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From the office to the field: Areas of tension and consensus in the implementation of the National Environmental Policy Act within the US Forest Service

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ABSTRACT

We conducted an online survey ($n = 3321$) followed by five focus groups with Forest Service employees involved in compliance with the National Environmental Policy Act (NEPA) to explore agency views of how NEPA should be implemented within the agency. We filter these perceptions through the lenses of different functional groups within the agency, each with its own role in agency compliance with NEPA and its own suite of perceived accountabilities. In doing so, we uncover areas of consensus regarding valued practices as well as tensions between employees with different roles in NEPA compliance. General consensus exists regarding the importance of the effective functioning of interdisciplinary teams, but opinions about what constitutes an effective team vary. Findings suggest that NEPA serves as a playing field for competing accountabilities felt by line officers, disciplinary specialists, and advisory personnel within the agency, as each attempts to exert influence over NEPA processes and their outcomes.

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1. Introduction

The USDA Forest Service lacks a clear unified purpose for its National Environmental Policy Act (NEPA) processes (see Stern et al., 2010). The lack of singular purpose, or critical task, for NEPA in the Forest Service amplifies the significance of discretion at the agency's operational levels (Lipsky, 1980; Wilson, 1989). While this allows space for implementers to appropriately adapt NEPA processes to local contexts, it also renders processes unpredictable and potentially counter-productive to the agency's mission, as field operators may act based more on personal inclinations or external pressures and accountabilities than on a shared vision of the agency mission (Lipsky, 1980; Stern et al., 2009). Wilson (1989) notes that such unpredictability often spurs higher level bureaucrats to create mechanisms that control operational discretion, often in the form of rules, directives, or policies, creating tensions within an agency.

Differences in perceived or "felt" accountabilities between employees with different functions within an agency can also cause

tensions. When upward accountabilities dominate, prior research suggests a tendency to focus on producing measurable short-term outcomes, including the fulfillment of procedural requirements and small-scale project implementation (Christensen and Ebrahim, 2006; Ebrahim, 2005; Merton, 1968). These types of accountabilities appear to be most commonly strongest in line officers within the Forest Service (Stern et al., 2010). Different forms of outward accountabilities, felt most strongly by implementers within the Forest Service (Stern et al., 2010), may also influence processes and outcomes, as some may place greater weight on appeasing public interest groups or scientific peer communities than on agency mission achievement. In addition to threatening mission achievement, these phenomena may also damage agency morale, as workers may occasionally feel their work is disconnected from their perceptions of the agency's most important goals (Ebrahim, 2005).

This paper focuses on Forest Service employees' views of how NEPA should be implemented within the agency. We filter these perceptions through the lenses of different functional groups within the agency, each with its own role in agency compliance with NEPA and its own suite of perceived accountabilities. In doing so, we uncover areas of consensus regarding valued practices as well as tensions between employees with different roles in NEPA

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compliance. We also address how different perceptions of the purpose of NEPA can influence how NEPA processes are conducted, following upon prior research that suggests the importance of this relationship (Stern et al., 2009).

2. Methods

We report results from an online survey of USDA Forest Service employees actively engaged in NEPA compliance and five subsequent focus groups with agency employees who function primarily in an advisory, or policy-making, role in Forest Service NEPA compliance. This paper reports on two specific portions of the survey: respondents' perceptions of what contributes to greater success in NEPA processes and of options for improving NEPA processes. Survey items were developed through a prior pilot study involving 25 interviews with NEPA practitioners across four federal land management agencies (see Stern and Mortimer, 2009) and through an examination of related literature. Each battery of items was followed by an open-ended comment box. These two comment boxes yielded 1302 written comments. We coded these responses through an iterative process, identifying key cross-cutting themes and refining those themes and adding extra codes on subsequent passes through the data. Sample details and analytical tests are further described in Stern et al. (2010).

Respondents were divided into four categories for analysis based on their primary role in Forest Service NEPA compliance. *Implementers'* primary or only role in agency NEPA compliance was to serve on interdisciplinary (ID) teams as disciplinary specialists or as ID team leaders. "Line officers" include Forest Supervisors and District Rangers who typically serve as the decisionmakers following NEPA processes. "Advisory" personnel are those who serve in a primarily advisory or policy-influencing role. These include regional coordinators, some NEPA instructors (those who teach internal training courses but are not typically on ID teams), and most respondents from the Washington, DC office. "Bridgers" are those individuals who regularly find themselves in both advisory and implementer roles. These were most commonly forest and district-level coordinators and planners, but also included NEPA instructors who regularly served on ID teams.

3. Quantitative results

Respondents were asked to rate the extent to which they believed the items listed in Table 1 contribute to successful NEPA processes in the FS on a scale of one to seven (1: low contribution to success; 7: high contribution to success). We also asked respondents to rate the extent to which they would be in favor or opposed to each of the statements in Table 2 regarding potential improvements in Forest Service NEPA compliance on a scale of one to five (1: strongly oppose; 5: strongly favor).

Exploratory factor analysis (using principal component extraction with varimax rotation) identified seven latent constructs underlying the contributors to success data and the data on ideas for improving NEPA (Tables 3 and 4). Four latent constructs were identified in the contributors to NEPA success data. We labeled the first factor, which focuses on ID team leadership, interactions, roles, and continuity, "team effectiveness." The second factor highlights perceptions associated with the importance of employing the best available science, following procedures, and conducting effective public involvement and interagency coordination. We labeled this construct "by-the-book NEPA," as it reflects the primary elements of CEQ and agency guidance (40 CFR § 1501, 1502, 1503). The third factor includes consultation with legal counsel, the use of contractors to complete the process, centralizing NEPA processes, and relieving ID team members of non-NEPA

related work. These statements reflect strategies designed to counteract agency fears that NEPA processes may not get completed effectively, that analysis may not meet legal requirements or may be bogged down by multiple work priorities, and that districts may not have adequate staffing to handle the environmental analysis. For these reasons, we labeled this construct "defensive NEPA." The fourth factor, "engaged decisionmaker," clearly reflects perceptions of the importance of decisionmaker involvement in the NEPA process. Other items did not statistically group together, though conceptually we can see that they reflect two basic latent ideas regarding the writing of the NEPA document and the scale of the project.

The exploratory factor analysis identified three latent constructs, or factors, in the responses on how to improve Forest Service NEPA processes. We call the first latent construct "policy reform." The construct is comprised of policy revisions that would reduce agency procedural burdens or the level of scrutiny aimed at agency processes. Changes to the Administrative Procedures Act (5 USC Sections 501 *et seq.*) would alter how agency decisions are treated in the court, presumably increasing the amount of judicial deference to the agency's decisions. Revisions to the appeals process and litigation standing requirements could also alleviate the level of public scrutiny directed at agency NEPA processes. Increases in the number of categorical exclusions would create a greater number of agency project types that would be exempt from project-specific environmental assessment or environmental impact statement analysis.

The second factor reflects perceptions about whether "programmatic" NEPA documents would improve agency processes. Programmatic documents are those that contain broader plans, typically for larger landscape scales such as entire watersheds or National Forests, to which other NEPA documents can tier, or cite, for project justifications or analytical findings.

The third factor, labeled "discretionary control," reflects a sentiment that field-level discretion in NEPA processes should be reduced or controlled through centralization, standardization, or training. Two other survey items regarding increasing collaborative public participation and allowing for greater flexibility in project documentation stood on their own as individual constructs.

Indexes were created for the factors listed in Tables 3 and 4 using the statements with bolded factor loadings; each statement was equally weighted in the construction of indexes. Student's *t*-tests on the indexes identified several areas of consensus, as well as some significant differences between functional groups (Table 5).

Items associated with ID team effectiveness were rated highly across all functional groups (Tables 1 and 5). There was also general consensus on some of the least valued strategies for NEPA processes, including centralizing NEPA processes, decreasing the use of programmatic documents, using contractors, and a less active and engaged decisionmaker.

Overall, implementers reflected values most different from the other groups, placing least emphasis on by-the-book NEPA, defensive NEPA, effective public involvement, and decisionmaker engagement. Compared to other functional groups, implementers placed greatest emphasis on employing best available science, writing their own section of the NEPA document, and breaking controversial projects into smaller more manageable pieces.

Line officers, in contrast, clearly favored greater decisionmaker engagement than other functional groups and were less hesitant about scaling up multiple projects into one larger project to go through the NEPA process. They were also consistently different in their views on how to reform NEPA. They placed greater emphasis on policy reform and the use of programmatic documents, while placing less emphasis on limiting or controlling the discretion of implementers.

Table 1
Mean scores on views of contributors to greater success of Forest Service NEPA processes across roles in the Forest Service.

	Advisory (153)		Line officer (355)		Bridger (392)		Implementer (1948)		Overall standardized mean	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
	An effective ID team leader	1	6.53	1	6.62*	1	6.45	1	6.44*	1
Effective collaboration amongst ID team members	2	6.24	3	6.09	2	6.11	2	6.12	2	6.14
Active and consistent engagement of the decisionmaker throughout the process prior to final decision	3	6.22	2	6.35*	3	6.10	3	5.88*	3	6.14
Effective public involvement	4	6.01*	4	5.89**	8	5.69**	8	5.57*	4	5.79
Clearly defined roles for ID team members	5	5.81	5	5.84	5	5.78	6	5.71*	5	5.79
Minimal turnover of the ID team leader	7	5.73	7	5.63*	4	5.89*	5	5.78	6	5.76
Employing the best available science	6	5.80	6	5.68	7	5.70	4	5.83*	7	5.75
Following all NEPA-related procedures as closely as possible	8	5.63	8	5.50	6	5.74*	9	5.46*	8	5.58
Minimal turnover of ID team members	9	5.62	9	5.37*	9	5.66**	7	5.60	9	5.56
Effective interagency collaboration	10	5.30*	10	5.16	10	4.90*	10	5.02*	10	5.10
The document is written primarily by one person with input from team members	11	4.33	11	4.51	11	4.40	12	4.38	11	4.40
Each team member writes his or her own section of each document	15	3.76*	12	3.99*	12	4.25	11	4.57*	12	4.14
Breaking controversial projects into smaller, more manageable pieces	13	4.19	12	3.99	14	3.92**	13	4.20*	13	4.07
Relieving ID team members of other non-NEPA-related duties	12	4.44	16	3.75*	13	4.00	15	3.83*	14	4.01
Consulting with legal counsel frequently throughout the process	14	4.13	15	3.80	15	3.65*	16	3.75*	15	3.83
Scaling up multiple projects into one larger project to go through the NEPA process	16	3.54**	12	3.99*	16	3.56*	14	3.91*	16	3.75
Effective use of contractors	17	3.32	17	2.93	17	2.77*	17	2.86*	17	2.97
The use of centralized processes (tasks performed by specialized units outside the ID team)	18	3.21*	18	2.58*	18	2.61*	19	2.67*	18	2.77
Less active engagement of the decisionmaker throughout the process prior to final decision	19	2.24	19	2.25*	19	2.35	18	2.74*	19	2.39

*Indicates significant difference from standardized mean score (student's t-test) with Bonferroni correction ($p < .0125$).

**Indicates marginally significant difference from standardized mean score (student's t-test, $0.05 > p > .0125$).

Advisory responses showed greater support for controlling discretion in NEPA processes and relatively less optimism regarding the use of programmatic documents and policy reform. Advisory respondents emphasized the importance of “by-the-book NEPA” and viewed “defensive NEPA” in a more positive light than any of the other functional groups. Advisory respondents also rated increasing collaborative public participation significantly higher than other functional groups.

Bridgers' responses were highly variable, sometimes aligning with any of the other three functional groups. For example, they aligned with implementers in placing lesser emphasis on the importance of effective public involvement, but agreed with advisory respondents in opposing scaling up smaller projects. Relative to all other groups, bridgers emphasized following NEPA procedures correctly.

4. Qualitative results and discussion: competing versions of NEPA

Qualitative results suggest the presence of two forms of internal agency tensions regarding NEPA: (1) *operational* tensions among those functional groups that are actively involved in conducting NEPA processes on the ground (line officers, bridgers and implementers); and (2), *advisory* tensions between advisory personnel and the operational functional groups actively involved in conducting on-the-ground NEPA processes. Our analyses of open-ended survey comments and focus groups reveal that different views on how to implement NEPA are at least partly driven by the specific accountabilities felt by each functional group. Quotes from focus groups and open-ended survey responses are used to support our analyses.

4.1. Operational tensions between line officers and implementers/bridgers

While all functional groups agreed on the importance of the effective functioning of ID teams, some subtle differences emerged between functional groups regarding what makes ID teams most effective. Line officers most commonly emphasized the importance of an effective ID team leader. In open-ended survey responses, line officers commonly clarified what they meant by this. Often “effective” meant maintaining efficiency as a priority in the process by keeping environmental analyses tightly focused on the project's original purpose and need statement. From the line officer's perspective, the ideal ID team leader serves as the line officer's proxy throughout the process, consistently advances process efficiency, and enables the line officer to achieve measurable on-the-ground outcomes. Bridgers and implementers emphasized other attributes of effective team leaders: the ability to serve as a buffer between the efficiency demands of the line officer and the scientific and deliberative aspects of NEPA analysis, which require careful attention to quality and detail; the ability to communicate to the line officer the challenges implementers face with respect to balancing non-NEPA related duties with their NEPA process obligations; and communication with the line officer and forest leadership team that reduces the potential for abrupt changes in the direction of analysis.

These same themes surfaced in comments regarding decisionmaker engagement. Line officers' open-ended survey comments commonly reflected a primary goal for decisionmaker engagement of keeping the ID team on task.

“[Decisionmaker engagement] is needed to keep the process and project simple, reminding IDT members and the public as to the decision to be made, and keeping the team focused on the

Table 2
Mean scores on views of the values of options for improving Forest Service NEPA processes across roles in the Forest Service.

	Advisory (153)		Line officer (355)		Bridger (392)		Implementer (1948)		Overall standardized mean	
	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean
	Increase the range of categorical exclusions available	3	3.81*	1	4.32*	1	4.03	2	3.88*	1
Allow for greater flexibility in documentation that could enhance opportunities for adaptive management	2	3.88	2	4.15*	2	3.96	1	3.95**	2	3.99
Institute strict requirements for standing for external stakeholders to file lawsuits	7	3.59**	4	3.99*	3	3.80	3	3.72*	3	3.78
Revise the Administrative Appeals Process	6	3.61	3	4.01*	5	3.66	4	3.60*	4	3.72
Establish core competencies for resource specialists that perform NEPA analyses	1	4.05*	8	3.43*	4	3.74	4	3.60*	5	3.71
Increase collaborative public participation	4	3.80*	6	3.64	7	3.42*	8	3.47*	6	3.58
Establish standardized procedures for resource effects analyses	5	3.67**	10	3.42*	6	3.54	6	3.55	7	3.55
Increase the use of programmatic environmental documents	9	3.17*	5	3.65*	8	3.39	7	3.52*	8	3.43
Revise the Administrative Procedures Act	8	3.23**	9	3.54*	8	3.39	10	3.39	9	3.39
Revise NEPA	10	3.15*	7	3.62*	10	3.23*	9	3.44*	10	3.36
Decrease the use of programmatic environmental documents	11	2.75*	11	2.34*	11	2.54	11	2.53	11	2.54
Centralize all NEPA processes to remove the burden of compliance from field staff	12	1.89*	12	1.53*	12	1.60**	12	1.75*	12	1.69

*Indicates significant difference from standardized mean score (student's t-test) with Bonferroni correction ($p < .0125$).

**Indicates marginally significant difference from standardized mean score (student's t-test, $0.05 > p > .0125$).

project without being led into speculative analyses that doesn't contribute to the quality of the decision."

Implementers commonly shared different opinions compared to line officers about the most important aspects of decisionmaker engagement. Implementers' open-ended survey comments reflected desires for a line officer who clearly communicates priorities for ID team member work, is knowledgeable about the NEPA process, and, perhaps most importantly, uses the environmental analysis to inform his/her decisions. The ideal line officer should be engaged just enough, at major "decision points," often at the start and finish of the process, but should otherwise avoid "micromanaging" the team. Some implementers noted that too much line officer engagement can "torpedo the efforts of the team" and diminish their effectiveness in working out "the best strategies for the various alternatives."

Implementers want time to produce and use best available science, and they want their analyses to influence decision-making. Line officers' survey responses, on the other hand, commonly reflected a vision of NEPA as primarily a procedural hoop with only minor impacts on decision-making processes (see also Stern et al., 2010). Implementers more commonly shared visions of NEPA as a decision-making process, where a deliberate, scientific series of analyses should precede decision-making and have some bearing on environmental outcomes.

Respondents explicitly described how different perceived accountabilities can drive or reinforce these visions of what NEPA processes are supposed to be. Implementers appear to be pulled in the most directions at once, feeling accountabilities toward their scientific disciplinary peer community, what they see as their particular resource of focus, line officers, and local and vocal publics.

"Our specialists see NEPA as a very bad thing because it either keeps them from getting the job implemented or their line officers are telling them that we don't need to protect that much; there is a conflict there that NEPA gets right in the middle of."

Comments commonly reflected implementers' desires to be an advocate for both their resource and their science. Some also expressed frustrations in what they viewed to be line officers' dismissal of public comments and input. Perceptions of line officers' focus on upward accountability and efficiency can often conflict with ID team members' desires to directly influence process outcomes that reflect their own orientations and accountabilities. Furthermore, when work within the NEPA process does not appear to contribute to decision-making, tensions rise, as reflected in the words of one implementer:

I support the use of NEPA, but it has its problems. In every project I've worked on, the proposed action has been locked in before scoping to be the final NEPA decision. Alternatives are only straw dogs. Our projects are developed to meet volume targets. Benefits for fuels reductions, wildlife habitat improvement, etc. are only coincidental benefits to the primary purpose of meeting target ... Congress needs to change our ties between budget and timber target in order to use NEPA in a less contentious context."

Diversity in closed-ended survey responses within functional groups, along with our own experiences in researching Forest Service NEPA processes, suggests that these tensions of course don't always exist. However, the general trend was not refuted or disputed in 2767 open-ended comments received in the overall survey effort.

4.2. Tensions between advisory personnel and operational groups

Tensions are also apparent between advisory personnel and the other three functional groups working at the agency's operational

Table 3
Exploratory factor analysis (principal components extraction with varimax rotation) on contributors to success Forest Service NEPA processes.

Contributors to success	Factor 1 Team effectiveness	Factor 2 By-the-book NEPA	Factor 3 Defensive NEPA	Factor 4 Engaged decisionmaker
Clearly defined roles for ID team members	0.522	0.306	0.191	0.263
Effective collaboration amongst ID team members	0.522	0.465	-0.052	0.198
An effective ID team leader	0.649	0.322	-0.024	0.232
Minimal turnover of ID team leader	0.854	0.081	0.082	-0.012
Minimal turnover of ID team members	0.839	0.120	0.095	-0.043
Effective public involvement	0.042	0.744	0.045	0.082
Employing best available science	0.152	0.724	0.028	-0.037
Following all NEPA-related procedures as closely as possible	0.149	0.610	0.135	0.068
Effective interagency collaboration	0.280	0.563	0.246	0.007
Consulting with legal counsel frequently through the process	0.052	0.318	0.581	-0.032
Effective use of contractors	-0.046	0.144	0.766	-0.045
The use of centralized processes (tasks performed by specialized units outside the ID team)	-0.006	0.059	0.805	-0.069
Relieving ID team members of other non-NEPA-related duties	0.360	-0.085	0.612	0.054
Active and consistent engagement of the decisionmaker through the process prior to final decision	0.317	0.238	0.126	0.740
Less active engagement for the decisionmaker throughout the process prior to final decision	0.006	0.034	0.243	-0.828
Breaking controversial projects into smaller, more manageable pieces	0.288	0.086	0.395	-0.226
Scaling up multiple projects into one larger project to go through the NEPA process	0.064	0.059	0.147	-0.119
The document is written primarily by one person with input from team members	0.179	0.068	0.141	-0.098
Each team member writes his or her own section of each document	0.157	0.133	0.126	-0.112

level. Advisory personnel in the study expressed two primary accountabilities: to ensure high quality processes and to maintain agency credibility to multiple higher level stakeholders outside the agency (Stern et al., 2010). As one advisory respondent noted, “we at the WO [Washington Office] do policy, process, and procedures, and it is important to us that those procedures are followed.” In order to meet these accountabilities, advisory personnel exhibited more support for nearly all measures aimed at controlling the NEPA process from the top down. Meanwhile, implementers, bridgers, and line officers showed signs of resistance to this group of measures.

In addition to supporting more control over field-level discretion, advisory respondents were more convinced than other groups in the agency that a renewed focus on “by-the-book” NEPA will likely contribute to success. They were also more supportive than any other group of “defensive NEPA,” a suite of ideas that insulate the process from potential negative effects. Also in line with advisory respondent’s process focus, they were hesitant to support ideas for improving NEPA that they believed may jeopardize the successful completion of the process. For example, open-ended responses suggest that their comparative lack of support for programmatic NEPA is based on a concern that the technique may

be used incorrectly, leading to legally “fatal” manipulations of NEPA at the project scale.

In open-ended survey responses, implementers often responded negatively to top-down measures aimed at controlling the NEPA process. They repeatedly stated that contracted and centralized NEPA cripple the agency’s ability to deal with the ecological nuances particular to each project. These measures further worried implementers that they would cause NEPA to move further toward being an empty procedural exercise, diminishing their ability to use NEPA to impact agency decisions. Relieving implementers of non-NEPA related duties was also viewed in a negative light by implementers, who reported that this approach would limit their time in the field, reducing their on-the-ground knowledge and directly threatening their ability to achieve their goals of producing excellent science.

“You have to spend time on the ground to understand a piece of country in order to effectively analyze environmental effects, and to know where compromise is appropriate and where to stand firm to protect your resource. People would not be effective if they ONLY did NEPA and didn’t interact with the ground in any other way.”

Table 4
Exploratory factor analysis (principal components extraction with varimax rotation) on improving Forest Service NEPA processes.

Potential strategies for improving NEPA processes	Factor 1 Policy reform	Factor 2 Increase Programmatic	Factor 3 Discretionary control
Revise NEPA	0.780	0.126	0.074
Revise the Administrative Procedures Act	0.769	0.045	0.059
Increase the range of categorical exclusions available	0.612	0.215	0.011
Institute strict requirements for standing for external stakeholders to file lawsuits	0.679	0.036	0.027
Revise the Administrative Appeals process	0.785	-0.002	0.017
Increase the use of programmatic environmental documents	0.174	0.916	0.113
Decrease the use of programmatic environmental documents	-0.088	-0.936	0.034
Centralize all NEPA processes to remove the burden of compliance from field staff	0.221	0.080	0.540
Establish core competencies for resource specialists that perform NEPA analysis	-0.103	-0.093	0.740
Establish standardized procedures for resource effects analyses	0.071	0.097	0.794
Increase collaborative public participation	-0.260	0.000	0.177
Allow for greater flexibility in documentation that could enhance opportunities for adaptive management	0.348	0.050	-0.115

Table 5

Mean scores on indexes reflecting respondents' views of contributors to NEPA success and ways to improve NEPA processes.

Contributors to success indexes (7-pt. scale)	Advisory	Line officer	Bridger	Implementer	Overall standardized mean
Team effectiveness	5.98	5.91	5.99	5.93	5.95
More decisionmaker	5.98	6.05*	5.88	5.57*	5.87
By-the-book NEPA	5.68*	5.56	5.50	5.47*	5.56
Defensive NEPA	3.79*	3.26*	3.25*	3.27*	3.39
Index of NEPA reforms (5-pt. scale)					
Policy reform	3.48*	3.89*	3.61	3.60*	3.65
Increase programmatic	3.22*	3.66*	3.42	3.50*	3.45
Discretionary control	3.21*	2.80*	2.96	2.96	2.98

* $p < .05$.

Different functional group accountabilities were also at the center of focus group discussions about the reasons underlying differing views on collaboration with the public. For line officers, implementers and bridgers, there is no immediate payoff for engaging in this form of collaboration. It only takes one individual or group to file an appeal or litigate agency decisions, and a long collaborative effort is no surefire protection against these measures. Operational functional groups face further disincentives to collaboration with the public, including the expenditure of time and effort and the emotional costs of addressing conflict (Manring, 1998). Some mentioned that line officers may be forced to pay overtime to employees engaged in after-hours collaboration with the public, thus raising the price of the NEPA process, and potentially jeopardizing implementation. While some suggested that public scrutiny often works to improve NEPA analyses, operational functional groups often noted that collaboration requires compromise and argued that often these compromises produce what they view to be less desirable environmental outcomes.

In contrast, advisory personnel showed significantly greater support for collaborative public participation. In focus groups, advisory personnel noted that collaboration with the public is for some a "sacred cow" that remains salient at the advisory level for its utility in maintaining agency image and credibility. If questioned by "Congressional" on a problematic project, advisory personnel can report that they are working on "collaboration." Participants explained that the term itself is "preventative maintenance."

Some advisory personnel that participated in focus groups expressed awareness that their accountabilities may conflict with those of the agency's operational workers, noting their support for collaboration coupled with the pressures for process efficiency place the implementer in a difficult place. This further supports our interpretations of the data.

"One of the things we do to implementers *every time*—we know it takes 1½ years to do an EA, and it takes 3 years to do an EIS. So we give them 6 months to do an EA and we give them 1 year to do an EIS, and then we say: 'and you should collaborate and it get it done before the fiscal [year ends].'"

5. Conclusions and implications

This research set out to uncover whether or not there might be a single consensus perception of the purpose of NEPA in the Forest Service and whether there might be some particular suite of practices or strategies that Forest Service NEPA practitioners agree could contribute to more successful processes. We found only a weak consensus that the purpose of NEPA is primarily to disclose environmental analyses and that effective ID teams are critical to achieving success. In addition, we found competing versions of NEPA indicative of contests within the agency for influence over NEPA processes and their outcomes.

On the one hand, the results present some good news from an agency perspective. First, the elements most commonly believed by practitioners to lead to greater success in NEPA processes, in particular ID team factors, are internal to the agency. As such, the research has identified an area that might be realistic to address in a meaningful way through agency training. Moreover, the diversity of strategies selected by different individuals as valuable, and of open-ended comments, reflects an acute understanding amongst agency personnel that no one-size-fits-all solution exists for agency planning processes.

On the other hand, competing visions of NEPA's purpose and struggles for influence in the decision-making process represent clear challenges for the agency. Without a clear critical task for NEPA, implementers and decisionmakers may each aim toward different goals (Wilson, 1989). This poses a challenge for advisory personnel to effectively communicate with field operators. Different views of NEPA's relationship to decision-making can further strain relationships between line officers and ID team members. ID team members' survey responses indicated that NEPA serves as a primary mechanism through which they feel empowered to influence management decisions. As some line officers keep NEPA processes separate from decision-making, ID team members can come to feel disenchanting with their work.¹

While these tensions are not always present within every NEPA process or always felt by all agency personnel, trends revealed within this study suggest that different functional groups within the agency may be structurally programmed to have different critical tasks for NEPA. In other words, the structural arrangements through which the agency complies with NEPA can lead to conflict. As such, NEPA processes become a major playing field on which competing ideals and accountabilities struggle for influence in land management decisions.

While the phenomenon of competing critical tasks is certainly not unique to the Forest Service (Hall, 1991; Pondy, 1967; Wilson, 1989), the implications may go beyond tasks associated with NEPA. They may elicit a typical bureaucratic response to excessive variability at the field level of increased top down control (Pondy, 1967; Wilson, 1989). This response may have an undesirable ripple effect through the agency. Restricting operational autonomy can lower employees' commitment to their organization, which in turn can negatively affect job performance (Riketta, 2002; Riketta and Landerer, 2005). At the same time, competing critical tasks and accountabilities may deteriorate the common social identity typically found in successful organizations, diminishing trust between supervisors and subordinate, and potentially leading to

¹ Newer implementing regulations, which were published in the federal register in Jul, 2008 (after the survey), direct responsible officials to "coordinate and integrate NEPA review and relevant environmental documents with agency decision-making" (C.F.R. §220.4 (3)(c)).

further declines in performance (Kramer and Cook, 2004; Willemyns et al., 2003). Multiple NEPA critical tasks may also complicate or confuse any clear connection between these tasks and agency mission. A gulf between tasks and mission may be especially problematic for public servants who, more than workers in other sectors, must understand these connections to stay motivated to achieve the agency's mission (Ebrahim, 2005; Wright, 2007).

Not all consequences of internal agency conflict are negative, however. Overt task conflicts, defined as perceptions of “disagreements among group members about the content of their decision” (Simons and Peterson, 2000: 102), can be good for team processes as they may stir greater debate and more thoughtful consideration of project elements (Amason, 1996; Putnam, 1994; Simons and Peterson, 2000). In fact, one could argue that the very intention of NEPA may have been to create such debates so that deliberation could lead to better outcomes (Caldwell, 1998; Dreyfus and Ingram, 1976). A recent study, however, suggests that while conflict over appropriate outcomes might lead to more positive process results, conflicts about how to get the work done tend to lead toward less desirable outcomes (Stern et al., 2009). The disagreements identified in this paper and its companion piece (Stern et al., 2010) relate to both forms of conflict. Further, it is unclear whether or how commonly different ideas and agendas related to Forest Service NEPA processes are openly acknowledged within the agency's planning activities. As such, the exact impacts of competing conceptions of NEPA processes on process outcomes may be variable and worthy of future study.

The research has also identified some other key avenues for future research. Additional studies on the confirmation and impacts of competing accountabilities in the agency could reveal valuable lessons concerning agency communication and performance. Furthermore, while studies of NEPA processes themselves are present in the literature (Cortner, 1976; Espeland, 1994; Overdevest, 2000), few have attempted to look across NEPA processes to test whether certain strategies actually do tend to lead toward different outcomes across contexts. Laband et al. (2006) studied contextual factors influencing appeals on Forest Service fuels reduction projects, but did not focus on process-related variables. Stern et al. (2009) examined the influence of process-related variables on team leaders' perceptions of Forest Service NEPA process outcomes, but only on recreation-related NEPA processes. The study found internal team member satisfaction, compromise between interested parties, and perceptions of mission achievement to be the most predictive of perceptions of excellent outcomes. A greater focus on the influence of internal team interactions across a broader suite of projects would test the hypotheses of Forest Service NEPA practitioners concerning their importance for successful NEPA compliance. Furthermore, research explicitly on communications between functional groups about NEPA within the agency could further illuminate causes and challenges associated with disparate views about NEPA and could move the agency toward a better understanding of the relationships between employees.

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