
LOST IN THE FLOOD?: THE EFFICACY OF MASS COMMENT CAMPAIGNS IN AGENCY RULEMAKING

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Lost in the Flood?: The Efficacy of Mass Comment Campaigns in Agency Rulemaking

ABSTRACT

This article examines the efficacy of mass comment campaigns—collections of identical and near-duplicate comments sponsored by organizations and submitted by group members and supporters—in administrative rulemaking in the United States. By assembling information about more than 1,000 mass comment campaigns that occurred during Environmental Protection Agency rulemakings between 2012 and 2016, the analysis addresses the manner in which the agency responds to campaigns and the association between campaigns and the substance of rules. The analysis demonstrates that mass comment campaigns elicit a limited degree of procedural, but not substantive, responsiveness. Procedurally, the vast majority of mass comment campaigns receive responses from the agency. Substantively, however, there is little consistency between mass comment campaigns and the content of rules. These findings suggest that mass comment campaigns have neither enhanced participatory democracy nor transformed rulemaking into a process of “notice and spam.”

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INTRODUCTION

In 2015, Gina McCarthy, the administrator of the Environmental Protection Agency (EPA), testified before the United States Senate on behalf of the agency's proposed Waters of the United States regulation. In her testimony, McCarthy highlighted the scope and tone of the public comments that had been submitted in response to the proposed rule: "We have received over one million comments, and 87.1 percent of those comments...are supportive of this rule" (Lipton and Davenport 2015). Shortly after McCarthy delivered her testimony, the rule was finalized in a manner consistent with the sentiments expressed in the vast majority of comments.

Approximately 90 percent of the Waters of the United States comments were submitted as part of mass comment campaigns (Potter 2017). Mass comment campaigns are collections of identical and near-duplicate comments sponsored by organizations and submitted by group members and supporters. In the Waters of the United States rulemaking, the preponderance of sponsoring organizations consisted of environmental advocacy groups such as Earthjustice, the Sierra Club, and Natural Resources Defense Council.

The sheer magnitude of the occurrence of mass comment campaigns, as well as the fact that the Waters of the United States rule ultimately reflected the preferences expressed in the overwhelming number of campaigns, raises the following questions. What is the role of mass comment campaigns in administrative rulemaking? More specifically, in what manner do agencies respond to mass comment campaigns? Do mass comment campaigns affect the substance of agency rules?

There are theoretical and empirical reasons to doubt the efficacy of mass comment campaigns. Mass comment campaigns generally state directional preferences for or against proposed rules and contain little in the way of legal, economic, scientific, and technical information (Balla, et al. 2018). Other comments, by contrast, respond in detail to the substance of issues raised by agencies in proposed rules. If, as research demonstrates, it is uncertain the extent to which substantive comments affect agency decision making (West 2004, Yackee 2006), then making such a determination for mass comment campaigns presents an even greater challenge in logic and inference, particularly given that "rulemaking is not a plebiscite" (Farina, et al. 2012, 135).²

Despite such doubts and difficulties, it remains a salient task for research to assess (rather than assume away) the role of mass comment campaigns in agency rulemaking. Mass comment

² It is plausible that directly influencing the content of agency rules is not the primary purpose of mass comment campaigns, which instead may be oriented toward increasing group membership and attracting financial contributions (Karpf 2010, Shulman 2009).

campaigns are common occurrences that on occasion attract extensive media and public attention (Grimaldi and Overberg 2017). Rather than draw inferences from unusually prominent mass comment campaigns, it is important to ground understanding of campaigns in more general group and agency practices. Furthermore, mass comment campaigns constitute elements of the records on which agencies are expected to make and justify regulatory decisions (Farina, et al. 2012). Finally, rulemaking occurs within the context of the American political system, in which authority is routinely delegated to agencies to resolve the kinds of directional, value-laden concerns raised in mass comment campaigns (Mendelson 2011).

To what extent are mass comment campaigns impactful elements of rulemaking processes and outcomes? This article analyzes the role played by more than 1,000 mass comment campaigns that occurred during EPA rulemakings between 2012 and 2016. The research entails coding the content of mass comment campaigns, other comments, proposed and final rules, and agency responses to comments. Through these original data, the article generates insight into two specific aspects of the operation of mass comment campaigns in EPA rulemaking during the period under analysis. First, in what manner does the EPA explicitly respond to mass comment campaigns? Second, is there an association between mass comment campaigns and the substance of EPA rules? Given data limitations, the article does not provide definitive evidence of the direct influence of mass comment campaigns on the content of EPA regulations. Rather, the analysis focuses on EPA processes (i.e., the handling of mass comment campaigns) and patterns in outcomes (i.e., the consistency of campaigns with final rules).

Through this approach, the article makes a number of contributions to knowledge regarding the efficacy of mass comment campaigns in agency rulemaking. The analysis demonstrates that the mass comment campaigns under analysis elicited procedural, but not substantive, responsiveness. Procedurally, the vast majority of mass comment campaigns received explicit responses from the agency. Substantively, however, there is little consistency between mass comment campaigns and the content of final rules. Normatively, these findings suggest that mass comment campaigns have neither enhanced participatory democracy (Moxley 2016) nor transformed rulemaking into a process of “notice and spam” (Noveck 2004, 441).

I. Research and Expectations Regarding Mass Comment Campaigns

Over the past several decades, research has illuminated much about the occurrence and nature of mass comment campaigns. The efficacy of mass comment campaigns, however, has not yet been broadly investigated. This section brings together these areas of inquiry to establish expectations regarding agency handling of mass comment campaigns and the consistency of campaigns with rulemaking outcomes.

a. Occurrence of Mass Comment Campaigns

Mass comment campaigns are longstanding occurrences in rulemaking (Karpf 2010). In the modern communications (i.e., Internet) era, mass comment campaigns have taken place in a wide variety of issue areas, including the environment, wildlife, and natural resources (Farina, et al. 2012; Karpf 2010; Shulman 2009). Much of what is known about mass comment campaigns is drawn from instances (such as the Waters of the United States rulemaking) that have generated unusual (even historic) media and public attention (Lipton and Davenport 2015). Some research, however, has focused on mass comment campaigns at the EPA more broadly, irrespective of attention. This research demonstrates that as few as 13 percent and as many as 28 percent of EPA proposed rules are subject to mass comment campaigns (Balla, et al. 2018; Potter 2017; Potter and Richardson 2017). Mass comment campaigns, although not ubiquitous, are far from rare occurrences in EPA rulemaking.

b. Nature of Mass Comment Campaigns

Although highly-publicized mass comment campaigns typically consist of hundreds of thousands or millions of identical and near-duplicate submissions, the vast majority of campaigns (at least in the context of the EPA) are substantially smaller in breadth (Balla, et al. 2018; Potter 2017; Potter and Richardson 2017). Across policy areas, mass comment campaigns are primarily initiated by organizations—such as environmental advocacy groups—representing the interests of beneficiaries of stringent regulations (Farina, et al. 2012; Shulman 2006). Regulated entities, though less active as a general matter, nevertheless sponsor mass comment campaigns on a regular basis. For example, a National Park Service rule restricting snowmobiles in national parks attracted the attention of large numbers of snowmobile enthusiasts and the recreational tourism industry (Farina, et al. 2012).

Mass comment campaigns are short in length, usually consisting of no more than a few sentences or paragraphs (Balla, et al. 2018). The basic language of mass comment campaigns is provided by sponsoring organizations, with personalized anecdotes and opinions regularly added by individual participants (Karpf 2010). The primary contribution of mass comment campaigns is not the submission of legal, economic, scientific, or technical information, but rather the statement of directional preferences for or against proposed rules (de Figueiredo 2006). For example, the core text of a mass comment campaign (sponsored by MoveOn.org) on an EPA proposed rule restricting industrial mercury emissions consisted of two sentences urging the agency to set stringent standards (Shulman 2009). Individualized modifications to this comment did not enhance the substantive content of the campaign. Participants instead amplified MoveOn’s value-laden sentiment, commonly exhorting the EPA to “do its job” (Shulman 2009, 44).

On occasion, mass comment campaigns are lengthy and contain legal, economic, scientific, and technical information (Balla, et al. 2018). One such mass comment campaign, sponsored by the Natural Resources Defense Council, was submitted in response to the EPA’s proposed Clean Power Plan, a climate change rule requiring significant reductions in carbon dioxide emissions from electric power generators, in particular coal-burning plants. The mass comment campaign states a clear-cut political sentiment: “Along with over 1.4 million members and supporters of the Natural Resources Defense Council, I want to see extremely strong climate action.” The mass comment campaign also addresses substantive concerns regarding climate change, extensively citing data and reports in a well-sourced submission.

c. Agency Handling of Mass Comment Campaigns

The fact that mass comment campaigns are by and large “little more than clap-o-meters” (Nou 2014) opens up the possibility that agencies handle campaigns in a different manner than other comments. According to the Supreme Court, “comments must be significant enough to step over a threshold requirement of materiality before any lack of consideration becomes of concern” (Dooling 2001, 901).³ Agencies therefore face judicial review standards that are relatively relaxed in the context of mass comment campaigns, given that campaigns typically eschew the provision of legal, economic, scientific, and technical information (Mendelson 2011).

Anecdotal evidence suggests that agencies treat substantive comments “far more seriously” than mass comment campaigns (Mendelson 2011, 1359; see also Cuellar 2005, Moxley 2016, Shulman 2009). There are documented instances of agencies paying little (if any) heed to preferences expressed in mass comment campaigns (Farina, et al. 2012; Mendelson 2012). For example, a proposed rule opening up selected waters governed by the National Park Service to jet ski use generated thousands of comments in opposition (Mendelson 2011). In announcing its final rule, the agency “never engaged at all the overwhelming number of comments opposing any jet ski access” to the waters in question (Mendelson 2011, 1364). Although such anecdotes are suggestive, the manner in which agencies as a general matter handle mass comment campaigns is a topic “worth further investigation” (Mendelson 2011, 1367).

d. Consistency of Mass Comment Campaigns with Rulemaking Outcomes

Despite evidence suggesting that agencies discount mass comment campaigns, case studies have unearthed instances—ranging from organic food standards (Shulman 2003) to the establishment of a do not call registry (de Figueiredo 2006)—in which campaigns have exerted influence over the content of regulations. In 2014, for example, the Federal Communications

³ *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 U.S. 519, 553 (1978).

Commission proposed allowing Internet service providers to offer preferential access (i.e., faster speeds) to consumers willing to pay higher prices (Wyatt 2014). Analysis suggests that the agency “capitulated to the demands” of mass comment campaigns opposed to online fast lanes (Potter and Richardson 2017, 2) by modifying the proposed rule in a manner that “reflected the bulk of the public comments” (Moxley 2016, 693).

Why do agencies, at least on occasion, acquiesce to the requests of mass comment campaigns? Mass comment campaigns signal broad public interest in issues under consideration in agency rulemaking (Karpf 2010). Such signals alert politicians about opportunities to take positions and actions on value-laden issues of importance to key constituencies. Researchers have argued that the efficacy of mass comment campaigns as signals of political information is in part contingent on scope (i.e., the number of comments) (Karpf 2010, Potter and Richardson 2017). In addition, the identity of the sponsoring organization—in particular its influence with politicians—has been posited as a characteristic associated with the impact of mass comment campaigns on rulemaking outcomes (Potter and Richardson 2017).

e. Expectations for Agency Handling and Consistency

One reason why case studies of the efficacy of mass comment campaigns are especially common is that it is difficult to separate out in a systematic manner (i.e., large-N context) the specific influence of campaigns from other inputs that occur during complex, contentious regulatory proceedings. As a result, the article (which examines more than 1,000 mass comment campaigns) eschews making inferences about the direct (causal) effects of campaigns, focusing instead on agency handling of campaigns and the consistency of campaigns with rulemaking outcomes. Expectations about agency handling and consistency are derived from prior research on mass comment campaigns.

Research has demonstrated that mass comment campaigns are typically brief statements of directional preferences in favor of or opposition to proposed rules. Given that rulemaking is (most fundamentally) an administrative process governed by statute and judicial review, the article’s overarching premise is that mass comment campaigns are less efficacious than other (i.e., substantive) comments. This premise implies a pair of hypotheses regarding agency handling of mass comment campaigns and the consistency of campaigns with rulemaking outcomes.

Agency Handling Hypothesis: Mass comment campaigns are handled in a more cursory manner than other comments.

Consistency Hypothesis: Changes in content from proposed to final rules are less likely to be consistent with mass comment campaigns than with other comments.

Although mass comment campaigns are ordinarily limited to the expression of value-laden, directional sentiments about proposed rules, campaigns on occasion convey legal,

economic, scientific, and technical information (Balla, et al. 2018). This distinction implies a hypothesis regarding agency handling and consistency across mass comment campaigns of varying substantive content.

Substantive Content Hypothesis: As the substantive content of mass comment campaigns increases, (a) agency handling of campaigns increases in seriousness and (b) the consistency of campaigns with rulemaking outcomes increases.

Mass comment campaigns vary—by virtue of scope and sponsoring organization—as signals of broad public interest and, hence, the attention of politicians. Politicians are more likely to take positions and actions on proposed rules attracting the participation of large constituencies as well as organizations with whom officials share policy preferences. This distinction implies a hypothesis regarding agency handling and consistency across mass comment campaigns of varying levels of prospective political attention.

Political Attention Hypothesis: As the prospective political attention attracted by mass comment campaigns increases, (a) agency handling of campaigns increases in seriousness and (b) the consistency of campaigns with rulemaking outcomes increases.

The agency handling and consistency hypotheses entail comparisons of the efficacy of mass comment campaigns relative to other comments submitted in response to proposed rules. By contrast, the substantive content and political attention hypotheses juxtapose agency handling and consistency across mass comment campaigns of varying characteristics. With these expectations established, the following sections detail the collection and coding of the information used to operationalize and evaluate the hypotheses in context of mass comment campaigns that occurred during EPA rulemakings between 2012 and 2016.

II. Data Collection

The article's empirical analysis requires coding the content of mass comment campaigns, other comments, proposed and final rules, and agency responses to comments. To establish the scope of the research, it is necessary to first select rules and comments for coding. The EPA is the focal point of the analysis not only because of its prominence as a rulemaking organization, but also because it identifies and circulates information about mass comment campaigns in a clear and thorough manner unmatched by other agencies. Specifically, the EPA has (since 2012) posted mass comment campaigns to regulations.gov, a government-wide repository of rulemaking documents. Agencies classify documents posted to regulations.gov along a variety of dimensions. One such dimension is documents labeled "mass mail campaign." The EPA is

the only agency that makes regular use of the mass mail campaign label and, therefore, for which it is possible to readily and systematically collect information about mass comment campaigns.⁴

The EPA issues hundreds of rules each year (Sykes 2016), many of which are routine and not consequential in the context of public commenting. The analysis is therefore limited to proposed rules that are subject to regulatory review on the part of the Office of Information and Regulatory Affairs (OIRA). OIRA is a White House office charged with reviewing proposed rules—according to analytical standards and presidential priorities—prior to publication in the *Federal Register* (the daily journal of the United States federal government) (Balla, Deets, and Maltzman 2011). All proposed rules reviewed by OIRA are significant in some respect, either because of their anticipated economic effects or political ramifications.⁵

The analysis focuses on EPA rules reviewed by OIRA that possess three characteristics. First, a notice of proposed rulemaking was issued in 2012 or later, during the period in which the EPA has used the mass mail campaign label to identify mass comment campaigns. Second, a final rule was published in the *Federal Register* by January 20, 2017, the end of the Obama administration. This parameter ensures consistency in the institutional context (i.e., partisan control of the White House) within which the regulation was developed.⁶ Third, at least one mass comment campaign was submitted in response to the notice of proposed rulemaking. Twenty-two rules satisfy these criteria and, therefore, constitute the empirical focus of the analysis.

For each of these rules, the following information is assembled: the notice of proposed rulemaking, all mass comment campaigns submitted in response to the notice, a sample of other (substantive) comments, the EPA's response to comments document, and the final rule that was published in the *Federal Register*. The collection of proposed and final rules is straightforward.⁷ The other pieces of information, however, require elaboration.

A search for documents labeled “mass mail campaign” reveals that 1,049 mass comment campaigns were submitted in response to the proposed rules under analysis. Three proposed rules engendered a single mass comment campaign, while the remainder generated multiple campaigns sponsored by a variety of organizations. The largest collection of mass comment campaigns (a total of 363 campaigns) occurred in response to the proposed Clean Power Plan.

⁴ The EPA does not list each and every submission in mass comment campaigns, but rather posts a single illustrative submission. In addition, the EPA provides information about such characteristics as the sponsor and number of submissions of mass comment campaigns.

⁵ Searchable information about OIRA review is available at <https://www.reginfo.gov/public/>.

⁶ The politics of the environment (along with many other policy areas) experienced a fundamental disruption with the transition to President Trump (Horn 2018). The article leaves for future research the task of investigating the efficacy of mass comment campaigns in the distinct environment of the Trump administration.

⁷ The *Federal Register* is accessible at <https://www.federalregister.gov/>.

These mass comment campaigns were submitted by such organizations as the Environmental Defense Fund, North American Coal Corporation, and American Public Health Association.

When posting rulemaking information to regulations.gov, the EPA classifies some documents as “company/organization comment.” This label excludes mass comment campaigns and comments submitted by individuals unaffiliated with firms and associations. The label serves as a means of identifying substantive comments, as groups representing regulatory beneficiaries and regulated entities are (relative to other participants) regular sources of legal, economic, scientific, and technical information (Cuellar 2005). For example, a 16-page comment jointly submitted by three consumer advocacy groups during the Clean Power Plan rulemaking contained extensive citations, incorporated detailed data and analysis, and communicated specific recommendations derived from the evidence presented.⁸ Given the length and complexity of group comments, a stratified sample of documents labeled “company/organization comment” is assembled. For each notice of proposed rulemaking, a random sample of 20 group comments was selected. If fewer than 20 group comments were generated by a proposed rule, then all such comments were included in the sample. This process produces a collection of 417 group comments for analysis.

The EPA routinely issues documents that respond in detail to comments submitted on notices of proposed rulemaking. It is not uncommon for these response to comment documents to consume hundreds (on occasion, thousands) of pages.⁹ On regulations.gov, the EPA utilizes the label “comment response” to denote response to comment documents. Response to comment documents were identified for 19 of the proposed rules under analysis. These documents—along with proposed rules, mass comment campaigns, group comments, and final rules—are coded in the manner described in the following section.

III. Coding Rules and Comments

The assembled documents are coded as a means of operationalizing and evaluating the article’s hypotheses. Table 1 summarizes the empirical expectations for each hypothesis. To assess the agency handling hypothesis, the number of times a mass comment campaign or group comment is mentioned in the rulemaking’s response to comment document is recorded.¹⁰ The

⁸ This comment is accessible at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2013-0602-23982>.

⁹ The EPA also discusses comments in the preambles of final rules. Response to comment documents are typically more comprehensive treatments of comments than preambles.

¹⁰ Response to comment documents are searched according to comment identification numbers. For example, the identification number for a group comment submitted by the Association of Clean Water Administrators on a proposed pollutant discharge reporting rule is EPA-HQ-OECA-2009-0274-0493. The last set of digits constitutes the unique (and thus searched) number for this particular comment, which was mentioned 26 times in the response to comment document. Three response to comment documents do not list comment identification numbers, but rather reference comments in less specific ways (e.g., “one commenter states...”). These three rulemakings are not included in the analysis of response to comment documents.

number of mentions serves as a proxy for the seriousness (or, alternatively, cursory nature) of the EPA's handling of particular comments. It is expected that group comments are, on average, mentioned more frequently in response to comment documents than mass comment campaigns.

Assessing the consistency hypothesis entails coding changes in regulations across proposed and final rules, as well as changes requested in mass comment campaigns and group comments. The texts of proposed and final rules are compared across five dimensions: (1) Has the number of regulated entities (e.g., facilities, companies, industries) increased, decreased, or stayed the same? (2) Has the number of outcomes (e.g., activities, substances) being regulated increased, decreased, or stayed the same? (3) Has the level of outcomes (e.g., pollutant standards) being regulated increased in stringency, decreased in stringency, or stayed the same? (4) Have the compliance and effective deadlines of the regulation moved to an earlier date, later date, or stayed the same? (5) Have the monitoring and reporting requirements of the regulation gotten stricter, more lenient, or stayed the same?¹¹

Group comments are evaluated according to the same criteria, with a focus on whether the comment requests more, less, or the same level of stringency (relative to the proposed rule) on each dimension. Given that mass comment campaigns typically contain little in the way of legal, economic, scientific, and technical information, it is not practical to code campaigns with such specificity. The first three criteria are therefore collapsed into a single, broad dimension: Does the mass comment campaign request more, less, or the same level of stringency (relative to the proposed rule) with respect to the overall substance of the regulation? The last two criteria—compliance/effective deadlines and monitoring/reporting requirements—are evaluated in the same manner for mass comment campaigns as for group comments.

The analysis entails assessing, for each comment, the extent to which changes in regulatory stringency across the proposed and final rule are consistent with changes requested in the comment. Specifically, the proportion of dimensions along which such consistency occurs is calculated for each comment.¹² It is expected that the proportion of consistent dimensions is, on average, higher for group comments than mass comment campaigns.

To assess the substantive content hypothesis, the number of words contained in mass comment campaigns is recorded. The number of words serves as a proxy for the nature of the

¹¹ Two coders independently evaluated each set of proposed and final rules, coming up with preliminary assessments. These judgments were then compared and coders came to agreement on final determinations. Any remaining uncertainties or discrepancies were resolved by a third coder. If a dimension is not relevant in the context of a particular rulemaking, then the dimension is coded as missing.

¹² For mass comment campaigns, the single, broad request regarding the overall substance of the regulation is compared for consistency with each of the three specific dimensions of entities, outcomes, and levels.

information communicated in mass comment campaigns. Value-laden expressions of political sentiment are readily expressible in a few words. By contrast, conveying legal, economic, scientific, and technical information requires the articulation of arguments and submission of data and evidence. It is expected that as the number of words in mass comment campaigns increases, (a) campaigns are mentioned more frequently in response to comment documents and (b) there is greater consistency between campaigns and rulemaking outcomes (i.e., the proportion of consistent dimensions increases).

Assessing the political attention hypothesis requires gauging the scope of mass comment campaigns and the extent to which politicians share policy preferences with sponsoring organizations. The scope of mass comment campaigns is operationalized as the number of identical and near-duplicate comments. Sponsoring organizations are classified as representatives of either regulatory beneficiaries or regulated entities. In the context of environmental policy, regulatory beneficiaries are constituencies that generally prefer stringent rules, such as environmentalists, labor unions, and liberal organizations. Regulated entities, by contrast, are facilities, companies, and industries (e.g., the agriculture and energy sectors) that are often negatively impacted by stringent environmental rules.

Given that the analysis focuses on EPA rulemaking during the Obama administration, it is straightforward to identify regulatory beneficiaries as more likely to share policy preferences with politicians (i.e., agency leaders and White House officials) than regulated entities.¹³ The expectation, therefore, is that mass comment campaigns sponsored by regulatory beneficiaries are (a) handled more seriously and (b) more consistent with rulemaking outcomes than campaigns sponsored by regulated entities. In addition, it is expected that agency handling and consistency with rulemaking outcomes increases as the number of identical and near-duplicate submissions in (and hence prospective political attention of) mass comment campaigns increases.

IV. Analysis

In this section, information on mass comment campaigns, group comments, proposed and final rules, and agency responses to comments is used to evaluate each of the article's four hypotheses regarding the efficacy of mass comment campaigns. The agency handling and consistency hypotheses—both of which are grounded in the notion that mass comment campaigns are less efficacious than substantive comments—are examined first. The analysis then turns to the substantive content and political attention hypotheses, both of which posit that efficacy varies across mass comment campaigns of differing characteristics.

¹³ As the Environmental Defense Fund (an environmental advocacy group) put it, "President Obama's environmental legacy is impressive...the most consequential of any president in our history" (Gaby 2017).

a. Agency Handling Hypothesis

The agency handling hypothesis is assessed by juxtaposing the number of times mass comment campaigns and group comments are mentioned in response to comment documents. Four hundred nine mass comment campaigns occurred during rulemakings with response to comment documents that reference specific comments. The sample of group comments for these rules consists of 311 submissions. The expectation is that group comments are, on average, mentioned more frequently in response to comment documents than mass comment campaigns.

Of the 720 comments under analysis, 576 submissions (80 percent) were mentioned in response to comment documents. Figure 1 illustrates a typical mention, in which the EPA excerpts a comment and then directly responds to the issues raised in the excerpt. Mass comment campaigns and group comments were referenced with virtually the same regularity. The respective percentages are 81 percent for mass comment campaigns and 79 percent for group comments.

Most comments were referenced a small number of times in response to comment documents, with a few submissions mentioned with unusually high frequency. The average comment was referenced eight times. Four comments (all group comments) were referenced more than 100 times. For example, the comment excerpted in Figure 1, submitted by the Public Service Company of New Hampshire on a proposed rule governing wastewater discharges from power plants, was mentioned 154 times.

Group comments are mentioned in response to comment documents with greater frequency than mass comment campaigns. The average group comment is referenced 14 times. By contrast, the average mass comment campaign is mentioned three times. All but one mass comment campaign is mentioned 20 times or fewer, while 55 group comments are referenced more than 20 times. These descriptive statistics are consistent with the agency handling hypothesis. Although mass comment campaigns are referenced in response to comment documents, campaigns are mentioned with less frequency than group comments.

As a means of accounting for comment, rule, and EPA office characteristics in explaining differential handling of mass comment campaigns and group comments, regression analysis is conducted. The dependent variable is the number of times a comment is referenced in a response to comment document. The primary covariate is an indicator of whether the comment is a group comment or mass comment campaign. Two comment characteristics are controlled for: (1) whether the comment was submitted by a regulatory beneficiary or regulated entity, and (2) the number of words contained in the comment. In addition, the regression incorporates a rule characteristic (whether the rule is economically significant), as well as an indicator of whether the rule was issued by either the Office of Air and Radiation or Office of Water (as opposed to another EPA office).

As illustrated in Figure 2, the regression results solidify support for the agency handling hypothesis. Group comments are mentioned more frequently in response to comment documents than mass comment campaigns, taking into account comment, rule, and EPA office characteristics. This association is statistically significant and substantively meaningful. A group comment that is otherwise typical is expected to be referenced 11 times. An analogous mass comment campaign, by contrast, is mentioned three times in expectation. According to this measure and analysis, the EPA handles group comments more seriously than mass comment campaigns.

b. Consistency Hypothesis

The consistency hypothesis is assessed by juxtaposing, for mass comment campaigns and group comments, the proportion of dimensions for which requested and actual changes in proposed rules are consistent. There is no clear pattern in changes implemented by the EPA across proposed and final rules. On all five dimensions, some final rules become stricter, other final rules become more lenient, and yet other final rules stay the same in comparison to their respective proposed rules. All but three proposed rules experienced changes in multiple directions. In a final rule governing particulate matter standards, for example, the number of regulated entities increased while the level of outcomes decreased in stringency.

The nature of requested changes varies systematically across mass comment campaigns and group comments. Across all dimensions, mass comment campaigns disproportionately call for increases in stringency. By contrast, group comments appealing for leniency occur at a higher rate than comments asking for strict regulations. Among comments that addressed compliance and effective dates, for example, 67 percent of mass comment campaigns favored tighter deadlines while 66 percent of group comments supported extending deadlines.

These differences in requested changes reflect the respective types of organizations that sponsor mass comment campaigns and submit substantive comments in response to proposed rules. The vast majority of group comments (81 percent) are generated by regulated entities. By contrast, 68 percent of mass comment campaigns are mobilized by regulatory beneficiaries.

The majority of changes solicited in comments are not incorporated into final rules. Across all comments, the average proportion of dimensions for which requested and actual changes are consistent is .3. The proportion of consistent dimensions is zero for 54 percent of comments, and 71 percent of comments have a proportion less than one-half. On the other extreme, 19 percent of comments have a proportion of one, in that requested changes are reflected in actual changes on all dimensions.

The consistency hypothesis states that the proportion of dimensions for which requested and actual changes in proposed rules are consistent is, on average, higher for group comments than mass comment campaigns. The average proportion of consistent dimensions is .42 for

group comments and .26 for mass comment campaigns. Table 2 reports the results of regression analysis in which the the dependent variable is the proportion of consistent dimensions and the primary covariate is an indicator of whether the comment is a group comment or mass comment campaign. In the first two regressions, the parameter estimates for the indicator of group comments are positive in sign and statistically significant, indicating support for the consistency hypothesis. In the third equation, however, the estimate (although positive) does not attain significance at conventional levels.

The estimate for comments submitted by regulatory beneficiaries is negative and significant. This estimate indicates that changes requested by regulatory beneficiaries are, in comparison to changes solicited by regulated entities, less consistent with actual changes implemented in final rules. As highlighted earlier, sponsor identity overlaps substantially with type of comment. Given the relative proclivity of regulated entities to submit substantive comments and regulatory beneficiaries to mobilize mass comment campaigns, it is difficult to separate out the respective associations of comment type and sponsor identity with changes implemented in final rules. Taken together, the analysis nevertheless suggests that mass comment campaigns are (at best) no different than group comments in the proportion of dimensions for which requested and actual changes in proposed rules are consistent and, if anything, generally experience lower proportions of consistency.

c. Substantive Content Hypothesis

The substantive content hypothesis is assessed by comparing, for mass comment campaigns of varying word lengths, the number of times campaigns are mentioned in response to comment documents and the proportion of dimensions for which requested and actual changes in proposed rules are consistent. Mass comment campaigns are for the most part brief, with an average length of 227 words. One-quarter of mass comment campaigns consist of fewer than 100 words. Only 11 mass comment campaigns are more than 1,000 words in length.

The correlation between the number of words in mass comment campaigns and number of mentions in response to comment documents is .26.¹⁴ This finding that mass comment campaigns consisting of larger numbers of words are mentioned more frequently in response to comment documents is further supported by regression analysis.¹⁵ The parameter estimate for the number of words is positive in sign and statistically significant.

As Figure 3 illustrates, the magnitude of the association between the number of words and number of mentions is for the most part not substantively meaningful. A mass comment campaign of 6 words (the minimum) that is otherwise typical is expected to be mentioned one

¹⁴ This correlation is statistically significant.

¹⁵ Negative binomial regression is utilized, with alternative approaches estimated to confirm the robustness of the assessment of the substantive content hypothesis.

time in a response to comment document. A comment of 190 words (the 50th percentile among mass comment campaigns) is expected to be referenced two times. Even a comment of 1,273 words (the second-largest count in the analysis) is expected to be referenced 4 times. It is only a comment of 3,207 words (the longest mass comment campaign by nearly 2,000 words) that, with 37 mentions, has a substantially different expected number of references.¹⁶

The correlation between the number of words in mass comment campaigns and the proportion of dimensions for which requested and actual changes in proposed rules are consistent is .11.¹⁷ In the regression analysis, the parameter estimate for the number of words is positive in sign and statistically significant, indicating that the proportion of consistent dimensions is higher for lengthier mass comment campaigns.¹⁸ The magnitude of the association, however, is not substantively meaningful. A one percent increase in the number of words is associated with a .02 percent increase in the proportion of consistent dimensions.¹⁹ For a mass comment campaign to experience a (relatively small) ten percent increase in the proportion of consistent dimensions, the associated increase in the number of words is substantial at 50 percent. Taken together, the analysis of the substantive content hypothesis suggests that although the number of words in mass comment campaigns is associated with EPA handling of campaigns and the consistency of campaigns with rulemaking outcomes, these associations are not particularly robust in magnitude.

d. Political Attention Hypothesis

The political attention hypothesis is assessed by comparing the number of times campaigns are mentioned in response to comment documents and the proportion of dimensions for which requested and actual changes in proposed rules are consistent across campaigns (a) sponsored by regulatory beneficiaries and regulated entities and (b) of varying numbers of identical and near-duplicate submissions. The expectation is that, during the period under analysis (the Obama administration), mass comment campaigns mobilized by regulatory beneficiaries were more likely than campaigns submitted by regulated entities to express viewpoints consistent with the preferences of agency leaders and White House officials. Mass comment campaigns initiated by regulatory beneficiaries were therefore (a) handled more seriously and (b) more consistent with rulemaking outcomes than campaigns sponsored by regulated entities. In addition, it is expected that agency handling and consistency with

¹⁶ The 95 percent confidence interval for this prediction ranges from 2 to 181 references.

¹⁷ This correlation is statistically significant.

¹⁸ The analysis consists of a fractional logistic regression with comment, rule, and EPA office characteristics as covariates. The association between the number of words and proportion consistent holds across the full model as well as models including subsets of covariates.

¹⁹ The parameter estimates are converted to elasticities for ease of interpretation.

rulemaking outcomes increases as the number of submissions in (and hence prospective political attention of) mass comment campaigns increases.

Mass comment campaigns sponsored by regulatory beneficiaries were mentioned, on average, two times in response to comment documents. Contrary to expectation, this frequency is less than the average number of mentions (4) for mass comment campaigns submitted by regulated entities.²⁰ Similarly, the average proportion of dimensions for which requested and actual changes in proposed rules are consistent is .39 for mass comment campaigns submitted by regulated entities, more than double the proportion (.16) for campaigns initiated by regulatory beneficiaries.²¹ Accounting for comment, rule, and EPA office characteristics,²² the consistency between requested and actual changes is 11 percent lower for mass comment campaigns mobilized by regulatory beneficiaries than campaigns generated by regulated entities.

There is no association between the number of identical and near-duplicate submissions in mass comment campaigns and either agency handling of campaigns or the consistency of campaigns with rulemaking outcomes.²³ The correlations between the number of submissions in mass comment campaigns and (a) the number of times campaigns are mentioned in response to comment documents and (b) the proportion of dimensions for which changes requested by campaigns and actual changes in proposed rules are consistent are both exceedingly weak (.01) and not statistically significant. Similarly, the parameter estimates for the number of submissions in mass comment campaigns are not statistically significant in regression analyses of the number of mentions and proportion of consistent dimensions. In sum, the analysis indicates that, contrary to the political attention hypothesis, politically salient mass comment campaigns (campaigns sponsored by regulatory beneficiaries and campaigns with large numbers of submissions) were advantaged neither procedurally nor substantively in the making of the EPA rules under analysis.

²⁰ This difference is statistically significant. The regression analysis provides further evidence against the political attention hypothesis. The negative binomial regression includes an indicator of whether the mass comment campaign is sponsored by a regulatory beneficiary. This indicator is never positive in sign (in either the primary analysis or alternative robustness checks).

²¹ This difference is statistically significant.

²² This accounting occurs through fractional logistic regression analysis in which the primary covariate is an indicator of whether the mass comment campaign is sponsored by a regulatory beneficiary.

²³ The average number of identical and near-duplicate submissions in mass comment campaigns is 8,083, with a median of 285 submissions.

CONCLUSION

This article has addressed the efficacy of mass comment campaigns in administrative rulemaking in the United States, focusing specifically on the role played by more than 1,000 campaigns that occurred during EPA rulemakings between 2012 and 2016. The analysis investigates two elements of EPA responsiveness to mass comment campaigns—the handling of campaigns in response to comment documents and consistency of campaigns with the content of final rules. These elements are compared across mass comment campaigns and other (group) comments, as well as between campaigns of varying substantive and political characteristics.

The analysis demonstrates that mass comment campaigns elicited a limited degree of procedural, but not substantive, EPA responsiveness. Procedurally, the vast majority of comments, including mass comment campaigns, are referenced in response to comment documents. The frequency of such references, however, varies across types of comments, with group comments mentioned at higher rates than mass comment campaigns. Although mass comment campaigns are mentioned more frequently with increases in legal, economic, scientific, and technical information, the magnitude of this association is not substantial.

Substantively, the consistency between changes requested in proposed rules and the content of final rules is, generally speaking, rather low. The majority of changes solicited in comments are not incorporated into EPA rules, an association that holds especially in the context of mass comment campaigns. Among mass comment campaigns, consistency is particularly limited for campaigns sponsored by regulatory beneficiaries, an unexpected pattern given the political importance of constituencies such as environmental advocacy groups in the Obama administration.²⁴

Together these findings offer insight into the manner in which mass comment campaigns affect (and do not affect) rulemaking processes and outcomes. One compelling rationale for the submission of mass comment campaigns is that rulemaking occurs within the context of the American political system. Agencies, in other words, are routinely asked to resolve directional, value-laden concerns (Mendelson 2011), and mass comment campaigns are instruments through which such sentiments are communicated to agencies. Consistent with this account, there are documented instances of mass comment campaigns influencing agency rulemaking through the activation of political attention (de Figueiredo 2006, Potter and Richardson 2017, Moxley 2016, Shulman 2003).

The article indicates that, despite such examples, mass comment campaigns have not, as a more general matter, demonstrated efficacy in affecting rulemaking processes and (especially)

²⁴ It is important to examine the generalizability of this conclusion beyond the EPA and the Obama administration, both of which are characterized by distinct administrative and political contexts.

outcomes. Mass comment campaigns are, relative to group comments, ineffective in generating agency responses. This lack of efficacy suggests that legal and administrative concerns (not political considerations) are ordinarily paramount in agency rulemaking. In such a decision-making environment, the most consistent (although by no means surefire) pathway to influence is the submission of legal, economic, scientific, and technical information.

Normatively, there has been excitement over the prospect of mass comment campaigns as instruments for enhancing participatory democracy (Moxley 2016). Conversely, concerns have been expressed that mass comment campaigns run the risk of transforming rulemaking into an unmanageable process of “notice and spam” (Noveck 2004, 441). The evidence presented in the article suggests that neither perspective has fully manifested. The mass comment campaigns under analysis were for the most part handled by the EPA in a manner reflective of their (lack of) legal, economic, scientific, and technical information. In the end, these mass comment campaigns demonstrated little consistency with the content of agency rules.

Table 1. Empirical Expectations, By Hypothesis

<i>Hypothesis</i>	<i>Empirical Expectation</i>
Agency Handling Hypothesis	<ul style="list-style-type: none"> group comments are mentioned more frequently in response to comment documents than mass comment campaigns
Consistency Hypothesis	<ul style="list-style-type: none"> the proportion of dimensions for which requested and actual changes in proposed rules are consistent is higher for group comments than mass comment campaigns
Substantive Content Hypothesis	<ul style="list-style-type: none"> as the number of words in mass comment campaigns increases, campaigns are mentioned more frequently in response to comment documents as the number of words in mass comment campaigns increases, the proportion of dimensions for which requested and actual changes in proposed rules are consistent increases
Political Attention Hypothesis	<ul style="list-style-type: none"> mass comment campaigns sponsored by regulatory beneficiaries are mentioned more frequently in response to comment documents than campaigns sponsored by regulated entities the proportion of dimensions for which requested and actual changes in proposed rules are consistent is higher for mass comment campaigns sponsored by regulatory beneficiaries than campaigns sponsored by regulated entities as the number of submissions in mass comment campaigns increases, campaigns are mentioned more frequently in response to comment documents as the number of submissions in mass comment campaigns increases, the proportion of dimensions for which requested and actual changes in proposed rules are consistent increases

Figure 1: Excerpt of Response to Comment Document

Commenter Name: Tom DeLawrence
Commenter Affiliation: Public Service Company of New Hampshire(PSNH)
Document Control Number: EPA-HQ-OW-2009-0819-4633-A1
Comment Excerpt Number: 39
External Review Flag: No External Review
External Review Incorporated into Response: No

Comment Excerpt:

The unique situation PSNH faced, caught between a stringent state law and a federal permitting process, should not, and indeed legally cannot, be utilized by EPA to impose this ZLD technology on the industry as BAT for FGD waste waters.

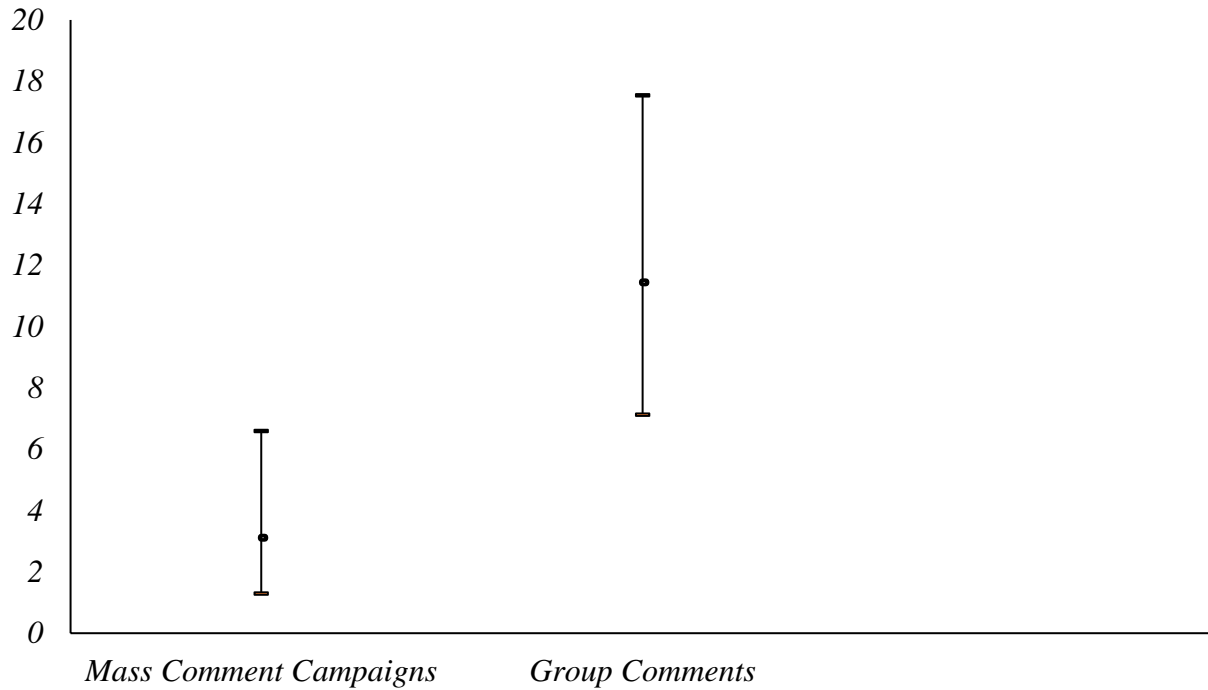
Comment Response:

The final rule does not require use of ZLD technology for FGD wastewater.

EPA assumes that the commenter is using the word “ZLD technology” to refer to evaporation technology, which formed the basis for FGD wastewater limitations under proposed Option 5, and which forms the basis for the final voluntary incentives program BAT limitations and final NSPS/PSNS. See preamble section VIII. The final rule does not establish BAT limitations for all existing sources of FGD wastewater discharges based on evaporation for the reasons explained in preamble section VIII.C.1.

Note: The response to comment document from which this excerpt is taken is accessible at <https://www.regulations.gov/document?D=EPA-HQ-OW-2009-0819-6469>.

Figure 2: Predicted Number of Mentions, By Comment Type



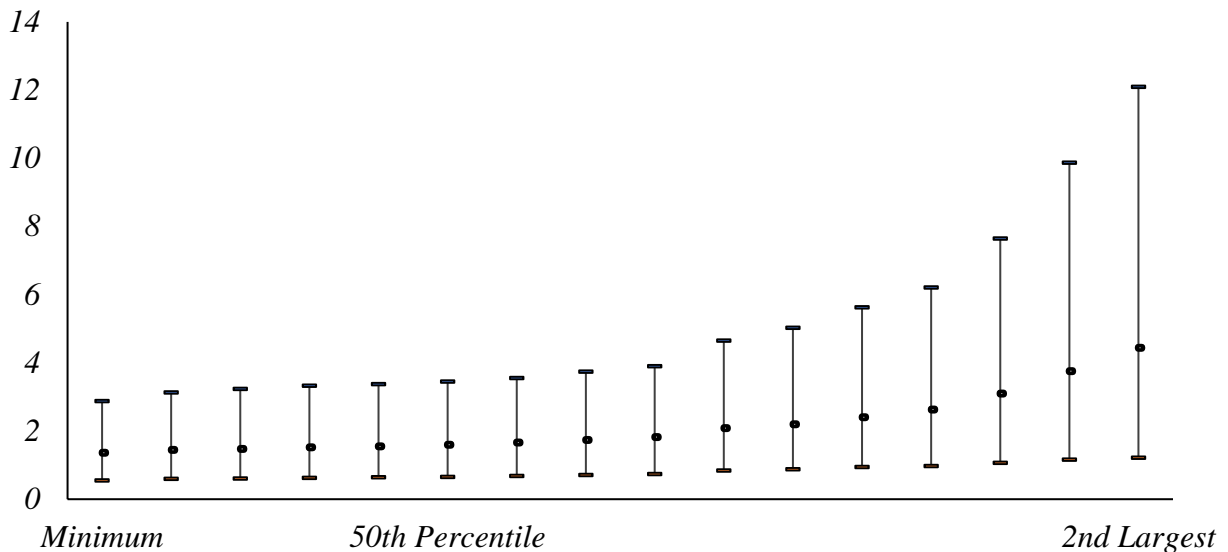
Note: The y-axis represents the predicted number of mentions in response to comment documents. These predictions (and associated 95 percent confidence intervals) were calculated for mass comment campaigns and group comments with other covariates set at their central tendencies. These predictions are derived from a model including all covariates and with robust standard errors clustered by rulemaking. The statistically significant difference between mass comment campaigns and group comments is robust across specifications (i.e., models including subsets of covariates) and types of (i.e., non-robust, non-clustered) standard errors.

Table 2: Analysis of Consistency of Requested and Actual Changes

<i>Covariates</i>	<i>Parameter Estimates (Standard Errors)</i>		
Group Comment	.70 (.11)***	.64 (.11)***	.24 (.16)
Economically significant rule		.16 (.10)	.04 (.13)
Air or water office		-.46 (.17)***	-.45 (.19)**
Number of words in comment			.01 (.01)
Regulatory beneficiary comment			-1.00 (.15)***
<i>Constant</i>	-1.05 (.06)***	-.70 (.17)***	-.15 (.22)
<i>Log likelihood</i>	-791.29***	-788.86***	-513.81***
<i>Number of observations</i>	1,313	1,313	893

Note: Each column reports the results of a fractional logistic regression. The number of observations in the third equation is significantly reduced due to missing data regarding whether the comment was submitted by a regulatory beneficiary or regulated entity (it is not always possible to identify comment sponsors). ***=statistically significant at $p<.01$. **=statistically significant at $p<.05$.

Figure 3: Predicted Number of Mass Comment Campaign Mentions, By Word Count



Note: The y-axis represents the predicted number of mass comment campaign mentions in response to comment documents. These predictions (and associated 95 percent confidence intervals) were calculated for mass comment campaigns at increments of word counts, from the minimum to second-largest word count. The maximum word count is excluded for scaling purposes (the prediction is 37 mentions). Other covariates were set at their central tendencies. These predictions are derived from a model including all covariates and with robust standard errors clustered by rulemaking. The statistically significant result for the number of words is robust across specifications and types of standard errors.

References

- Balla, Steven J., et al. 2018. "Where's the Spam?: Mass Comment Campaigns in Agency Rulemaking." Paper presented at the annual meeting of the Midwest Political Science Association, April 5-8, Chicago, IL.
- Balla, Steven J., Jennifer M. Deets, and Forrest Maltzman. 2011. "Outside Communications and OIRA Review of Agency Regulations." *Administrative Law Review*, Vol. 63, Special Edition, pp. 149-177.
- Cuellar, Mariano-Florentino. 2005. "Rethinking Regulatory Democracy." *Administrative Law Review*, Vol. 57, No. 2, pp. 411-500.
- de Figueiredo, John M. 2006. "E-Rulemaking: Bringing Data to Theory at the Federal Communications Commission." *Duke Law Journal*, Vol. 55, No. 5, pp. 969-993.
- Dooling, Bridget C.E. 2011. "Legal Issues in E-Rulemaking." *Administrative Law Review*, Vol. 63, No. 4, pp. 893-932.
- Farina, Cynthia R., et al. 2012. "Rulemaking vs. Democracy: Judging and Nudging Public Participation that Counts." *Michigan Journal of Environmental & Administrative Law*, Vol. 2, No. 1, pp. 123-172.
- Gaby, Keith. 2017. "Ready to Defend Obama's Environmental Legacy? Top 10 Accomplishments to Focus on." *Environmental Defense Fund*, <https://www.edf.org/blog/2017/01/12/ready-defend-obamas-environmental-legacy-top-10-accomplishments-focus>.
- Grimaldi, James V., and Paul Overberg. 2017. "Millions of People Post Comments on Federal Regulations. Many Are Fake." *Wall Street Journal*, <https://www.wsj.com/articles/millions-of-people-post-comments-on-federal-regulations-many-are-fake-1513099188>.
- Horn, Marissa. 2018. "26 Environmental Rules Being Rolled Back in the Trump Era." *Bloomberg*, <https://www.bna.com/26-environmental-rules-n73014477330/>.
- Karpf, David. 2010. "Online Political Mobilization from the Advocacy Group's Perspective: Looking Beyond Clicktivism." *Policy & Internet*, Vol. 2, No. 4, pp. 7-41.

- Lipton, Eric, and Coral Davenport. 2015. "Critics Hear E.P.A.'s Voice in 'Public Comments.'" *New York Times*, <https://www.nytimes.com/2015/05/19/us/critics-hear-epas-voice-in-public-comments.html>.
- Mendelson, Nina A. 2011. "Rulemaking, Democracy, and Torrents of E-Mail." *George Washington Law Review*, Vol. 79, No. 5, pp. 1343-1380.
- Mendelson, Nina A. 2012. "Should Mass Comment Campaigns Count?" *Michigan Journal of Environmental & Administrative Law*, Vol. 2, No. 1, pp. 173-183.
- Moxley, Lauren. 2016. "E-Rulemaking and Democracy." *Administrative Law Review*, Vol. 68, No. 4, pp. 661-699.
- Nou, Jennifer. 2014. "The FCC Just received a Million Net-Neutrality Comments. Here's What It's Like to Sort Through Them All." *Washington Post*, https://www.washingtonpost.com/posteverything/wp/2014/07/18/the-fcc-just-received-a-million-net-neutrality-comments-heres-what-its-like-to-sort-through-them-all/?utm_term=.51c31496e67f.
- Noveck, Beth Simone. 2004. "The Electronic Revolution in Rulemaking." *Emory Law Journal*, Vol. 53, No. 2, pp. 433-522.
- Papke, Leslie E., and Jeffrey M. Wooldridge. 1996. "Econometric Methods for Fractional Response Variables with an Application to 401(k) Plan Participation Rates." *Journal of Applied Econometrics*, Vol. 11, No. 6, pp. 619-632.
- Potter, Rachel Augustine. 2017. "More than Spam?: Lobbying the EPA through Public Comment Campaigns." *The Brookings Institution*, <https://www.brookings.edu/research/more-than-spam-lobbying-the-epa-through-public-comment-campaigns/>.
- Potter, Rachel Augustine, and Mark D. Richardson. 2017. "Vox Populi? Agency Rulemaking and the Politics of Mass Comment Campaigns." Paper presented at the annual meeting of the Midwest Political Science Association, April 6-9, Chicago, Illinois.
- Shulman, Stuart W. 2003. "An Experiment in Digital Government at the United States National Organic Program." *Agriculture and Human Values*, Vol. 20, No. 3, pp. 253-265.
- Shulman, Stuart W. 2006. "Whither Deliberation? Mass e-Mail Campaigns and U.S. Regulatory Rulemaking." Paper available online at <http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1001&context=erulemaking>.

Shulman, Stuart W. 2009. "The Case against Mass E-mails: Perverse Incentives and Low Quality Public Participation in U.S. Federal Rulemaking." *Policy & Internet*, Vol. 1, No. 1, pp. 23-53.

Sykes, Justin. 2016. "Nearly 4,000 EPA Regulations Issued Under President Obama." *Americans for Tax Reform*, July 6.

West, William F. 2004. "Formal Procedures, Informal Processes, Accountability, and Responsiveness in Bureaucratic Policy Making: An Institutional Policy Analysis." *Public Administration Review*, Vol. 64, No. 1, pp. 66-80.

Wyatt, Edward. 2014. "F.C.C., in a Shift, Backs Fast Lanes for Web Traffic." *New York Times*, <https://www.nytimes.com/2014/04/24/technology/fcc-new-net-neutrality-rules.html>.

Yackee, Susan Webb. 2006. "Sweet-Talking the Fourth Branch: The Influence of Interest Group Comments on Federal Agency Rulemaking." *Journal of Public Administration Research and Theory*, Vol. 16, No. 1, pp. 103-124.