Abstract

While a range of research establishes the importance of the courts to policy implementation, no study has examined whether judicial ideology affects bureaucratic decision-making independently of litigation. We delineate the key conditions under which the mere composition of the courts should influence administrative decisions, and test for this effect in wetlands permitting, which satisfies the theoretical conditions. In particular, we examine whether the composition of the appellate and district courts, which have jurisdiction over the policy, affects the likelihood the Army Corps of Engineers grants a permit. Conducting econometric analysis of 18,331 applications that were evaluated between 1988 and 1996, we show that an Army Corps official is more likely to issue a permit the greater the percentage of judges appointed by a Republican president. We thus find that the influence of the courts over policy implementation is even greater than previous work has suggested.

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1. Introduction

A variety of research establishes the large role of the federal courts in policy implementation. Most of this work examines the impact of judicial rulings. For example, studies document how judges’ interpretations of legislative statutes have caused officials to alter procedures in agencies ranging from the Environmental Protection Agency (EPA) (Melnick 1983) to the Department of Energy (Chubb 1983) to the National Labor Relations Board (Moe 1985). Other work demonstrates how judicial rulings affect bureaucratic decisions or “outputs.” In the area of water pollution, Hunter and Waterman (1996) show that EPA officials increase the number of inspections and referrals for litigation as judges increase the penalties assessed against polluters, and Wood and Waterman (1993) offer comparable evidence regarding EPA referrals for litigation. Similarly, in examining antitrust enforcement, Wood and Anderson (1993) find that the number of antitrust cases pursued by the Justice Department declines when the courts dismiss more antitrust cases. As a whole, this body of research suggests that bureaucratic decision-making is affected by the likelihood that the courts would uphold administrative decisions.

Studies examining disparities in regulatory outcomes also indicate that officials respond to the threat of legal action over their decisions. For example, Munch (1976) examines the implementation of government "takings" or eminent domain by the Chicago Department of Urban Renewal, and finds the department has tended to over-compensate wealthy landowners while under-compensating poor ones. She conjectures the primary reason for the inequity is the wealthier parties’ greater capacity to file suit. Likewise, Sigman (1998) shows that the EPA chooses less extensive clean-up for a Superfund site when a liable private party rather than the government is expected to bear the costs of the clean-up, and liable private parties, unlike taxpayers, have repeatedly sued over the details of these plans (Kagan 1995).

Despite this range of work suggesting that the courts affect policy implementation, a potentially critical relationship has not been examined, namely that between the ideological composition of the courts and bureaucratic decision-making. One of the most consistent findings in the literature on the federal
judiciary is that judges’ ideological preferences affect their rulings. Moreover, even though the Administrative Procedure Act exhorts judges to defer to an administrative official’s assessment of fact, research shows they are more likely to rule in favor of an official if his decision is consistent with their ideology. Thus to the extent that administrative officials strive to decrease the likelihood of being overturned in court, their decisions may be influenced by the ideological composition of the courts, even when no cases are actually heard.

This potential effect is important since in many areas of policy implementation, litigation itself is exceedingly rare. For example, as Ringquist and Emmert (1999, 12) observe with regards to the EPA, the agency “rarely brings suit to force compliance with environmental protection statutes, and once a suit is filed, the EPA faces terrific incentives to avoid taking the suit to trial.” For the EPA as well as other agencies, litigation drains scarce resources in terms of funding and staff, causing officials to prevent litigation if at all possible (Hunter and Waterman 1996). Yet if merely the threat of litigation affects bureaucratic behavior, then judges are in effect influencing policy even when agencies manage to avoid going to court.

In this paper, we delineate the conditions under which the composition of the courts should affect bureaucratic decision-making, and then test for this relationship in a policy area that satisfies the conditions, wetlands permitting. In particular, we examine whether the composition of the appellate and district courts, which have the principal legal jurisdiction over the policy, affects the likelihood that a permit is granted by the Army Corps of Engineers, the agency with primary administrative authority. Conducting econometric analysis of 18,331 permit applications between 1988 and 1996, we find that an Army Corps official is more likely to grant a permit the greater the percentage of judges appointed by a Republican president in his district and appellate courts. The analysis controls for a variety of potential influences, including previous judicial rulings, the regional structure of the Army Corps of Engineers, the

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1 E.g., Segal and Spaeth 1993 for the Supreme Court, Songer, Segal and Cameron 1994 for the appellate courts and Rowland and Carp 1983 for the district courts.
presidential administration, the composition of Congress, and the economy. While most of these control variables are found to affect Army Corps officials’ decisions, but importantly, the appellate and district courts’ ideological compositions have an impact that is similar in magnitude to these other factors.

The paper is structured as follows. The second section presents a theoretical framework of the conditions under which the composition of the courts should affect bureaucratic decision-making. The third section describes the regulatory process on wetlands permitting. The fourth section discusses the empirical model, data and measurement. The fifth section presents the empirical results, and the sixth section concludes with a discussion of the broader implications of the analysis.

2. Theoretical Framework: Bureaucratic Decisions and the Composition of the Courts

Our hypothesis that the composition of the courts will affect bureaucratic decision-making depends upon four key conditions, and this section explicitly delineates them. The discussion serves two purposes. First, it outlines the causal linkage between the central independent and dependent variables. Second, it provides a theoretical framework for assessing the applicability of this hypothesis across policy domains, including that of our empirical analysis, wetlands permitting.

The first and perhaps most obvious key condition is that bureaucrats have some degree of discretion. If an official lacked any freedom of choice over his policy decisions, then no opportunity would exist for outside factors, including the courts, to influence his or her actions. Lowi (1979) argues that officials have the most discretion over policies that lack strict legislative or administrative laws and Bawn (1995) finds it to be greatest when a high level of technical expertise is required. We therefore expect our hypothesis to be most applicable to these types of policies.

The second key condition is that judges, like administrative officials, have discretion over their decisions. If all judges were forced to rule similarly on a given case, then rulings would be independent of the ideological composition of the courts. Legal precedent establishes that greater deference should be granted agencies in disputes over the interpretation of a legislative statute than ones over guidelines set by the bureaucracy (Tiller 1998). Judicial discretion should therefore be higher in the latter type of case,
causing our hypothesis to be most applicable to policies in which agencies, rather than Congress, have established the administrative procedures and rules.

Moving beyond purely legalistic issues, our third key condition is that judges’ ideology affects their rulings over bureaucratic decisions, and research supports this assumption. For example, Ringquist and Emmert (1999) find that in cases over enforcement by the EPA, district court judges appointed by Republican presidents have assessed lower fines than have ones appointed by Democratic presidents. Similarly, examining appellate cases involving administrative agencies, Humphries and Songer (1999) show that a judge is significantly more likely to uphold an agency decision if it is ideologically consistent with her preferences. Because the literature on judicial decision-making has found consistently found a relationship between judges’ ideology and rulings across policy areas, this assumption should not limit the applicability of our hypothesis.

The fourth and final key condition is that administrative officials have the incentive to avoid making decisions that would likely be overturned in court, and the literature suggests that this condition holds generally across administrative policies. Rulings against an agency can set off a “fire alarm” to the Congress and president that officials are not correctly performing their duties, and these political principals may respond to such signals by cutting funding, making personnel changes, or otherwise reforming the agency (McCubbins and Schwartz 1984). Moreover, when an agency loses a case, judges often remand the matter for further bureaucratic and judicial review, an action that drains the scarce resource of staff. In order to preserve this resource and avoid litigation in the first place, officials have the incentive to enact policies that the regulated parties believe would be upheld in court. Kagan (1995, 103) goes so far as to argue that "litigation avoidance" is currently the primary determinant of bureaucratic decision-making. Supporting his argument, Hunter and Waterman (1996) find that EPA officials prefer to achieve their goals through informal measures and avoid litigation if at all possible.

Research suggests that agency officials, in assessing the likelihood of having their decisions upheld in the courts, incorporate information about judicial ideology. For example, Clermont and
Eisenberg (1995) find that government officials, when fighting a civil case with multiple district courts in which it could be tried, engage in “forum shopping” for a court with favorable preferences. Likewise, Estreicher and Revesz (1989) argue that opportunities for forum shopping encourage "agency nonacquiescence" with existing legal precedent, since they allow an agency to seek a different ruling under a favorable venue. Finally, the aforementioned studies on the effect of judicial rulings suggest that administrators incorporate information about revealed judicial preferences (Wood and Anderson 1993, Wood and Waterman 1993, Hunter and Waterman 1996).

In sum, our hypothesis applies to contexts in which officials and judges each have at least some discretion, in which judges’ ideological preferences influence the content of the rulings, and in which officials, incorporating information about judicial preferences, try to avoid making decisions that would be overturned in court. For administrative policies lacking these criteria we do not expect the composition of the courts to influence bureaucratic decision-making. Moreover, as our discussion has noted, even among policies that qualify, the key conditions may vary in terms of degree, particularly those of bureaucratic and judicial discretion. In the next section, we discuss the applicability of the conditions to the policy domain of the empirical analysis, wetlands permitting.

3. Wetlands Permitting

The Code of Federal Regulations defines wetlands as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.” The federal government’s authority over this property derives from Section 404 of the Clean Water Act of 1977. The act classifies wetlands as navigable waters, building upon the Rivers and Harbors Appropriation Act of 1889, which grants the Army Corps of Engineers authority over such waters. Consistent with this earlier legislation,

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3 See for example Segal and Spaeth (1993) and Rowland and Carp (1996).
4 40 CFR 230.3(t).
the Clean Water Act requires that a federal permit be obtained from the Army Corps of Engineers for the filling, dredging, or other development of wetlands. In addition, the statute authorizes the Environmental Protection Agency to set the guidelines for the issuing of permits and grants the agency veto power over any permit issued by the Corps.

The administrative guidelines that have been established allow for substantial discretion on the part of the Army Corps official who evaluates an application for an individual wetlands permit. As surmised by the *Wetlands Deskbook*, a legal reference, “applying the guidelines requires the exercise of judgment, which has given rise to differences of opinion on the meaning of the guidelines in particular circumstances” (Strand 1997). More specifically, the guidelines stipulate three requirements for the granting of a permit. First, no “practicable alternative” to the project may exist. In other words, if officials determine that the project could be conducted without developing the wetlands, then the permit could be denied. Second, the permit must not be the cause of significant destruction of waterways. For example, if the project would cause an existing waterway to become impassable, then the permit could be denied. Third, proper mitigation must be conducted. An applicant’s willingness to create and/or restore other wetlands can be pivotal in determining whether a permit will be issued.

While the imprecise nature of the guidelines would arguably engender a great of uncertainty for applicants, the administrative procedures for processing applications are designed to foster intercommunication among Army Corps officials, applicants, and other interested parties. Potential applicants are even afforded a pre-application consultation if they so desire, and once an application is officially submitted, the process is designed to be as open as possible. In particular, upon determining that an application is complete, the Army Corps issues a public notice that invites “comments” from the public on the permit application. The notice is placed in public locations such as the post office, and sent to all potentially interested parties, such as adjoining property owners, state and local officials, and

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5 The following description refers to applications for individual permits, the source of our data. Individual permits must be obtained unless a general class of permit (entitled nationwide, regional or general) has been issued for a particular type of wetlands development, in which case the process requires less scrutiny by regulators.

6 The description of the administrative process is from 33 CFR Part 325.
conservation organizations. Environmental interest groups tend to be particularly active players at this stage (as well as other stages), often offering detailed alternative plans that require less development of wetlands.\footnote{7} If the issues raised by the comments cannot be handled informally, then the Army Corps engineer with primary responsibility for the evaluating the application calls a public hearing, to which all interested parties are invited. The hearing allows for the discussion of any differences among the private parties, as well as any differences that exist between the Army Corps engineer and the parties. Only subsequent to all of these procedures does the engineer issue his or her decision on the permit. The entire process, from the completion of the permit application through the decision, generally takes between two and three months.

As mentioned above, if the Army Corps issues a permit, by law the EPA can veto the application. In practice, however, such vetoes are exceedingly rare. Since the regulations on wetlands went into effect in 1979, the EPA has vetoed only 11 of the approximately 150,000 permit applications.\footnote{8} Because of the infrequency of this EPA activity, we focus on the decision-making of the Army Corps in the empirical analysis. In doing so, however, we account for the potential influence of the EPA.

The federal courts have jurisdiction over lawsuits filed against the Army Corps over a wetlands permitting decision. In general, the initial venue is limited to the federal district court for the wetland in question or for the Army Corps office of the official that made the permit decision.\footnote{9} In our empirical analysis, we analyze only permit decisions in which these two possible district courts are equivalent in order to remove the possibility of “forum shopping.” The appellate court for that district court thus hears any appeals, and as Humphries and Songer (1999, 208) note, the appellate court is almost always “the final arbiter in practice” for litigation involving the decisions of federal administrative agencies. In other words, the probability that the Supreme Court will review an administrative decision over the granting of a wetlands permit is miniscule. The Court receives far more appeals than it can possibly hear. A key

\footnote{7 Interview with District Engineer, Jacksonville District of the Army Corps of Engineers. 9 January 2001.}
\footnote{9 See 28 U.S.C. §§ 1391(b), 1391(e) and 1402, and 33 U.S.C. § 406 and 1319(b). Also verified by a lawyer for the Sierra Club. Interview with Mr. Totton Heffelfinger, Sierra Club, 12 January 2001.}
criterion for deciding among them is national importance (Perry 1991), and while the US wetlands program as a whole has large effects on the environment and economy of the nation,[10] any given ruling about an individual permit decision typically lacks such importance.[11]

The types of lawsuits that are filed against the Army Corps over wetlands permitting decisions can be divided into two main categories: lawsuits by applicants contesting the denial of a permit, and lawsuits by environmental groups or other parties contesting the granting of a permit. Across these categories, the standard charge is that the Army Corps behaved in an "arbitrary and capricious" manner in handling the application. Other legal grounds are also possible, such as the constitutionality of the wetlands permitting process or whether the land in question actually constitutes a wetland under federal law. However, the broad nature of the regulatory guidelines make the arbitrary and capricious charge attractive since it is difficult to disprove without careful scrutiny of the regulator’s behavior.

Moreover, as mentioned previously, the Supreme Court has established that judges should take a “hard look” at cases involving the implementation of regulatory rules set by agencies (Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402) even though precedent establishes that judges should defer to bureaucrats’ interpretations of a legislative statute (Chevron U.S.A., Inc. v. National Resources Defense Council Inc., 467 U.S. 837, 843). In the former type of case, judges must examine carefully whether bureaucrats acted “reasonably” in interpreting the administrative guidelines, such as those established by the EPA for wetlands permitting. Tiller (1998, 118) refers to this standard as a “nondeference doctrine,” noting that it “often allows a court to substitute its judgment for that of the regulator if it so chooses.”

The case of wetlands permitting is thus opportune for testing the hypothesis that judicial preferences affect bureaucratic decision-making. Agency officials have a good deal of discretion in

[11] Supporting this claim, for our data, which begins in 1988 and lasts through 1996, the Supreme Court did not hear any cases involving administrative decisions over wetlands and the appellate courts heard 44 cases.
evaluating permit applications, and judges have substantial discretion in assessing whether officials adhered to the regulatory guidelines. The administrative process also facilitates interaction among the regulators and regulated parties, encouraging informal negotiations rather than lawsuits as the prime means of achieving regulatory compliance. Thus if our hypothesis is correct, it should receive support in this case. The next sections develop and implement an empirical model for assessing whether in fact the data support the hypothesis.

4. Model, Data and Measurement

The data include 18,331 decisions by the Army Corps between 1988 and 1996 over whether to issue a permit for the development of wetlands. We obtained the data from the Environmental Working Group, a nonprofit environmental research organization that compiled the information through Freedom of Information Act (FOIA) requests to the 27 Army Corps districts, each of which maintains the records on wetlands permitting for that region of the country. The 18,331 data points do not include some permitting decisions for three reasons, none of which creates a bias in favor of our hypothesis. First, 11 of the districts were either unwilling or unable to provide the data in a manageable format. Second, the Army Corps has granted a few state governments primary authority for reviewing the applications, and analyzing these administrative decisions would require a separate examination of the states’ bureaucratic institutions and legal systems. Third, we have included only permit applications in which the district court with jurisdiction over the property of the wetland is equivalent to that of the Army Corp office responsible for evaluating the application. As mentioned in the previous section, venue can be given in both of these district courts, and our requirement that they be equivalent prevents our results from the bias that could be generated from litigants’ opportunities for forum shopping.

12The National Headquarters of the Army Corps does not retain this information.
13 These districts include Alaska, Buffalo Charleston, Honolulu, Huntsville, Nashville, New England, New Orleans, Norfolk, Pittsburgh and Rock Island.
14 These states include Massachusetts, Michigan and, since 1993, New Jersey. The Army Corps does not, in any case, maintain records of these permitting decisions.
Even with these exclusions, the data have the advantage of large regional variation. The permit applications come from nineteen different states, including ones from the Northeast, Southeast, Midwest, Southwest, and Northwest. In total, 23 district courts and 9 appellate courts are included.

Our hypothesis predicts that the composition of these courts should affect Army Corps officials’ decisions over permit applications, with officials being more likely to issue a permit the more likely are the courts to favor the preservation of existing wetlands. On this issue of wetlands preservation, the two major parties have diverged, with Democrats preferring greater federal regulation over wetlands than Republicans have desired. For example, in each of the past four presidential elections, the Democratic candidate has expressed greater support than the Republican for the protection of wetlands, and congressional Republicans have promoted bills, opposed by most Democrats, which would make the majority of existing wetlands no longer subject to federal regulation. This partisan divergence comports with the scholarly finding that Democrats prefer greater environmental regulation in general (e.g., Erikson and Wright 1997), with Democratic appointees to the courts being more likely to rule in favor of environmental protection than Republican appointees (Kovacic 1991, Ringquist and Emmert 1999). We therefore expect that the more liberal the composition of the courts, the less likely will be an official to issue a wetlands permit.

To test this prediction, we employ an econometric specification in which the dependent variable, Permit Issued, equals one if an Army Corps official issues a permit and equals zero otherwise, and in which the key independent variables reflect the liberalness of the district and appellate courts. As discussed in the previous section, these courts are in practice the final arbiters of litigation involving administrative decisions over wetlands permits. We also include in the specification a set of control

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16 For example a large majority of Republicans in the 104th Congress favored H.R. 961, which opponents estimated would eliminate Clean Water Act protections for at least 71 percent of remaining wetlands in the lower 48 states (Environmental Working Group 1996). In the final vote, Republicans voted 195 in favor of the bill and 45 against it, while Democrats voted 34 in favor and 150 against the legislation.
variables that account for a wide range of phenomena, including the national political context, the economy and the natural environment of the surrounding land. Formally, the econometric model that we employ can be stated as:

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\text{Pr (Permit Issued } = 1\text{) } = \Phi (\beta_0 + \beta_1 \text{ Liberalness of District Court } + \beta_2 \text{ Liberalness of Appellate Court } + \beta_3 \cdot \beta_{25} \text{ Control Variables})
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A probit specification is employed because of the dichotomous nature of the dependent variable. The following delineates the individual control variables, and discusses all measurement issues.

**Liberalness of District and Appellate Courts.** A range of research emphasizes the importance of presidents in determining the ideological composition of the lower courts (e.g., Carp and Stidham 1985, Rowland and Carp 1996, Goldman 1997). Similarly, research finds that judges appointed by Democratic presidents are more likely rule in favor of environmental protection than are judges appointed by Republican presidents (Kovacic 1991, Ringquist and Emmert 1999). We therefore base our measure of the liberalness of the district and appellate courts on the party of the appointing president. Specifically, each variable equals the percentage of full-time judges on the court who were appointed by a Democratic president.

We have also estimated the model with alternative measures, such as ones that incorporate the judge's region and, for the appellate courts, the judge's party. In each case, we found substantively similar results, a finding that did not surprise us since previous studies (Humphries and Songer 1999, Ringquist and Emmert 1999) of lower court judges' rulings on administrative activity have found the ideology of the appointing president to be the most important factor.

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\(^{17}\) We have also analyzed the data with the measure for the appellate court judges equal to 1 if a majority of them were appointed by a Democratic president and 0 otherwise, and found substantively similar findings.  
\(^{18}\) We are currently gathering yet other existing measures of appellate judges’ preferences to conduct robustness checks on the findings.
Agency Heads Heiburg and Thomas (Reagan Administration), Hatch and Reilly (Bush Administration) Williams and Browner (Clinton Administration). The literature on the bureaucracy suggests that the individual leaders of an agency can affect policy implementation (Meier 1979, Wilson 1989). We therefore control for the different commanders of our key agency, the Army Corps of Engineers, during the time series of the data (Lieutenant General Elvin R. Heiberg III, Lieutenant General Henry J. Hatch, and Lieutenant General Arthur E. Williams). Because each commander's years in office overlap perfectly with those of his presidential administration and the EPA Administrator of that presidency, the analysis controls for these three effects simultaneously. We explicitly recognize the potential impact of the EPA because, as described in the previous section, the agency can veto permit applications accepted by the Army Corps. While this power has rarely been employed, the threat of the veto may still influence an Army Corps official’s decision.

Army Corps Budget for Wetlands. A range of work shows that budgetary resources affect bureaucratic outputs in the area of environmental policy (e.g., Wood and Waterman 1993, Ringquist 1995). This work typically suggests that resources increase the level of enforcement of environmental regulations, and we therefore expect the Army Corps budget for wetlands permitting to be positively correlated with the likelihood of a permit denial. The variable that we include to control for this effect equals the enacted budget authority for the Army Corps program account entitled “Regulatory Program,” which represents the wetlands permitting program. During the time series of our data, this variable is correlated with Clinton’s tenure in office at \( \rho > 0.8 \), and thus to avoid problems of multicollinearity, we estimate one empirical model that controls for presidential administration and a second that controls for budgetary resources.

Liberalness of Supreme Court. While the probability of the Supreme Court accepting a case on an individual wetlands permit is quite low, we still control for the effect that this possibility could have on an

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19 We have also analyzed the data with the EPA Program and Management budget, which includes the funding for the EPA review of wetlands permit applications. Because this funding is correlated with the Army Corps regulatory budget at \( \rho \approx 0.85 \), we do not include a variable for the EPA funding. However, regardless of whether we control for
Army Corps official's decision. Employing a measure analogous to that for the lower courts, the variable equals the percentage of justices appointed by a Democratic president. In the time series of our data, the variable is correlated with Bush's presidency at $\rho<-0.8$, and we therefore include the factor in the model with the control for the Army Corps budget, but not the one with the indicators for presidential administration.

*Liberalness of Congress.* Theories of congressional control of the bureaucracy suggest that Congress may influence bureaucratic behavior through the threat of hearings and ultimately statutory reform (e.g., McCubbins and Schwartz 1984). We measure this potential influence with the percentage of Democrats on the House Resources Committee, the House committee with jurisdiction over wetlands. We focus on the committee rather than it in combination with the floor, and on the House rather than both chambers, since all of these factors are highly collinear ($\rho>0.9$) and research on congressional control emphasizes House committees' pivotal roles in oversight (Calvert, Moran and Weingast 1987).

*Lawsuits Won by Applicants, Lawsuits Won by Interest Groups.* To account for any effect of judicial rulings as opposed to the composition of the courts, we control for instances in which the decision of the Army Corps has been overturned in the courts. Specifically, we include two variables that represent the number of published lawsuits that overturned Army Corps decisions in the previous year, the first variable accounting for suits won by permit applicants and the second for suits won by interest groups or other parties contesting the issuing of a permit. For over 99 percent of the observations, there is no litigation of either type. Moreover, because the standard charge of the lawsuits that do exist is that arbitrary and capricious, the ruling should not have a good deal of precedent-setting value. We therefore do not expect the rulings to have a strong impact on Army Corps officials’ decisions.

*Size of Economy, Change in Size of Economy.* Research suggests a positive correlation between economic growth and environmental enforcement in countries, such as the United States, with a per capita

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20 When both factors are included simultaneously, the effects of the composition of the courts remain substantively similar, but those on the presidential administrations become insignificant.
income of at least $10,000 (Grossman and Krueger 1995). Given this finding, we expect that intra-United States variation in the economy may affect Army Corps decisions on wetlands permitting, with officials being less likely to issue a permit in regions with healthier economies. To control for this possibility, we include two economic factors at the state level. The first, which equals the gross state product of that year, represents the size of economy. The second equals the annual percentage change in gross state product, and reflects the recent trend in the state’s economic performance.

**Environmentalism of State.** The potential responsiveness of street-level agents to local preferences could create inequity in federal policy implementation independent of any created by the composition of the courts. To control for such an impact on Army Corps decision-making, we include a variable representing the political support for environmentalism in the state. The variable equals the average of the senators’ League of Conservation (LCV) Scores, which represent the elected officials’ voting over key environmental legislation. The higher a senator’s score, the greater his or her support for environmental regulation by the federal government.  

**Wetlands in State.** This factor accounts for the influence that the surrounding natural environment may have on a regulator’s decision over whether to issue a permit. For example, in arid regions, the few wetlands that exist could be so precious to the local ecosystems that regulators would be more likely to deny applications for wetlands development. The measurement of Wetlands in State is based on the National Resource Inventory conducted by the Department of Interior in 1987. The inventory used sampling techniques to estimate for each state the percent of surface area covered by wetlands, and our variable equals this percentage.

**Indicators for Army Corps Divisions and Years.** Our final sets of independent factors account for variation in Army Corps decision-making across regional division and time. Research suggests that the federal structure of agencies may create differences in administrative outputs among regional offices (e.g., Hunter and Waterman 1996), and in order to avoid overestimating any impact of the regional variation in

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21 We are currently gathering a longer time series of data on Senators’ LCV scores in order to apply the Groseclose, Levitt and Snyder (2000) approach to using interest groups ratings across years.
the composition of the courts, we want to control for such independent types of regional variation. Similarly, we include the year effects in order to control for any (otherwise unaccounted for) changes over the years that are unassociated with retirements and new appointments to the courts.

5. Results

Table 1 presents the results of the analysis. Because the econometric specification consists of a probit model, the table presents not only coefficients and t-statistics but also the marginal effects of the variables at their means, the standard parameter values at which probit models are interpreted.

[Table 1 about here]

The findings strongly support our hypothesis. An Army Corps official is found to be less likely to issue a permit for the development of wetlands the more liberal are the district and appellate courts in which his decision could be litigated. The effect is statistically significant at p<0.05, two-tailed, for both lower courts and specifications. In fact, across the two specifications, the parameter estimates are identical. This equivalence is not surprising given that the motivation for the second model was the high multicollinearity among some of the control variables; as Burden, Caldeira and Groseclose argue (2000), when collinear factors are interchanged, the effects of the other variables in an analysis largely remain the same.

The marginal effects presented in Table 2 suggest that the impact of each lower court is not only statistically significant, but also consequential in magnitude. For the district court of an Army Corps official, the results indicate that if the percentage of judges appointed by a Democratic president increased by 50 percentage points, then the probability of the official granting a permit would decrease by approximately eight percent. The impact is similar for the appellate court of the official. Specifically, if the percentage of judges appointed by a Democratic president increased by 50 percentage points, then the official would be approximately 7 1/2 percent less likely to accept an application for a permit.

Even within the nine years of our data, the federal court districts of Maryland and the Eastern District of California experienced such variation. In Maryland, the district court varied from having 0 to
56 percent of the judges appointed by Democratic presidents, and the 4th Circuit Court of Appeals, which has jurisdiction over Maryland, ranged from 0 to 64 percent. Similarly, the Eastern District of California ranged from 14 to 66 percent in the district court, and 0 to 42 percent in the appellate court (which is for the 9th circuit). Moreover, even more typical rates of turnover produce a noticeable impact when the two lower courts are evaluated in combination. For example, the standard deviations of 0.20 and 0.18 for the district and appellate courts, respectively, suggest that a standard deviation of change in the lower courts would affect the probability of a permit being accepted by about six percent.

This magnitude remains relatively constant when the probit coefficients are interpreted at values other than the means of Liberalness of the District Court and Liberalness of Appellate Court. Table 2 shows the marginal effects for various initial percentage values of these factors, holding all other variables at their means.

[Table 2 about here]

Although the impact diminishes somewhat as the initial percentage appointed by a Democratic president increases, this diminution is minor. Specifically, the results indicate that a standard deviation of increase in each court would decrease the probability of a permit being issued by 6 percent if the initial percentage of judges appointed by a Democrat were 0, 25 or 50 percent, and by 5 percent if the initial percentage were 75 percent.

Turning now to the control variables, we find that this impact of the lower courts does not appear inconsequential once the effects of other factors are considered. Beginning with the controls for presidential administration, these parameter estimates support the finding of the literature that the presidential administration affects policy implementation. As shown on Table 1, the results suggest that an Army Corps official’s probability of issuing a permit was significantly higher under the Bush and Reagan administrations than the Clinton administration. In terms of the magnitude of this effect, the difference between the Clinton and Bush administration is about the same that achieved if both lower courts experienced a 50 percentage point increase in the percentage of judges appointed by a Democratic
president. Thus while the impact of presidential administration is slightly larger than that of a typical change in the composition of the courts, the two effects are within the same magnitude.

Among the other variables that represent political control, only the coefficient of the Army Corps budget is significant at conventional levels. The insignificance of the impact of the Supreme Court was all but predicted given that, as discussed previously, the Court almost never hears cases on wetlands permitting decisions. The negligible effect of the congressional variable is more surprising although of course, the table as whole does not indicate that Congress is inconsequential\footnote{We are currently gathering data for other measures of congressional control, for example the median LCV score of members’ on the House Resources Committee, to see whether the factor would have a significant effect with such an alternative measure.}.\footnote{See Moe (1987) for a detailed argument of this point.} The budget is clearly a function of not only presidential but also congressional influence, as are the bureaucratic appointments. Moreover, since much of the strongest evidence for the “congressional dominance” literature has not controlled for bureaucratic appointments\footnote{See Moe (1987) for a detailed argument of this point.}, it is possible that these other controls capture the key aspects of congressional influence, at least in the context of wetlands permitting.

Among the other variables, the effects that surpass conventional levels of statistical significance include the economic factors (individually), the Army Corps indicators (jointly), and the year indicators (jointly). Each economic effect supports the Grossman and Krueger (1995) finding that among relatively strong economies, wealth should be correlated with higher levels of environmental protection; specifically, our results indicate that both the level and trend of a state’s economy decrease the probability that an Army Corps official issues a permit for the development of wetlands. Also consistent with prior research, the joint significance of the indicators for Army Corps division suggests that the regional structure of the agency affects bureaucratic behavior. Our analysis provides even more support for this effect than existing work (e.g., Hunter and Waterman 1996) since we can eliminate the possibility that the regional variation derives from differences in the composition of the lower courts across the divisions of the agency.
The fact that the remaining effects, those of the lawsuits, environmentalism in the state, and wetlands in the state, are insignificant does not strictly contradict our expectations. In fact, we explicitly predicted that the lawsuits would not affect bureaucratic behavior since they are not typically rulings on precedent-setting issues. For the other two variables, we made no prediction, although the results on environmentalism support Scholz and Wood (1998), who fail to find a significant relationship between state ideology and the enforcement activity of the Internal Revenue Service. Despite the negligible effects of these three factors, their inclusion does serve a purpose. In particular, including these seemingly plausible influences on bureaucratic decision-making ensures that the impact of the composition of the lower courts has not been overestimated.

6. Discussion and Conclusion

The literature on bureaucracy suggests that the courts have played an increasingly important role in policy implementation over time. Their willingness since 1971 to take a “hard look” at whether bureaucratic behavior complies with administrative law has granted judges an increased capacity to overrule the judgment of officials (Tiller 1998). In addition, the courts to grant standing to interest groups over any given administrative decision has invited a litany of lawsuits (Wilson 1989). Yet the systematic effects of these changes have remained largely unexplored. As Wilson (1989, 282) surmises, “There have been countless essays on whether the courts should intervene as they do but scarcely any that describe what systematic (as opposed to particular) changes in bureaucratic life this intervention has produced.”

This essay has attempted to provide such a systematic analysis. Developing a theoretical framework, we identified the conditions under which the mere composition of the courts, independent of any actual litigation, should affect administrative decisions. These conditions include bureaucratic discretion, judicial discretion, a correlation between judges’ policy preferences and expected rulings, and

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24 Excluding these effects does not substantively alter the results.
agency officials’ desire to avoid their decisions being overturned in court. After establishing that the administrative policy of wetlands permitting possessed these conditions, we proceeded to analyze 18,331 decisions by Army Corps officials over whether to grant a permit for wetlands development. The analysis showed that officials were significantly more likely to deny a permit the more liberal were the appellate and district courts in which any litigation over the decision would be fought. Our essay therefore suggests that the courts play a significant role in policy implementation, even when no cases are heard. The mere threat of the litigation allows administrative officials to be influenced by the composition of the courts.

This finding has a number of implications. The first and perhaps most obvious is that when the president and Congress grant discretion to an agency, they may be simultaneously granting influence to the courts with jurisdiction over the administrative decisions. A range of work analyzes the trade-off that these political principals face between allowing an agency enough discretion to utilize technical expertise and insulating their own policy preferences (e.g., Bawn 1995, de Figueiredo 2000). Most of this work has been concerned with the potential influence of future presidents and congressional members, as well as the agency officials themselves. Our analysis suggests that an additional factor in the optimal trade-off between expertise and insulation should be the composition of the courts.

A second implication is that policy implementation will not be consistent across federal court districts when regulated parties cannot engage in so-called “forum shopping” for a favorable court. The legal literature has produced an abundance of articles that criticize the evils of forum shopping, and our study has certainly not sought to be a comprehensive examination of this practice. However, our results do suggest one potential benefit. If the regulated parties of our analysis could have searched for a favorable court, then the discrepancy in the probability of obtaining a wetlands permit across the court districts may well have disappeared. To the extent that the US desires each citizen to comply with equal treatment under the law, forum shopping may serve the benefit of increasing such equity across regions of the country.

25 See Clermont and Eisenberg (1995) for a review of this literature.
References


Table 1: Army Corps Decisions on Wetlands Permits and the Composition of the Lower Court(s) Probit Analysis, 1988-1996

<table>
<thead>
<tr>
<th>Dependent Variable = ( \text{Pr} (\text{Permit Issued} = 1) )</th>
<th>Coefficient (t-statistic)</th>
<th>Marginal Effect at Means</th>
<th>Coefficient (t-statistic)</th>
<th>Marginal Effect at Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberalness of District Court</td>
<td>-0.415* (-7.640)</td>
<td>-0.165</td>
<td>-0.415* (-7.640)</td>
<td>-0.165</td>
</tr>
<tr>
<td>Liberalness of Appellate Court</td>
<td>-0.380* (-3.473)</td>
<td>-0.151</td>
<td>-0.380* (-3.473)</td>
<td>-0.151</td>
</tr>
<tr>
<td>Heiburg and Thomas (Reagan Adm.)</td>
<td>0.848* (17.264)</td>
<td>0.315</td>
<td>Dropped due to Multicollinearity</td>
<td>---</td>
</tr>
<tr>
<td>Hatch and Reilly (Bush Adm.)</td>
<td>0.474* (9.750)</td>
<td>0.187</td>
<td>Dropped due to Multicollinearity</td>
<td>---</td>
</tr>
<tr>
<td>Army Corps Budget for Wetlands</td>
<td>Dropped due to Multicollinearity</td>
<td>---</td>
<td>-0.136* (-3.288)</td>
<td>-0.054</td>
</tr>
<tr>
<td>Liberalness of Supreme Court</td>
<td>Dropped due to Multicollinearity</td>
<td>---</td>
<td>-2.586 (-0.480)</td>
<td>-1.028</td>
</tr>
<tr>
<td>Liberalness of Congress</td>
<td>0.243 (0.540)</td>
<td>0.097</td>
<td>-5.444 (1.170)</td>
<td>-2.165</td>
</tr>
<tr>
<td>Lawsuits Won by Applicants</td>
<td>-0.007 (0.135)</td>
<td>-0.003</td>
<td>-0.007 (0.135)</td>
<td>-0.003</td>
</tr>
<tr>
<td>Lawsuits Won by Interest Groups</td>
<td>-0.009 (-0.172)</td>
<td>-0.003</td>
<td>-0.009 (-0.172)</td>
<td>-0.003</td>
</tr>
<tr>
<td>Size of Economy</td>
<td>-0.175* (-16.804)</td>
<td>-0.070</td>
<td>-0.175* (-16.804)</td>
<td>-0.070</td>
</tr>
<tr>
<td>Change in Size of Economy</td>
<td>-0.095* (-14.757)</td>
<td>-0.038</td>
<td>-0.095* (-14.757)</td>
<td>-0.038</td>
</tr>
<tr>
<td>Environmentalism of State</td>
<td>-0.071 (-1.287)</td>
<td>-0.028</td>
<td>-0.071 (-1.287)</td>
<td>-0.028</td>
</tr>
<tr>
<td>Wetlands in State</td>
<td>-0.114 (-0.417)</td>
<td>-0.046</td>
<td>-0.114 (-0.417)</td>
<td>-0.046</td>
</tr>
<tr>
<td>Constant</td>
<td>1.516* (6.088)</td>
<td>6.114 (1.673)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indicators for Army Corps Divisions: Yes
LR test for inclusion: \( p = 0.000 \)

Year Indicators: Yes
LR test for inclusion: \( p = 0.000 \)

Number of Observations: 18331

Log Likelihood: -11251

Likelihood Ratio Test of Joint Significance: \( \chi^2 = 2825 (p = 0.000) \)

* \( p > 0.05 \), two-tailed. The omitted presidential administration is that of Clinton.
Table 2: Effect of Change in Composition of the Lower Courts on Wetlands Permitting Decisions
Alternative Initial Percentages of Appointments by Democratic Presidents*

<table>
<thead>
<tr>
<th>Initial % Democratic Appointees in District and Appellate Courts</th>
<th>Effect of Δ in % Democratic Appointees in District Court</th>
<th>Effect of Δ in % Democratic Appointees Appellate Court</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>-0.164</td>
<td>-0.150</td>
</tr>
<tr>
<td>25%</td>
<td>-0.165</td>
<td>-0.151</td>
</tr>
<tr>
<td>50%</td>
<td>-0.159</td>
<td>-0.146</td>
</tr>
<tr>
<td>75%</td>
<td>-0.148</td>
<td>-0.136</td>
</tr>
</tbody>
</table>

*All other variables at means.