Large Diameter Trees and the Political Culture of "Restoration": A Case Study with the Grand Canyon Forest Partnership, Flagstaff, Arizona

Michael Reed Coughlan, Northern Arizona University

Abstract: The material presented in this paper resulted from ethnographic research conducted with the Grand Canyon Forest Partnership (GCFP) of Flagstaff, Arizona, in the fall of 2001, as well as continued attention to the public discourse of commercial timber harvesting, forest fire prevention, ecological restoration, and ecosystem management in Southwestern ponderosa pine (*Pinus ponderosa*) forests. In general terms, the paper reflects an increasing concern for and attention to the nation's forest lands, primarily in response to what forest experts consider unnatural forest fire behavior. These fires, in turn, constitute a symptom of declining health and sustainability of forest ecosystems. More specifically, this paper concerns the "large tree" or "diameter cap" issue involving Flagstaff area forest restoration prescriptions. Because the "large tree" issue is central to the debate over forest policy and management in the American Southwest and elsewhere, it has become a focal point for regional conflict. The story of this issue as it played out within the GCFP illustrates a local community-level example of what has become widespread in national environmental political culture.

INTRODUCTION

The Grand Canyon Forest Partnership (hereafter GCFP)[1] is a partnership between the USDA Forest Service and the Grand Canyon Forests Foundation, a semi-autonomous subsidiary of the Grand Canyon Trust, a regionally-focused environmental non-profit organization. Through the Foundation, other

[1] The content of this paper primarily describes values, views, and beliefs held by informants during the fall of 2001, just prior to a restructuring of the Partnership. Consequently, this paper refers to the organization primarily as the GCFP, rather than by its new name the Greater Flagstaff Forest Partnership (GFFP). However, in some cases, where the paper references events that occurred after May of 2002, GFFP is used instead.

stakeholders are brought into the Partnership as contributors to an advisory board, management team, communications team, research team, and business development team (Grand Canyon Forest Partnership 2001a). As an institution, the GCFP is not a simple organization, but a council of organizations. Partner organizations now include 23 governmental agencies and non-governmental organizations.

The GCFP functions as a semi-public forum in which individuals representing stake-holder institutions can discuss and coordinate on regional forest management issues. The forum can be defined in terms of an evolving sociopolitical structure or institution, engaged in a cultural process of redefining political, economic, and ecological relationships to the land, specifically the ponderosa pine (*Pinus ponderosa*) forests of northern Arizona. For example, the GCFP documents describe the partnership as "working together in Flagstaff's urban-wildland interface: restoring the health of ecosystems, reducing the danger of catastrophic fires, seeking expanded economic opportunity, enhancing management of our public lands" (Grand Canyon Forest Partnership 1998:cover). The reasoning behind GCFP activities can be summed up in three points: (1) the problem: unhealthy forests; (2) the main symptoms: catastrophic wildfire, decrease in biological diversity of forests, debilitated watershed functions, and increased tree mortality due to widespread insect infestations, disease, and interspecies competition; and (3) the solution: ecological restoration.

In the fall of 2001, the GCFP was in the process of adopting the Society for Ecological Restoration's (SER) guidelines and definitions for ecological restoration. These guidelines state that "the mission of every ecological restoration project is to reestablish a functional ecosystem of a designated type that contains sufficient biodiversity to continue its maturation by natural processes and to evolve over longer time spans in response to changing environmental conditions" (Clewell et al.

2000:1). In northern Arizona, a majority of land managers, forest ecologists, and environmentalists agree that ecological restoration presents the best solution to the prevention of unnatural, catastrophic wildfires. However, lack of funding combined with arguments over the details of restoration prescriptions have slowed and/or prevented its implementation (Allen et al. 2002; Covington 2000; Moore et al. 1999).

The topic of this paper, the "large tree" or "diameter cap" issue, involves the intersection of financial problems and ideational conflicts stalling the GCFP's goal of forest restoration. Responding to these political and economic barriers, the GCFP management team began to draft the "large tree" policy statement. With this policy, the management team intended to set a limit or cap on the size of trees (in terms of diameter) that could be cut in forest restoration projects. For the majority of GCFP participants, the decision of whether or not to cut "large" trees (and even what is meant by "large") is based primarily on forest resources and economics. The resource-economics perspective is driven largely by a particular ideology referred to as "neoliberalism" throughout this paper. For a minority of GCFP participants and for a large number of the interested public, the large tree issue raises ecological, ideological, and aesthetic concerns that often conflict with neoliberal ideals. This minority viewpoint is driven by a set of ideological positions generally termed "environmentalism."

BACKGROUND

The ponderosa pine forests of northern Arizona occur between 6000 and 8000 feet above sea level. Although the ponderosa dominates the forest structure, associated native vegetation includes several other tree species and a wide variety of grasses, wildflower, and shrub species typical of the forest's understory (Grahame and Sisk 2002). Historically these forests were sparsely wooded, uneven aged stands, hosting a relatively frequent (every two to eight years) fire regime (Moore et al.

1999). The native disturbance regime of frequent, low intensity fires maintained a fire-adapted forest rich in understory vegetation and large diameter, old growth trees (Moir 2002). Beginning in the latter half of the nineteenth century, predominantly Anglo-American settlement began to drastically alter the forests (Moore et al. 1999; Swetnam et al. 1999). Intensive overgrazing by non-native livestock eliminated most of the fine fuels that historically carried the frequent, low intensity wildfires. This factor in combination with wildland fire suppression interrupted the fire regime, allowing seedling ponderosa pines to out-compete and replace native understory vegetation. Further, over the next century, the timber industry removed a majority of the large, older trees. As a result of these activities, the forests of northern Arizona are today densely populated with nearly homogenous stands of small diameter, nutritionally stressed trees highly susceptible to diseases and catastrophic wildfires (Allen et al. 2002; Covington et al. 1997; Moir 2002; Moore et al. 1999; Swetnam et al. 1999).

A recent history of increasingly intense wildfire seasons has created a sense of urgency for many involved in forest management (Allen et al. 2002). The catastrophic wildfires that currently characterize northern Arizona forests seriously threaten the ecological integrity of those forests:

> Wildfires are so extreme in their behavior and effects that they are in many ways worse than clearcutting. Critical habitat for threatened and endangered species is destroyed, watershed function is disrupted, and human habitat value reduced for centuries to come. [Covington 2000:136]

The GCFP was formed as a direct response to these threats. According to Moseley and KenCairn, the GCFP came together in 1996 as "disputes over federal forest management coupled with dramatic wildfires ... created a sense of crisis" (Moseley and KenCairn 2000:122). They argue that this political and ecological crisis created a "window of opportunity," to "realign institutional arrangements," toward a more collaborative

problem-solving organization (Moseley and KenCairn 2000:122). While citizen-based participatory models developed elsewhere, in Flagstaff institutional realignment resulted in the GCFP, a collaborative partnership of stakeholder institutions.

The sociopolitical process employed by the GCFP builds on principles of the ecosystem management "paradigm." The principles of ecosystems management prescribe the incorporation of participatory decision-making and ecological science into land management strategies (Wallace et al. 1996). According to Wallace et al. (1996), the development of the ecosystem management approach is a response by land managers and policy makers to the social and ecological criticisms launched by the environmental movement during the later part of the twentieth century. In general, environmentalist's criticisms stressed the lack of ecological principles as well as public participation in public land management issues. The ecosystem management philosophy therefore demanded a restructuring of policy formation process and management goals. Because "the group [GCFP] decided to form an institutional partnership to develop a consensus for restoration-based forest management" (Moseley and KenCairn 2000:124), this change in land management decision-making also required a shift in ideology for the traditionally market-oriented land managers.

Cawley and Freemuth (1992:45) describe this sort of shift in land management ideology as one that progresses from a tradition of production science that aims to "maintain and/or increase the long-term productivity of the nation's resource base," to a science of applied ecology that seeks to "maintain and restore" ecosystems. However, in attempting to understand the GCFP where official policy has presented a version inclusive of both of these ideological positions, a polarized, paradigmatic model of these cultural viewpoints is not useful. Instead, the GCFP tended to synthesize and sometimes confuse the two

scientifically driven ideologies. Politically, this ideational marriage proved problematic.

A history of appeals, litigation, and general conflict between the GCFP and environmental organizations preceded the generation of the "large tree" policy statement. The root of the conflict concerned the intensity of restoration "treatments" and the use of commercial operators. Environmental groups perceived these aspects as "commercial logging" rather than "forest restoration." Some GCFP participants hoped that setting a limit on the diameters of trees to be cut would reassure environmental groups and other interested members of the public that "economics" was not driving "treatments." Instead, principles of ecosystem science were to determine the treatment prescription.

Officially, the GCFP management team provides the interface between the Partnership Advisory board and the U.S. Forest Service. This group is dominated by professional foresters from Arizona State Lands Department, Northern Arizona University School of Forestry and Ecological Restoration Institute, City of Flagstaff Fire Department, and the U.S. Forest Service. The management team meets weekly, directs "day to day" activities, and produces and edits management related policy. Consequently, the main responsibility for the creation of a "large tree" policy, tentatively titled "A Management Policy for the Retention of Large Diameter Ponderosa Pine in the Flagstaff Urban Wildland Interface," fell to the management team. Six months in the making, the "large tree" policy continued to occupy a great deal of management team efforts through the fall of 2001.

THEORY

Much of the anthropological literature related to the subject matter of this study makes use of theories specifically concerned with the critical analysis of discourse and discursive strategy. The term "discourse" refers on one level to the content of

human communication, but on another to social meanings embedded in that content. Discursive practice or strategy refers to how people use that content to construct and legitimate particular "social formations, identity, relations of power, beliefs, and ideologies," (Farnell and Graham 1998:413). The analysis of discourse and discursive processes examines "the means by which social action, cultural knowledge, and social institutions are achieved and enacted" (Farnell and Graham 1998:414). Therefore, discourse-centered analysis understands symbolic content as a component of cultural processes.

Because this paper focuses on political culture, analysis scrutinizes the relationship between power, ideology, and discourse. Brosius (1999:277) contends that "anthropology has a critical role to play not only in contributing to our understanding of the human impact on the physical and biotic environment but also in showing how that environment is constructed, represented, claimed, and contested." In demystifying the sociocultural contexts within which land management occurs, anthropologists have the potential to point out the roots of more subtle or tacit biases that ultimately guide (or misguide) the decision-making process. In other words, anthropologists need to examine how the environment is conceived of and communicated about because cultural contexts are also political contexts and vice versa. As Wolf (1997:388) points out, "the ability to bestow meanings ... is a source of power." Power and discourse are intimately linked.

Guldbransen and Holland present a critical analysis of the relations of discourse and power in their look at the American Heritage Rivers Initiative (2001). The article places the American Heritage Rivers Initiative (the actors, their collective discourse, and consequent actions) in the context of global political economic trends as well as that of concomitant social movements. The Guldbransen and Holland study is of particular interest to this project, in that it takes partnerships similar to the GCFP as a focus. The authors characterize such

partnerships as "hybridizing forms of environmental decision-making," that have, "blunted the radical edges of the environmental movement" (Guldbransen and Holland 2001:126). They describe a process in which the discursive privileging of business as an apolitical "super-citizen" resulted in the gradual exclusion of biocentric views and environmental justice issues (Guldbransen and Holland 2001).

The theoretical framework used to describe and analyze these discursive processes links ethnographic data to historical, political economic, and ecological contexts. This framework is often referred to as "political ecology." Traditionally one of the main goals of political ecology is to expose the relationship between political economy, ecological degradation, and social/environmental justice. Consequently, the application of political ecology theory and methods to solving environmental justice problems led to the critical evaluation of environmental policy formation and the land management regimes they simultaneously prescribe, preclude, and prohibit. The theoretical framework presented by political ecology is well suited to the study of the GCFP, as it is an organization dedicated to recruiting broad-based social support and market generated funds for implementing ecological restoration-based land management. This paper, then, attempts an ethnographic description of a power struggle in which discourses articulating cultural perceptions, beliefs, and political ideologies play an instrumental role.

METHODS

Research methods used during the fall 2001 study included participant observation, focus group, structured survey and ethnographic interview techniques. Participant observation took place at weekly management team meetings as well as monthly advisory board meetings. Interviews were conducted with five key informants, all active participants in the GCFP. Key informant sampling involved a non-random cluster sample in

which interview subjects were recruited from a core group of active partnership participants. Although the sample is not representative of the entire group, participant observation data suggests that the interview data provided an accurate picture of the cultural composition of the GCFP. Data gathered from the focus group and survey only indirectly contribute to the analysis presented here. Familiarity with land management and ecological restoration in Southwestern Ponderosa Pine forests gained both through work and volunteer experiences with the Grand Canyon Trust, USDA Forest Service, the National Park Service, and an AmeriCorps conservation corps also contributed to this analysis.

POLITICAL FRAMES

GCFP publications state that member organizations share a set of environmental, social, and economic values. These common values then motivate the organizations to commit personnel and resources to the forest restoration cause. A comparison of the ideal culture as presented by GCFP publications with the real culture as described by participants and observed by the researcher, revealed that while participants perceived that they shared a common set of values, in reality, they did not.

Neoliberalism describes a relatively recent political trend that emphasizes not liberal social policy, but liberal economics (i.e., unconstrained markets). Since the early 1970s, there has been a slow, but apparent shift in the western political economic paradigm from one espousing the Keynesian economics of the welfare state to that of neoliberalism (Martinez and Garcia 1996). Neoliberal policy changes include bureaucratic decentralization from federal to local administration and the privatization of goods and services historically provided by government. For public lands management, this shift has resulted in a drastic decrease in funding for land management agencies and an increase in the importance of private concessionaires and user fees. According to Guldbrandsen and

Holland (2001:126), "Neoliberalism celebrates the wisdom of the market place and the need for localities to shape themselves to fit niches in the capitalist economy." Consequently, neoliberal conservation strategies emphasize local, market-oriented solutions to land management problems.

In the GCFP, neoliberalism drives the search for market-based solutions in order to fund restoration. More ardent neoliberalism demands that restoration projects completely pay for themselves through "sustainable" commercial timber harvest based on the principles of restoration forestry.

Traces of neoliberal ideology were evident in all of the informants' dialogues with the researcher. However, one informant clearly articulated a fundamentalist neoliberal viewpoint. A discussion about the economic goals of the GCFP evoked this response:

> I truly believe that we cannot continue to do forest health, forest restoration, and fire reduction on the public's dollar. I mean these are expensive projects and so somehow, if we really care about this idea of restoring the forest ... then we really need to figure out how to fund it, because ... funding it off the tax payer, funding it off the federal appropriations is a pretty fickle way of trying to run a sustainable project.

The neoliberal viewpoint augments a pragmatic economic argument with a moral imperative: public funding is unreliable and amoral. For this same informant, the characteristics of the social relations of production (i.e., corporate industrialism versus small scale capitalism and/or publicly funded labor) are irrelevant in the face of a pragmatic solution:

> There is a social concern that the partnership often gets trapped in ... that economic development would be perceived as the goal and so as a consequence there are words that get stuck into our policies statements, there are debates that we have about what size industry would we attract. Well, frankly that is out of our control, that is completely out of the Partnership's ability to affect in terms of who really would come in and establish a business here yet we waste an enormous amount of time debating the size of industry the types of products that we would be comfortable with that outside market

> forces are something that the partnership has little ability to effect and, but we again spend a great deal of time on those, and I think it's a lack of trust perhaps within the membership that says economic development isn't the goal, economic development is a tool to sustain the goal.

In neoliberal discourse the economy operates best when unrestricted by government regulation. In fact, the "economy" and "market forces" become entities or forces independent and super-ordinate to local social organization; they are the means and measures of human progress. For this informant, no qualifier need be made about private sector economic development, it is an integral component of the GCFP goals, because without it, there will be no restoration.

These views stand in contrast to the other side of the GCFP political spectrum characterized by the ideology of mainstream environmentalism. This ideology is represented and articulated most obviously, though not exclusively, by the Grand Canyon Trust (GCT). Mainstream environmentalism, while tolerant of neoliberal views, emphasizes environmental concerns over economic. Scale appropriate, sustainable industry is advocated, but is not seen as a main goal of the GCFP. For example, one informant stated: "I don't like the idea of cutting big trees just so we can make the project pay for itself ... I just don't think that is a valid reason at all to cut those trees."

The environmentalist ideology stems from the idea that political economic causes are at the root of environmental degradation. As one informant put it:

> Conflict between the partnership and the environmental community outside of the partnership has been the simple issue of commodification of ecosystems ... They recognize that as an inherent conflict of interests to say that you are managing for ecosystem health or ecological integrity but at the same time to say there is an economic incentive in there that might lead you or the decision-makers to go in a direction that may not facilitate those goals. There is obviously some historical truth to that, we wouldn't be here today restoring the ecosystem had they not been commodified and

> degraded through that process, through industrial logging of old growth, through livestock, etc., it is a real concern.

However, in this articulation of the environmentalist ideological concerns, this informant made the distinction between the "environmental community outside of the partnership" and the environmentalist position within the partnership. The main difference in the two views being more radical environmentalism outside the partnership opposes commercial logging activity on forest lands. Mainstream environmentalism, on the other hand, allows for some commercial activity to fund restoration and is therefore inclusive of a softened neoliberal position. This softened neoliberalism allows for and encourages a market-based solution to funding as long as it is restoration-based.

DISCOURSE, POWER, AND GCFP POLITICAL PROCESS: THE FATE OF LARGE DIAMETER TREES

At first GCFP participants of both ideological leanings defined the large tree issue as a problem to be solved with "good science." As one informant, a professional forester, stated, "there is no need for a diameter limit ... there is no scientific basis for a diameter limit." Proponents of retaining large trees cite the hypothesis that large trees are underrepresented on the landscape due to extensive commercial logging over the past century. According to the Center for Biological Diversity, one of the main environmental organization pushing to retain large trees, 90 percent of trees in the American West are 12 inches in diameter or smaller (Center for Biological Diversity 2002). This problem, coupled with the fact that larger trees are generally more resistant to fire, leads to the conclusion that removing larger trees further damages the ecosystem. Consequently, environmental groups such as the Center for Biological Diversity and the Southwest Forest Alliance would like to place

the diameter cap at 16 inches in diameter at breast height (dbh)[2], while still retaining most trees at 12 inches or greater (Southwest Forest Alliance 2003). However, according to arguments made by forest ecologists at GCFP management team meetings, scientific evidence points to the importance of "old growth" trees, not simply large trees. Hence, there is no scientific consensus on the significance of less mature, large trees to forest health.

One informant who supported the policy pointed out that "we don't have the research yet to show that not having a [diameter] cap is okay." However, most land managers felt the reverse; until solid scientific evidence is put forth, "large trees" should have no formal exemptions from management prescriptions. Regardless of whether there is evidence that large trees play an important role in landscape scale ecology, opponents of the diameter cap state that trees must be taken on a case-by-case basis and any set diameter cap would be arbitrarily imposed. For some, a diameter cap violates what informants called "foresters' professional discretion."

By late October 2001, "large tree" policy discussions at GCFP management team meetings were beyond this initial argument. The management team recognized that beyond the scientific argument, this concern over "large tree" retention was a "social issue." On one level, the general public liked the looks of large diameter trees in the forest; it was an issue of simple aesthetics. If aesthetics were at issue, public education could ease the conflict and no diameter limit would be necessary. However, according to a main proponent of the policy, the aesthetic values held by the public were tied to the perception, "that the cutting of large trees is synonymous with commodity production at the cost of ecosystems." As a result of this continuing public concern the management team drafted a

[2] Foresters measure the diameters of trees by "diameter at breast height" and abbreviate this measurement as "dbh," hence 16 dbh.

preliminary version of the policy, which was to be reviewed by the GCFP advisory board and finalized.

Following an "introduction" and an "assumptions and rationale" section, the "large tree" policy statement included these passages:

> The Grand Canyon Forest Partnership believes that large trees are an important component of a healthy ponderosa pine forest ... We do not subscribe to the removal of large trees simply to increase the value of restoration byproducts. When appropriate, trees excess to ecological needs may be utilized to offset the costs of restoration ... The maximum diameter of trees to be cut evolves from the Partnership's review of ecological conditions and needs and will continue to be evaluated on a project-by-project basis. As existing conditions and sites differ, so will the maximum size of trees to be cut ... in projects where trees larger than 18" (diameter at breast height) are to be cut, trees to be removed larger than 18" dbh will be documented by the Forest Service with photographs and case-specific rationale for their removal. The Multi-Party Monitoring team will review and assess this information to inform future project planning. [Grand Canyon Forest Partnership 2001b]

Significantly the statement recognized the importance of large trees to the forest and rejected their sacrifice for purely economic reasons. However, the policy did not create a "hard" diameter limit on trees to be removed and therefore left room for "project-by-project" variance. The management team hoped that this careful wording would appease all sides.

The advisory board meets once a month in a corporate style boardroom at the Flagstaff City Hall. These meetings are supposed to be attended by a representative of each member organization and are also open to the interested public. Introductions are the first matter of business and are necessary at every meeting due to inconsistencies in the attendance of member organization representatives and the ephemeral nature of advisory board personnel in general. Although management team participants are arguably the most heavily involved in the GCFP, they often miss advisory board meetings due to scheduling conflicts. On November 13, 2001, less than half of the

most active management team participants were present and only 12 of the member organizations were represented. Despite the incomplete appearance, turnout was average for the period observed.

The advisory board first discussed several items on the agenda, and then, the "large tree" policy came up for review. Over the previous month, the management team had attempted to solicit any comments or concerns that member organizations might have with the policy document. Advisory board participants failed to comment during this time, despite multiple e-mails urging them to do so. Management team members therefore hoped that the advisory board would approve the document, sending it into its final stages. These hopes were immediately dashed when it became known that the Forest Service liaison, for whatever reasons, had not informed his superiors about the policy statement. The vote was immediately tabled, but discussion of the policy continued.

Arguments over the importance of tree size verses age class initiated the conversation with general disagreement and discontent. People were visibly confused and agitated by the policy. Most had obviously not reviewed it beforehand and were unprepared to discuss it. At the same time, proponents of the policy remained conspicuously silent. Finally, someone mentioned that the policy essentially addressed social concerns rather than ecological needs. As the policy suddenly transformed into a social issue, participants at once found it a more acceptable proposal. It became easier for the GCFP to perceive the policy as appeasing social pressures, rather than compromising their view of scientific evidence. Soon, however, the discussion turned to whether or not the general public perceived the need for a diameter cap or if it was solely a belief held by a minority of oppositional environmental groups. A participant pointed out that, in fact, social science has yet to qualify the assumption that the public perceives the removal of large trees as problematic.

Attention shifted to the wording of the document itself. A "bulleted" statement placed under the heading "Assumptions and Rationale" read, "Concern exists that the cutting of trees, especially in diameter classes over 16 inches at breast height, equates to the restoration of large tree, industrial type forest management." "Whose concern?" a discussion participant asked. Another interjected that it was not just a concern but a tightly held value. "Well, we just don't care about that concern," was the response. Without continued argument, the statement was edited out of the document and a reference to the aesthetic value of large trees was suggested in its place. The participants were unable to accept the idea that these political economic concerns could possibly be legitimate.

However, some political economic concerns were considered legitimate. For example, GCFP recognized through the course of discussion that the "large tree" policy called for the retention of trees 18 inches dbh and over, not 16 inches and over as stated by the previously edited bullet point. Those extra two inches of diameter were not added arbitrarily. According to informants, the two inches between 16 and 18 dbh make a significant difference in the value of the tree. Economically speaking, logging 2.5 trees 16 to 18 inches in diameter per acre could pay for otherwise costly thinning projects. In some respects, this fact negated the quieting effect the policy was supposed to have on environmental organizations, since a main complaint of these organizations has to do with the role commercial timber interest might play in restoration projects. Most environmental groups in conflict with the GCFP are against the use of publicly owned forests for commercial timber harvests. However, the GCFP had already dismissed the political economic concern with the removal of the bulleted statement mentioned above.

At some point during this discussion, a Forest Service (FS) official appeared. At about this time, a discussion participant asserted that the "large tree" policy was essentially an "18-inch

diameter cap." What followed was a heated exchange in which the FS official made an emotionally charged argument against the "large tree" policy. Below I summarize aspects of the argument recorded in my field notes. Unfortunately this summary of the argument does not capture the emotional depth of the exchange.

(1) No ecological data shows that there is any need for a diameter cap; therefore, this is the "easy way out" for the GCFP.
(2) Instead of working on this policy, the GCFP should be educating and informing the public about why to trust the Forest Service decisions.
(3) Setting a diameter cap implies that the Forest Service cannot be trusted and needs to be regulated by an outside agency.
(4) The Forest Service does not want the idea cultivated that the GCFP or environmental groups are "making them do the right thing."

The message was clear; the Forest Service would not support the "large tree" policy.

In January of 2002, the GCFP began a restructuring process that is largely the result of political and ideological struggles described in this paper. In May, 2002, the GCFP renamed and simultaneously reinvented itself as the Greater Flagstaff Forest Partnership (GFFP) in an effort to further distance the organization from politically symbolic affiliations and relationships that a majority of Partnership participants felt hindered its ability to achieve its goals (Greater Flagstaff Forest Partnership 2002a). In order to complete the restructuring process, the Grand Canyon Forest Foundation changed its name to the Greater Flagstaff Forest Partnership, Inc. This move effectively divorced the Partnership from its parent mainstream environmental organization, the Grand Canyon Trust (see Greater Flagstaff Forest Partnership 2002a), leaving the more neoliberal-leaning conservation interests with the upper hand.

Although the GCFP more or less permanently tabled the "large tree" policy at the November 13th advisory board meeting, the Partnership previously approved a 16-inch diameter cap for the Kachina Village Forest Health Project with

the following exceptions: "to achieve the desired objectives of creating grassy openings or enhancing existing forest openings, or to enhance growth and health within larger groups" (USDA Forest Service 2001:2). Where trees of 16 inches or greater were to be cut, most would be left in place or otherwise used for habitat purposes (USDA Forest Service 2001:2). This cap policy was very similar to the 18-inch more general policy outline above. However, in August of 2002 when the official project plans were released, the Forest Service's preferred alternative did not take these GCFP recommendations into account. Instead, the Forest Service proposed cutting and selling 7,000 trees over 16 inches in diameter in order to provide $498,000 of revenue with which to recoup some of the $1.5 million in estimated project costs (Ghioto 2002). The Forest Service's justification for not taking GCFP recommendations maintained that they were based on "politics" while the "preferred alternative" was based purely on "ecological criteria" (Greater Flagstaff Forest Partnership 2002b). Consequently, the GFFP reversed its recommendations and decided to back the Forest Service (Ghioto 2002). Although the GFFP approved the "preferred alternative" by a "unanimous" vote, significantly, the Grand Canyon Trust abstained.

FIGHTING FOREST FIRES AND ENVIRONMENTALISTS WITH "RESTORATION"

The GCFP is engaged in what Higgs calls "reverse adaptation," where there is "an inversion of the traditional relationship between means and ends" (Higgs 1997:344). The recent approval of the Forest Service's "Preferred Alternative" in the Kachina restoration project is an example of this problem. Had the GFFP not approved the "preferred alternative," they may have found themselves without purpose. Conversely, the lack of will to oppose the Forest Service was cultivated in a political culture heavily favoring neoliberal interests within the GFFP. In other words, neoliberal ideological interests have successfully co-

opted forest restoration discourse and now determine the parameters under which restoration occurs.

Both oppositional environmental groups and national politics exert social and political pressures that affect GCFP decision-making processes. Although changes in the GCFP/GFFP can be understood as reactions to ecological events such as the severe wildfires of summer 2002, they are also local manifestations of changes taking place in the national social and political climate. The idealistic notions of "collaboration" between environmental groups and land management agencies were drafted during the Clinton administration. Federal land management agencies now face political pressures to conform to the Republican agenda, a mandate made clear with President Bush's reversal of the Clinton-era "Roadless Land Initiative" and the introduction of the "Healthy Forest Initiative" in August of 2002 (United States Department of Agriculture et al. 2002). The GCFP discourse openly recognizes environmental opposition as a serious political pressure, but the influence of national politics remains ironically obscured.

As an example, the Forests Service's main problem with the "large tree" policy seemed to be that the dialogue surrounding it would deem it an 18-inch "diameter cap" despite the fact that the policy was explicitly not a hard cap, and allowed for exceptions as needed. Essentially, for the Forest Service, the "large tree" policy boils down to a power issue: the Forest Service simply does not want the general public and/or environmental NGOs dictating policy decisions that constrain the Service's ability to manage land how they, and the executive branch of the federal government, see fit. Therefore, the Forest Service understands the "advisory" capacity of the GCFP (GFFP) as providing only technical and public relations support. The Forest Service agreement to restore the forests rests on the assumption that they ultimately define what "restoration" means. As a result, the agency filters and controls the language and science that dictates restoration management parameters.

Hence, the decision not to have a diameter cap is framed as apolitical, based on "good science."

In the end, however, the Forest Service needs the GFFP to back its version of restoration in order to gain sociopolitical legitimacy in this new era of "ecosystems management." The Forest Service garners support from the GFFP and, in turn, the public, through a discursive strategy that privileges their version of ecological science, albeit driven by "production science" directives, over the sociopolitical interests of collaborative-democratic policy formation. The emphasis on "science" (or lack of it) over political considerations is a discursive tool that at once de-legitimizes and co-opts oppositional discourse.

President Bush's "Healthy Forest Initiative" (United States Department of Agriculture et al. 2002) offers a perfect example of this phenomenon. Essentially the new policy initiative is a conservative backlash conducted through the use of the language and concepts of the ecological restoration paradigm. The initiative adopts the ecological discourse of its opponents while at the same time discrediting environmentalist efforts to be heard (i.e., through appeals). In doing so, the Healthy Forest Initiative precludes attempts to suggest alternative political economic methods by which to achieve similar management goals. Environmentalists are now portrayed as preventing "ecological restoration," largely because of their opposition to conventional "multiple use" land management – that is, the use of commercial timber operators to achieve management goals. Alternatively, it could be alleged that the federal government and local institutions are preventing the restoration by not allocating monies to publicly funded restoration projects. Many environmental organizations are not opposed to non-commercial "fuels" thinning projects, and would be even less so if comprehensive restoration was emphasized over fuels reduction and fire prevention objectives. However, the fact that the more powerful neoliberal interests have co-opted the

"biocentric" discourse of ecosystem management, health, and restoration, renders "invalid" any alternative interpretations of cause/blame and solution. This discursive coup is legitimated through the complicity of individuals within the context of the tactical power of social institutions in the Flagstaff community. Ultimately, the GFFP is setting itself up as a coalition for the advancement of neoliberal conservation strategy effectively endorsing a technocratic oligarchy over the democratic principles envisioned by the original progenitors of "ecosystem management."

CONCLUSION

The failure of the "large tree" policy, the restructuring of the GCFP/GFFP, the Kachina Village Forest Health Project, and the rhetoric of the Healthy Forest Initiative all point to a general trend moving forest restoration and management toward the objectives of neoliberal conservationists. This process has successfully disenfranchised environmentalists and the general public from the forest restoration process by ignoring and undermining efforts to change the political economics of public lands management.

There is no solid scientific basis for a diameter cap nor is there such a basis for a limitless harvest for the commercial timber industry. However, forest restoration standards must be based on some value judgments. Who should determine the fate of the nation's forests: a minority with vested interest in the industrial capitalist enterprise that is primarily responsible for the poor condition of those forests, or, in the spirit of collaborative, egalitarian ecosystems management—everyone? Should local communities take on the full responsibility of restoring the forests that the federal government, in collusion with industry, ruined? These are political economic questions, not ecological ones. If ecological restoration is to truly be based on the democratic, participatory principles of ecosystem

management, the GFFP might not represent the model it was intended to become.

REFERENCES

Allen, Craig D., Melissa Savage, Donald A. Falk, Kieran F. Suckling, Thomas W. Swetnam, Todd Schulke, Peter B. Stacey, Penelope Morgan, Martos Hoffman, Jon T. Klingel
2002 Ecological Restoration of Southwestern Ponderosa Pine Ecosystems: A Broad Perspective. Ecological Applications 12(5):1418-1433.

Brosius, J. Peter
1999 Analyses and Interventions: Anthropological Engagements with Environmentalism. Current Anthropology 40(3):277-309.

Cawley, R. McGreggor, and John Freemuth
1992 Tree Farms, Mother Earth, and Other Dilemmas: The Politics of Ecosystems Management in Greater Yellowstone. Society and Natural Resources 6(1):41-53.

Center for Biological Diversity
2002 Forest Structure in the West: 90% of Trees 12 Inches in Diameter Or Smaller. http://www.biologicaldiversity.org/swcbd/programs/fire/12orSmaller.pdf, June 28, 2003.

Clewell, Andre, with John Rieger and John Munro
2000 Guidelines for Developing and Managing Ecological Restoration Projects: Society for Ecological Restoration.

Covington, W. Wallace
2000 Helping Western Forests Heal: The Prognosis is Poor for U.S. Forest Ecosystems. Nature 408(1):135-136.

Covington, W. Wallace, P.Z. Fule, M.M. Moore, et al.
1997 Restoring Ecosystem Health in Ponderosa Pine Forests of the Southwest. Journal of Forestry 95(4):23-29.

Farnell, Brenda, and Laura R. Graham
1998 Discourse-centered Methods. *In* Handbook of Methods in Cultural Anthropology. H.R. Bernard, ed. Pp. 411-457. Walnut Creek: AltaMira Press.

Ghioto, Gary
2002 Cutting-edge Controversy. Arizona Daily Sun, August 18: A1 and A11.

Grahame, John D., and Thomas D. Sisk
2002 Canyons, Cultures and Environmental Change: An Introduction to the Land-use History of the Colorado Plateau. http://www.cpluhna.nau.edu/, July 4, 2003.

Grand Canyon Forest Partnership
1998 A Guide to the Grand Canyon Forest Partnership. Flagstaff: United States Forest Service and the Grand Canyon Forest Foundation.
2001a Grand Canyon Forest Partnership. www.gcfp.org/, September 25, 2001.
2001b A Management Policy for the Retention of Large Diameter Ponderosa Pine in the Flagstaff Urban Wildland Interface: Internal Document.

Greater Flagstaff Forest Partnership
2002a Grand Canyon Forest Partnership Now Greater Flagstaff Forest Partnership. http://www.gffp.org/media_pr/gffp_release.htm, August 25, 2002.
2002b Partnership Advisory Board Meeting Minutes, 9 July 2002. www.gffp.org, August 20, 2002.

Guldbrandsen, Thaddeus Countway, and Dorothy C. Holland
2001 Neoliberalism, Environmental Activism, and the American Heritage Rivers Initiative. Anthropology Quarterly 74:124-134.

Higgs, Eric S.
1997 What is Good Ecological Restoration? Conservation Biology 11(2):338-348.

Martinez, Elizabeth, and Arnoldo Garcia
1996 What is "Neo-liberalism": A Brief Definition for Activists. www.corpwatch.org/trac/corner/glob/neolib.html., September 28, 2001.

Moir, Will
2002 Ponderosa Pine Fire Ecology. http://www.cpluhna.nau.edu/, July 4, 2003.

Moore, Margaret M., with W. Wallace Covington, and Peter Z. Fule
1999 Reference Conditions and Ecological Restoration: A Southwestern Ponderosa Pine Perspective. Ecological Applications 9(4):1266-1277.

Moseley, Cassandra, and Brett KenCairn
2000 Problem Solving or Social Change? The Applegate and Grand Canyon Forest Partnerships. Ponderosa Pine Ecosystems Restoration and Conservation: Steps Toward Stewardship, Flagstaff, Arizona, 2000. USDA, Rocky Mountain Research Station.
Southwest Forest Alliance
2003 Natural Processes Restoration Model. http://www.swfa.org/restoration_npr_model.html, June 28, 2003.
Swetnam, Thomas W., with Craig D. Allen, and Julio L. Betancourt
1999 Applied Historical Ecology: Using the Past to Manage for the Future. Ecological Applications 9(4):1189-1206.
United States Department of Agriculture, United States Department of Interior, and White House Council on Environmental Quality
2002 Administrative Actions to Implement the President's Healthy Forests Initiative. http://www.whitehouse.gov/ceq/hfi_usda-doi_fact_sheet_12-11-02.pdf, May 24, 2003.
USDA Forest Service
2001 Kachina Village Forest Health Project. Flagstaff: USDA Forest Service.
Wallace, Mary G., with Hannah J. Cortner, Margaret A. Moote and Sabrina Burke
1996 Moving Toward Ecosystem Management: Examining a Change in Philosophy for Resource Management. Journal of Political Ecology 3:1-36.
Wolf, Eric
1997 Europe and the People Without History. Berkeley: University of California Press.