

**Private Forestry Practices
Regulated by Public Programs:
Experiences with
State Forest Practice Laws¹**

by

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**PRIVATE FORESTRY PRACTICES REGULATED BY PUBLIC PROGRAMS:
EXPERIENCES WITH STATE FOREST PRACTICE LAWS ³**

Public regulation of forestry practices prescribed by private landowners has been a sensitive issue for forest landowners and forestry professionals for decades. The issue is not new --- Gifford Pinchot, the founder of the Society of American Foresters, was a strong advocate of such regulations. In his book Breaking New Ground, Pinchot leaves little doubt about where he stood on the issue when he said " . . . we saw that only Federal control of cutting on private [forest] land could assure the Nation the supply of forest products it must have to prosper . . . that [we] will eventually exercise such control is inevitable, because without it the safety of our forests and consequently the prosperity of our people cannot be assured." Such are strong words from a most renowned conservationist and a widely-respected forestry professional.

The regulatory environment advocated by Pinchot never materialized in his time -- politically more sensitive state laws facilitated by the federal government were proposed and accepted as alternatives. But what if Pinchot were alive today to view the regulatory landscape that currently exists in many of our far

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western and New England states? Would he be pleased that his interests had been modestly achieved? And what about states where such approaches to private forestry are being actively suggested -- -- states like Minnesota, Montana, Arkansas, Michigan, New York, West Virginia and the like? Would he relish the opportunity to enter the political arena where his strongly held views on the subject could be set forth? I expect he would do so with great gusto, observing that only the times have changed -- not the issues.

Opinions about public regulation of private forestry practices are probably as sensitive and as strongly held today as they were 50 and 60 years ago. The notion of a landowner having to comply with a government prescribed forestry standard out of concern for the law and fear of legal penalties somehow tends to irritate the American spirit. Before we fasten ourselves in to unbending positions on the issue, might not it be in our best interest to explore the landscape of forest practices regulation? Consider:

* What do we mean when we speak of public regulation of private forestry practices?

* Why have public regulatory approaches to directing the application of private forest practices become so popular?

* Are there equally effective alternatives to public regulation of private forestry practices?

* If a forest practice law is judged to be necessary, what subject matter might comprise its contents?

* What has been accomplished via state forest practice laws -- and at what cost?

* And how might a state proceed on the matter of forest practices regulation?

WHAT DO WE MEAN WHEN WE SPEAK OF PUBLIC REGULATION OF PRIVATE FORESTRY PRACTICES

Regulation is a harsh word -- likewise, it is a harsh tool of public policy. In a forestry context, forest practice regulation implies government prescribed rules and standards that the forestry practices of private owners must comply with in order to conform with broader societal interests in their forests. In such a context, the modern forest practice laws which have been developed across the nation speak well to the nature of regulation. Most such laws concern themselves with a broad range of forestry benefits, including timber, water, recreation, aesthetics and fish and wildlife habitat -- to name just a few. Similarly broad is the range of forest practices that are of concern to such laws. From a timber management perspective, for example, forest practices are often considered to be any activity or operation required to establish, care for, or remove trees. Timber harvesting, site preparation, tree planting, stand thinning, application of chemicals, fire control activities, and construction of transportation networks are but a few examples. In some instances, forest practices are defined as literally any activity or operation which takes place within a forested area. Examples include removal of certain forest vegetation to enhance a forest's aesthetic characteristics; construction of hiking trails for forest recreational uses; planting selected forest vegetation to improve wildlife habitat; and the application of herbicides to foster improved forage production in forested areas.

WHY HAVE PUBLIC REGULATORY APPROACHES TO DIRECTING THE APPLICATION OF PRIVATE FORESTRY PRACTICES BECOME SO POPULAR?

Public regulation of private forestry practices has been around for a long time. As of the mid-1950s, nearly all states had enacted "seed-tree" laws, namely laws that, at a minimum, required the reforestation of cut-over private lands. They were never seriously acknowledged nor enforced; most have long since been repealed. Beginning in the early 1970s, however, regulation took a more somber turn, especially in far western states such as California, Oregon and Washington. In such states, comprehensive laws focusing on a variety of forest outputs and forestry practices and calling for complex administrative structures and rigorous enforcement of forest practice standards became the order of the day. Today, nearly half of all states have some form of legal regulations (such as a seed tree law) that direct the forestry practices of private forestland owners; 12 of these states have chosen to enact and implement a modern comprehensive forest practice law.

The extent of forest practices regulation by state governments is best illustrated by considering the area of private timberland that is or could be subject to the provisions of modern state forest practices laws. At the present time, the nation's 12 comprehensive forest practices laws directly influence the nature of forestry practices applied to nearly 20 percent of all U.S. privately-owned timberland. If the timberland situated within the 12 additional states that are known to be actively considering such laws is included, nearly 50 percent of the nation's privately-owned

timberland would then be subject to the provisions of a comprehensive state forest practice law. Such is an area twice the size of all the timberland that is situated within the National Forest System. The exact number of private forestland owners impacted by such a regulatory landscape is subject for speculation; surely it would be a significant proportion of the nation's 7 million nonindustrial private landowners.

The renewed interest in public regulation of private forest practices stems from an amazing array of causes and concerns. Some of the arguments favoring regulation are grounded in reality, others are based on vivid imaginations and foggy misconceptions about the real world in which forestry is practiced. Consider a sampling of the major circumstances which have given rise to renewed interest in public regulation as a policy mechanism to be focused on the forestry practices of private landowners.

Without question, some advocates of forest practice laws are persons and organizations that have experienced careless and often shoddy application of forestry practices -- including, excessively large and aesthetically displeasing clearcuts; poorly maintained forest roads that promote sediment in streams and rivers; indiscriminately applied pesticides that impose havoc on certain species of wildlife; and the timber harvesting residues that remain to fuel the ferocity of unexpected wildfires. These circumstances are at times a reality. These conditions require immediate and straight-forward corrective attention. They may -- or may not -- warrant a comprehensive regulatory program.

Interest in forest practice regulations has also resulted from broad-scale public concern over the environment in general. That the public has an interest in environmental matters is without question. One need only read about toxic wastes, recycling, spotted owls, global warming, and tropical deforestation to get a clear message of wide-spread interest in local, national and world-wide environmental conditions. Citizen activism pointed toward forest practices has undoubtedly been fostered in part by this wider public concern over the condition of natural environments in general.

In the same vein, forest practice regulation has come of age because of federal laws requiring state programs which collectively are designed to address important nationally defined environment problems. The dredge and fill permitting process implemented by the U.S. Army Corp of Engineers, and various Amendments to the Federal Water Pollution Control Act have often set the tone for regulation. The 1972 Amendments to the Federal Water Pollution Control Act, for example, required state action to control silvicultural sources of water pollutants. Not surprisingly, some states took the Environmental Protection Agency serious when in 1975 it issued a model state forest practice law as a means for addressing such sources.

Forest practices laws are also of burgeoning interest today because of a continuing society-wide fascination with the placement of legal standards in legislatively established laws. To some, specification of minimal reforestation standards or maximum

clearcut sizes in law is viewed as the most effective means of sending a clear message to the forestry community that a change in management direction is needed. Such a forceful approach is the "stick" approach to management, used even though a "carrot" approach might do just as well. Likewise, forest practice standards are often inserted in law to facilitate litigation -- evidence can be presented to demonstrate whether a landowner did or didn't violate a legally specified threshold beyond which conduct is unacceptable. We Americans have a proclivity for legislative law. Moreover, we have a fascination with the placement of detailed standards of conduct into laws. In part, such is a reflection of our uneasiness with public agencies being granted significant administrative discretion.

Statewide forest practice regulations are also being suggested as a response to a plethora of municipal and county ordinances which often restrict the practice of forestry. In New Jersey, for example, over 100 of the state's municipalities at one time had adopted restrictive ordinances concerning timber harvesting. Similarly in Connecticut, 25 of the state's 169 townships had at one time enacted some form of forest practice regulation. The Massachusetts Forest Cutting Act was established in part out of desperation over the proliferation of timber harvesting restrictions among local units of government. As professionals, we often argue that forestry practices must be prescribed by and be appropriate for each forested acre. Sometimes, however, society adopted rules to do so become a jungle of complexity and

inefficiency that is in need of statewide uniformity, possibly a statewide forest practice law.

And last, suggestions for enacting a forest practice law has also been motivated by a "get there first" attitude, a perspective that is founded on the notion that the world is run by those who show up. As interest in forest practice laws becomes more common, the mind-set in any one state often seems to be that of opposing parties hurrying to present their version of a forest practice law before their opponents suggest a law that is less to their liking. In the mean time, no one carefully ponders the substance of a forest practice law nor the alternative non-regulatory approaches that can be used to influence private landowner decisions regarding forestry practices.

In sum, state forest practice laws are common on the American scene. The burgeoning interest in such laws has many sources. Included are concerns over poorly prescribed forestry practices, tail-coat effect of broader interests in the environment in general, federal stimulus to state action, fascination with regulatory policy as a tool of intervention, fear of multiple local ordinances addressing timber harvesting, and a get there first attitude by political actors in the halls of state government. Others reasons may exist -- you can be the judge.

ARE THERE EQUALLY EFFECTIVE POLICY ALTERNATIVES TO PUBLIC REGULATION OF PRIVATE FORESTRY PRACTICES?

To presume that regulatory programs embodied in state forest practice laws are the only means of guiding private forestry

practices toward more socially acceptable standards of conduct would be a gross miscalculation. There are other policy mechanisms that may well accomplish the same purposes, at less cost, and with less political intrusion into the lives of private citizens. For example, if private landowners are found to be designing, constructing and maintaining forest roads in manners that cause unacceptable levels of sediment in streams, a public emphasis on extension-educational or technical service programs might be in order. By providing landowners with information about proper road construction and maintenance, landowners might well adjust their practices for the betterment of all. If their poorly designed roads are the result of financial problems, state government might be well advised to look to financial incentive programs -- pay the landowner to build better roads via cost share mechanisms or provide indirect yet appropriate reductions in tax rates applied to forest land or the products produced there-from. To suggest, however, that regulation is the only alternative to achieving society-wide interest in private forests is grossly misleading and very inappropriate. Very often, it is the mix of policy tools -- including voluntary guidelines -- that is most effective.

IF A FOREST PRACTICE LAW IS JUDGED TO BE NECESSARY, WHAT SUBJECT MATTER SHOULD COMPRISE ITS CONTENTS?

Development and enactment of a state forest practice law is a significant political event in any forestry community. Intense arguments are likely to occur over the need for such a law. Disagreements will surely occur over the purposes that such a law

is to serve. And numberable issues will surface over how best to administer a forest practice law. Deliberations of such a nature are healthy in any political environment; they should however be cognizant of two major conditions, namely:

1. Forests are not widely uniform in their species or ecological make-up. Laws, rules and standards applied to forests should accommodate the diverse conditions which exist in forest environments. Not to recognize this variability ignores some rather fundamental laws of nature.

2. Administrative settings for carrying out laws, rules, and standards are often as variable as forests themselves. Administrators have different political attitudes toward the intensity with which a law should be applied. They often interpret forest practice standards differently when faced with differing on-the-ground situations. Surely they have different intellectual capacities for handling complex legal situations posed when enforcing regulations. Administrators also have varying degrees of compassion for those in the private sector that are subject to regulation. And administrators are often influenced by broader political changes (such as a change in political leadership) that influence the manner in which a law is carried out. Not to recognize this variability in human perspectives likewise ignores some rather fundamental laws of mankind.

But what might be said of the general content of a state forest practice law and the rules that might be set forth to guide its implementation? Recognizing that such laws and rules should be

customized to match the political, administrative and forest resource conditions with a state, consider the following.

* **Statements of Intent should be Clear.** Forest practice laws should clearly express the policy objectives they intend to seek, the forest benefits or outputs they hope to foster or preserve, and the forestry practices for which standards should be developed. If sustained, high-level production of benefits from quality forest environments is the reported intent of a law, such should be stated in a forth-right manner. If within such a context, concern is with the quality of water flowing from private forest lands, the need to ensure the existence of quality forested watersheds should be clearly identified. And if practices undertaken for timber management purposes are of concern to the accomplishment of such interests within forest watersheds, then timber management practices should be targeted as in need of standards to which landowners must comply. Without clear purposes and statements of coverage, forest practice laws can become administratively perplexing and frightfully disturbing to the public that is about to be regulated.

* **Administering Agency should be Explicitly Identified.** Forest practice laws should clearly specify who is the responsibly administering agency. Typically a state's forestry or natural resources agency is the focal point for administration -- but not always. In Washington, the Department of Natural Resources and the Department of Ecology share responsibility; the latter department being charged with establishment and administration of water

quality standards. For efficiency's sake, however, a single administrative agency is probably best; likewise, a forestry or natural resource agency would seem most appropriate as the administering unit. Regardless, the law should specify who is to be in charge.

* **Rule Promulgating Authority should be Specified.** Forest practice laws should give someone -- a board, a commission or an agency -- responsibility for developing the necessary forest practice rules and standards that will be required to accomplish a law's objectives -- for example, minimum number of seedlings per acre; maximum acceptable miles of road per acre; or appropriate application of herbicides and pesticides. These detailed forest practice standards should not be incorporated into legislative law. To do so ignores the natural variability that exists in forest environments and neglects the reality that such standards may have to be changed in order to accommodate newly developed knowledge and unforeseen administrative circumstances. Standards in law are like concrete -- virtually indestructible.

* **Technical Advisory Committee(s) should be Established.** Forest practice laws should provide for technical forestry advisory committees to assist in the development of forest practice rules and in the development of systems for monitoring the application of such rules. It is through such mechanisms that most technical forestry information regarding forest practice standards flows into administrative systems. Some states have regional committees while others find a state-wide technical advisory committee to be most

fitting.

* **Landowners and Forestry Practices to be Covered should be Specified.** Forest practice laws or rules should clearly specify the forest landowners to which they apply. In most cases, primary interest is with privately owned forest land, both industrial and nonindustrial. Some states, such as Oregon, have chosen to extend regulatory requirements to forest land owned by state and county governments. Some have also developed interagency agreements with federal land management agencies.

Similarly, forest practice laws and rules should specify which forestry practices are to be regulated and which are to be exempted. For example, should timber harvesting be subject to regulation, but not road construction, silvicultural chemicals, precommercial thinning and reforestation? Some states have enacted laws so strict that conversion of forestland to other uses is prohibited or at least regulated by a permitting process. Practices usually exempted from regulation are those that pose little or no threat to the environmental, such as very small timber harvests and the cutting of firewood for personal use.

* **Enforcement Procedures and Penalties for Noncompliance should be Specified.** To insure compliance with established forest practice standards, forest practice rules should clearly specify the procedures that landowners must comply with. Such can be very simple -- notify the state of intent to harvest, then proceed. Or very complex -- filing a notice of intent to harvest timber and a detailed timber harvesting plan; then wait for agency approval of

the plan and permission to begin a harvesting operation. Once approval to proceed has been granted, subsequent inspection of timber harvesting operations are often called for. Inspections are sometimes made before an operation starts in order to determine whether provisions of a harvesting plan will fully protect the harvested site. Some states make inspections several years after harvest to determine if adequate reforestation has occurred.

Enforcement procedures should also be addressed in a forest practices law. Stop work orders may be called for to halt timber harvesting operations until violations have been corrected. Criminal and civil penalties might also be applied. Some states have provisions to allow the state to repair adverse resource impacts when landowners fail to do so -- the cost of such repairs are attached as liens against property. Most forest practice laws establish an administrative appeals procedure by which alleged violators may appeal the charges made against them. Despite available sanctions, states seldom apply penalties as an enforcement mechanism. Rather, compliance is sought primarily through cooperative and consultative means.

* Licensing Requirements may be Called for. Licensing of timber harvesters may be an important element of a state forest practice law. Massachusetts and California, for example, require the licensing of all timber harvesters. In Massachusetts, such operators must pay a fee and pass a written exam, while in California professional foresters specializing in timber management must be licensed. Only after meeting educational and experience

requirements and successfully passing a written exam can foresters prepare timber harvesting plans for forest landowners.

In sum, when contemplating a state forest practice law, serious consideration should be given to what is to be accomplished, the nature of the responsible agency, how rules are to be promulgated, the avenue for technical forestry input, the landowners and practices to be covered, and the nature of mechanisms to be used for enforcement.

WHAT HAS BEEN ACCOMPLISHED BY STATE FOREST PRACTICE LAWS -- AND AT WHAT COST?

Are state forest practice laws an effective means of accomplishing the public interest in private forestry activities? Answering such a question is not easy. Analyses are often derailed by our often murky understanding of the relationship between a particular forestry practice and a desired outcome such as improvements in the quality of water flowing from a forested watershed or the presentation of a forest landscape that is more pleasing to the public's eye. Similar confusion occurs because uniform measures are not available for valuing many of the additional environmental amenities that regulation is thought capable of producing. The problem becomes even more perplexing when efforts are made to separate the effect of a forest practice law from a landowner's more general responses to concern over environment quality in general -- responses which may have occurred in the absence of a regulatory program.

Measurement problems aside, however, for states that had enacted forest practice laws through 1985, there is considerable agreement that regulation has been responsible for significant improvements in the condition of the resources the laws were established to protect. Water quality is apparently better, fish are more abundant, and more trees are going in the ground. In Oregon, 30-40 percent more area is apparently being reforested than would have been reforested without a law, while in California regulations have resulted in a \$2-\$3 million dollar annual increase in reforestation investments -- an increase that apparently would not have occurred without a forest practice law. Similar accomplishments can be cited for other states.

The clientele of forest practice laws are also apparently satisfied -- most do not view regulation as overly burdensome. In a 1985 study of nine major client groups -- which included private landowners, timber harvesters, foresters, wildlife and environmental groups -- in seven states having comprehensive forest practice laws, all groups were supportive or at least neutral towards regulation. Even groups carrying the burden of regulation -- landowners and timber harvesters -- were fairly positive toward regulatory programs as currently administered.

The accomplishments attributed to state forest practice laws have not come without cost. In 1984, seven Western states expended \$10 million in total to administer their state forest practice laws. Among the significant sources of added costs were legally mandated reviews of harvest permit applications and the inspection

of completed harvesting operations. In Oregon alone, the number of inspections annually carried out often exceeds 14,000. In some states, service forestry programs were literally devastated during the first year of their law's implementation; service foresters were moved in mass to the tasks of approving hundreds of timber harvesting plans and inspecting thousands of timber harvesting operations.

The cost of regulation to the private sector can also be high. In the same seven states, regulation of forest practices has required private landowners, timber operators and consumers to annually expend an additional \$120 million for activities such as the preparation of harvest plans, the redesign of roads, and the accomplishment of intense reforestation requirements. Regulations can also mean a direct reduction in timber harvesting revenue for forest landowners and timber harvesters. For example, Washington's regulations require the leaving of sufficient vegetation to ensure the existence of at least 75 percent of the midsummer midday shade over certain categories of streams considered important for fish habitat. Such can very often involve the leaving of very valuable merchantable trees. Are such costs excessive? The answer obviously depends on one's opinion as to the magnitude and nature of benefits that accrue from such investments and the nature of those who receive and pay for them.

HOW MIGHT A STATE PROCEED ON THE MATTER OF PUBLIC REGULATION OF PRIVATE FORESTRY PRACTICES?

State forest practice laws and the regulations embodied therein have become a fact of life on the American forestry scene.

Many pitched, emotional arguments have raged over the degree to which forestry practices should be regulated, or whether they should be regulated at all. Despite such differences, forest practice regulation often follows the same evolutionary path followed by most regulatory programs: a ratcheted progression toward expanded state authority over forestry practices on private forest lands. The path is traversed in different styles by different states. Some move slow and cautiously, while others take fitful steps of varying sizes. What advice might be given as we contemplate greater emphasis on the regulation of private forestry practices?

* if we're going to have a forest practices act, make it the best available. If the state's finest political and professional minds acknowledge that a forest practice law will eventually be enacted, attention should be directed toward constructing a law that will be efficient, effective and operationally workable. Review, for example, the experiences of other states and incorporate the best of each in a proposed law. Set aside heated debate over whether or not such a law should exist; focus professional and citizen expertise on the possible structure of a law and the means by which it can be successfully implemented.

* if we're going to have a forest practices act, design it to accommodate varying administrative and forest resource conditions. If a law is to be enacted, make absolutely sure it is capable of achieving desired objectives in manners that accommodate the variety of administrative and resource conditions that exist within

a forestry community. Uniform resource and administrative conditions seldom exist statewide -- laws should be designed to recognize and accommodate this variability.

*** if we're thinking about a forest practices act, recognize regulation as but one of many policy mechanisms that are available for achieving the same purpose.** If concern exists over the quality of private forest environments, consider a range of policy mechanisms for intervening in the workings of the private sector, including voluntary guidelines, educational programs, cost-share programs and regulatory programs. Focus on the relative efficiency, effectiveness and distributional consequences of each mechanism or combination there-of. Similarly, experiment first with those mechanisms that are less costly and less politically intrusive. For example, begin with voluntary guidelines. If such an approach fails to produce the desired results, proceed to augment educational and technical-assistance programs; inform landowners of more sensitive ways of managing their forests. If concerns continue to exist, move toward cost-share mechanisms and, as a last resort, move toward full scale public regulation of private forestry practices.

*** and, if we're going to have a forest practices act, recognize that its structure and administration will be improved over time.** Newly enacted regulatory programs focused on private forestry practices are seldom examples of effectiveness and efficiency. If anything, the experiences of other states points to the evolutionary nature of regulatory programs. What appeared as an especially deleterious legal provision at the time, very often

becomes a non-problem with experience. And what at the height of intense political debate was considered to be an essential program ingredient, often becomes an ingredient to be abandoned with the advent of experience. Experience is a great teacher; to presume that a newly established regulatory program will solve all environmental problems is unrealistic. Similarly unrealistic is to presume that additional technical, administrative and political questions will not develop.

Regulation of private forest practices is a sensitive issue of concern to forestry professionals in all states. Regardless, they should bring their forestry expertise to bear on the matter as they would any other issue concerning the use and management of forest resources. Only then will society in general be in a position to fully receive the range of benefits that forests are capable of providing.