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Forest Management in the Interface: Practicing Visible Stewardship [1]

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Interface forests are often owned and surrounded by people unfamiliar with sustainable management practices. Some of these people have difficulty evaluating the actual effects of forest management. These people may have limited understanding of ecology and no experience with forest harvesting or regeneration. However, they are still keen to evaluate forest management because forests are such a visible and integral part of their community. To maintain good public relations, natural resource professionals must be sensitive to public perceptions of acceptable forest management, which may differ from professional judgments based on ecological and economic criteria.

Visible stewardship techniques such as cues-to-care and screening practices can help improve public perceptions of resource management practices such as timber harvesting. This fact sheet reviews a suite of visible stewardship options. Some approaches are actually ecologically and economically beneficial, while others are strictly cosmetic. Resource professionals must decide what approach or combination of approaches is appropriate for their situation. Visible stewardship practices can provide opportunities to promote public understanding of forest ecology and economy. The challenge, then, for interface professionals, is to devise practices that are economically feasible, ecologically sound, socially acceptable, and easily understood by nonprofessionals.

Cues-to-Care

Silvicultural, harvesting, and other vegetation management practices are often assumed to be guilty of environmental degradation and must be proven innocent. Therefore these operations in the interface must send a message, through direct and indirect cues, that environmental quality is being sustained or improved. Because many interface residents lack experience with forest ecology and forest management, they may not know how to "read" the landscape for cues of environmental quality. When doing so, they rely on indirect cues about *how* the forest is being managed. Forest managers who are able to leave a site looking clean and neat are perceived by interface residents as being more

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professional, more competent, and better stewards. These cues-to-care provide a "language" of landscape form that the public reads to mean *good management* (Hull, Robertson, and Buhyoff 2004; Shelby, Tokarcyk, and Johnson 2004; Sheppard and Harshaw 2001; Sheppard 2003; Nassauer 1992; Ribe 2002).

Physical indicators of care include mowed or trimmed vegetation, lack of overgrown weeds, minimal erosion, visible erosion control mechanisms, minimal mud on the road, minimal wasted and damaged trees, a clean and neat work site, professionally dressed and behaved workers, contour planting, minimal downed wood or vegetation obstructing views, tended fences, and visible wildlife feeders. Of course the message of stewardship also can be communicated directly and overtly using signs that explain soil stabilization practices and reforestation intentions. These cues-to-care change the appearance of a messy, abandoned, and ugly landscape into one that is cared for and more socially acceptable. Management practices that leave cues-to-care demonstrate that the environment is being cared for by professionals who have a long-term investment.

Waste and damage

A logging site should communicate that all harvested resources were needed, carefully used, and extracted in a way that sustains site quality. Logs left at the site suggest that managers do not care enough to finish the job. It also suggests that the wood is of such low value that there is little justification for what appears to be a very dramatic and possibly damaging intervention in the forest. It gives the impression that the operator is so interested in making a fast buck that he/she hurried to the next site, concerned only with getting the most valuable pieces and leaving the rest to rot. Scarred or bent trees that are left standing suggest that operators do not care about the recovery of the site.

Neatness

Cues-to-care include equipment in good repair, minimizing slash, re-seeding skid trails and loading decks, minimizing and removing mud from public roads, minimizing dust spreading to roads or adjacent properties, and installing visible erosion-control devices. Litter, unstacked logs, and large piles of brush and tops give the appearance of waste or unprofessionalism.

Schedule and duration

Activities should be scheduled to accommodate traffic patterns and work schedules common in suburban areas. When possible the sights and sounds of logging and operation of heavy machinery should be restricted to times when landowners and neighbors are away from the property. These schedules can be made available to landowners, neighbors, and the community as a way to manage expectations. Timing should try to avoid wet periods that increase mud on the road but also avoid very dry periods that promote dust clouds that can travel to roads, into houses, and onto adjacent properties. Both mud and dust are visible red flags to interface residents.

Planning and safety

Foresters, landowners, logging contractors, and others responsible for planning the harvesting operation should make available to landowners, neighbors, and the community a description of their efforts to mitigate hazards associated with harvesting activities. This includes the dangers associated with felling, skidding, loading, and hauling in a populated area.

Communication

Signs can describe the care that was taken to protect soil and the plans for the future forest through planting or natural regeneration. Clearly communicate with the landowner the types of equipment that will be used, where it will enter and exit the property, which trees will be likely removed or damaged during harvest, where soil will be most compacted through skidding and loading, and where and to what degree slash will be left behind. Identify opportunities for silvicultural operations to increase vistas, protect privacy, create trail systems, improve forest health, and otherwise enhance valued aesthetic qualities. A written agreement among logger, owner, and forester should clearly outline the shared expectations for site behavior and cleanup.

Re-vegetation

Explain that a harvested forest is not dead and that healthy new vegetation will soon appear. Signs, letters, brochures, and demonstration projects can help stakeholders comprehend the rate and type of re-vegetation that will be occurring. Photographs and photo-simulations of similar sites are particularly effective.

Appearance of staff and equipment

Interface landowners may rely heavily on first impressions. Professionalism is communicated by the appearance of equipment, the clothing or uniform of personnel, being able to provide documentation of credentials, and using relatively up-to-date, sophisticated equipment.

Commitment to community

Extractive industries have a bad reputation of exporting wealth out of a community and then relocating to exploit other communities. Representatives of these industries (e.g., natural resource professionals, industry representatives, logging contractors) should communicate that they have a long-term commitment. They need to show that they are invested and investing in the local community and its environment. Demonstration projects, letters to the editor, service on community boards, and speaking at public meetings can educate owners and neighbors about how active forest management can be economically feasible, socially acceptable, and environmentally sustainable.

Screening Forest Practices

In addition to or instead of cues-to-care, vegetative buffers and harvesting plans can be designed to hide forest practices using a variety of techniques. Following are some strategies for protecting visual aesthetics.

Buffers

Terrain provides an effective visual and acoustic buffer to hide management operations, but is unavailable in many locations where management occurs. Vegetative buffers with sufficient thickness and understory can block views, but it is difficult to block harvesting sounds. Visual buffers may have costs: they remove portions of land from management, suggest that forestry has something to hide, and may increase maintenance frequency to clean up after wind damage.

Prepare logging details with aesthetics in mind

Locate landing, roads, clearings, and comings and goings of equipment away from main roads to minimize their visibility, especially areas with heavily compacted soil where re-vegetation will be slow. Restore landings and clearings into meadows or scenic openings. Locate skid trails and landings so they can be converted into trails, parking lots, or campsites.

Slash, tops, downed wood

Tops and limbs obstruct views into the forest and thus have negative visual impacts. They also provide a clear indication that management has occurred. Burn, crush, chip, and distribute tops and limbs. Set height limits in contracts.

Clearcuts

Clearcuts tend to be lightning rods for controversy. Several tricks can hide or disguise their presence. Few straight lines occur in nature, and they catch people's eyes. The visibility of these clearings can be minimized by blending the clearing shape to match topographic contours and mimic natural shapes. Also, feather or layer edges to blur distinctive lines or hard edges that attract attention. Most importantly, avoid breaking the horizon because changes on the ridge line are difficult to hide and easily attract attention. Large clearings are harder to hide. Smaller and dispersed patches have less negative impact than one large clearing. Consider replanting with grass or trees because aesthetics increase quickly with green-up.

Does Forestry Have Something to Hide?

“Clearcutting is not appropriate in situations where, because of overriding resource sensitivities (e.g. visual sensitivity or landslide hazard), it is likely to result in significant adverse impacts” (SAF

2002). The Society of American Foresters (SAF) has no official policy on forest aesthetics. Hints of an implicit policy can be found in SAF positions on timber harvesting and in various recommendations for best management practices found in state, federal, and industrial forestry publications, most of which recommend hiding or disguising forest management actions behind visual buffers or otherwise decreasing the scale and appearance of active forest management. The point of this section is to question the de facto policy of hiding forest management behind visual buffers because it is possible that hiding and disguising the practice of forestry may send a hypocritical message to the public about the practice, intent, and ethics of forestry. Do these practices suggest that active forest management is bad for the land and that foresters are not to be trusted? Or are they methods of preserving aesthetics out of respect for the public? Which practice is most appropriate in an increasingly politicized and regulated environment? The landscape is the most publicly accessible aspect of natural resource management. Managers should expect, and even encourage, the public to evaluate management based on what it sees in the landscape. Aesthetics should provide the public "a clear audit" of the land manager's ethics (Hull et al. 2000; Schauman 1998; Sheppard 2003). Cues-to-care offer an alternative to hiding active forest management. They attempt to communicate stewardship and can illustrate ecological processes and the consequences of actively managing these processes to meet demand for natural resources, products, and services. In the end, creative forest managers may use some combination of buffers, cues-to-care, and other techniques to practice socially-acceptable forest management in the interface.

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