

Pacific Southwest Research Station and Region 5 Sustainable Operations Survey Report

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Executive Summary

This report presents findings from a survey of USDA Forest Service Pacific Southwest Region (Region 5) and Pacific Southwest Research Station¹ employees regarding sustainable operations. Issues surrounding waste management (i.e., recycling) and waste reduction, energy conservation, water conservation, transportation, other actions currently taken, and barriers and facilitators to sustainable operations were explored. This information was gathered to inform sustainable operations efforts in the region and station. I surveyed employees based on the view that employees' individual actions and attitudes have a large influence on effectiveness of sustainable operations efforts. The presentation represents interpretation based on answers of the respondents (a total of 451, resulting in a response rate of 26.4 percent) and is not designed to draw conclusions about all employees within the region and station. Findings offer insights into current and potential practices aimed at sustainable operations in the region and station.

The main findings were:

- ✓ The majority of waste-reduction measures (seven of nine), reuse of materials (four of six), and energy conservation measures (four of five) were frequently engaged in. Five of seven item types were frequently recycled. This suggests a number of sustainable practices are already in place.
- ✓ Efforts to share fleet vehicles and to downsize were generally supported and practiced. There were, however, situations where respondents expressed concerns important to consider in efforts to broaden both of these measures, particularly when field workers or emergency personnel were involved.
- ✓ Some measures indicated room for improvement. Most traveled to work alone and did not feel they had been encouraged to carpool or use public transportation. Less than a majority reported programs in place to recycle a range of items at their work location. Among those who make purchases, green purchasing occurred about 34 percent of the time.
- ✓ Ideas for increasing sustainable operations were offered surrounding fleet and fleet management, commuting, facilities and construction, fire camps and incident situations, and recycling.
- ✓ A variety of beliefs and attitudes were supportive of sustainable operations. The vast majority believed they have a personal and professional responsibility to behave in environmentally responsible ways, and most believed the public expects sustainable operations. Most potential barriers to sustainable operations were not perceived to be an issue in their work location.

¹ For information about Region 5 of the USDA Forest Service visit www.fs.fed.us/r5 and for information about the Pacific Southwest Research Station visit www.fs.fed.us/psw.

- ✓ Most important to successful implementation of sustainable operations were practical systems put in place by staff on the job and commitment from station and regional leadership.
- ✓ Other topics regarding environmental issues of greatest concern, sources of environmental concern, connection to nature, and problems facing the region and station were also explored and add additional insights into employee concerns and attitudes.

Findings suggest that:

- ❖ Continued leadership support of sustainable operations paired with employee engagement in development of programs that work on the ground will foster maintenance and growth of sustainable operations in the region and station.
- ❖ Specific actions that can be taken in the region and station include:
 - Simple reminders sent via e-mail and included with other communications (such as message banners) that focus on specific sustainable operations actions. Less frequently practiced actions might be useful to target. These reminders help to affirm commitment to sustainable operations and keep the commitment salient.
 - Assistance in setting up carpools, incentives for using carpools or public transportation, and support of telecommuting would be helpful measures to specifically address the usual practice of commuting to work alone. These measures would specifically address a number of environmental issues of concern to employees. Presentation of programs could include a reminder of specific benefits to the environment and to employee well-being gained through adoption of the programs.
 - A Web site accessible to employees could present information on specific actions that could be taken in the workplace, including documented benefits of each action. How-to steps to accomplish the action, including resources others have used that work, might be presented. One specific example would be a listing of green hotels in the area to share with out-of-town guests, and green hotels out of the area that employees could stay at while traveling out of town. Resources to gain support for more-difficult-to-fund and larger scale items might also be presented on this site, along with key contacts to assist ways to leverage funding and energies. The microgrant programs might be featured here as well, including reports of implementation and accounts of how the measures made a difference.
 - Localized groups based in each worksite or small geographic region could be set up, composed of a cadre of volunteers, to examine site-specific concerns and solutions, perhaps working from the open-ended comments provided in this report as a springboard for idea generation. Following the national effort, these could be referred to as “green teams,” localized champions for sustainable operations.
 - Efforts should be kept positive to benefit from the already predominant values that support sustainable operations.

Leaders in the region and station have taken a number of positive measures to encourage sustainable operations, including support of this employee survey, awarding of microgrants, and commitment to national and statewide greening initiatives. Continued investment of resources and reporting on that investment will help employees see continued commitment through action.

The majority of respondents expressed support of sustainable operations and provided a number of examples in their locations, as well as a number of ideas and suggestions for moving forward.

Given the specific concern that sustainable operations efforts might draw resources away from an already strained organization (budget, personnel, and numerous other initiatives), care should be taken to outline how sustainable operations work in a complementary fashion, rather than in competition with, efforts to address these other concerns.

The reader should continue through the full report for specific details on actions already taking place, perceived barriers, and attitudes and opinions pertinent to sustainable operations efforts.

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Introduction

The Forest Service is tasked with caring for the land and serving people. Within its ranks, a cadre of individuals is employed with varying backgrounds, life experiences, and environmental values, attitudes, and behaviors. On a daily basis, these employees' actions make up the defined relationship that the agency has with the land. Part of that relationship includes actions in the workplace, ranging from the environmentally responsible to the less responsible. As the agency strives to focus more on sustainability and reduce its environmental footprint, these workplace actions increase in interest. A survey focused on sustainable actions in the workplace and underlying motivators and barriers was conducted, involving employees of the Pacific Southwest Research Station (PSW) and the Pacific Southwest Region (Region 5 / R5).

The Present Study

The objectives of this study were aimed at gaining insight into the following operational sustainability topics:

- Assess the amount and range of environmentally responsible actions taking place in the work setting such as waste reduction activities, energy conservation measures, recycling practices, green purchasing, consideration of “green” hotels for lodging and meeting destinations, water conservation measures, and fleet management/use practices.
- Gather reported motivators and barriers to successful sustainability activities.
- Measure perceived professional and personal responsibility for sustainability.
- Measure attitudes and opinions regarding sustainable practices and perceived attitudes and opinions of others worked with, as well as perceived PSW/R5 leadership attitudes and opinions.
- Assess respondents' perceptions of the most important environmental issues.
- Gather respondents' ideas for ways to reduce impacts in the office setting.
- Gather respondent descriptors including commute to work and telecommute from home, gender, work location (PSW lab, R5 forest, other), time worked at location, environmental identity, and environmental concern.

Much of the structure for this study rested in the Proenvironmental Behavior Change Model (or PBCM, see Burn and Winter n.d., or Burn 2007). The PBCM identifies five barriers to environmentally responsible behavior (social norms, competing attitudes, setting design, bad habits, and ignorance and misinformation) and links each barrier to tested interventions.

Social norms—One PBCM barrier is social norms. Research supports the idea that social norms may promote or discourage proenvironmental behavior (Burn 1991, Schultz 1998, Winter and Koger 2004). If employees perceive that the agency norm is focused on sustainable activities (and likewise the work location) proenvironmental behaviors are much more likely.

Competing attitudes—A second PBCM barrier is competing attitudes. Although most people believe in preserving the natural environment, other competing attitudes and values may dominate. Likewise, positive attitudes toward convenience and saving money may serve as the competing attitudes barriers to proenvironmental behavior.

Setting design—A third barrier identified by PBCM is setting design, where the design of the physical setting increases the behavioral costs of proenvironmental

behavior while enabling depreciative behavior. For example, recycling is more likely in a setting where containers are clearly labeled and easily accessible. In short, even people inclined to behave proenvironmentally may not if the setting does not make it easy to do so.

Bad habit—A fourth PBCM barrier, was derived from Oskamp's (1991) point that habit can create attitude-behavior inconsistency. Some environmentally depreciative behaviors are unthinkingly performed out of habit or tradition. Individuals and groups tend to adopt customary ways of interacting with the environment that over time become entrenched and automatic. An example of this would be driving the four-wheel-drive SUV to a meeting across town, instead of arranging for a more fuel-efficient vehicle for the day.

Ignorance and misinformation—A lack of information or incorrect information may be barriers to proenvironmental behavior. Some people may behave inconsistently with their attitudes owing to ignorance (Oskamp 1991) and lack of knowledge can prevent environmental concern from leading to consistent environmental action (DeYoung 1988-1999).

The benefit of PBCM is as an organizing structure for examining barriers to proenvironmental behavior. In addition, within each barrier type, PBCM offers an array of intervention strategies derived from applied social psychology aimed at increasing environmental responsibility.

One survey section addresses primary environmental concerns of the respondent, followed by an environmental concern scale. This scale measures origin of environmental concern, with the idea that although a majority of respondents will be concerned about environmental issues, the source of their concern may differ greatly (adapted from Schulz, see Schultz and Zelezny 2003 and Snelgar 2006). For example, individuals may be concerned about environmental issues because of the consequences for their personal health (egoistic value). Understanding the underlying source of concern (linked to central values) allows tailoring of programs aimed at increasing environmental behaviors.

Another section explores connection to nature, measured through the Environmental Identity Salience Scale (adapted from Clayton 2003). This scale has been used across a variety of populations and has been shown to be predictive of environmentally responsible actions.

The main purpose of this study is to examine current proenvironmental behaviors taking place in the Forest Service work environment and to explore avenues for additional steps towards sustainable operations.

Methods

Sample Selection

I created a database, containing all PSW and Region 5 employees' active e-mail addresses and work locations (forest or lab based on information in the Enterprise Directory). A sample of individuals to be surveyed was constructed through a random process. The desired number of respondents from within PSW and R5 was determined, and then the proportions of respondents to be selected from each location within PSW and R5 (for example lab or forest) were set. Proportions were based on overall distribution of PSW and R5 employees in the initial database. I then used a random-number-generating program to identify who would be selected into the sample and noted those selections in the database.

Survey and Study Materials

A survey was constructed for this study and placed on an online Web service (Zoomerang). The survey contained items on reduction of use, re-use of items, recycling, perceived responsibility, and attitudes regarding sustainability. A few items examined location (to verify the information we had from the Enterprise database), and years of employment with the Forest Service. The full survey appears as appendix A in this report.

Procedure

A letter (app. B) describing the survey effort and approval to use Forest Service time to participate was signed by Bernie Weingardt (then Regional Forester for Region 5) and Jim Sedell (then Station Director for PSW). The letter went out a week in advance of the survey through employee mailrooms. Employees who were randomly chosen as participants received up to three messages through Lotus Notes, describing the survey and inviting them to participate. A link to the survey site was provided, along with an “opt out” link provided through Zoomerang that precluded any future mailings regarding the survey being conducted. A maximum of two reminder messages were sent, only to those who had not fully completed the survey or had not opted out. The final reminder message included announcement of an incentive, a random prize drawing for those who fully completed the survey before the closing date.

Respondents

The initial database included 8,607 names drawn from the Enterprise Directory; of which 8,582 could be linked to a specific location (8,180 of these were linked to R5, 402 to PSW). A total of 1,719 names were randomly selected from this original sample to become study participants (1,709 became the valid sample when 10 proved to be invalid e-mail addresses). The overall response rate for this study was 26.4 percent ($n = 451$), including 24.1 percent of regional employees and 33.2 percent of station employees who were randomly selected. Variation in response rate by location was considerable, and is outlined in appendix C. Prior surveys of Forest Service employees have revealed a similar issue with response rates. Many reasons for nonresponse have emerged across these studies including a shortage of time, disapproval of supervisor to use agency time to participate, disinterest in surveys and or survey topic, failure to read e-mail (quick scans lead to quick disposal of inbox items not directly of interest), and inaccurate e-mail addresses (for example, the individual has left the agency but the e-mail address is still active). In this particular study, a few individuals contacted us reporting difficulty with the survey site. The site remained functional throughout the study period and we attempted to directly troubleshoot issues; individual connections to the Internet and settings on computers appeared a plausible barrier for the few instances that we could not resolve.

Because the response rate was lower than what would be desirable to make confident generalizations from the responses, caution should be exercised in interpreting results. A nonresponse bias check was not possible owing to multiple constraints; therefore the degree of similarity between our respondents and the random sample is unknown. Furthermore, there is no preexisting knowledge of the incidence of selected behaviors or attitudes held by the general population of station and region employees, disallowing adjustments of reported information to fit population estimates.

Results

Who Participated

The 451 respondents were almost equally distributed by gender (45.9 percent male, 49.2 percent female, 4.9 percent missing). The majority are assigned to Region 5 (74.3 percent), with about one-fifth (17.7 percent) assigned to PSW. The remainder is assigned to the WO (3.3 percent), an enterprise program (1.1 percent), or other segment of the Forest Service. These individuals were included as respondents because they work within the Pacific Southwest Region, without regard for the work unit they were assigned to. Respondents work throughout California and Hawaii as shown in appendix C. They averaged 14.71 years worked in California or Hawaii (ranged from less than 1 year up to 41 years), and reported 16.57 years worked in the Forest Service (ranged from less than 1 year up to 42 years).

Waste Reduction Measures

A set of behaviors focused on ways to reduce overall consumption was examined. Approaches to reduce overall use, including the reuse of materials, were of interest. Each of these occurred in relatively equal frequency within the region, the station, and other locations (no statistically significant differences).

Nine actions involved the reduction of use of materials or water—

For each of these, respondents were asked to indicate the percentage of time each action was taken out of the total opportunities to take that action, ranging from 0 = never, 50 = about half the time, to 100 = always (some respondents alternatively chose NA, representing not applicable, or skipped the item entirely).

Seven of the actions were **frequent** (reported as actions more than 50 percent of the time, fig. 1):

- ✓ Turn off water when not in immediate use (SD = 21.66, mode = 100, n = 426)
- ✓ Edit documents on the computer before printing (SD = 24.94, mode = 100, n = 436)
- ✓ Use e-mail or physical bulletin boards for memos and announcements (SD = 27.06, mode = 100, n = 400)
- ✓ Read documents on the computer without printing (SD = 25.16, mode = 50, n = 447)
- ✓ Design documents to conserve paper when/if printed (SD = 35.64, mode = 100, n = 388)
- ✓ Make double-sided copies (SD = 33.58, mode = 50, n = 439)
- ✓ Print double-sided (SD = 36.63, mode = 50, n = 424)

Less frequently done were:

- ✓ Use routing slips for review of hardcopy documents (SD = 38.07, mode = 0, n = 256)
- ✓ Gather rainwater or runoff for landscape watering (SD = 24.50, mode = 0, n = 227)

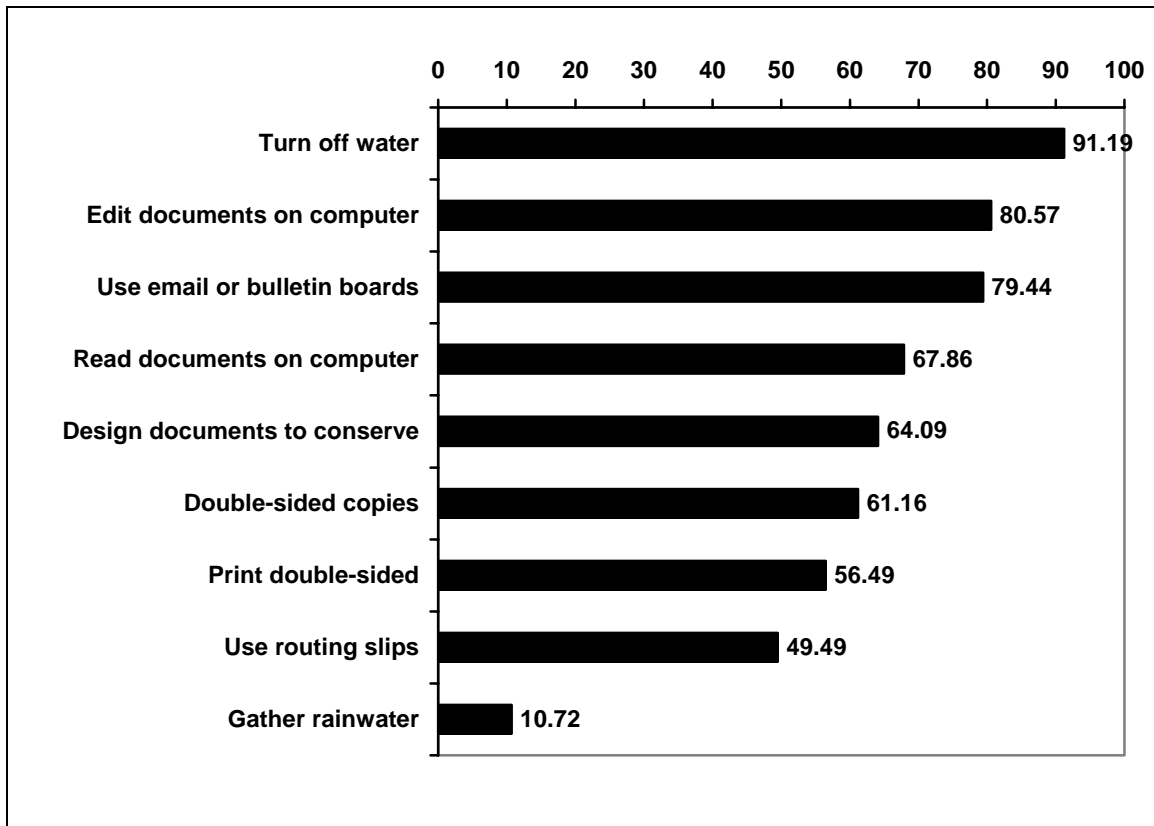


Figure 1—Percentage of time actions were taken to reduce waste.

- ❖ These findings suggest that reminders to print double-sided documents and to copy double-sided might be helpful. In addition, suggestions to gather rainwater to provide water for landscaping may be helpful in increasing frequency.

Six actions involved the reuse of materials—

Again, respondents used the 0-to-100 scale, representing the percentage of time they took each action.

Four of the actions were **frequent** (fig. 2):

- ✓ Reuse file folders (SD = 26.83, mode = 100, n = 430)
- ✓ Reuse packaging materials (SD = 38.10, mode = 100, n = 383)
- ✓ Reuse field materials such as planters and/or containers (SD = 35.44, mode = 100, n = 220)
- ✓ Reuse scrap paper for taking notes (SD = 32.44, mode = 50, n = 448)

Less frequently done were:

- ✓ Reuse envelopes and/or diskette mailers (SD = 36.73, mode = 0, n = 388)
- ✓ Reuse single-sided paper in a printer for drafts (SD = 30.51, mode = 0, n = 409)

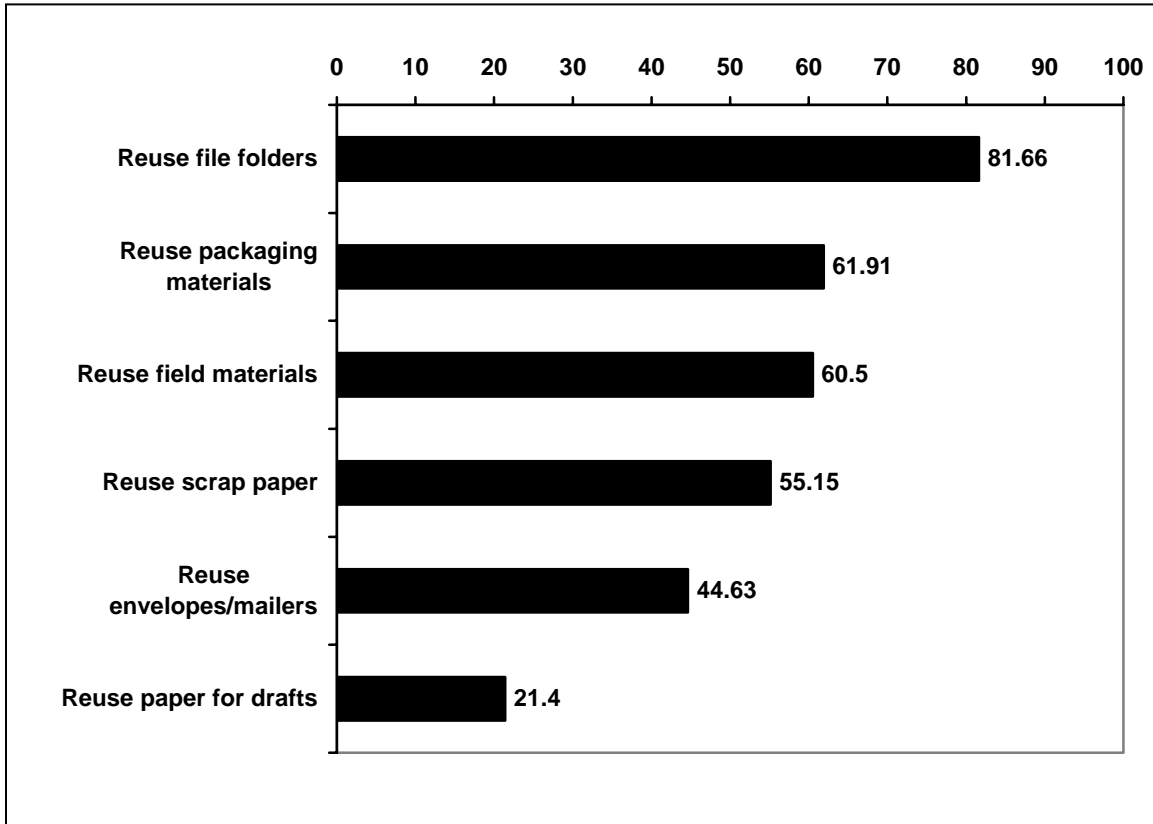


Figure 2—Percentage of time actions were taken to reuse materials.

- ❖ Findings suggest that reminders on reuse of paper for drafts (using GOOS or good on one side), reuse of scrap paper, and reuse of packaging materials, may all be helpful in increasing sustainable actions.
- ❖ Reuse of field materials may be a less practical suggestion and would require specific knowledge of materials not presently being reused and reasons for single use.

Energy Conservation Measures

Five actions resulted in energy conservation—

(The 0-to-100 scale was used for this set of questions as well.)

Four of the five actions were **frequent** (fig. 3):

- ✓ Turn off lights when leaving the office for the day or extended periods (SD = 18.89, mode = 100, n = 437)

- ✓ Turn off electrical equipment when leaving the office for the day or extended periods. (SD = 30.39, mode = 100, n = 423)
- ✓ Turn off computers when leaving for the day or extended periods. (SD = 36.86, mode = 100, n = 439)
- ✓ Unplug chargers for electrical devices when not in use. (SD = 42.40, mode = 100, n = 369)

One of the actions was less frequent:

- ✓ Unplug electrical equipment when not in use overnight or for extended periods. (SD = 40.60, mode = 0, n = 404)

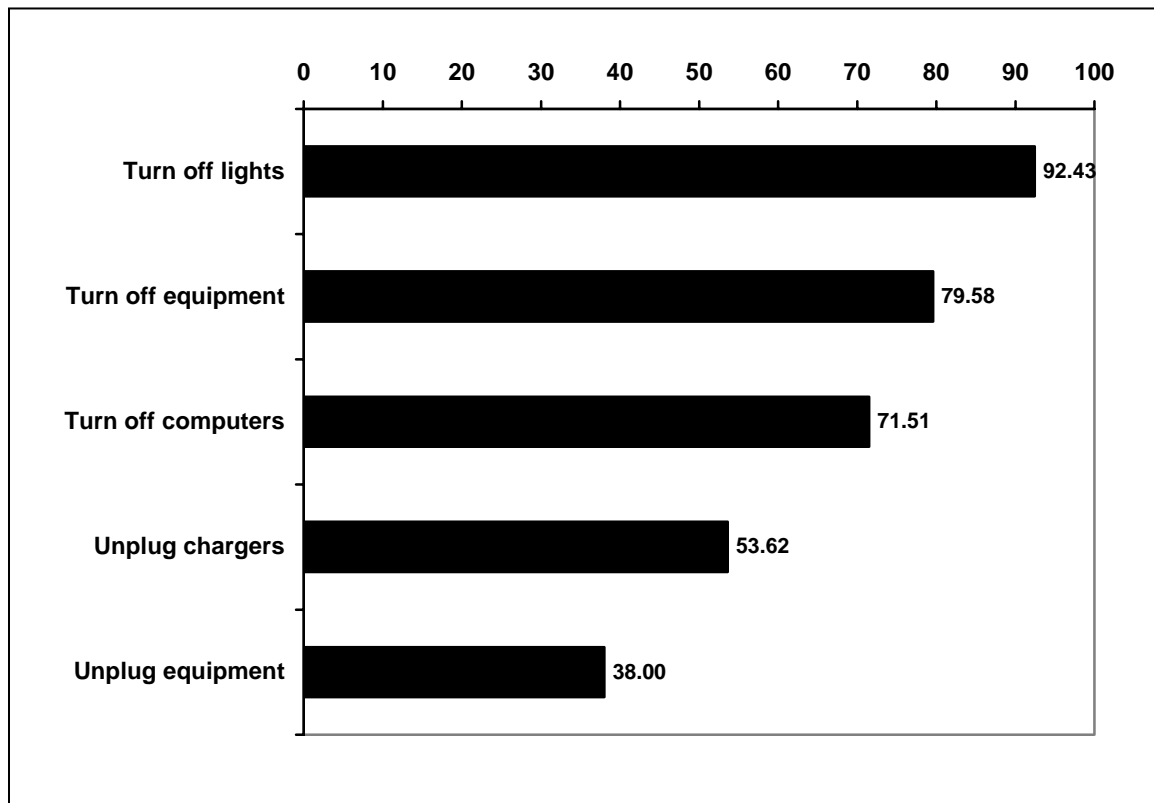


Figure 3—Percentage of time actions were taken to conserve energy.

- ❖ Findings suggest that reminders on unplugging chargers and other equipment when not in use as appropriate to the equipment may be of value. In particular, a focus on those items found to draw the most wattage would be worthwhile.

In addition to asking about these behaviors, we asked about the number of peripheral devices, aside from computer, monitor, printer, and other electrical equipment that drew electricity. One-fourth reported no peripheral equipment, another fourth reported one item, and another fifth reported two items. Nine individuals (2 percent) reported 10 peripheral devices and a few respondents reported more than 10. The average number of peripherals was 2.1 (mean, SD = 3.53, mode = 0 and 1, n = 429). Impact of these devices depends on their actual consumption of energy and how often they are used—two things we did not ask about here. Actual consumption of energy can

be assessed using a measuring device (such as the Kill-A-Watt meter²) to help determine amount of consumption accounted for by electrical devices.

- ❖ Findings suggest that employees with one or more peripheral devices could be encouraged to become informed on level of energy consumption in order to make good decisions about replacement or retirement of these items. At the very least, the items could be unplugged when not in use.

Commuting and Fleet

Travel to work—

The vast majority of respondents (84 percent) reported traveling to work alone in a personal or assigned vehicle. Almost one-tenth (7.3 percent) traveled on foot or by bicycle, and less than 1 percent (0.7) used public transportation. A few (2.9 percent) telecommuted from home 90 percent of the time or more.

Over half of the respondents did not agree that they had been encouraged by their employer to rideshare or use public transportation (53.9 percent); few agreed (8.9 percent).

- ❖ Findings suggest that leadership in Region 5 and PSW could consider expressing specific support for carpooling, public transportation, telecommuting, and other alternatives that would decrease commute impacts on the environment. Assistance in sponsoring carpooling programs, rideshare, and other alternatives may be feasible in some locations. Incentives for use of public transportation might also be considered.

Two items focused on fleet vehicles—

One of these items asked respondents how they felt about sharing fleet vehicles using a reservation/sharing system (reserve/share). The other asked how they felt about downsizing to a smaller vehicle or hybrid when fleet vehicles were up for renewal (downsize/hybrid). Responses to both of these show about one-tenth are not in support of these strategies and another tenth had no opinion. Among those expressing some form of support, the reservation/sharing system was more supported than the downsizing or use of hybrids through present behaviors, although more expressed willingness to downsize or use hybrids (fig. 4).

² The use of trade or firm names in this publication is for reader information and does not imply endorsement by the U.S. Department of Agriculture of any product or service.

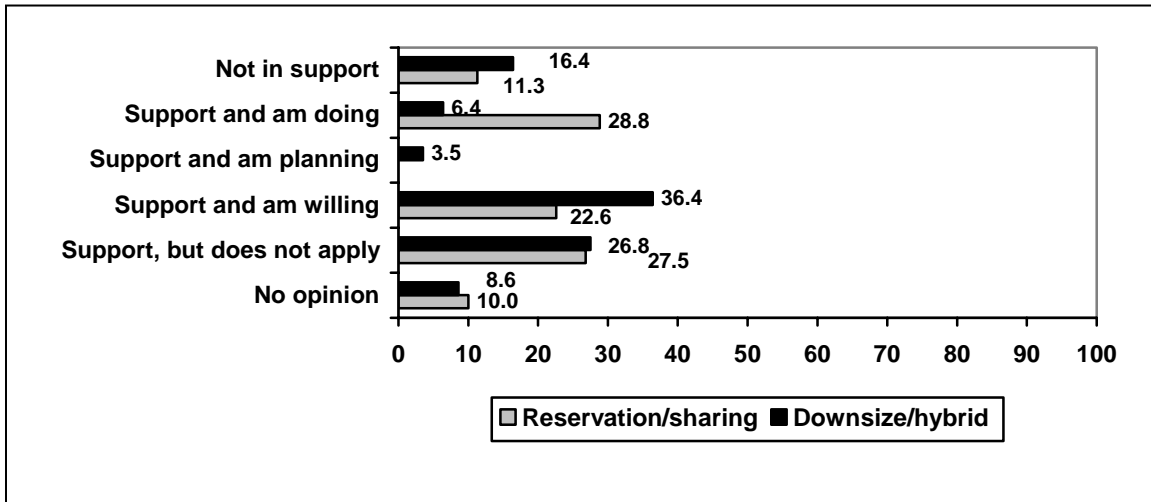


Figure 4—Opinions on fleet strategies.

Those who were not in support of either fleet item were asked to explain their responses. Respondents not in support of the reservation/sharing system ($n = 51$) expressed a number of reasons, including general difficulty, inconvenience, and conflicts (13); conflicts with work assignment or equipment needed (11), or specifically a fire assignment or position requiring own rig (7); unplanned schedule changes/variations including location worked (5); no anticipated environmental benefit (4); concerns about fleet management such as quality of maintenance (3); and conflicts with living situation (3). (The number of concerns does not match the number of people not in support of the reservation/sharing systems because some respondents offered more than one concern and others did not offer concerns.)

Respondents not in support of the downsizing/switching to hybrid ($n = 72$) expressed a number of concerns. The largest number of concerns focused on forest roads and the need for a four-wheel drive with adequate clearance (22). Aspects of hybrids or smaller vehicles in addition to this included inadequate size for crews and or equipment (11), insufficient power (5), inadequate ruggedness or durability (3), and safety in field/mountain situations (3). Two job types were mentioned frequently where downsizing was not viewed to be appropriate including fire and emergency situations (8) and fieldwork (5). Some respondents expressed the general opinion that hybrids or smaller vehicles would not fit their work or situation (6). A few mentioned concerns about cost for initial purchase or maintenance (3) or believed that such a switch would not be efficient (3). Another 12 comments were too diverse to categorize (The number of concerns focused on downsizing/switching to hybrid does not match the number of respondents not in support of this measure because some offered multiple concerns and others did not offer any at all.)

- ❖ Findings suggest that efforts to share fleet vehicles and to downsize are generally supported and practiced. There are, however, situations where respondents expressed concerns important to consider in efforts to broaden both of these measures, particularly when field workers or emergency personnel are involved. Attention to these concerns and addressing them specifically would increase chances of success in continued implementation. An educational effort to address perceptions about futility and actual accomplishments linked to such measures might also be helpful in changing attitudes and reducing resistance.

Recycling Practices

Seven items addressed recycling—

Once again the 0-to-100-percent scale was used, and respondents were asked to indicate the percentage of time they recycled various items out of the number of times when the occasion arose. In some cases respondents chose “not applicable,” so the percentages represent average response among those who had used such products in their work setting.

Five of the seven types of items were **frequently** recycled (fig. 5):

- ✓ Paper and paper-based products (SD = 25.53, mode = 100, n = 446)
- ✓ Plastic (SD = 32.17, mode = 100, n = 402)
- ✓ Printer cartridges (SD = 36.06, mode = 100, n = 289)
- ✓ Batteries (SD = 35.74, mode = 100, n = 374)
- ✓ Glass (SD = 36.70, mode = 100, n = 341)

Two of the item types/recycling strategies were less often reported:

- ✓ Mixed waste recycling in a desk side container (SD = 44.98, mode = 0, n = 292)
- ✓ Other technologically based waste such as diskettes and cds (SD = 37.92, mode = 0, n = 312)

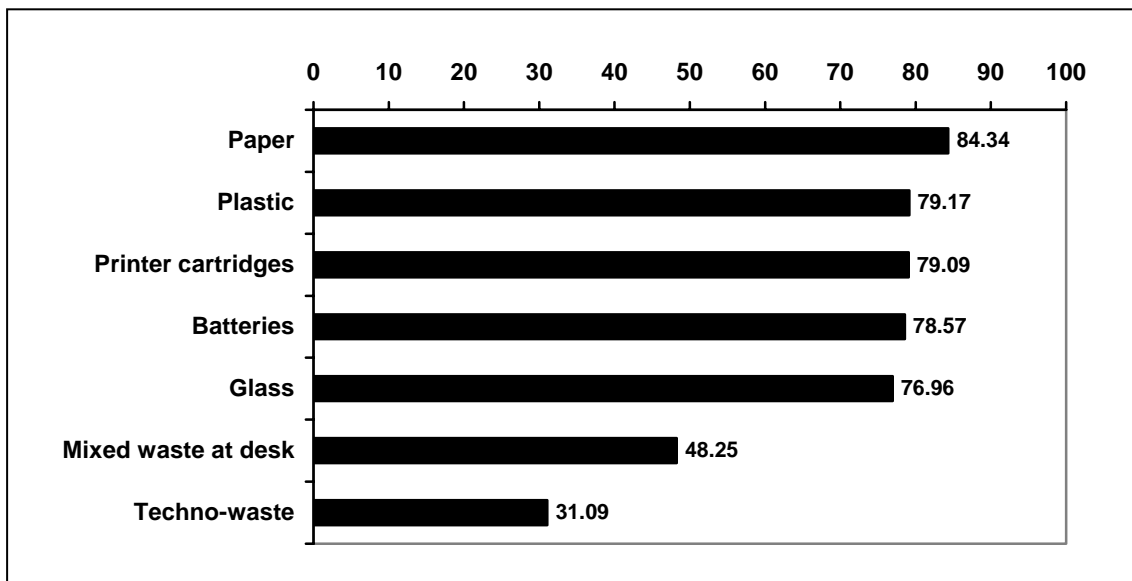


Figure 5—Percentage of time item types are recycled or recycling strategy is applied.

Respondents were asked to rate the degree of truth in the following statement: “Programs to recycle most if not all of the items listed above are not available at my work location.” Less than one-tenth were unsure (7.5 percent). However, more than one-third indicated the statement was true (29.7 percent) or completely true (11.8 percent). About half indicated the statement was somewhat untrue (23.3 percent) or completely untrue (27.5 percent). The incidence of recycling was significantly higher for all the types of

items featured in figure 5 when respondents indicated programs were available at their location (examined through t-tests and available on request).

- ❖ Findings suggest that mixed waste containers at office locations and other work sites could be a useful addition to the work setting. Immediacy of containers and ease of recycling will remain important determinants of successful adoption of recycling programs.
- ❖ Findings suggest that recycling of technologically based waste could be encouraged, given the low level of participation expressed by respondents.
- ❖ Finally, programs that support recycling of all items that can feasibly be recaptured should be considered at all locations, recognizing that in some areas dependence on regional availability of recycling needs to be taken into account. Other programs support recycling of items with prepaid delivery and packaging, allowing some independence from local programs. Recycling of technologically based waste is a specific example of this.

Green Purchasing

Three items focused on green purchasing related to procurement and travel.

- ✓ Although 51 percent did not make purchases, those who did made “green purchases” an average of 34 percent of the time. (SD = 30.65, mode = 0, n = 215)
- ✓ About one-fifth did not travel on business. Among those who did, respondents stayed at hotels with eco-friendly programs about 36 percent of the time. (SD = 35.57, mode = 0, n = 342)
- ✓ Almost three-fourths did not arrange meetings. Among those who did, respondents arranged meetings at hotels with eco-friendly programs about one-fifth of the time. (SD = 31.47, mode = 0, n = 109)
- ❖ Findings suggest that reminders encouraging green purchasing could be helpful. In addition, the conservative percentage of those using eco-friendly hotels when traveling and arranging meetings suggests specific attention to increase awareness of these programs could be very helpful. Informing employees about hotels’ green programs and identifying how to find out that information may be necessary. A list of green hotels might be constructed to be provided to out-of-town agency visitors. Sharing these lists across locations would increase awareness.

Other Actions Taken

An open-ended item (question 42) invited respondents to report other actions they were doing that were not covered in the set of items addressed above. Some of the items mentioned were personal, expressing a central commitment to practice sustainability at home and at work. Others expressed the opinion that the Forest Service is doing a good job overall at “green practices.” Recycling of various items was mentioned several times. Recycling and waste represented a major focus in response to this item. Some respondents telecommute, others drive hybrids. One mentioned various green activities funded through microgrants including a sustainable garden, using a green janitorial service, and recycling of various products. Another mentioned use of green products for serviceware at employee award ceremonies. Specific mentions are listed in appendix D, and the reader is encouraged to look these over for additional greening ideas.

- ❖ The listing of other actions taken was lengthy and demonstrates an array of responsible actions that others might consider adopting in their own day-to-day practices.

Suggestions for Increasing Sustainability

Question 42 (an open-ended item) also invited respondents to offer ideas for increasing sustainable operations, yielding a considerable number of ideas that readers can refer to in appendix D. A number of respondents offered ideas regarding **fleet and fleet management**, such as converting fleet to biodiesel, downsizing some of the fleet to smaller vehicles where appropriate to requirements, and altering fleet management approaches. Others listed ideas surrounding **commuting** issues, including allowing telecommuting, siting offices near public transportation, arranging meetings accessible to public transportation, and encouraging carpooling. Ideas surrounding **facilities and construction** were mentioned by several respondents and included ideas for dual-flush toilets, using solar power, conducting energy audits, using green cleaning products, installing motion-detector lights, avoiding pesticides, and changing the use of heating and air conditioning. A few focused specifically on **fire camps and incident situations**, describing needs for recycling and providing environmentally focused briefings. Comments focused on **recycling** discussed the need for recycling stations for items including computer equipment and electronics, batteries, and general waste. A few suggested sustainable ideas linked to the surrounding community to implement recycling and renewable energy. Others suggested the need for more funding, more involvement from leadership, and educational/awareness programs for employees and recreationists.

- ❖ Findings included a wide variety of suggestions, some less expensive than others to implement. These suggestions might be considered by locations to foster sustainable operations. The variety of ideas demonstrates respondents' tendencies to think about sustainability in a number of ways.

Responsibility

Five items explored perceived responsibility for sustainable operations—

Results indicate that respondents see a personal and professional responsibility for sustainable operations. They also indicate the perception that the public expects sustainable operations in the Forest Service.

- ✓ The vast majority (92.4 percent) agreed they have a professional responsibility to behave proenvironmentally whenever possible. (only 2.9 percent disagreed, and 1.1 percent did not answer or were unsure)
- ✓ The vast majority (90.9 percent) agreed they have a personal responsibility to behave proenvironmentally whenever possible. (only 2.7 percent disagreed, and 1.8 percent did not answer or were unsure)
- ✓ The majority (64.8 percent) disagreed with the statement that they have more pressing professional responsibilities than sustainable operations. (16.8 percent felt they had more pressing professional responsibilities)
- ✓ The majority (62.6 percent) disagreed with the statement that the agency has more pressing responsibilities and concerns than sustainable operations. (18.4 percent felt the agency had more pressing responsibilities)

- ✓ The majority (77.6 percent) agreed that the public expects sustainable operations in the Forest Service. (6.6 percent felt the public did not expect it)
- ❖ Findings suggest that most respondents embrace the idea of personal and professional responsibility for sustainable operations. This acceptance is an important value from which to draw when fostering commitment to specific actions.

Barriers

Eight items explored barriers to sustainability—

We asked respondents about eight potential barriers to sustainable operations. For each, they indicated agreement or disagreement with statements using a scale of 1 to 5, where 1 = strongly agree, 2 = agree, 3 = neither, 4 = disagree, and 5 = strongly disagree.

More than one-third agreed that (fig. 6):

- ✓ Green products are more expensive than other products.

Less than one-third agreed that:

- ✓ Green practices are impossible or impractical in their location.
- ✓ Green practices are costly to the agency.³
- ✓ They are not in the habit of considering sustainability and proenvironmental behaviors in their day-to-day work.
- ✓ Green products are inferior in quality to other products.
- ✓ They could recycle but forget to.
- ✓ They are unsure of what is meant by sustainable operations.
- ✓ They don't have time to worry about green practices.

³ It should be noted that expense of green products is a narrower barrier than cost of green practices overall. Although both address perceived cost and are therefore related, the focus differs.

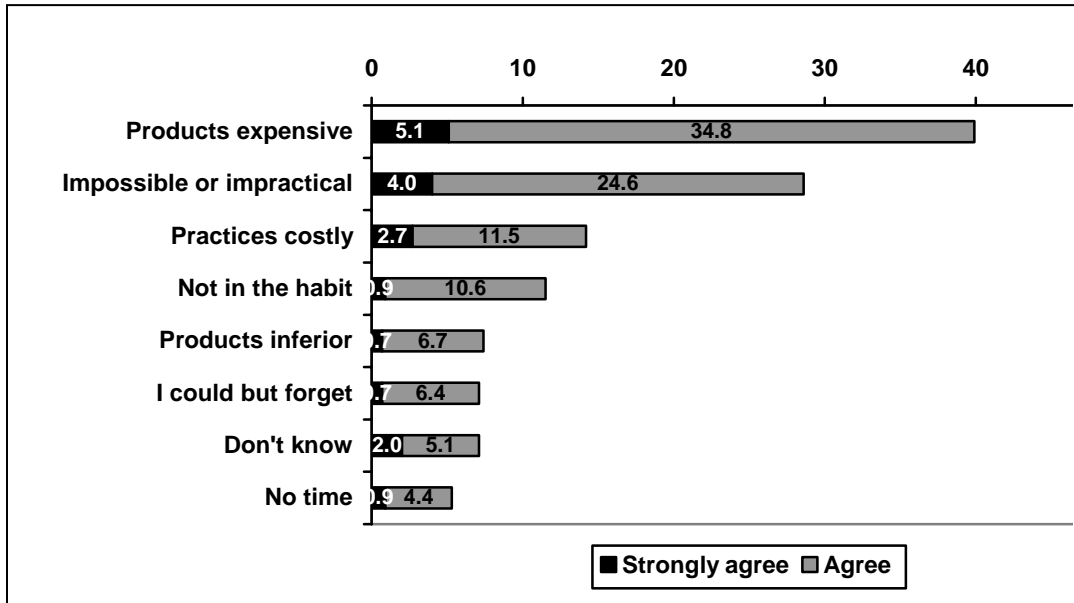


Figure 6—Agreement with statements of barriers to sustainable operations.

An open-ended item (question 42) inviting respondents to list current sustainable practices along with suggestions to increase sustainability led to an interesting set of responses focused on **barriers**. More than two dozen distinct comments related to barriers were offered and appear verbatim in appendix D. A few respondents mentioned concerns over the cost of greening, such as the up-front investment in solar power, increased cost of LEED design, higher cost of green products over less environmentally responsible alternatives, and general lack of money. Some mentioned constraints related to purchasing regulations and alternatives. Attitudinal barriers and less than ideal support for sustainability were mentioned. A few mentioned constraints specific to their location, making some sustainable actions impractical. Finally, others cited more pressing matters for the Forest Service they felt needed more attention.

- ❖ Although agreement was rare for each item, these items can inform agency information and education efforts focused on sustainable operations. They can also reflect areas for agency action to remove barriers. Of specific interest would be increased information on the cost of green products and amount of savings or other impacts that could be quantified to demonstrate savings.
- ❖ The offering of a number of barriers provides useful insight for furthering sustainable operations efforts. These might be considered as specific hurdles for locations to address through programs, subteams, or perhaps through educational means. Some items probably need to be recognized as true barriers locally and regionally, with reasonable suggestions wherever possible to address them.

Commitment and Support

Five items examined commitment and support of sustainable operations—

Two items showed majority agreement regarding sustainable operations (fig. 7):

- ✓ The majority are personally committed to practicing proenvironmental behaviors.
- ✓ Most see their coworkers as supportive of sustainable operations.

Three items showed less than majority agreement:

- ✓ Almost half saw station and regional leadership as supportive of sustainable operations.
- ✓ Almost half agreed green purchasing is encouraged by their employer.
- ✓ About a third encourage green practices among contractors/cooperators/partners.

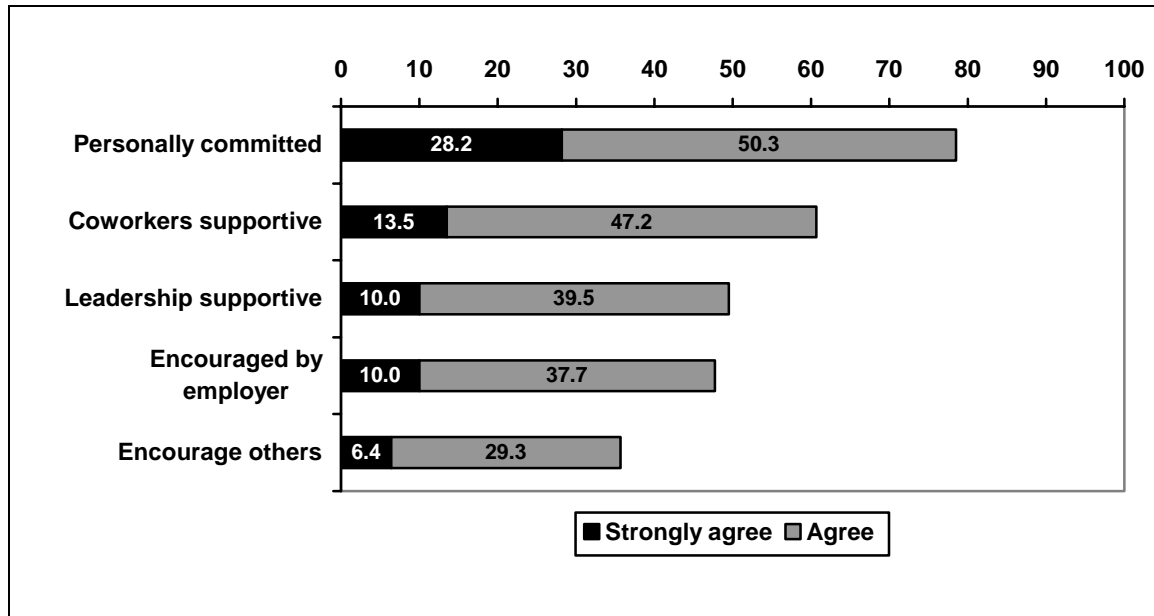


Figure 7—Commitment and support of sustainable operations.

Perception of leadership support was linked to significant variation in the level of environmentally responsible actions taken (statistically tested through ANOVA and available upon request). Those who agreed that leadership was supportive were significantly more likely than the other respondents to practice more sustainable acts in the workplace.

- ❖ Findings suggest commitment to sustainable operations by leadership, and reminders on green purchasing as a valued practice could be reaffirmed.

Importance to Sustainability

Fifteen items examined what is important to the implementation of sustainable operations—

All fifteen items were rated as “very important” or “somewhat important” by the majority of respondents (fig. 8).

The two items rated as very important by the majority were:

- ✓ Practical systems put in place by staff on-the-job.
- ✓ Commitment from station and regional leadership.

Items rated as very important by one-third to just under half were:

- ✓ Large funding sources to cover big-ticket items (for example, conversions to solar power).
- ✓ A better understanding of the environmental benefits or costs of current practices.
- ✓ More information about how to do this.
- ✓ More commitment from folks “on the ground.”
- ✓ Policies or procedures to guide us.
- ✓ Knowing what the costs and savings are to the Forest Service.

The remaining items, viewed as comparatively less important, but still at least somewhat important to a majority were:

- ✓ Support from my coworkers.
- ✓ A Web site with information that I can use.
- ✓ People to motivate and drive changes (for example, sustainability champions).
- ✓ Small grants to cover local proposals (for example, microgrants).
- ✓ Public support.
- ✓ Rewards for “doing the right thing” not just “feel good” feedback.
- ✓ Reminders in the workplace, such as posters or stickers.

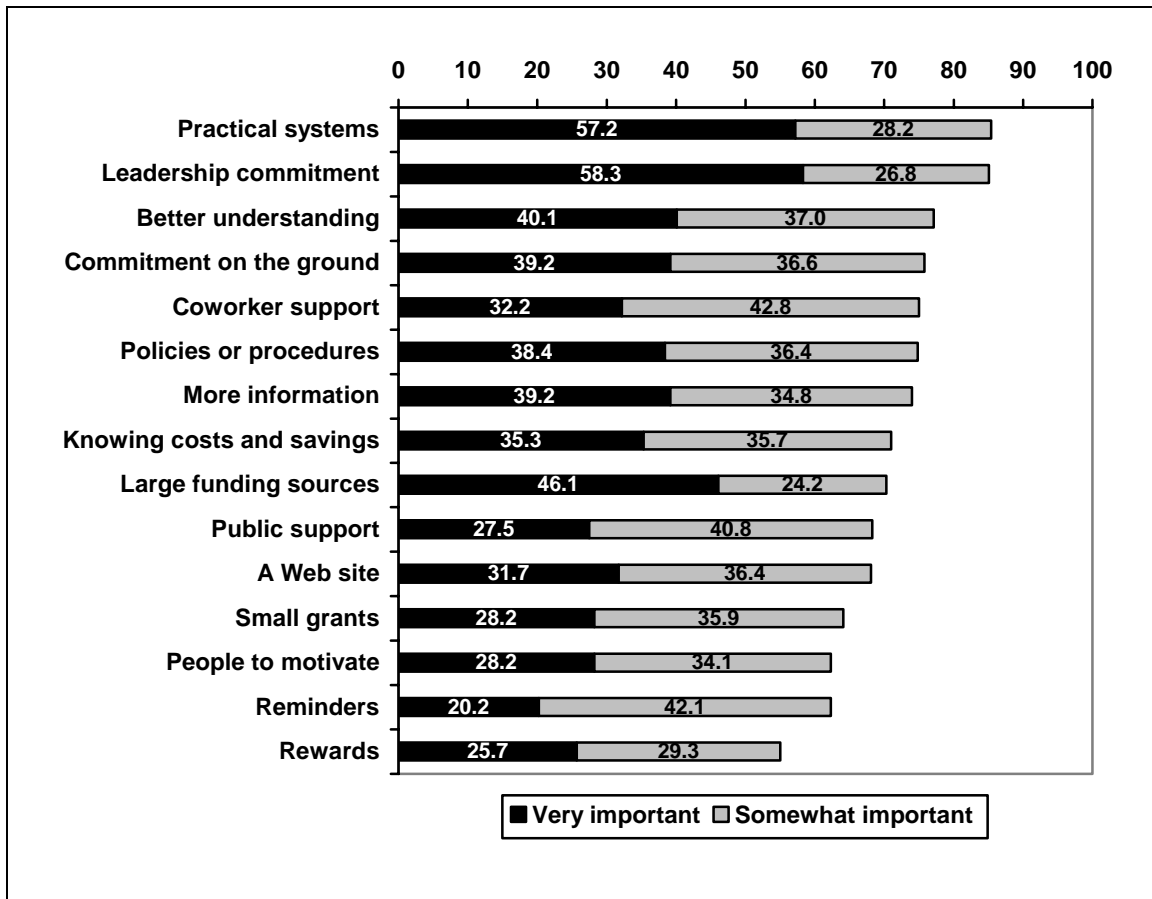


Figure 8—Importance to implementation of sustainable operations.

- ❖ Findings again point to the importance of valuing sustainable operations by leadership. An interest in additional information, including Web sites, with details on practices such as contacts and resources might be helpful. Findings also reveal the importance of “bottom up” generation of programs for sustainable operations.

Routine and Actions

The majority of respondents reported that they consider the environmental impact of their actions several times throughout the day (32.4 percent), or daily (33.0 percent). The remainder reported consideration of impacts a few times a week (13.1 percent), on occasion (17.3 percent), or not at all (1.8 percent; 2.4 percent did not provide an answer).

- ❖ Findings suggest environmental impacts of one’s actions are routinely considered by most respondents.

Environmental Concern

Respondents were asked to identify the one environmental issue that concerned them the most. A total of 508 mentions were listed by respondents. These results were then compared with a survey by the Public Policy Institute of California (PPIC) (Baldassare et

al. 2007) that reports on environmental concerns held by Californians. Table 1 contrasts the responses from this study to that of the PPIC. It should be noted that the PPIC reports the primary concern of respondents, whereas our respondents offered multiple concerns (therefore our percentages add up to more than 100 and are based on proportion of respondents listing each unique concern.) Among the region and station employees, climate change and global warming were of greatest concern, whereas PPIC respondents chose air pollution as the primary environmental concern.

Table 1—Primary environmental concerns of respondents and comparison to PPIC survey.

PSW/R5 respondents ^a		PPIC respondents ^b	
Concern	Percent	Concern	Percent
Global warming/climate change	13.2	Global warming	11.0
Trash/waste generation/hazardous waste	10.0	Landfills/garbage/sewage/waste	3.0
Fires, deforestation, forest and biodiversity	9.2	Loss of forests, forest fires	4.0
Air pollution/air quality/emissions	8.4	Air pollution	29.0
Water quality/water pollution	6.8	Water pollution	5.0
Recycling	6.2	(No comparison)	
Land management	5.4	(No comparison)	
Energy consumption/need other sources	5.2	Energy	6.0
Population growth/overpopulation	5.0	Population growth/overpopulation	2.0
Need to replace fossil fuels	4.8	(No comparison)	
Water quantity/waste of water	3.6	Water supply	8.0
Commuting/need public transportation	3.6	Traffic congestion	3.0
Lack of awareness (general, among public, within agency)	3.4	(No comparison)	
(No comparison)		Immigration	3.0
Excessive consumerism	2.4	(No comparison)	
Pollution-general	2.0	Pollution-general	5.0
Land use/development	2.0	(No comparison)	
Environmentalists	1.0	(No comparison)	
Other	8.4	Other	9.0
Don't know/no answer	18.4	Don't know	12.0

^a Based on 501 concerns listed by respondents, with multiple responses possible.

^b Based on proportion of concerns listed, with only one response possible.

Environmental concern is typically high among the general public; the consequences that concern them have been found to center around three thematic areas described as biospheric (well-being of living things not human), social-altruistic (concern for other humans), and egoistic (self-oriented). Each of these has been proposed as a viable connection to environmental issues, expanding more traditional approaches that lean toward a biospheric focus.

Twelve items addressed these areas by asking “I am concerned about environmental problems because of the consequences for _____” (rated on a 1 to 10 scale, 1 = not at all important, 10 = supreme importance).

Four items assessed importance of biospheric consequences (fig. 9):

- ✓ Trees (SD = 1.99, n = 424)
- ✓ Plants (SD = 2.04, n = 427)
- ✓ Animals (SD = 2.01, n = 427)
- ✓ Birds (SD = 2.17, n = 428)

Four items assessed importance of social-altruistic consequences:

- ✓ Children (SD = 1.97, n = 427)
- ✓ Future generations (SD = 1.95, n = 430)
- ✓ Humanity (SD = 2.20, n = 425)
- ✓ People in the community (SD = 2.07, n = 429)

Four items assessed egoistic consequences:

- ✓ My health (SD = 2.0, n = 428)
- ✓ My future (SD = 2.37, n = 423)
- ✓ My lifestyle (SD = 2.31, n = 425)
- ✓ My prosperity (SD = 2.51, n = 423)

Aside from “my health,” egoistic concerns were assigned the lowest importance ratings among the three types examined.

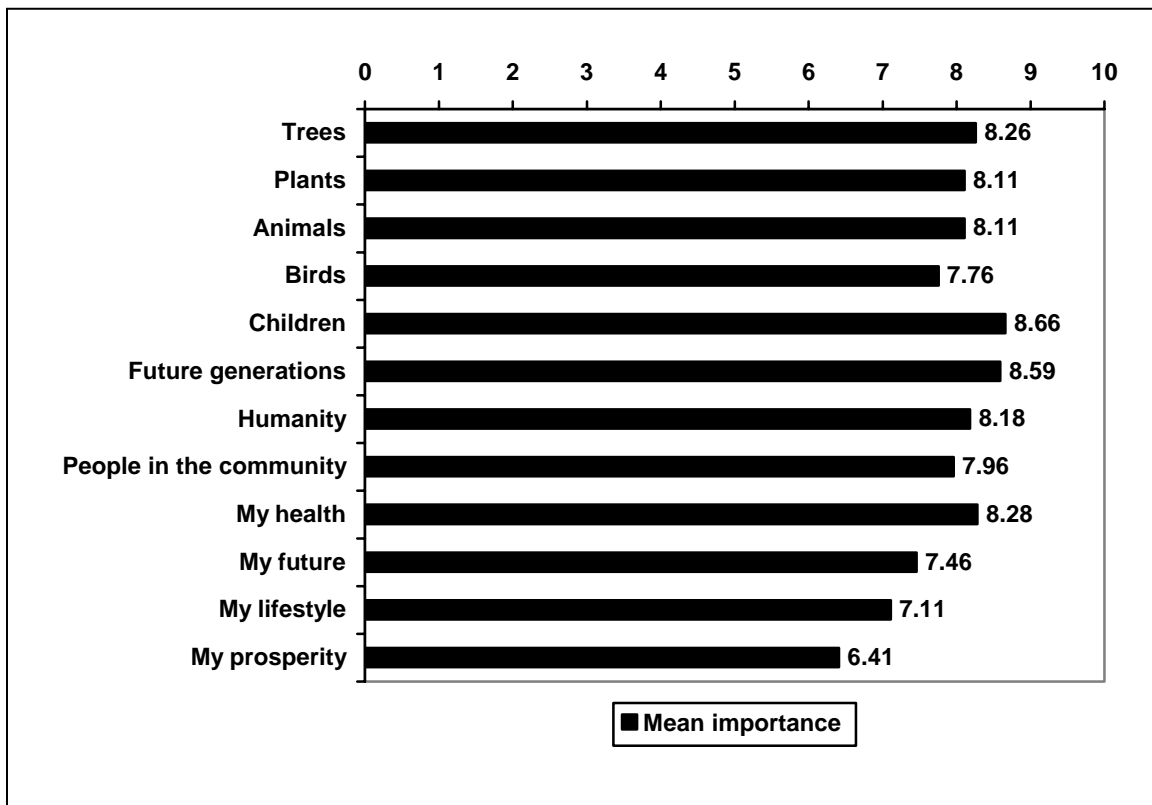


Figure 9—Importance of various consequences linked to environmental concerns. (Respondents concerned about environmental issues because of the consequences to the things listed in the figure.)

Although no single item was rated especially low (averaged below 5), personal prosperity was assigned the least importance among the areas of concern.

- ❖ Findings suggest that information, education, and reminders can address biospheric and social-altruistic aspects of sustainability and remain pertinent to our respondents. Health-related messages would also be relevant.

Environmental Identity Salience

Ten items addressed environmental identity salience (or personal connection to nature). Each statement was rated on a scale of 1 to 7, where 1 = not at all true of me, 4 = neither true nor untrue, and 7 = completely true of me (fig. 10).

Respondents felt two statements were most true of them:

- ✓ I would feel that an important part of my life was missing if I were not able to get out and enjoy nature from time to time. (SD = 1.23, mode = 7, n = 424)
- ✓ Learning about the natural world should be an important part of every child's upbringing. (SD = 1.05, mode = 7, n = 427)

Five additional items were above the mid-range of the scale (above an average of 5), and therefore at least somewhat true:

- ✓ I really enjoy camping and hiking outdoors. (SD = 1.47, mode = 7, n = 425)
- ✓ When I am upset or stressed, I can feel better by spending some time outdoors communing with nature. (SD = 1.52, mode = 7, n = 428)
- ✓ I think of myself as a part of nature, not separate from it. (SD = 1.49, mode = 7, n = 428)
- ✓ I have never seen a work of art that is as beautiful as a work of nature, like a sunset or a mountain range. (SD = 1.67, mode = 7, n = 423)
- ✓ I spend a lot of my free time (non-FS time) in natural settings. (SD = 1.54, mode = 7, n = 427)

Three items were less true of respondents:

- ✓ Sometimes I feel like parts of nature have a spirit of their own. (SD = 2.01, mode = 4, n = 423)
- ✓ I believe that some of today's social problems could be cured by returning to a more rural life-style in which people live in harmony with the land. (SD = 1.69, mode = 4, n = 425)
- ✓ I have a lot in common with environmentalists as a group. (SD = 1.74, mode = 4, n = 425)

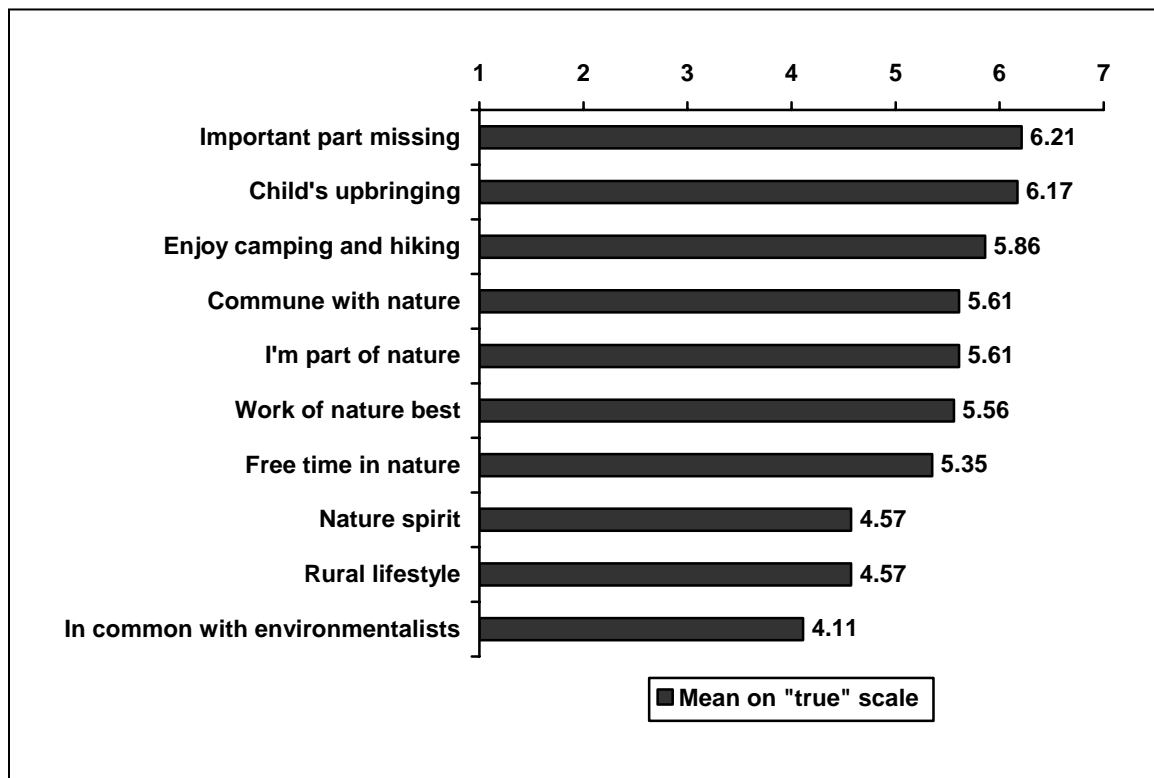


Figure 10—Environmental identity salience of respondents: personal connection to nature.

- ❖ Findings suggest a connection to nature among respondents, and some separation from viewing oneself as an environmentalist.

Issues of Most Concern Facing Region 5/PSW

Respondents were asked to write in an issue facing the region or station that concerned them the most. Sometimes respondents provided multiple issues of concern. These were assessed according to themes suggested by respondents (n = 456). Issues of most concern included environmental issues, general sustainable operations, general health and safety, organizational concerns, funding issues, and external pressures (table 2).

Table 2—Issues facing region 5 or PSW of most concern.

General type of concern	Category of concern	Specific concern	Number of mentions
Environmental Issues	Forests and forest management	Timber management issues	21
		Forest health/condition of forests and ecosystems	12
		Deforestation	5
		General habitat concerns	4
		Habitat conditions	3
		Bark beetles	3
		Loss of biodiversity	2
	Climate change	Global climate change/global warming	17
		Drought	6
		Changes in weather	4
	Pollution	Air pollution and air quality	11
		Water pollution and water quality	8
		Degraded air quality due to fires	3
		Litter in the forest	3
		Polluted riparian zones	2
		Pollution to the land	2
		Vehicle impacts on air quality	1
		Waste generation during fires	1
	Species-related issues	Threats to wildlife	3
		Invasives	2
		General loss of species	1
	Water-related	Water quantity	10
		Over-consumption and waste of water	8
	Land use	Uses of forests and impact on land	18
		Urbanization and urban sprawl (including expansion of wildland-urban interface)	11
		Overdevelopment	6
		General land use	4
		Consumption of resources	2
		Development of alternate energy sources on forest land	1
Fires		Fire in general	11
		Fire management	6
		Catastrophic fires	5
		Prescribed burning	3
Sustainable operations	General	Barriers	16
		Lack of recycling	5
		Waste of energy	4
		Lack of biomass utilization	3
		Difficulties buying green products	3
	Transportation	Fleet issues including SUVs	9
		Driving and cars	5
		Long commutes	2
	Awareness/education	Need for public education	6
		Need for education in Forest Service	6
		Attitudinal barriers in the agency	3
		General apathy and lack of awareness	2

		Public attitudes	1
Health and Safety	General	Health and safety	7
		Health of people	2
		Personal health	1
		Health of children	1
Organizational issues	Organizational change	General	4
		New processes for human resources	3
		Centralization of services	2
		Contracting out	2
		Fleet management	1
Personnel	Lost and current	Loss of personnel/retention issues	15
		Lack of expertise	7
		Retention of firefighters	4
		Firefighter pay	3
		General issues	3
		Lack of environmental consciousness	1
Funding		Loss of funding and budget	21
		General funding levels	9
		Difficulties funding sustainable operations	8
		Inadequacy of pay	4
		Cost of fighting fires	4
		Lack of funds to maintain infrastructure	3
		Misuse of budget	1
External pressures		Political issues	8
		Litigation	6
		From environmentalists	5
		The NEPA process	2
Miscellaneous		Too varied to categorize	22

Additional Comments

A number of additional comments were added at the end of the survey and are included as appendix E. The reader may wish to review these to gain additional insight into the thinking of participants. Some respondents offered specific comments about the survey, both negative and positive. Negative comments included overall concerns about the survey itself, the length of it, and specific items. Positive comments focused on support for the survey, anticipation of its applications, and support for sustainable operations.

Special Analyses Fitting the Proenvironmental Behavior Change Model

In the beginning of this report I introduced the PBCM as a way of understanding barriers and facilitators to proenvironmental actions. In this section I present a brief set of analyses specific to this model's application.

Social norms seemed to be supportive of sustainable operations as evidenced by the majority belief in a personal and professional responsibility to behave proenvironmentally. Furthermore, perceived responsibility was associated with a higher likelihood of taking environmentally responsible actions (personal responsibility and action score based on sum of percentages across 32 actions was correlated at 0.328, $p < 0.001$, $n = 446$; professional responsibility was correlated at 0.269, $p < 0.001$, $n = 443$). Most believed that coworkers were supportive of sustainable operations, and this belief was associated with environmental action ($r = 0.241$, $p < 0.001$, $n = 396$). About half

believed that station and regional leadership were supportive of sustainable operations. Again, this belief was associated with environmental action ($r = 0.206$, $p < 0.001$, $n = 363$). However, less than half agreed that green purchasing is encouraged by their employer, and almost half felt they had not been encouraged to carpool or use public transportation. Second to practical systems put in place by folks on the ground, commitment of leadership to sustainable operations was viewed as very important to successful implementation of sustainable operations. Policies and procedures to guide sustainable operations might be viewed as another aspect of norms, and was rated as very important to success by more than a third of respondents. Some open-ended remarks suggested that putting guidelines in place would bolster sustainable operation efforts; others added the caveat that guidelines and policies would have to be accompanied with resources to allow implementation. Norms might also be reflected through rewards, which were viewed as very important by one-fourth of the respondents. Attitudes and apathy were cited as issues of concern to sustainable operations. Positive reminders of agency values in support of sustainable operations, tips and resources, and other means of support would affirm the agency norm favoring sustainability.

Competing attitudes is a second factor in the PBCM and was reflected in some areas. For example, comments on lack of support for downsizing of fleet and sharing of fleet vehicles revealed some attitudes that compete with sustainable operations. Specifically, some felt that safety while traveling in the field might be compromised in a downsized vehicle. Responses showed that a minority felt the agency had more pressing responsibilities and they had more pressing personal professional responsibilities. Some open-ended comments were offered along the lines of other issues being far more important than sustainable operations and the idea that environmental concerns were misdirected at the wrong issues. Some felt that efforts aligned with environmentalists were a barrier to the business of the Forest Service. Although not a majority opinion, this suggests there is merit in exploring alternative values that align with sustainable operations drawn from different areas of concern, such as the social-altruistic value set reported on earlier. Rather than being introduced as competing values, these other values can be aligned with sustainable operations when framed properly. A positive association between the social-altruistic concerns, biospheric, and egoistic concerns was found for frequency of environmental action ($r = 0.258$, $p < 0.001$, $n = 430$; $r = 0.222$, $p < 0.001$, $n = 429$; $r = 0.123$, $p = 0.01$, $n = 428$, respectively).

Setting design was revealed as a barrier to sustainable operations by some respondents. As reported earlier, some felt sustainable actions were impossible or impractical at their location. A few mentioned the lack of recycling programs at their locations. A number of open-ended comments specifically mentioned fire camps and incident situations where recycling was not practiced and waste was of great concern. Programs to facilitate sustainable operations in fire camps, with specific needs of that setting in mind, would be of value. Recycling of technologically based waste was the least reported among item types. A setting-based program to handle this type of waste would address setting barriers.

Bad habit may be reflected as a barrier to sustainable operations. Fleet management is a particular area of concern where this might be the case. Crews assigned SUVs and other large vehicles might use those vehicles when traveling to in-town meetings. A few suggested this might be the case because trying to also have a small vehicle at their disposal for such trips was impractical. Only about one-fifth reused paper for printing drafts. Not being accustomed to saving paper printed only on one side is reflective of a habit that might be difficult to break. Other possible uses include saving that paper for scrap or note taking. Water bottles used in fire camps were mentioned by

a few and reflect another bad habit. Although convenience might link this to the competing attitudes barriers, it might also be a failure to think through the environmental impacts of doing things in the “usual way.” Printers not set at double-sided printing as a default might be difficult to overcome if folks forget to reset the default before printing documents that can be double-sided. Reminders in locations where these behaviors take place can alert people to the desirable action and help set new habits that are more environmentally friendly.

Lack of knowledge or ignorance was associated with the findings reported. Public and agency need for education was mentioned by some respondents as a concern in sustainable operations. Some respondents suggested they would like to know measurable benefits gained from different actions so they could better understand the impacts of sustainable operations. Some mentioned a general interest in more information, including how to locate green hotels and what the green hotel program is.

Conclusions

Most respondents believed in a personal and professional responsibility to behave in an environmentally responsible fashion. Most waste reduction, energy conservation, recycling, and water conservation efforts were being practiced, although infrequent behaviors highlight areas for additional gains in sustainability.

Continued leadership support of sustainable operations paired with employee engagement in development of programs that work on the ground will foster maintenance and growth of sustainable operations in the region and station.

Simple reminders could be sent via e-mail and included with other communications (such as message banners) that focus on specific sustainable operations actions would be helpful. Less frequently practiced actions might be useful to target. These reminders help to affirm commitment to sustainable operations and keep the commitment salient. Fleet management is one area where special attention to barriers and additional measures may be quite helpful. Reminders and educational information would be well-placed as efforts to increase responsible actions, although resources to facilitate implementation will be necessary. Clear statements of leadership support of sustainable operations are also important. Messages about sustainable operations should be linked to a variety of values, including those reflecting biospheric, social-altruistic, and egoistic concerns (especially health-related issues). These are suggested based on findings from this survey that environmental concerns are linked to each of these topical areas.

Assistance in setting up carpools, incentives for using carpools or public transportation, and support of telecommuting would be helpful measures to specifically address the usual practice of commuting to work alone. These measures would specifically address a number of environmental issues of concern to employees. Presentation of programs could include a reminder of specific benefits to the environment and to employee well-being gained through adoption of the programs.

A Web site accessible to employees could present information on specific actions that could be taken in the workplace, including documented benefits of each action. The costs of the action, how it was taken, and cost savings or other impacts should be documented. In other words, outline how it was done and what difference was made. How-to steps to accomplish the action, including resources others have used that work, might be presented. One specific example would be a listing of green hotels in the area to share with out-of-town guests, and green hotels out of the area that employees could stay at while traveling out of town. Resources to gain support for more-difficult-to-fund and larger scale items might also be presented on this site, along with key contacts that

can assist in leveraging funding and energy. The microgrant programs might be featured here as well, including reports of implementation and accounts of how the measures made a difference. Highlighting measures that can be implemented at little to no cost will be essential to demonstrating the understanding that resources are a continuing concern.

Localized groups based in each work site or small geographic region could be set up, composed of a cadre of volunteers, to examine site-specific concerns and solutions, perhaps working from the open-ended comments provided in this report as a springboard for idea generation. Following the national effort, these could be referred to as “green teams,” localized champions for sustainable operations. Efforts should be kept positive to benefit from the already predominant values that support sustainable operations.

Leadership in the region and station have taken a number of positive measures to encourage sustainable operations, including support of this employee survey, awarding of microgrants, and commitment to national and statewide greening initiatives (and in some cases, adding performance standards that focus on sustainable operations). Work by Fukukawa et al. (2007) suggests support for such accountability standards. Comments offered by some respondents suggested the belief that without accountability, sustainability efforts would not be followed through. Continued investment of resources and reporting on that investment will help employees see continued commitment through action.

Given the specific concern that sustainable operations efforts might draw resources away from an already strained organization (budget, personnel, and numerous other initiatives), care should be taken to outline how sustainable operations works in a complementary fashion, rather than in competition with, efforts to address these other concerns.

Acknowledgments

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Appendix A: Survey



PSW / Region 5 Sustainable Operations Survey

Thank you for joining us as a respondent in this survey. We will ask you about Sustainable Operations, which for the purposes of this survey will refer to all actions that are pro-environmental. This involves the Forest Service's effort to 'green' our business practices and reduce our environmental footprint, and includes a range of activities such as recycling and energy conservation measures. We are not asking about your land management activities or research program in this survey.

Please read each question carefully and choose the best response from among the options presented, or write in your response as appropriate. While you may skip any items you are not comfortable answering, complete responses are most helpful to us.

Zoomerang will save your survey responses as you move to each new page (by clicking submit). When you move to the next page you will not be allowed to go back, whether you have supplied your responses or not. If you leave the survey you may return later by clicking the Zoomerang link in the original email message. The link will take you to the beginning of the page where you last stopped in the survey. You will receive reminder messages from Zoomerang until you fully complete the survey.



Waste Reduction Measures

I'm going to ask you about some waste reduction measures that you might be taking in your work setting. As each opportunity to take an action comes up, what percentage of the time do you take that action?

These questions are rated on a scale from 0 to 100, representing the percent out of every chance where you take each action. Use the pull-down to select a number for each question.

(NA=not applicable, 0=never, 50=about half of the time, and 100=always)

-
- 1 Reuse scrap paper for taking notes.

Pull-down contains NA, and consecutive numbers 0 through 100

-
- 2 Reuse single-sided paper in a printer for drafts.

Pull-down contains NA, and consecutive numbers 0 through 100

-
- 3 Reuse packaging materials (for example Styrofoam peanuts).

Pull-down contains NA, and consecutive numbers 0 through 100

-
- 4 Reuse file folders.

Pull-down contains NA, and consecutive numbers 0 through 100

-
- 5 Reuse envelopes and/or diskette mailers.

Pull-down contains NA, and consecutive numbers 0 through 100

-
- 6 Reuse field materials such as planters and/or containers.

Pull-down contains NA, and consecutive numbers 0 through 100

-
- 7 Make double-side copies.

Pull-down contains NA, and consecutive numbers 0 through 100

-
- 8 Print double-sided.

Pull-down contains NA, and consecutive numbers 0 through 100



Survey Page 1

- 9 Read documents on the computer without printing.

Pull-down contains NA, and consecutive numbers 0 through 100

-
- 10 Edit documents on the computer before printing.

Pull-down contains NA, and consecutive numbers 0 through 100

-
- 11 Design documents to conserve paper when/if printed.

Pull-down contains NA, and consecutive numbers 0 through 100

-
- 12 Use email or physical bulletin boards for memos and announcements.

Pull-down contains NA, and consecutive numbers 0 through 100

-
- 13 Use routing slips for review of hardcopy documents.

Pull-down contains NA, and consecutive numbers 0 through 100

- 14 Turn off water when not in immediate use.

Pull-down contains NA, and consecutive numbers 0 through 100

- 15 Gather rainwater or runoff for landscape watering.

Pull-down contains NA, and consecutive numbers 0 through 100



Survey Page 2

Energy Conservation Measures

Using the same scale as the last set of questions, how often do you practice the following energy conservation measures while at work?

(NA=not applicable, 0=never, 50=about half of the time, and 100=always)

- 16 Turn off lights when leaving the office for the day or extended periods.

Pull-down contains NA, and consecutive numbers 0 through 100

- 17 Turn off electrical equipment when leaving the office for the day or extended periods.

Pull-down contains NA, and consecutive numbers 0 through 100

- 18 Turn off computers when leaving for the day or extended periods.

Pull-down contains NA, and consecutive numbers 0 through 100

19 Unplug chargers for electrical devices when not in use.

Pull-down contains NA, and consecutive numbers 0 through 100

20 Unplug electrical equipment when not in use overnight or for extended periods.

Pull-down contains NA, and consecutive numbers 0 through 100

21 Considering your office space and basic equipment in your assigned work area, how many peripheral devices, *aside from your computer, monitor, printer, and other equipment central to your work assignment*, do you have that draw electricity? (examples include electric coffee makers, beverage warmers, small refrigerators, fans, space heaters, etc., do not count electrical items that are used in a barracks situation. Fill in a number...



Survey Page 3

Fleet and Commuting-related Items

22 How do you get to work from your home a majority of the time?

- on foot or bicycle
- using public transportation
- in a carpool or vanpool
- alone in a personal or assigned vehicle
- not applicable because I telecommute from home 90% or more

23 I have been encouraged by my employer to rideshare or use public transportation.

strongly agree	agree	neither agree nor disagree	disagree	strongly disagree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	2	3	4	5

24 One way to reduce environmental impacts is to share fleet vehicles, using a reservation/sharing system. How do you feel about this practice?

- I have no opinion on it.
- I support it, but it does not directly apply to me.
- I support it, and am willing to do this.
- I support it, and am doing this.
- I am not in support of this. (please explain)

25 Another way to reduce environmental impacts is to downsize to a smaller fleet vehicle, or arrange for a hybrid vehicle (such as the Ford Escape Hybrid) when fleet vehicles are up for renewal. How do you feel about this practice?

- I have no opinion on it.
- I support it, but it does not directly apply to me.
- I support it, and am willing to do this.
- I support it and am planning on doing this.
- I support it and have already done it.
- I am not in support of this. (please explain)



Recycling Practices

Considering the following items that you might recycle at work, what percentage of the time do you recycle each type of item. If you do not use the type of item listed please enter 'NA'.

Again, provide your answers based on the scale from 0 to 100, where 0=never, 50=about half the time, 100=always, and NA=not applicable.

26 Paper and paper-based products

Pull-down contains NA, and consecutive numbers 0 through 100

27 Glass

Pull-down contains NA, and consecutive numbers 0 through 100

28 Plastic

Pull-down contains NA, and consecutive numbers 0 through 100

29 Batteries

Pull-down contains NA, and consecutive numbers 0 through 100

30 Printer cartridges

Pull-down contains NA, and consecutive numbers 0 through 100

31 Other technologically-based waste such as diskettes and cds.

Pull-down contains NA, and consecutive numbers 0 through 100

32 Mixed waste recycling in a desk side container.

Pull-down contains NA, and consecutive numbers 0 through 100

33 Programs to recycle most if not all of the items listed above are not available at my work location.

completely true

true

not sure

somewhat untrue

completely untrue



Survey Page 5

Green Purchasing

What percentage of time does green purchasing come into consideration when you are buying work related products? (This question also applies to items you have others order or purchase on your behalf that you make the request for.)

Provide your answers based on the scale from 0 to 100, where 0=never, 50=about half the time, and 100=always.

34 Considering only those purchases where a 'green alternative' might be available, what percentage of **your** purchases can actually be considered 'green purchases'? (For example, if you needed to purchase a chair, did you purchase one constructed from recycled products?)

Pull-down contains NA, I don't make purchases, and consecutive numbers 0 through 100

35 When traveling on Forest Service business, I stay at hotels that have eco-friendly programs in place.

Pull-down contains NA, I don't travel on FS business, and consecutive numbers 0 through 100

36 When arranging Forest Service meetings, I arrange them at hotels that have eco-friendly programs in place.

Pull-down contains NA, I don't arrange FS meetings, and consecutive numbers 0 through 100



Survey Page 6

Responsibility for Sustainable Operations

37 Please indicate your degree of agreement or disagreement with each of the following statements:

1 strongly agree	2 agree	3 neither	4 disagree	5 strongly disagree	unsure
I have a personal responsibility to behave pro-environmentally whenever possible.					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a professional responsibility to behave pro-environmentally whenever possible.					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My agency has more pressing responsibilities and concerns than sustainable operations.					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have more pressing professional responsibilities than practicing sustainable operations.					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The public expects sustainable operations within the Forest Service.					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Survey Page 7

Barriers to Sustainable Operations

38 Please indicate your degree of agreement or disagreement with each of the following statements:

1 strongly agree	2 agree	3 neither	4 disagree	5 strongly disagree
Many green practices are impossible or impractical in my location.				
1	2	3	4	5
I don't have the time to worry about green practices.				
1	2	3	4	5
I'm not in the habit of considering sustainability and pro-environmental behaviors in my day to day work.				
1	2	3	4	5
I could recycle but I forget to.				
1	2	3	4	5
I think most green practices are costly to the agency.				
1	2	3	4	5
I don't know what you mean by sustainable operations.				
1	2	3	4	5
I think green products are inferior in quality to other products.				
1	2	3	4	5
I think green products are more expensive than other products.				
1	2	3	4	5



Commitment and Support for Sustainable Operations

39 Please indicate your degree of agreement or disagreement with each of the following statements:

1 strongly agree	2 agree	3 neither	4 disagree	5 strongly disagree	unsure
Green purchasing (for example, purchasing paper products with a high post-consumer content) is encouraged by my employer.					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most of my coworkers are supportive of sustainable operations.					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Station and regional leadership are supportive of sustainable practices.					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I encourage green practices among contractors/cooperators/partners.					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am personally committed to practicing pro-environmental behaviors.					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Importance to Sustainable Operations Implementation

- 40 How important do you think each of the items below is in efforts to implement successfully sustainable operations within PSW and Region 5?

1 very important	2 somewhat important	3 neither	4 somewhat unimportant	5 very unimportant
Commitment from station and regional leadership.				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Practical systems put in place by staff on-the-job.				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Policies and or procedures to guide us.				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A better understanding of the environmental benefits or costs of current practices.				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rewards for 'doing the right thing' not just 'feel good' feedback.				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People to motivate and drive changes (for example, sustainability champions).				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More information about how to do this.				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowing what the costs and savings are to the Forest Service.				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Small grants to cover local proposals (for example, microgrants).				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Large funding sources to cover big ticket items (for example, conversions to solar power).				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A website with information that I can use.				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

More commitment from folks 'on the ground'.

1

2

3

4

5

Support from my coworkers.

1

2

3

4

5

Public support.

1

2

3

4

5

Reminders in the workplace, such as posters or stickers.

1

2

3

4

5



Survey Page 10



Daily Routine



41 In your daily work routine, how often do you consider the environmental impact of your actions?

- several times throughout the day
- daily
- a few times a week
- on occasion
- not at all



Survey Page 11

Your Ideas

42 You have answered a series of questions on sustainable practices in the workplace. However, you may already be doing other things that you feel are aimed at sustainable operations, or you may have ideas that the region or station could adopt to help with sustainable operations. Please use the space provided to write in your actions we did not ask about and your ideas for making operations more sustainable. Please be clear if this is a suggestion, or something that you are already doing.



Survey Page 12

Environmental Concern

43 (In one minute or less) Please identify the one environmental issue that concerns you the most.

44 People around the world are generally concerned about environmental problems because of the consequences that result from harming nature. However, people differ in the consequences that concern them the most. Please rate the following items from 1 (not at all important) to 10 (supreme importance) in response to the question:

I am concerned about environmental problems because of the consequences for _____

1	2	3	4	5	6	7	8	9	10
not at all important				neutral					supreme importance
Future generations									
1	2	3	4	5	6	7	8	9	10
Birds									
1	2	3	4	5	6	7	8	9	10
My health									
1	2	3	4	5	6	7	8	9	10
Animals									
1	2	3	4	5	6	7	8	9	10
People in the community									
1	2	3	4	5	6	7	8	9	10
My lifestyle									
1	2	3	4	5	6	7	8	9	10
Children									
1	2	3	4	5	6	7	8	9	10
Plants									
1	2	3	4	5	6	7	8	9	10
My prosperity									
1	2	3	4	5	6	7	8	9	10
Humanity									
1	2	3	4	5	6	7	8	9	10
Trees									
1	2	3	4	5	6	7	8	9	10
My future									
1	2	3	4	5	6	7	8	9	10

-
- 45 (In one minute or less) Please identify the one issue facing Region 5 / PSW that concerns you the most.



Survey Page 13

About you...

I'd like to know a few things more about you to help me understand who responded to this survey.

Please tell me:

-
- 46 Are you male or female?

- male
- female

-
- 47 Are you assigned to Region 5, PSW, or another segment of the Forest Service?

- Region 5 *(skips to question 49)*
- PSW *(skips to question 50)*
- Other segment *(skips to question 48)*



Survey Page 14

48 If you are assigned to another segment of the Forest Service (not R5 or PSW), what segment are you assigned to and where are you located?

Segment

Location



Survey Page 15

49 For R5 employees – please indicate if you are assigned to the regional office or a forest, and select which forest if appropriate. (a pull down list of each forest/regional office/enterprise unit)

- Regional Office
- Enterprise unit
- FAMSAC
- IRM
- Remote sensing lab
- Lake Tahoe Basin Management Unit
- San Dimas Technology and Development Center
- Northern CA Service Center
- Southern CA Service Center
- Angeles National Forest
- Cleveland National Forest
- El Dorado National Forest
- Inyo National Forest
- Klamath National Forest
- Lassen National Forest
- Los Padres National Forest
- Mendocino National Forest
- Modoc National Forest
- Plumas National Forest
- San Bernardino National Forest
- Sequoia National Forest
- Shasta-Trinity National Forest
- Sierra National Forest
- Six Rivers National Forest
- Stanislaus National Forest
- Tahoe National Forest



Survey Page 16

50 For PSW employees-please indicate if you are assigned to PSW headquarters or to one of the station's labs, and select which lab if appropriate. (a pull down list for each PSW location)

- Albany
- Arcata-Redwood Sciences Lab
- Davis
- Fresno-Forest Sciences Lab
- Hilo-Institute of Pacific Islands Forestry
- Placerville-Institute of Forest Genetics
- Redding-Silviculture Lab
- Riverside-Forest Fire Laboratory
- Sierra Nevada Research Center



Survey Page 17

51 How many years have you been stationed in California or Hawaii? (choose number of years from the drop down box)

Pull-down contains consecutive numbers 0 through 50 or more

52 And, how many years have worked in the Forest Service? (choose number of years from the drop down box)

Pull-down contains consecutive numbers 0 through 50 or more



Survey Page 18

53 Please read these questions and provide a response for each by indicating how untrue or true each is in describing you...

1 not at all true of me	2	3	4 neither true nor untrue	5	6	7 completely true of me
a. I spend a lot of my free time (non-FS time) in natural settings (woods, mountains, desert, lakes, ocean)						
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I think of myself as a part of nature, not separate from it						
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. When I am upset or stressed, I can feel better by spending some time outdoors "communing with nature"						
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I have a lot in common with environmentalists as a group						
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I believe that some of today's social problems could be cured by returning to a more rural lifestyle in which people live in harmony with the land						
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Learning about the natural world should be an important part of every child's upbringing						
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I really enjoy camping and hiking outdoors						
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Sometimes I feel like parts of nature – certain trees, or storms, or mountains—have a spirit of their own						
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I would feel that an important part of my life was missing if I were not able to get out and enjoy nature from time to time						
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. I have never seen a work of art that is as beautiful as a work of nature, like a sunset or a mountain range						
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



- 54 Write in any comments or opinions regarding operational sustainability, green practices, or this survey.



Survey Page 20

Thank You Page

Thank you for your participation in this survey! When the analysis is complete, a message will be sent to all PSW and Region 5 employees through pdls making them aware of the web location to visit where the full report can be read.

If you have any questions about this study or would like to offer a personal comment please email Dr. Pat Winter at pwinter@fs.fed.us.

If you would like more information about sustainable operations, click the report below (4MB pdf):

[Increasing Sustainable Operations In the Forest Service Pacific Southwest](http://fsweb.psw.fs.fed.us/Sust_Ops-Env_Ftprnt_in_the_FS_Pac_SW_Dec_06.pdf)
(Link to: http://fsweb.psw.fs.fed.us/Sust_Ops-Env_Ftprnt_in_the_FS_Pac_SW_Dec_06.pdf)

Survey Closed Page

I'm sorry, our study has ended. When the analysis is complete, a message will be sent to all PSW and Region 5 employees through pdls making them aware of the web location to visit where the full report can be read.

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Appendix B: Letter to Employees

File Code: 7180/7400/7130/2170

Date: August 2, 2007

Route To:

Subject: Region 5 and PSW Sustainable Operations Survey

To: All R5 and PSW employees

Region 5 and the Pacific Southwest Research Station (PSW) have made an important commitment to adopting environmentally sustainable practices in the operation of our facilities and fleet. Sustainable operations refer to the Forest Service's effort to 'green' our business practices and reduce our environmental footprint. Sustainable operations activities reduce our footprint by decreasing energy use, water use, and waste production at our buildings and facilities; reducing emissions and increasing fuel efficiency in our fleet; increasing recycling; and developing and implementing green purchasing practices.

As a part of the sustainable operations effort, individual practices, opinions, and ideas are being sought from Forest Service employees in Region 5 and PSW. Randomly selected employees will be contacted by Patricia Winter, Research Social Scientist at PSW, and invited to participate in a survey. This survey is your chance to tell us what you are doing now, what you think about various measures and barriers, and what else might be done. Findings will be used to assist our efforts in maintaining and furthering sustainable operations in Region 5 and at PSW.

We want you to know that your participation in this survey is completely voluntary. However, the findings will be more useful to the Station and Region with complete participation. Additionally, you should know that your answers will be anonymous and your name and other identifying information will not be stored with your answers.

Because we value this effort, the use of Forest Service time to participate in this survey is approved.

If you have questions, please contact Pat Winter (pwinter@fs.fed.us).

/s/ Bernie Weingardt
BERNARD WEINGARDT
Regional Forester

/s/ James R. Sedell
JAMES R. SEDELL
Station Director

cc: Dan Duefrene
Pat Winter
Larry A Rabin

Appendix C: PSW and Region 5 Samples and Respondents

Table 3—Pacific Southwest Research Station sample and respondents.

Location	Number in database	Number selected	Number valid	Number of respondents	Response rate
					<i>Percent</i>
Redwood Sciences Lab	67	42	42	10	23.8
Riverside Fire Lab	67	41	39	19	48.7
Sierra Nevada Research Center	59	37	36	9	24.3
Institute for Pacific Islands Forestry	56	33	33	9	27.3
Headquarters and Albany Sciences Lab	50	27	27	13	48.1
Silviculture Lab in Redding	36	23	23	8	34.8
Institute for Forest Genetics	30	18	18	4	22.2
Forestry Lab, Fresno	18	11	11	4	36.4
Center for Urban Forestry and Chemical Ecology Research Units, Davis	14	9	9	3	33.3
Total	402	241	238	79	33.2

Table 4—Region 5 and detached units sample and respondents.

Location	Number in database	Number selected	Number valid	Number of respondents	Response rate
					<i>Percent</i>
Los Padres NF	673	121	120	15	12.5
San Bernardino NF	655	117	116	17	14.7
Shasta Trinity NF	583	97	97	30	30.9
Angeles NF	564	102	101	17	16.8
Stanislaus NF	473	84	84	19	22.6
Regional Office	441	76	75	33	44.0
Plumas NF	440	71	71	14	19.7
Sequoia NF	427	85	85	13	15.3
Lassen NF	412	74	74	26	35.1
Sierra NF	411	75	75	23	30.7
Cleveland NF	407	74	73	13	17.8
Klamath NF	379	67	67	23	34.3
Tahoe NF	347	61	61	25	41.0
Eldorado NF	334	59	59	12	20.3
Modoc NF	309	56	56	7	12.5
Six Rivers NF	302	55	55	16	29.1
Inyo NF	231	42	42	9	21.4
Lake Tahoe Basin Management Unit	221	40	39	9	23.1
Mendocino NF	213	39	38	8	21.0
Enterprise Units	140	25	25	8	32.0
Information resource management	83	13	13	0	0
FAMSAC	10	5	5	2	40.0
Northern California Service Center	16	8	8	4	50.0
Southern California Service Center	13	7	7	4	57.1
Remote Sensing Lab	33	11	11	2	18.2
San Dimas Technology and Development Center	63	12	12	6	50.0
Assigned to Washington Office but working in area of region and station	2	2	2	0	0
Total		1,478	1,471	355	24.1

Appendix D: Responses to Question 42

Question 42: You have answered a series of questions on sustainable practices in the workplace. However, you may already be doing other things that you feel are aimed at sustainable operations, or you may have ideas that the region or station could adopt to help with sustainable operations. Please use the space provided to write in your actions we did not ask about and your ideas for making operations more sustainable. Please be clear if this is a suggestion, or something that you are already doing.

Region 5

ID	Write in your actions we did not ask about and your ideas for making operations more sustainable:
	SUSTAINABLE THINGS DONE NOW
160809434	I don't think about this a lot due to recycling/being 'green' is a part of "my" lifestyle. I think the FS does a really good job recycling/being green.
160931484	I believe the Forest Service is doing well to be eco-friendly
160810914	I try to be conscious about recycling everything at home and on the job.
160823662	I reuse plastic & glass containers.
160922702	I bring recyclables such as cans and bottles to the recycle center and give the money we get to our employee association fund.
160917037	Things I already do: 1. Shut off engine when stopped for more than a minute. 2. Accelerate slowly to lower gas consumption. 3. Slowly coast to stoplights to minimize complete stops and gas use. 4. Pick up nails, etc in parking lots to minimize tire damage/replacement. 5. Park in first vacant place rather than driving much further in hopes of finding a space closer to the store. 6. Park a little further from my destination in the field (and walk more) in order to save gas and wear-and-tear on my truck.
160807261	Some of the items that I purchase thru GSA already state that the item is used by recycled paper/materials and percentage that make good strategies for purchasing.
160817216	When I need to go out to the woods and change flag lines or remove tags from boundary trees, I try to re-use old tags and flagging if it is in good shape.
160819951	It seems my peers who grew up during the '70s earth conscious days are more likely to recycle/reduce/reuse/buy green etc. Maybe I'm a nut but I feel compelled to recycle/reuse/reduce. I was brought up that way. I ride my bike to work 2 or 3 time a week and pick up roadside garbage when I drive once or twice a week [and recycle what I can]
160922702	I grab paper/cardboard out of the office trash and put it in the recycle bins.
160840026	Paper and aluminum recycling is established.
160927438	We are currently recycling all cell phones, pagers and other communication equipment that is no longer usable and/or retiring them safely out of land fills.
160901214	I take any thing that I think could be recycled in whether I get money for it or not.
161143595	I am already doing most of the sustainable operations mentioned
161900783	You didn't mention work-at-home, which a number of people do currently. This should be regarded as a pro-environmental behavior.
161867910	Recycle all paper, plastic, aluminum, and batteries used at this station.
160816509	I put my recyclables in the proper bins. I have no idea where they go from there (maybe all in the same dumpster?)
160808446	I work from home 100% of the time. I only come into the office to mail materials, pick

	up mail, and drop off my timesheets once a month at most. I only stop in when I have another reason to drive to the area, so I don't take unnecessary trips.
160808446	I also drive a hybrid vehicle.
163594511	Photovoltaic systems on two homes I own. One is independent of the grid, the other feeds excess power to the grid.
161392283	My office offers receptacles for recycling for most items mentioned.
161249409	We have landscaped the building with native plants and have purchased a bike shelter to encourage bike commuting.
161022244	At our unit in --- we have already gotten a green janitorial service, and it actually costs less than a regular janitor. All of their cleaning products are green certified.
161022244	We also received funding (microgrant) to purchase recycling for glass, plastic, paper, and batteries, and bins will be in common areas, and at each work station or office.
160928793	In our office space we are fortunate to have natural lighting so we don't use overhead lights except in the winter months when it's darker in the mornings and early evenings.
161022244	We were also just approved for --- microgrants that I believe are important to sustainability practices. One is the purchase of four bicycles to ride around town instead of using government vehicles. This will cut down on emissions, will help us avoid contributing to California's traffic issues, and minimize car maintenance.
161022244	Also we are going to be participating in a sustainable garden with rain barrels and native plants.
160814139	I currently work at home one day each week, saving gasoline and reducing air pollution.
160822254	I buy compostable plates and easily recycled utensils for employee award ceremonies at work.
161628868	--- I can share with you that we are already doing most of the items & questions in place ... and the handfuls of employees in the facility are doing their part. Our contracted janitorial service and caterer adhere to our recycling efforts. Our Business (customer service) Center is also adhering to our recycling efforts. Our waste management company provides wet trash and recycle dumpsters / with (name of city removed) doing mixed recyclables ... so all employees, classrooms and meeting rooms have recycle containers/making it easy for our janitor(s) to stay on track.
161832318	We have a good, basic ethic on recycling things. I believe that it could be better and more employees could be involved.
161940316	I try to reduce and reuse everything that applies.
162067595	When I receive updates about fire restrictions that need to go out with the campfire permits, I copy the two pages front and back onto one sheet of paper.
162841021	The local community of South Lake Tahoe has a "built in" recycling program through its refuse department. Trash is actually gone through at the dump and any recyclables removed. No sorting required. It definitely lessens the "hassle" of recycling.
163422198	We use an environmentally friendly mix for two cycle engines. This is one area that could be improved nation wide.
163595209	We recently required that our janitorial contractor purchase and use "green" products.
163595209	We have expanded our beverage container recycle program in our developed recreation sites.
163595209	We do an excellent job of recycling white paper.
163608487	I am doing my part at my station and home, So I hope everyone does the same.
163612291	At this fire station we already recycle products to help with funding for various items. I

	am always willing to go as far as I can to make my work place and home as “green” as I can.
163789252	clean up Scenic Byways thru forest and recycle the recyclables - (already do)
163789252	river and creek cleanups - (already do)
160983189	Personally I drive a small diesel which I fuel with biodiesel. This alternative should be made available/known to staff. People should be aware of the carbon footprint of their travel.
161051177	more of a comment: PSW-Redwood Sciences Lab is located in Humboldt County, which is possibly the greenest county in the nation - we would be a great test lab for any new ideas, because we already recycle, use double sided paper when possible, etc. In the future, we'd like to get a Hybrid vehicle but Q 25 only listed Hybrid Escape as an option - are there other hybrid vehicles that would be appropriate for field crews going camping for the week?
	PRESENT BARRIERS
160807065	There are some items, such as furniture, that we have to purchase from specific vendors (like Unicorps) that may not be environmentally friendly. If we could get away from that mind set, and seek out these sustainable sources, we'd be able to make more of an impact.
160809109	We would like to use solar power at two fire stations that have no grid connection, but the initial cost is high.
160809434	With the FS downsizing and reorganizing, fewer folks are doing more and more with a lot less. Forest should already have these practices in place. The question will be if the Forest continues to do them once the transformation is completed due to lack of people and funding to collect, mail, transport, etc recycle/green items. I think recycling/green should occur where possible and the cost is not higher compared to non-recycling/green products. The Forest shouldn't be forced to be green if they are not given a budget to support being green. We can barely get the work down on the ground due to our budgets being so small and declining. Something has to give and be put aside when funding drops. First things to go are the “extra” things the Forest does such as interpretation, recycling, etc. My suggestion is to get Congress and the President to fund the FS if they are going to mandated that we do this. Second, we should continue what we are doing the best way we can, when we can and keep it in the forefront of the organization.
160810514	Small locations in rural and remote areas do not have the availability of recycle facilities. The cost of shipping, the dangers and costs of storage are prohibitive. Green cleaning agents are costly and not effective - at least the ones that have been purchased in this office. Many recycled paper products do not work in copy machines used by FS and produce substandard copies.
160815459	I feel the biggest waste is at the RO and WO level where request are made to units asking to submit reports (or?) and it goes know where & it's a waste of time effort & product(s).
160808626	It'll be a long time before we get computer screens good enough to enable us to proof without printing the document off.
160817478	In my position I see a lot of paper that is used for forms that ask repetitive questions. Time should also be considered a source of energy, forms in general should be short and to the point. This would save time and paper/energy.

160818177	You mentioned printing double sided or using scratch paper to print drafts....I would definitely be doing this IF I had my own printer or only shared it with two or three co workers...however, I share it with about 20 (at least), making it impossible to be more sustainable.
160818502	Years ago we had recycling programs. In some areas those programs have ceased due to the added expense and lack of personnel. There is an added expense to purchasing recycled goods. FS specification writers need questions answered on prices, alternate products for what they currently spec and life cycle cost saving and then they still might not spec these products. Due to the lack of personnel available researching alternate items is time consuming. Some of the older spec writers don't want any more changes. They are having difficulty keeping up with learning new computer software and the basic work. We keep getting additional work functions added, with fewer people and less funds. Stress levels are high and moral is low for the seasoned FS employee. New regs with no additional funds won't force the spec writers to change old habits. The local recycling centers won't just take stuff without markets available to buy the collected items. So just requiring sustainable operations isn't going to do it. Writing contract specs to recycle won't help if there isn't a collection market, or it increases the contract price. If there is a collection, without additional costs-someone must take time to find out what is locally available to be recycled. Not all areas can collect the same items. A web site with listed products made from recycled items, cost comparison and the ability to make up those additional expenditure of funds may help. If it becomes burdensome and major time consuming without assistance or someone daily enforcing-I don't believe it will happen. Where's the money and what's the incentive? Besides some older folks believe global warming is a political and financial scam. So even that will be an obstacle to overcome.
160819951	We need to have administration/DR/staff on board with the concepts you have questioned about. It seems to be more of a personal lifestyle decision that no one talks about or encourages; "He doesn't recycle, oh well, too bad" he thought. I see spotty regard to recycling on our district [recycling is facilitated in the main office but not for out stations or offices] or in the general public.
160840026	Most other dimensions are a stretch for the average employee (beyond recycling). Forest Service culture is a barrier to progress especially engineering. LEEDS and Green Certification are not known or understood by most FS folks. They do not make the connection.
160901214	In my opinion people only recycle products that they can get money for. Somehow along the way everybody needs to practice conservation and recycling. Just knowing about is good but not doing it wont help the environment any.
160956478	We are in the process of designing a LEED office. There is an increased cost for this technology. \$\$ help would make this more do-able and success more likely. To date there has been little help.
161859985	We have a tremendous amount of recyclable paper but have nowhere to go with it even though we would like to. It gets dumped.
161890407	Purchases are extremely limited and generally not items where green purchasing is an option.
161859667	Some practices are either quite a bit more expensive or difficult to accomplish under government rules. However, most practices are easy to accomplish and we should all be

	doing them.
161890407	The computer printer to which I have access does not allow double-sided printing. I understand it is to be replaced soon
161453617	I have a strong personal sustainability commitment as do many others in our workplace. However, I feel that this FS sustainability campaign is a bunch of b.s. The public does not care if the FS is sustainable; the public barely knows who the “forestry service” is! Morale is low around here, because our co-workers are being forced out of the FS due to reduced budgets. When we hear that someone is getting eco-windows or the director is getting a hybrid that does not make us feel good about sustainability -- it further erodes morale. Those funds could have been used on a co-workers job. More co-workers mean we can focus on the important parts of our jobs not spend time on tasks that were previously handled by someone else. That would improve morale. Improved morale would allow us the freedom to consider acts of sustainability and act on them.
161389779	I feel we have too many GSA vehicles. We are already sharing but we don't use a good system and some employees over use vehicles and are inconsiderate of others taking a GSA vehicle to the airport and leaving it for a week. Scientists don't seem to care about conserving the use of vehicles or dealing with problems of misuse.
161357498	I have tried to turn off lights where I work only to be told by other employees to leave them on. They make lighting for warehouses that is based on using fluorescent bulbs instead of the halogen now used. They are brighter than the other kinds.
161022244	Lastly, there has been a lot of talk about trading in our shared government vehicle for a hybrid. Everyone in my office is supportive, however, again, it's not easy because it's not the least expensive.
161022244	We are moving into a new building in the near future, and although we did look at green furniture, it is still not very cost-effective for us to purchase it. Since the government always goes with the lowest bidder, it leaves units without an option to purchase, the often more expensive, green furniture, even if it's higher quality and helps the environment.
160842549	From a sustainability standpoint, it was unwise of us to move to a site that is difficult to reach on public transportation. This point was made clear by many employees before our move here.
160819555	As to recycling paper, the biggest problem is that the cans get full fast and no one has time to run 10 to 15 little cans to the dumpster. Need larger container on wheels that we could dump all the smaller can into and just make one trip every other week.
160819555	We have many old (over 10 years) fridges/freezer that are using way too much energy and need to be replaced; however, I am told there is no money for things like that.
160819555	We used to recycle broken glass and glass/plastic container from the lab; however, this is no long done. I would like to see this policy restored.
160811315	Our rural location impedes efforts to carpool or take public transit. We now have a good recycling program on-site, but much of our work requires the use of disposable products, for which there are few if any “green” alternatives, and paper forms, which we recycle but still require paper and printer use. Our buildings are notoriously energy-inefficient, but funds are not available to upgrade HVAC or replace windows.
160956568	We currently receive no information on how to increase fuel economy (tune ups, tire pressure, etc.).
161155357	We are penalized if we do not put enough miles on our fleet vehicles. It is use or lose.

	For a wilderness and trail crew we should be acknowledged for saving miles not threatened with losing a vehicle for lack of mileage. We now have only one vehicle and we use more miles dropping and picking up crew not to mention lost productive work time.
160828261	At our workplace (6Rivers SO) the heat is commonly kept at 70-72 degrees, which is too hot, especially for those of us who keep our homes at 64-66. ---- The overheated building often has fans running, beginning at 0800 hrs. Excess energy to heat & then energy to cool wouldn't be tolerated by any one person who had to pay the bill.
161028730	Additionally I don't like pesticides, but they spray my office building and other work sites on a regular basis under the auspices of our health and safety. I'd like to opt out, but how? I'd rather kill black widows and ants than have my work environment sprayed just because those insects might be there.
161381983	The main challenge is getting a lot of people who don't care or have bad attitudes to get on board and make an effort. Most of the systems are in place somewhere on the district, but no one really knows how much money or waste we save or what good comes from the effort.
161439183	I am currently a member of an IMT and I strive to encourage recycling efforts. However, most local districts do not have the ability to help with this effort.
161555399	I try to use sustainable operations everyday. My answers lacked in the recycling of glass & plastic because the city we live in does not have separate containers for recycling. There is a reported 1 in 3 recycling recovery in trash. I work in a field crew and have limited time in the office. I think as you go lower down the chain it is less practice (ex: field crews).
161823901	The Forest Service manual or handbook provides clear guidance and authority for storing a government vehicle at home under certain conditions for specific job categories. I have been doing this for over ten years resulting in many saved vehicle miles, gas, tires, emissions, etc. Region 5 now has an unwritten policy delivered at the last forest supervisors meeting to curtail this policy due to liability concerns to the forest supervisors who sign the authorizations. This thought process is totally without merit and against written policy, but is resulting in more miles driven by many employees in both their government vehicles and personal.
161847517	LEED certification for new Forest Service buildings over 2500 sq. ft. is now our policy; however there is no organizational (funding) emphasis to build or support "in-house" skills. LEED consulting services add to already strained project costs. The result appears to be substantially higher incremental project costs than the 2% to 7% typically "advertised".
161871966	Sometimes they keep the building overly cold in the summer months. I think this is not always needed and can be uncomfortable.
161918587	Wanted to address major recycling at fire camp and units but agency not supportive so far of idea to recycle everything but allow local unit to keep the money for local use (e.g. for green improvements)
162167667	Use of alkaline batteries on a fire is a ongoing issue - new batteries are given out after each shift and then set aside for disposal when they might have a lot of life still in them. It would be good to have some information available on who might be able to continue using these gently used batteries to get the full life. I don't know if recyclable batteries would be practical on a fire.

162270383	We are frequently told to keep computers on when away/weekends due to security software update downloads. Everyone around my office now just logs-off vs. turns off, their computers all of the time for primarily this reason, by default.
162911551	Also, I usually have to print multiple copies of my time sheet for review with my supervisor, it would be better to have an electronic means of sending a draft version.
162911551	Finally, there are several desktop computers in my office. These are all left on overnight, every night, because that is when automatic updates happen in the system. I feel that this wastes a lot of electricity, however, I don't want to turn them off and then have them miss critical updates. What should I do here?
163595003	Toner cartridges in my work place are not recycled. Need help with this problem.
163595209	We recently lost our local recycle vendor in our small community and this may make recycling more difficult and expensive in the near future.
163612291	I know the one thing I think about is the printer paper that is wasted. Sometimes the printer will spit out extra paper or a single line item on one sheet that is unnecessary and it is thrown into the paper recycling can - then from there I don't know where it goes.
163848085	When ordering a desk chair last year there were no desk chairs within or even close to my budgeted amount that could be considered either recycled or non-chemical (w/o fire retardants). It also took a lot of time and research to find out about the products available.
163771460	Location of remote bio-diesel tanks so we don't have to drive 100 miles with 5 people to fill up the fire trucks. Considering personnel time/fleet use and wear & tear on equipment, we spend about \$11/gallon at most of our remote locations where we still have the fuel vaults but fleet management is too lazy and unwilling to put forth the effort to keep these tanks in service.
	SUGGESTIONS
	Suggestions for fire/incident situations
160810107	Make eco-friendly practices as important as safety in fire camp. It needs to be part of the daily briefing - and strongly worded.
160922702	I would like to strongly suggest that fire camps set up recycle bins everywhere, because they really go through the cans and plastic bottles. The last fire camp I was at had a few, but not outside each trailer, and people were a bit lazy to bring them even just a few yards away.
163424205	Mandate recycling at fire camps to reduce wastes and costs. Get local non-profit organizations involved as they could generate revenue by recycling beverage containers in many states.
164091205	Fire operations, especially large fires, need more recycling options throughout the U.S. California is starting to change, but we recently went to Montana where we had carefully separated all of our recyclable waste from our normal trash (including batteries)..... what did the camp staff do? Threw everything away right in front of us; needless to say, we stopped recycling on that fire. I recommend making the large blue GSA trash bags available for recyclables, and having IMTs make sustainable operations one of their top suppression objectives (listed right there in the IAP).
163778953	I work in the Fire Management Program in the USFS and I think there are many opportunities to make Fire Management more green. I will not advocate a change that would decrease the safety of line going personnel or increase the work load or time commitment significantly to restock supplies. I think recycling could be emphasized

	better at base camps, especially batteries, cardboard and plastics.
163778953	Also packaging of cache items could be looked at to reduce the amount of packaging or use re-useable packing materials.
163819252	All incidents and events should emphasize full recycling. A huge amount of recyclable material is generated by thousands of firefighters and contractors over an extended period. What ever happened to canteens we refilled, in lieu of 50,000 plastic bottles of water?
	Suggestions regarding fleet and fleet management
160810107	Don't replace 4 wheel drive vehicles needed for field work with light weight vehicles and/or hybrids - only replace city vehicles with hybrids.
160811240	Quit buying gas guzzler vehicles such as v-10 Dodge and Fords. Buy more diesel and begin using bio diesel.
160810327	Bring back Forest Auto Shops! They can then manage tire and oil use to insure recycled products are used and save R5 hundreds of thousands of dollars by using recycled products. PLUS - FS auto shops doing all inspections, tire replacement, LOF, and light repairs at a minimum, will save R5 millions of dollars a year and provide for an overall safer fleet, while doing a vastly better job with our little part to reduce dependence on foreign oil through the use of retread tires, re-refined oil and other shop lubricants and fluids, longer oil change intervals, and huge savings in overall fleet maintenance repair costs. My Forest alone has seen a 52% increase in the fleet budget in just 3 years since going "100% commercial", not to mention the lost ability to use recycled products as we did in the past.
160818007	Have diesel based vehicles so that biodiesel can be used.
160818007	Purchase vehicles that get higher than average mpg – domestic vehicles get the worst of ANY others. PUSH the domestic vehicle companies to sell us higher than average mpg.
160818177	I see many co workers (specially fire management) drive SUV's, however I RARELY, if at all, see them with passengers, one or two SUV's should suffice the entire fire management fleet, the rest of the fleet could easily be converted into 4 cylinder vehicles.
160820771	Hybrid vehicle technology currently does not meet the need for most of our utility field vehicles. Biodiesel could be used in much of the existing fleet and help shape our future vehicle procurements. Go Bio now, don't wait for the hybrid technology to catch up to our utility vehicle application need.
160828261	Easier access to tire pressure gauges and air compressors might help to keep tire pressure close to optimum (fuel savings).
160828261	Please take a hard look before purchasing ethanol flex-fuel vehicles. From what I've read energy output to input for ethanol derived from Brazilian sugarcane is 15-1 vs. 1.3-1 for U.S.-grown corn ethanol. Biodiesel, which I use in my personal vehicle, makes a lot more sense.
160824532	Purchase economy automobiles and trucks.
160933096	Converting the vehicle fleet to hybrid or alternative fuel vehicles once the technology is available for off road capabilities.
160956568	We need to do a better job in planning our fleet needs as a unit. Currently operators decide what vehicle they need, without consideration for overall unit needs. The result is we have far more "big" pickup trucks than we need, and these vehicles are not fuel efficient. Linked with this planning, of course, would be the need for people to share

	vehicles to a much greater degree than we do currently.
161878580	Encourage motorcycle use over pick ups or sedans. A current practice and a suggestion.
163778953	The agency could also look into bio-diesel for its vehicles.
160819951	Our shop has a minimum number of vehicles and borrows as needed. But since we are field oriented we have to have ready access to vehicles 24/7 sometimes. A vehicle pool wouldn't work well in the summer for us. In the winter, yes it would and does work.
161197256	Buying cars that could be used around town instead of being forced to drive what would normally be a large truck.
161032641	Complete (or begin) an analysis of the use of personal vehicles or rentals for gov't travel vs. purchase of a gov't vehicle (hybrid) to be shared by a group of individuals. This has been talked about for some time, but have heard of no progress.
161837489	What ever happened to the natural gas vehicles? I used to drive a FS truck that was CNG.
161867910	Purchase of fleet and maintenance vehicles that are the most fuel efficient for the requirements of the job. Whether that vehicle is an engine used for fire, heavy duty pickup, van, or single passenger units. This includes but is not limited to: motorcycles, ATV's, OSV's, chainsaws, and all light and heavy equipment used on the job.
161179632	We could change all light bulbs not already fluorescent to compact fluorescent bulbs, and convert more Stations to Solar and wind power, especially in remote locations.
163819252	Rural/remote duty stations should be offered more flexibility in fleet selection, so that we could obtain appropriate and economical vehicles to suit our needs. Extended daily commutes are a large contributor to energy waste and CO2.
161195791	Planning trips to save time/fuel while in the field. Using GIS/GPS to map routes. (if updated material is available).
163819252	There is no such thing as public transportation in the mountains. A more flexible vehicle use policy would reduce driving time and energy consumption. (i.e., Drive POV 50 mi to duty station, pick up gov. vehicle, drive back past home on way to SO, repeat on return trip.)
	Suggestions for facilities and construction
160809109	Recycling construction materials in place instead of requiring removal and disposal then delivery of new materials. Specifying a recycled component of aggregate base, concrete and asphalt. Using recycled plastic composite decking and recycled timbers for a visitor center.
160818007	Use solar/hybrid devices whenever possible. Ex: solar heating of water for bathrooms.
160818007	Increasing insulation of government buildings to reduce the amount of heating/air conditioning.
160824532	Monitor air conditioning and heating - which are often too cold or too hot.
161867910	Require leased buildings to meet a minimum efficiency standard for heating, cooling and lighting.
160828261	One of the bathrooms at work takes about 3 minutes before hot water comes out. One or more on-demand hot water heaters would generate a huge energy savings.
160818007	Require contractors and government cleaning products to be biodegradable and/or based upon a minimum recycled component.
161021717	I think there should be more maintenance dollars, so windows/hot water heaters/and old air cond/furnace's could be replaced to make more things energy efficient.

161028730	I suggest that other building/work area sustainability practices be incorporated when the building owner agrees: solar, instant hot water, low flow toilets and faucets, best quality insulation in windows, walls, ceilings, etc.
161028730	That the FS have a policy (I'm not big on policy usually) that air conditioning is compliant or better than state policy (here that is 74 or 75 degrees).
160956568	I work in an office with overhead lighting (as with all the offices here), seems like we should explore relative costs of overhead vs. desk lighting. Overheads seem inefficient.
161850061	Landscaping should be consistent with local conditions. They tried native landscaping at our office here in the high desert of eastern California, but pulled everything out and put in a lawn when they couldn't keep up with the weeds. That lawns is now watered pretty much every day of the week, which seems a sin given that we only get about 10 inches of rain a year. I'm not saying that we need to get rid of all lawns at FS facilities (although I would personally prefer it), just that we should be very conscious of our water use and apply strict water conservation strategies when it comes to maintaining landscaping (i.e., accept lawns that aren't "golf course" green because they're only watered 2 or 3 times a week as opposed to every day). Also, I believe chemicals should only be used on a very limited basis when it comes to landscape maintenance. We are the Forest Service, after all.
161850061	Install "dual flush" toilets wherever possible, including public facilities. These are toilets that have one flush for liquid waste and a stronger flush for solid waste.
161372009	Funding for maintenance leads to a sustainable operation. Cuts in funding or "letting things go" leads to re-investing more capital or "throwing good money after bad". This is a suggestion. Why build more when we can't care for what we have.
162852751	I am currently having our utility supplier perform an energy audit of my facility to identify measures that can be performed in order to reduce our energy consumption and reduce our carbon footprint. I highly recommend that all facilities have this audit performed and take action on findings.
164147935	You didn't ask if our location is planting water-conserving vegetation or making sure irrigation is as efficient as possible. That isn't a personal decision/action, so may not be appropriate for this survey. It could be part of the last section, though (spell it out). A lot of locations don't do such a good job at that.
163599673	When weather is reasonable, instead of using the A/C or heating we would open the windows and doors to regulate building temperature.
163614253	Toxic-reduction efforts in cleaners/paints/maintenance supplies.
162039470	I recommend that motion detectors be installed in common areas that do not have sustained/constant use (e.g. restrooms, hallways, etc.) automatically turning lights on/off upon entry or exit.
161021717	Stations that have room should have small wind mills to help generate electric/ with work better than the solar panels.
161416473	Make sure lawns are watered during cool parts of the day, and minimize lawn sizes.
162167667	Suggest as an agency that use of less toxic cleaning products be encouraged like vinegar and baking soda.
162270383	Control of thermostat in office if present for turning off/down at night or weekends (already doing here).
162270383	Motion sensors for in-room lighting (automatically turn off after time) -already in our offices.

161851840	I think that large areas of lawn should be converted to water efficient plantings. This would also save fuel to run mowers and haul clippings for disposal and would lessen disposal impact. This requires funding. Trees should be planted to shade walls that face south and west. Irrigation systems would need to be re-done to provide appropriate irrigation patterns. Employees should be encouraged to use (efficient) desk lamps rather than overhead lights. This would require funding, of course. We already have removed some tubes from lights in halls so that they are not so brightly lighted. Outside doors that expose heated or cooled spaces should not be propped open. Windows that let in southern and western sun should have user controlled blinds or solar film.
160932314	It would be nice to know how much power we use -- at the facility-wide level & individual appliances/equipment. I've heard that you can get devices that measure power usage on individual pieces of equipment (e.g. Watt's Up, etc.), which I think would be handy for determining the sources of large power-consuming equipment. On the facility scale, I've recently heard that in some areas of the country (not sure around here) that local electric companies are giving consumers devices to monitor their house's (or business's) total power consumption/cost in real time; this way, they can see how much it costs to turn on certain appliances (e.g., http://www.boston.com/business/ticker/2007/05/nstar_offers_el.html).
	Suggestions to address commute
160810107	In rural areas without public transportation - facilitate van pools that employees can pay into.
160822972	encourage employees to carpool between stations encourage employees to work at nearest station
160840810	Locate RO in location that is more amenable to getting to work by walking, bikes or mass transit, and in neighborhoods that are safer to live in and commute through.
160922702	I also would like to recommend financial incentives for bicycle riders to work. At my office, there is a financial subsidy to people who live far away and take a bus to work. However, my husband and I use no gas to get to work, but are paying a far higher rent in order to live close enough not to need to drive/bus to work. More people in town here could certainly ride their bikes, and a financial incentive might just make the difference. We have excellent bike trails in our area (Santa Barbara, CA) that come very close to the office.
160956568	The RO is virtually impossible to get to using public transportation, while I don't advocate moving the RO, consideration of public transportation should figure into location of R5 facilities, especially in higher population areas.
161416473	Locate trainings and offices near public transit so we don't have to drive so much. Also, offices should be near residential areas so we can bike or walk to work. Often, our SOs are on the outskirts of town--most of us can't afford to live in the country.
161615409	Make public transportation available to the regional office.
160973003	We should make more use of virtual employees, telecommuting, and teleconferencing.
160973003	When we do have to have face-to-face meetings, choose locations that are accessible by public transportation.
161615409	Encourage alternative work locations and telecommuting to reduce/eliminate our long commutes.
161900783	Would suggest making workplace showers available to encourage bike/run to work.

161826884	I suggest more allowance of telecommuting and more flexibility in schedules to allow rideshares.
163614253	Telecommuting, maxi-flex schedule to reduce commuting needs.
160823197	I think the support of work-at-home opportunities are important when applicable. The agency does not walk the talk on this subject. I think there are many opportunities for employees to work at home more that are not currently being taken advantage of.
160983189	Encouraging walking or biking to work
161878580	Work a 4/10's work schedule, as opposed to 5/8's. p&s
163819252	Occasional telecommuting arrangements would really benefit the gov't. by reducing travel time and vehicle emissions. We spend many hours a day....driving.
	Suggestions for recycling
160818007	Have electronic waste, normal glass/plastic/aluminum/paper recycling facilities, battery, etc recycling as a normal routine. This can be facilitated with scheduled pick-ups/drop-off sites at each facility that are gathered and sent in once or twice a year. This means down to each individual office.
160927438	Perhaps more information on the recycling of computer equipment and other electronics used daily in government operations.
161015224	A great recycle tool would be a recycle basket (say 12"x8"x14"tall) and matching waste baskets (say 12"x4"x14"tall) that together would replace the existing office waste baskets. It would then be as easy to recycle as it is to discard. When the new recycle/waste basket sets are delivered they could come with a up to date list of what is recyclable. What is recyclable is constantly changing.
161162318	aluminum cans dumped along forest roads can be picked up by field going personnel while on regular duties and environmentally disposed of
161381983	If we were allowed to keep money from recycling bottles and cans and put it towards our budget shortfalls, people would care a lot more.
161434112	It is my understanding that there is an executive order requiring that we use recycled paper in our printers and copiers. In five years on this forest I have seen recycled paper available in the copier room only one time. Publicize the executive order to forest leadership and make them responsible for following up to check for compliance.
161569446	provide more and better locations to recycle, inform co-workers of station locations and what we can recycle
163656818	It would be helpful if all recyclables were required to be recycled with a weekly trip to the recycling place. IE: someone can be put in charge of taking the recyclables down and that would be part of their job, and they could use the money for a party for the station, some sort of reward.
162310151	Comprehensive recycling stations
164073762	Don't spend more time recycling items than the cost of recycling them takes. (In other words, don't spend a dollar to save a nickel.)
161357498	We need a way to recycle old computers and other electronic equipment to include radios and chargers.
161163392	We need to make sure every time a piece of equipment fails, it is replaced with an energy efficient model. Recycle bins are available but I would like to see printer cartridge bins near printers. A once a year pick-up of electronic type surplus for recycling, circuit boards, scrap wire, old machines, etc.

160842549	We should have a CD/DVD recycling program (if we have one, I don't know about it).
164091205	Also, nobody in our Region has come up with a good way to recycle the large amount of batteries that we've been accumulating; our local disposal service only accepts waste from private consumers. We now have quite a large stash of used batteries that we're trying to dispose of.
161868904	visible recyclable container even at reception area
163594228	Recycling needs to be as convenient as throwing it away.
163035296	Have recycling receptacles placed throughout government buildings. Have mandatory classes in recycling.
163604510	I would like to suggest that we develop a process for recycling of old computers and peripherals - an easy way to recycle them through donations to schools/groups, ability to 'give' them to a company that dismantles them for scrap/recycle.
163789252	Place recycling trailer at public campground and river accesses to encourage public recycling of aluminum cans. - (suggestion of an idea seen in place @ BLM river accesses in Utah)
163961174	Have mixed recycling stations located throughout facilities rather than just paper recycling locations.
164050470	suggestion: It would be a step in the right direction if the region and the WO starting funding what it would take to develop a comprehensive recycling program rather than just giving it lip service and expecting employees to develop their own recycling program (i.e., staff it, write microgrants to develop the storage facilities, etc.) without any funding to support it.
161392283	Perhaps more education on the how to recycle the less common items such as batteries.
163769058	I just feel that we need to be encouraged to recycle more.
	Suggestions that are community based
160813924	Suggest sponsoring of rural communities to implement recycling programs. Many rural areas within the Six Rivers NF do not have recycling programs.
160967867	I would like to see the federal gov't provide local communities with incentives for renewable energy. This needs to begin in the workplace and look at partnering with the local schools in small communities region wide & nationwide. The local community schools also need to do a better job in the recycling effort. We (feds) could be leaders in this arena and what better time than now? ... Given the current situation, with so much negative in the fed gov't; we could certainly gain by a positive move for our children, future generations and the earth.
	Suggestions for general programs
160810371	We recycle at my work station but it could use a lot more employee awareness and "pep" programs. I think the rewards program is a good idea and gets people involved. Environmental awareness programs need to be implemented.
160811615	Put standard systems in place, identify target results, develop pilot projects, expand successes, communicate expectations, fund programs as needed, identify actions that can be done now at no cost.
160829787	more funding
160917624	more involvement from the top leadership
160820771	Policy requirements for green standards in contracting.

160840026	We need to frame and highlight the easy and practical items.
160911010	The FS needs to educate its workforce more on the small and incremental ways to green the work place.
160823662	Suggest make sure a product, such as, a hybrid vehicle, will save energy/environment to make, use, and eventual disposal. Look before you leap.
161814744	Make the movement a national program where all levels of management are forced to make it part of their duties rather than optional. If told to do it they just “might” comply.
162375087	Discuss these items regularly at staff meetings, especially with new hires.
163806741	Definitely rewarding those that participate in maximizing sustainable/green practices. There is no incentive or thought process in a lot of my employees regarding the environment, despite working for the Forest Service. Constant reminders telling people what they should be doing and why.
163819252	Needed: Leadership at the local level. Many red-carded employees cannot carry their aluminum can 15-20’ down the hall to recycle barrel. Sheesh! My 87-year-old Mom with limited mobility does in her home..
163848085	In order to make good environmental purchases we have to have options available to us at reasonable prices, encourage those choices, and make those products as readily available as conventional products.
	Other Suggestions-Miscellaneous
160853156	pick up spilled gas
161555399	I do feel the minimum is being done in the office but it could be improved slightly by signage or competitive ‘rewards’ by department.
160820771	Biomass utilization of our forest by- products, there is a developing market that we are missing many opportunities for.
160928014	Many of the programs we currently use demand a high volume of paper printing. There should be alternatives to printing, such as storage as PDF files for programs that require storage.
163614253	Online training to reduce travel.
161837489	The FS uniforms could go eco friendly-currently we have no choice for organic fibers
160933096	Utilizing renewable forms of energy for electricity such as solar power.
161861576	Recycling training as part of new employee orientation - many folks seem to have no clue on the subject.
160956568	Collectively, we waste a tremendous amount of paper printing “header” sheets for every printing job. Printing the sheet is the default setting, and most employees do not realize this setting can be changed. The default should be “no header”, changed on a case by case basis when employees need the header.
161867910	Promote contracting to those sources that use the most energy efficient means to fill the contracts.
161868904	Going to schools and interacting with kids.
161868904	Leaving literature at camp sites.
160975238	The easier we make it to develop and maintain sustainable operations, the more likely we are to succeed. I encourage the explorations of incentives or grants to help field units institute sustainable operations. I am encouraged that we are thinking about this at the Regional level...thank you!
162060126	Make double sided printing the default on all printers. Many folks do not know how to

	use double sided printing.
162167667	Regarding the rewards question on sustainable practices - one useful agency 'gift'/'award' could be a reusable shopping bag displaying FS pride in being environmentally conscious.
161195791	Reducing waste in the labs.
161851840	The FS should not expect to push updates on computers after hours as this requires folks to leave the computers running. Or the computers should be designed to "wake on LAN" for an update. The FS should only purchase displays that have a power off feature, employees may need instruction in its use.
162911551	It would be good if there was a dedicated printer where one-sided draft paper could be re-used in our office.
163422198	I also think there could be more influence with policy on using wood by products for fuel wood. In Florida a new plant is being constructed that makes wood pellets. Many timber sales on federal lands have huge slash piles that we must burn during the winter months. Most of this type of material could be used in producing wood pellets. Plus there would be a financial benefit in using our natural resources more efficiently.
163612786	Sustainability used as criteria for funding investment projects
163612786	Better web resources identifying sources of products that lead to sustainability/conservation (especially when designing facilities and specifying for contracts)
163769058	I just feel that we need to be encouraged to recycle more.
160810419	I suggest that all Station printers be set to print double sided as a default. If a document needs to be printed single sided, the author can change the default setting. This might actually save a few trees!
160813259	Suggestion; The United States Government as a whole needs to actively pursue solar energy usage. Every home, building, public center throughout the USA needs at least some (30 to 50 %) of its energy needs fulfilled through solar energy. Obviously, funding is the big issue. The USA needs to focus tax dollars into green energy, and realize the positive effects of green energy.
160983189	Changing food habits to more healthy foods, giving people time during the day when there is the farmer's market so they can purchase healthier food.
161858045	We sometimes react to deadlines without looking at the whole picture. For example, where do we want to be down the road, rather than can we get some funds now to do something piecemeal, rather than doing it right in the first place. This usually takes more money up front, but with considerable opportunities for savings in the long run.
161890407	How do we find out about classification of hotels?
161891887	There needs to be more effort to excess Items before throwing or giving them away
163611408	GSA could offer more green items, for example, packing boxes made solely of recycled materials.

Appendix E: Open-Ended Comments

Question 54: Write in any comments or opinions regarding operational sustainability, green practices, or this survey.

Region 5

ID	Write in any comments or opinions:
160807065	Make it easier for us to purchase "green" products by being able to look for them instead of forcing us to purchase from required vendors.
160808626	I think the questions towards the end got a little silly, more designed to propagandize rather than elicit information. I am very busy.
160809109	We (R5) can do much more, and I am glad to see support at the RF level. Little by little we will make changes for the better if we can consider "green" options when we do our jobs.
160809434	Some of the questions are not clear and need examples. For example, "I have alot in common with environmentalists." (previous page or two) What does this mean? Does it mean don't cut trees or use fire; or does it mean teaching about nature, hiking, and enjoying the outdoors; or both? You need an example of what you mean after questions like that. I think I'm an environmentalist. I do believe in cutting and fire to keep the forest healthy; and teaching, enjoying nature, etc. I'm more in the middle as an environmentalist than extreme right or left winged. So, how would I answer your question?? In my field, the word "environmentalist" means no cutting or fire. They are extremists. I am not.
160810107	It is sad to me that 35 years after Earth Day, we are just now taking this issue seriously enough to have a survey like this.
160810327	As Fleet Mgr. I have pushed the use of Alt. fuels for years on my Forest, starting with CNG in the late 1990's, then moving to Hybrids with our first Honda Civic in 2003, Escape in 2004 and recently adding 5 more hybrids in 2007. I have been running B20 Biodiesel in all 8 of our Forest fuel tanks since the spring of 2005 which means all of our Forest fire and diesel trucks and all construction vehicles have been using it for some time with no problems or complaints. We have fought (fire) hard to keep retread tires on ALL of our large trucks for the past 15 years. When we had our own Auto Shops, we used recycled and re-refinded products to the greatest extent possible. Too bad that all those efforts are lost to us now. (Except the B20) And it seems the rest of the region is just now discovering it??
160810371	This survey is good and I hope something will develop from it.
160810514	More government waste - time is precious as well as the environment. Just can't wait to see all the paper, processes, and waste this survey will cause! Waste of time, money, and energy that could really make a difference on the ground in improvements to the environmental conditions of the National Forests!
160810914	I feel that there needs to be a balance between environmental practices and the needs of humanity. It's not simple, of course, but through education we can teach the children how to live in this world without using resources to their limits.
160810980	better survey than many we see in government

160811240	What kind of bs were the last ten questions. This kind of thinking wanting to know someone's feelings is what causes many of the problems in the FS.
160811615	I think sustainability and green practices should be a high priority for the Forest Service.
160815459	Most folks who are not educated & experienced in land management (or have very little) have a very different outlook on what needs to be done or not done. Fuels reduction is a must ... wildfires today are NOT natural. Timber Sales CAN be implemented in order to provide the resources needed & to sustain them. If you are going to build in the woods then take responsibility for your own actions & quit blaming everyone else.
160817216	I would like to see the Forest Service design future buildings to take advantage of natural lighting sources, and diurnal heat fluxuations.
160819951	The tough part of a green program is to make it an accepted and universal part of the organization, as if you didn't know. That takes time and will require direction from the top, economic viability in the marketplace and education at the elementary school through college level for all citizens, not just federal employees.
160820771	I would hope to see this agency, along with the Interior land management agencies playing a more significant role in supporting green practices and implementing them to a larger extent in the future.
160823662	It would be best if all employees were on the same page when it comes to recycling. We haven't gotten much direction/encouragement reminders from supervisor's office, regional or WO. We're being told to purchase green; but there are other things that can be done to recycle and help our world.
160823806	Global warming is occurring, but we are not the cause. We are merely witnessing a natural cycle of the earth and we need not panic or go to wild political extremes to "stop" global warming.
160828261	1) The question re: vehicle sharing left little room for nuances. I currently share a vehicle with the entire department. The experience would be more positive if the monthly PM check included the washing of the INSIDE of the windshield & previous users picked up their trash. 2) Rewarding people for behaving sustainably seems unnecessary. 3) It is a good thing and gratifying to have the agency assess its operations via this survey.
160830756	This survey is a waste of time in my opinion
160833739	survey seems to be slanted
160839499	I wonder how much energy I have wasted doing the survey
160840026	Need incentives.
160842940	I would love to ride-share or use public transportation, but there are no options for me, aside from moving, that are possible.
160901214	I see on TV how the media claims that doing something (i.e. using florescent light bulb) is equivalent to removing so many thousands of cars off of the roadway, and wonder if we are all going to do that it would be great and while we're at it why don't we remove those thousands of cars off anyway which would double our efforts.
160911010	More things need to be pre-engineered with how to dispose of the item in mind.
160915432	I appreciate this survey and hope that USFS is becoming more environmentally

	aware of their decisions and actions executed.
160915557	Waste of time
160917037	I take issue with the use of the name "environmentalist" in the last group of questions. The term "environmentalist" almost always refers to 'preservationists'. Preservationists want to keep the forests as they are now. They seem not to understand that trees are always growing or dying, they never are static. Foresters are true environmentalists. Foresters strive to improve the growth and condition of the forests. The so-called "environmentalists" of today are hypocrites. They claim to care about the environment, yet they continue to use cars and highways to live their lives. They continue to rely on fossil fuels. They live in bigger houses, own more/bigger vehicles, and consume more natural resources than they need. Calling "environmentalists" hypocrites is kind; they are a big part of the problem. If they truly cared about the environment, they would stop driving fossil fuel vehicles and live in small homes and consume minimum natural resources.
160917624	more use of the electronic media to educate the younger generation
160922702	Should be more encouraged everywhere and in every aspect of what we do! Reducing the amount of stuff we use in an aspect that is rarely discussed, but should be practiced more. Although I strongly agree with and practice the concept, I never heard of the term sustainable operations. Do we have to use a new term rather than one we all know already?
160923691	A green fleet though it be a noble concept is not practical. We need what we have right now. If it isn't broke, don't try to fix it.
160928798	While sustainable operations are important, is there no limit to the "important" issues Forest Service employees are expected to address these days? When will there be a list of "less important" issues that Forest Service employees will no longer be required to address? The workforce is in serious change overload.
160933096	The USFS and other federal and state government organizations should lead the way in the use of sustainable practices and serve as an example for the private sector.
160948664	Survey is a bit slanted towards sustainable operations without considering other viewpoints.
160956568	I think emphasis on sustainability is a good thing. If emphasis is coming, please make the approach something that will stimulate the creativity of our employees rather than mandate region wide approaches certain to fit some places and not others. We have old, inefficient facilities that would appear to be major obstacles to operating very efficiently. I would hope that any message on operations (energy use, recycling, etc.) would be compatible with our land management direction. If they are in conflict then we will appear (actually will be) hypocritical. The survey in general was okay, but some of the questions (For instance, why do I care about things environmental? did not hit on my "views"- it went to plants and birds and trees- I care about the systems, and there was no way to give that response (except here).
160967867	I am hopeful that R5 FS will become a leader in sustainable forestry and green practices and in implementation of renewable energy programs.
160973003	I don't feel that our leadership has committed the agency to sustainability in any

	meaningful way.
160975238	Thank you for asking....let's not let it stop here!
160997320	FS is behind the ball in practicing sustainability, green practices, etc. despite our mandate of sustained yield, caring for the land, etc.
161006795	Some questions were rather limiting in their focus. Overall it seems to be a good survey. Unfortunately, I've been around long enough now to be pretty tired of the "fad" of the month or year, and lack of "sustainable operations" on the ground to provide quality service to the recreating public.
161015224	Now that US car makers use part made overseas and Japanese cars are assembled here. Let drop the buy American (which only benefits the CEOs of the US car companies) and buy our fleet based on: 1) appropriate for the job; 2) gas mileage and air quality; 3) maintenance costs and reliability; 4) cost and resale value
161021717	Was a little long
161126855	This survey asks a lot of questions that requires you to think about what you do in your everyday lifestyles. Yet it is biased on the fact that not all people can answer the questions you have asked because of their participation outside of the work place and where they live.
161136679	I think in this day and age everyone does their best to help mother earth, as far as this survey, I think it was a waste of my valuable time, please take my name off of your mailing list.
161155357	In many areas of region 5 and the west in general solar and wind power could at least supplement power at F.S. offices and buildings. Considering how much money gets spent in r 5 a small percentage could go to alternative power and these systems could be added to over the years Example 2 solar panels a year added to buildings cost under \$2000.00 a year
161179632	There is a lot of talk in the Agency, and lots of surveys, but little action...
161186532	Alot of these questions are personal and should not be asked of employees. This is NOT the type of survey that should be conducted in the workplace.
161235384	Stop thinking small steps - think globally. The USFS and USA should support certified wood products and reduce deforestation in tropical areas. Better forest management practices here can reduce devastating impacts there. Do not export environmental impacts!
161255784	Just enjoy nature, the good and bad.
161367828	I appreciate the work and questioning that went into this survey... I am hoping for some positive benefits to come from this. Thanks!
161372009	That last section was kind of creepy.
161381983	We are moving in the right direction, but please keep using common sense when making policies.
161416473	The answer buttons on this survey need to more clearly show that a button was selected.
161569446	my job requires the purchase of many materials that must meet engineering specs and are not available from recycled products
161629904	Common sense, wise decision making and moderation are the key...
161694045	I'm becoming embarrassed to work for the government. The lies and corruption at the HIGHEST levels of government (The President and the

	Administration) should not be shrugged off. Those responsible for lying to us about almost every aspect of government should be imprisoned. The lies, coupled with the dissolving of the Agency by starving it to death, are creating work overloads and destroying morale. But then, if your aim is to 'eliminate' government services, what better way than to cripple them with budget cuts and staff lay-offs. You can then point a finger at those same Agencies and accuse them of not being efficient or getting anything done. Shame Shame.
161814744	Not impressed with the question base of this survey.
161817625	Operational sustainability is a good goal. However, given the costs of recycling, costs of recycled material and lack of recycling facilities in rural areas, this initiative needs to be looked at VERY closely. We can spend an enormous amount of energy (people) and money attempting to recycle a small amount at a HUGE cost to the agency. Unless and until recycling becomes easier & affordable, rural areas (where many FS offices are) will struggle with this. "Green" vehicles are another issue... Hybrids are about the only vehicle that's "doable". Other technologies, while they have merit, are not applicable to rural areas simply because of the lack appropriate fuel (CNG, hydrogen, biofuel, etc.). Until these alternative fuels become more readily available, "green" vehicles should not be put into the fleet.
161823901	I commend the Forest Service for their current efforts and the knowledge there is always room for improvement.
161825457	I hope this survey will help the organization and the results get to the masses with a strong urgency that we need to practice sustainable practices as much as possible.
161828724	In rural settings such as this, recycling is not really viable. Recycling centers depend on mass quantities and rural counties don't supply it, so recycling centers are few and far between. Centers that do exist are ones that deal in big money items such as aluminum, glass and 1 and 2 plastics. We recycle what is available to recycle and sometimes that is all that you can ask.
161832318	What are we doing with this info?
161834955	Too long!!!!
161837489	I wonder what will be the end result of this survey. Will anything actually change? Will there be a result? Will I know of the result?
161838085	wow...what alot of off the wall questions...someone had too much time on their hands to come up with a survey like this...definitely a waste of my time and the Gov'ts time!!!
161859985	The term has never reached this office. I only hear about it when actors are promoting it on TV. R5 seems to always be in court over our counter-productive and destructive forest practices. The fire fighting end of it is as destructive in its chaotic, impatient approach driven by politics rather than practicality.
161861576	A resource agency should be a good steward in all aspects, and set the example of wise resource use.
161867910	operational sustainability starts with the individuals not with the organization
161868201	It is too long.
161871966	I support it.

161878580	good idea
161918587	The first page the drop down menu only showed 1-10 so I answered as 1=10%, 10=100%. Then I saw that there was a scroll...
161940316	Green practices should especially be incorporated in the operation of the government because this should be an example for others to follow
161996143	we should all do our part to make what we have in this world last without letting it waste
162067595	Are not the last few questions somewhat too touchy/healy-feely for the workplace?
162100978	Green practices by themselves are a waste of time. Such practices need to be balanced with cost and time. Most of the green facts are in fact propaganda and not true facts, such as man's effect on global warming. Green environmentalism is a fanatical religion masquading as scientific facts and propagated by an irresponsible media.
162103559	Survey is too long
162167667	I'm not sure how people were selected for this survey but I hope it went to people who are not environmentally conscious too. It's confusing to me why some people 'don't care'. I think 'reducing' should be the first priority - what can we do without? I also think it's good to look at advertised green practices and really make sure that they are solving and not causing a different environmental problem.
162270383	How far can we get without legislating enlightenment?
163422198	Clear cutting is not natural. Some tree species need total removal to prosper (lodge pole pine). Sustainable forestry practices must be implemented with emphasis on a multiple age stands. That way old growth trees are present with the next generation trees. Birds and animals need to have both open and closed areas for protection and food (edge effect/mosaic). I just came back to the Forest Service after spending two years on a DOD base as the Fire Management Officer. Total of four years burning on this base. In two years we burned 85% of the base. With the prescribed fire we implemented, ignoring some of the Fish and Wildlife rules on specific specie management practices, we concentrated on the overall ecosystem management. The outcome was eye opening. Endangered plant species thrived, a gopher tortoise (endangered) population tripled, Bald Eagles nested only in burned areas, the trees became healthier and were showing signs of converting back to pre-European settlement. Deer health improved and the weight and antler size almost doubled. Fire is nature's way of healing itself. There is no state in the union that does not have some fire interval that nature needs. We need to study what those intervals were and try to restore what humans have disrupted.
163584809	This is typical of what frustrates me with our agency. While recycling and conservation are important, we tend to create bureaucratic process rather than respond responsibly. There are many issues and challenges facing people on the ground that are not dealt with adequately. This program, and survey, appear to be a function of people at higher levels of the organization having too much time on their hands.
163594228	I think some of your questions are irrelevant to the issue of sustainability or

	green practices. How I feel about art vs. nature, and if storms have spirits???
163594630	I see Forest Service employees as the practical Environmentalists. We are the stewards of small tracts of land in a sea of humanity. These lands need to be actively managed for safety and sustainability. "Green" needs to be affordable in \$ and time.
163595003	Excellent questions!!
163595209	The Forest Service at one time accomplished much more work with a lot less resources. We have evolved into expecting large office buildings with <1/2 the amount of employees from 20 years ago. We drive vehicles and burn up fossil fuels excessively for the amount of actual work produced. We do not invest in deferred maintenance practices that produce energy savings devices and equipment that are environmentally sustainable. We do not set the best example to the public that we should be doing.
163608487	This was a good Survey to open your eye.
163612291	Any and all suggestion would be welcome at this fire station. It's good to know that this issue is on the table and progressing forward.
163633665	absolutely too long
163729518	WE NEED TO SET AN EXAMPLE, WE ARE THE FOREST SERVICE
163769058	Thank you for selecting me to participate in this survey.
163789252	Cut down on all the waste associated with the firefighting machine.
163806741	Hopefully this survey can be used to change some minds, it's too bad that people even in the FS are oblivious to human actions and their effects on nature.
163819252	Competitive sourcing and removing support services has completely changed the FS ability to manage the land. Resource specialists now spend 85% of our time performing administrative, technological, and accounting functions. I am lucky to find enough time to take annual leave to get out to the woods!
163848085	I think the Forest Service should be the lead agency in tackling environmental sustainability both in-doors and out.
163961174	I definitely support the cause of attempting to better our natural environment and protect its beauty for the future but people need to know how and we need alternatives for our current adulating habits as people will not stop utilizing the luxuries we have no matter how harmful unless there is an equal alternative.
164050470	Don't just talk about it, fund it! Microgrant funding to support sustainable operations is an inefficient way to build this program. Staff time required to write the grants may outweigh the dollars secured to fund sustainable operations while decreasing time staff should be spending on their resource specific tasks. If you want this program to take off it will require funds to support it.
164091205	It will be interesting to see if the recommendations from this surveys' respondents will really be implemented, or if we will just adopt a "feel-good" program like the Hollywood celebrities (i.e. carbon-offsetting.) Incidentally, I'm not a hippie- I come from a logging family; however, I do believe in conservation through "sustainable" practices and consider myself a common-sense environmentalist.
164154454	Did someone get paid to write these questions?

PSW

ID	Write in any comments or opinions:
160811315	Green and sustainable practices should not be optional. Our fleets should be in the process of changing to hybrids; our funding should require certain criteria for purchases; our travel should be curtailed by the use of teleconferencing, etc.
160813259	Thanks, this survey is a step in the right direction.
160816422	The design of green buildings is highly desirable, and when FS personnel evaluate cost/benefits they need to emphasize green design.
160819555	I hope Washington folks will listen to the people at the bottom of the food chain. We are the ones that get the job done if someone will just give us the tools we need to do the job.
160928793	It is critical that there are no-brainers in place for everyone in the workplace to recycle, reuse, order "green" office products. It should be mandatory that our agency put into place policy for purchasing and practicing green operations.
160983189	operational sustainability, like any other activity, requires resources and knowledge. It requires changing habits and relearning.
161020247	Station and regional leadership should NOT be combined in survey questions, as they are not the same...
161022244	I think I have covered all that I wanted and needed to say about sustainability and green practices, so I will comment on this survey by saying that surveys such as this that mean a great deal to me are a pleasure for me to complete, however, this survey was especially pleasing in that the questions asked were right on target.
161051177	I included one comment in the previous comment area (#41?). I think we could do more with solar or wind power; some drier areas could collect water - these need to be site-specific plans, not national agenda items. Thanks for the opportunity for feedback.
161163392	If it can be done w/o costing more money or create more duties for the existing workforce I'm all for it.
161195791	It would be nice to see the FS go completely green. Best of luck
161389779	I recently heard of two GS-11's, who had to drive a GSA vehicle about 150 miles one way, so that a scientist could use it and then go back down and pick up the vehicle when he was done. It took two GSA vehicles to do this on two different days.
161392283	This survey has reminded me to be more aware of my environment, at work as well as during my free-time. It has put in perspective what should be a priority. Without a healthy environment everything else we find dear will disappear.
161845213	a good survey
161858045	We could use information on the efficacy of rechargeable batteries. We are concerned with reliability for devices left in the field that must function for long periods of time without undue monitoring.
161859667	Let's do it!
161891887	There are now more people living on the earth than in all recorded time. We need Sustainability more than ever but reality says in will only get worse.

161900783	"Man is a political animal" (needs to live in a polis or city). Aristotle. "Breathing city air makes one free." (Posted in a Medieval German town). Cities are not per se a problem and in some ways lessen environmental impact as compared to rural living. Most of us cannot, and should not, "go back to the land," even if we could.
162108270	This survey had too many questions. And it's absurd to request a ranking on a 1 to 100 scale. 1 to 3 would be more like it.
162272010	It is a very long survey
163594511	its about time
163599673	Instead of writing questions that negate, for example "Do you NOT do so and so", rephrase it "Do you do this and that". Using the negative then having to answer "not true" to get a positive answer is a bit awkward.
163617060	The last section was pretty "woo-woo" and of very limited value.
163656818	thanks for finally trying to change things
164147935	This survey is rather long....

Other

ID	Write in any comments or opinions:
160808446	I'm happy to see the agency is finally taking this issue seriously. Better late than never.
160823197	I believe, as leaders of an environmental organization, that the Forest Service needs to take a leadership position in sustainability.
162054884	I support taking care of the land by recycling, ride-sharing, and organizing your shopping on the way home, etc. The last part of the questionnaire seemed completely "over-the top"!! It's clear that this survey is totally from a slanted point of view, is inappropriate and has a group's private agenda.
162218032	I almost did not take this survey because I did not know what operational sustainability was. What a bureaucratic name! I used to work on waste reduction and recycling at a national level in FS in the 1990s. Unfortunately, the program died out. I hope what you are doing can revive it again. But change the name!
164073762	We must care for the environment, but it is a personal thing...not something that the government should mandate. My parents taught me to enjoy and care for my surroundings...and we have taught our children...and they are teaching their children.