPA’s review consisted of “a comprehensive technical and legal evaluation” of Louisiana’s proposal to “confirm that the proposed program is as stringent as the Federal regulations and to evaluate [its] effectiveness.” *Id.* at 28451. During EPA’s comment period, Louisiana passed a statute amending its UIC program in various ways. *See* State of Louisiana Underground Injection Control Program; Class VI Program Revision Application; Notice of Availability of New Information, 88 Fed. Reg. 55610, 55611 (Aug. 16, 2023). EPA opened a second comment period for 30 days to address the revisions. Louisiana Class VI Primacy Final Rule, *supra*, at 707. In addition to 90 days of commenting, EPA also held two hearings. *Ibid.*

In January 2024, EPA granted Louisiana’s primacy application. *Id.* at 703. The agency had received over 48,000 comments during its rulemaking. *Id.* at 707. The “majority” of the almost 7,000 comments received in the final month of commenting “supported primacy approval.” *Id.* at 707. EPA’s final rule incorporated Louisiana’s Class VI well program by reference as 40 C.F.R. § 147.950. *Id.* at 710.

Deep South Center for Environmental Justice, Healthy Gulf, and Alliance for Affordable Energy (“AAE”) petitioned for review in this court under the SDWA’s review provision, which authorizes petitions for review “in the circuit in which the petitioner resides or transacts business which is

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directly affected by the [agency] action.” 42 U.S.C. § 300j-7(a)(2). The State of Louisiana and its Department of Energy and Natural Resources (“LDENR”) intervened.

II

We begin and end with Article III standing, “a bedrock constitutional requirement.” *United States v. Texas*, 599 U.S. 670, 675 (2023). Standing doctrine polices the separation of powers so federal courts do not become “a vehicle for the vindication of the value interests of concerned bystanders.” *Allen v. Wright*, 468 U.S. 737, 756 (1984) (quotation omitted). In cases brought by organizational plaintiffs, it is of particular importance that “standing is not measured by the intensity of the litigant’s interest or the fervor of his advocacy.” *Valley Forge Christian Coll. v. Ams. United for Separation of Church and State*, 454 U.S. 464, 486 (1982).

Article III requires plaintiffs to show they “have (1) suffered an injury in fact, (2) that is fairly traceable to the challenged conduct of the defendant, and (3) that is likely to be redressed by a favorable judicial decision.” *Spokeo, Inc. v. Robins*, 578 U.S. 330, 338 (2016). The claimed injury must be “concrete and particularized” and “actual or imminent, not conjectural or hypothetical.” *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 561 (1992) (quotation omitted). Deep South claims organizational standing, which permits it “to sue on [its] own behalf for injuries [it has] sustained.” *Havens Realty Corp. v. Coleman*, 455 U.S. 363, 379 n.19 (1982). Healthy Gulf and AAE claim associational standing, which permits organizations to assert injuries on behalf of their members. *See Warth v. Seldin*, 422 U.S. 490, 511 (1975).¹

¹ The Supreme Court and commentators often use the terms “organizational” and “associational” standing interchangeably. *Compare, e.g., Students for Fair Admissions, Inc. v. President and Fellows of Harvard Coll.*, 600 U.S. 181, 199–200 (2023), *with FDA v. All. for*

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We first (A) address Deep South’s organizational standing theory. We then (B) discuss the associational standing theory advanced by Healthy Gulf and AAE. Both theories fail to meet the injury-in-fact requirement. Finally, we (C) outline traceability problems with both theories.

A

Deep South asserts two separate but related theories of injury: It says EPA’s approval of Louisiana’s primacy application “has [1] already and [2] will continue to force [it] to reallocate significant resources from its various direct service programming.” Wright Decl. ¶ 13. Neither survives *Alliance for Hippocratic Medicine*.

1

In a limited set of circumstances, Article III permits organizations “to sue on their own behalf for injuries they have sustained.” *Havens*, 455 U.S. at 379 n.19. In such cases, organizational plaintiffs “must satisfy the usual standards for injury in fact, causation, and redressability that apply to individuals.” *All. for Hippocratic Med.*, 602 U.S. at 393–94 (citing *Havens*, 455 U.S. at 378–79).

Alliance significantly clarified the doctrine of organizational standing. In that case, the Alliance for Hippocratic Medicine and other pro-life medical associations claimed standing under *Havens* to challenge an FDA action because they “incurr[ed] costs to oppose FDA’s actions” and expended

Hippocratic Med., 602 U.S. 367, 393–94 (2024), and *All. For Hippocratic Med.*, 602 U.S. at 398 & n.2 (Thomas, J., concurring).

But the two doctrines are critically distinct. Organizational standing refers to organizations’ standing “to sue on their own behalf for injuries they have sustained.” *Havens*, 455 U.S. at 379 n.19. The organization itself alleges a direct injury. Associational standing, in contrast, refers to an organization’s assertion “solely as the representative of its members,” at least one of whom has standing. *Warth*, 422 U.S. at 511.

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“considerable resources to the detriment of other spending priorities.” *Id.* at 394–95 (quotation omitted). The Court unanimously found that injury insufficient: An organizational plaintiff “cannot spend its way into standing simply by expending money to gather information and advocate against the defendant’s action.” *Id.* at 394; *see also Clapper v. Amnesty Int’l USA*, 568 U.S. 398, 417–18 (2013) (holding “self-inflicted” injuries do not confer standing).

Deep South is an organization “dedicated to improving the lives of children and families harmed by racially disproportionate pollution burdens.” Wright Decl. ¶ 6. It engages in activities including “education, research, and community engagement in governmental decisionmaking” to further that mission. *Ibid.* Deep South alleges that it “has had to remove staffing, resources, and time from climate equity, energy efficiency, and renewable energy programming to fight the [Class VI] buildout in Louisiana.” *Id.* ¶ 22. Deep South further alleges it has redirected resources to conducting research, preparing comments, lobbying EPA to disapprove the project, and creating an “education campaign” opposing Louisiana’s application. *Id.* ¶ 15.

As in *Alliance*, these injuries are not cognizable under Article III. Deep South’s opposition to EPA’s action, no matter how intense, amounts to “a setback to [its] abstract social interests,” which has never sufficed to confer standing. *Havens*, 455 U.S. at 379 (citing *Sierra Club v. Morton*, 405 U.S. 727, 739 (1972)). Even though Deep South’s staff has “dedicated approximately 850 hours to education and advocacy,” Wright Decl. ¶ 16, that claimed injury embodies the exact “expansive theory of standing” that *Alliance* rejected. 602 U.S. at 395; *see also id.* at 394 (describing organizations conducting studies, drafting petitions to the FDA, and engaging in public advocacy and education).

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Even before *Alliance*, Deep South’s expenditures would not have sufficed to support Article III standing. See *NAACP v. City of Kyle*, 626 F.3d 233, 238–39 (5th Cir. 2010) (holding that performing studies, lobbying, preparing for litigation, and diverting time does not “concretely and perceptibly impair[]” an organization’s activities as required by *Havens* (quoting *Havens*, 455 U.S. at 379)); see also *Steel Co. v. Citizens for a Better Env’t*, 523 U.S. 83, 107 (1998) (“Obviously . . . a plaintiff cannot achieve standing . . . by bringing suit for the cost of bringing suit.”). Fifth Circuit precedent uniformly held that diverting “resources to litigation and legal counseling in response to actions or inactions of another party [was] insufficient to impart standing.” *Ass’n for Retarded Citizens of Dall. v. Dall. Cnty. Mental Health and Mental Retardation Ctr. Bd. of Trs.*, 19 F.3d 241, 244 (5th Cir. 1994).

Accordingly, Deep South’s past expenditures do not suffice to create cognizable injuries and hence do not create organizational standing.

2

Next, Deep South’s future organizational injuries.

Only in the rarest cases can organizations demonstrate standing by showing a defendant’s action interferes with their activities. In *Havens*, a nonprofit organization called HOME sued Havens Realty under the Fair Housing Act, alleging Havens’ employees gave black HOME employees false information about apartment vacancies. 455 U.S. at 367–68. HOME’s work “included the operation of a housing counseling service,” *id.* at 368, so Havens’ falsehoods “perceptibly impaired” its ability to provide accurate information to clients. *Id.* at 379. The Supreme Court concluded HOME alleged a “concrete and demonstrable injury to the organization’s activities— with [a] consequent drain on [its] resources.” *Ibid.* A handful of subsequent Fifth Circuit cases thereafter cited *Havens* to justify a much broader category

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of standing based on “diversion of resources.”² *See, e.g., Ass’n of Cmty. Orgs. for Reform Now v. Fowler*, 178 F.3d 350, 360 (5th Cir. 1999); *OCA-Greater Hous. v. Texas*, 867 F.3d 604, 612 (5th Cir. 2017).

But the Supreme Court has limited *Havens* to “its context.” *See All. for Hippocratic Med.*, 602 U.S. at 396 (“*Havens* was an unusual case, and this Court has been careful not to extend the *Havens* holding beyond its context.”). The *Alliance* Court clarified that *Havens* does not support standing where “an organization diverts its resources in response to a defendant’s actions.” *Id.* at 395. HOME had standing in *Havens* not because it voluntarily changed its programming or activities in response to the defendants’ actions. Rather, those “actions directly affected and interfered with [its] core business activities.” *Ibid.* HOME’s theory of standing was akin to that of “a retailer who sues a manufacturer for selling [him] defective goods.” *Ibid.* As a panel of this court presciently wrote, “the perceptible impairment . . . not the drain on the organization’s resources, is the concrete and demonstrable injury for organizational standing.” *La. Fair Hous. Action Ctr., Inc. v. Azalea Garden Props., LLC*, 82 F.4th 345, 353 (5th Cir. 2023) (cleaned up). Article III requires “direct interference.” *All. for Hippocratic Med.*, 602 U.S. at 395 (cleaned up).³

² Many more cases, however, rejected such attempts to establish organizational standing based on diversion of resources. *See, e.g., Ass’n for Retarded Citizens of Dall.*, 19 F.3d at 244; *La. ACORN Fair Hous. v. LeBlanc*, 211 F.3d 298, 305–06 (5th Cir. 2000); *City of Kyle*, 626 F.3d at 239; *Tenth St. Residential Ass’n v. City of Dallas*, 968 F.3d 492, 500 (5th Cir. 2020); *El Paso County v. Trump*, 982 F.3d 332, 343–44 (5th Cir. 2020).

³ Our esteemed concurring colleague objects to our quotation of the Supreme Court’s *Alliance* opinion. *See Post*, at 25 (GRAVES, J., concurring in judgment). But we are quoting what the Supreme Court said. If there is a difference between “direct interference” (our phrase) and “directly affected and interfered” (the Supreme Court’s phrase), it is not obvious to us.

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No direct interference has occurred here. EPA’s approval of Louisiana’s Class VI primacy application places no obstacles to Deep South’s “core business activities,” *ibid.*, of “developing research and policies addressing efficient and renewable energy transition, clean air benefits, and equitable climate action.” Wright Decl. ¶ 17. Even if EPA’s approval “makes it more difficult” for Deep South to achieve its mission—which is far from obvious—that is not the kind of “impediment” *Alliance* requires. *Ibid.* Deep South alleges companies will be “disincentivize[d]” from constructing wells safely and Louisiana lacks the requisite “expertise and resources to implement its Class VI program,” making it necessary for Deep South to take action “from the very early stages of an application through the post-closure enforcement of each individual Class VI well.” Wright Decl. ¶¶ 19, 20. Deep South further alleges it “will need to divert resources to act as a watchdog” and “advocate against . . . the permitting of Class VI wells.” *Id.* ¶¶ 19, 25. But the challenged EPA action neither prevents Deep South from engaging in its advocacy, education, and training activities nor compels it to take any action. So its diversion-of-resources theory fails.

Even under the pre-*Alliance* regime, standing based on diversion of resources required that the organization’s activities in response to the defendant’s conduct “detract or differ from its routine activities.” *Tenth St. Residential Ass’n v. City of Dallas*, 968 F.3d 492, 500 (5th Cir. 2020) (cleaned up). Deep South’s purported diversions include “act[ing] as a watchdog,” which it already does by “monitoring compliance” with environmental laws. Wright Decl. ¶¶ 19, 22. Likewise, it plans to engage in “advocacy, community education, and community engagement,” all of which it already does. *Compare id.* ¶ 23 *with id.* ¶ 22. Deep South voluntarily chooses to engage in different types of education and advocacy in response to EPA’s grant of primacy; that is clearly not an example of “direct interference” with its business operations.

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In short, Deep South “cannot manufacture its own standing.” *All. for Hippocratic Med.*, 602 U.S. at 394. We decline Deep South’s invitation to “extend the *Havens* holding beyond its context.” *Id.* at 396. We therefore dismiss its petition.⁴

B

Healthy Gulf and AAE attempt to establish associational standing. Associational standing requires petitioners to identify a specific member who “would otherwise have standing to sue in [his] own right.” *Students for Fair Admissions v. President and Fellows of Harvard Coll.*, 600 U.S. 181, 199 (2023) (quoting *Hunt v. Wash. State Apple Advert. Comm’n*, 432 U.S. 333, 343 (1977)). That, in turn, requires us to consider the individual members’ alleged injuries—which “must be concrete, particularized, and actual or imminent.” *Clapper*, 568 U.S. at 409 (quotation omitted).

We first (1) discuss the imminence requirement as expounded by the Supreme Court in *Clapper*. Then, we (2) address the organizations’ theory of traditional economic injury. Next, we (3) describe their theories of health, property, aesthetic, recreational, and other injuries. We then (4) address their contention that Louisiana’s regulatory scheme will injure them by “waiving” certain long-term liabilities. Finally, we (5) discuss the organizations’ overarching assertions that the primacy program makes *all* of their alleged injuries more likely to occur.

⁴ Deep South “relies on organizational standing,” Reply Br. at 9, but also alleges in its declaration that its Community Advisory Board members “will be injured . . . because they will suffer from pollution and dangerous conditions imposed by Class VI wells.” Wright Decl. ¶ 24. The theories of injury underlying that claim mirror those alleged by Healthy Gulf and AAE, so insofar as Deep South could have standing as a membership organization, it fails for the same reasons discussed in the following section.

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1

An injury in fact must be “actual or imminent, not conjectural or hypothetical.” *Lujan*, 504 U.S. at 560 (quotations omitted). Although imminence is “a somewhat elastic concept, it cannot be stretched beyond its purpose.” *Id.* at 564 n.2. This requirement bars claims based on injuries grounded in mere speculation. And the imminence requirement overlaps with another Article III standing requirement: traceability. *See All. for Hippocratic Med.*, 602 U.S. at 385 n.2. The question at bottom is whether petitioners will suffer some future injuries that are traceable to the challenged actions of the defendant. *See ibid.*

In *Clapper*, plaintiffs challenged Section 702 of the Foreign Intelligence Surveillance Act (“FISA”), which permits federal officials to surveil certain foreigners. *Clapper*, 568 U.S. at 401. Plaintiffs corresponded with people alleged to be likely targets of FISA surveillance and claimed injury based on the “objectively reasonable likelihood that their communications” would be surveilled under Section 702 in the future. *Id.* at 406–07.

The Supreme Court rejected plaintiffs’ novel standing theory because it rested on a “highly attenuated chain of possibilities:” that (1) the Government would target plaintiffs’ correspondents; (2) it would do so under Section 702; (3) the FISA Court would approve the proposed surveillance; (4) the Government would succeed in intercepting communications; and (5) plaintiffs would be parties to those communications. *Id.* at 410. In particular, the second link (whether any eventual surveillance would be authorized by Section 702) was “mere speculation,” defeating the traceability requirement set forth in *Lujan*. *Id.* at 410–11.

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2

The simplest and least attenuated injury alleged by AAE and Healthy Gulf involves economic injury.⁵ AAE’s Executive Director alleged that Class VI projects “will increase energy costs to consumers.” Burke Decl. ¶ 9. On this theory, utility companies will propose wells, receive permits, and construct the wells, but will never ultimately operate them due to the risks of carbon sequestration. As a result, they will pass along costs to consumers. So the “proposed [Class VI] operations will increase utility bills for [AAE] members with no environmental benefit.” *Id.* ¶¶ 9–12; *see also* Robertson Decl. ¶ 14 (alleging that her local power plant’s application will “pass off the costs of these risky, dangerous endeavors to consumers” such that her utility bills will increase).

This theory presents significant problems of imminence and causation. The chain of possibilities runs as follows: (1) a party applies for a Class VI permit; (2) Louisiana issues the permit; (3) the well is constructed; (4) sometime later, the well is abandoned; and (5) the costs pass to consumers via higher utility bills. None of these events is “certainly impending,” and petitioners must show that *all* of them are. *Clapper*, 568 U.S. at 402.

There is an additional layer of speculation here because whether to issue a permit is a “decision[] of independent actors.” *Id.* at 414. Healthy

⁵ Healthy Gulf and AAE members also allege they will experience economic injury in the form of increased tax burdens due to the liability transfer, *see infra* Section II.B.4, as Louisiana will “foot[] the bill of any post-closure issues with Class VI wells.” George Decl. ¶ 13; *see also* Robertson Decl. ¶ 13. This kind of injury has never sufficed to support standing. *See, e.g., DaimlerChrysler Corp. v. Cuno*, 547 U.S. 332, 344–45 (2006) (finding no standing based on plaintiffs’ increased state tax burden on grounds that their injury was not concrete, particularized, actual or imminent, or redressable); *Frothingham v. Mellon*, 262 U.S. 447, 486–89 (1923) (finding no standing where injury consisted of government spending that would “increase the burden of future taxation”).

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Gulf and AAE lack any “actual knowledge” of Louisiana’s approval process—instead, they “merely speculate and make assumptions about” how the State will administer the Class VI program. *Id.* at 411. Like § 702 of FISA, the primacy grant “at most *authorizes*—but does not *mandate* or *direct*” Louisiana to take the actions to which petitioners object. *Id.* at 412 (emphasis in original). The organizations “can only speculate” about how Louisiana will operate its program and grant Class VI permits. *Ibid.* The Supreme Court has long noted its “reluctan[ce] to endorse standing theories that require guesswork as to how independent decisionmakers will exercise their judgment.” *Id.* at 413; *accord Lujan*, 504 U.S. at 562 (“[W]hen the plaintiff is not himself the object of the government action or inaction he challenges, standing . . . is ordinarily substantially more difficult to establish” (cleaned up)). Petitioners’ theory requires guesswork all the way down: how Louisiana will act, whether and how EPA might choose to intervene, and whether well operators will, in fact, abandon their substantial investments by deciding not to operate a well after constructing it.

Although some parties have already applied for permits, that fact removes only one step in the chain of causation. And even if every single event occurs as speculated, petitioners run into two additional hurdles. First, attenuation itself provides an independent bar. *See All. for Hippocratic Med.*, 602 U.S. at 383 (distinguishing between the “speculative” and “attenuated” elements of causation and stating “[t]he causation requirement also rules out attenuated links”). Second, there is a significant causation problem, as affected consumers would be required to show that the increase in their utility bills was due to the failed project, not other independent economic factors. *Cf. Clapper*, 568 U.S. at 412–13 (requiring that plaintiffs show surveillance was authorized by FISA rather than some other source of law).

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3

AAE and Healthy Gulf also allege other injuries that merely add additional steps to the causal chain. These include “imminent health, property, aesthetic, recreational, economic, professional, and procedural injuries.” Burke Decl. ¶ 13. For example, AAE member Cynthia Robertson lives within 20 miles of two proposed Class VI injection sites, which she claims “threaten [her] safety and the water and air quality near [her] home.” Robertson Decl. ¶ 8. Robertson is also “extremely concerned” that injection wells and pipelines built to transfer CO₂ from emissions sites to wells will leak, causing her personal injury. *Id.* ¶¶ 9–10. Similarly, AAE member Kevin George alleges that he drives through Baton Rouge several times a year, and he is “concerned about leaks, explosions, and other dangers from” the many Class VI wells proposed there. George Decl. ¶ 9.

Other members allege aesthetic and recreational injuries. Healthy Gulf member Scott Eustis claims injury because a company called Air Products “will soon seek Class VI permits” in a lake where he “swim[s], fish[es], and boat[s].” Eustis Decl. ¶ 10. A second company has proposed a Class VI well in a location that he visits “at least 3 times annually,” and these wells will “destroy the aesthetic and recreational values of the area.”⁶ *Ibid.*; *see also* Solet Decl. ¶¶ 7–8 (describing similar personal, aesthetic, and recreational injuries based on the Air Products and Grand Isle applications). Likewise,

⁶ Eustis also alleges aesthetic and recreational injuries from “imminent permitting of Cox Operating’s” Class VI project in Grand Isle, Louisiana because LDENR must monitor the project. *Id.* ¶ 11. This allegation is particularly odd: Eustis alleges LDENR is “[not] aware that they will have to be involved in this project.” *Ibid.* He presents no support for that contention other than that boundary waters “are particularly neglected by LDENR.” *Ibid.* Due to the extensive regulatory and permitting requirements for UIC wells, including continuous monitoring during operation, this seems highly implausible.

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George fishes “2-3 times per month in waterways including Black Lake,” where there is a pending permit application for a Class VI well and proposed carbon dioxide pipeline. George Decl. ¶ 8. This could cause “carbon dioxide leaks” that would affect the fish population and fishermen’s safety. *Ibid.*

Now consider the chain of petitioners’ speculation. It begins as it did with their alleged economic injuries: (1) a party applies for a Class VI permit; (2) Louisiana issues the permit; (3) and the well is constructed. But then, more steps are added: (4) the well survives rigorous pre-injecting testing requirements; (5) injection occurs; (6) some kind of mishap occurs, resulting in (7) an injury affecting a member’s person, property, or intangible interests in the environment. This theory of injury ultimately amounts to a “speculative chain of possibilities” that cannot establish a “certainly impending” injury. *Clapper*, 568 U.S. at 414. And the attenuation itself precludes standing: The “chain of causation” from the challenged EPA action to a member’s eventual injury “is simply too attenuated.” *All. for Hippocratic Med.*, 602 U.S. at 391.

As in *Clapper*, the final step bears additional emphasis: Even if all other contingencies occur as alleged, petitioners “can only speculate as to whether” *they* will be injured. *Clapper*, 568 U.S. at 414. For instance, George’s theory of personal injury requires that he would be driving through Baton Rouge on one of his several yearly trips at the very time some piece of Class VI infrastructure malfunctioned. The Constitution does not countenance such contingency.

4

Finally, the organizations claim Louisiana’s long-term liability transfer “leaves them without recourse for potential damages should CO₂ escape the injection zone any time after site closure.” Blue Br. at 20–21. It is first necessary to understand the liability transfer provision. Mirroring EPA

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regulations, Louisiana imposes a series of requirements on well operators to wind down UIC operations. *See* LA. STAT. ANN. § 30:1109. If the well operator complies, a “certificate of completion of injection operations” “shall issue.” *Id.* § 30:1109(A)(1). At this point, Louisiana’s regime diverges from federal regulations. Once a certificate of completion issues, the State assumes ownership of the well and stored CO₂. *Id.* § 30:1109(A)(2). The statute broadly releases operators from liability.⁷ That release does not cover any liabilities incurred due to the operator’s noncompliance with applicable laws or regulations before the certificate of completion issued. *Id.* § 30:1109(A)(3). It also does not release operators from liability arising from the fraudulent “conceal[ment]” or “misrepresent[ation]” of “material facts related to” the facility or injections. *Id.* § 30:1109(A)(5).

Petitioners call this provision a “liability waiver.” *See, e.g.,* Blue Br. at 11. But the statute appears to *transfer* liability associated with UIC wells to a State-operated fund called the Carbon Dioxide Geologic Storage Trust Fund (“the Trust”). LA. STAT. ANN. §§ 30:1109(A)(3); 30:1110(A). The Trust is funded by various sources including State revenue, donations, civil penalties, and interest. *Id.* § 30:1110(B). If the Trust ever lacks sufficient funds to address “*any* duty, obligation, or liability” that arises after a certificate of completion issues, “the release from liability will not apply.” *Id.* § 30:1109(A)(4) (emphasis added).

Despite this, Healthy Gulf and AAE allege another theory of injury in which their members experience some kind of damage after site closure and

⁷ Specifically, the statute provides that “the storage operator, all generators of any injected carbon dioxide, all owners of carbon dioxide stored in the storage facility, landowners, and all owners otherwise having any interest in the storage facility shall be released from any and all future duties or obligations” associated with the well once the certificate issues. *Id.* § 30:1109(A)(3).

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“the waiver of liability leaves them without recourse for potential damages.” Blue Br. at 20–21. The organizations allege the liability transfer “remov[es] members’ ability to hold owners and operators liable if damage occurs.” *Id.* at 23.

So, the chain of events must occur as follows: (1) a party applies for a Class VI permit; (2) Louisiana issues the permit; (3) the well is constructed; (4) the well survives rigorous pre-injecting testing requirements; and then (5) injection occurs. But then petitioners need five additional levels of speculation: (6) 50 years elapse⁸; (7) the operator applies for and receives a certificate of completion in compliance with regulatory requirements, resulting in a liability transfer; (8) some kind of mishap occurs; (9) resulting in an injury affecting members’ person, property, or intangible interests in the environment; and (10) those members receive diminished compensation from the Trust.⁹

This theory stretches attenuation and speculation far beyond their breaking points. The Supreme Court and our court have rejected far less. *See, e.g., Murthy v. Missouri*, 603 U.S. 43, 70 (2024) (rejecting plaintiff’s theory of injury that (1) he would engage in speech within a targeted category, (2) the

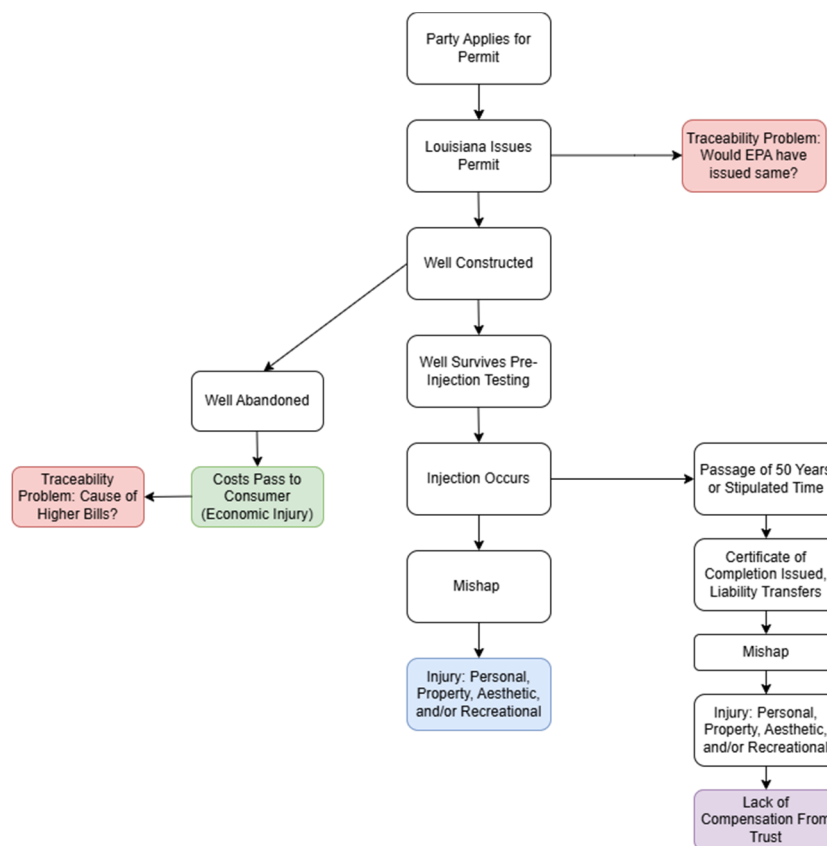
⁸ Louisiana regulations permit, like their federal counterparts, cessation and winding-down of UIC operations on “any other time frame established on a site-specific basis.” LA. STAT. ANN. § 30:1109(A)(1). Like federal law, however, fifty years is merely a statutory default and well operators may only alter the closure timeline with regulatory approval. *Ibid.*

⁹ This contention alone is inconsistent with the statute. The liability transfer provides a crucial backstop that ensures injured parties are not left without compensation. If the Trust “has been depleted of funds such that it contains inadequate funds to address or remediate any duty, obligation, or liability that may arise after issuance of the certificate of completion,” the last recorded owner or operator is *not* released from liability. LA. STAT. ANN. § 30:1109(A)(4).

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Government would ask the platform to suppress it, and (3) the platform would acquiesce); *Louisiana v. Haaland*, 86 F.4th 663, 666–67 (5th Cir. 2023) (rejecting plaintiff’s theory of injury requiring that (1) buyers bid on areas inhabited by the endangered Rice’s whale, (2) buyers then actually undertake drilling activities, (3) one or more whales would be killed by those activities, and (4) a member of the plaintiff organization experience an aesthetic injury due to the diminished whale population). The imminence and causation requirements described in *Clapper* and *Alliance* simply do not permit petitioners’ attenuated and speculative injuries.

Petitioners’ Primary Theories of Injury



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5

Petitioners also raise two overarching theories of how Louisiana’s Class VI program will increase the likelihood of any of the injuries described above.

First, petitioners contend the liability transfer “will discourage companies from constructing Class VI wells designed for long-term safety” and thus any wells permitted “will not be sufficiently protective of human health, water, and the environment.” Robertson Decl. ¶ 13; *see also, e.g.*, George Decl. ¶ 13; Eustis Decl. ¶ 16; Burke Decl. ¶ 14.

This cannot save their claims. The liability transfer occurs only after well closure and a certificate of completion is issued and does not cover any liabilities arising before issuance. Shirking on costs during construction and operation would thus incur liabilities unaffected by the transfer. Moreover, any measures intended to cut costs after closure run the risk of causing disaster before closure. It is speculation piled on speculation to say, as petitioners do, that UIC operators will invest in safety measures that last up to—but only up to—50 years. *See All. for Hippocratic Med.*, 602 U.S. at 384 (“The causation requirement precludes speculative links—that is, where it is not sufficiently predictable how third parties would react to government action or cause downstream injury to plaintiffs.”). The reaction petitioners predict is not predictable—it is not even rational.

Second, petitioners lodge general complaints that traditional injuries are more likely due to Louisiana’s “lack of staffing and expertise to administer a permitting program.” Robertson Decl. ¶ 15; *see also id.* ¶ 16 (“The State is not responsive to the public and has not indicated its intent to enforce permit conditions or vet facilities for adequate protections of public health and the environment.”); Eustis Decl. ¶ 18 (alleging the State cannot “carefully

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review Class VI permit applications and ensure that permit conditions are enforced”).

Even assuming this is true, it resolves nothing. These allegations do no more than add another vague, atmospheric contingency to the chains of events described above. Standing requires more.

*

Under both Supreme Court and Fifth Circuit precedent, every theory of future injury alleged by AAE and Healthy Gulf fails for lack of imminence. Imminence is “stretched beyond the breaking point” here, because the organizations “allege[] only an injury at some indefinite future time.” *Lujan*, 504 U.S. at 564 n.2.

C

Finally, a few words on traceability. As noted above, *see supra* at 14, traceability sometimes overlaps with the imminence prong of the injury in fact requirement. But that does not mean the doctrines are conterminous. Far from it: traceability is its own standing requirement. And it imposes independent obstacles here, separate and apart from petitioners’ failures to demonstrate injury.

Constitutional standing requires that an injury in fact be “fairly traceable to the challenged action.” *Clapper*, 568 U.S. at 409 (quotation omitted). That requirement serves “to ensure that in fact, the asserted injury was the consequence of” EPA’s grant of primacy. *Murthy*, 603 U.S. at 69 n.8 (quotation omitted). “[W]here a causal relation between injury and challenged action depends upon the decision of an independent third party . . . , standing is not precluded, but it is ordinarily substantially more difficult to establish.” *California v. Texas*, 593 U.S. 659, 675 (2021) (cleaned up).

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Had EPA denied Louisiana’s primacy application, the federal default regulations for Class VI wells would apply, and EPA could permit Class VI wells to be built within the State of Louisiana. So the same wells could be built—with or without the challenged EPA action granting primacy to Louisiana.¹⁰ Petitioners therefore cannot trace any alleged injuries to EPA’s grant of primacy to the State. *Cf. Clapper*, 568 U.S. at 413. Traceability requires more than the bare speculation presented here.

* * *

Because all three petitioners fail to demonstrate Article III standing, the petitions for review are DISMISSED.

¹⁰ If anything, EPA’s decision to grant Class VI primacy to the State makes the standards stricter and hence makes the wells safer. That is because Louisiana’s standards generally mirror the federal regulations but are more stringent in some ways. *See* Intervenor’s Br. at 38–40 (collecting state standards that exceed federal ones).

Petitioners also argue that, despite identical state and federal standards, the State will administer these standards poorly. *See, e.g.*, Robertson Decl. ¶ 15 (contending the State’s “lack of staffing and expertise” will lead to “painfully low enforcement” and “administer[ing] the Class VI program in a manner that is [not] protective of my health and my property”). Petitioners made identical arguments to EPA multiple times, EPA rejected them, and petitioners have given us no reason to think EPA was wrong to credit the State’s planning and preparation.

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JAMES E. GRAVES, JR., *Circuit Judge*, concurring in the judgment only:

The majority dismisses the petition because all three environmental organizations lack standing. I agree that is the correct disposition, so I spill no more ink on the subject. I concur in the judgment only, however, because in my view the majority’s opinion is overstated.

I offer an illustrative example that revolves around the central precedent at issue here: *Food and Drug Administration v. Alliance for Hippocratic Medicine*, 602 U.S. 367 (2024).

The majority states that “Article III requires ‘direct interference.’” *See ante* at 11 (citing *All. for Hippocratic Med.*, 602 U.S. at 395). But *Alliance* never unequivocally says that Article III requires direct interference in all cases. Or even that organizations can only claim Article III organizational standing if they can show direct interference. In fact, the phrase “direct interference” does not appear in *Alliance*. *See* 602 U.S. at 372–97.

Instead, the Court seems to cautiously distinguish the facts in *Alliance* from the facts in *Havens Realty Corporation v. Coleman*, 455 U.S. 363 (1982), saying that the FDA’s actions in *Alliance* had “not imposed any *similar* impediment to the medical associations’ advocacy businesses.” *All. for Hippocratic Med.*, 602 U.S. at 395 (emphasis added). The use of “similar” undermines the reading that the impediment must always directly affect and interfere like in *Havens*.

Notably, the Court reiterated the language from *Havens*: “perceptibly impaired.” It said: “HOME sued Havens because Havens ‘perceptibly impaired HOME’s ability to provide counseling’ In other words, Haven’s actions directly affected and interfered with HOME’s core business activities” The Court began the second sentence by using the adverbial phrase “[i]n other words,” suggesting that “directly affected and interfered” is a rephrasing of “perceptibly impaired.”

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Instead of taking the Court at its word, the panel majority creates a more stringent requirement than the “perceptible impairment” the Supreme Court recognized in *Havens* and extended in *Alliance*, and that our court recently applied in *Louisiana Fair Housing Action Center, Inc. v. Azalea Garden Properties, LLC*, 82 F.4th 345, 353 (5th Cir. 2023). In my view, that approach overreads *Alliance* and improperly imposes a stricter rule on Article III standing’s injury-in-fact requirement than the Supreme Court outlined.

Given this, and other, concerns with the majority’s characterizations of the state of the law, the parties’ arguments, and the interplay between them, I concur in the judgment only.