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RESULTS OF A SURVEY ON PUBLIC PARTICIPATION

IN NATIONAL FOREST PLANNING PROCESSES

Kevin L. Williams and Jo Ellen Force

"To start with, I had to know something about the people, the country, and the trees. And of the three, the first was the most important."

Gifford Pinchot (1947)
First Chief of the USDA Forest Service

The authors are Kevin L. Williams, who was a graduate student at the University of Idaho at the time of this work. He now works with the Western Colorado Citizen's Congress in Montrose, Colo., on forestry and related public issues. Jo Ellen Force is associate professor in the Department of Forest Resources at the University of Idaho, Moscow, Idaho 83843.

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ABSTRACT

With few exceptions, participants in forest planning in the Pacific Northwest are a rather homogeneous group with respect to these sociodemographic characteristics: they are men (84.8%); white (97.3%); middle-aged (average age of 47.1 years); well-educated (average 15.7 years education); have high family incomes (65.1% earn \$25,000 or more); and are more likely to be political moderates (45.3%) and independents (40.8%). Although the five public participation methods rated as being most desirable by participants were not offered by any of the forests in the study, in total, 92% of participants had been active in the USDA Forest Service public participation process and/or a variety of other tactics. Major recommendations to public agencies include inventorying the people resource, offering new methods of participation and recognizing the public as professional peers who can make important contributions to forest planning.

OBJECTIVES

Public participation plays an important role in Forest Service planning and decision-making, yet little empirical data are available about what kinds of people are participating; why they get involved; and what methods of participation they prefer. This report for the survey respondents addresses the above questions.¹

METHODS

During the summer of 1983, forest plan mailing lists were obtained from four national forests in Idaho and Washington. The forests selected were: (1) the Mt. Baker-Snoqualmie; (2) the Idaho Panhandle; (3) the Clearwater; and (4) the Nezperce. These forests are believed to be representative of the Pacific Northwest's rural and urban areas. A random sample of individuals and organizations from among the four mailing lists was chosen.

A mail questionnaire was constructed, implemented and analyzed according to Dillman's (1978) Total Design Method which is based on social exchange theory and careful administration of the survey instrument. This method was selected because it consistently achieves response rates of 60 to 75 percent with the general public (Dillman 1978).

Of the 1,396 questionnaires which were mailed, 49 were undeliverable because of incorrect addresses, and 92 were not completed because of illness, death, or other reasons, leaving 1,255 eligible respondents. The results reported here are based on 984 (78%) useable questionnaires.

The data were analyzed using the Statistical Package for the Social Sciences (SPSS Inc. 1983).

Although the response rate was high, 28 of the 271 nonrespondents were randomly selected and an attempt was made to reach them by telephone. Ten nonrespondents were successfully reached who were willing to answer six questions related to the study. There was no statistically significant ($\alpha = .05$) difference between these nonrespondents and the respondents on the following variables measured: age, place of residence, length of residence, and organized vs. nonorganized representation. Sixty percent of the nonrespondents were inactive vs. 21.5% for respondents. The average educational level for nonrespondents was 13.6 years vs. 15.7 years for respondents. Thus, although two characteristics of nonrespondents were different, the sample is presumed to be reasonably representative of the population.

¹ For a complete analysis of the study, see: Williams, Kevin L. 1985. Public participation in national forest planning. Moscow, Idaho: University of Idaho. Unpublished M.S. thesis.

RESULTS

Organized vs. Nonorganized Representation

One key factor explored in this study was the distinction of participants who represented an organization (organized representation) from those who represented themselves (nonorganized representation). The highest percentage of participants represented themselves (57.3%) while the remainder represented an organization (42.7%). This shows that it is not just the organized interests in society who are participating in national forest planning processes, but nonorganized individuals also wish to participate.

Those representing organizations reported memberships of "more than 1000" in 38% of the cases, "between 100 and 1000" in 34% of the cases and "less than 100" in the remaining 28%. The geographic representation of the organizations was as follows: local - 24%; state - 31%; regional - 23%; national - 17%; and other - 5%.

Active vs. Inactive Participation

A second important factor was the distinction of active from inactive participants. Active participants were defined as those who participate in Forest Service sponsored public participation activities *in addition* to receiving information through the mail. Inactive participants were defined as those who *do not* participate in Forest Service sponsored activities beyond the act of receiving information through the mail. The highest percentage of participants was active (78.5%) while the remainder was inactive (21.5%). In total, 92% of participants had participated in Forest Service sponsored activities and/or through political, legislative, and judicial processes, such as writing or calling a congressman (57%), filing an appeal (8%), or lobbying (13%).

Place of Residence

Participants were classified as rural, urban or metropolitan. Thirty-five percent of participants were living in an urbanized area with at least 50,000 inhabitants (metropolitan), 34% were living in places with between 2,500 and 49,999 inhabitants (urban), and 31% were living on ranches or farms, and in towns or villages smaller than 2,500 inhabitants (rural). Additional insights were hoped to be gained by distinguishing between participants based on their place of residence because it is widely accepted that there are place of residence differences related to environmental concern.

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Interest Orientation

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A final distinction was made between participants based on their self-identified interest orientation. The highest percentage of participants was found to be representing preservation or environmental interests (27.2%) followed by timber interests (20.5%), recreation interests (15.6%) and fish and wildlife interests (13.5%). The remaining 23% represented a variety of interests associated with the national forests, such as mining, Native American interests, ranching, and water.

Sociodemographic Characteristics

With few exceptions, participants are a rather homogeneous group with respect to sociodemographic characteristics: they are men, white, middle-aged, well-educated, have high family incomes, and are more likely to be moderate and politically independent. Sociodemographic characteristics of participants in the entire sample are presented in Table 1.

Four important differences were found between participants with timber interests and those with preservation or environmental interests. A greater proportion of those with timber interests was male (92%), Republican (49%), conservative (52%), and had high family incomes, (79% over \$25,000), whereas for participants with preservation or environmental interests the data were as follows: male (76%), Republican (14%), conservative (16%), and family incomes over \$25,000 (60%). These data highlight underlying differences in attitudes and beliefs between these groups.

Eighty-eight percent of participants in the entire sample were from Idaho and Washington. Because of this sizable proportion, some comparisons can be made between participants in 1983 and the residents of Idaho and Washington according to the 1980 census.

First, if we compare the educational attainment of participants with that of Idaho and Washington residents we find that 63.0% of participants in the entire sample have completed four or more years of college whereas only 16.1% of Idaho residents and 19.1% of Washington residents had done so (United States Bureau of the Census 1981a, 1981b). Further, 65.1% of forest planning participants had an annual family income of \$25,000 or more compared to 27.2% of Idaho residents and 40.3% of Washington residents (United States Bureau of the Census 1981a, 1981b). It is obvious that participants are generally well-educated and from upper income levels.

This does not necessarily mean that upper middle class Americans are the only ones concerned with national forest planning. In a recent USDA-sponsored survey on environmental concerns, Mohai (1984) found that, "the upper middle class link is not a link between the upper middle class and environmental concern but a link between the upper middle class and political activism."

Table 1. Sociodemographic characteristics of participants

SEX (%)	
Male . . . . .	.84.8
Female . . . . .	.15.2
INCOME (%)	
\$25,000 or more . . . . .	.65.1
Less than \$25,000 . . . . .	.34.9
RACE (%)	
Caucasian . . . . .	.97.3
Non-Caucasian . . . . .	.2.7
POLITICAL PARTY AFFILIATION (%)	
Democrat . . . . .	.27.6
Republican . . . . .	.28.6
Independent . . . . .	.40.8
Other . . . . .	.3.0
POLITICAL BELIEFS (%)	
Very conservative . . . . .	.4.0
Conservative . . . . .	.28.2
Moderate . . . . .	.45.3
Liberal . . . . .	.14.5
Very liberal . . . . .	.3.9
None of the above . . . . .	.4.1
AGE (mean years) . . . . .	.47.0
EDUCATION (mean years) . . . . .	.15.7
LENGTH OF RESIDENCE (mean number of years lived in area) . . . . .	.21.8

Motivation

The 21.5% of the respondents who reported they had not participated in forest planning in any way other than receiving information from the forest through the mail were asked *why* they decided not to participate in other ways. The survey participants were asked to rate the reasons on a 5-point scale ranging from extremely important to not important. The relative importance of these reasons are shown in Figure 1.

All respondents were asked to rate reasons why they were interested in participating in forest planning—again on a 5-point scale ranging from extremely important to not important (see Figure 1).

The most important reason people are participating in national forest planning activities is to defend an interest in or activity on public forest land which they feel is threatened. This reason is closely followed by motivations to encourage the conservation of natural resources and to see that economic effects of proposed actions are analyzed and considered. Analyses also revealed that defending a special interest is more important to those representing organizations than to those representing themselves and to active participants than to inactive participants. Motivations related to economic effects are more important to those representing organizations, those who are active, those living in rural areas and those representing timber interests. Motivations related to conservation interests are more important to active participants and those representing preservation or environmental interests. Motivations related to the desire for knowledge are highest for active participants and those from rural areas.

How Respondents Participated

Sixteen methods of participation were offered by one or more of the four national forests in the study. The five most commonly used methods in descending order were: presentations (62.1%), response forms (61.5%), personal

letters (56.3%), telephone calls (51.6%), and workshops (34.6%). Participants with timber interests attended presentations (73.5%) and open houses (23.5%) more than other groups whereas those with fish and wildlife interests attended open houses less than others. Personal letters were sent more often (69.9%) by those with preservation or environmental interests.

Preferences for Methods

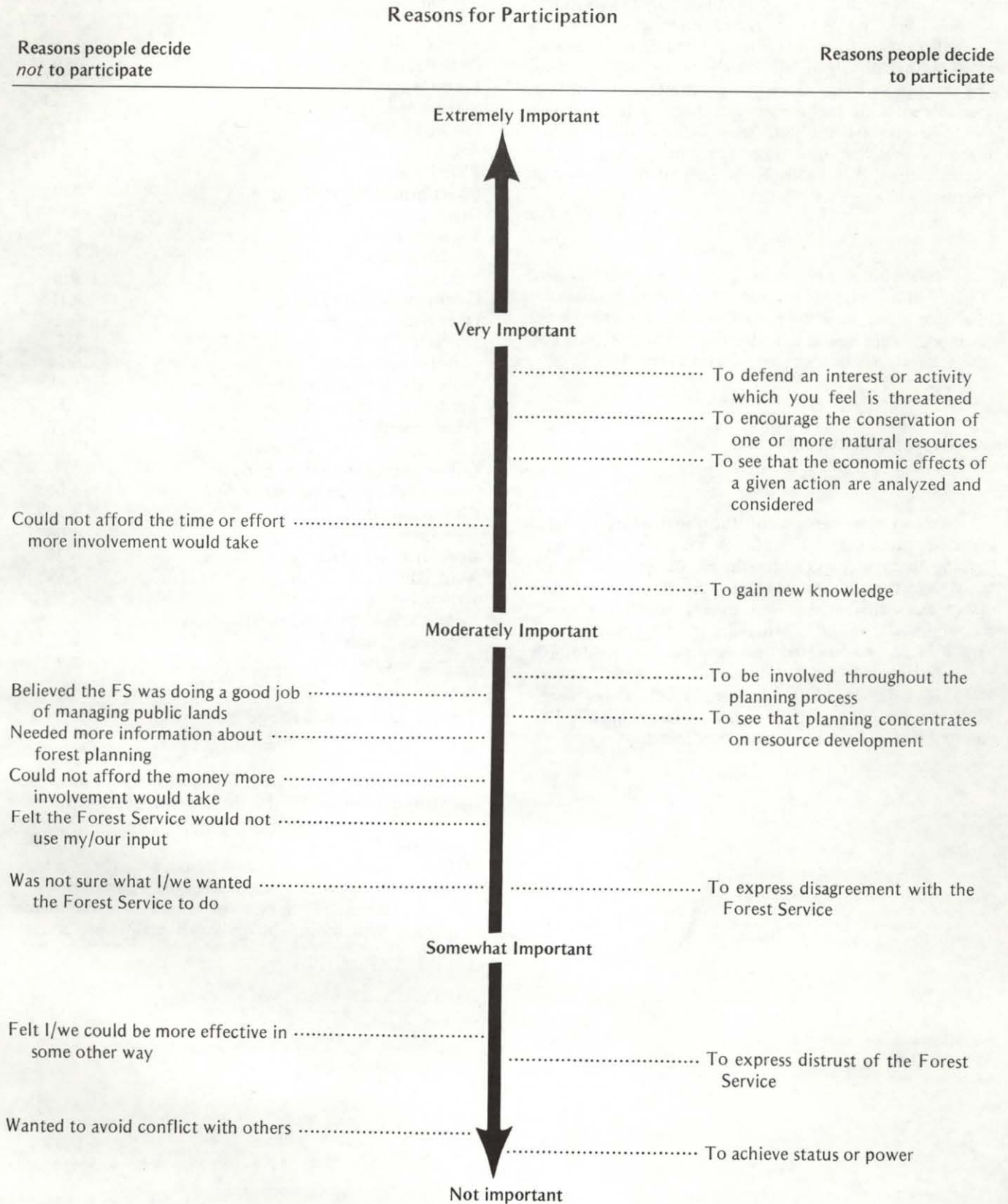
Respondents were also presented with a list of 28 public participation methods that have been used by forests and/or suggested in the public participation literature. They were then asked to select the three methods which they considered to be most, second most and third most desirable.

One method of participation was consistently ranked as being the most desirable: citizen representatives on Forest Service policy-making bodies. Although such policy-making bodies can vary in size, composition and function, such bodies may be the official decision-making structure (Arnstein and Metcalf 1976). Thus, it appears that, in general, participants desire a more direct participatory role in guiding the decision-making process.

The five methods ranked as being most desirable by participants in the entire sample had not been offered by any of the forests in the study according to the public information officers. These methods, ranked in descending order, were: citizen representatives on Forest Service policy-making bodies, formal public hearings, survey of citizens' attitudes and opinions, open public meetings, and meetings held for residents of a specific community. Participant preference for methods is an asset managers can use to stimulate better public participation.

The five least desirable methods ranked in ascending order were: radio programs, game simulations, interactive TV-based participation, computer-based techniques, and open houses.

Figure 1. Relative importance of the various reasons people *decide not to* participate and *decide to* participate in the national forest planning process.



Respondents were also asked to rate each of the 28 public participation methods on a 5-point Likert-type continuum: very desirable (5.0), desirable (4.0), neither desirable nor undesirable (3.0), undesirable (2.0) and very undesirable (1.0). The 28 methods and the mean scores on the 5-point scale are listed in Table 2. Eighteen methods were rated statistically significantly higher desirability by those respondents with environmental or preservation interests than those with timber interests (see Table 2). Two methods were rated a statistically significantly ($\alpha = .05$) higher desirability by those respondents with timber interests than those with environmental or preservation interest (see Table 2).

In almost all cases, those participants who had participated in a particular method rated that method as more desirable than those who had not participated in that method. It appears as though exposure to a method positively affects a person's preference for the method.

Costs of Participating

Twenty-nine percent of the respondents reported spending "more than 1 day but less than 1 week per year" learning about or participating in the development of national forest plans and another 30% reported spending "more than 1 week but less than 1 month per year." Respondents were asked what dollar cost per year they have incurred, and reported the following: less than \$10 per year - 23%; between \$10-\$50 per year - 18%; between \$50-\$100 per year - 11%; between \$100-\$500 per year - 17%; and over \$500 per year - 19%. The remaining 12% reported they did not know what they spend.

Table 2. Mean preference scores^a for methods of public participation.

Method	Mean Score
Formal public hearings	4.04 ^b
Presentations	4.08
Lectures at colleges	3.48 ^b
Surveys of citizens	4.13 ^b
Private meetings	3.42 ^c
Radio programs	3.58 ^b
TV programs	3.73 ^b
Direct mail of materials	4.09
Open house	3.80
Show-me trips	4.02
Liaison groups	3.87
Workshops	3.96 ^b
Community meetings	4.18 ^c
Open public meetings	4.23 ^b
Interactive TV	3.46 ^b
Toll-free number	3.74 ^b
Nominal group process	3.88 ^b
Arbitrator or mediator	2.86 ^b
Direct negotiation	3.78
Citizens' Advisory Committee	3.85 ^b
Citizen representatives on Forest Service policy-making bodies	4.00 ^b
Citizen training	3.73 ^b
Game simulations	3.08 ^b
Computer-based techniques	3.30
Adult education courses	3.58 ^b
Writing letters	4.03 ^b
Informal contacts with Forest Service officials	4.13
Telephone calls	3.77 ^b

^a Means are based on a five-point scale from "very desirable" (5.0) to "very undesirable" (1.0).

^b These methods were rated statistically significantly ($\alpha = .05$) higher desirability by those respondents with environmental or preservation interests than those with timber interests.

^c These methods were rated statistically significantly ($\alpha = .05$) higher desirability by those respondents with timber interests than those with environmental or preservation interests.

CONCLUSION

The major conclusion of this study is that *specific target groups* of participants in national forest planning activities can be identified and described according to their sociodemographic characteristics, participation behavior, reasons for participating, and preferred methods of participating. Data collected about the people participating in forest planning can be used by forest managers to understand the public and to design public participation programs for specific groups.

It is hoped that this study will help both the public and forest managers to more effectively participate in forest planning on America's national forests.

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