THE INFLUENCE OF MAJORITY IDEOLOGY ON ENVIRONMENTAL LAW ADJUDICATION IN THE U.S. SUPREME COURT

A Thesis submitted to the Faculty of the Graduate School of Arts and Sciences of Georgetown University in partial fulfillment of the requirements for the degree of Master of Public Policy

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April 13, 2010
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ABSTRACT

As the highest court in the land, the U.S. Supreme Court is the final interpreter of federal law. Its interpretations can mean the difference between clean drinking water and pollution with impunity. An understanding of the factors that influence Supreme Court decision-making is therefore critical to environmental protection. While other fields of law have examined the impact of ideology on Supreme Court decision-making, its effect on environmental law adjudication remains unexplored. My investigation expanded the scope of existing lower court studies by examining how majority ideology affects the disposition of environmental cases in the Supreme Court. I hypothesized that a Supreme Court with a liberal majority was more likely than a conservative majority to rule in favor of environmental protection. Using a weighted least squares linear probability model and a probit model, I found that a liberal Court majority, a Democratic sitting President, and an anti-environmental protection lower court decision all increase the probability that the Supreme Court will issue a pro-environmental protection decision. By improving our understanding of Supreme Court decision making, my study offers insight on how to best advocate for environmental protection.
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I. INTRODUCTION AND BACKGROUND

As the highest court in the land, the United States Supreme Court is the final interpreter of federal law. The vast majority of cases arrive at the Supreme Court as appeals from federal circuit courts or state supreme courts. Arguably the most important aspect of the Supreme Court is the composition of the Court itself. Each distinct set of nine justices constitutes a natural court with its own ideological majority. Justices are appointed by the President with the advice and consent of the Senate to life tenure, a constitutional design intended to grant independence to the justices.¹ A majority of the Supreme Court’s members must concur in a decision to issue a controlling opinion. The degree to which the federal judiciary upholds given legal perspectives depends on which understanding commands a majority on the Supreme Court.² Changes in Court composition over time can produce marked shifts in jurisprudence.³ Indeed, the frequency of 5-4 rulings demonstrates the importance of even one pivotal appointment.⁴

Presidents usually attempt to appoint nominees who they believe hold similar ideological views.⁵ Appointments are of special interest when they can shift the ideological balance of the Court.⁶ As an example, P. S. Ruckman, Jr. has suggested that the nominations of Associate Justices Sandra Day O’Connor and Antonin Scalia were not highly contentious in part because each was perceived as involving “a retired

¹ Denis Steven Rutkus, “Supreme Court Appointment Process: Roles of the President, Judiciary Committee, and Senate,” CRS Report for Congress (20 March 2008).
³ Dinan 134.
⁴ Rutkus.
⁵ Rutkus.
conservative being replaced by an ideological twin." The recent confirmation of Associate Justice Sonia Sotomayor and the likely retirements of aging members of the Court make a study of the role of ideology in Supreme Court decision-making pressing and relevant.

The visibility and publicity of Supreme Court decisions can deter would-be polluters, making environmental law a critical part of the Supreme Court’s docket. My hypothesis was that a liberal Supreme Court majority is more likely to rule in favor of environmental protection than a conservative majority. There are multiple reasons why I expected this outcome. First, research suggests that conservative justices side with industry groups more often than liberal justices in environmental regulatory cases. Second, liberal justices are more likely to consider novel standing arguments. Standing is a particularly critical hurdle in environmental cases, as it can enable or prevent citizen groups from bringing suit for damage to ecosystems. For example, in a 5-4 decision in Massachusetts v. EPA, the liberal court majority accepted the novel legal argument that because a state had a special interest in protecting the rights of its citizens, Massachusetts had legal standing to bring the case. Third, liberal justices may be more open to statutory interpretations that consider the purpose or spirit of environmental protection statutes. Justice Stevens and other purposivists will look to legislative history,

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7 Ruckman 797.
congressional conference reports, and other materials that may indicate Congress’
purpose because they believe such materials inform their understanding of congressional
intent.\textsuperscript{12} In contrast, textualists such as Justice Antonin Scalia adhere to a literal reading
of the statutory text, even if it contravenes other evidence of congressional intent.\textsuperscript{13}

My study adapted Brian Baak’s 2007 GPPI thesis, which examined the effects of ideology on the Court’s criminal docket, to the Court’s environmental docket.\textsuperscript{14} Baak
used weighted least squares and probit regression models to find that a liberal court
majority was more likely to vote in favor of a criminal defendant than a court with a
conservative majority. I used an updated version of the data base used by Baak.
Whereas Baak restricted his sample to criminal cases, I limited my sample to the 187
environmental protection decisions issued between 1953 and 2007, which are pre-coded
in Harold J. Spaeth’s U.S. Supreme Court Judicial Data Base.\textsuperscript{15} My dependent variable
was the occurrence of a pro-environmental protection decision. As in Baak’s analysis,
my principal explanatory variable was the ideology of the Court’s majority.

With more than one Supreme Court justice nearing retirement, major shifts in the
Court’s ideological composition are possible.\textsuperscript{16} Estimation of how future shifts may
affect environmental protection cases will help environmental advocates focus their legal
efforts on activities most likely to affect Supreme Court decision-making.

\textsuperscript{12} Brian Lamb, Interview with Justice John Paul Stevens, \textit{C-SPAN} (June 24, 2009).
\textsuperscript{14} Brian Baak, “Supreme Court Decision-making: An Analysis of the Court’s Criminal Docket and the Role
\textsuperscript{15} Harold J. Spaeth and Jeffrey A. Segal, “The U.S. Supreme Court Judicial Data Base.” 24 Sep. 2009,
\textltt{http://www.cas.sc.edu/coli/juri/sctdata.htm}.
\textsuperscript{16} “Sotomayor’s Supreme Court Debut Nears, Columbia Law School Experts Say She Will Fit In Right
Away.”
II. Literature Review

Previous studies have found strong evidence that the ideology of federal judges affects their environmental law decision-making.\(^{17}\) Because the Supreme Court plays a critical role in interpreting law, a clearer understanding of how ideology influences the Supreme Court is critical to environmental protection.

A. NEPA Decisions in Federal District and Circuit Courts

In a 2004 study, researchers at the Environmental Law Institute (ELI), found a dramatic correlation between the outcome of National Environmental Policy Act (NEPA) cases and the party affiliation of the presiding judge.\(^{18}\) The study, which reviewed 325 NEPA decisions over a three year period, sorted judges as either Democratic or Republican appointees by using political party of the appointing president as a proxy for each judge’s individual ideology. Cases fell into one of two broad categories of parties bringing suit: pro-environment plaintiffs and pro-development (industry) plaintiffs. The time period only spanned January 2001 to June 2004 in order to control for the underlying litigation climate. In other words, the authors assumed that there was no meaningful variation in the filing or adjudication of lawsuits during the three-year time period of their study.


\(^{18}\) Austin.
The ELI study found that federal district court judges appointed by Democratic presidents ruled in favor of environmental protection nearly 60% of the time, while judges appointed by Republican presidents ruled in favor only 28% of the time.19 District judges appointed by Democrats ruled against the environment in industry development cases only 14% of the time, while Republican-appointed judges ruled against the environment in favor of industry plaintiffs nearly 60% of the time.20 Federal circuit cases are typically decided by a majority of the judges on a three-judge panel. On federal circuit court panels, Democratic majorities issued pro-environment verdicts 58% of the time while Republican majorities issued such verdicts only 10% of the time.21 The results of the ELI study suggest that judges’ political affiliations have a significant impact on environmental claims under NEPA.

B. Industry Challenges in the D.C. Circuit Court

Whereas the ELI study analyzed district courts and circuit courts generally, Sunstein et al. (2004) focused on the influence of ideology in the federal D.C. Circuit Court.22 Sunstein assembled a sample of EPA cases by searching the Georgetown Law library’s judicial database and crosschecking it with the Lexis legal research system. The researchers also used data from Richard Revesz’s data set on industry challenges to EPA decisions. Through these methods, Sunstein identified 142 cases in the time period spanning September 1994 through December 2002.

19 Austin.
20 Austin.
21 Austin.
22 Sunstein et al.
The investigators limited their study to the D.C. Circuit Court, which for jurisdictional reasons hears the vast majority of environmental law cases. D.C. Circuit cases are decided by a three-judge panel. Sunstein coded as pro-industry a vote by a judge to provide any relief to the industry challenger and found that the political party of an appointing president affects a judge’s likelihood to favor an environmental challenge. Between 1970 and 2002, Democratic appointees voted against agency challenges 64% of the time, whereas Republican appointees did so 46% of the time. The researchers also found that a homogenous Democratic panel was more likely to vote in favor of environmental protection than a homogenous Republican panel. A Democratic appointee was about twice as likely to vote in favor of environmental protection when sitting on a panel with two other Democrats as a Republican appointee sitting with two other Republican appointees. The Sunstein study therefore suggests that court composition affects voting patterns in environmental cases, at least in the D.C. Circuit Court.

C. Environmental Law in the Ninth and D.C. Circuit Courts

Like Sunstein et al., Wenner and Ostberg (1994) also examined environmental law in the D.C. Circuit, but added a comparison with the Ninth Circuit to their study. The Ninth Circuit Court of Appeals is known as a controversial and liberal circuit court, whereas the D.C. Circuit Court is known as a “mini Supreme Court” due to its important role in overseeing decisions of administrative agencies. Wenner and Ostberg’s

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23 Sunstein et al. 322.
24 Sunstein et al. 322.
25 Wenner and Ostberg.
26 Wenner and Ostberg 219.
empirical study examined 399 environmental law cases adjudicated by the Ninth Circuit between 1970 and 1990, and 349 cases adjudicated by the D.C. Circuit between 1970 and 1988. They coded case outcomes according to which of three types of litigants won—industry, environmentalists, or government.

Wenner and Ostberg found that Democratic nominees ruled in favor of environmentalists more than their Republican counterparts. In addition, they found no evidence that Republican judges appointed under Bush and Reagan had changed the ideological direction of decision making in the Ninth or D.C. Circuits on environmental issues. The authors postulated that their findings demonstrate restraint by Bush and Reagan appointees in deferring to executive agencies instead of using their own ideological preferences to favor industry groups.

D. Environmental Regulation in the D.C. Circuit Court

Richard Revesz (1997) also focused on the role of court ideology in the D.C. Circuit. His study found evidence of political party influence on the rate of reversal of environmental regulations in cases brought by industry and environmental groups. Revesz’s study examined approximately 250 challenges to EPA decisions. He coded the cases for elements including political party of the judges, composition of the panel, whether the challenger was an industry or environmental group, and the reasons given for each vote. Revesz also divided his sample into subsamples to reflect time periods in

27 Wenner and Ostberg 218.
which a court’s composition was relatively stable and to control for potential differences in the composition of cases heard over time.

Revesz hypothesized that Democratic judges were more likely than Republican judges to reverse the EPA when the challenger was an environmental group, and conversely that Republican judges were more likely than Democratic judges to reverse when the challenger was an industry group. The study confirmed both hypotheses. Republican appointees had a higher reversal rate than Democrats for industry challenges of environmental regulations and Democrats had a higher reversal rate than Republicans for environmental challenges.

E. Environmental Regulation in the U.S. Supreme Court

Moving from the Circuit Courts up to the Supreme Court, an analysis by Miles and Sunstein (2006) examined Supreme Court and appellate court adjudication of cases that cite *Chevron v. NRDC*, a landmark case in environmental and administrative law. The study used the political party of the nominating President to examine whether Democratic versus Republican-appointed judges were more likely to vote in favor of liberal agency interpretations. Miles and Sunstein created their own data set limited to administrative law decisions that cite *Chevron*. Their analysis has environmental law implications because the majority of administrative law cases – including *Chevron* itself – are environmental law cases.

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28 Revesz 1728.
29 Revesz 1741.
Miles and Sunstein generated validation rates for each Supreme Court justice by coding all judicial votes cast in 15 separate *Chevron* cases. A judicial vote was coded as liberal if it invalidated an agency interpretation challenged by a public interest group or labor union.\(^\text{31}\) The sample size was the 120 votes cast in the 15 *Chevron* cases.\(^\text{32}\) Two sets of controls existed, one for fixed effects to control for trends over time, and another for variation across cases.\(^\text{33}\)

The study found that among the courts of appeals, the average Democratic appointee was 14 percentage points more likely than the average Republican appointee to vote for a liberal agency decision. On the Supreme Court, liberal justices were 27 percentage points more likely to validate liberal agency interpretations than conservative agency interpretations. The study also found that conservative justices validated agency interpretations at higher rates during Republican administrations than during Democratic administrations.

### F. Expanding on Past Studies

Past Supreme Court scholarship has explored the effects of administrative deference,\(^\text{34}\) *amicus curiae* participation,\(^\text{35}\) and legislative history,\(^\text{36}\) but not majority ideology. While other fields of law including tax and property law have considered the

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\(^{31}\) Miles and Sunstein.

\(^{32}\) Miles and Sunstein.

\(^{33}\) Miles and Sunstein.

\(^{34}\) Miles and Sunstein 823.


impact of Supreme Court ideology, its broad effect on environmental law adjudication remains unexplored. Both the Revesz and Miles and Sunstein studies limit their environmental law samples to only cases that involved federal agencies. In the Miles and Sunstein study, the sample was further restricted to only those cases that invoked *Chevron*.

My investigation expands both the scope and timeframe of existing studies. I focus on the Supreme Court instead of the D.C. Circuit or lower federal courts, and include all environmental protection decisions, not just those involving federal agencies or invoking *Chevron*. Finally, I examine the past half century of environmental protection decisions rather than a smaller time period of only a few years or a couple decades.

Evidence of ideological voting may encourage federal agencies that enforce environmental laws to expend greater effort to meet the legal “hard look” doctrine, which requires that courts take a “hard look” at agency decisions in arbitrariness review. It also may encourage Congress to facilitate environmental litigation through looser standing requirements or through the creation of new causes of action. For environmentalists, my study will provide insight into litigation strategies and other activities likely to yield success before the Supreme Court.

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37 Revesz 1717.
III. Methodology

I used a weighted least squares linear probability model and a probit model to test my hypothesis that a Supreme Court with a liberal majority is more likely than a Court with a conservative majority to rule in favor of environmental protection. I chose these two models because both correct for heteroskedasticity and the analysis most closely related to mine also used weighted least squares and probit models.\(^\text{39}\)

I tested my hypothesis using a subset of Harold J. Spaeth’s U.S. Supreme Court Judicial Data Base.\(^\text{40}\) The creators of the Spaeth Data Base individually coded each Supreme Court decision for several variables, including the date of decision, the vote of each justice, the court under review, and the direction of decision. My sample size of 187 cases spanned 1953-2007, which corresponded to the Warren Court through the Roberts Court. The Spaeth Data Base Handbook recommends docket number as the unit of analysis for studies of case disposition.\(^\text{41}\) Since I examine the outcome of environmental protection decisions, I therefore used docket number as my unit of analysis.

There were several reasons why I expected a Court with a liberal majority to vote in favor of environmental protection more often than a Court with a conservative majority. First, Sunstein et al. found that conservative justices, more than liberal justices, support industry challenges of environmental regulations thought to interfere with the functioning of a free market system.\(^\text{42}\) Since conservative justices sympathize more with

\(^{39}\) Baak.

\(^{40}\) The Spaeth Data Base is available for free download in multiple formats from the Judicial Research Initiative, <http://www.cas.sc.edu/coli/juri/sctdata.htm>.


\(^{42}\) Sunstein et al. 301.
industry arguments to remove market interferences, they will be more likely to strike
down regulations that promote environmental protection.\textsuperscript{43} This will make a conservative
Supreme Court less likely to vote in favor of environmental protection.

Second, liberal justices may be more likely to recognize novel standing arguments
presented by plaintiffs in environmental protection cases. The acceptance by the liberal
Court majority of the state standing argument proffered in \textit{Massachusetts v. EPA}
illustrates that a liberal court may be more likely to grant standing, and in turn to hear the
merits of an environmental protection case. In \textit{Massachusetts v. EPA}, the Court
recognized states as having special standing status by virtue of their interest in protecting
their citizens.\textsuperscript{44} As standing in many environmental cases is the first and determinative
hurdle, liberal court interpretations of standing requirements are more likely to result in
an environmental protection outcome.

Third, a liberal majority may be more open to statutory interpretations that
consider the purpose or spirit of environmental statutes. Justice Stevens, leader of the
liberal wing of the current Supreme Court, supports consideration of legislative history to
decipher the intent of Congressional acts.\textsuperscript{45} In contrast, Justice Scalia, a conservative
member of the Court, insists on a strict textual interpretation of statutes with no
consideration of congressional conference reports or other items of legislative history.\textsuperscript{46}
The aspirational purposes of environmental statutes may not always appear in the text of
the statute. By considering legislative history, a liberal majority may be more likely to

\begin{footnotes}
\item[43] Sunstein et al. 301.
\item[44] Massachusetts v. EPA at 526.
\item[45] Lamb.
\item[46] Sunstein 429.
\end{footnotes}
interpret environmental statutes in favor of environmental protection, since this is the aim of most modern environmental statutes. I would therefore expect a liberal court majority, which is more likely to consult legislative history, to also rule in favor of environmental protection more often than a conservative court.

A. Dependent Variable, ProEnviro

My dependent variable is the occurrence of a pro-environmental protection decision, which is pre-coded in the Spaeth Data Base as an indicator variable. I renamed Spaeth’s variable dir (representing direction of the decision) so that ProEnviro=1 for a pro-environmental protection decision and ProEnviro=0 for an anti-environmental protection decision.

B. Principal Independent Variable, LibCourt

My principal independent variable is the majority ideology of the Supreme Court at the time of decision. To code the ideology variable LibCourt, I adapted the method used in Brian Baak’s study, which examined the effects of ideology on the Court’s criminal docket. First, I determined the ideology of each justice on each natural court. Second, I used the ideology of the justices from the first step to identify whether a majority of the justices were liberal or conservative. If a majority of the justices were

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47 Baak.

48 None of the cases in my sample involved a natural court with an equal number of liberal and conservative justices.
liberal, then I coded that court as $\text{LibCourt}=1$. If a majority of the justices on the Court were conservative, then I coded that court as $\text{LibCourt}=0$.

There are two main methods used to determine a justice’s ideology – the content analysis method and the presidential proxy method.\textsuperscript{49} Both methods are well respected in legal empirical research, and at least one study found no statistically significant difference between the two methods of coding Supreme Court ideology.\textsuperscript{50} The first method uses a holistic approach known as the attitudinal or content analysis method. The second method codes the majority ideology using the political party of the appointing President as a proxy for the ideology of each justice.

One limitation of both methods is they assume that a justice’s ideology is stable over time. I do not account for variations in ideology over time because this requires reevaluation of a justice’s ideology at the date of each decision. Considering the half century time span of my study, reevaluation at each date was not practical and would have introduced inconsistency in measurement. It would also raise the issue of whether to calculate ideology based on environmental votes only or other cases such as civil rights decisions too. In addition, though some justices vote more liberally towards the end of their career, I found that switching ideological values to account for such changes did not

\textsuperscript{49} There is a less common third method used by Corey Ditslear and Lawrence Baum which computes an ideological score for each Supreme Court justice based on voting record while on the Supreme Court. I have chosen not to use this method for several reasons. First, the method is not commonly employed in Supreme Court empirical studies. Second, my dependent variable itself is the outcome of the votes of Supreme Court justices and it would evaluate the same information if I used the same measure for both the dependent and independent variable. Third, the ideology value for each justice would change for each case if it only used cases decided until that point in time. If calculated based on all cases decided while on the Supreme Court, it would in some cases include votes from cases decided after the case of study. Neither of these options is optimal and I therefore do not use this method. See Corey Ditslear and Lawrence Baum, “Selection of Law Clerks and Polarization in the U.S. Supreme Court.” \textit{Journal of Politics} 62 (Aug. 2001): 869.

\textsuperscript{50} Baak.
alter the majority’s ideology. For example, Justice Souter was appointed by a Republican President and therefore receives a conservative coding as his ideological value. Even with a liberal coding for Justice Souter to reflect his liberal voting record, the majority on the Court is still conservative. I therefore decided to maintain a stable measure of the Court’s majority ideology over time rather than attempt to account for voting trends.

i. Content Analysis Method

The content analysis method, also known as the attitudinal model, measures a justice’s ideology by her statements in the editorials of leading national newspapers. Segal and Cover (1989) pioneered this method by devising a set of measures to reflect a justice’s ideological position from sources independent of judicial votes. Specifically, they scored newspaper editorials written and published by Supreme Court nominees before Senate confirmation. Segal and Cover based individual ideological scores on the liberal or conservative content of each justice’s published editorials. One limitation of this method is that most editorials authored by Supreme Court nominees deal exclusively with civil rights, which may not indicate a justice’s philosophy on environmental law issues. A second problem is that some justices made few substantive statements in their editorials and therefore provide little material with which to calculate an ideological value. As an example, Segal and Cover point out the relative paucity of editorials for.

52 Jeffrey A. Segal and Albert D. Cover, “Ideological Values and the Votes of U.S. Supreme Court Justices.” *American Political Science Review* 83 (June 1989).
53 Lim 729.
54Lim 729.
judicial nominees before the Warren Court era. A third weakness is that researchers have not yet updated the ideological values to include recent appointees Chief Justice Roberts and Associate Justice Alito. Omitting decisions made by Roberts and Alito would eliminate thirteen cases from my study. To preserve a larger sample size, I therefore rejected this method in favor of the more common presidential proxy method.

ii. Presidential Proxy Method

All of the related studies in my area of research used the presidential proxy method. An advantage of this method is that it produces consistent and relatively accurate classifications of the justices and facilitates indicator variable coding. One limitation of the presidential proxy method is that it does not capture each justice’s ideology issue by issue. For example, a justice may be liberal on environmental regulation but more conservative on civil rights. There are also a few notable counter-examples that challenge the accuracy of this method. Justices Earl Warren and David Souter were both appointed by a Republican president but cast mostly liberal votes while on the Court. Because coding for these justices does not change from conservative to liberal under the content analysis method either, I chose to follow the precedent of past studies and use the presidential proxy method.

55 Lim 729.
56 Lim 730.
57 Segal and Cover.
C. Other Independent Variables

In addition to majority ideology, I considered five other independent variables and included three in my final conceptual model.

i. DemPres

This variable accounts for the political party of the President in office at the time of the Supreme Court decision. Executive agencies may adopt more liberal, pro-environment positions during Democratic presidencies than during Republican presidencies, leading to more frequent reversals of agency positions by conservative Supreme Courts. Further bolstering this theory is Revesz’s study, which found that Republican court appointees are more likely to uphold EPA decisions defended by a Republican administration.\(^58\) This variable may also capture information on the general political mood of the public as expressed through presidential elections. I coded this variable as \(\text{DemPres}=1\) for a Democratic President, and \(\text{DemPres}=0\) for a Republican President.

One reason why I expected \(\text{dempres}\) to increase the likelihood of a pro-environmental protection decision was because Democratic presidents may adopt more liberal, pro-environmental interpretations of federal statutes than Republican administrations. For example, President Clinton’s administration strengthened national environmental protection targets.\(^59\) When Democratically-controlled federal agencies

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\(^58\) Revesz 1735.

advocate for environmental protection before the Court, a liberal Court that defers to the executive branch will be more likely to issue a pro-environmental protection decision. Revesz's study, which found that Republican court appointees are more likely to uphold EPA decisions defended by a Republican administration, also supports this expectation.  

Another reason why a Democratic president may increase the probability of an environmental protection decision is that he can advance his position and priorities through his Solicitor General. The Solicitor General represents the President and the United States government and is “quite successful” before the Supreme Court. One report found that the Court ruled in agreement with the Solicitor General’s position in 75% of cases between 1920 and 1973. The Solicitor General’s high level of success suggests that the Court pays close attention to the federal government’s position. If the Solicitor General therefore adopts a pro-environmental protection position before the Supreme Court, the Court may be more likely to agree and issue a pro-environmental protection decision.

**ii. AntiLowCt**

This variable codes the direction of the ruling of the court under review. I coded this variable as $\text{AntiLowCt}=1$ for an anti-environmental protection decision, and

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60 Revesz 1717.
AntiLowCt=0 for a pro-environmental protection decision. At least one study found that the Supreme Court is more likely to grant review to a case when it disagrees with the lower court’s decision. This allows the Court to reverse the case and correct errors in lower court rulings. I therefore expected that an anti-environmental protection decision in the court under review increased the likelihood of a pro-environmental protection Supreme Court decision.

One reason why I expect AntiLowCt to increase the likelihood of a pro-environmental protection decision derives from the Supreme Court’s control over its own docket. Supreme Court justices vote on whether to hear each case and they grant review of a very limited number of cases each year. Justices are more likely to grant review of cases when they disagree with the lower court’s outcome. This preserves limited judicial resources for outcomes the Court intends to correct through reversal. Such reasoning led me to believe that the Court would be more likely to reverse a case’s outcome than to affirm. Accordingly, I expected that a case with an anti-environmental protection decision by the lower court was more likely to result in a pro-environmental protection decision from the Supreme Court.

### iii. Fed

The Fed independent variable identifies whether the court under review was a federal court. Virtually all cases on the Supreme Court docket arrive either as an appeal

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66 Brenner.
of a federal question from a State court or as an appeal from a lower federal appellate court. I coded this variable as $Fed=1$ if the lower court was a federal court and $Fed=0$ if a state court.\(^{67}\) In my final model, it made no difference whether I coded cases arising under the Supreme Court’s original jurisdiction as $Fed=1$ or $Fed=0$. I therefore coded such cases as $Fed=1$, since they did not arise in state court.

State court justices face the political pressures of elections since most state judges are elected to their positions. In contrast, U.S. presidents appoint federal circuit and district court judges to life tenure designed to ensure that federal judges are unafraid to make unpopular decisions.\(^ {68}\) The relative independence of the federal judiciary may therefore increase the likelihood that federal judges will uphold environmental protections without fearing repercussions from industry or other constituents. Federal courts may also be more likely to adjudicate environmental cases since the major environmental statutes in the U.S. are federal statutes, such as the Clean Water Act.

Disagreement among the federal circuit courts of appeals on their interpretation of a single federal issue is also a common justification for Supreme Court review. This could increase or decrease the likelihood of a pro-environmental protection decisions, depending on the direction of the lower court’s decision.

\(^{67}\) Federal courts in my sub-sample coded as $Fed=1$: 9C, SDFL, 10C, 7C, DCC, MDFL, 6C, EDMI, 3C, 4C, 5C, DNM, 8C, WDVA, SDIN, 2C, 1C, DDC. State courts in my sub-sample coded as $Fed=0$: CA, AK, CO, COAP, NJ, NM, WA, ME. Cases arising under the Supreme Court’s original jurisdiction were coded as Fed=1.

iv. Disagree

A final independent variable that I considered, but ultimately rejected, was \textit{Disagree}, which indicates disagreement between the trial and appellate courts in the case under review. This variable had 40 missing values due to incomplete data in the Spaeth Data Base. Preliminary models in which I included this variable did not demonstrate statistical significance for \textit{Disagree}. To preserve a larger sample size, I therefore omitted \textit{Disagree} from my final conceptual model.

v. Decadal Variables

To account for effects that may change over time, I attempted to include a series of independent indicator variables for each decade. My rationale was that the decadal variables would help to account for changes in external factors over time that may affect the Court’s likelihood to issue a pro-environmental protection decision. My inclusion of this variable is similar to Revesz’s decision to include subsamples in his study to examine time period effects. Though decade categories do not capture annual fluctuations, they may suggest whether major events, such as the revelation of toxic dumping at Love Canal, sparked a trend of liberal environmental voting on the Court. The decadal variables also help account for potential changes in public opinion that may have influenced the Court’s adjudication. At the least, a statistically significant decadal variable can indicate an area for further research to isolate the external factors that affected the Court in a particular decade. The time span of my sample ranges from 1953-
2007, so the 1950s and 2000s variables capture only seven years of data each instead of a full ten-year decade. All other decades represent a ten-year time span.

I was unable to keep the decadal variables in my final conceptual model due to high multicollinearity between the decade indicators and the LibCourt variable. The Court had a liberal majority only in the 1950s and 1960s, making LibCourt and the decade variables a subset of the same information data. Due to the severe multicollinearity, controlling for a particular decade in effect also controlled for LibCourt. I therefore needed to drop the decade variables in order to analyze the effects of LibCourt. Table 1 presents a distribution of cases over time for LibCourt.

Table 1. Distribution of Cases per Decade in which LibCourt=1

<table>
<thead>
<tr>
<th>DECADE</th>
<th>1950s</th>
<th>1960s</th>
<th>1970s</th>
<th>1980s</th>
<th>1990s</th>
<th>2000s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of environmental protection cases in which the Court had a liberal majority (LibCourt = 1)</td>
<td>8</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

D. Final Conceptual Model

After dropping disagree and the decadal variables from my regression model, I was left with the following final conceptual model:

\[ ProEnviro = \beta_0 + \beta_1LibCourt + \beta_2DemPres + \beta_3AntiLowCt + \beta_4Fed \]
Table 2 (below) summarizes the variables included in my final conceptual model.

### Table 2. Summary of Variables

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>DESCRIPTION</th>
<th>EXPLANATION OF CODING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProEnviro</td>
<td>Pro-environmental protection court decision</td>
<td>Dependent variable coded as: 1=pro-environmental protection decision 0=anti-environmental protection decision</td>
</tr>
<tr>
<td>LibCourt</td>
<td>Liberal majority on the Supreme Court at the time of the decision</td>
<td>Principal independent variable coded as: 1=liberal court majority 0=conservative court majority</td>
</tr>
<tr>
<td>DemPres</td>
<td>Democratic President in office at the time of the decision</td>
<td>Independent variable coded as: 1=Democratic President in office 0=Republican President in office</td>
</tr>
<tr>
<td>AntiLowCt</td>
<td>Anti-environmental lower court decision under review by the Supreme Court</td>
<td>Independent variable coded as: 1=anti-environmental protection 0=pro-environmental protection</td>
</tr>
<tr>
<td>Fed</td>
<td>Court under review is a federal district or circuit court, or the case arose under the Supreme Court’s original jurisdiction</td>
<td>Independent variable coded as: 1=federal court, or case arose under the Supreme Court’s original jurisdiction 0=state court</td>
</tr>
</tbody>
</table>

**E. Potential Limitations**

There are other potential factors affecting Supreme Court adjudication that I omitted from my analysis. *Stare decisis*, or the legal doctrine that courts should abide by reasoned past decisions, may overcome the ideological preferences of particular justices and encourage them to uphold decisions they would otherwise overturn. I did not account for *stare decisis* effects in my analysis because it would require a more expanded investigation of the contents and precedents of each of the 187 cases present in this study. Many of the environmental statutes passed in the 1970s would have no legal precedent.
for justices to follow. Additionally, at least one study found that Supreme Court justices
do not appear to be influenced by past decisions with which they disagree.\textsuperscript{69}

A second possible influence on environmental decisions was public opinion. Segal and Spaeth
suggest that appointed justices with lifetime tenure are insulated from popular pressure. Conversely, Adamany and Grossman suggest that the Supreme Court’s
dependence on other institutions to enforce its rulings encourages the Court to remain attentive to popular attitudes.\textsuperscript{70} Unfortunately, I was unable to identify environmental public opinion data that used a consistent sampling method for the fifty year span of my study. Most polls of public opinion, such as a 2008 Gallup poll, only span a few years and lack public responses to the same question over a greater time period.\textsuperscript{71} I therefore chose to omit this element from my analysis.

A third omitted consideration was the experience of the litigating parties. A study by Kevin T. McGuire found that repeat players were more successful in the Supreme Court than less experienced litigants.\textsuperscript{72} I did not include a similar measure of litigation experience for two main reasons. First, measurement of the experience of counsel requires subjective judgments that may not accurately capture experience. For example, an attorney with ten years of litigation experience who has only argued two cases before the Supreme Court may be less experienced than an attorney with seven years of

experience who has argued before the Court each year. Second, McGuire’s method averaged the experience of an attorney over a five-year period. While it may be acceptable to estimate a litigant’s average experience over a five-year period, it is less justifiable to do so over a fifty-year period in which some lawyers will begin and end an entire career.

Finally, I excluded measures of issue salience from my study. Some justices may respond more favorably to issues they find personally salient. Because researchers cannot survey the Supreme Court justices directly, they must instead rely on surrogates for issue salience. Epstein and Segal propose media coverage of a given issue as a proxy measure for issue salience to Supreme Court justices. I chose to exclude measures of issue salience because it would require an evaluation of media coverage up to the year of decision for each of my observations. This methodology is neither practical nor consistent for my half-century study. I therefore leave it to future research to find a method for including issue salience in a study of Supreme Court decision-making.

73 Epstein and Segal 66.
74 Epstein and Segal 66.
75 Epstein and Segal 66.
76 Epstein and Segal 66.
IV. RESULTS

The results of my probit regression model show that three of the factors in my final conceptual model were statistically significant. Only one variable, *Fed*, was not statistically significant. Table 3 lists the results of my probit regression analysis.

Table 3. Factors Affecting Supreme Court Decision-Making in Environmental Protection Cases

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>PROBIT ESTIMATE (STANDARD ERROR)</th>
<th>MARGINAL EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>LibCourt</em></td>
<td>1.365 (0.356)</td>
<td>0.435</td>
</tr>
<tr>
<td><em>DemPres</em></td>
<td>1.165 (0.228)</td>
<td>0.438</td>
</tr>
<tr>
<td><em>AntiLowCt</em></td>
<td>1.363 (0.229)</td>
<td>0.498</td>
</tr>
<tr>
<td><em>Fed</em></td>
<td>-0.071 (0.563)</td>
<td>-0.028</td>
</tr>
<tr>
<td>Intercept</td>
<td>1.183 (0.580)</td>
<td></td>
</tr>
</tbody>
</table>

N=187, * p<0.001

i. *LibCourt*

The statistical significance of my principal independent variable, *LibCourt*, shows that holding other factors constant, a Supreme Court with a liberal majority is 43.5 percentage points more likely than a Supreme Court with a conservative majority to issue a pro-environmental protection decision (p<0.001). This supports my hypothesis that a Court with a liberal majority is more likely to favor environmental protection outcomes.
ii. *DemPres*

The coefficient on *DemPres* is statistically significant (p<0.001), showing that the presence of a Democratic president in office increases the likelihood of a pro-environmental protection decision. With a Democratic president in office, the Court is 43.8 percentage points more likely to rule in favor of environmental protection as when a Republican president is in office.

To the extent that election results indicate public opinion, *DemPres* may also capture information on the nation’s political mood. During Republican administrations, the Court was less likely to issue pro-environmental protection decisions. This may reflect acknowledgment by the Court of public sentiment opposing environmental regulation during conservative periods in the country’s history. A decadal breakdown of the number of pro-environmental protection decisions versus anti-environmental protection decisions in Table 4 supports this expectation.

**Table 4. Environmental Protection Decisions by Decade and by Presidency**

<table>
<thead>
<tr>
<th>Number of Pro-Environmental Protection Decisions</th>
<th>Number of Anti-Environmental Protection Decisions</th>
<th>Decade</th>
<th>Presidency</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>2</td>
<td>1953-59</td>
<td>Republican</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>1960-69</td>
<td>Democratic</td>
</tr>
<tr>
<td>24</td>
<td>33</td>
<td>1970-79</td>
<td>Republican</td>
</tr>
<tr>
<td>26</td>
<td>39</td>
<td>1980-89</td>
<td>Republican</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>1990-99</td>
<td>Democratic</td>
</tr>
<tr>
<td>13</td>
<td>15</td>
<td>2000-07</td>
<td>Republican</td>
</tr>
</tbody>
</table>
During the 1960s, when the nation elected two Democratic Presidents, the Court issued 17 pro-environmental protection decisions, compared to only 1 anti-environmental protection decision. This pattern reversed in the 1970s and 1980s, when the country elected Republican presidents Richard Nixon, Ronald Reagan, and George H.W. Bush. The trend reversed again briefly during the Clinton years of the 1990s, only to shift back towards anti-environmental protection with the election of George W. Bush in 2000. My regression results support the trend shown in Table 4 and suggest that the Supreme Court is not immune to Executive Branch activity when ruling on environmental cases. Further supporting this result is a declaration by Chief Justice John Roberts, who stated that the actions of the executive branch do influence the Court’s docket.  

To focus on decadal effects and relevance of the presidency, I omitted additional columns from Table 4 that would provide the political party of each house of Congress. Including Congressional election results would require biennial breakdown of environmental protection decisions and make it more difficult to identify long-term trends. Future researchers may wish to examine the impacts of Congressional elections on environmental protection decisions. Such analysis could provide insight into the relative decline in pro-environmental protection decisions rendered during the 1970s despite a Democratic Congress and the passage of historic environmental legislation, including the Clean Air Act Amendments (1977) and the Clean Water Act (1972).

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77 Barnes.
iii. AntiLowCt

I expected to see a greater likelihood of an environmental protection decision if the court under review had ruled against environmental protection. The coefficient on AntiLowCt was statistically significant (p<0.001), which supports my hypothesis. When the Court considered a case with an anti-environmental outcome in the lower court, it was 49.8 percentage points more likely to issue a pro-environmental protection decision than in a case with a pro-environmental lower court ruling.

My sample included 107 cases with pro-environmental protection lower court decisions and 80 cases with anti-environmental protection lower court decisions. Of those 80 anti-environmental protection decisions, the Court reversed the outcome in 62 cases, or 77.5% of cases. In contrast, of the 107 pro-environmental cases, the Court issued pro-environmental protection decisions in only 31 of those cases, or 29.0% of cases.

iv. Fed

The coefficient on Fed was not statistically significant, indicating that whether a case arose in federal or state court did not affect its adjudication. Though I did not have an expectation of how Fed would affect the likelihood of a pro-environmental outcome, I thought the life tenure of federal court judges might insulate them from politically controversial decisions. The insignificance of Fed suggests that even if this is true, state judges may not be so greatly influenced by political pressures as to produce a statistically significant difference in their adjudication.
Another possible explanation for the insignificance of *fed* is that in addition to the numerous federal environmental statutes, there are many state environmental statutes. Each state’s highest court is the final interpreter of state law. The Supreme Court therefore cannot overrule a state court’s interpretation of state environmental laws. As such, cases that invoke only state environmental statutes will not arrive at the Supreme Court. This suggests that those cases filed in state court that do arrive at the Supreme Court already contain a federal issue similar to those found in federal court cases, and for this reason procedural history has no effect on Supreme Court adjudication.

**V. Policy Implications**

My results suggest that the appointment of even a single Supreme Court justice can have immediate effects on the likelihood of pro-environmental protection decisions if that appointment shifts the ideological balance of the Court. The recent frequency of 5-4 votes on key Supreme Court environmental cases supports this assertion. I now elaborate on specific recommendations for environmental advocates in light of my findings.

First, the significance of *DemPres* suggests that the public has power to affect the insulated decisions of the Supreme Court through the office of the President. Though citizens do not elect Supreme Court justices, the political party of the president does have an impact on the Court’s decisions. This implies that environmentalists should support

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78 Examples include the Washington Clean Air Act, the Colorado Clean Air Act, the California State Drinking Water Act, and the Massachusetts Clean Energy Biofuels Act.

79 For example, see *Rapanos v. U.S.*, 547 U.S. 715 (2006) or *Massachusetts v. EPA.*
Democratic presidential campaigns to capitalize on the significant effects of DemPres.
Through the Democratic president’s solicitor general, environmentalists can increase	heir chances of pro-environmental protection decisions before the Supreme Court. As
such, environmentalists should closely monitor presidential nominations to key legal
policy posts in each administration, such as the positions of EPA Administrator, Attorney
General, and Solicitor General. Specifically, environmentalists should advocate for
nominees likely to advance the positions of a pro-environmental president.

Second, the significance of LibCourt indicates that environmentalists should also
review Supreme Court nominees to ensure a liberal majority on the Court. Electing
Democratic Presidents who are likely to appoint ideological liberals to the Court is one
way to advance this strategy. Even within Democratic nominations, environmentalists
can look to voting records, published articles, and public statements of Supreme Court
nominees for confirmation of liberal ideology. Environmentalists can then use this
information to urge presidents to appoint liberal Supreme Court justices that are more
likely to adopt pro-environmental protection arguments. Future researchers may wish to
examine potential links between a justice’s ideology on environmental law and other
issues, such as civil rights, to determine if there are issue-specific ways to predict a
justice’s voting pattern.

Next, the increased likelihood of reversal of anti-environmental protection
decisions shown by AntiLowCt suggests that environmentalists should focus their
litigation resources on appealing adverse decisions to the Supreme Court. Advocates
litigating before the Supreme Court should aim for reversal of anti-environmental
protection decisions issued by Circuit Courts and State Supreme Courts. The statistical insignificance of Fed also allays doubts that the initial filing of environmental cases in state or federal court may impair the likelihood of victory in the Supreme Court.

Finally, in the case of Fed, which I found to have no significant impact, it is possible that my sample size was too small to detect the effects of state court procedural history. My sample of 187 cases contained 12 cases arising in state courts, in contrast to 175 cases arising from federal courts or under the Supreme Court’s original jurisdiction. Future studies may wish to examine this factor with a data set expanded beyond environmental protection decisions, or focus on cases on a statute-by-statute basis.

My research fills a gap in the existing environmental literature by identifying significant factors that affect the Supreme Court’s environmental decision-making. Liberal court justices, Democratic presidents, and anti-environmental lower court rulings all increase the likelihood of a pro-environmental protection decision. No doubt there are other factors which may affect Supreme Court adjudication of environmental issues, such as the experience of litigators and public opinion. Future research on an expanded data set may identify the influence of these factors and determine whether new trends have emerged since 2007.
### Table A1. Descriptive Statistics – Means

<table>
<thead>
<tr>
<th>VARIABLE NAME</th>
<th>N</th>
<th>MEAN</th>
<th>STD. DEV.</th>
<th>MINIMUM</th>
<th>MAXIMUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProEnviro</td>
<td>187</td>
<td>0.497</td>
<td>0.501</td>
<td>0</td>
<td>1.000</td>
</tr>
<tr>
<td>LibCourt</td>
<td>187</td>
<td>0.128</td>
<td>0.335</td>
<td>0</td>
<td>1.000</td>
</tr>
<tr>
<td>DemPres</td>
<td>187</td>
<td>0.492</td>
<td>0.501</td>
<td>0</td>
<td>1.000</td>
</tr>
<tr>
<td>AntiLowCt</td>
<td>187</td>
<td>0.428</td>
<td>0.496</td>
<td>0</td>
<td>1.000</td>
</tr>
<tr>
<td>Fed</td>
<td>187</td>
<td>0.936</td>
<td>0.246</td>
<td>0</td>
<td>1.000</td>
</tr>
</tbody>
</table>
### Table B1. Descriptive Statistics – Frequency

<table>
<thead>
<tr>
<th>VARIABLE NAME</th>
<th>VARIABLE DESCRIPTION</th>
<th>VALUE</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
<th>CUMULATIVE FREQUENCY</th>
<th>CUMULATIVE PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProEnviro</td>
<td>Pro-environmental protection court decision</td>
<td>0</td>
<td>94</td>
<td>50.27</td>
<td>94</td>
<td>50.27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>93</td>
<td>49.73</td>
<td>187</td>
<td>100.00</td>
</tr>
<tr>
<td>LibCourt</td>
<td>Liberal court majority at the time of the decision</td>
<td>0</td>
<td>163</td>
<td>87.47</td>
<td>163</td>
<td>87.17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>24</td>
<td>12.83</td>
<td>187</td>
<td>100.00</td>
</tr>
<tr>
<td>DemPres</td>
<td>Democratic president at the time of the decision</td>
<td>0</td>
<td>95</td>
<td>50.80</td>
<td>95</td>
<td>50.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>92</td>
<td>49.20</td>
<td>187</td>
<td>100.00</td>
</tr>
<tr>
<td>AntiLowCt</td>
<td>Anti-environmental lower court decision under review by the Supreme Court</td>
<td>0</td>
<td>107</td>
<td>57.22</td>
<td>107</td>
<td>57.22</td>
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<tr>
<td></td>
<td></td>
<td>1</td>
<td>80</td>
<td>42.78</td>
<td>187</td>
<td>100.00</td>
</tr>
<tr>
<td>Fed</td>
<td>Court under review is a federal court or case arose under original jurisdiction</td>
<td>0</td>
<td>12</td>
<td>6.42</td>
<td>12</td>
<td>6.42</td>
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<tr>
<td></td>
<td></td>
<td>1</td>
<td>175</td>
<td>93.58</td>
<td>187</td>
<td>100.00</td>
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</table>
BIBLIOGRAPHY


Lamb, Brian. Interview with Justice John Paul Stevens. *C-SPAN* (June 24, 2009).


Rutkus, Denis Steven. “Supreme Court Appointment Process: Roles of the President, Judiciary Committee, and Senate.” CRS Report for Congress (March 20, 2008).

Segal, Jeffrey A. and Cover, Albert D. “Ideological Values and the Votes of U.S. Supreme Court Justices.” American Political Science Review 83 (June 1989).


