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Translating Legal Rights into Management Practice: Overcoming Barriers to the Exercise of Co-Management

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In many cases the management of certain common property natural resources has been successfully shared between government agencies and groups claiming co-management rights. This analysis adds to existing middle-range theoretical propositions about how such co-management arrangements develop, and specifically how groups overcome barriers to co-management when their co-management rights are protected in law but resisted politically. The paper examines a range of strategies used successfully by a coalition of environmental groups and Indian tribes with rights to participate in fish and wildlife habitat protection in the state of Washington. Their struggle first to procure co-management agreements and then to have the agreements implemented has implications for the theory and practice of joint management of other common property resources, especially where multiple agencies and parties are involved.

Key words: co-management, fisheries, forests, wildlife, environmental protection, common property theory, issue networks

NORTH AMERICAN INDIAN RIGHTS to co-manage fisheries and to protect fisheries habitat have seldom, if ever, received greater recognition and protection than under the landmark case *US v. Washington* in its 1974 Phase I and its 1980 Phase II decisions. The "Boldt decision," as it is popularly called, interpreted the language of 1850s treaties that the US government had made with western Washington tribes as providing a guarantee that the tribes could manage their own fisheries, subject to certain conservation restrictions, and to joint planning with state managers (Cohen 1986, 1989). There can be an enormous distance, however, between legal decisions and their application to the practice of resource management, especially when legal rights run counter to prevailing power relationships. This paper contrasts Phase I and Phase II of *US v. Washington*, first in how easily and quickly rights are translated into co-management agreements, and second in how quickly and completely these agreements have been implemented.

These two phases of the case are used in part to illustrate best case and worst case scenarios in how barriers to co-management are successfully overcome. In addition, the comparison of these phases generates new middle range theoretical propositions about the conditions under which the development and implementation of co-management of renewable natural resources is possible. These propositions extend those already advanced about conditions for the development of successful fisheries co-management (Pinkerton 1988, 1989), and about a variety of successful "common pool" or "common property" resource management regimes that avoid the "tragedy of the commons" (Berkes 1989, Feeny et al. 1990, McCay and Acheson 1987, Ostrom 1990). Researchers in this subfield of cultural ecology and institutional analysis have been using empirical case studies to predict inductively the conditions most favorable to the development of self-management and co-management, and to generalize about how co-management arrangements alter relationships between manager and managed so that sustainable management of resources can occur and the "tragedy" avoided. This discussion focuses specifically on favorable conditions in the latter stages of the development of co-management: the stages between the legal recognition of rights and the achievement of agreements,

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and the stage between agreements and full implementation. Work in this area is still rare.

Defining Co-Management: A Range of Functions, Parties and Scope

Co-management can be generally defined as power-sharing in the exercise of resource management between a government agency and a community or organization of stakeholders, in this case Indian tribes with treaty rights.[1] Co-management arrangements are not confined to aboriginal groups with special management rights (e.g., Amend 1989, Jentoft 1989, Jentoft and Kristoffersen 1989), although they may occur more frequently among such groups, especially where management rights have been clearly delineated in court decisions.

Co-management agreements may be more or less comprehensive, covering one or all aspects of management activity. The co-management agreement resulting from the Phase I decision covered shared data collection and analysis, allocation, and shared planning of the salmon harvest between treaty tribes and the Washington Department of Fisheries. In contrast, the co-management agreement resulting from the Phase II decision is more complex. It covers the management function of habitat protection for fish and wildlife, and includes—in addition to the tribes and environmental umbrella groups—the Washington Departments of Fisheries, Wildlife, Ecology, and Natural Resources, and the logging industry's Washington Forest Protection Association. This complexity is the result of the Phase II decision's recognition of a tribal right to protect fish habitat: the judge reasoned that the right to an allocation of fish would be meaningless if habitat, and hence fish, could be destroyed. Environmentalists had no such legal right to protect wildlife habitat, but made common cause with the tribes in order to associate wildlife and fisheries issues.

In such a multi-party agreement, the performing of the management function (habitat protection) may not be the goal of all participants. The criteria for inclusion in the agreement is not necessarily agreement on the goals, but rather the power to further *or to frustrate* the management function. Industrial parties whose activities can potentially destroy habitat seek trade-offs in co-management agreements which differ from those sought by government agencies charged with habitat protection. They thus have a fundamentally different definition of the purpose of the agreement, and continue to seek to impose this definition. The struggle to reach and implement agreements in such situations inevitably involves different types of barriers and different dynamics in overcoming them. The analysis of types and degrees of resistance to implementing the Phase II decision begins with an outline of the same issues in Phase I.

Five Stages of Translating Rights into Co-Management Practice

Seeing how long it takes for co-management to progress through five stages can help us better understand the differential points of resistance in the two situations. The five stages are: (1) adopting a negotiating posture, (2) conducting negotiations, (3) producing an agreement, (4) fully implementing the agreement, and (5) institutionalizing procedures.

In Phase I, resistance was confined mostly to stage one, with a residual spill-over into stage two. It took seven years of court battles and civil disobedience after the 1974 decision before the state government decided to adopt a negotiating posture with the tribes. During most of these seven years, the state government had championed court appeals and resistance to the 1974 court decision as it and related cases made their way to the US Supreme Court and were upheld in 1979 (Cohen 1986: chapters 6–7). Even after that, citizens' initiatives still strove to abrogate treaty rights, and state policy did not change. As the judicial system approached overload, new court officials were appointed to help, but the system was still cumbersome, slow, and in many cases non-binding. Often the state would simply appeal decisions and take them back to court (Schmitten 1987). At various points federal enforcement officers were sent in to carry out court orders, and the federal court had to take over fisheries management for several years. Nevertheless, the state was able to exercise mechanisms to drag out every disputed management decision. State managers today claim that this situation could have lasted almost indefinitely. (See Cohen 1986 for a detailed analysis and the role of federal inertia in this process.)

However, the federal political climate in this decade included not only the US Supreme Court, but also a nation-wide and local civil rights movement in support of southern Blacks and Indian tribes. This contributed to the eventual defeat of local resistance in both the south and in Washington State. In 1981 a new Washington State governor, Spellman, decided that the costly court battles were unproductive and a waste of money: the tribes were winning almost all the cases, even if they were not getting the management action they wanted. He appointed a new head of the Washington Department of Fisheries who agreed to negotiate with the tribes.

It still took three more years, and the replacement of six of the eight senior people in the agency, to reverse the war mentality that had permeated not only the fisheries management agency and the fishing industry, but even the legislature. In summary, it took seven years to reach a negotiating posture (stage one), and then three more years to start the actual negotiation of a co-management agreement (stage two). Phase I is a "best case scenario" only after the first stage, unless one considers the 1979 final Supreme Court decision to be the beginning of stage one.

After stage two, everything progressed smoothly and rapidly to stage five. The Puget Sound Salmon Management Plan agreement was signed and adopted by the court in 1985 (stage three): court cases over implementation were rare thereafter. The Salmon Management Plan agreement laid out a schedule of all the procedures the tribes and state would go through in jointly planning the harvest. It included such activities as sharing of data, agreement on run size estimates, agreement on levels of harvest and alternatives, should the run be larger or smaller, hatchery production goals, and egg sources. It also included conflict resolution mechanisms, although there has been little need for them. Instead, the process of harvest management has been immediately and smoothly implemented (stage four), and the process of joint planning and problem solving has been institutionalized in bi-annual retreats between tribes and state (stage five). Although management problems and disagreements remain, the tribes and state now jointly give workshops to other agencies looking at co-management, to illustrate how the process works. Their travelling road show, a day-long workshop of nine presen-

tations containing spirited and good-willed debate, has all the hallmarks of an institutionalized co-management process. The Phase I co-management agreement and implementation process is thus a best-case scenario in the sense that it progressed smoothly and completely through the five stages once initial resistance was overcome.

Phase II: Different Parties, Functions, and Issues

Negotiating and implementing Phase I rights regarding shared harvest management involved changing the expectations of relatively powerless stakeholders, commercial and recreational fishermen, and the decision-making procedures of a relatively powerless government agency, the Washington Department of Fisheries. In contrast, the Phase II decision regarding tribal rights to protect fish habitat affected actors and agencies with far more political and financial power than had Phase I. The timber industry controlled the state legislature (Waldo 1988),[2] and the Department of Natural Resources was an agency "captured"[3] in its regulatory function by its other mandate to log the state timberlands it held in trust to raise funds for public school construction and its own budget. As such, its relations with major logging companies has tended to be as much collegial as regulatory. In response to court challenges by environmental groups, a new agency head began in 1980 a gradual re-orientation of the DNR toward its mandate to regulate forest practices (mostly logging) for the protection of fish and wildlife. The progress in this direction was extremely slow, however; the DNR did not have a separate Forest Practices Division until 1990.

Not surprisingly, the points of resistance to progression through the five stages described above were therefore quite different. The decision to negotiate was made quickly, although the actual negotiation happened under duress and took longer. Implementing the agreement has been exceedingly difficult and is still only partial. First I briefly describe the first two phases: adopting a negotiation posture, and conducting negotiations.

Adopting a Negotiation Posture on Phase II

Following the Phase II 1980 decision, it took only one year for the major industrial water resource users (e.g., logging companies, hydroelectric companies, factories discharging waste) to analyze the situation and adopt a negotiating and mitigating stance. (See Waldo 1981 for the analysis which was the basis of the decision to follow this path.) In 1982, three years before the salmon co-management agreement was signed by the tribes and state, key industrial leaders had formed the Northwest Water Resources Committee to work with tribes in rehabilitating damaged salmon habitat, and in carrying out joint projects for rehabilitation and enhancement. By 1984 they had institutionalized this relationship into the Northwest Renewable Resources Center (NRRC), which organized conferences and workshops to discuss resource conflicts and press for their resolution through mediation, another service provided by the NRRC.

Of course, one reason that business responded more quickly than had government to court rulings is that it had learned from previous history that court appeals had a very low success rate. In addition, however, businessmen tend to be pragmatists: they have little tolerance for the threat of disruptions or delays to normal operations, and will consider all options to avoid them. While the income of government officials usually does not depend on the outcome of court rulings or policy decisions, businessmen's standard of living, or their stockholders' profits, often depend completely on such matters. Hence they are quicker to seek out-of-court solutions, but are also likely to seek to postpone costly effects, while seeking ways to re-capture the institutions they are losing through court battles.

Deciding to Negotiate an Agreement on Phase II

Despite industry's ease in adopting a negotiating posture (stage one), it took five more years to begin actual negotiations for an agreement (stage two). It may be argued that the negotiating stance of industry in 1981 did not necessarily indicate a willingness to reach an agreement involving significant power-sharing, but more likely involved appeasement: an attempt to stay out of court and to forestall or prevent the formation of a coalition strong enough to force a real power-sharing agreement. The analysis that persuaded industry to be conciliatory toward the tribes instead of depending on the courts in fact predicted that a coalition of tribes, environmentalists, and non-Indian commercial fishermen could be a political threat to industry, and that industry/tribal negotiations could reduce this threat (Waldo 1981).

Eventually industry was brought to the negotiating table and recalled to the table several years later because the tribes and their allies used a successful combination of five strategies, involving five separate sources of power: (1) coalitions and issue networks, (2) new legislation and the threat of legislative amendments, (3) the threat of greater regulation and public review through the citizens' Forest Practices Board, (4) court actions to reform legislation and to amend regulation, and (5) a citizens' initiative to stop conversion of forests to real estate. The tactical use of these five strategies eventually enabled the tribes and their allies to overcome the resistance of industry and the Department of Natural Resources to negotiating a co-management agreement, and later to implementing the agreement. Each strategy is discussed below.

STRATEGY 1: COALITIONS AND ISSUE NETWORKS. The coalition that eventually formed and was instrumental in forcing real negotiations included not only tribes and environmental groups but also the three relevant state agencies: Fisheries, Wildlife, and Ecology. The addition of the latter three agencies was possible only because of the Phase I co-management agreement, which allowed the tribes and agencies to overcome their differences and to express their common interest in protecting fish habitat.[4]

Tribes, environmentalists, and state agencies brought complementary resources to the coalition. Environmental groups had experience lobbying the legislature, the Forest Practices Board, and using the courts on these issues, but had narrowly defined rights and little access to field data. The tribes had been largely isolated from mainstream political processes, but now had field biologists and habitat analysts on staff, and the clearest legal rights to protect habitat. The agencies had paid staff, access to technical information, and an interest in developing more rationally defined (rather than politically influenced) decision-making procedures. As they were brought into working com-

mittees with tribes and environmentalists (see below), they were able to further the discussion of alternative models and standards for measuring habitat protection. The combination of resources available to this coalition, and its ability to form an active issue network (as defined by Heclo 1978) to generate and discuss new models and standards, was the key to its success. Issue networks have been identified as a potent force for change, because they unify diverse policy actors across governmental and non-governmental sectors in sharing information and exploring alternative possibilities; they thus support and legitimize the attempt to institute practices believed to be superior to the status quo.

STRATEGY 2: LEGISLATION AND LEGISLATIVE AMENDMENTS. Some parties in the above-mentioned coalition were also active in seeking reform of forest practices (including both logging and silviculture), through new legislation and the continued threat of legislative amendments. Despite the strength of the timber lobby in the legislature, the public interest in legislating environmental protection for water, wildlife, and fish had become well organized and powerful by the late 1960s. Public interest groups were successful in passing the State Environmental Policy Act (SEPA) in 1971, which set up the Department of Ecology, and an environmental impact review process for agencies which regulate industrial activities. SEPA required that a range of impacts be analyzed, including direct, indirect, and cumulative. Measuring cumulative impacts of forest practices was to become a key issue in fish and wildlife habitat protection.

Partially to avoid SEPA review of forest practices, as well as review under the federal Clean Water Act, the logging industry allowed passage of the Forest Practices Act in 1974. This act was intended to provide the scope of regulation that could adequately protect forest-related resources: fish, wildlife, and water. It was amended in 1975 to restrict potential SEPA review to a narrow list of activities "which have a potential for substantial impact on the environment." A large part of the struggle to protect fish and wildlife habitat has centered around the effort by the tribes and their allies to enlarge the definition of which logging activities have to be reviewed by a SEPA process as potentially harmful.

STRATEGY 3: THREAT OF GREATER REGULATION AND PUBLIC REVIEW. The actual definition of what forest practices are considered potentially harmful comes from the Forest Practices Board (FPB), a citizens' panel appointed by the governor and empowered by the Forest Practices Act to commission studies, hold public hearings, and enact protective regulations. Regulations are adopted under a public review process as part of the Washington Administrative Code, and carry the force of law.

Even though the industry held several seats on this board, and at first dominated it, this body eventually provided a forum for citizens' action. As the state urbanized in the 1980s, the FPB had to give more consideration to the concerns of non-resource sector citizens. It was in fact actions around the Forest Practices Board that finally brought the industry seriously to the negotiating table in 1986, and began to force serious discussion of cumulative effects standards in 1991.

STRATEGY 4: COURT ACTION TO REFORM LEGISLATION AND AMEND REGULATION. The impetus for the Forest Practices Board to adopt stricter forest practice regulations happened in several stages, however. The first stage resulted from the Classic U timber sale case (*Noel v. Cole*) on Whidbey Island, in which an environmental group won a ruling in 1980 that the definition of what activities were potentially harmful to the environment was too narrow and restrictive to fulfill the purposes of the Forest Practices Act (to protect other public resources). The FPB was required by the court to review the regulations. The FPB then identified cumulative effects as one of 14 issues which should be considered for inclusion in the definition of environmental sensitivity and started a three-year review of its regulations on this matter. Court actions and threatened court action in 1989 would finally force the FPB to make regulations requiring further consideration of cumulative effects.

HISTORICAL NARRATIVE: STRATEGIC USE OF THE FOUR SOURCES OF POWER IN STAGE TWO OF PHASE II. After the Phase II decision in 1980, tribes and environmental groups began more actively using the Forest Practices Board to affect regulation. For example, they stopped an industry initiative to freeze stream typing, because they knew that inventories were inadequate and that many streams were unclassified or improperly typed in terms of their importance as fish habitat.

The environmental groups and the tribes also began using the public hearing process of the Forest Practices Board to identify key issues, and to organize and focus a strong public demand for regulations on cumulative effects and protection of the riparian zone (the wetted zone alongside stream banks). The FPB was forced to commission a study of options for dealing with cumulative effects and riparian zone protection. A tribal and an environmental representative got on the committee overseeing the study, somewhat counterbalancing the industry's domination of the process. After the Timber/Fish/Wildlife agreement, tribes and environmentalists both got seats on the FPB, because they had been recognized as part of the policy community.

The environmentalist/tribal coalition also worked through the legislature in 1985 to change the composition of the Forest Practices Board by an amendment to the Forest Practices Act. The coalition attempted to replace the positions for the Department of Trade and Economic Development and the Department of Agriculture with positions for the Department of Fisheries and the Department of Wildlife. Although unsuccessful, this effort demonstrated the degree of legislative support for the concept, and showed industry and political leaders that they could not ignore strong public concern for protection of public resources.

Industry was finally brought to the negotiating table when the completed Forest Practices Board study recommended stricter regulations for cumulative effects and riparian zone protection, and a coalition of tribes, environmentalists, and Departments of Ecology (on the board), Fisheries, and Wildlife supported strong regulation. Although industry managed to alter the proposed regulatory package, they were horrified by the proposals.

Negotiating an Agreement on Phase II (Stage Three)

In the face of these unacceptable regulations, which it believed would be adopted by the Forest Practices Board in 1986, the timber industry agreed to enter into negotiations with the tribes, the environmental umbrella groups, and four state agencies (Fish, Wildlife, Ecology, and Natural Resources). In six months these parties had agreed on interim compromise regulations and agreed

on a process by which they would implement the regulations and resolve future disputes over issues which would have been "agreement breakers" during the first negotiations. Initial implementation of this Timber/Fish/Wildlife (TFW) co-management agreement began about a year later, after funding was acquired and staff hired. Funds were successfully solicited from the state legislature for the agencies ($4.5 million for 1987–88), from the federal government for the tribes ($2 million), and from private foundations for environmental groups on a three-year pilot basis ($750,000). The umbrella Washington Environmental Council also contributed several volunteer staff positions. The TFW agreement was implemented most importantly and directly through a review by the representatives of all these parties of "sensitive" forest practices applications. In the spirit of negotiation and co-operation, parties met to review or even pay field visits to such sites and to decide whether more than the minimum protection was needed, and how to mitigate or avoid potential impacts.

At this stage, the tribes were willing to compromise because immediate regulatory action and inclusion in the policy process were more attractive to them than continued litigation. The tribes also wished to keep open the possibility of eventually relitigating the Phase II decision, which by that time has been vacated by the court (Cohen 1986). As a result, the co-management agreement was never officially signed. It still carried the force of official policy, however, and the court asked for regular progress reports during negotiations. The court could potentially view a failure of the agreement as cause to reopen litigation.

Environmentalists were willing to compromise because wildlife concerns were included in the agreement, and their own inclusion in the policy and implementation process was an unprecedented opportunity. They hoped that improvements in industry performance would justify the implied three-year moratorium on new regulation in the agreement. They also believed, at least at the outset, that the agreement would be a tool far superior to use of the courts and the press for bringing about reform of logging practices. On the theory that incentives to negotiate would evaporate if courts or press were used, there was an implicit understanding that neither of these tools would be used in the first three years.

For their part, the timber companies (who were the industry leaders of the negotiations) did not necessarily think of the agreement as having a substantial impact on their activities. At worst, it cost them far less to live with the agreement ($1 million in administration, $7–8 million in uncut trees, $5 million in improved logging roads and deferred logging in 1988) than the cost of litigation ($50–60 million a year) (Halbert and Lee 1990) and the proposed stricter regulations. At best, it would buy them several years' freedom from court cases *and* increased regulation, enhance their stature as responsible corporate citizens, and transfer most of the cost of conflict resolution to taxpayers. Furthermore, the tribes and their allies had to accept the maintenance of a lucrative timber industry as one of the goals of the agreement, because they feared conversion of private forest land to real estate even more than they feared poor logging practices. The industry could thus continue to use the threat of becoming less profitable than real estate as an indirect threat to habitat. In other words, the benefits of the agreement were widely shared by all parties, but the costs of the agreement were disproportionately born by tribes, environmentalists, and taxpayers.

In addition, the regulatory history of the forest industry in Washington gave the timber companies reason to believe that they would be able to continue to be the major influence on implementation of policy and agreements. The Department of Natural Resources, the state agency which issues logging and other forest practice permits, was still in the mid-1980s an agency "captured" (Lowi 1969, Stigler 1975) by its own and its client's timber interests, and whose past operations and regulatory practices had been little affected by forest practice regulations to protect fish, wildlife, and water quality. In addition, the timber industry still held a commanding position in the legislature and the state power structure (Fraidenburg 1989, Waldo 1988).

The rest of this discussion deals with the first four years of attempts to implement (stage four) the Phase II TFW agreement, from mid-1987 to mid-1991. Implementation is still incomplete, and from this vantage point, three sub-stages of implementation appear significant: (a) partially-failed early attempts at consensus on site-specific action: mid-1987–mid-1989; (b) partially-failed enlargement of the issue to cumulative effects in watersheds and the inclusion of counties and new environmental groups into TFW through the Sustainable Forestry Roundtable: mid-1989–1990; (c) successful attempts to propose the idea of implementing threshold mechanisms on a watershed basis to measure cumulative effects and criteria for when logging restraints are necessary, through an evolved Forest Practices Board: 1991. The progression of implementation through these three sub-stages illustrates both the nature of resistance and also how the five strategies were used effectively to begin putting the principles of the agreement into management practice.

The Timber/Fish/Wildlife Agreement: Stage A Implementation

The final negotiated draft of the TFW Agreement in January 1987 looked workable at first. The agreement covered a range of issues (e.g., old growth preservation, pilot watershed planning, road maintenance), but for purposes of this discussion I focus on those most critical to long-range habitat protection. Industry accepted to leave mandatory riparian zones of 25 feet alongside most streams, half of the zone required by the proposed Forest Practices Board regulations. On most other issues, especially leaving a larger riparian zone or upland wildlife habitat areas, site-specific review by field representatives of all the co-operators was to replace mandatory regulation. The industry knew that site-specific negotiations would be less constraining than across-the-board restrictions which, it believed, were often overly rigid and unnecessary.

Field review was done by regional "inter-disciplinary" teams: technical representatives of all the TFW co-operators (tribes, environmentalists, state agencies, logging company) of proposed logging on sites classified as sensitive. The idea was that, by looking at site-specific problems, the co-operators would be able to reach consensus about compromises that were in the spirit of the agreement. Since decisions by the lead agency, Department of Natural Resources (DNR), could be appealed by any of the co-operators to the Forest Practices Appeal Board, it was assumed that all the co-operators would work hard to reach consensus and make the agreement work. In addition, the co-operators agreed to abide by the results of the scientific evaluation and research program (CMER), which would indicate what final standards of protection for public resources were necessary.

The initial hopefulness of the tribes and their allies was put to the test by problems that emerged even in the first year, but were thoroughly confirmed by the Third Annual Review of the process in October 1990. One major problem was the too narrow definition of sensitive sites: only .05% of all applications qualified for SEPA review before 1986, and by 1989 this ratio had changed to only .2%. Combined with "regionally sensitive" applications that DNR had made a commitment to identify, only 9% of all logging applications were sent to the co-operators for their review in 1989 (DNR 1990). The other related major problem, which is really a more comprehensive restatement of the first problem, is that site-by-site review of logging permits does not permit cumulative effects to be judged. The TFW process allowed an annual pre-harvest review and identification by DNR of "priority issues" of concern in each region, but these steps were not comprehensive enough to identify threats to public resources that would appear in a watershed-wide viewing of cumulative impacts of logging. The size of a continuous clearcut and the rate of logging in one area over a five to 25 year period would produce effects that might not be detectable from looking at any one permit in isolation. The co-operators' interdisciplinary field teams could exhaust themselves looking at individual permits and never have an opportunity to identify the more fundamental problems. Comprehensive, integrated, long-range planning was required to protect public resources, but industry had resisted more than a vague espousal of this principle in the original negotiations. Two pilot basin projects were to study the possibility.

A third problem was that the Department of Natural Resources (DNR), as the lead agency that decided to put conditions on the logging permit or not, would often override the consensus of all the co-operators but industry. DNR in many cases still saw the timber industry as its major concern and client and felt much less obligation to the other co-operators, who were not viewed as significant constituents. Of the 11.5 million acres of non-federal forest land regulated by DNR, the agency is itself a land-owner in trust for some 2.1 million acres of state land that it logs to raise money, principally for public schools and counties. Twenty-five percent of some timber trusts' sales goes directly into DNR's budget. Although the TFW agreement reorganized the DNR to more clearly reflect the regulatory and proprietary functions, the same personnel and mentality tended to remain; new attitudes toward public resources and other constituents developed very slowly. Most DNR foresters were not trained in fish and wildlife biology, forest ecology, or hydrology, and often had difficulty accepting the technical advice of the other co-operators' field personnel as valid.

A fourth problem was that the voluntary provisions of the agreement were seldom followed: only the minimum regulatory requirements were met in most cases. Riparian zones rarely exceeded 25 feet on private lands. Much less upland wildlife territory was set aside than suggested in the agreement (two acres per 160 logged), and set asides were sometimes temporary. Some landowners made a conscientious effort to protect public resources, but many did not; they were essentially free-riders. TFW did not truly constitute a move from a regulation-based system to one based on managing toward certain goals, as had been hoped.

A fifth problem was that the agreement did not provide for monitoring or enforcement by DNR of site specific agreements. While tribal staff conducted some monitoring, tribal reporting of violations had little impact on DNR, and resulted usually in court threats by tribes against DNR for not enforcing regulations or agreements made among TFW co-operators.

Finally, the research process has been extremely slow to produce usable results for field managers. Tribal staff and academics at the University of Washington have criticized the fact that many research questions have not been conceptualized so as to produce results or techniques which could be used in the field in the short term (Halbert and Lee 1990). While these problems may result simply from lack of coordinated leadership at the technical level, they tend to reinforce the industry's position that "we don't have enough data yet to indicate how we should change the status quo."

In this first sub-stage of implementation, all parties had recognized that issues such as cumulative effects would be postponed; the scope of this issue, and the timing of when it would receive a high priority, was left vague in the agreement. While the TFW co-operators grappled with all the above problems in the first two years (mid-1987 to mid-1989), few of them realized how much they had raised public expectations for improvements in protection of public resources. While the first sub-stage of implementation failed to produce the results expected by the allies, it was a necessary stage for raising public awareness, expectations, and eventually outrage that there was little apparent improvement in management. Industry's attempts in the press to emphasize their responsible corporate action through the agreement merely made more glaring the discrepancy between rhetoric and management actions. The second sub-stage of implementation was propelled chiefly by public perception that nothing had changed in the damage to fish and wildlife habitat.

TFW Implementation, Stage B: Sustainable Forestry Roundtable

The two major issues of cumulative effects and the definition of environmental sensitivity, not adequately addressed in the original TFW process, eventually forced themselves onto the agenda through pressure from groups outside the TFW policy community. In this second sub-stage of implementation, political activism and court cases against the Department of Natural Resources by counties and new environmental groups forced the DNR to react. DNR seized the initiative by attempting to forge a new corporatist compromise, which included the outside agitators in a new process, but did not define habitat protection as the major objective. The struggle in this stage centered around DNR's attempts to convince the public through the press that public resources would be protected in a new agreement and that industry would make major sacrifices. The allies got bad press in this stage for attempting to assert their own definition of the goals of the agreement, but furthered their struggle through the courts, through extending the issue network to Forest Practices Board members, and through a second attempt at legislative reform.

The most important new challengers that forced DNR to take action were the political activists in Kittitas and Snohomish Counties. The RIDGE group in Kittitas County on the east side of the Cascade range was effective in bringing press attention to the rate of cut/community stability issue. The Burlington Northern Railway, which had received substantial land grants from the US government to construct the railhead to the west coast in

the 19th century, had turned first to mining and then to logging. The small towns in Kittitas County had a history of boom and bust employment, but those who stayed were unwilling to tolerate another cycle. The Plum Creek Timber Company, recycled from Burlington Northern, began clearcutting some 5000 acres annually in this area in the 1980s in response to a booming Japanese market for raw logs. Outrage mounted in the communities because the much touted TFW process did nothing to affect the rate of cut. The communities argued that a gift from the nation should not give a logging company the right to make rapid windfall profits and wipe out their communities for the next generation. They put forth their own plan for a slower, sustainable rate of cut, a 100 year cycle in which only 10% of the area could be cut in 10 years, and preference given to local contractors (Mitchell 1990). (Plum Creek was logging at the rate of 40% in 10 years, leading to a non-sustainable 25 year rotation cycle.) Although RIDGE was composed of retired coal miners and younger, more left-wing activists, its issues won sympathy from the local conservative county commissioner who was also deeply concerned with a sustainable rate of cut and community survival (BKCC 1990).

While Kittitas County activists attacked DNR forest management from the perspective of non-sustainable rate of cut, Snohomish County took the DNR, the Forest Practices Board, and the logging companies to court in the summer of 1989 for ignoring cumulative effects and public opposition to the logging of a large wildlife corridor around Lake Roesiger, north of Seattle. This largely suburban county, whose homeowners valued their proximity to forests and wildlife, resented the rapid and seemingly uncontrollable clearcutting of forests, much of which ended up being converted to real estate, removing wildlife habitat permanently. Outraged that the celebrated TFW process was doing nothing to prevent this loss of habitat, they won a ruling from the Forest Practices Appeal Board and eventually the court that it was impossible to assess the potential environmental harm of one logging permit without putting it in the context of the cumulative impact of other adjacent logging. The court ordered the Forest Practices Board to find a process for considering the cumulative impact of logging on watersheds. The court also suggested that the TFW process be used to develop the new procedures for judging cumulative impacts. (The TFW policy committee, composed of the chief representatives of the co-operators, could do this simply by agreeing on the new procedures.)

DNR appealed the ruling (and lost at the next level), but the combination of RIDGE, Snohomish County, political pressure from the Whidbey Island group which had launched *Noel v. Cole*, and a general rise in environmental activism over logging practices and conversions to real estate, all convinced the DNR that they had to respond to a sizeable and growing constituency that would no longer accept business as usual. As one DNR official put it,

> There is a big difference in public involvement in the last 10 years, and membership in environmental groups has skyrocketed in the last five years. Some of our congressional delegates talk about the "environmental industry" as better funded and better organized than the timber industry. There are about a zillion groups out there that want more protection of fish and wildlife [referring to SUSTAIN, a new environmental coalition]. The Sierra Club Legal Defense Fund and the Wilderness Society both now have permanent offices in Seattle. In California, the Forests Forever initiative is trying to ban clearcutting. Initiative 547 in this state is trying to prevent conversion of forest land to real estate.[5] We have to respond to all this.

In other words, DNR began to respond to its perception of countervailing power in other constituencies, and to free itself somewhat from agency capture (Wilson 1980).

The head of DNR took the initiative in responding to both the court order and his interpretation of public sentiment by convening the Sustainable Forestry Roundtable (SFR) in fall 1989. It included the TFW co-operators, plus the counties and the new environmental groups. Its mandate was to extend the TFW process to the new issues. DNR's head had been elected with the support of environmentalists, and his ambition was to bring about a peaceable agreement with industry. At a series of Sustainable Forestry Roundtable meetings during 1990, the parties attempted to reach agreement on a package of issues. The tribes played a mediating role in these discussions. Sensing the vulnerability of the process to changes in political climate, they tried to persuade the new environmental groups to reach agreement by compromise. The tribes were successful in keeping the negotiations going for a time, but the environmental caucus was divided on where to compromise.

For the environmental groups new to the process, the primary issue was the rate of harvest. Industry would not agree to a rate of harvest slower than 4% per year (a non-sustainable rate), which made agreement impossible for the new environmental groups. Washington Environmental Council, an older environmental umbrella organization that had participated in TFW, believed that a more important issue than rate of harvest was getting agreement to apply cumulative effects measures that would shut down logging if exceeded. TFW research, based partly on Canadian models (e.g., Wilford 1987), was beginning to develop some threshold mechanisms based on degree of tree canopy closure and hydrological flow in a watershed, as well as in-stream measures such as percent pool area, large woody debris frequency, sediment levels, and water temperature, which could be used to measure damage to public resources from logging. The "older" environmentalists and the tribes reasoned that these measures would be likely to prevent damage to public resources as well as, or better than, the rate of harvest. Protection of public resources was in fact a more secure foundation for their arguments than rate of harvest, given the private nature of forest landholdings.[6] This viewpoint had been recognized by the court, which had ordered the Forest Practices Board to find ways to consider cumulative effects in logging applications. Negotiators for the Washington Environmental Council consistently maintained the position that DNR's mandate was to protect the public interest in protection of these resources.

The DNR's urgency in bringing the "newer" environmentalists into the policy process and sticking to a timetable for their agreement paved the way for the agreement's failure. These groups were new to this arena and would have required more time to view the statewide issues from more than a local perspective. Just as important, the development of federal proposals to protect the old growth habitat of the endangered northern spotted owl, which occurred during the SFR negotiations, reduced industry's willingness to compromise on other issues. The Sustainable Forestry Roundtable did not reach agreement, but in debating numerous options for the protection of public resources it did air the concept of using cumulative effects thresholds based on TFW research. In particular, Forest Practices Board members who attended were exposed to this option, and pulled into the issue network. As a result, the SFR furthered the process of finding a political and technical solution that would garner wide support and be difficult for industry to reject.

Stage C Implementation: The Forest Practices Board

During most of 1990, the Sustainable Forestry Roundtable had been the forum of action. The hope had been that an agreement could have been sent to the legislature to be put into law. After the legislature rejected three attempts in early 1991 to pass compromise packages that had not received the support of all parties, the "ball" was thrown back into the court of the Forest Practices Board, which now was required to produce measures for calculating and avoiding negative consequences of cumulative effects of logging on public resources.

What the FPB did at this point must be viewed not only in terms of the requirements of the Lake Roesiger (*Snohomish County v. State of Washington et al.*) court order to produce action on cumulative effects, but also in terms of its reaction to TFW and the Sustainable Forestry Roundtable process. While in the past, the FPB had relied on DNR to provide the major direction, now public members of the FPB became far more active in looking for solutions themselves, because the processes they were watching suggested that there were solutions to be had. They became part of the issue network of TFW, and made direct contact with the TFW research effort. They formed six different sub-committees, working on developing solutions to issues with different agency personnel, tribes, environmental groups, and academics. Heclo (1978) and McFarland (1987) link the existence of lively and diverse issue networks which communicate criticisms of policy and generate ideas for new policy initiatives to the breaking of agency capture. As one FPB member put it, "When you come up with a solution that all these people have worked on, it is far more likely to fly, get public support." The cumulative effects committee of the Forest Practices Board studied the preliminary TFW research and was convinced that it was possible to find some reliable and politically acceptable measures of cumulative effects. At this point, the failure of the TFW co-operators to reach agreement on a cumulative effects policy package (because industry vetoed agreement by the other co-operators) merely had the effect of passing the initiative to the Forest Practices Board. In its May 1991 meeting this body resolved to begin considering proposals to implement cumulative effects measures which would result in rule-making.

Will Full Implementation and Institutionalization Occur?

Is the TFW process, as it has evolved from the initial agreement through the Sustainable Forestry Roundtable and the more active role of the Forest Practices Board, merely a temporary reform in policy that will never produce a fully implemented and institutionalized co-management process for habitat protection? How can we best conceptualize what TFW does and the basic conditions which make it possible?

The most sophisticated analysis so far of the TFW process (Halbert and Lee 1990) uses the pluralist paradigm to view TFW as a reform cycle in policy-making that has only temporarily broken the agency capture situation by which industrial interests dominate policy. In this model tribal interests are considered minor, and environmentalists are merely another special interest group, while the general public is seen as still largely excluded from access to information and ability to participate in the process. Fraidenburg (1989) also viewed TFW as a conspiracy among special interest groups, which exclude the public from participation. The National Environmental Policy Act's environmental impact statement process is seen as a preferable model of public review or public input into policy.

Although some elements of this argument seemed reasonable enough at the time, subsequent developments have shown that important fundamentals of this interpretation can now be questioned.

Is the TFW process merely a temporary reform? This question can be linked to the question of whether TFW is an example of temporarily successful pluralist pressure group politics. The most recent and interesting version of pluralist politics cited by Halbert and Lee is the "triadic power" model of McFarland (1987). This model pictures an ebb and flow between the "agency capture" situation (in which the major economic producers dominate agency policy) and a triangle of power in which "countervailing forces" (such as tribes and environmental groups) exert enough pressure to break agency capture by the economic producers. In the triangle or "triadic power" situation, other groups are presumed to have equal power with economic producers, which condition is presumed to give the agency more ability to act according to professionalized standards of decision-making, independent of both groups. The power triad, however, is only a temporary reform; as countervailing power ebbs with the lessened activity of countervailing groups, agency capture is reasserted by the economic producers. In other words, reforms are not institutionalized, but can be eliminated.

The environmentalists and tribes were included in the policy community because they had the resources to take the logging companies to court and/or to draw public attention to the destruction of *public* resources. As an alliance, they do not act as a private interest group, or as simply one of a plurality of interests. Because of their stance on the protection of public resources, as well as the legal position of both groups, it is more appropriate to view the tribal/environmental alliance as an associative-corporatist rather than a pluralist body. Associative-corporatist bodies are characterized by the identification of their own interests with the larger public interest (Streeck and Schmitter 1985). In this they are fundamentally different from the logging companies, which have only a private interest. The logging companies' inability to identify their interests with the public interest was clearly shown in their inability to accept a sustainable rate of cut. The influence of the tribes and environmentalists on public opinion, and their ability to identify themselves with the protection of the public interest, must also be seen in the context of a substantial drop in public confidence in governmental decision-making, and an equally substantial rise in awareness and concern about irreversible destruction of public natural resources, particularly in the last five years. The associative-corporatist or "micro-corporatist" mode of policy-making in this situation appears more likely to be associated with a paradigm shift or basic transformation in policy rather than a reform cycle.

Is the general public excluded from the policy-making process in TFW? This issue is a genuine problem for corporatism, because the level of knowledge of the issues and the level of debate is such that it is indeed difficult for the general public to participate. Negotiating the TFW agreement took by some counts about 100 meetings, many of which were technical discussions among staff of the various parties. When judged against these difficulties, the TFW process has shown a remarkable ability to expand to include new issues and new actors when there was significant public pressure from these actors, or about these issues. Groups or parties have been excluded because of limited resources. Some counties and environmental groups have dropped out voluntarily when they did not have the time and energy to

continue to participate in the extensive, in-depth debates that characterized the Sustainable Forestry Roundtable and the continuing TFW process. Furthermore, it is unlikely that the new environmental groups and the counties would have had any opportunity at all to act in this policy-making fashion without the pre-existing TFW process.

Opportunities for the general public to participate in policy debate and to set the TFW agenda are limited, but there are significant opportunities for the public to participate in site-specific comments on proposed logging practices. The inter-disciplinary team process can and does include observers who have a specific concern about a particular site. In some regions, the environmental participant on the inter-disciplinary teams has been particularly effective in informing the public about proposed logging, and soliciting public input about particular concerns. Some environmental representatives have become highly visible public contact people who become depositories of public concern and are effective at communicating these concerns to the DNR. In other regions, organized environmental groups that were not party to TFW have developed good working relations with the DNR district manager and make regular comments on proposed logging.

Of course any member of the public has always been able to make submissions to the Forest Practices Board, and to make comments on proposed regulations at public hearings. This process existed before TFW. The TFW process has, however, energized the FPB, making it more interested in agenda setting and independent activity. The FPB has incorporated TFW research as public, and independently communicates with the TFW research team. General public FPB members attended both the SFR and the Third Annual Review of TFW. Ironically, when FPB members requested to become part of TFW, the TFW policy group expressed concern that allowing them to do so might be seen by the public as too much privatization of policy-making. TFW invited FPB members to attend all their meetings as observers, but felt it was important for the FPB to maintain a separate process, and be perceived by the public as separate. As we have seen, when TFW co-operators did not reach agreement on policy for implementing cumulative effects research, the debate was passed on to the Forest Practices Board. This development should be seen as a sign that the TFW process has been successful not only at more in depth issue-debating and policy-making than would be possible in environmental impact review processes, but also at passing on unresolved issues to other forums.

What was the role of the tribes and the courts in creating the process? It is important to remember that the Phase II decision about tribal rights to protect habitat was the original catalyst for the TFW process. Although the decision had been appealed and vacated by the court (Cohen 1986), it should be kept in mind that the court gave instructions to the parties to negotiate, and requested regular reports during the TFW original negotiations. At critical later points, environmental groups and counties secured court decisions that propelled the process into dealing with more fundamental issues. Tribal appeals of violations of forest practice regulations and of agreements made under the TFW process also maintained pressure on DNR to implement the agreement.

The environmentalists alone would have had limited success in protecting wildlife or fisheries habitat. Their legal position was much weaker than that of the tribes because they had to chip away at the definition of public rights, while the tribes could use proprietary rights to defend resources. Environmentalists had talented and experienced volunteers who could organize effective co-operative processes, as well as lobbies, letter-writing campaigns, and public testimony, but they were also spread thin, and had periodic fund-raising crises. Without the support of tribal rights, access to tribal research, and especially the TFW research, they would not now be in a position to press for mechanisms such as thresholds to measure cumulative impacts on public resources.

The tribes working alone would probably also have accomplished less. As Scheingold notes, "when legal rights run counter to prevailing power relationships, it surely cannot be taken for granted that these rights will be redeemed on demand" (*In* Bruun 1982:273). The tribes alone would have had more difficulty convincing the public that they were protecting public resources, because of their economic use of the fishery. Acting with the environmentalists, however, they were able to make the linkage that protecting tribal resources is the same as protecting public resources, and to use far more forcefully the arguments about protecting the spiritual values associated with natural resources. Although the tribes had critical political expertise in their leaders, and excellent technical and political expertise on staff, these resources were both spread very thin. The issue network they could form with the environmentalists and agencies was far more powerful than would have been sole reliance on their own resources. In short, the tribes were almost certainly necessary to the process, but probably could not have done it alone. The courts, as used both by the tribes and by other challengers, were very important in pushing the process along at key points, and *may* also have been a necessary condition to implementing habitat protection.

What is the linkage between co-management and the corporatist policy-making sought by government during the Sustainable Forestry Roundtable? What elements of either or both are present in the TFW process? This discussion began by comparing the co-management agreement emerging from the Phase I decision with the difficulty of achieving and then implementing an agreement to protect habitat. From the tribal perspective, TFW was another co-management agreement, covering another management function, fish habitat protection. For environmental groups, the same could be said for wildlife.

The government's lead agency, DNR, saw the Phase II agreement and process quite differently, however, because powerful and influential interests were fundamentally in opposition to measures that the tribes and environmentalists believed were barely adequate. (As one tribal habitat biologist put it, we cannot afford to treat habitat protection as an area of continual political compromise. If we keep accepting even small habitat losses, eventually there will be no habitat and no species left. Critical thresholds below which some species cannot survive may be closer than we think). For DNR, as evidenced in the Sustainable Forestry Roundtable, keeping peace (within its own dual roles, as well as between industry and environmentalists), not habitat protection, was the goal.

While co-management agreements are usually initiated from the bottom to solve the problems or concerns of communities or groups dependent on resources, corporatist decision-making is often initiated by government to solve the problems of gov-

ernments with expanded power and high costs of running an orderly process. The SFR was an attempt by government to make the parties reach an agreement outside the courts.

The unresolved tension in the TFW process comes partially from the difference between the goals of the allies to define the process as habitat protection co-management, and the goals of DNR to define the process as a conflict between two stakeholders in public resources who have equally legitimate demands and must each compromise. During the SFR, the tribal/environmentalist allies tried to work within the government's corporatist framework by attempting to define themselves as the more legitimate policy-making partner with government, representing the public interest. A significant portion of the Forest Practices Board, and at least some of the public, do not believe that the logging companies have the right to destroy public resources in their pursuit of private wealth. As the lead agency, however, DNR has only very recently appeared to lean toward this position. A great deal of the struggle around the SFR, and the repeated use of the courts, results from the fact that DNR as a captured agency is apparently only now beginning to free itself from its old relationship with the logging companies and from domination by its own role as logger of public trust lands. As far as the allies are concerned, the companies are involved in corporatist policy-making in order to reduce and mitigate the economic impact of increased regulation, and to improve awareness of and compliance with rising public standards of protection. In Washington State, some of the leading logging companies are locally based, and are thus especially responsive to public opinion.

In summary, the TFW process contains a struggle between two opposing but overlapping ways of defining that process. The allies seek co-management and measure the success of the process by whether habitat is in fact protected. The DNR seeks corporatist agreement, and measures success by whether it is able to escape court challenges. It appears that the process of achieving genuine co-management will be slow, but it does not appear impossible. Along the way, would-be co-managers such as the allies may have to participate in corporatist policy-making forums in order to convince government and the public that they are protecting the public interest, and in order to achieve their more specific goals.

Conclusion

This discussion has shown five strategies that tribes and environmentalists used and continue to use effectively to work towards translating the legal promise of *US v. Washington*, Phase II, into management practices to protect fish and wildlife habitat. Issue networks/alliances, legislation and threatened legislative amendments, threat of greater regulation and public review, court action and threat of court action to reform legislation and amend regulations, and initiatives to prevent conversion of forest land to real estate were used to bring the logging industry to the negotiating table and to push forward implementation at various stages. The adoption by the allies of a corporatist-associative mode of policy-making may in itself be considered another strategy.

The sources of power used by the allies were not simultaneously available. The stages of development of implementation therefore reflected what they could achieve in any one period. Mobilizing the interest and support of more players such as counties, radical environmental groups, and the Forest Practices Board was possible only as these players observed the distance between the rhetoric of agreements and the reality of management practice. One source of power was used to raise public awareness in order to mobilize another source of power.

In the beginning, the allies were only able to effect some minimal standards of habitat protection and to become involved in some implementation and in research. While the TFW agreement won the industry a temporary reprieve from public pressure, new court cases and negative press reappeared when the limitations of the agreement became obvious. The negative press and court challenges were more virulent in response to exaggerated claims by industry and DNR of the accomplishments of the agreement. The aroused public awareness led DNR to try to duplicate the original credibility and popularity of the TFW agreement through convening the Sustainable Forestry Roundtable. To do so, DNR had to put more difficult long-range issues such as cumulative effects on the table, and include counties and radical environmental groups. This process placed pressure on the TFW research effort to produce technical measures of cumulative effects which would be usable in the field. Discussion of such technical measures in an active issue network of agencies, tribes, environmentalists, counties, and Forest Practices Board members was fruitful enough in this second stage that the FPB became proactive in seeking a solution itself when the SFR negotiations did not produce one. At this point, the issue network had become more important than press coverage or what anyone imagined public opinion to be.

During the Sustainable Forestry Roundtable, the allies consistently fought on the ground of protection of public resources from damage by private interests. The allies resisted DNR's attempt to redefine the issue as corporatist decision-making involving big industry and other groups, but insisted that the public interest in fish, wildlife, and water quality protection was its own priority. Together with the technical hope of measuring damage to public resources, the allies' position convinced members of the FPB that they were obligated to move to protect these resources.

The successful use of these strategies, and the comparative strength of the barriers to translating rights into practice in Phase I and Phase II suggest six new middle range theoretical propositions about permitting conditions for co-management which can be added to the existing list (Pinkerton 1989:26–29).

1. Previous co-management agreements may facilitate reaching a negotiating posture, but may not facilitate negotiation of new agreements or implementation of new agreements.
2. Barriers to negotiating and implementing co-management agreements are greater in proportion to the power of other parties affected and the extent to which they have captured a government agency.
3. Barriers to implementing co-management are more easily overcome through alliances of stakeholders, non-governmental organizations, and agencies with complementary resources, especially when these parties form issue networks which generate new technical information and alternative models.
4. Barriers are more easily overcome through the use of mul-

tiple sources of power, such as courts, legislature, public boards, and citizens' initiatives at strategic times, creating a spillover effect from one to another.

5. In situations of substantial power differential between parties, implementation of co-management agreements may be furthered by an appeal to the general public interest through use of corporatist-associative style policy-making forums. This strategy may be most successful in more developed regions with diversified economies and stakeholder groups.
6. The composition of courts and the political climate in any particular decade may influence the degree to which court action is preferred over political action. The changing composition of the US Supreme Court between 1970 and 1990 (to more conservative), as well as the changing political climate in the state of Washington (to more supportive of tribal rights), is likely to affect the mix of strategies which can effectively overcome barriers to co-management in a particular historical period.

The TFW agreement is still only partially implemented, and there may be further arenas of resistance to putting cumulative effects measures into specific rules. This discussion has shown in general the nature of barriers to implementing co-management and strategies for overcoming them.

NOTES

[1] Some 20 tribes in western Washington had signed treaties with the US government in the 1850s. The treaties stated that the tribes had exclusive rights to on-reservation fisheries and that off-reservation "the right of taking fish at usual and accustomed grounds and stations is further secured to said Indians in common with all citizens of the United States." The treaties had the force of law because of the Commerce Clause and the Supremacy Clause of the US Constitution (Cohen 1986:38–39).

[2] Some observers argue that the timber industry, at least in more recent years "controls" the legislature only in the sense of its ability to veto bills in combination with business and agricultural interests.

[3] See Lowi (1969) for the most influential analysis of agency capture by economic producers. In this case the capture might be considered ideological, since the DNR itself, as well as the timber companies, considered the legal requirement to protect fish and wildlife under the 1974 Forest Practices Act as almost trivial compared to the importance of timber production.

[4] Curt Smitch, former Assistant Director of the Department of Fisheries, was appointed head of the new Department of Wildlife (formerly Department of Game) with a mandate to "bring in" co-management. Smitch has survived this controversial posting and become a highly respected member of the Phase II negotiating team.

[5] Citizens' initiative 547 proposed to create local control mechanisms to limit the conversion of forested land to real estate. It gathered the necessary number of signatures to be placed on the ballot in record time, but was defeated in the fall 1990 election. Press comment at the time interpreted this, and the defeat of an initiative to ban clearcutting in California, as a rejection of the entire environmentalists' agenda. Subsequent events demonstrated, however, that the environmentalists' and tribes' desire to measure and stop unacceptable cumulative effects of logging on other resources was well supported in the issue network, and that negative press was irrelevant to this process.

[6] Mike Reed, habitat biologist for the Jamestown Klallam tribe, in researching the development of forest policy regarding sustained yield management of private timber lands in the Pacific Northwest, finds that so far neither policy nor legislation has successfully implemented the apparent public will to require sustainable private timber production which protects timber-dependent communities and certain watershed values.

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