Leadership Impact on Forest Service Operations: Intriguing Ideas from Public Administration Theories

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Managers have subordinates—leaders have followers.
(Murray Johannsen 2012)

hat happened to the USDA Forest Service? This well-worn topic seems to be gaining a dismal, cynical edge. "Once heralded as among the most respected and effective government agencies, the Forest Service has become a case study of bureaucratic red tape and low morale" (Hull 2011). Employees give it low marks for leadership, ranking it 198th out of 229 agencies in a recent survey (Partnership for Public Service 2011), and describe a stressful and demoralizing work environment (Brown et al. 2010). The Government Accountability Office (GAO) decries its endless reorganizations, ill-planned and ineffective new technologies (Nazarro 2009), and poor budget stewardship (GAO 2011). Line officers surveyed thought the Forest Service most rewards agency loyalty and least rewards innovation and independence (Kennedy et al. 2005)—values seemingly at odds with leadership criteria such as Leading Change and Leading People (Office of Personnel Management 2012).

Forest Service founder Gifford Pinchot could lead change and people. He combined cutting-edge science of his day with savvy understanding of the political environment. He shaped a system of national forests, a profession, and an organization devoted to their care—and was fired for insubordination. By the 1950s, the Forest Service was described as an effective organization in the classic study, *The Forest Ranger* (Kaufman 1960). This tidy and insular organization focused on timber, range, and mining. It balanced national goals with decentralization and local autonomy by developing "voluntary conformity" in its field leadership—district rangers—through practices such as hiring only foresters, frequent transfers, and reviews. Fifty years later, more public interest and mandates for the environment, workforce diversification, balanced budgets, perfor-

mance, and security have reshaped the Forest Service. But old leader norms may operate today—producing leaders ineffective for a complex environment.

Theories from the field of public administration on complex organizations hint that the Forest Service organization may still operate as it was initially designed, despite external forces and internal shifts in demographics and policies. The design is maintained by a resilient, self-reinforcing leadership, itself an artifact of earlier times. I explore this leadership design using (1) my observations as a former employee, (2) Kaufman (1960) and recent work for insights on organization impact on leaders, and (3) four ideas drawn from complex organization theory. Finally, I suggest more empirical research on this topic and offer some broader implications for federal government.

Personal Experience with the US Forest Service

I am not a forester. I came to the Forest Service after a short career in journalism and graduate work in public administration—the science behind government management—which caused me to view organizations as "organisms" that over time focus on organization survival over mission. This outlook kept me from immediately accepting agency norms; instead, I tended to observe and evaluate. I started in the late 1980s when organization change was in vogue, so my work with change efforts and consultants only reinforced this tendency. My subsequent career in public affairs, policy, and leadership provided experience across the country with every level and division-National Forest Systems, Research, State and Private Forestry, and Business Operations. During my tenure, mission and workforce broadened. A rigid system of directives and management reviews softened. The Forest Service manual was less judiciously applied and much was under revision. The organization change fad ended. I saw one fascinating constant—difference between leaders (line officers) and other employees (staff):

• Many aspiring to line positions followed predictable rites of passage that separated them from others: visibility through details or teams, finding a sponsor, and focus on upward mobility. The career path often included a position as a district ranger, a stint on one of the office staffs in Washington, DC (preferably in Legislative Affairs), Dep-

Received March 2, 2012; accepted August 3, 2012.

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Acknowledgments: The author thanks Dr. James Wolf, professor, Virginia Tech Center for Public Administration and Policy, who introduced her to the fascinating subject of Complex Organization Theory, and patiently helped her sharpen the focus of this article through several iterations. She also thanks Marc Stern, associate professor, Virginia Tech Department of Forest Resources and Environmental Conservation, and dissertation author Art Gaffrey, for their reviews.

uty Forest Supervisor, and, if successful, Forest Supervisor. A few moved higher.

- Staff jobs were stepping stones for upwardly mobile line aspirants, and key positions often were filled by generalists not from that discipline. Specialists from the discipline often felt marginalized.
- Line officers were the focus. Little could be done without their approval—partly because of the sweeping authority given to supervisors by Office of Personnel Management rules, and partly because of the Forest Service paramilitary tradition of line authority. They were "the field" to their superiors and thus in demand for teams, special projects, and frequent management team meetings. Staff had to work around their limited availability, disrupting and fragmenting work processes.
- Most line officers seemed more upbeat than other employees. Many had moved every 3–4 years and experienced new adventures, success, and good career endings.

After a career in high-level staff jobs, I hoped my experience might "make a difference" at the field level so I left Washington, DC, and took a downgrade to a District Ranger job. There I experienced

- Special access and support services as a ranger, which staff did not have.
- Being suddenly needed by all for advice, influence, and decision processes—not just by my own district staff, but often by staff officers, other personnel, and even my superiors. I was often asked to intervene in difficulties beyond my own sphere of responsibilities.
- Overwhelming demands for compliance from all levels of the organization, often for top-down directives from regional or Washington, DC, office staffs. These included security training, meeting attendance, and use of field personnel to support administrative processes.

Several times during my career I proposed studying the agency's leadership culture but found little interest. Also, I found myself caught up in day-to-day organization chaos with little time to think independently. Only when I left the agency did I have time to pursue my ideas. A fresh encounter with organization theory simply amazed me with intriguing ideas that could be applied to leadership culture in organizations, particularly my own. Even the classic work, *The Forest Ranger*, touted as an

example of Forest Service excellence, had other implications.

Literature on Forest Service Leadership: Kaufman and "Voluntary Compliance"

The Forest Ranger was a public administration study based on observations of and interviews with five district rangers and review of agency policies and procedures (Kaufman 1960). It found that the Forest Service created in its rangers the "will and capacity to conform" through selection, frequent transfers, upward reporting, internal reviews, training, and use of language and symbols. Forty-five years later, Kaufman (2005) reflected that leaders were locked into a prescribed set of ideas and behaviors formed in a particular context and might have trouble changing if a new context required it.

Most recent articles evaluate the growing complexity of Forest Service leaders' decision environment; only a few consider organization influence. District ranger views that aligned more with commodity interests than public interests were found to be influenced by institutional socialization processes that had not changed since the 1950s (Twight and Lyden 1988). Samson and Knopf (2001) labeled the Forest Service an "archaic bureaucracy" that tries to fix complex problems with teams and budget requests; it could only accomplish conservation if dismantled and restructured. Although Forest Service policy emphasizes collaboration and flexibility, Davenport et al. (2007) found the emphasis on upward accountability and centralized power structures constrained community relationships. Twelve district rangers interviewed on National Environmental Policy Act (NEPA) decisions had great diversity in background, management style, and local context (MacGregor and Seesholtz 2008), but all tended to minimize risk in selecting projects. Interestingly, line officer risk aversion prompted more NEPA process, delays, and costs without improving court defensibility (Mortimer et al. 2011). Surveys also found that staff specialists and line officers have very different goals for NEPA analyses. Line officers are focused more on organization goals and getting projects done efficiently than on good process or building stakeholder relationships, perhaps because they are held accountable to meet targets for field resource accomplishments (Stern et al. 2010a, 2010b, Stern and Predmore 2011).

Three dissertations extended Kaufman's (1960) work on the organization and managers. Leonard (1978) showed that managerial assumptions, formal structure, personality, and task environment helped determine manager behavior, which then extended beyond an individual to become part of the organization's social environment. A study of California rangers and their supervisors using classic public administration and organization systems theory concluded that the district ranger role had broadened from a remotely situated resource specialist to a public manager—a public administrator with responsibilities for land and resource management (Brewer 1984).

The most recent dissertation (Gaffrey 2007) indicated that sweeping changes to line officer makeup, role, and controls had not changed compliance behavior. Gaffrey (2007) built on Kaufman's foundation to explore effects of social and policy changes on district ranger administrative behavior. He found an organization in 2007 with less oversight and more diversity than its predecessor in 1960. Internal reviews were infrequent and transfers more voluntary, and there was no longer homogeneity in ranger gender or professional background. Modern rangers followed a yearly work plan rather than keep a daily diary on their activities as in Kaufman's day, and instead of written memos only through the chain of command, communication now came electronically from many sources. Still, Gaffrey saw little difference in rangers' administrative behavior compared with that of their 1960s counterparts. Although his focus was rangers' broad administrative discretion, not organization controls, he still found strong voluntary compliance. Rangers whose administrative behavior was not in line with their supervisor's desire or direction "became aware of voluntary compliance measures being implanted to help them change their decisions." These included reviews of a ranger's staff/community relations or a directed reassignment to a new position. "Since some ranger jobs offered better promotion opportunities than others, moving from one district to another can either be a reward, or a punishment for past behavior. Who gets placed in the choice assignment ... (is) watched by rangers as signals of preference by the agency leadership" (Gaffrey 2007).

Intriguing Explanations from Organization Theory

What has caused and what reinforces compliance in Forest Service line officers? For possible answers, I looked to organization theory, a subset of public administration. This large body of knowledge includes countless theories ranging from classic public administration typologies of the early-20th century to contemporary economic and other perspectives. After reviewing dozens of sources, I chose four concepts from different schools of thought to help explain how compliance behavior could persist and be reinforced even when the organization structure changed. I drew these ideas from classic public administration, decisionmaking, institutional, and power-domination theories. I labeled each concept to help convey it to a general audience. In this section, I briefly summarize each concept and its source and give a few sketches of how it might apply to Forest Service leaders.

Rules-Driven Management (Public Administration)

What I call rules-driven management emerges from classic public administration studies. Weber (1947) was one of the first to study the organization type emerging at the turn of the 20th century in Western civilizations. He defines it as a bureaucracy—an ideal type organization for administering increasingly complex tasks of society. Its characteristics include division of labor with different tasks and responsibilities assigned to specific individuals, offices, or subunits; hierarchy of authority; written rules that govern practice and decisions for consistency across individuals and subunits; separation of organization and individual resources and personal and official roles; and merit appointments—based on qualifications rather than personal ties. "Bureaus" are added as new tasks are assigned. Weber's principles apply to many modern bureaucracies in the public and private sector. Created in 1905, the Forest Service is a classic bureaucracy. It has kept its original design: new divisions (or, lately, service centers or project teams) are simply added as new tasks are assigned. This design was based on early-20th century ideas of scientific managementthat jobs, management, and organization design could be based on scientific studies on how to most efficiently do a given task (Taylor 1911). Administrative processes were objective, universal, natural, altogether devoid of historical and cultural contexts, and dictated only by scientific laws (Lee 1995). Chief Forester Pinchot designed the Forest Service as an instrument within the overall project of scientific management in American society (Nelson 1999).

The bureaucracy implements laws through rules-driven management (Weber 1947). The bureaucratic organization—an ordering of social relationships—is the instrument of legal-rational authority to carry out domination (imposing one's will on others). The law gives an organization a certain task to do and imbues it with authority to do it. Legitimacy rests on rules, and submission to authority is based on *duty of office*. Obedience is to an impersonal order, not an individual. An official with legal-rational authority has power derived from established rules.

Rules-driven management is the basis for Forest Service line officer compliance. The line of authority from the executive branch confers faith in the administrator's legal-rational impartiality. Accepting a line position may restrict the recipient's decision premises to accept organization action and manager direction as impartial and correct. Perhaps this rules-driven structure is the basis for self-reinforcing management behavior outlined in the three theories below.

Unobtrusive Control (Decisionmaking Theory)

Decisionmaking theories move beyond static structure and roles. Simon (1957) and March and Simon (1958) argue that the classic ideal-type view of organizations is too simplistic, describing the organization as a social system. Challenging classic views of administrators impartially implementing laws, they propose bounded rationality-administrators' rationality is bounded or limited by available information, their mental cognitive ability, and the finite amount of time available to make a decision. Perrow (1986) further elaborates how organizations shape decisionmaking. Organizations help create bounded rationality through unobtrusive control, a nice descriptor of how domination quietly works out in modern bureaucracies. Premises for decisions are controlled through division of labor, systems of hierarchical authority, communication channels, training, and indoctrination. These methods limit information to that which encourages managers to make decisions viewed as correct by the organization and helps

them adapt their decisions to organizational motives. Perrow defines organization structure as patterns of behavior that are relatively stable and only slowly change. A supervisor structures the environment so employees see the proper things in the proper light. The supervisor appears to give few orders but sets priorities by statements such as "we had better take care of this first." Organization communication systems and vocabularies also screen out parts of reality and magnify others, relying on managers' bounded rationality to decide based on precedent or limited search for alternatives. Organization symbols become the real world and anything that does not fit is not communicated. Members then only see things as described in an organization's vocabulary. Unobtrusive control may have evolved to reduce conflicts. An organization limits information and controls managers' cognitive premises to shape behavior without open coercion (Perrow 1986).

Kaufman's (1960) observations illustrate these ideas. Rangers make the decisions the organization wants them to based on organization premise-limiting factors of frequent moves, professional affiliation, and top-down information channels. According to Gaffrey's (2007) examples, rangers still comply today. Why does voluntary compliance persist despite fewer controls, broader responsibilities, a more diverse workforce, more information sources, more public involvement, and competing environmental laws and directives? For this, I turn to newer theories on organizations.

"The Way We Do Things" (Institutional Theory)

Institutional theory explores how organization values persist regardless of outside stimuli. Organizations instill values, create reality, and reinforce structure through belief systems that exist as distinct normative systems. The discipline of forestry, for e.g., is an institution with a system of values and norms and a view of reality that persist over time. Public organizations constantly must seek legitimacy because they are not designed for profit-making and are likely subject to pressure to continually justify the mechanisms they set in place as something right and legitimate (Scott 2008). Given the legal-rational basis of government authority, government bureaucracies develop practices that relate the way we do things to doing the right thing. A government organization maintains a sense of legitimacy by conforming to law. Public organizations are given tasks and authority, and make rules and procedures for doing tasks and also develop into social realities that create rules for how one operates in an organization. Leaders are socialized to accept these rules as the legitimate way to do things. Leader interaction makes up social structures that in turn determine leader values and behaviors (Scott 2008).

In the Forest Service, positions such as District Ranger or Forest Supervisor with "line authority" not only have specific roles and duties, but are imbued with moral legitimacy for whatever actions they undertake. Some of the organization rules or accepted practices for Forest Service line officers include upward-looking compliance, innercircle selection of other compliant employees for advancement, and use of staff positions for stepping stones. These have become institutionalized as the way we do things and thus, the right way to do things.

Position Power (Power-Domination Theory)

Power-domination theorists build on some of the past theories discussed, blending concepts of legitimate authority and rationalizing tendencies of actors to describe the ability of the management culture to reinforce old structures in the face of change. A recent case study considered a United Kingdom police force publically exposed for corruption. Despite reforms, local officers continued to enforce old ways with implicit support from subordinates (Gordon et al. 2008). The authors claim managers' legitimate authority becomes a social reality that channels power in organizations. Practices embedded in an organization's social reality may legitimize certain actions and unobtrusively delegitimize others. Building on unobtrusive control, position power is how people in authority can subtly articulate old hierarchical power relations and formal bureaucratic practices, despite structural change aimed at the opposite behavior. Only viewpoints and actions that resonate with the prevailing social order will be considered legitimate. Those with position power rationalize what is called legitimate, and subordinates accept their version as rational.

Using position power, Forest Service line officers may unobtrusively articulate and reinforce hierarchical power relations and formal bureaucratic practices even in the

absence of formal directives or a homogeneous workforce. Today's line officer may be urban, female, from any one of many diverse ethnic groups, and from a nonforestry profession, yet socialized to operate much as her rural, white male forester predecessors. Pressure for compliance may be passed on by only selecting and promoting those who comply, as indicated in Gaffrey's (2007) examples. Compliance with organization norms seems to now be an end in itself for line officers. Conflict may arise when staff specialists and other employees act from institutional values of their profession rather than from Forest Service organization compliance.

This position power model could further illuminate the conflict between staff and decisionmaker goals found in recent NEPA studies (Stern and Predmore 2011) as well as employees' growing critique of leadership in the Partnership for Public Service and other surveys. It could explain recent burdensome business procedures handed down by managers who treat each new societal mandate (a set of rules to enforce new society priorities such as civil rights or homeland security) as not only a new rule but a new priority. Overemphasis on line officers' careers, adherence to rules for their own sake, and the resulting impact on staff effectiveness might contribute to other Forest Service-acknowledged problems such as ineffective and process-heavy NEPA analysis (Bosworth 2001).

Summary and Implications

The Forest Service's original structure as a classic bureaucracy (Weber 1947) is the foundation for resilient line officer influence. The legal-rational premise reinforces rules-driven management and presumed infallibility of line officers. Unobtrusive control supports selecting for line-position employees who seek to do what the agency wants, and transfers offered as rewards or punishments reinforce upwardly mobile managers who take their cues from those above them in the chain. The Forest Service view of reality becomes the "real world" for its members. This allows contradictory organization views that field managers (District Rangers or Forest Supervisors) must make all crucial field decisions and are also the only valid source of "field perspective" for short-term upper level assignments—creating organization chaos as staff must plan projects

around unavailable managers. Using the organization and its authorities to promote, shape, and reinforce compliant leaders has become institutionalized as the way we do things and the right way to do things in the Forest Service. Because these methods are practiced by line officers who hold position power and define how things are done and are also reinforced by up-and-comers who aspire to line positions, challenges, or alternate approaches are unlikely.

This may be why the Forest Service was called rigid (Twight and Lyden 1988) or an archaic rules-driven bureaucracy (Samson and Knopf 2001) despite its many changes. It helps explain the disconnect between employees and managers as well as conflict line officers indicated between their own values and that of the organization (Kennedy et al. 2005). The results of line compliance may be garnering low employee scores for leadership and GAO critiques as mentioned previously. Maybe this is why after two "reform chiefs" from outside the usual chain-ofcommand (Jack Ward Thomas and Michael Dombeck), the organization returned to tradition with three chiefs from the usual upwardly mobile track of line moves, or why the 1990s era of Reinvention and reform ended so abruptly. It could be why new centralized business processes in recent years caused so much disruption as compliant managers treated them as new laws to be obeyed. Perhaps most managers from district rangers on up the chain continue to construct a reality where voluntary compliance with informal or formal orders is expected and such orders are obeyed. Any or all organization requests are legitimate and the right thing, backed up by the authority and meaning of the Forest Service itself. Compliance is reinforced by selecting and promoting for position power those who comply. Compliance may be an end in itself for line officers. Adherence to the original bureaucratic design is reinforced by a leadership designed to be impartial and unquestioning of any societal directives that come

But should compliance be a concern? After all, it is a key function of government operations, and may work for reaching simple goals—as it did for a simpler Forest Service. I have suggested that compliance for the sake of compliance could be an archaic function of outdated bureaucracies that may prevent real leadership. To be successful, according to Wilson (1989), a bureaucracy

must manage behaviors that enable the organization to address its critical task, its key environmental problem. However, he notes that the bureaucratic design for stability and routine will resist true innovation needed to redefine the critical task. The Forest Service had a clear self-defined critical task of timber and range management in 1960 but today may lack such clarity. To redefine the critical task (mission) is a leadership function. Productive change only occurs when leaders correctly analyze the organization's existing culture against attributes needed to achieve strategic objectives (Schein 2010). What if leadership is the force that resists change?

Conclusions

Despite major changes in the Forest Service's environment and makeup, mechanisms in its design continue to select and reinforce *voluntarily compliant* line officers who are upwardly focused. This assembly line produces the same product regardless of material or entry point.

I have offered up a hypothetical structure of how four concepts from Complex Organization Theory might play out in resilient voluntary compliance behavior of Forest Service managers and ramifications for the organization. Anecdotal and survey evidence indicates that in this static, rulesdriven bureaucracy, unobtrusive control measures of the past have been institutionalized for district rangers and other jobs up the chain of command, reinforced by the way we to do things promotion methods and position power of line officers. This perspective is not aimed to discredit the land or work ethic of Forest Service managers or employeesonly to point out there may be underlying social forces at work in the organization producing values and behaviors that will not address today or tomorrow's complex land stewardship challenges. The empirical evidence is limited—only District Rangers have been studied much and behaviors and relationships "up the chain" only inferred. It remains for future scholars to link organizational theory to empirical evidence of mechanisms that appear to be operating in the Forest Service. Solving leadership problems requires first identifying the causes and reinforcements of nonleadership. These could be operating in many of the organizations that order all aspects of our complex society.

The Forest Service is a good place to consider this problem, because its original leadership design has been well described. Leaders socialized to comply may not always respond creatively to new challenges to refine their mission with new knowledge and social change—they may tend to only do what they are told. This way, they may just keep adding new divisions, staffs, processes, and teams in reaction to laws, lawsuits, and other pressures—increasing complexity and fragmentation and employee and public frustration. Understanding this dynamic in the Forest Service could lead to similar insights about other organizations and possibly aid true reinvention of the federal sector. Instead of rhetoric about transformative leaders or antigovernment diatribes, the focus could be redesigning organizations and leadership to function well for the 21st cen-

Literature Cited

- BOSWORTH, D. 2001. The process predicament: How statutory, regulatory and administrative factors affect national forest management. Statement of Dale Bosworth, Chief of USDA Forest Service, Oversight Hearing before the House Subcommittee on Forests and Forest Health, Resources Committee, 107th Cong., Dec. 4, 2001.
- Brewer, A.L. 1984. *The district ranger: From Smokey Bear to public manager.* Dissertation, Golden Gate Univ., San Francisco, CA.
- Brown, G., T. Squirrel, and C. Harris. 2010. Growing organizational challenges for the Forest Service: Results of longitudinal study in a period of major environmental change. *J. For.* 108(2):77–85.
- DAVENPORT, M., D. ANDERSON, J. LEAHY, AND P. JAKES. 2007. Reflections from USDA Forest Service employees on institutional constraints to engaging and serving their local communities. *J. For.* 105(1):43–48.
- GAFFREY, A. 2007. Administrative behavior: A case study of U.S. Forest Service district rangers. Dissertation, Univ. of La Verne, La Verne, CA. 103 p.
- GORDON, R., M. KORNBERGER, AND S. CLEGG. 2008. Power, rationality and legitimacy in public organizations. *Public Admin.* 87(1):15–34.
- GOVERNMENT ACCOUNTABILITY OFFICE (GAO). 2011. Forest Service: Continued work needed to address persistent management challenges. GAO-11-423T, US Government Printing Office, Washington, DC. 15 p.
- HULL, R.B. 2011. Forestry's conundrum: High value, low relevance. Review. *J. For.* 109(1): 50–56.
- JOHANNSEN, M. 2012. Instructor, Business Management, University of California Los Angeles,

- and senior vice president, TTG Consultants. Available online at www.legacee.com/Info/Leadership/Definitions.html; last accessed Feb. 28, 2012.
- KAUFMAN, H. 1960. *The forest ranger, a study in administrative behavior*. Johns Hopkins Press, Baltimore, MD. 269 p.
- KAUFMAN, H. 2005. Afterword, *The forest ranger*, Special reprint ed. Resources for the Future Press, Washington, DC. 261–269 p.
- Kennedy, J.J., R.W. Haynes, and X. Zhou. 2005. Line officers' views on stated USDA Forest Service values and the agency reward system. USDA For. Serv. Gen. Tech. Rep. PNW-GTR-632. 72 p.
- Lee, E.W. 1995. Political science, public administration, and the rise of the American administrative state. *Public Admin. Rev.* 55(6):539–546
- LEONARD, F.S. 1978. Managerial assumptions: The underlying structure for management behavior in the U.S. Forest Service. Dissertation, Harvard Univ., Cambridge, MA. 330 p. (Abstract available from Diss. Abstr. Int. 39(8):5032. [UMI No. 7904056]).
- MACGREGOR, D.G., AND D.N. SEESHOLTZ. 2008. Factors influencing line officers' decisions about National Environmental Policy Act project design and development. USDA For. Serv. Gen. Tech. Rep. PNW-GTR-766. 27 p.
- MARCH, J., AND H. SIMON. 1958. *Organizations*. Wiley, New York. 287 p.
- MORTIMER, M., M. STERN, R. MALMSHEIMER, D. BLAHNA, L. CERVENV, AND D. SEESHOLTS. 2011. Environmental and social risks: Defensive NEPA in the US Forest Service. *J. For.* 109(1):27–33.
- NAZZARO, R.M. 2009. Forest Service: Emerging issues highlight the need to address consistent management challenges. GAO-09-4443T, General Accounting Office Testimony before the Subcommittee on Interior, Environment, and Related Agencies, Committee on Appropriations, House of Representatives, Mar. 11, 2009. 22 p.
- NELSON, R. 1999. The religion of forestry: Scientific management. *J. For.* 97(11):4–8.
- Office of Personnel Management. 2012. Executive core qualifications. Available online at www.opm.gov/ses/recruitment/ecq.asp; last accessed Feb. 28, 2012.
- Partnership for Public Service. 2011. Best places to work survey: Forest Service (USDA). Available online at www.bestplacestowork. org/BPTW/rankings/detail/AGII; last accessed Feb. 28, 2012.
- Perrow, C. 1986. *Complex organizations*, 3rd ed. Random House, New York. 307 p.
- Samson, F.B., and F.L. Knopf. 2001. Archaic agencies, muddled missions and conservation in the 21st century. *Bioscience* 51(10):869–873.
- Scott, W.R. 2008. *Institutions and organiza*tions: *Ideas and interests*, 3rd ed. Sage Publications, Los Angeles, CA. 266 p.
- Schein, E. 2010. Organizational culture and lead-

- ership. John Wiley and Sons, Inc., San Francisco, CA. 464 p.
- SIMON, H.A. 1957. *Administrative behavior*. Free Press, New York. 259 p.
- STERN, M., AND A. PREDMORE. 2011. Decision making, procedural compliance, and outcomes definition in U.S. Forest Service planning processes. *Environ. Impact. Assess. Rev.* 31: 271–278.
- STERN, M., A. PREDMORE, M. MORTIMER, AND D. SEESHOLTS. 2010a. From the office to the
- field: Areas of tension and consensus in the implementation of the National Environmental Policy Act within the U.S. Forest Service. *J. Environ. Manage.* 91(6):1350–1356
- STERN, M., A. PREDMORE, M. MORTIMER, AND D. SEESHOLTS. 2010b. The meaning of the National Environmental Policy Act within the U.S. Forest Service. *J. Environ. Manage.* 91(6): 1371–1379
- TAYLOR, F.W. 1911. The principles of scientific

- *management*. Harper and Brothers, New York and London. 144 p.
- TWIGHT, B.W., AND F.J. LYDEN. 1988. Multiple use vs. organizational commitment. *For. Sci.* 34(2):474–486.
- Weber, M. 1947. The theory of social and economic organization, T. Parson, T. (trans.). Free Press, New York. 436 p.
- WILSON, J.Q. 1989. Bureaucracy: What government agencies do and why they do it. Basic Books, Inc., New York. 433 p.

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