From Individualism to Healthy Communities: Toward Ecological Adaptability

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Introduction

Effective integration of human sustenance activities with ecological systems requires immediate human needs he satisfied while also perpetuating ecological conditions assuring satisfaction of needs for all people over the long run. To accomplish these dual objectives, people must adopt institutions effective in sustaining ecological conditions extending beyond their lifetimes and extending ecological services to others beyond their immediate community. Social institutions are the vehicles by which human actions are most effectively channeled toward creating and maintaining such ecological adaptability. Institutions accomplish effective channeling of action hy focusing choices on issues of greatest concern, exercising dispersed and informal social control, transmitting values and behavior patterns to newcomers and the young, and mobilizing knowledge and expertise for most effective inquiry and decision-making (Berger and Luckmann 1966; Meyer and Scott 1992).

Two institutions are fundamental to the perpetuation of desirable ecological conditions: resource management institutions (which channel behavior to create and maintain desirable ecological conditions) and land and resource tenure institutions (assuring predictable patterns of resource access, use, and disposal). This paper questions whether these institutions, as presently constituted, are best structured to sustain ecological functions necessary for human survival and well-being, and suggests promising alternatives.

This institutional critique is in part inspired by Wendell Berry's (1995, 61) affirmation of community as the smallest unit of health: "I believe that the community—in the fullest sense: a place and all its creatures—is the smallest unit of health and that to speak of the health of an isolated individual is a contradiction in family or community or in a destroyed or poisoned ecosystem." Berry's most important contribution is the imagery with which he nurtures our minds. He sketches a picture in which people and the place in which they live are represented as an interdependent whole. There is no separation of people from their environment, and no isolated individuals standing over against one another or their surroundings. The well-being of people is inextricably intertwined with the life of other organisms and physical processes, and the only way to image health is to picture all of these elements working together in a place as a "community." This definition of community will be used throughout this paper

The paper begins with a discussion of how the language of Newtonian mechanics has shaped our thinking about human ecological relations, and how a more imaginative, holistic representation of human-nature relations is revealed by the language of healthy communities. This is followed by a description of how tenure and management institutions embody the mechanistic and individualistic cultural ethos of North American society inherited from the Enlightenment, with its emphasis on individual interests and rights as the basis for social order. These traditional institutions will be evaluated in terms of their capability to protect and enhance relationships between individuals, as well as relationships between individuals and nature. Commitments people make to others and ecological processes in a place of residence are emphasized as the way people adapt to ecological circumstances. The development of new institutional arrangements in particular places offers opportunities to stimulate the development of "familial" attachments to both nature and others who benefit from nature's ecological services, now and in the future. Development of local natural resource tenure and management institutions is illustrated by describing self-organizing activities that led to a salmon habitat conservation plan for a county in Northeast Oregon.

From Newtonian Mechanics to Community

Holistic images of ecological health are difficult to grasp for many scientists and policy-makers. Such a holistic picture is often said to be at once too complex, too "fuzzy: and too general to he useful for analysis or policy making. Far better to decompose the community into its constituent parts and discover how each part behaves. According to such conventional thinking, analysis holds the promise for understanding and predicting how individual parts act and how they relate to one another. Such mechanistic logic stems from Newtonian mechanics, with its emphasis on equilibrium processes and the stability these processes are thought to provide. Despite attempts to envision more dynamic processes in both society and nature, Newtonian mechanics still hold sway in at least five features of the language used for framing, analyzing, and attempting to solve human ecological problems.

First, human individuals are abstracted from their place in nature and represented as separate from the biosphere. The abstraction of people from nature is a cultural construct especially widely shared by modem urban peoples. Studies of human ecology remind us that human populations are integral, if not dominant, ecological components, profoundly affecting the functions of local, regional, and global energetics and biogeochemical cycling (Sack 1990; Odum 1975). Sack (1990) emphasizes how the biological identity of human individuals is

distorted by the culture of modem advertising and consumer lifestyles in which connections to the biosphere are ignored in favor of standardized places (e.g., McDonald's) and repetitive acts of consumption.

Second, following from the separation of humans from nature is the view that nature is a "thing" separate from human values, beliefs, and aspirations. The possibility that human experience of the physical and biological properties of nature is socially constructed is often ignored (Cronon 1995; Berger and Luckmann 1966). A mechanistic image of nature is embodied in its reification as fixed natural resources (e.g., timber, water supply, or forage) or as undisturbed natural ecosystems exclusive of human intervention. The fixed properties of these "things" are thought to interact with human populations in predictable ways, meeting human needs and providing opportunities for protecting natural processes from human interference. The possibility that humans interact not with nature as such, but with nature as they have imagined it (especially by focusing on only a few of many biological and physical attributes) is generally ignored.

Third, patterns of interactions between humans and nature are thought to be identifiable and understood through representation in linear, deterministic models. Hence, a science of human-nature interaction is thought possible, yielding predictions about patterns of interaction from law-like generalizations applying to events in diverse times and places. Several sociologists have advocated such a comprehensive human ecological science (see especially Firey 1960; Cottrell 1955). The possibility that human-nature interactions are not governed by such simple deterministic processes has only begun to be examined (McLain and Lee 1996; Wilson, et al. 1994).

Fourth, stability in human-nature interactions is thought to he attainable by applying the results of deterministic models to predict how humans will respond to nature and how nature responds to human intervention (Schiff 1966). An enduring and stable relationship between human activities and natural ecological processes is envisioned as possible when humans mimic natural ecological processes in their resource management practices. But the inherently dynamic properties of natural systems and human societies have made such stability an elusive goal (Botkin 1990). Increasing rates of human demographic and technological change, coupled with the dynamic processes in ecosystems, necessitates the use of language that accommodates the reality of persistent change and changing rates of change.

Finally, people imagine that it is possible to return to previous, stable patterns of human interaction with nature. Current emphasis on ecosystem restoration is based on the assumption that stable states of nature existed and can be recreated to simulate those encountered in "virgin lands" such as North America at the time of first European contact. The fact that these states of nature were products of the cultural views and actions of previous human occupants is too often ignored, along with the challenges of "restoring ecosystems" containing peoples with far higher population densities, far more complex technologies, and very different cultures and resource management practices. Also ignored is the possibility that there was far less ecological stability during pre-European times than we generally assume.

In summary, the language of Newtonian mechanics leads us to assume that humans and nature are separable, nature is objective and knowable without considering its possible social construction, human interactions with nature are predictable, predictability makes stability possible, and processes of interaction are reversible. These are all key features of a clockwork model of a world governed by simple equilibrium processes (Botkin 1990; Landau 1972). But they are features that may not accurately represent the way in which humans actually exist in and interact with nature. A closer look at how such mechanistic language shaped tenure and resource management institutions that emerged from the Enlightenment will help us better understand the strengths and weaknesses of existing institutions and the promise of a more inclusive view of healthy communities.

Tenure and Resource Management Institutions

Property ownership and natural resource management practices in North America embody political and economic principles originating with the Enlightenment (Curry-Roper and McGuire 1992). Tension between the individual and the collectivity (the state) is the source of a dynamic process in Enlightenment thought. Enlightenment thought was heavily influenced by the imagery of Newtonian mechanics. American ideas of individual freedom were derived from John Locke, who asserted that society is a collection of individuals and the foundation of society is the will of the individual. Individuals are separate from the whole (both society and the natural world) and could only find expression in personal ownership. Adam Smith assumed that since individuals were hopelessly selfish, the social good could only be achieved by the free choices of autonomous, self-sufficient individuals—hence the beneficent functions of the "invisible hand." Both Locke and Smith assumed freedom is independence from obligations to the state or others, and private property is the key institution for protecting individual independence and autonomy. The function of the state, therefore, was to protect the exercise of freedom by autonomous individuals. The state is limited to refereeing actions of competing individuals.

According to this Enlightenment view, collectivities, including both the human community and the state, are seen as oppressive forces limiting individual initiatives and autonomy (Curry-Roper and McGuire 1992). In most instances, the courts clearly favor individual rights over claims of the collectivity or government. Take recent legal rulings on pornography on internet as an example of where individual freedom is given more emphasis than public morality. Similarly, the rights of private property owners are increasingly favored over government regulation to protect public goods, with the "taking issue'' becoming a major political debate about the protection of individual autonomy.

To clearly see how wedded we are to Enlightenment thought, one only need reflect on the fact that community residents, as members of local collectivities, receive less sympathy from the courts or policy makers than private owners or purveyors of pornography. The courts and policy makers treat geography as a language of ***space*** (a surface of opportunities for competing individuals) and see ties to real places as a lack of freedom (oppression, containment, or even residual feudalism), thereby minimizing the importance of community as a language of ***place.*** (Curry-Roper 1996). To assert that communities are places with their own integrity and rights to self-determination is seen as archaic, romantic, or sentimental, but certainly not useful.

This is not to say that the limits of individualism go unrecognized. Market failures, public goods, and excessive opportunism are acknowledged and answered by granting authority to the state. Central planning, often using economic logic derived from the private sector, is justified where markets and individual rationality fail to protect air, water, biodiversity, or other public goods. The use of the FORFLAN model for national forest management planning stands as an example of where linear programming techniques developed for optimizing production in a firm were used to allocate and schedule the production of public goods; national forests were divided into cells (uniform spatial units) and abstract values were assigned to these cells without recognition of unique natural features, geographic features, topography, or cultural defmitions not contained in inventory data (Lee 1977). Utilitarian values of land were summed up across this homogenized landscape. But, as with all bureaucratic solutions to public goods problems, central planning imposes the visions of social elites (the preferences of a few who claim to be enlightened) on the collectivity at large (Lasch 1995; Dryzek 1987). This pattern of bureaucratic leadership tends to persist, and to change in content only when one social elite is succeeded by another (as recently happened when advocates for forest preservation replaced advocates for timber production as the social elite with most influence over United States national forest policy).

Natural resource management policy in North America has long reflected the false dichotomy between the individual and the state embodied in Enlightenment thought. The cultural script inherited from the Enlightenment strips human experience of its richness and variety and obscures the reality of how people actually live their daily lives. The autonomous individual separated from others and nature is a fiction of our legal system, policy makers, and private social elites which benefit from maintaining control over corporate or public bureaucratic agendas (Korten 1995). Those responsible for maintaining and reconstructing this fiction have a lot to do with creating winners and losers in disputes over natural resources. This is illustrated by social scientists who have argued that resource-producing rural communities are obsolete and must accommodate inevitable changes in values shared by the collectivity, as well as by industry leaders and economists who have stressed the need for individuals to adjust by moving to new towns and finding new jobs. In both cases individuals are envisioned in Newtonian terms as marbles that will adjust their position on a plane surface in response to forces beyond their control.

What gets ignored by architects of the Enlightenment fiction is the fact that individuals have always been embedded in intimate relationships to one another and to nature, and address problems through collective, self-organizing activities. Extended family and friendship networks are the life-blood of social life in communities **of** place (Wilkinson 1991), and a working knowledge of nature is fundamental to survival, enjoyment, and ecological adaptation in a locale (McGovern et al. 1988). The fracturing of these relationships to other individuals and nature is a relatively recent phenomenon that accompanied the rise of the modem state with its Newtonian imagery and emphasis on individual freedom (Polanyi 1957).

Private property, as envisioned in the United States, tends to reflect the mechanistic assumptions of Enlightenment thought. Individuals abstract themselves from the social and ecological contexts in which they are imbedded. Individuals often behave in an ecologically uninformed way when they exhibit an exclusive commitment to a limited space (their property), maximize short-term returns on the investment of capital or labor, and ignore relationships to nature other than opportunistic extraction of resources (Firey 1960). Well-motivated natural resource stewards may be forced to act in ecologically disruptive ways. Some small nonindustrial private owners were forced into ecological disruptive behavior when they liquidated their forests and sold their land in response to the fear of confiscatory environmental regulations which threatened the security of their property rights (Lee 1996).

Similarly, well-motivated natural resource managers working for state or federal government may similarly fmd themselves acting in ecologically disruptive ways when the institutions they work for ignore the social and ecological contexts of human action. Attempts by the state to regulate natural resource systems by imposing centralized planning and top-down control have been met with limited success throughout the world (World Commission on Environment and Development 1987). Top-down control generally leads members of communities of place to withdraw voluntary conformity to state policies (IUCN, UNEP, and WWF 1991). The state can further alienate community members by substituting centralizing police powers for the voluntary social controls that had previously engendered conformity in local communities (Pendleton 1995). Moreover, centralized governments can contribute to additional ecological disruption when they substitute highly generalized knowledge for the rich and varied knowledge held by particular communities about local ecological systems (Chandler 1990). Such richness in ecological knowledge is as valuable a form of social capital as the diversity of biological capital it often describes. The state contributes to the decline of ecologically adaptive behavior by ignoring or eliminating ecological knowledge embedded in communities of place.

Beyond Enlightenment Thought

We have seen how Enlightenment thought left us with a false dichotomy between the individual and the collectivity. Enlightenment imagery will not get very far in fostering ecologically adaptive practices unless we face its flaws and fmd alternatives that compensate for its weaknesses. The importance of *place* in human experience offers a promising alternative image, especially when place is seen as the foundation for human freedom and the development of a sense of personhood embodying relationships to others and ecological processes. Feminist scholars have recently re-emphasized what others had been arguing for a long time: true freedom arises out of embeddedness in relationships to people and ecological processes in a particular place (Fox-Genovese 1991).

In the context of place, freedom ***to*** live in relationship takes precedence over freedom from oppression exercised by either the state or communities of place (Curry-Roper 1996). "Freedom to" involves taking personal interest and responsibility for being embedded in a place and in relationship to others. Care-taking, or stewardship, of a place, including its human inhabitants and ecological processes, emphasizes the nurturing of connections. People who are committed to care-taking of a place live for others and their surroundings as well as for themselves. Care-taking commitments grow out of a rich inner spiritual life in which the larger sense of self, or **soul,** is extended to embrace the welfare of others (even others beyond the immediate community) and the ecological processes supporting life (Smith 1952). In contrast to the Enlightenment vision of a separate and autonomous individual, people who are committed to care-taking places see such individualism as an illusion. Rather than an emphasis on individual mobility and freedom from connections, reality is instead a web of intricate and ever-extending relationships. As reinterpreted from the context of place, the Enlightenment ideas appear as an enormously effective political rhetoric rather than an accurate mapping of social and ecological reality; individuals embedded in relationships is the fundamental reality obscured by the Enlightenment's preoccupation with liberating individuals from oppressive relationship — relationships in which power is exercised over individuals or groups (Gaventa 1980).

The contributions of Enlightenment thought can be incorporated in a revisioned logic of places by using it to emphasize the qualities of relationships. Concerns about "freedom from" oppressive relationships remain important concerns for those seeking ecologically adaptive institutions, since people who do not share in exercising control over the events that affect their lives are less likely to behave in an ecologically adaptive manner (Lee 1992). However, there are several other qualities of relationships that contribute to ecologically adaptive behavior in addition to power-sharing. Closely related to power-sharing is dispersed control. Social controls that are multistranded and spread throughout a local society are most effective in empowering a wide variety of people and bringing their problem-solving abilities to bear on the collective problems they face (Ostrom 1990). Dispersed control is essential for mobilizing embedded ecological knowledge, or the operational ecological knowledge acquired in an ecological context by people with particular resource management practices (Chandler 1990). **All** these qualities of relationships contribute to situated identities in which people extend themselves to incorporate others and ecological processes as elements in their core identities (Smith 1952). **A** situated identity is revealed in names of people, locations, and events whose meanings are shared widely among local residents and whose mention elicits common sentiments. Another quality that merits attention is the *flexibility* of relationships that becomes possible in small-scale societies which rely on interpersonal knowledge and communications. Such flexibility enables people to avoid rigid bureaucratic procedures and exhibit resiliency by recovering form and function when challenged by the difficulties encountered in new circumstances (Stacey 1996). These qualities of relationships are illustrated in the following case study description of a salmon habitat conservation plan developed by local residents in a remote mountain community.

Salmon Habitat Enhancement Plan

Ecologically adaptive behavior is illustrated by coordinated action to help protect and enhance the mountain habitat for the Snake River salmon (*Oncorhynchus tshawytscha*) within the boundaries of Wallowa County in northeast Oregon State. The plan assessed existing habitat conditions and recommended projects on every river and stream in the county, including upstream water impoundments, commercial thinning of forests, exclusion fencing around riparian zones, controlling weeds, removing woody material, rotating grazing, surfacing roads, and relocating campgrounds.'

All relevant stakeholders were brought together in a network focused on the need to protect and restore the mountain habitat of the Chinook salmon. This network, and the committees through which it is already implementing remedial actions, is a self-organizing partnership that coordinates the independent initiatives of a multitude of private and public landowners, government regulatory jurisdictions, businesses, and private citizens.

Setting

Wallowa County has an area of 3,153 square miles, with a 1990 population of 6,950 residents. The county contains the upper reaches of two major river systems (Grand Ronde and Imnaha). These rivers run into the Snake River, which in turn enters the Columbia River. Sixty-five percent of the land in Wallowa County is owned by the federal government, and about 50 % of this land is leased to stock-growers for grazing cattle and sheep. The remaining 50 % of federal land is heavily forested or consists of high elevation lands covered by rock, snow, and brush. Agriculture is an important industry along the rivers in the fertile valley bottoms.

Over half of the population of Wallowa County is concentrated in four rural communities, with the remainder dispersed in rural residences. These communities are nestled in picturesque high mountain valleys that slope up to mountain ranges which define the boundaries of Wallowa County. Most

people share the cultural values found in an economy based on the production of natural resources, and earn a living by ranching, fanning, harvesting timber, or trading the commodities produced in these industries. The natural beauty and small-town way of life has attracted a few urban residents seeking remote places to practice arts and crafts and/or to enjoy unspoiled nature.

Local ranchers were given long-term leases to graze their cattle on the federal lands. Both the U.S. Forest Service and BLM recognized early in the twentieth century that land and resource stewardship would he encouraged by granting long-term leases. Security of grazing land stimulated investments in fences, water development, and adoption of rangeland conservation practices. Federal lands also supplied timber to local sawmills and contract loggers. Sustained-yield plans for the federal forests assured local industries of a timber supply that could justify long-term investments in improved utilization and manufacturing technology.

In **1855** the Nez Perce Tribe was granted treaty rights to salmon in the rivers and to gather, hunt, fish and graze livestock on federal lands. Most large private landowners have also granted tribal members access for gathering, hunting, and fishing on lands traditionally used by the Nez Perce. Local residents and members of the Nez Perce Tribe identify with the land, its resources, and the traditional uses of land or water-based resources. They feel they have inherent rights to maintain their culture and traditions, and believe these rights are protected by federal statutes (especially The National Environmental Policy Act, National Forest Management Act, and Hells Canyon Preservation Act) requiring administrative agencies to respect the "custom and culture" found in rural communities and Indian tribes. They also feel that these rights are an expression of the "pursuit of happiness" guaranteed by the U.S. Constitution.

In both the spring and the fall, Chinook salmon travel almost 500 miles up these rivers to spawn in the tributaries contained in Wallowa county. As has occurred throughout the Columbia River basin, the number of anadromous fish returning to the county had dropped to 10-15 % of historic numbers by the early **1990s.** Degradation of the mountain habitat of the salmon is only a partial cause for the decline of the species, since commercial and recreational fishing in the ocean and mouth of the Columbia River, ocean and river predators, and dams along the Columbia and Snake Rivers are by far the most important causes for **loss** of salmon.

Somewhat ironically, attempts to preserve forests could result in more catastrophic wildfires that already pose a threat to the survival of the chinook salmon. Unnaturally large and intense fires are exceptionally damaging to the salmon habitat because they kill all vegetative cover and alter the soil chemistry in ways that lead to changes in the chemistry of the streams. The forests of this region are suffering from severe forest health problems associated with unnaturally dense accumulations of stressed and dying trees. Under natural conditions, wildfire would have burned every 10-25 years and maintained the forest cover in open, park-like stands with a carpet of grasses, herbs, shrubs, and small trees on the ground layer. Local citizens and forest scientists claim that the most practical solution for restoring forest health and protecting the mountain habitat of the chinook salmon is to use grazing and selective timber harvesting to reduce vegetative fuels and to follow this fuel reduction with the reintroduction of carefully prescribed ground fires. Historical conditions could be progressively re-established by using commercial wood utilization to selectively reduce fuel hazards and restore a forest structure better balanced with environmental conditions.

Formation **of** the Planning Committee

Both local residents and members of the Nez Perce Tribe have an appreciation for the cultural value of salmon as a traditional part of the land and its rivers. A commitment to protect and restore the salmon population was the unifying motivation **for** forming a committee to develop a cooperative plan. An additional motivation was the concern of landowners and resource users that an externally imposed salmon recovery plan might drastically reduce grazing, timber harvesting, and sand and gravel extraction.

Also contributing to a willingness to cooperate was growing insecurity of long-standing rights to use federal lands for grazing and timber harvesting. Several years prior to this planning effort, the federal agencies began to reduce the term of grazing leases, culminating in revised regulations that removed many of the incentives for land and resource stewardship and replaced these incentives with penalties.

The Wallowa County-Nez Perce Tribe Salmon Recovery Strategy Committee was formally established in **1992** following the listing of the Snake River chinook salmon as threatened under the Endangered Species Act. Planning started with a small group of concerned citizens in local government, and the livestock and timber industries, who got together and asked the Nez Perce to join them in forming a "leadership group" that could organize a broad-based cooperative planning effort. An inclusive list of stakeholders was developed, and individuals representing each stakeholder group were invited **to** an organizational meeting. Twenty persons representing **11** stakeholder groups covering all relevant aspects of the human, economic, and natural capital at stake were ultimately involved **as** members **or** alternates (Wallowa County-Nez Perce Tribe **1993).** The committee consisted of representatives from Oregon State and United States government regulatory and land management agencies, the Nez Perce Tribe, and local citizen groups ranging from livestock grazing and logging to environmental protection and recreation and tourism.

The leadership group blended into the committee and a local citizen respected for his knowledge and fair-mindedness was asked to serve **as** a facilitator. He provided leadership for the process by keeping people focused, identifying issues, bringing out silent partners, and providing feedback to clarify positions. Discussions emphasized the need for each participant to honor the legitimacy of other participants and their

interests. Decisions were made by talking until a consensus emerged, and everyone could live with the decision. A spirit of interpersonal trust and confidence emerged among all committee members.

The Committee issued the following mission statement (Wallowa County-Nez Perce Tribe 1993:1):

> To develop a management plan to assure that watershed conditions in Wallowa County provide the spawning, rearing, and migration habitat required to assist in the recovery of Snake River salmonides by protecting and enhancing conditions as needed. The plan will provide the best watershed conditions available consistent with the needs of the people of Wallowa County, the Nez Perce Tribe, and the rest of the United States, and will be submitted to the National Marine Fisheries Service for inclusion in the Snake River Salmon Recovery Plan.

The National Marine Fisheries Service is the U.S. government agency with responsibility for preparing a plan for recovering the Snake River chinook salmon under the authority of the Endangered Species Act. Plans for recovering the mountain habitat of the chinook salmon were carefully coordinated with five federal agencies. In addition to the land management responsibilities of the U.S. Forest Service and Bureau of Land Management, the committee coordinated its plans with the hydroelectric and irrigation responsibilities of the Bonneville Power Administration, the water resource management responsibilities of the Bureau of Reclamation, and the anadromous fish protection responsibilities of the National Marine Fisheries Service (Wallowa County-Nez Perce Tribe 1993). The committee expected and was informally assured by federal officials that its plan would be incorporated as an element in the comprehensive Snake River chinook salmon recovery plan.

Initial fmancial support came from participating agencies (especially the Bonneville Power Administration) and in-kind contributions from committee members. Leadership in seeking federal assistance with habitat restoration and impact mitigation came from the Bureau of Reclamation, since its charter allows it to work on problems where private and public jurisdictions abut or overlap. The total cost of implementing recommendations of the plan will approximate $19 million. The plan identified 35 potential sources of external funds for implementation projects, including five federal agency programs, eight Oregon State programs, two regional integrated resource assistance programs, and six private sources for wildlife and ecological restoration.

Implementation committees were formed soon after the plan was published. Three independent, but interconnected, committees were formed to guide implementation activities for elements of the ecosystem addressed by the salmon recovery plan: the Grand Round River Watershed Council, Forest Enhancement Committee, and Watershed Element Committee. Informal networks established during the preparation of the Salmon Recovery Plan were expanded and became the basis for continuous communication among the three implementation committees.

Soon after the committee reached consensus and issued a plan embraced by all participants, the Hells Canyon Preservation Council (a Snake River environmental preservation group) joined with the Pacific Rivers Council and the Sierra Club Legal Defense Fund in a law suit that sought to protect the chinook salmon (and restore the ecosystem to its presettlement "wildness") by terminating all timber harvesting and grazing on watersheds of the Wallowa-Whitman National Forest. By advocating the removal of grazing and timber harvesting without suggesting mitigations for severe fire hazards, local environmental preservation groups are inadvertently embracing policies that would indirectly endanger the salmon.

Evaluation of Salmon Recovery Plan

The above-mentioned five qualities of relationships associated with healthy communities were used as criteria for evaluating the Salmon Recovery Plan. All five characteristics were represented in this planning effort. Moreover, flexibility and resilience was demonstrated in the development of management tactics to overcome obstacles to implementation when weaknesses developed in one or more of these characteristics. The plan is now at a stage where the partnership structure is in place, implementation committees have been operating, and actions are being taken to overcome obstacles to funding and external recognition.

The main strengths of this cooperative, multiowner, multiagency planning effort are its focus on a local community of small size in which there is dynamic leadership and a commitment to power-sharing, dispersed control, and utilization of local ecological knowledge. Also important is the shared sense of identity and perceived rights to maintaining long-standing traditions and ways of life.

This small-scale partnership structure epitomized direct democracy by bringing people face to face and fostering a sense of mutual respect and willingness to share power. The most significant evidence of direct democracy is the reciprocity of perspectives that emerged from interaction. Such mutuality has enabled individuals to step in for one another and learn how to carry out technical tasks such as assessing fish habitat. Unusual qualities of leadership were obviously involved in designing this process and facilitating the successful development of a plan endorsed by all stakeholders. Moreover, the small size of the community, and the dispersed control represented in the network established hy planners, enabled nonparticipants to appreciate what was accomplished and adopt as their own the commitments made by committee members representing them.

Activities of the committee were coordinated with comprehensive planning efforts for the Snake River chinook salmon across all of its Snake River watershed spawning habitat. The involvement of labor and local business and community stakeholders on the committee assured that perpetuation of local employment opportunities would be considered along with ecological constraints and technological innovations. Sustaining the local population dependent on resource produc

tion was a central concern of the committee's deliberations, and was consistent with its attempt to balance the maintenance of human, economic, and natural processes.

Resilience was built into the planning effort from the beginning. The published plan begins with the statement, "This document is intended to be dynamic, designed to change rapidly with new knowledge and changing conditions in a manner that will promote understanding and cooperation among all parties involved." (Wallowa County-Nez Perce Tribe 1993).

Resilience was demonstrated by the formation of implementation committees following the decision of local environmental groups to break with the community consensus on the Salmon Recovery Plan. The legal challenge by environmentalists severely threatened local ranching and timber industries and betrayed the cooperative agreement embodied in the salmon recovery plan, since members of the Hells Canyon Reservation Council lived in Wallowa County and had gone along with the plan.

The U.S. Forest Service, Bureau of Land Management, and National Marine Fisheries Service were slow to share power with the local community of place by incorporating the plan as an element of the overall Snake River chinook salmon recovery planning. The Forest Service is leading a multi-agency ecosystem management planning effort initiated by the Clinton Administration late in 1993—after the Salmon Recovery Plan was completed. This ecosystem management planning effort encompasses a region covering almost 100 counties in four states of the inland West. Federal agencies are unwilling to make commitments until they see how the Wallowa County-Nez Perce Tribe grass-roots plan articulates with the coordinated plan for all federal lands and resource jurisdictions. The comprehensive ecosystem management plan may be completed in 1997.

Even though the Wallowa County-Nez Perce Tribe Salmon Recovery Plan bas not been accepted by centralized federal authorities, the three locally supported committees are already coordinating the implementation of its recommended mitigation and restoration activities on both federal and private lands. Federal and state officials working in the local community are cooperating with landowners, local businesses, and community groups to begin implementation of the plan prior to its inclusion in either the larger ecosystem management planning effort or the Salmon Recovery Plan for the entire Snake River system. Environmental preservation advocacy groups are the only stakeholders not included in the work of these committees.

Conclusion

A rural community of place with a local culture emphasizing individualism and private property rights voluntarily undertook a cooperative planning effort exhibiting considerable ecologically adaptability. Given their commitment to a plan which recognized the importance of relationships to other people and ecological processes, local residents would very likely fmd themselves comfortable with Wendell Berry's (1995, 61) affirmation of community (including humans and their surroundings) as the smallest unit of health. Despite a rhetoric of individualism in the local culture, the Wallowa County-Nez Perse salmon habitat conservation plan reflects a commitment to creating and perpetuating qualities of relationships associated with ecological adaptability.

Many communities of place, especially in rural regions with remnants of traditional farming and ranching cultures, share a commitment to balance social and ecological relationships with individual rights and the political imperatives of natural resource management regimes. As such, these places provide opportunities for experimenting with the development of more ecologically adaptive approaches to individual ownership and natural resources management. Local institutions often already embody commitments to the collective interests of the local society, including protection of ecological processes.

Oppressive relationships that exist between powerful urban constituencies and isolated rural communities of place may be reflected in the slowness with which the federal government is addressing possible incorporation of the Wallowa County-Nez Perse plan as an element in its regional salmon conservation strategy. Local power-sharing, dispersed control, mobilization of local ecological knowledge, articulation of a situated identity, and flexibility all contributed to the success of local stakeholders in eliciting voluntary commitments to salmon habitat conservation goals. Regardless of the promise of ecological adaptability in locally generated planning, there is reluctance on the part of national elites to share power with citizens in rural Communities of place. Distrust arises when the collective interests shared in communities of place do not coincide with the collective interests of national publics and urban-based public interest groups. Resolution of this conflict is one of the greatest challenges facing policy makers concerned with implementing ecologically rational behavior.

Adoption of an explicit human ecological approach would help overcome excessive individualism inherited from the Enlightenment by framing discussions in terms of a relationship between consumer-oriented urban constituencies and rural resource-producing communities. The linkage of production with consumption is largely ignored in highly individualistic, modem advanced industrial societies (Sack 1990), leading urban constituencies to resymbolize rural landscapes as places of leisure or environmental preservation (Cronon 1995). Yet for rural citizens these landscapes are generally places for producing the resources consumed by urhan populations. The ecological relationship between people in urban and rural places is best described in terms of the resource dependency of consumer populations and the rural work needed to steward and produce these resources. The principles of ecological adaptability associated with communities of place could be writ large to encompass the material nurturance relationships of natural resource producers and consumers. Ecological rationality of both rural resource-producing and urban resource-consuming communities will accompany an affirmative view of relationships in which the self is extended through ecological awareness to both others and the natural world.

Endnote

1. Details of the planning effort not described in the published plan were obtained from interviews with key participants. These interviews are not noted because of a commitment to protect the anonimity of the interviewees.

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