Money and Cooperative Federalism:
Evidence from EPA Civil Litigation[*]

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Abstract

The federalism structure of the US government requires active cooperation from state governments to successfully enforce federal environmental regulations. What explains state governments' participation in lawsuits against firms that are accused of violating major environmental statutes? We argue that firms' political connections with state politicians affect a state government's decision to join the litigation process. By constructing a novel dataset on the EPA's civil cases and settlements for the period 1998-2021, we show that state environmental agencies are less likely to join the EPA in court when the defendant firms contributed to Republican state legislators. We do not find the same pattern when firms have connections with Democratic legislators. We also show that state involvement in litigation is associated with higher penalties as well as more environmental provisions in judicial outcomes. Our findings highlight how state politics can be an avenue for firms to exert influence on federal regulations.

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1   Introduction

One of the defining characteristics of environmental policy in the US is its federal structure (Rothenberg 2002; Konisky and Woods 2018). The federal government sets standards and regulations, and also has powers to monitor and enforce its programs and statutes across the country. The Environmental Protection Agency (EPA) is the agency that administers the most important federal statutes, such as the Clean Air Act (CAA) and the Clean Water Act (CWA). Notwithstanding, the role of state governments is also crucial for environmental policy. States have authority to regulate important areas, like the fracking industry, and to experiment with different policies, such as cap and trade programs (Revesz 2001). On the other hand, most of the environmental regulatory enforcement of federal mandates is carried out at the state level by state environmental agencies. The existence of many areas of overlapping jurisdiction between the federal and state governments creates the opportunity for both levels of government to cooperate. Environmental policy in the US, in particular, depends to a large extent on a partnership between federal and state governments.

Cooperative federalism is a type of relationship between the federal and state governments in which common goals are pursued by all and there is little intergovernmental conflict regarding which level of government has the authority to do what (Fiorino and Weted 2020). One of the areas of environmental enforcement in which cooperation between the federal and state governments is particularly important is federal litigation. Litigation has become one of the most widely used tools to address issues of climate change and environmental regulation in the US. Although the EPA has the authority to sue and take a case to court on its own, state governments can join the EPA as plaintiffs through their environmental agencies or state attorneys general. By joining the litigation process, states can bring important resources to strengthen the case against presumed violators. Therefore, state cooperation in federal litigation cases can be important for punishing violators, and recovering resources for cleanup operations, and deterring future violations.

Although cooperation from state government is a critical factor in successfully enforcing federal regulations, state governments do not always join EPA civil cases as plaintiffs even when

the violation occurred in their territories. For example, on January 27, 2022, the EPA announced a settlement with the Dow Chemical Company for its violation of the Clean Air Act (CAA).[1] According to the court document, the Dow Chemical Company and its subsidiaries violated the CAA by generating excessive emissions of pollutants, including benzene. The violation took place in four facilities located in Freeport, Texas; Orange, Texas; Hahnville, Louisiana; and Plaquemine, Louisiana. In the lawsuit, however, only the Louisiana Department of Environmental Quality joined the EPA as a co-plaintiff. The state of Texas did not join the civil litigation even though violations by the Dow Chemical Company took place at two facilities in its territory.

In this paper we investigate why state environmental agencies decide to join (or not) the EPA in court in civil litigation against the private sector. We argue that political connections that alleged firms have with state politicians affect a state government's decision to join the litigation process. Firms have strong incentives to influence judicial outcomes by utilizing their political connections. Litigation cases are usually the most high-profile and expensive regulatory actions for firms. Although there is a large literature on special interests' influence on regulatory agencies (Rothenberg 1994; Gordon and Hafer 2005), their influence on litigation cases has received less attention (Figueiredo and Figueiredo 2002). Most of the litigations initiated by the EPA against private firms are brought to federal courts. Given that federal judges who rule on EPA civil cases are appointed by the president and judges are assigned randomly once a cases are filed in federal district courts, there is limited opportunity for accused firms to directly influence judges' litigation decisions.

We propose a different channel of influence. We argue that firms can use their political connections with state politicians to affect court outcomes indirectly through the involvement of state agencies in the judicial process. Litigation outcomes depend on the resources that parties bring into court (Figueiredo and Figueiredo 2002). Especially regarding EPA civil cases, without input from the states—which enforce more than 75% of the federal regulations (González 2022)—the federal government would be less effective in presenting its case and a lack of cooperation from

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1. https://www.epa.gov/enforcement/ (accessed March 11, 2022).

state governments ultimately benefits the defendant's side.

Then, how do firms influence a state environmental agency's decision through their connections with state politicians? There are various channels through which state politics influence the decisions of state bureaucratic agencies. State legislatures approve the budget for these agencies and in many cases conduct oversight of their work (Cook and Fortunato 2022). If the legislature is not content with how a bureaucratic agency is performing, it can enact more specific laws to tighten its control (Huber, Shipan, and Pfahler 2001; McGrath 2013). Governors also appoint the heads of these agencies and in some states these nominations require confirmation by the state senate. Politicians also use informal contacts with agencies to address case work or policy demands on behalf of their constituents and interest groups (Ritchie 2018; Ritchie and You 2019; Silfa 2022). Therefore, if state politicians are connected with defendant firms, they could apply pressure on state environmental agencies not to join the EPA as a co-plaintiff.

To test our argument, we construct a novel dataset on EPA civil cases and settlements for the period 1998-2021. We manually review and code 748 civil cases initiated by the EPA, focusing on cases that were settled in a federal court, as opposed to cases that were handled administratively by the EPA alone. Given our focus on private firms, we exclude cases in which the defendant was a city or a county, as well as "national" cases without a specific location of violations. Our final sample includes 333 unique judicial cases for which we gather a rich set of information from court documents (consent decrees). For each case, we extract the information on firms involved on the defendant side, the places where violations occurred, and which states joined the EPA as plaintiffs. We also collect data on the statutes that were violated; the court where the settlement took place; and other variables, such as penalties assigned, and environmental provisions mandated by the court. Of the 333 cases, 176 included at least one state agency that sided with the EPA on the plaintiff's side. To measure political connections between defendant firms and state politicians, we use campaign contribution data from the Database on Ideology, Money in Politics, and Elections (DIME) compiled by Bonica (2018).

We find that state environmental agencies are less likely to join the EPA in court when the firms

3

involved contributed to Republican state legislators in previous legislative elections. This finding is robust to the inclusion of various control variables, including court fixed effects and a measure of the seriousness or salience of the case. The effect is especially salient for contributions made by defendant firms to Republican state legislators who serve on committees with jurisdictions over environmental regulation and land use. Contributions made to state legislators who serve on committees that have little connection with environmental issues, such as veterans' affairs, show no effect. We do not find any effect for political connections with Democratic legislators. These differences could be because Republicans and Democrats represent voters and donors with very different views about the role of the EPA and environmental regulation in general (Egan and Mullin 2017; Karol 2019). Therefore, it could be costlier for Democratic legislators to side with alleged polluting firms, given that the major environmental groups donate mostly to Democratic candidates, and their voters strongly support environmental regulations.

Interestingly, we do not find any effect for contributions to governors' races. This could be driven by multiple factors. First, the size of contributions made by the firms in our sample is much larger for state legislators than for governors. Second, the share of contributions from the defendant firms is larger for state legislators' campaign war chests than those of governors. Third, a governor's partisanship is strongly correlated with a state's decision to join the EPA court cases: states led by Republican governors are less likely to join EPA's civil cases. This suggests an increasing pattern of partisan federalism (Bulman-Pozen 2014), and once we control for a governor's partisanship, contributions from defendant firms to that governors' race have little influence on the state's decision.

Next, we turn to analyzing the policy implications of cooperative federalism. In particular, we ask if state involvement is associated with different court outcomes. We focus on court-mandated penalties and environmental projects assigned to firms. This second outcome is particularly important since the highest costs in environmental litigation punishments involve environmental projects, rather than monetary penalties. We find that state involvement is associated with higher total penalties, especially penalties paid to state governments. This result suggests that state governments'

4

involvement in the litigation process could increase monetary benefits allocated to the states themselves. We also find that more cooperation from state agencies is associated with more spending on environmental projects and with the number of different projects mandated in consent decrees. Our findings demonstrate that political connections prevent states from joining EPA litigations even though the violations occurred in their territories and there could be potentially high material benefits through penalties and environmental programs if they join the EPA as plaintiffs.

The main contribution of this research is to highlight the importance of studying special interest influence at the subnational level (Anzia 2018, 2022; Stokes 2020) even if we focus on national policy as an outcome. Many agencies, such as the EPA, rely on the states to conduct most regulatory activities, and state agencies play an important role in regulations and litigation. In this context, state politics can be a venue to influence federal regulation. Our paper highlights how the structure of federalism can create an opportunity for firms and interest groups to influence national policies through state politics (Meckling and Trachtman 2022b).

Second, we identify a novel channel of private firms' influence on judicial outcomes through state governments. The literature on special interests and courts has mostly focused on amicus curiae briefs (e.g., Box-Steffensmeier, Christenson, and Hitt 2013) and to a lesser extent on judicial elections (Bonneau 2005). Amicus curiae briefs can influence judges' decisions by presenting evidence and supporting the case for one of the parties involved (Bils, Rothenberg, and Smith 2020). Our theory also points to the information and resources brought to court, but instead of focusing on direct participation by interest groups, we emphasize the involvement of state regulatory agencies as plaintiffs, which is a function of firms' political connections to state politicians. Finally, the relationship and degree of shared responsibility between the federal and state governments is one of the most fundamental questions in the environmental federalism literature (Woods 2020). In this paper we expand this literature by quantifying the effect of state cooperation with the federal agency on penalties and environmental programs that defendant firms must pay.

2   Cooperative Federalism and Environmental Policy

The federal structure of the US government is embedded in the Constitution, and it defines the relationship between the federal government and the states. Although the Constitution's Supremacy Clause asserts that federal law trumps state laws, the federal government does not have as much as power over the states as it may appear. According to the Tenth Amendment's anti-commandeering doctrine, the federal government cannot force state governments to enforce federal laws or to provide assistance (Chemerinsky et al. 2015). Thus, voluntary cooperation from state governments with the federal government has been considered an important ingredient for successful implementations of federal laws and regulations in many policy areas.

Cooperative federalism is characterized by shared responsibilities and (somewhat) clear lines of authority among different levels of government (Fiorino and Weted 2020) and this relationship is particularly important in environmental policies as state governments are responsible for enforcing the vast majority of federal laws and regulations. The logic behind cooperative federalism is to benefit from both the centralized arrangements by the federal government and the flexibility that decentralization can provide (Rothenberg 2002). The EPA has more resources than state agencies to invest in research to set standards and exploit economies of scale. By setting minimum standards and adopting a nationwide perspective, the EPA also can help prevent a race to the bottom in environmental regulation across the states, although there is little evidence of this type of behavior among states (Konisky 2007). On the other hand, states can adapt EPA standards so they are met through minimum costs according to the unique circumstances of each state. Also, local governments can take advantage of their local knowledge to monitor firms and conduct regulatory and enforcement actions.

This cooperative design is present in the most important federal statues regarding environmental control in the US. For example, the EPA is the default administrator for the Clean Water Act (CWA) and Resource Conservation and Recovery Act (RCRA), and states must apply for "primacy," which allows them to be the primary administrator and to enforce these statues (Sigman

and Traub 2007). The Clean Air Act is somewhat different since states are the default administrators, but they are required to submit their State Implementation Plans to the EPA for approval. In all cases, state governments retain significant leverage over how they conduct regulatory activities. Also, combining employees in the four largest state environmental agencies in the US (California, New York, Texas, and Pennsylvania) produces almost the same number of employees as in the federal EPA. Without cooperation from state governments, it is hard to imagine how the EPA could, for example, conduct the tens of thousands of inspections that the Texas Commission on Environmental Quality performs annually.

This does not mean that the federal and state governments work together and cooperate in all aspects of environmental policy. There is vast literature documenting how partisan differences within the federalism system—both between the federal and state governments (Bulman-Pozen 2014) and between state and local governments (Barber and Dynes Forthcoming; Butler et al. 2017; Einstein and Glick 2017)—hinder cooperation and increase gridlock. In recent years, environmental policies have been a subject of intense partisan disputes, and conflicts between the states and the federal government have frequently occurred (Konisky and Woods 2016, 2018). In March 2020, during the outbreak of the COVID-19 crisis and economic downturn, the EPA under the Trump administration issued a final rule to roll back the Obama administration's fuel-efficiency standards for automobiles, citing the need to reduce costs associated with environmental regulation. A few months later, California Attorney General Xavier Becerra along with other state and municipal governments sued the Trump administration, challenging the EPA's final rule on fuel efficiency (Tabuchi 2020).

In addition to monitoring federal regulations, litigation against private firms is an important area of cooperation between federal and state environmental regulators. According to a recent report published by the United Nation's Environment Programme, litigation has been an increasingly important tool used to address issues of climate change and other environmental issues.[2] The EPA also actively uses formal lawsuits for enforcement actions and the largest violations of federal

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2. https://www.unep.org/resources/report/global-climate-litigation-report-2020-status-review (accessed on October 1, 2022).

statutes are settled in court. Litigation cases can entail penalties of millions of dollars for polluting firms. These cases are also important because, along with penalties, court orders usually include environmental projects to be conducted and/or financed by the defendant firms. The financial costs of those projects are usually much higher than the penalties and provide reparations to affected communities.

3   State Involvement in Federal Environmental Litigation

Now we turn to discuss the role of states in federal litigation. When the EPA finds a violation of federal statutes, it can lead to either an administrative or a judicial action. Administrative actions, which are handled by the EPA alone, take the form of notices of violations and/or orders directing involved parties to comply with the regulation. Judicial actions involve formal lawsuits. For the most part, the decision of which action to take depends on the severity of the violations. For example, the CAA and the CWA establish caps for penalties, which are regularly adjusted for inflation.[3] If the penalties sought by the EPA are larger than these caps, the EPA must refer the case to the Department of Justice (DOJ). The EPA and the DOJ can determine whether to handle these cases administratively or judicially. If the case is taken administratively, then states cannot be parties to the enforcement action. For major violations, the EPA brings cases against the defendants to court through the DOJ.

The EPA can take two types of judicial actions: civil and criminal litigations. The distinction between civil and criminal cases is important from a burden-of-proof perspective. In criminal cases some level of knowledge or intent must be proven and guilt must be proven beyond a reasonable doubt. In contrast, civil judicial cases can be brought simply through the existence of the environmental violation and defendants are not required to admit to any violation.[4] And in most civil judicial cases, the government and the defendant reach a mutually agreeable settlement. In

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3. On December 23, 2020, the EPA announced the finalized rule on its penalty caps. For the Clean Air Act, the maximum penalty is $56,460 per day, per violation. For the Clean Water Act, the maximum penalty is $48,762 per day, per violation. See https://www.federalregister.gov/documents/2020/12/23/2020-26997/civil-monetary-penalty-inflation-adjustment (accessed August 12, 2022).

4. https://www.epa.gov/enforcement/basic-information-enforcement (accessed March 14, 2022).

this paper, we focus on civil litigation cases where only the occurrence of a violation is brought to court because this is the most common type of judicial action that the EPA takes.[5]

Since we are examining state involvement in federal litigation, any restriction on a state's ability to join the EPA in court could seriously bias our results. Although federal environmental statutes generally allow private actors, such as NGOs or individuals, to sue for violations, they must further demonstrate in court that they have immediate connections to the action been challenged. It has been difficult for environmental groups to provide this legal "standing" in environmental lawsuits (Lazarus 2020). However, we argue that this is not the case for state governments. States may join the EPA as plaintiffs for violations within their borders. Whether a state worked with the EPA from the beginning of the investigation or joined later but prior to the case's presentation in court, states are entitled to a special standing status in court (Green 2012). This means that if a state decides to join the EPA in a trial, it generally faces no restriction to enter as a plaintiff.

If it is determined that the case will be taken judicially, the EPA case team may inform the state that the EPA is proceeding with an enforcement action and offer the state an opportunity to join the case. There is no formal procedure in place to ask a state to join a federally led enforcement action. However, under the most important statutes, such as the CAA or the CWA, most states are the main administrators of these regulations (holding so-called "primacy" status) (Fowler and Birdsall 2020); therefore, the EPA typically informs the state that the EPA is proceeding with an enforcement action.[6] States can join the litigation process through their environmental agencies (which have the authority to regulate these statutes) and/or through the state attorney general. By joining the EPA in litigation, state agencies can secure resources for their states as monetary penalties and environmental projects paid for by defendant firms. Despite the federal government's active efforts to elicit state cooperation, there is significant variation among states regarding involvement in these litigation cases. Why do not all states join the EPA as a co-plaintiff when violations occur within their borders?

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5. Since 1970 the EPA participated in 15,237 civil judicial cases and 2,805 criminal cases. Source: https://echo.epa.gov/tools/data-downloads (accessed February 1, 2022).

6. We acquired information about the procedure of state involvement in a litigation through correspondence with multiple EPA bureaucrats involved in civil litigations.

To understand state environmental agencies' decisions to join the EPA in court, it is important to consider how state politicians could affect decisions made by state environmental agencies. First, state legislatures oversee these agencies and assign their budgets. If the state legislature is not content with how a bureaucratic agency is performing, it can enact more specific laws to tighten its control (Huber, Shipan, and Pfahler 2001; McGrath 2013). Second, state legislators can use other, more informal channels of influence. Data acquired from our Freedom of Information Act (FOIA) request to the Texas Commission on Environmental Quality (TCEQ) shows that Texas state representatives and senators contacted this agency much more frequently than federal-level politicians.[7] Moreover, this data reveals that these legislators contacted the TCEQ about specific policies and actions with respect to particular firms and constituencies. Third, governors appoint the head and sometimes the board of directors of these agencies.[8] By these appointment attributions, the executive can be confident that the highest-ranked employees in these agencies are aligned with her policy preferences. For example, in 2012 Governor Rick Perry (R-TX) announced that Toby Baker would be the next commissioner of the TCEQ. Despite the fact that Baker had no prior background in environmental issues, he had previously been an adviser to Governor Perry and repeatedly stated that he shared the governor's views on environmental protection (Wilder 2012).

Private firms are usually defendants in EPA civil litigations. The costs associated with judicial cases far exceed those of administrative fines and penalties, but extant research on the influence of the private sector on regulatory outcomes has paid little attention to judicial cases.[9] We argue that even if there is no direct channel of special interests' influence on federal judges and federal court outcomes, state agencies can indirectly affect these outcomes.[10] According to the DOJ's guidance for joint state/federal civil environmental enforcement litigation, "State and federal attorneys united against the resources of major corporate litigants can lead to faster and better settlements

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7. Between 2000 and 2021, elected politicians directly contacted the TCEQ more than 5,500 times. Around 80% of these contacts were made by the governor or state legislators.

8. Table A2 in the Appendix presents the mode of appointment procedures for the head of state environmental agency.

9. Figueiredo and Figueiredo (2002) and Figueiredo (2005) are some exceptions.

10. The process of case assignment to judges is computerized and clerks in the federal system use the Management/Electronic Case Filing (CM/ECF) system. Each judge receives a number of "cards," which account for the probability of handling a given case (Botoman 2018).

with even more significant penalties and broader injunctive relief" (DOJ, 2017).[11] This suggests that cooperation from state governments is critical in deciding court cases against corporate defendants.

How do firms influence state environmental agencies' decisions to join EPA lawsuits? Our main hypothesis is that state environmental agencies will be less likely to join the EPA in court when defendant firms made campaign contributions to state politicians in that state. Campaign contributions by firms alone can signal their intention to fight bureaucratic regulations (Gordon and Hafer 2005). Campaign contributions also enable access to politicians (Kalla and Broockman 2016) and therefore, to the extent that politicians can influence the behavior of bureaucratic agencies as we explained above, firms can affect the behavior of environmental agencies through their connections with state politicians (Stokes 2020).

Politicians may hold different opinions on environmental regulations conducted by the EPA depending on their own ideologies or pressures from various groups, which make them more or less likely to be affected by contributions made by defendant firms. There is a significant divide between Democrats and Republicans around environmental protection (Egan and Mullin 2017). Therefore, Democratic state politicians may face cross pressures from corporations that donated to them and from environmental interest groups or their constituents. The degree of cross pressure may be less severe in the case of Republican state legislators. Thus, the influence of firms' political connections over state politicians may vary depending on the party affiliation of the politicians. To examine the potential heterogeneous effect, we analyze the effect of defendant firms' contributions to Democrats and Republicans separately.

Our argument rests on the idea that state agencies are important actors in the litigation process. By joining the EPA, they can bring resources to strengthen the case against the defendants. Local knowledge can be a very important aid for the EPA's federal or regional officials who may know less about the firms and sites involved in a given case. If true, we should expect to see a difference in court outcomes when state agencies participate, since litigation outcomes depend on the

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11. https://www.justice.gov/file/928531/download (accessed March 12, 2022).

resources that parties bring to court (Figueiredo and Figueiredo 2002). Our second hypothesis is that state environmental agencies' involvement will lead to larger penalties and environmental provisions mandated by the court. This is an important exercise to examine how state governments' involvement makes a difference in judicial outcomes in environmental litigations.

4   Data and the Stylized Facts

We obtained data for the most significant EPA civil cases between 1998 and 2021 from the enforcement website of the EPA. The EPA provides a list of 748 cases that are considered of particular importance.[12] We begin by manually reviewing and coding these 748 civil cases initiated by the EPA. The enforcement website provides a summary of the cases and, in many cases, a link to the court documents. Among 748 civil cases posted on the EPA's website, 238 are civil administrative cases that were not taken to a federal court, and these cases were handled by EPA alone. Given that our hypothesis involves the behavior of state agencies, we focus on the second type of cases: civil judicial cases. Civil judicial cases are accompanied by consent decrees. A consent decree is an agreement between the plaintiff(s) and the defendant(s) that is supervised by a court. These cases are filed by the DOJ on behalf of the EPA and these cases were all settled in federal courts.[13] Out of 510 consent decrees settled between April 1998 and March 2021, we gather information on 476 cases from consent decrees.[14]

Consent decrees provide a rich set of information about cases, including the parties involved,

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12. https://cfpub.epa.gov/enforcement/cases/. A complete list of all EPA judicial cases can be found in the Enforcement and Compliance History Online database (ECHO). For our period of analysis, the total number of civil cases is around 4,500. Among these, many cases that are labeled "judicial civil actions" are cases handled in EPA courts. This larger sample also includes many minor administrative cases against small firms or cases that involve minor violations that do not involve any state government's participation. We contacted an EPA bureaucrat to double check the sample selection of major cases and the EPA bureaucrat confirmed that the cases listed on the EPA web page were selected as major cases by the EPA.

13. More than 95% of EPA litigation cases are settled (Helland 2001) and civil litigations usually result in payment of penalties and/or funding of environmental projects by the defendants.

14. We were not able to find the court documents or other sources to supply enough case-level information for 34 cases. When we examined those cases, we found that one-third of them concerned the EPA's requirements for importers. When companies import pesticides or objects that may contain toxic substances, they are required to inform the EPA about the substances; however, some companies violated those regulations. These types of cases are also settled in the federal courts but are less likely to involve a state government.

the types and sites of the violations, the federal and state statutes that were broken, and the monetary penalties and other judicial provisions for the defendants.[15] Some cases do not present a particular location where the actions that led to the consent decree occurred. For example, in 2015, MTU America (a subsidiary of Rolls Royce Power Systems) settled a case regarding the production and distribution of engines across the United States that did not comply with the CAA. These national cases are usually handled by the EPA alone, so we exclude them from our sample. We also exclude cases in which the defendant is a city or a county. Finally, there are cases that are a continuation of a previous case in which, for example, one of the parties is looking for a change in the conditions imposed by the court. In these cases, we analyze only the original court document. The final sample for empirical analysis includes 333 consent decrees where the defendants are private firms.[16] Figure 1 shows our 333 cases by the year in which the court settlement occurred.

Figure 1: EPA Civil Litigation Cases Settled by Year
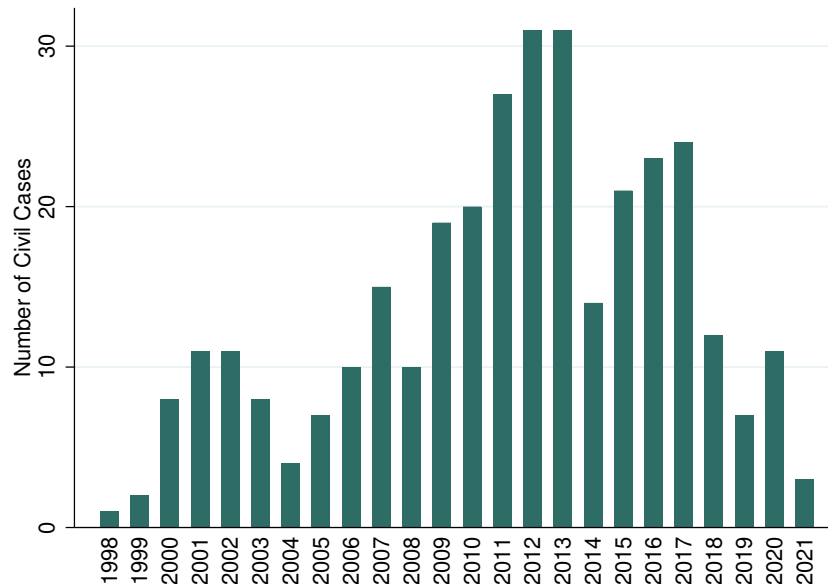
Our research question concerns the involvement of state agencies siding with the EPA in the litigation process. Of the 333 cases, 157 did not include the participation of a state agency. The

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15. Descriptive statistics for the variables we collected are presented in Table A1 in the Appendix.

16. Figure A1 in the Appendix presents a chart summarizing the case selection process and the litigation cases included in our sample.

remaining 176 cases included at least one state agency as a plaintiff.[17] To analyze the decision of an individual state agency to join the EPA in litigation, we transform this data so that the unit of observation is at the level of the litigated case and the state in which the violation occurred (case-state level). For example, in 2018, Chevron settled a case for violations of the CAA; the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Emergency Planning and Community Right-to-Know Act (EPCRA) at locations in California, Hawaii, Mississippi, and Utah; but only the state of Mississippi joined the EPA in court. This single case comprises four observations, one for each state. In this way, we can analyze state agencies' behaviors when there is a documented environmental violation in their states. This also allows us to incorporate a rich set of state- and firm-level variables. We have 780 observations at the case-state level, with 293 instances in which state environmental agencies joined as plaintiffs. Figure 2 shows the number of cases by state and the cases in which the state environmental agency sided with the EPA in court. We have cases for all 50 states, with Texas having the largest number of cases for environmental violations.

We take other relevant variables from the court documents, such as the court in which the case was settled and the federal and state statutes that were allegedly violated by the defendants. We also gather information on penalties and other provisions in the consent decrees. Firms can be assigned to pay a penalty to the federal government and the state governments, and states can receive a share of these funds if they join as plaintiffs. We measure total penalties, penalties paid to the federal government, and penalties paid to the states involved, at the case level. In many cases, monetary penalties are not the largest expense for private firms. Courts can also mandate that firms complete different types of environmental projects where the violations occurred. We measure the estimated costs of mitigation and environmental projects, supplementary environmental projects, and injunctive relief. We use two variables to measure the scope of environmental programs that defendant firms must provide. First, we use the estimated costs in dollars when the information is

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17. Figure A2 in the Appendix shows the distribution of cases according to the number of state agencies involved. Out of the 333 cases we analyze, only 27 include the participation of an actor besides state governments as a co-plaintiff along with the EPA. These include county- or city-level agencies, such as the Jefferson County Board of Health; or an NGO, such as the Sierra Club. No private firms or individuals are plaintiffs in our sample.

Figure 2: Participation Decisions by State Agencies
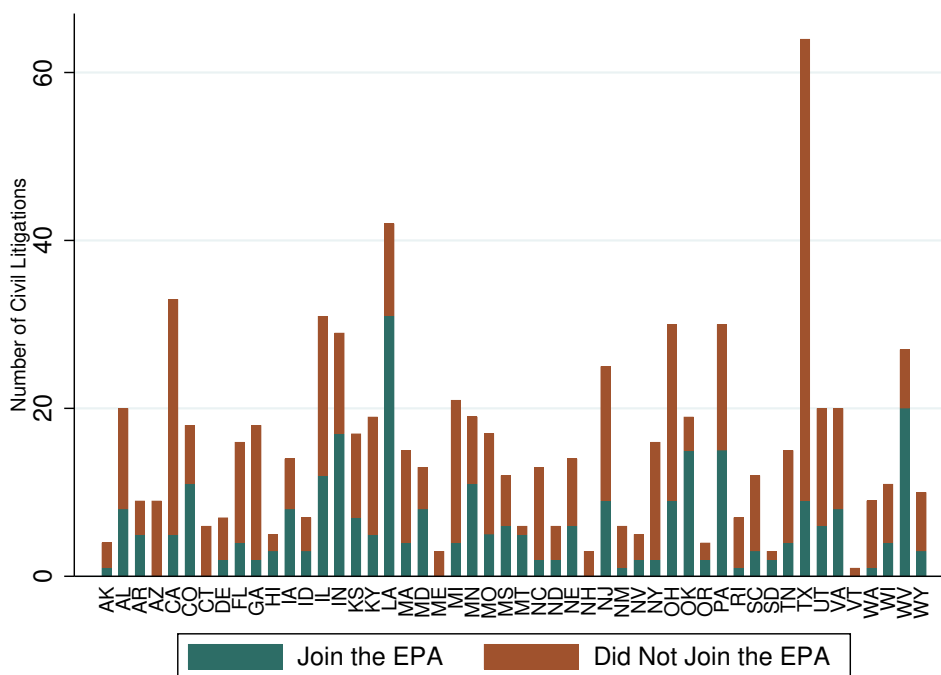
available. Given that we only have the information for estimated costs associated with a particular mitigation project for 234 cases, we create a variable indicating how many types of environmental provisions were stipulated in the consent decree.[18]

To measure political connections between defendant firms and state politicians, we use campaign contributions made by private firms involved in litigation to governors' and state legislators' races using data from the Database on Ideology, Money in Politics, and Elections (DIME) compiled by (Bonica 2018). Here we need to consider the timing of the contribution. Our focus is to uncover whether previous political connections through campaign contributions affected the behavior of environmental agencies. The contributions of interest are those made before the EPA and the DOJ brought the case against a given firm so we can measure the existing political connections prior to the litigation. Therefore, instead of using a consent degree's settlement date, we use the filling date for the case's presentation in court. For most cases in our data, the judicial process took

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18. Penalties and environmental provisions are assigned at the litigation case level, so our analysis is at the case level instead of at the case-state level. Descriptive statistics for case level variables are shown in Table A1 in the Appendix.

only a couple of months; but for a small subset of cases, the time elapsed between the filling and settlement dates was a couple of years.

We measure contributions in the election cycles prior to the date on which the case was filed in a federal court. More specifically, we measure contributions to governors' races in the previous election cycle (previous four years) and to legislators' races in the previous two election cycles (previous four years). We separate legislative contributions into those made to Republican and Democratic candidates. For governors' races, we include total contributions to the incumbent governor, contributions to the party of the incumbent governor, as well as contributions to Republican and Democratic candidates.

We have 577 unique firms in our data, and we measure contributions from both corporate Political Action Committees (PACs) and individuals employed at the defendant firms. In some cases, consent decrees involve small firms or subsidiaries, so we also include contributions from parent companies for those cases. Of the total number of 577 firms, 42% made at least one contribution to state races in our sample.[19] Given the unit of analysis is at the case by state level, we calculate the total campaign contributions made by the defendant firm(s) to state politicians in the state where the violation occurred. If there are more than one defendant firm involved in the lawsuit, we aggregate the contributions made by all defendant firms to state politicians for those cases.

Table 1 present the summary statistics of campaign contributions made by defendant firms at the case by state level. We only present the summary statistics for the cases where defendant firms made positive contributions to state politicians. For example, there are 146 cases where the defendant firm(s) made donations to Democratic gubernatorial candidates in the state where the violation happened and the mean value of total contributions made to the Democratic gubernatorial candidates in the election cycle prior to the date when the EPA filed a law suit is $19,424. There are two patterns worth noticing. First, the mean total contribution for Republican candidates is significantly larger than for Democratic candidates, especially in donations to state legislators.

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19. Figure A3 in the Appendix shows the distribution of firms' ideologies (CF Scores from Bonica 2018) based on their overall donation patterns across years. Although there are more firms on the conservative side (greater than zero), the pattern is not as extreme as one would expect given that we are focusing on firms sued for environmental violations.

Second, much of the contributions are allocated to legislative races. Among the firms in our sample that made positive donations to state races, 83% of their state-level donations were contributed to legislative races as opposed to gubernatorial races.

Table 1: Summary Statistics for Campaign Contributions by Defendant Firms

Variables	N	Mean	Median
Total Contributions to Democratic Governor Candidates ($)	146	19,424	3,886
Total Contributions to Republican Governor Candidates ($)	166	22,788	5,745
Total Contributions to Democratic State Legislature Candidates ($)	245	37,083	6,047
Total Contributions to Republican State Legislature Candidates ($)	269	58,129	9,457
Number of Democratic State Legislature Candidates	245	18.8	8
Number of Republican State Legislature Candidates	269	30.0	11
Contributions per Democratic State Legislator ($)	245	1,525	790
Contributions per Republican State Legislator ($)	269	1,412	761

Notes: The unit of observation is case by state. For the summary statistics, we only include cases where the defendant firm(s) made positive campaign contributions to state races. We calculate the contributions made by the defendant firm(s) to state politicians where the violations happened in the election cycle prior to the date when the EPA initiated a lawsuit. If there is more than one defendant firm in each case, we aggregate the contributions made by all defendant firms.

5 Political Connections and States' Decisions to Join the EPA

We test our hypothesis with a sample of 780 case-state level observations. We link defendant firms' campaign contributions to state politicians and the decision of state environmental agencies to join the EPA in court. The empirical specification is as follows:

$$Join_{i,j,t} = \alpha + \beta \, log(1 + Contributions_{i,t}) + \delta \, \mathbf{X}_{i,j,t} + \theta_i + \gamma_t + \varepsilon_{i,j,t} \tag{1}$$

where i, j and t refer to states, litigation cases, and years, respectively. The dependent variable takes the value of 1 if the state environmental agency of state i joined the EPA in case j settled in year t, and 0 otherwise. We use different measures of campaign contributions that are described below. $\mathbf{X}_{i,j,t}$ contains various control variables at the state and case levels, while θ_i and γ_t represent state and year fixed effects. Finally, $\varepsilon_{i,j,t}$ is the error term. All models are estimated by OLS with standard errors clustered at the state level.

Before we present the main results, it is important to discuss whether a sample selection process would affect the results. Given that our analyses focus on a state government's participation in litigation *conditional on* the EPA bringing the case to court, one concern is that the EPA would only bring the case to court when the agency secured enough support from state governments. Defendant firms could also directly affect the EPA's decision to initiate civil judicial cases through other channels, such as contacting members of Congress. There is no data indicating whether the EPA began investigations of potential violations but declined to pursue a lawsuit, so it is challenging to examine what factors influence the EPA's decision to cancel litigation. However, our data refutes that the EPA only initiates litigation when it has secured a sufficient support from state governments. As Figure A2 in the Appendix shows, almost half of the civil judicial cases did not involve cooperation from state governments even though the violations took place in the states' territories. Additionally, our correspondence with EPA bureaucrats suggests that the EPA first decides to pursue litigation based on their case team's evaluation of the magnitude of violations (i.e., if the penalties from the violations exceed the penalty caps for each statue). Then, the EPA informs relevant state governments and solicits their cooperation in the litigation. Therefore, we believe that the EPA's decision to pursue a civil judicial case is not a function of a state government's confirmed cooperation.

Another concern is that firms may utilize other tools to influence the EPA's decision about whether the violation is addressed through administrative actions or judicial cases. Although the degree of violations and the total penalty would determine which action to take, it is possible that politically active firms exert their influence to make their violations to be handled via administrative actions. If this is the case, our estimate would underestimate the effect of political connections on state governments' actions. We investigate whether firms under administrative cases versus judicial cases are systematically different in terms of their political activities. Table A3 in the Appendix shows that that, overall, there is no systematic difference in the total campaign donations and lobbying spending between firms under administrative cases and firms under judicial cases.

5.1 Contributions to Legislative Races

Since Republican candidates, particularly in the legislature, received the largest share of contributions in our sample, we begin by analyzing contributions to Republican legislative candidates. Results are presented in Table 2. The main explanatory variable *(ln) Contribution* is the sum of contributions made to Republican state legislative candidates (both incumbents and challengers) by defendant firms in the previous two election cycles (four years) prior to the court filing.[20] Column (1) includes three control variables related to EPA statutes. Specifically, we include a variable taking the value of 1 if the case concerns the CAA and a variable taking the value of 1 if the case concerns the CWA. We include a third variable (*Num. Statues*) that counts the number of EPA statutes violated. We also include the number of states where reported violations happened (*Num. States*) and the number of firms sued in the judicial case (*Num. Firms*).[21] Finally, we add a variable that takes the value of 1 if at least one of the defendant firms' headquarters is in that state (*Headquarter*) to control for the potential significance of a defendant firm's contribution to the state economy or the salience of violations to local voters, which may affect state environmental agencies' decisions.

The estimated coefficient for campaign contributions is statistically significant and indicates that an increase of one standard deviation in total contributions to Republican state legislative candidates decreases the probability of a state agency joining the EPA in court by 4.6 percentage points. We also find that when the violation occurred in a state where the defendant firm is headquartered, the state is more likely to join the EPA as a co-plaintiff. This suggests that when a firm that is visible to voters violates environmental statues, local media may cover the incident more prominently and the environmental violation becomes more salient to voters, politicians, and

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20. We also examine donations only made to incumbent Republican state legislators and find similar results. In the Appendix, we use the same econometric specifications as in Table 2, with different ways of measuring campaign contributions. In Table A4 we show that state agencies are less likely to join the EPA when defendant firms contributed to more state legislators (regardless of the amount of the contributions), while in Table A5 we find the same effect when using contributions per legislators as the independent variable.

21. When multiple states are involved in a case, there is a possibility of free-riding among states. Thus, we include the total number of states involved in the case to address a state's strategic incentive to join the EPA. However, this concern can be mitigated by the fact that only participating states could receive a penalty payment from the defendant firm.

bureaucrats in that state. This may prompt actions from the state government (Mullin and Hansen Forthcoming).

Our main hypothesis points to the political influence on state bureaucrats, so in Column (2) we include various political variables indicating if the state has a Republican governor and if there is a Republican majority in the upper and lower chambers of the legislature. State attorneys general are of particular importance in state litigation. In many states, attorneys general participated in the litigation process on behalf of state environmental agencies. Therefore, we add a variable that takes the value of 1 if the state attorney general is a Republican.[22] We also add two variables that indicate if the governor or the majority party of the state legislature are from the same party as the president (*Gove-President Aligned* and *Leg-President Aligned*).[23] The coefficient for the campaign contributions variable remains significant and negative after controlling for these political variables.

Available resources and certain events could impose some constraints on state environmental agencies' capacity to join the EPA litigation. To account for this, we gather information on state agencies and the number of natural disasters that occurred in the state. Data on the budget and staffing for these agencies was compiled by the Environmental Integrity Project for the period from 2008 to 2018, which covers most of our cases.[24] We include the state environmental agency's budget since the resources of these agencies can affect their capacity to gather information and join the EPA in court (*(ln) State Agency Budget*). We also take data from the Federal Emergency Management Agency (FEMA) on natural disasters.[25] This variable counts the number of declared natural disasters by the FEMA at the state level (*Num. FEMA Disaster*). These events can affect the resources of these agencies. We also include state GDP in the previous year (*(ln) State GDP*). Column (3) shows that the results remain qualitatively the same when we include the series of

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22. Independent attorneys general (neither Democratic nor Republican) are very rare, at least in our sample. Adding a variable for independent attorneys general to this specification does not change the results.

23. We define the state legislature as aligned with the president if the majority in both chambers share the same party as the president.

24. https://environmentalintegrity.org/news/state-funding-for-environmental-programs-slashed/ (accessed August 13, 2022).

25. https://www.fema.gov/disaster/declarations (accessed August 13, 2022),

Table 2: Contributions to Republicans in Legislative Races

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions	-0.011***	-0.011***	-0.014**	-0.015***	-0.014***
	(0.004)	(0.004)	(0.005)	(0.004)	(0.005)
CAA	-0.046	-0.053	-0.073	-0.159**	-0.241***
	(0.065)	(0.064)	(0.083)	(0.072)	(0.090)
CWA	-0.166***	-0.174***	-0.211**	-0.371***	-0.463***
	(0.060)	(0.060)	(0.084)	(0.074)	(0.087)
Num. Statutes	0.001	0.002	0.023	-0.019	0.006
	(0.033)	(0.033)	(0.045)	(0.056)	(0.060)
Num. Firms	0.004	0.004	0.005	0.005	0.001
	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)
Num. States	-0.008	-0.008	-0.002	-0.024***	-0.028**
	(0.005)	(0.005)	(0.006)	(0.009)	(0.011)
Headquarter	0.141***	0.142***	0.155***	0.093*	0.078
	(0.042)	(0.042)	(0.048)	(0.049)	(0.053)
Republican Gov		-0.086**	-0.112**	-0.101*	-0.086
		(0.036)	(0.050)	(0.057)	(0.056)
Republican Upper		-0.052	-0.085	-0.144**	-0.139**
		(0.087)	(0.134)	(0.069)	(0.068)
Republican Lower		0.108	0.058	0.067	0.064
		(0.066)	(0.089)	(0.069)	(0.069)
Republican AG		-0.017	0.044	0.044	0.035
		(0.065)	(0.102)	(0.067)	(0.069)
Gov-President Aligned		0.017	0.014	0.024	0.026
		(0.039)	(0.053)	(0.044)	(0.046)
Leg-President Aligned		-0.031	-0.053	-0.039	-0.016
		(0.041)	(0.082)	(0.043)	(0.044)
(ln) State Agency Budget			-0.103		
			(0.119)		
Num. FEMA Disasters			-0.003		
			(0.002)		
(ln) State GDP			-0.593		
			(0.467)		
Num. Signing EPA Officer					0.024*
					(0.013)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	780	777	530	770	738

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions* is the log of total contributions to Republican candidates in legislative races by a defendant firm. Standard errors are clustered at the state level. $*** \, p<0.01$, $** \, p<0.05$, $* \, p<0.1$.

control variables that measure states' capacities and resources.

In Column (4) we estimate the same model as in Column (2), but instead of using state fixed effects we use court fixed effects to address the possibility that the EPA strategically selects a court for a particular case. This is a demanding test since we have 163 different federal courts in our sample with 780 observations.[26] If anything, we see a larger and more robust effect of campaign contributions on state governments' decisions.[27] Finally, in Column (5) we estimate the same model as in the previous column, but include the number of EPA officials who signed the consent decrees as an additional control (*Num. Signing EPA Officer*). This is an important variable since it is possible that states only choose to join the EPA for high-profile cases or for very complex cases in which the EPA could not make a compelling case without input from the states. Measuring the severity of a particular violation is a difficult task. Consent decrees can comprise tens or even hundreds of pages with highly technical information about violations and their impact. The reason for including the number of EPA and state officials in the consent decree is because the number of officials actually involved in the case should provide a measure of the complexity and/or severity of a particular case. This control variable has a positive and significant sign as expected. After controlling for the complexity or severity of the case, the main result persists.[28]

Joining federal litigation as a co-plaintiff is not the only action that state governments perform to help the EPA. State environmental agencies also implement regulatory actions to implement federal statues and regulations. How many enforcement actions that the state environmental agencies currently perform could also influence the state governments' decision to join the EPA. To examine this possibility, we measure the number of regulatory actions conducted by a state government related to the CAA and CWA in a year when the litigation was filed by the EPA for a violation

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26. There are 94 federal district courts but some federal courts have divisions, which have jurisdiction over different parts of the judicial district. That is why the number of unique courts in our sample is greater than 94.

27. We also collect information on the district court judges' partisan affiliations based on the party of the president who appointed them from the Federal Judicial Center. We include the partisan composition of judges as a control for robustness checks and the main results remain the same and the coefficient on the partisan composition of district judge courts is not statistically significant. See Table A6 in the Appendix for the result.

28. To further account for the possibility that the severity of violations are driving our results, we use other measures of seriousness or complexity of violations. In Table A7 in the Appendix we show that our results remain the same when controlling for the number of facilities involved in each state, penalties paid to the EPA, and the number of pages in the consent decree.

that occurred in that state.[29] We include the total number of state governments' regulatory actions under the CAA and CWA as control variables and run the analysis. Table A8 in the Appendix presents the results. The effect of campaign contributions to Republican state legislators remains robust and there is no systematic relationship between state governments' other enforcement actions and their likelihood of joining the EPA in litigation. We also include the defendant firm' federal lobbying spending for the previous four years before the EPA filed a lawsuit to control for the firm's size and political influence. Table A9 in the Appendix shows that the main results are robust and the coefficient on the federal lobbying variable is not statistically significant. To check if a particular state (e.g., Texas) drives the result, we exclude each state from the sample and run separate regressions. Figure A5 in the Appendix shows the coefficients from the regressions and the results are remarkably consistent regardless which state is excluded.

To account for the possibility that the previous results are driven by long-standing relationships with legislators and state agencies, we check whether the effect from campaign contributions is different for states with and without legislative term limits. Results are presented in Table A10 in the Appendix, and show that there is no conditional effect from term limits. We estimate the same models as a placebo check: instead of measuring contributions in the previous two election cycles, contributions to Republican legislators are measured in the subsequent two elections. If we are estimating the effect of existing political connections on the behavior of state environmental agencies, we should not see a significant effect here. Results in Table A11 in the Appendix confirm our main results. The lack of relationship between a state joining the EPA and future contributions to candidates in state legislative races also suggests that defendant firms do not use contributions as a reward for a state government's inaction in EPA litigation.

Now we turn to analyze the effect of contributions to Democratic candidates in state legislative elections. Results are shown in Table 3, and for each column we use the same specifications

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29. A regulatory action is the sum of overall regulatory activities, such as enforcement (notices of noncompliance), violation (a violation of the CAA or CWA was found), and penalty (when the state assigned a penalty to the facility). The data come from the EPA's Enforcement and Compliance History Online (ECHO) portal (https://echo.epa.gov) (accessed February, 2022).

as in Table 2.[30] The overall picture of Table 3 is that the effect we find for Republicans is not present when considering contributions to Democrats in legislative races. Although the estimated coefficients have negative signs, only one of the seven specifications shows a coefficient significant at 5%, which contrasts with the findings in the previous table.

Table 3: Contributions to Democrats in Legislative Races

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions	-0.007	-0.007	-0.008	-0.011**	-0.010*
	(0.004)	(0.004)	(0.006)	(0.005)	(0.005)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	780	777	531	770	738

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. The independent variable is the log of contributions to Democratic candidates in legislative races. Full results are in Table A13 in the Appendix. Standard errors are clustered at the state level. $*** \ p<0.01, ** \ p<0.05, * \ p<0.1$.

The previous results show an interesting heterogeneity by partisan connection: State environmental agencies are less likely to join the EPA in court when the firms sued by the EPA contributed to Republican candidates in state legislative races in the previous election cycle, but we do not find the same pattern when firms have political connections with Democratic legislators. These differences could be explained by the fact that Republicans and Democrats represent voters and donors with opposing views about environmental protection and the role of the EPA (Karol 2019). It is well-established that the proportion of voters who prioritize environmental protections over jobs is higher among Democrats than Republicans (Sances and You 2022) and Democrats hold a significantly more positive view of the EPA than Republicans (Pew Research Center, 2017). Democrats and Republicans also have different donor bases.

To investigate the countervailing pressure from environmental groups on state legislators, we check the donations from politically active environmental groups. We retrieve the list of the

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30. We present the results for our main independent variable for brevity. Full results are shown in Table A13 in the Appendix.

top 20 environmental groups in terms of their total donations in the 2020 election cycle from Opensecrets.org.[31] Then we examine the partisan composition of these top 20 environmental groups through their donations to state-level elections between 1996 and 2018 (Bonica 2018). We find that these groups spent 90% of their resources to support Democratic candidates at the state level.[32] Combined, this suggests that Democratic legislators face more pressures from competing groups, which makes it more costly for them to side with defendant firms (Meckling and Trachtman 2022a).

5.2   Heterogeneous Effects by Committee Assignments

Given our findings for contributions to Republicans in legislative races, we now turn to analyze if the effect varies by contributions to Republican state legislators on different committees. We use data on state legislative committees from Fouirnaies and Hall (2021). We construct different variables to measure contributions by firms involved in civil litigation to committees that are relevant for state environmental agencies. We measure contributions to legislators on committees related to environmental protection, to energy, and to agriculture, land use and natural resources.[33] We also measure the total contributions by defendant firms to state legislators who serve on "prestigious" committees, which include committees on the Budget, Appropriations, Ways and Means, and Rules. The empirical specification is the same as in Equation (1), and we use the full set of controls and court fixed effects as in Column 5 of Table 2. Results are summarized in Figure 3 and full results appear in A12 in the Appendix.

First, we present the main result from all contributions to Republican candidates by defendant firms (*All*). Second, we estimate the effect of contributions to committees related to environmental issues, which is the sum of contributions to committees related to environmental issues, and find a negative and significant effect (*Environment*). We also examine the effect of total contribu-

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31. https://www.opensecrets.org/industries/contrib.php?cycle=2020&ind=Q11 (accessed August 14, 2022).

32. Figure A4 in the Appendix presents the share of contributions given to Democratic candidates and Republican candidates in races for state legislatures and gubernatorial elections made by the top 20 environmental groups by election cycle.

33. To this end, we search for the following terms in the names or the description of the committees: environment, environmental, energy, oil, gas, agriculture, land use and natural resources.

Figure 3: Heterogeneous Effects of Contributions by Committee Assignment
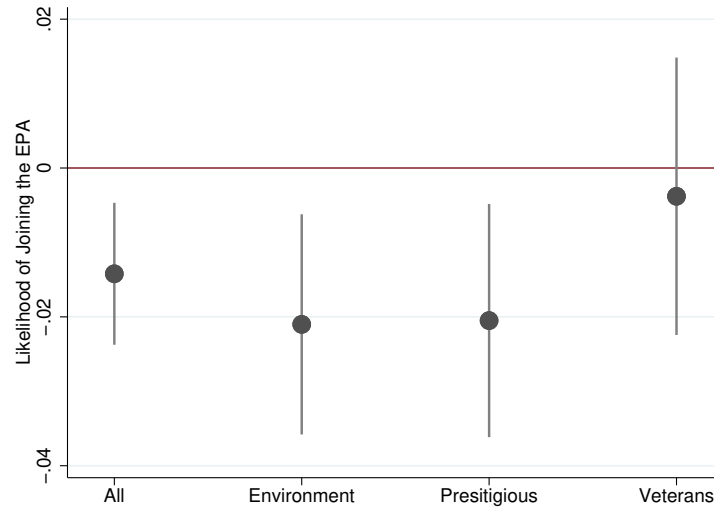
Notes: The figure shows the coefficients on the variable *(ln) Contributions* to Republican state legislators who serve on each type of committee. The bars indicate 95% confidence intervals.

tions made to Republican incumbent state legislators who served on prestigious committees and see a similar negative effect (*Prestigious*). For the last result we conduct a placebo analysis using contributions to committees related to veterans and the military which are orthogonal to the issue of environmental protections (*Veterans*). If our argument is correct, political connections to legislators on these committees should not have a significant effect on the behavior of state environmental agencies even as environmental issues could be at least indirectly present in many areas. As expected, this estimate is very close to zero and far from significant. The analysis suggests that firms' political connections with legislators who have oversight authority on the state environmental agency or with powerful members in the state legislatures is closely related to the state's decision to join the EPA as a co-plaintiff.

5.3   Gubernatorial Races

Now we turn to analyze if contributions to races for governor are also related to the behavior of these agencies. Both parties are always represented in the legislature, regardless of which holds the majority, and we have evidence at the federal level that individual legislators can influence bureau-

cratic agencies (Ritchie and You 2019). The situation is different for governors' races, since only one candidate from one party holds that seat. Therefore, we measure contributions to gubernatorial races in other ways. First, we measure total contributions to both parties in governors' races in the previous election cycle (Table A14). Then, we measure contributions to the incumbent governor and candidates to the party of the incumbent governor (Tables A15 and A16). Finally, we measure contributions to Democratic and Republican candidates (Tables A17 and A18). In contrast to our findings for legislative races, we do not observe any clear pattern for governors' races, indicating that contributions to gubernatorial races are not strongly correlated with the behavior of state environmental agencies.

There are at least three reasons why we find no effect of contributions on gubernatorial races. First, legislative races account for 83% of total contributions from the firms in our sample, which means that these firms might be focusing mostly on legislative races to gain influence with the governor.[34] Relatedly, the contributions of a single firm might not be very important in a governor's race to which many other interest groups and individuals donate. But a generous contribution from a large company can be crucial for a state legislator. Indeed, the average amount that gubernatorial candidates raised is $2.75 million per race, whereas state legislative candidates only raised $18,000 on average. Third, as the coefficient on the variable *Republican Gov* in Table 2 shows, the governor's Republican partisanship is negatively associated with a state's decision to join the EPA in court and the effect is large. Given partisanship's strong and large effect on the outcome, there may be little room for firms to influence the state's decision through additional contributions to gubernatorial races.

6   Does State Involvement Make a Difference?

The previous results show that campaign contributions can have an effect on state environmental agencies' decisions to join the EPA in litigation. Now we turn to analyze the policy implications

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34. When considering all state elections between 1998 and 2020. contributions to legislative and governors' elections account for 60% and 40% of total contributions, respectively, by all individuals and PACs.

of this finding and ask: What is the effect of agencies' involvement in terms of judicial outcomes? For this part of the study our unit of analysis is the judicial case (instead of the case-state level), since penalties and environmental projects are determined at the case level.

We start by analyzing if agencies' involvement affects the penalties assigned to firms. To this end we use the following econometric specification:

$$ln(1 + Penalty_{j,t}) = \alpha + \beta \, State \, Participation_{j,t} + \delta \, \mathbf{X}_{j,t} + \gamma_t + \varepsilon_{j,t} \qquad (2)$$

where j and t stand for litigation cases and years, respectively. We use three measures of penalties, both computed in 2021 dollars: (1) total penalties assigned by the court to both the federal government and the states; (2) penalties only paid to the federal government; and (3) penalties only paid to state government(s). These measures are directly extracted from the court documents. We use two measures of state participation for the main independent variable: the total number of agencies that joined the EPA (*Num. State Participation*) and a dummy variable indicating if any state agency, out of all states affected, joined the EPA in court (*Any State Participation*). In these specifications we include the EPA statutes violated, the number of defendant firms, and the number of affected states as control variables. We also add a variable taking the value of one for cases that involve the cleanup of a superfund site.[35] We include this variable since in cleanup cases, penalties are less common and consent decrees usually put more emphasis on environmental provisions. Year fixed effects are represented by γ_t, and $\varepsilon_{j,t}$ is the error term. All models are estimated by OLS with robust standard errors.

Results are shown in Table 4. Columns (1) and (4) show that environmental agencies are associated with higher total penalties. One additional agency as plaintiff is associated with an increase of 27.3% in the total amount of penalties (Column 1), while having at least one state agency side with the EPA is associated with an increase of 81.6% in total penalties when compared with no state involvement (Column 4).[36] On the other hand, we find no effect for penalties assigned only

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35. Superfund cases involve the violation of the Comprehensive Environmental Response, Compensation and Liability Act of 1980. See https://www.epa.gov/superfund/what-superfund (accessed August 14, 2022).

36. The effect sizes are calculated as follows: $100 \times (e^{0.242} - 1) = 27.3\%$ for Column (1) and $100 \times (e^{0.597} - 1) =$

to the federal government in Columns (2) and (5). However, states' participation is strongly associated with penalties that polluting firms must pay to state governments (Columns 3 and 6). Taken together, these results show that when state agencies join the litigation process, the assigned penalties are larger and this difference goes to the states that participated in the litigation process. The results imply that, despite potential compensation from defendant firms, states that are politically connected with defendant firms do not join federal litigations.

Table 4: Effects of State Participation on Penalties

Outcome = Penalty	(1) (ln) Total	(2) (ln) Federal	(3) (ln) State	(4) (ln) Total	(5) (ln) Federal	(6) (ln) State
Num. State Participation	0.242**	0.089	0.133***			
	(0.107)	(0.096)	(0.024)			
Any State Participation				0.597*	0.088	0.398***
				(0.334)	(0.287)	(0.031)
CAA	0.584	0.721	-0.076	0.590	0.726	-0.080
	(0.709)	(0.743)	(0.072)	(0.709)	(0.744)	(0.058)
CWA	0.850	0.956	-0.029	0.837	0.940	-0.036
	(0.729)	(0.755)	(0.069)	(0.725)	(0.753)	(0.055)
Num. Statutes	0.613***	0.494**	0.078**	0.548**	0.482**	0.037
	(0.229)	(0.236)	(0.037)	(0.236)	(0.240)	(0.032)
Num. Firms	0.046**	0.047**	0.003	0.049**	0.049**	0.003*
	(0.023)	(0.021)	(0.002)	(0.024)	(0.020)	(0.002)
Num. Affected States	-0.043	0.000	-0.037***	0.005	0.020	-0.011***
	(0.047)	(0.044)	(0.007)	(0.032)	(0.032)	(0.004)
Cleanup	-10.605***	-11.377***	-0.299***	-10.596***	-11.379***	-0.294***
	(1.106)	(1.039)	(0.070)	(1.107)	(1.043)	(0.063)
Mean Outcome Variable	12.3	12.0	0.21	12.3	12.0	0.21
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	326	321	321	326	321	321

Notes: The variable *Num. State Participation* counts the number of state agencies that joined a litigation case, and *Any State Participation* is a binary indicator of the involvement by any state agency. Robust standard errors in parentheses. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

As previously stated, in many cases penalties are not the main cost of the litigation process for the firms involved. Now we turn to analyze if state involvement affects environmental provisions and projects mandated in consent decrees. The econometric specification is very similar to the previous one. We use two measures for the scope of environmental projects. The first uses the actual estimated cost of these projects as stated in the consent decrees.[37] Since in many cases projects

81.6% for Column 4.

37. We have information on the estimated costs of the environmental programs from the court documents for 233

are mandated but there is no actual cost estimate in the court documents, we use a second variable by dividing the types of environmental provisions into three groups: compensation and mitigation projects, supplementary environmental projects, and injunctive relief. For our second measure we code a variable for each case taking the value of one if each of these three environmental provisions are assigned. Then, we sum the three to construct a variable that ranges from 0 (no environmental provisions) to three (all three types of environmental projects assigned).

Results in Table 5 show that the involvement of state agencies in the litigation process is also associated with more spending on environmental projects and on the number of different environmental projects in the consent decrees. Results presented in this section show that the costs of political influence at the state level go beyond a failure of environmental agencies to fulfill their mandates. By not joining the litigation process, states lose monetary resources and beneficial environmental projects. Political connections that polluting firms have with state politicians not only decrease cooperation from state governments but also have significant environmental consequences.

7   Conclusion

Active cooperation among different levels of government is crucial for public policy and regulation in federal systems and shared responsibility is the norm across policy domains (Rodden 2006). In this paper we analyze how the private sector can use campaign contributions to state politicians to weaken this cooperative interaction by affecting state environmental agencies. In particular, we study why state environmental agencies do or do not join the EPA in civil litigation against corporate litigants when the firms allegedly pollute state territories. We argue that political connections with state politicians matter and that state agencies will be less likely to join the EPA in court when the firms on the defendant side contributed to state politicians.

To test our argument, we construct a novel dataset of EPA civil litigation cases for the period

out of 332 cases.

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Table 5: Effects of State Participation on Environmental Programs

	(1) (ln) Projects ($)	(2) Number of Projects	(3) (ln) Projects ($)	(4) Number of Projects
Num. State Participation	0.581	0.061**		
	(0.366)	(0.030)		
Any State Participation			2.219***	0.163**
			(0.810)	(0.081)
CAA	7.826***	0.466***	7.633***	0.469***
	(2.272)	(0.156)	(2.232)	(0.156)
CWA	4.014	0.087	3.900	0.085
	(2.433)	(0.160)	(2.409)	(0.160)
No. Statues	-0.249	-0.015	-0.471	-0.032
	(0.960)	(0.087)	(0.909)	(0.086)
No. Firms	-0.020	0.000	-0.015	0.001
	(0.133)	(0.004)	(0.125)	(0.003)
No. Affected States	-0.200	-0.026**	-0.062	-0.014
	(0.175)	(0.012)	(0.160)	(0.010)
Cleanup	-7.018***	-0.694***	-7.124***	-0.689***
	(2.384)	(0.200)	(2.340)	(0.200)
Mean Outcome Variable	11.3	1.1	11.3	1.1
Year FE	Yes	Yes	Yes	Yes
Observations	233	331	233	331

Notes: The dependent variable in Columns (1) and (3) is the log of total expenses on environmental projects, and in Columns (2) and (4) it is the number of environmental projects required in a consent decree. The variable *Num. State Participation* counts the number of state agencies in a litigation case, while *Any State Participation* is a binary indicator of involvement by any state agency. Robust standard errors in parentheses. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

1998-2021. We show that firms that contributed to state Republican candidates are less likely to face the state environmental agency in court as an ally of the EPA. This result is consistent across various specifications and the effect is particularly strong for contributions made to Republican state legislators who served on environment-related committees or prestigious committees. On the other hand, we do not find such a pattern for Democratic legislators, or for governors' races. Our findings highlight that polluting firms can target state legislators to influence how federal regulation is enforced by affecting the degree of state governments' cooperation with the federal government.

We also analyze the policy implications of these findings by showing the effect of state involvement on court outcomes. We show that when state environmental agencies join the litigation process as plaintiffs, penalties on the accused firms are higher and that participating states receive these benefits. We also show that when state agencies join the EPA, the courts mandate higher

spending on environmental projects and more types of environmental projects to be conducted by the defendants. This is consistent with the idea that states can bring resources to court to make stronger cases for environmental violations. State involvement in the litigation process affects not only the firms involved, but also citizens by affecting environmental projects. Recent studies have shown that environmental enforcement is associated with health outcomes (Clay and Muller 2019). Focusing on the determinants of cooperation between different levels of government could expand our understanding of the consequences of cooperative federalism on various policy and social outcomes.

The role of state and local governments in environmental regulation has become increasingly important as actions to curb climate change are stalled at the federal level (Astor 2022). A recent landmark Supreme Court ruling *West Virginia v. Environmental Protection Agency*—which struck down the EPA's authority to regulate carbon emissions from power plants—highlights the limited tools that the EPA has to regulate pollution.[38] As the subnational governments' role in environmental regulations has become increasingly important, the influence of interest groups, particularly polluting firms, can also increase. Interest groups could have more power to influence policies at the local level (Anzia 2022) and this is particularly true for energy industries' influence on environmental regulations at the state level (Stokes 2020). Our finding shows that defendant firms also could use state politics to influence the federal regulations and court outcomes regarding environmental violations. As the states will be the key battleground for environmental regulations in coming years, scholars need to pay more attention to how state politics, especially under the federalism structure, provide opportunities for private sectors to exert influence on environmental regulations that have significant consequences on climate change, one of the most pressing issues that citizens face today.

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38. https://www.supremecourt.gov/opinions/21pdf/20-1530_n758.pdf (accessed August 24, 2022).

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Appendix: Supporting Information for

Money and Cooperative Federalism: Evidence from EPA Civil Litigations

Figure A1: The Case Selection Process
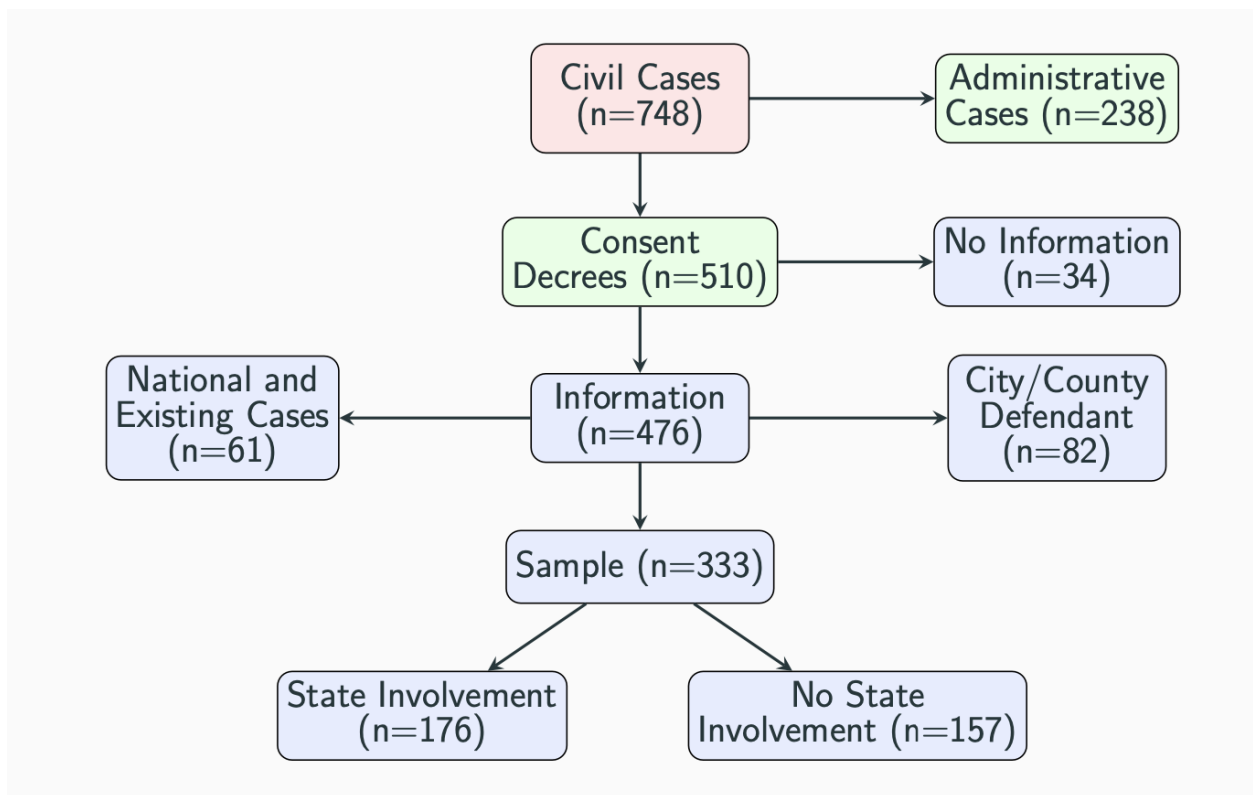
Notes: This chart shows the case selection process for the main data construction.

Figure A2: Litigation Cases with State Agencies
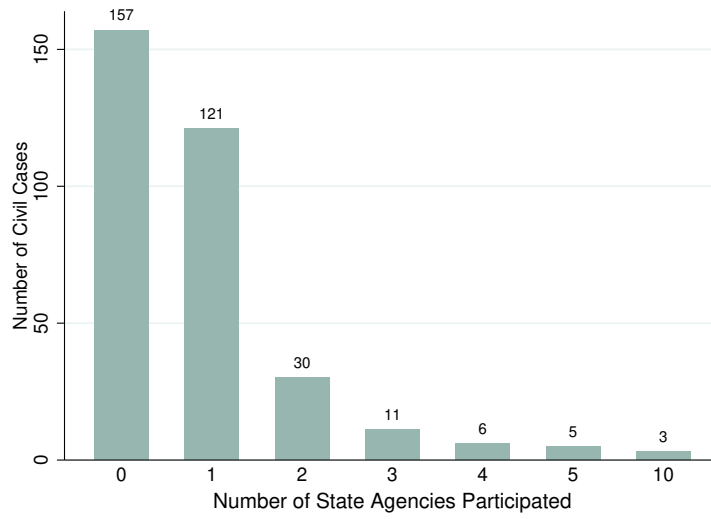
Notes: This shows the distribution of the cases by the number of states involved.

Figure A3: Distribution of Firms by Ideology
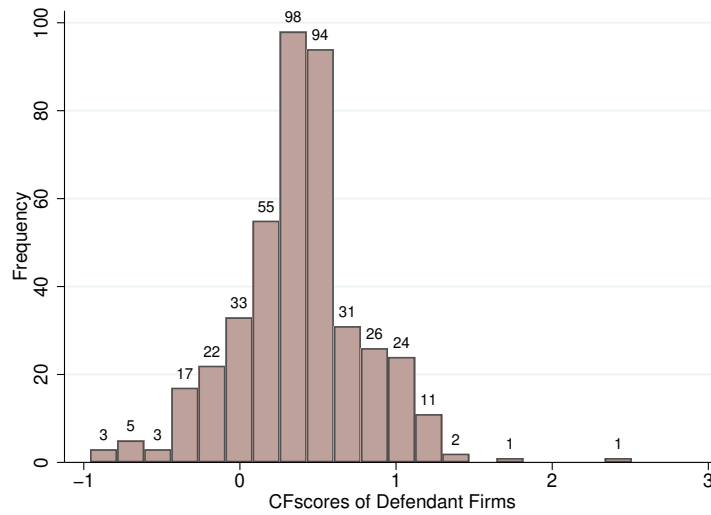
Notes: This shows the distribution of defendant firms' CFscore from Bonica (2018). Negative values mean liberal and positive values mean more conservative. It includes all the firms in our sample, regardless of the firms' contribution to state races. If we narrow down the firms with the records of contributions to state races, we see a similar distribution.

Figure A4: Share of Contributions by Top 20 Environmental Groups
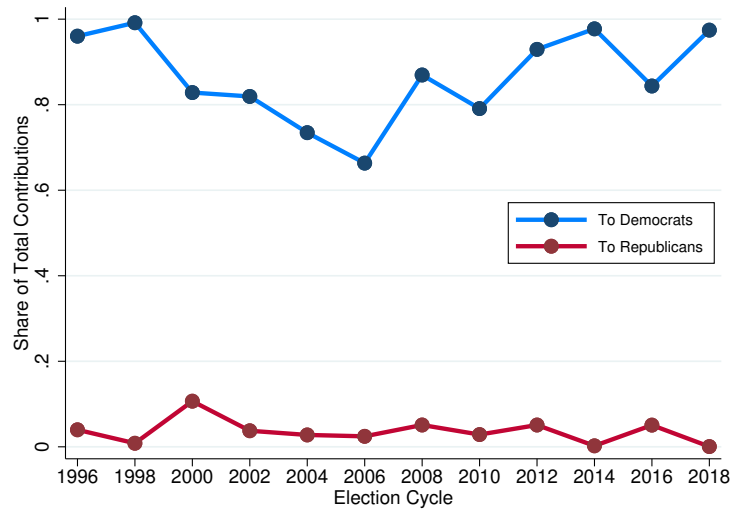
Notes: This figure shows the partisan shares of the top 20 environmental groups' contributions at the state level. The list of environmental groups is from the opensecrets.org (https://www.opensecrets.org/industries/contrib.php?cycle=2020&ind=Q11). The values do not add up to 1 because the environmental groups also donated to candidates who are neither Democrats nor Republicans, such as Green Party candidates.

Figure A5: Excluding Each State
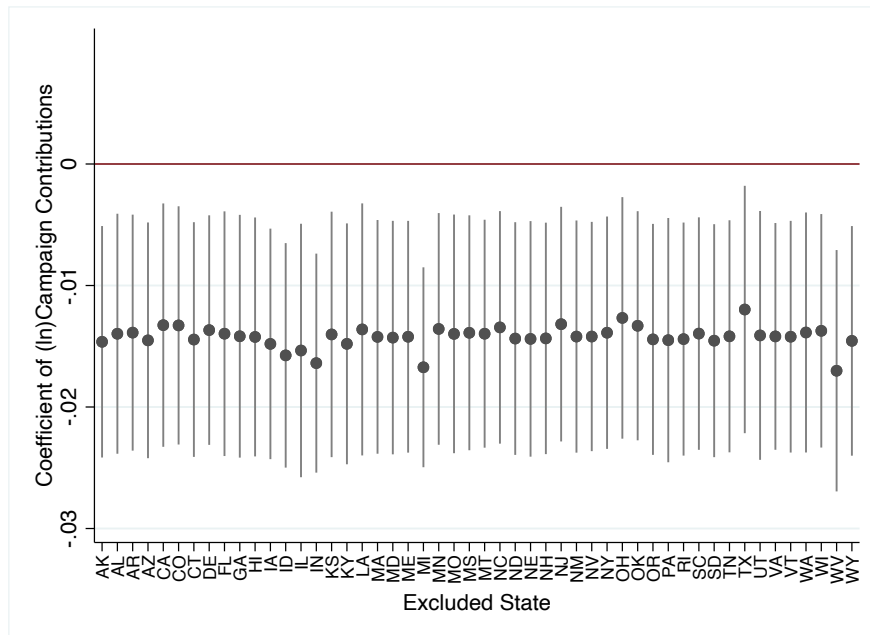
Notes: This shows the coefficients from the main regression when we exclude each state from the sample.

Table A1: Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	Min	Max
Case/State Level					
State Joining the EPA	780	0.38	0.48	0	1
Contribution to Governor	780	8,977	44,931	0	821,699
Contribution to Governor (D)	780	3,611	25,778	-665	508,875
Contribution to Governor (R)	780	4,851	25,113	0	379,083
Contribution to Governor (Inc)	780	5,440	25,273	0	306,186
Contribution to Governor (Inc Party)	780	6,752	31,931	-443	379,083
Contribution to Legislature (1 cycle)	780	16,846	77,196	-62	1,216,160
Contribution to Legislature (2 cycles)	780	31,894	135,938	-603	1,915,416
Contribution to Legislature (1 cycle, D)	780	5,443	27,351	-62	320,362
Contribution to Legislature (2 cycles, D)	780	10,689	51,718	-603	633,861
Contribution to Legislature (1 cycle, R)	780	10,266	52,292	0	900,091
Contribution to Legislature (2 cycles, R)	780	18,938	86,046	0	1,365,116
CAA	780	0.60	0.49	0	1
CWA	780	0.32	0.47	0	1
Num. Statutes	780	1.23	0.67	1	4
Num. Firms	780	2.21	5.30	1	60
Num. States	780	6.11	5.86	1	23
Republican Governor	780	0.53	0.50	0	1
Republican Upper	780	0.62	0.48	0	1
Republican Lower	780	0.60	0.49	0	1
Republican AG	780	0.50	0.50	0	1
Gov-President Aligned	780	0.47	0.50	0	1
Leg-President Aligned	780	0.33	0.47	0	1
State Agency Staff	527	1,250	1,062	155	5,689
State Agency Budget (1,000s $)	559	316,125	579,713	27,074	4,563,862
Num. FEMA Disaster (t-1)	780	2.95	6.13	0	57
State GDP	776	484,914	519,965	24,910	2,739,343
Num. Signing EPA Officer	742	4.80	3.20	1	16
Case Level					
State Joinining the EPA	333	0.53	0.50	0	1
Num. State Joining the EPA	333	0.88	1.35	0	10
CAA	332	0.52	0.50	0	1
CWA	332	0.29	0.45	0	1
Num. Statutes	332	1.14	0.52	1	4
Num. States	332	2.41	2.99	1	23
Num. Firms	332	1.96	4.12	1	60
Republican Governor	332	0.55	0.50	0	1
Republican Upper	332	0.64	0.75	0	11
Republican Lower	332	0.60	0.49	0	1
Penalty (1000s $)	327	3,446	8,154	0	82,744
Penalty Federal (1000s $)	322	2,744	6,798	0	70,112
Penalty State (1000s $)	320	331	1,458	0	23,6417
Environmental Program (1000s $)	234	119,590	339,148	0	3,734,394
Environmental Program (num)	333	1.12	0.80	0	3
Cleanup	331	0.15	0.36	0	1

Table A2: Environmental Agencies

State	Agency	Head of State Environmental Agency
Alabama	Alabama Department of Environmental Management	Proposed by Governor, ratified by Senate
Alaska	Alaska Department of Environmental Conservation	Appointed by Governor
Arizona	Arizona Department of Environmental Quality	Appointed by Governor
Arkansas	Arkansas Department of Energy and the Environment	Appointed by Governor
California	California Environmental Protection Agency	Appointed by Governor
Colorado	Colorado Department of Public Health and the Environment	Appointed by Governor
Connecticut	Connecticut Department of Energy and Environmental Protection	Proposed by Governor, ratified by General Assembly
Delaware	Delaware Department of Natural Resources and Environmental Control	Proposed by Governor, ratified by Senate
Florida	Florida Department of Environmental Protection	Appointed by Governor and cabinet members
Georgia	Georgia Department of Environmental Protection	Proposed by Governor, ratified by Senate
Hawaii	Hawaii Department of Health	Appointed by Governor
Idaho	Idaho Department of Environmental Quality	Appointed by Governor
Illinois	Illinois Environmental Protection Agency	Appointed by Governor
Indiana	Indiana Department of Environmental Management	Appointed by Governor
Iowa	Iowa Department of Natural Resources	Appointed by Governor
Kansas	Kansas Department of Health and the Environment	Appointed by Governor
Kentucky	Kentucky Energy and Environment Cabinet	Appointed by Governor
Louisiana	Louisiana Department of Environmental Quality	Appointed by Governor
Maine	Maine Department of Environmental Protection	Proposed by Governor, ratified by Legislature
Maryland	Maryland Department of the Environment	Appointed by Governor
Massachusetts	Massachusetts Department of Environmental Protection	Appointed by Governor
Michigan	Michigan Department of Environment, Great Lakes, and Energy	Appointed by Governor
Minnesota	Minnesota Pollution Control Agency	Proposed by Governor, ratified by Senate
Mississippi	Mississippi Department of Environmental Quality	Appointed by Governor
Missouri	Missouri Department of Natural Resources	Appointed by Governor
Montana	Montana Department of Environmental Quality	Appointed by Governor
Nebraska	Nebraska Department of Environment and Energy	Appointed by Governor
Nevada	Nevada Department of Environmental Protection	Appointed by Governor
New Hampshire	New Hampshire Department of Environmental Services	Appointed by Governor
New Jersey	New Jersey Department of Environmental Protection	Appointed by Governor
New Mexico	New Mexico Department of Environmental Quality	Appointed by Governor
New York	New York Department of Environmental Conservation	Appointed by Governor
North Carolina	North Carolina Department of Environmental Resources	Appointed by Governor
North Dakota	North Dakota Department of Environmental Quality	Appointed by Governor
Ohio	Ohio Environmental Protection Agency	Appointed by Governor
Oklahoma	Oklahoma Department of Environmental Quality	Proposed by Governor, ratified by Senate
Oregon	Oregon Department of Environmental Quality	Appointed by Governor
Pennsylvania	Pennsylvania Department of Environmental Protection	Proposed by Governor, ratified by Senate
Rhode Island	Rhode Island Department of Environmental Management	Appointed by Governor
South Carolina	South Carolina Department of Health and Environmental Control	Proposed by Governor, ratified by Senate
South Dakota	South Dakota Department of Environment and Conservation	Appointed by Governor
Tennessee	Tennessee Department of Environment and Conservation	Appointed by Governor
Texas	Texas Commission on Environmental Quality	Appointed by Governor
Utah	Utah Department of Environmental Quality	Proposed by Governor, ratified by Senate
Vermont	Vermont Department of Environmental Conservation	Appointed by Governor
Virginia	Virginia Department of Environmental Quality	Appointed by Governor
Washington	Washington State Department of Ecology	Appointed by Governor
West Virginia	West Virginia Department of Environmental Protection	Appointed by Governor
Wisconsin	Wisconsin Department of Natural Resources	Proposed by Governor, ratified by Senate
Wyoming	Wyoming Department of Environmental Quality	Proposed by Governor, ratified by Senate

Table A3: Political Activities between Firms under Administrative vs. Judicial Cases

Political Activities	Administrative	Judicial	Difference	p-value
Total Contributions ($K)	137	80	56	0.27
Federal Contributions ($K)	68.6	27.1	41.5	0.04
State Contributions ($K)	15.9	11.2	4.6	0.50
Federal Lobbying Spending ($K)	10,166	4,859	5,307	0.11

Notes: The numbers show the mean values of politician activities of defendant firms aggregaged for four years prior to the EPA initiated an action.

Table A4: Contributions to Republicans in Legislative Races - Number of Legislators

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Num of Legislators	-0.039***	-0.039***	-0.048***	-0.050***	-0.043***
	(0.012)	(0.011)	(0.014)	(0.015)	(0.015)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	780	777	530	770	738

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Num of Legislators* is the log of the total number of legislators that received contributions from defendant firms. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

Table A5: Contributions to Republicans in Legislative Races - Contributions per Legislator

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions per Legislator	-0.014**	-0.014**	-0.019**	-0.018***	-0.017**
	(0.006)	(0.006)	(0.007)	(0.006)	(0.007)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	780	777	530	770	738

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions per Legislator* is the log of the number of legislators targeted over total contributions from defendant firms. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

Table A6: Contributions to Republicans in Legislative Races - Including Distrct Court Ideology

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions	-0.013**	-0.013**	-0.018**	-0.018***	-0.017**
	(0.006)	(0.006)	(0.007)	(0.006)	(0.007)
Republican Judges Share (%)	0.078	0.080	0.118	-0.171	0.040
	(0.072)	(0.068)	(0.092)	(0.517)	(0.500)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	769	766	521	766	736

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions* is the log of contributions to Republican candidates in legislative races. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

Table A7: Contributions to Republicans in Legislative Races - Severity of Violations

Outcome = Join the EPA	(1)	(2)	(3)	(4)
(ln) Contributions	-0.017***	-0.014***	-0.014***	-0.015***
	(0.005)	(0.004)	(0.004)	(0.005)
(ln) Num. Facilities	0.051			0.032
	(0.045)			(0.048)
(ln) Penalty to EPA		-0.008		-0.032
		(0.015)		(0.020)
(ln) Num. Consent Degree Pages			0.211***	0.234***
			(0.057)	(0.057)
Num. Signing EPA Officer				0.053***
				(0.017)
Mean Outcome Variable	0.37	0.37	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes
State FE	No	No	No	No
Year FE	Yes	Yes	Yes	Yes
Court FE	Yes	Yes	Yes	Yes
Observations	671	760	710	612

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions* is the log of contributions to Republican candidates in legislative races. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

Table A8: Contributions to Republicans in Legislative Races - Including State Enforcement Action

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions	-0.014**	-0.014**	-0.019**	-0.017**	-0.016**
	(0.006)	(0.006)	(0.007)	(0.006)	(0.007)
(ln) CWA State Enforcement Actions	0.004	0.007	-0.017	-0.010	-0.010
	(0.018)	(0.017)	(0.030)	(0.016)	(0.016)
(ln) CAA State Enforcement Actions	0.007	0.005	0.006	0.017	0.024
	(0.024)	(0.022)	(0.043)	(0.031)	(0.030)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	780	777	530	770	738

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions* is the log of contributions to Republican candidates in legislative races. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

Table A9: Contributions to Republicans in Legislative Races - Including Firms' Lobbying Spending

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions	-0.012**	-0.012**	-0.016**	-0.018***	-0.018**
	(0.006)	(0.006)	(0.008)	(0.007)	(0.007)
(ln) Lobbying Spending	-0.003	-0.003	-0.007**	0.003	0.005
	(0.003)	(0.003)	(0.003)	(0.005)	(0.005)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	780	777	530	770	738

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions* is the log of contributions to Republican candidates in legislative races. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

Table A10: Contributions to Republicans in Legislative Races - Term Limits

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions	-0.011**	-0.011**	-0.012*	-0.012***	-0.010**
	(0.005)	(0.005)	(0.006)	(0.004)	(0.005)
Term Limit	-0.159*	-0.174	-0.473	0.064	0.075
	(0.089)	(0.109)	(0.670)	(0.098)	(0.095)
(ln) Contributions×Term Limit	0.001	0.000	-0.007	-0.012	-0.014
	(0.007)	(0.007)	(0.010)	(0.009)	(0.009)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	780	777	530	770	738

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions* is the log of contributions to Republican candidates in legislative races. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

Table A11: Contributions to Republicans in Legislative Races - Placebo Check

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Future Contributions	-0.006	-0.006	-0.014**	-0.008	-0.007
	(0.004)	(0.004)	(0.006)	(0.006)	(0.006)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	779	776	530	769	737

Notes: Dependent variable in all Columns is a dummy variable that takes the value of 1 if the state agency joined EPA in court. *(ln) Future Contributions* is the log of contributions to Republican candidates in legislative races in the two posterior election cycles after the filing of the lawsuit. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

Table A12: Heterogeneous Effects of Contributions by Committee Assignment

Outcome = Join the EPA	(1)	(2)	(3)	(4)
(ln) Contributions: All	-0.014***			
	(0.005)			
(ln) Contributions: Environment		-0.021***		
		(0.007)		
(ln) Contributions: Prestigious			-0.020**	
			(0.008)	
(ln) Contributions: Veterans				-0.004
				(0.009)
Mean Outcome Variable	0.37	0.37	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Court FE	Yes	Yes	Yes	Yes
Observations	738	738	738	738

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions: All* is the log of contributions to Republican candidates in legislative races by a defendant firm. *(ln) Contributions: Environment* is the log of contributions to Republican candidates in committees related to environmental issues. *(ln) Contributions: Prestigious* is the log of contributions to Republican candidates in prestigious committees. *(ln) Contributions: Veterans* is the log of contributions to Republican candidates in veterans/military committees. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

Table A13: Contributions to Democrats in Legislative Races

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions	-0.007	-0.007	-0.008	-0.011**	-0.010*
	(0.004)	(0.004)	(0.006)	(0.005)	(0.005)
CAA	-0.048	-0.055	-0.088	-0.141*	-0.216**
	(0.066)	(0.065)	(0.083)	(0.073)	(0.091)
CWA	-0.166***	-0.174***	-0.214**	-0.359***	-0.444***
	(0.060)	(0.060)	(0.084)	(0.073)	(0.086)
Num. Statues	0.002	0.002	0.027	-0.017	0.009
	(0.033)	(0.033)	(0.044)	(0.054)	(0.058)
Num. Firms	0.004	0.003	0.004	0.005	0.001
	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)
Num. States	-0.008	-0.007	-0.001	-0.024**	-0.029**
	(0.005)	(0.005)	(0.006)	(0.009)	(0.011)
Headquarter	0.136***	0.137***	0.149***	0.088*	0.070
	(0.043)	(0.043)	(0.049)	(0.049)	(0.053)
Republican Gov		-0.085**	-0.122**	-0.104*	-0.088
		(0.036)	(0.054)	(0.057)	(0.055)
Republican Upper		-0.050	-0.076	-0.149**	-0.143**
		(0.087)	(0.135)	(0.068)	(0.069)
Republican Lower		0.109	0.065	0.064	0.060
		(0.066)	(0.085)	(0.069)	(0.068)
Republican AG		-0.019	0.056	0.040	0.032
		(0.066)	(0.103)	(0.067)	(0.069)
Gov-President Aligned		0.017	0.011	0.024	0.026
		(0.039)	(0.054)	(0.043)	(0.045)
Leg-President Aligned		-0.029	-0.048	-0.041	-0.017
		(0.041)	(0.083)	(0.044)	(0.044)
(ln) State Agency Budget			-0.117		
			(0.120)		
Num. FEMA Disaster			-0.003		
			(0.002)		
(ln) State GDP			-0.495		
			(0.465)		
Num. Signing EPA Officer					0.025**
					(0.012)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	782	779	532	772	740

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions* is the log of contributions to Democratic candidates in legislative races. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

Table A14: Contributions to Governor Races - All Contributions

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions	-0.004	-0.004	-0.004	-0.006	-0.006
	(0.004)	(0.005)	(0.005)	(0.006)	(0.006)
CAA	-0.049	-0.056	-0.091	-0.154**	-0.236***
	(0.066)	(0.065)	(0.082)	(0.070)	(0.087)
CWA	-0.160**	-0.168***	-0.214**	-0.357***	-0.449***
	(0.060)	(0.060)	(0.083)	(0.075)	(0.087)
Num. Statues	-0.003	-0.003	0.023	-0.028	0.001
	(0.033)	(0.033)	(0.043)	(0.055)	(0.059)
Num. Firms	0.003	0.003	0.003	0.004	0.000
	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)
Num. States	-0.007	-0.007	-0.000	-0.022**	-0.028**
	(0.005)	(0.005)	(0.006)	(0.009)	(0.011)
Headquarter	0.134***	0.134***	0.147***	0.085*	0.069
	(0.042)	(0.042)	(0.048)	(0.050)	(0.053)
Republican Gov		-0.090**	-0.125**	-0.104*	-0.088
		(0.035)	(0.054)	(0.057)	(0.056)
Republican Upper		-0.044	-0.062	-0.142**	-0.136*
		(0.086)	(0.136)	(0.070)	(0.070)
Republican Lower		0.110	0.063	0.070	0.065
		(0.067)	(0.085)	(0.070)	(0.069)
Republican AG		-0.015	0.058	0.041	0.033
		(0.066)	(0.104)	(0.068)	(0.070)
Gov-President Aligned		0.016	0.009	0.022	0.023
		(0.039)	(0.055)	(0.043)	(0.045)
Leg-President Aligned		-0.029	-0.048	-0.040	-0.015
		(0.041)	(0.084)	(0.045)	(0.045)
(ln) State Agency Budget			-0.118		
			(0.120)		
Num. FEMA Disaster			-0.003		
			(0.002)		
(ln) State GDP			-0.484		
			(0.468)		
Num. Signing EPA Officer					0.026**
					(0.012)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	780	779	532	772	740

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions* is the log of contributions to Democratic and Republican candidates for governor. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

Table A15: Contributions to Governor Races - Incumbent Governor

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions	-0.004	-0.003	-0.003	-0.004	-0.003
	(0.004)	(0.004)	(0.005)	(0.006)	(0.007)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	780	777	530	770	738

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions* is the log of contributions to the incumbent governor. $***$ p$<$0.01, $**$ p$<$0.05, $*$ p$<$0.1.

Table A16: Contributions to Governor Races - Party of Incumbent Governor

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions	-0.006	-0.006	-0.004	-0.005	-0.005
	(0.005)	(0.005)	(0.005)	(0.006)	(0.007)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	779	776	529	769	737

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions* is the log of contributions to candidates of the party of the incumbent governor. $***$ p$<$0.01, $**$ p$<$0.05, $*$ p$<$0.1.

Table A17: Contributions to Governor Races - Republican Candidates

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions	-0.007	-0.007	-0.006	-0.007	-0.008
	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	780	777	530	770	738

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions* is the log of contributions to Republican candidates in gubernatorial races. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.

Table A18: Contributions to Governor Races - Democratic Candidates

Outcome = Join the EPA	(1)	(2)	(3)	(4)	(5)
(ln) Contributions	-0.002	-0.003	-0.001	-0.000	0.002
	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)
Mean Outcome Variable	0.37	0.37	0.36	0.37	0.37
Control Variables	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Court FE	No	No	No	Yes	Yes
Observations	779	776	529	769	737

Notes: The dependent variable in all columns is a dummy variable that takes the value of 1 if the state agency joined the EPA in court. *(ln) Contributions* is the log of contributions to Democratic candidates in gubernatorial races. $***$ p<0.01, $**$ p<0.05, $*$ p<0.1.