How the Public Perceives Forestry (and Why It Matters)

October 24, 2005

Sarah Murray
Graduate, Social Sciences
College of Forest Resources
University of Washington
Box 352100
Seattle WA 98195-2100
(206) 719-7020
scmurra1@u.washington.edu

Peter Nelson
Graduate Student
Social Systems and Natural Resources
College of Forest Resources/Evans School of Public Affairs
University of Washington
Box 352100
Seattle WA 98195-2100
petern@u.washington.edu

University of Washington
College of Forest Resources
Northwest Environmental Forum
Box 352100
Seattle, Washington 98195-2100

Published November 2005

This paper is part of a series of discussion papers written to provide background information on salient issues identified as important by participants at the *Saving Washington's Working Forest Land Base* forum in November 2004.

Abstract

This paper examines public perceptions of forestry — including how they are formed, what factors influence them, what some of the current perceptions of forestry in the Northwest are, and the implications for the forest conversion issue.

One of the main concepts reviewed is that of social acceptability, which describes a judgment process in which individuals compare alternatives and decide which is the most acceptable practice or condition. Among the important points on acceptability are:

- Acceptability is a relative condition, and people must have clear alternatives to compare.
- Acceptability is based on individuals' perceptions, which are influenced by science, experience, knowledge, ethical concerns, values, attitudes, beliefs, and an individual's history with the landscape.
- Acceptability judgments are influenced by both social and geographical context, along with the positions of key groups.
- There is often a gray area between practices and conditions people judge "acceptable" and "unacceptable."
- Information plays a complex role in influencing people's perceptions and acceptability judgments. Information may not always have the intended effect, nor have the same effect on different people.

Among the findings from recent studies of public perceptions of forestry in the Northwest are that there remains widespread dislike of clearcutting, but this opposition may be mitigated by factors such as the size of the clearcut and the presence of alternatives such as a development vs. a working forest. Several studies on visual preferences have found that most people base their opinions of forest scenes primarily on aesthetics, such as the amount of vegetation present, and only foresters are likely to distinguish or evaluate scenes based on the type of management practice depicted.

Some lessons for the forest conversion issue include:

- Both the audience and context of a message or appeal related to working forests must be carefully considered, as people with different backgrounds and living in different settings will often react differently to the same message.
- It is important to present clear land use or management alternatives people can choose from, rather than ask them to value something such as a working forest in the abstract.
- Aesthetics are important in people's evaluations of forest scenes, and it should not be assumed that people will recognize different forest management practices (or the principles behind them) on the landscape.
- It is important to distinguish between passive support or "legitimacy" for particular policies and active social action, though they are related. In looking to influence perceptions, stakeholders should consider when general public support for working forests or opposition to forest conversion will be enough to satisfy their goals, and when more concrete actions, such as contacting legislators or voting on an initiative, will be required.

I. Introduction

Public perceptions — and the resulting policy actions taken by individuals and organizations in response to those perceptions — have a significant impact on how natural resources are managed. In the Pacific Northwest, the important role public perception plays has been dramatically demonstrated by events such as the spotted owl controversy in the late 1980s and early 1990s, when shifting public values and perceptions of forest practices contributed to significant reductions in timber harvest volumes across the region and an increasing recognition of the need to protect ecosystem values in forest management. Despite its obvious importance, however, "public opinion" on forestry and other natural resources issues remains difficult to define, and reported perceptions can change depending on what questions are asked and of whom. For instance, figures from general public opinion polls or other surveys are an important information source, but results may be influenced by factors such as how questions are worded and the context (i.e., geographic location, ongoing events and media coverage) in which respondents are answering the questions. In addition, while general public support is important in many cases, in others the opinions of key players — whether individuals or organizations — are more central in policymaking. When it comes to complex natural resource issues, one may not be able to give a simple definition of what "the public" thinks.

For the problem at hand — conversion of forestland to non-forest uses in Washington — research gives a picture of both what members of the public think of current forest practices and what factors might lead people to rate keeping land as working forests more acceptable than the development alternative. However, it is challenging to predict how perceptions and attitudes will translate into actions — for instance, how and when an individual's stated dislike of sprawl or support for working forests will lead him or her to an action such as donating money to a trust, supporting public incentives for working forests, or supporting laws that influence forest practices. By examining what factors influence perceptions and acceptability, including the role of information, and by reviewing Northwest residents' perceptions of and preferences for various forest practices, we can lay the groundwork for the next steps in understanding how to involve the public in the issue of forestland conversion.

This paper will examine the factors affecting public perceptions of forestry, what some of those perceptions are, and lessons for influencing those perceptions and effectively involving the public in the issues surrounding forest conversion. The paper will first explore the concept of social acceptability, including factors that influence individuals' views of what is acceptable. Next, it will examine the role of information in acceptability judgments. It will then present findings from recent studies related to public perceptions of and preferences for different forest management practices in the Northwest. Finally, it will discuss some of the implications for shaping and measuring public perceptions of working forests and the threat of forest conversion.

II. Social Acceptability

Brunson (1996) lays out a working definition of social acceptability: "Social acceptability in forest management results from a judgmental process by which individuals (1) compare the perceived reality with its known alternatives; and (2) decide whether the 'real' condition is

superior, or sufficiently similar, to the most favorable alternative condition. If the existing condition is not judged to be sufficient, the individual will initiate behavior — often, but not always, within a constituency group — that is believed likely to shift conditions toward a more favorable alternative" (p. 9).

There are several important points here. One is that acceptability is a relative condition — that is, in order to judge the acceptability of something a person has to have something else with which to compare it. If we want to influence public opinion of working forests, alternatives — such as a working forest vs. an unmanaged forest vs. a subdivision or strip mall — are needed. Once there are alternatives, an individual can judge the relative desirability, equitability, and feasibility of each in order to make a decision on which are acceptable and which are not (Brunson, 1993). However, there do have to be clear alternatives, and the individual must be aware of them. Raising awareness that development is an alternative to forestland may be the first step in influencing public perception in favor of working forests.

A second important point is that judgments of acceptability are based on the individual's perceptions of the characteristics of the alternatives as well as perceptions of which alternatives are more desirable, equitable, and feasible (Brunson, 1993; Brunson, 1996). Perceptions are influenced by science, experience, knowledge, ethical concerns, values, attitudes, beliefs, and an individual's history with the landscape (Bliss, 2000; Bradley and Kearney, 2005; Brunson and Reiter, 1996; Kearney, Bradley, Kaplan, and Kaplan, 1999; Stankey, 1996). Because of this, judgments "cannot be expected to change solely in response to changes in the level of technical understanding" (Stankey, 1996, p. 102). Simply providing information on forest management and threats to forestland will not necessarily change perceptions.

An additional important influence on acceptability judgments is context, both geographical and social (Bliss, 2000; Brunson, 1993; Stankey, 1996). One manifestation of this is the NIMBY (not in my backyard) syndrome, in which people are more likely to oppose a specific practice or condition if it will directly affect them. Context is especially relevant to conversion in the sense that there are certain areas in Washington that are more vulnerable to development pressures (such as in the Puget Sound metro areas). Another illustration of context is that existing public support for working forests is most likely different in, for example, an area with small logging towns compared with a suburb of Seattle.

Another element of context is the presence of interest groups. Acceptability is rooted in individual judgments, but is both influenced by and stimulates group behavior. Individual judgments are frequently based in part on the perceived judgments of key groups (Brunson, 1996). In addition, policy decisions are frequently made based on input from interest groups and/or key constituencies rather than on the opinions of individuals in the general public (Ribe and Matteson, 2002). Acceptance of this reality is implicit, if not explicit, in most studies of public perceptions of forestry, which generally examine the views of individuals within key "reference groups" such as timber industry employees, environmentalists, and government managers (e.g., Bradley and Kearney, 2005; Gobster and Rickenbach, 2003; Kearney et al., 1999; Rickenbach and Gobster, 2003; Ribe and Matteson, 2002). Several studies have found interesting and often unexpected similarities and differences in the conceptualizations and

perceptions of forest management among these groups, which will be discussed in more depth in a later section.

There are two additional relevant points about social acceptability. First, there are two ways of looking at acceptability — as a management target for which we can strive or as a minimum standard of what is "good enough" (Brunson, 1996; Stankey, 1996). Related to this, there is often a gray area for people between what is considered acceptable and what is unacceptable (Brunson, 1996), which may mean that it is difficult for decision makers to get strong feedback on alternative actions. Second, there may be contradictions between an individual's judgment of acceptable practices and conditions; people may not always "connect the dots." For example, people may say they dislike sprawl in rural areas, but enjoy the amenities of living in a more rural setting. This reinforces the importance of how questions to members of the public are phrased and the context in which they are asked.

III. The Role of Information

One common assumption is that providing people with information about natural resources issues will influence their views of these issues. However, research over the years has indicated that the process is more complicated than a simple cause-and-effect scenario. Stankey (1996) asserts that we have a poor understanding of how increased knowledge affects acceptability of natural resources management. While factors such as credibility, the timing of information, and the link between scientific and other forms of knowledge play a role, the relative weight of each factor is not always well understood and may in fact vary a great deal among individuals and contexts.

There has been conflicting evidence from studies on whether having additional information about forest management practices leads to more positive views of those practices and their effects (Brunson and Reiter, 1996). In fact, some research suggests that aesthetic judgments are highly affective (i.e., emotion-driven), and thus cognitive evaluations of different silvicultural treatments may play a limited role (Brunson and Reiter, 1996). People do not necessarily interpret information in the same way or draw the same conclusions about appropriate management from information presented to them (Brunson, 1993). In some cases, as technical knowledge increases, people may see more possibilities in a situation, and this may increase or reinforce opposition to a particular practice. Increased knowledge of physical, social, economic, political, and other consequences of management decisions can lead to reactions such as NIMBYism (Stankey, 1996) — a phenomenon that might be especially relevant to consider in terms of development pressure in a specific location.

IV. Findings from Recent Studies

One element in understanding how public perception contributes to the problem of conversion is to look at it from the perspective of landowners — why they own the land and why they would sell or convert it to non-forest uses. In a study of small landowners in King County, forest landowners were asked what factors would cause them to sell or subdivide their property in the

next five years. The top two underlying reasons were: 1) financial and 2) change in the quality of the surrounding area, such as its degradation through development or clearcutting. Landowners were about equally likely to sell or subdivide for either reason (Wadsworth, 1999). In the second case especially, landowners' perceptions of the situation around them could play a role. The reasons for selling land are likely somewhat different for larger commercial forest landowners, though financial considerations, such as the value of the land for timber compared with other uses, are likely at the top of the list for them as well. It is worth noting the different landowner types since the level of public support for open, working forestland vs. conversion to a non-forest use could influence landowners' behavior, but not necessarily in the same way.

Another step in understanding what level of support the public might have for working forests is to understand people's views of forest practices. It is especially important to understand some of the differences between groups in how they view management alternatives, which could affect how different people respond to information about working forests.

1. Public Perceptions of Clearcutting

One widespread finding in the literature — probably not surprising to anyone in the Northwest — is that there is significant public opposition to clearcutting, especially on public lands, with dislike expressed even among many foresters (Bliss, 2000; Bradley and Kearney, 2005; Bradley, Kearney, and Wager, 2003; Brunson and Reiter, 1996; Ribe and Matteson, 2002). More interesting are some of the nuances within this broad statement. For instance, many studies have shown the public to be more tolerant of clearcutting on private land (Bliss). One study found replanting requirements alone were not enough to improve most respondents' views of clearcutting, nor was hiding clearcuts, indicating that opposition to clearcuts is based on more than aesthetics (Ribe and Matteson).

Some factors that seem to mitigate negative views of clearcutting — and possibly other management practices — include land ownership and harvest characteristics (such as the size of the clearcut), though harvest modifications generally need ecological justification to change perceptions (Bliss, 2000).

Some data gathered in Washington illustrate the potential effect of these mitigating factors on opinions. In a 2002 survey of Washington voters, 69% agreed with the statement, "I don't always like how clearcuts look, but if it means the land will remain in use for forestry rather than being converted to housing and commercial developments, then clearcutting is acceptable."[1] In 2001, when given more detailed information about clearcutting requirements, a majority of voters were favorable toward clearcutting if they knew that 1) state laws require that trees be left next to

[1] WFPA Public Opinion Survey of Washington voters +/-4% error
"I don't always like how clearcuts look, but if it means the land will remain in use for forestry rather than being converted to housing and commercial developments, then clearcutting is acceptable."

	6/02
Agree	69%
Don't know	8%
Disagree	23%

streams to prevent soil erosion (62%) and 2) state laws require that trees must be replanted and growing within three years after an area is clearcut (72%).[2] This contrasts somewhat with the findings in the Ribe and Matteson (2002) study mentioned earlier, which may be due to the different groups surveyed or to the context in which the questions were asked. It is a topic that could be explored further, especially in terms of how the size of a clearcut and information about measures (i.e., buffers) used to reduce negative ecological impacts affect these views.

One other point worth noting is that none of the three groups in one study (those favoring timber production, those favoring forest protection, and those with moderate/less strongly held views) expressed strong trust for foresters in terms of their judgments on when clearcuts are appropriate, and did not express strong trust of land managers' evaluation of the impact of clearcuts on wildlife — though they did not necessarily distrust the managers, either (Ribe and Matteson, 2002). This potential lack of trust is something to keep in mind, in terms of who the messenger is or who is in charge of a given program, when developing information on forest management or designing public information campaigns.

2. Public Perceptions of "New Forestry" and Aesthetics

In recent years, several studies have shown public support for, or at least acceptance of, several "new forestry" techniques and aims, such as creating stream buffers and mimicking natural disturbances through the partial retention of trees and downed wood, that have been adopted based on greater understanding of forest ecosystem functions and in response to wildlife concerns.

In one study, respondents from three groups — productionists, protectionists, and those with moderate views on resource use — expressed support for "new forestry" aims on public lands, defined broadly as techniques that "generally aim to manage forests toward a more equal balance between timber harvests and wildlife habitat than traditional forestry is often viewed as doing" (Ribe and Matteson, 2002, p. 179). Members of all three groups, especially those favoring protection and those without a strong position, indicated a preference for new management practices over old for public lands (Ribe and Matteson).

Several visual preference studies have found that respondents tend to find silvicultural treatments showing fewer signs of human manipulation, such as group selection and thinning, more acceptable visually than scenes showing more human manipulation, such as clearcuts and two-age cuts (Bradley and Kearney, 2005; Bradley et al., 2003; Brunson and Reiter, 1996).

[2] "Here are some statements about clearcutting. Upon hearing each, please tell me if you are more likely or less likely to favor clearcutting."

		More	Don't know	Less
State laws require that trees be left next to streams to prevent soil erosion	**6/01**	61%	6%	33%
State laws require that trees must be replanted and growing within three years after an area is clearcut	**6/01**	72%	7%	22%

In a large recent study using scenes from Capitol Forest, Washington, Bradley and Kearney (2005) found notable differences in preferences between foresters and five other sub-populations (urban general public, rural general public, environmentalists, recreationists, and educators). In most cases, the groups reacted similarly to the scenes in the pattern described above. Foresters, however, showed significantly higher preferences for many of the treatments, including clearcuts, patch cuts, and group selection. Foresters on average also had a lower preference for the control ("natural") scene than environmentalists and educators.

Further analysis showed that most respondents reacted to the scenes more in terms of overall appearance than treatment type. The reasons respondents most often cited for their preferences fell into five categories: amount and quality of vegetation, degree of human intervention, aesthetic issues, technical forestry considerations, and ecological concerns. Across the scenes, foresters often gave reasons for their preferences related to management concerns rather than aesthetics. This evidence, along with some of the reasons respondents gave for their preferences, indicate that forestry professionals tend to view forest scenes differently than others, based on their experiences, and that people falling into the other groups tend to have fairly similar preferences to one another (Bradley and Kearney, 2005). This finding suggests caution when presenting information about working forests in assuming that people from all backgrounds will look at a scene on the ground in the same way.

At least one study has looked specifically at the effect of information on respondents' visual preferences. Brunson and Reiter (1996) found that preferences among students and state office workers in Utah followed patterns in other studies, with old-growth forest receiving the highest mean rating and group selection and thinning scenes also receiving "acceptable" ratings overall. Two-story cuts and clearcuts (with and without snag retention) received neutral or unacceptable mean ratings. Receiving information on ecosystem management did not have the expected effect on acceptability ratings. Students who received the information rated all scenes except old growth as less acceptable overall than their peers in the control group, while the office workers who received the information rated scenes as more acceptable than the control group. The authors discuss the possibility that demographic and background differences between the student and office worker groups may in part explain the different responses.

Some of the lessons from these studies are that aesthetics play a strong role in perceptions of forest management practices, especially for non-foresters; that perceptions can differ markedly among different "reference" groups; and that the effects of providing information on forest management on these preferences are not yet well understood. Recognizing these preferences and nuances will be important when it comes to disseminating information about working forests or seeking public support for key proposals — the audience and the content of a message or appeal must be carefully considered. A notable piece missing from many of these studies is how individuals rate various levels of management to development alternatives — a good question for future research.

One additional note relevant to the issue of conversion comes from two studies examining the views of forest parcelization and conversion in Wisconsin's Northwoods among key stakeholders. Among the findings from several focus groups was that some stakeholders were concerned that new owners would no longer use land for timber production. Many participants

looked favorably upon a state law giving tax breaks to those who continued to manage forestland for timber and other purposes. Not all timber production was seen as equally likely to prevent conversion, however; some saw increasing land ownership by large multinationals, rather than local companies with more community ties, as a driver of parcelization — they saw those companies as willing to sell off land to the highest bidder (Gobster and Rickenbach, 2003). A similar study in Washington might help to more clearly define the most relevant issues related to conversion in stakeholders' minds.

V. Shaping Public Perceptions

Information can be used to influence public perceptions, but as some of the literature demonstrates, it is important to tailor information to the audience being addressed. As some of the studies examining the views of different groups suggests, the target audience for information does matter. At least one author recommends targeting both individuals and groups for the most effective information strategy (Brunson, 1996). Another notes that while the "disinterested public" is more likely to make more affective judgments (i.e., based on emotional reactions to the aesthetics) in terms of practices such as clearcutting, the "interested public" tends to "evaluate forest practices more cognitively" — and thus possibly be more receptive to new information — and consider the practices in light of other values important to them (Bliss, 2000, p. 6).

Some of these other values may include protection of water quality, wildlife, and fish habitat. In surveys conducted in the late 1990s and early 2000s, Washington voters consistently ranked "clean water" and "protection of fish and wildlife habitat" as the first and second most important use of forestland (WFPA survey of voters, June 2004). With the changes in forest practices that have occurred to protect fish, water quality, and wildlife since the early 1990s and a communications effort designed to inform the public about these changes, the Washington Forest Protection Association has found that many voters now express the opinion that forest managers do a good job of protecting these values. In 2005, Washington voters gave private forest landowners high marks for their protection of the values important to them (WFPA Public Opinion Survey of Washington voters, +/-4% error, 2005).

These findings seem to indicate that members of the public would accept messages coming from these groups — the issue of trust mentioned earlier. Who the messenger is can be important in how people perceive information. If the individual or group delivering the information does not have credibility, it will fall on deaf ears. One way to avoid this problem is by using "third-party credibility" by having a respected and reliable individual or group deliver the message. In a survey conducted in early 2000, Washington voters found that university scientists were the most believable in making statements about fish habitat and water quality (WFPA Public Opinion Survey of Washington voters, +/-4% error, November 2000). In disseminating information about working forests and forest conversion, it will be important to consider who the appropriate messenger is for each target audience.

All of this may provide some guidelines for how to best publicize information about working forests and conversion threats. Working through key groups within the "interested public"

segment (such as those participating in the Working Forests Forum) and researching what arguments might be most relevant to individuals with different experiences and values could help make messages more effective and more likely to influence perceptions.

VI. Conclusions

When it comes to the forestland conversion issue, knowledge of the factors that influence perceptions and acceptability will help in designing strategies to gain public support in favor of working forests over converting the land to non-forest uses. Among the important points on acceptability reviewed above are:

- Acceptability is a relative condition, and people must have clear alternatives to compare.
- Acceptability is based on individuals' perceptions, which are influenced by science, experience, knowledge, ethical concerns, values, attitudes, beliefs, and an individual's history with the landscape.
- Acceptability judgments are influenced by both social and geographical context.
- There is often a gray area between practices and conditions people judge "acceptable" and "unacceptable."

Because of this, it will be important to define clearly what we are asking — Stankey's (1996) questions of "acceptability of what?" and "acceptable to whom?" Members of the public need to have a clear understanding of specific land use/land management alternatives in order to make acceptability judgments, and may not be inspired to act on behalf of a given alternative (such as monetary incentives for working forests) unless they strongly feel it is more acceptable than another.

Information plays a complex role in influencing perceptions of natural resource issues, with its impact affected by factors such as credibility, timing, and the link between scientific and other forms of knowledge. Having increased knowledge about forest management may influence people's perceptions in different ways, as illustrated by the Brunson and Reiter (1996) study in which students and professionals reacted differently to the same information. Taking this and the important role of "reference" groups in shaping individuals' opinions into account means that messages about working forests and conversion should be carefully crafted for specific audiences, such as key interest groups or residents of a particular area.

When does perception lead to action? Given alternatives, people will make judgments about which one is acceptable, and if the existing condition is not sufficient, the individual will initiate behavior — often within a group (Brunson, 1996). Acceptability may not be directly observable, but "must be inferred from the absence of overt behavior indicating a failure to achieve it" (Brunson, 1996, p. 9).

This link between perception and behavior points to two important sides of acceptability. On one hand, a more passive general public support in favor of certain policies and actions can produce "social legitimacy" or "social license," where the daily actions of companies, agencies, and organizations are seen as "desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995, p. 574). One example is forest certification, where landowners' forest practices must meet certain ecological criteria and

standards of public acceptability, and in exchange are granted a "sustainable" label indicating to the public that the practices are acceptable or desirable. On the other hand, in some cases more active public support is necessary — for instance, when citizens are asked to contact their legislators on an issue. When more active social action is required, leaders need to see the "overt behavior" indicating that current conditions are unacceptable. Perceptions and the resulting acceptability judgments are important in both cases, but the work required to create "support" or "legitimacy" vs. "action" may be significantly different. For the forestland conversion issue, it will be important to consider in which cases public support or legitimacy is sufficient and in which cases a greater degree of public involvement is needed, and work to influence perceptions and engage the public accordingly.

Literature Cited

Bliss, J.C. (2000). Public Perceptions of Clearcutting [Electronic version]. *Journal of Forestry, 98(12)*, 4-9.

Bradley, G.A., and Kearney, A.K. (2005). Public and Professional Responses to the Visual Effect of Timber Harvesting: A Systematic Study. Submitted for publication.

Bradley, G.A., Kearney, A.R., and Wager, J.A. (2004). Public Reactions Research. In R.O. Curtis, D.D. Marshall and D.S. DeBell (Eds.), *Silvicultural Options for Young-growth Douglas-fir Forests: the Capitol Forest Study — Establishment and First Results* (pp. 63-73). Portland, OR: USDA Forest Service Pacific Northwest Research Station PNW-GTR-598.

Brunson, M.W. (1993). "Socially Acceptable" Forestry: What Does It Imply for Ecosystem Management? *Western Journal of Applied Forestry, 8(4)*, 116-119.

Brunson, M.W. (1996). A Definition of "Social Acceptability" in Ecosystem Management [Electronic version]. In M.W. Brunson, L.E. Kruger, C.B. Tyler and S.A. Schroeder (Eds.), *Defining Social Acceptability in Ecosystem Management: A Workshop Proceedings* (pp. 7-17). Portland, OR: USDA Forest Service Pacific Northwest Research Station, PNW-GTR-369.

Brunson, M.W., and Reiter, D.K. (1996). Effects of Ecological Information on Judgments about Scenic Impacts of Timber Harvest [Electronic version]. *Journal of Environmental Management, 46*, 31-41.

Gobster, P.H., and Rickenbach, M.G. (2003). Private Forest Land Parcelization and Development in Wisconsin's Northwoods: Perceptions of resource-oriented Stakeholders [Electronic version]. *Landscape and Urban Planning, 69*, 165-182.

Kearney, A.R., Bradley, G., Kaplan, R., and Kaplan, S. (1999). Stakeholder perspectives on Appropriate forest Management in the Pacific Northwest. *Forest Science, 45(1)*, 62-73.

Ribe, R.G., and Matteson, M.Y. (2002). Views of old Forestry and new among Reference groups in the Pacific Northwest [Electronic version]. *Western Journal of Applied Forestry, 17(4),* 173-182.

Rickenbach, M.G., and Gobster, P.H. (2003). Stakeholders' Perceptions of parcelization in Wisconsin's Northwoods [Electronic version]. *Journal of Forestry, 101(6),* 18-23.

Stankey, G.H. (1996). The Social Acceptability of Forest Management Practices and Conditions: Integrating Science and Social Choice [Electronic version]. In M.W. Brunson, L.E. Kruger, C.B. Tyler and S.A. Schroeder (Eds.), *Defining Social Acceptability in Ecosystem Management: A Workshop Proceedings* (pp. 99-111). Portland, OR: USDA Forest Service Pacific Northwest Research Station, PNW-GTR-369.

Suchman, M. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *The Academy of Management Review 20(3),* 571-610.

Wadsworth, B. (1999). Factors Affecting Forest Land Conversion and the Feasibility of Cooperative Land Management Efforts at King County's Urban/rural interface (master's thesis). Seattle: University of Washington, College of Forest Resources, Seattle, WA

Washington Forest Protection Association (WFPA). (2000, November). Public Opinion Survey of Washington Voters. Unpublished.

WFPA. (2001). Public Opinion Survey of Washington Voters. Unpublished.

WFPA. (2002). Public Opinion Survey of Washington Voters. Unpublished.

WFPA. (2004, June). Public Opinion Survey of Washington Voters. Unpublished.

WFPA. (2005). Public Opinion Survey of Washington Voters. Unpublished.

Acknowledgments

The authors would like to thank **Cindy Mitchell** of the Washington Forest Protection Association for her generous help in providing information and content suggestions for this paper.

The Northwest Environmental Forum and the authors appreciate the comments by **Gordon Bradley**, *Professor,* College of Forest Resources, University of Washington, **Mitch Friedman**, *Executive Director,* Conservation Northwest, **Peter Heide**, *Director of Forest Management*, Washington Forest Protection Association, and **Cindy Mitchell**, *Director of Strategic Communications*, Washington Forest Protection Association, provided during the preparation of this material.