Sustainable Forestry—Searching for the Public Interest

Starker Lecture—Inland Foresters' Forum
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1) **Assignment to discuss sustainability from a forest management perspective.**

2) **Discussion Outline**
   a) Thesis
   b) Historical context
   c) Our dilemma
   d) The opportunity
   e) Closing thoughts

3) **Thesis:** Sustainable forestry is a social/political issue, not a science issue—we have sufficient science to develop alternatives to meet a larger share of society's needs and wants from our forests, if society could establish adequate social/political agreement to take appropriate actions.

4) **Historical Context:**

   a) Earth's solar system is part of a spiral galaxy knows as the Milky Way. Our solar system rotates around the Milky Way on about a 250 million year cycle. While not proven scientifically, it is more than a casual observation that the earth's climatic cycles (glacial to inter-glacial) are associated with the rotation around the Milky Way and other celestial influences such as our suns various cycles. We are currently in an interglacial period with the earth growing warmer, which has implications for tomorrow's forests. Man-kind has had and is having an influence on the earth's temperature, but the future consequences of the change are not known. However modelers and others are having fun telling us how bad we are and how we should change our ways.

   b) John Perlin, *"A Forest Journey—The story of wood and civilization,"* describes the forests and usage of wood from the Mesopotamia era through and after the American Revolution. Each society initially had an abundance of wood at its disposal. As they used up the wood due to population increase and improved technologies, the land was switched to agricultural land, followed by loss of productivity and erosion. As each society ran out of wood they went further distances to meet their needs. For example, England looked to North American for masts, production of pig iron, shingles, barrel staves, and other forest

products. Over the centuries the forests often re-grew, and after a long period, the respective countries had a new, but often diminished supply of wood locally. As the forests were being depleted, government often tried to stop or slow down the rate of use. Local citizens became angry at the loss of wood for their use or the increased cost of obtaining wood. Many U.S. forest policies resulted from avoiding a timber famine.

c) Jared Diamond, *"Collapse"*, documents how a number of historical societies, such as on Easter Island, Greenland, and what is now the SW United States, failed due to a combination of factors including deforestation and climate change. One interesting conjecture Jared offers is "What did the Easter Islanders think as they cut down the last tree?" Easter Island, as in the case of Greenland and some other societies that collapsed, invested their wood use heavily in meeting the "religious" needs of their society.

d) The pattern of wood use was repeated in the eastern and southern portions North America as they were settled by Europeans. It may be worth pointing out that by the time the first European settlers were arriving, the indigenous populations, along with their historic impacts on the forests, had been greatly diminished due to diseases brought by the early explorers, some 100 plus years earlier. Thus, the relative abundance and perception of the "forest primeval" may have been influenced to a degree by much reduced impacts from the native populations.

e) As the United States expanded, the forest liquidation pattern repeated itself in the Lakes states. By the end of the Civil War, public concern developed about forest depletion and forest protection policies, mainly to ensure military stores. These concerns eventually led to the establishment of the U.S. Forest Service, National Forests, and a range of forest policies based upon a vision of multiple use for the greatest good.

f) In 1900 George S. Long, *"George S. Long Timber Statesman"*, was appointed Weyerhaeuser's agent for Washington. His task was to acquire forest land, and eventually to build manufacturing and marketing capacity. Note that the forests he purchased resulted from the little ice age and associated natural catastrophes, such as fire and wind. In the early years he, and other landowners, were greatly concerned about fire. Long, and other timbermen, in 1908 formed the Western Forestry and Conservation Association to propose legislation for the "protection of the timber resources in Montana, Idaho, Washington, and Oregon." They hired E.T. Allen as the association's chief forester. In this role, Allen wrote several pamphlets outlining suggested courses of action. Among the northwest states, Oregon was the laggard in organizing its fire protection system. In his annual report to the association in 1911 Allen recommended the following method to establish an effective state forest code in Oregon. Key provisions included:

i) establishing a Board of Forestry;

ii) appointing a State Forester;

iii) supervision of all forest policy in the state;

iv) the establishment of a fire protection system; and

v) conducting forest assessments as a vehicle for developing new forest policy.

The essence of his recommendation is known today as ORS 526.005 to 526.046. The work of the Association went on to address insect and disease issues, reforestation, and taxation. Taxation was viewed as the major impediment to forest land owners retaining and reforesting their lands. Oregon's forest fee and yield tax was the result of this effort. Long was also concerned about the need to educate children about forests and their benefits, retaining public permission to manage the forests, and the ability to make a profit for the Company given the swings in the market. George recognized the need to practice good forestry from a public perspective while meeting the Company's need for profit. Since 1911 the principal downfall in industrial land management has been the failure to provide sustainable forestry on a timbershed basis. This has caused enormous disruption in the communities affected and has affected public attitudes towards private forest land management.

g) As a result of the Oregon Legislative Assembly adopting Allen's recommendations Francis Elliott was appointed the first State Forester in 1911. The chair of the Board of Forestry was Governor Oswald West. (The Governor served on and was chair of the BOF from 1911 to 1959.) Under the leadership of the Board and the State Forester, the Oregon Legislative Assembly authorized the establishment of forest protective associations as the principal vehicle for fire prevention and suppression. The Board's first Forestry Program for Oregon was to acquire forest land and manage it as an example of good forestry. Elliott spent the rest of his career to create what we know today as the Elliott State Forest by trading script for the south end of today's Siuslaw National Forest. The Board and Department went on to establish a forest nursery to foster reforestation, established insects and disease laws, provide for the conveyance of tax delinquent land to the Board for management and revenue sharing with counties, the 1941 Conservation Act, and the 1971 Forest Practices Act—all as means to good forestry, socially, economically, and environmentally. Overall, these laws and policies have served Oregon well, at least until now.

h) During the 1970's the Congress and state governments passed a large number of environmental regulatory laws to guide businesses. These statutes were land mark legislation for the time. They were premised on "the polluter pays philosophy" and ignored the responsibilities of the consumer. While highly effective these laws placed enormous cost burden on the companies and had unintended consequences. As the world economy globalized, the cost disparity

between environmental protection in the developed countries and third world countries caused the transfer of many jobs and environmental impacts overseas. Little progress has been made since then in developing other tools that help solve contemporary environmental problems in developed countries and preventing the exportation of environmental problems to third world countries.

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i) A new framework for thinking about environmental issues evolved from discussions by the United Nations. During the late 1960's and early 1970's the United Nations worried about global health issues. They appointed a variety of commissions to make recommendations to world leaders. In the late 1970's these leaders started to worry about global environmental issues. In 1983 they established the World Commission on Environment and Development. Gro Harlem Brundtland, Prime Minister of Norway, was the chair. This commission produced a report titled *"Our Common Future."* In short, they coined the term sustainability as we know it today. The report recognizes that "The environment does not exist as a sphere separate from human actions, ambitions, and needs, and attempts to defend it in isolation from human concerns have given the word 'environment' a connotation of naivety in some political circles…the 'environment' is where we all live, and development is what we all do in attempting to improve our lot within that abode. The two are inseparable...Sustainable development is development that meets the need of the present without compromising the ability of future generations to meet their own needs." This Commission report gave society new tools to think about social, economic, and environmental issues. The sustainability concept was not meant to be nirvana, but rather a conversation tool about individual country needs in a global context.

j) The Brundtland Commission report was followed by the 1992 UN Conference on the Environment and Development. Forestry was a large part of this meeting. Title 14, Chapter 11 laid out a set of principles for sustainable forestry that over 120 countries agreed to follow. Later, the Montreal Process, and other similar regional processes, identified criteria and indicators of sustainable forestry—how would you know it if you saw it. These processes were aimed at helping individual countries evaluate the status of their forests against their needs in a global context.

k) In the early to mid 1990's a large number of forest certification program evolved internationally. These programs essentially produced a series of geographic specific forest practices acts which the industry voluntarily agreed to follow owing to their concerns over market access. Like regulatory programs, the certification programs have placed an added cost burden on companies operating in developed countries and gave no incentive to consumers to be more environmentally responsible. Furthermore, this approach doesn't address the local use of wood for heating and cooking, which worldwide remains the biggest

use of wood and remains a large factor in the loss of forest and species in Africa and some other parts of the world.

l) The values held and expressed about forests are evolving. Increasingly the strongest held values by some are within the realm of spiritual and intrinsic values. Spiritual values view forests as a scared, religious, or spiritually special place. Intrinsic values view forest as important for their existence, regardless of how others value forest. Similar values shifts are occurring with regard to other ecosystem values, especially biodiversity (animal rights). This has resulted in some arguing that all species should have equal status and that sustainability must meet the "needs" and rights of the forest and all its diversity on par with human needs [Eco-centric view]. A recent Canadian survey, *David Bengstpn and Shashi Kant,* found that about 32% of the public place higher importance on bio-centric values (existence values, inherent worth, and spiritual values), 26% on anthropocentric values, and 42% on intermediate values. This split is similar to results previous survey results in Oregon. .

5) **The dilemmas faced in moving to sustainable forestry:**

a) Change in demography through a growing and increasingly urban population that has a different understanding of forest ecosystems, working landscapes and the forests role in meeting the public's needs and wants. Yet the public wants it all—jobs, a clean environment, social services, public safety, and the ability to educate their children. They want balance, but would not know it if they saw it. Jim Boyer, et ale. *"Why Not in My Back Yard, February 16, 2005"*,noted "While too much of the American Society resource extraction is 'out', consumption is most definitely 'in'." Stephen Shifley, *June 2006 Journal of Forestry*, noted that "our patterns of forest growth, removals, and consumption in a broader context raises the concern that our current situation is not sustainable in a global context and may be even unethical in a global context." Additionally, the public does not understand that there is a quid pro quo associated with forest lands—landowner gets to manage the land for the intended purpose and the public reaps significant benefits in terms of wildlife habitat, open space, recreation, clean air and water, affordable wood products, etc. by the landowner retaining forest land as working landscapes. In a broad sense, the public intellectually operates from an eco-centric point of view. On a day-to-day basis they operate on a human centric basis. Without a quid pro quo between landowners and the public, forest lands will (are) convert to HBU.

b) Our political mind set is that all forest lands are equal and should provide all things to all people. Yet the social license to practice forestry is not static, but is more like shifting sand with little understanding of the long-term nature of forestry and the results it can produce—**Barte's story**. The 10-15% of industrial lands nationwide provides 80% of our domestic production. If not for their high yield, the pressure on public lands to produce timber would be much greater.

c) We have had a change in industrial landownership from integrated companies to TIMO's and REIT's. [It is interesting to remember that 20 years ago the prediction was that the worldwide forest products industry would be ruled by just a few integrated giants like Weyerhaeuser Company. But at least in this country that isn't the way it worked out, and in other parts of the world it isn't clear what is going to happen but the role of government tends to be much greater.] This change to REIT and TIMO ownership occurred for many reasons, but most significantly, I would argue, that US tax law is what made the difference coupled with the world supply of wood and international competition. Companies could no longer afford to tie up their cash in land and timber. In the NW they were put under additional pressure owing to our regulatory programs. These new owner's time horizons are shorter and their expected investment return is higher than conventional integrated timber companies. Thus, they have and will continue to sell lands for higher and better use. We are losing high quality forest lands to these other uses. Nationally we currently we are losing about 1 million acres per year, mostly to development. These REIT and TIMO held lands will likely change hands again within the next 10 to 15 years. We need to send a signal to both the current and future landowners on what to save and how society will pay for it.

d) State and federal General Fund dollars are more limiting. In Oregon, during the 1970's about 3% of the GF went to natural resource agencies—today about 1% goes to these agencies. This change was aggravated by a series of initiative petitions that directed GF dollars to other priorities, chiefly education and corrections. As a result, either the costs of operating natural resource agencies has been shifted to the forest landowner/regulated constituency, putting additional economic pressure on them, or the programs have been reduced, and thus limited the ability of the agencies to solve important problems.

e) Legislative term limits forced out of the legislature knowledgeable people—those with vision and the ability to pursue an agenda beyond the bills their committee received. It is more difficult for agencies to develop lasting working relationships necessary to advance the resolution of natural resource issues important to their respective constituencies and the general public.

f) Scientist advocates and computer models are being delegated "decision making" rather than using them as decision support systems. Policy makers cannot abdicate their responsibilities to integrate information and find the public interest through vigorous discussions and debate.

g) For a series of complex reasons, our federal lands are a mess and quickly moving to an ecological and political disaster. Well intended people crafted plans that destroyed many rural communities that had been reliant on the economic activity

associated with the federal lands—with no or little input from the affected parties—oligarchy at its worst.

h) New conservation groups have risen in importance owing to their recognition of these mega trends, while others are still locked in their environmental protection mode and thus of less importance in solving today's natural resource issues. Industry needs to engage the new conservation groups in partnerships to pursue the public interest as well as their own interests.

i) Regulatory programs have been highly successful, but have reached the limit of their effectiveness as illustrated by BM 37. Also, as these regulatory programs were developed, the crafters did not think through the unintended consequences of their regulations. i.e. in the ESA no good deed goes unpunished.
The existing legal structure undercuts collaborative processes (and negotiated settlements) and undermines the ability to implement adaptive management strategies. Interests have become weary of collaborative processes since the results are used as the new point from which litigation begins. On the ground experiments that could produce better outcomes are thwarted by a number of processes, especially the inability to consider longer-term risks on equal footing with short-term risks in evaluating environmental impacts.

6) **If we are to move forward, we need a common vision and/or maybe a new forest resource management paradigm.**

a) In the spring, 2001 the Kansas Federal Reserve Board sponsored a conference on "Exploring Policy Options for a New Rural America." Dr Karl Stauber, president of the Northwest Area Foundation, delivered a paper at this conference titled *"Why Invest Rural America—a Critical Public Policy Question for the 21st Century."* The essence of his paper says that we had strong contracts with rural America from the Revolutionary War until 1973. Since then we have had no contract and the associated investments. As a consequence middle class citizens cannot make a living and are leaving rural American, leaving the rich and the poor. Our society is founded on a strong middle class sector. Yet in rural America we have gut shot this sector with our federal policies.

b) Michael Porter, the Bishop William Lawrence University Professor at Harvard Business School, wrote in the *November 10, 2008 issue of Business Week* the following observations: "…The U.S. has no long-term economic strategy—no coherent set of policies to ensure competitiveness over the long haul. Strategy embodies clear priorities, based on the strengths we need to preserve and the weaknesses that threaten our prosperity the most…In dealing with a crisis, experience teaches us that steps to address the immediate problem must support a long-term strategy…America's political system, especially as it has evolved in recent times, almost guarantees an absence of strategic thinking at the federal level. Government leaders react to current events piecemeal, rather than

developing a strategy that unfolds over years." Porter's observations about the issues with our economic policies mirror our natural resource policies.

c) New York Times foreign affairs columnist Thomas Friedman, in his recent book *"Hot, Flat, and Crowded"*, suggests that the United States has lost its groove. We lost our USSR competitor and we have gotten dumb and lazy. We need to get back to the 4th of July and not 9/11. Our federal government cannot currently solve big, multi-generational problems. Like a rocket going to the moon, we have thrust, but we are leaking energy. The crew in the capsule are fighting over the rocket's direction. We have five incredible opportunities masquerading as insoluble problems:

i) Energy and natural resource supply and demand;

ii) Petro-dictatorships;

iii) Climate change and global warming – weirding might be the right word;

iv) Energy poverty in third world countries;

v) Biodiversity change.

These problems are interrelated and should be solved together. He suggests we are entering the *energy/climate era or ECE*. We need to reshape our markets with the right price signals, rules, and standards. We need to develop solutions for these problems whereby we can go down the price volume curve towards a China price.

d) Karl Stauber, Michael Porter, and Tom Friedman are not alone in their beliefs that this country needs to set an agenda on these important issues.

i) After more than seven years of work, the National Commission on Science of Sustainable Forestry recently concluded "…the United States urgently needs to develop an integrated public policy framework to sustain our nation's forest that is relevant to America in the 21st century." The Western Governors Association and the National Association of State Foresters reached similar conclusions.

ii) In 2007 a IUCN white paper prepared for the conference *"Towards a New Global Forest Agenda"* noted: "Conservation policies have persistently overridden the rights of indigenous people and other forest-dwellers to own, control and manage their lands…It is time for conservation agencies to look again at what has become an undemocratic and unjust model for conservation…It will be hard, if not impossible to achieve conservation goals without engaging local communities…Local conservation agencies need to be more accountable to owners and users of the land with high biodiversity and to

work with them as partners, not adversaries. This involves taking a more sophisticated approach to the economic drivers which promote conservation, and developing capacity to analyze when conservation will be the result of local common property norms and when it will not."

e) Policies provide answers to new questions. Our current policies do not answer our new questions. Our current policies are as outdated as the crosscut saw—they address yesterday's issues, not tomorrows. What is needed is a new social contract with rural Oregon and rural America—one that addresses the public's concerns over growth management, biodiversity, energy, and global warming while addressing landowner concerns for economic security and social fairness. The concept of sustainability provides a framework for discussions. Thus it is time to have new state and federal policies that meet tomorrows needs, not yesterday's.

f) Sally Fairfax, *Forest and Raange Policy—Its Development in the United States,* points out that "policy is a series of negotiated settlements resulting from interaction among competing interest groups, among competing regions, and among agencies competing for the support, interest, and attention of the public…it is an unending process of negotiation." In these discussions traditional conservation groups will not be helpful in solving these issues, but the new, contemporary groups could be very helpful. The landowner community needs to move out of their current ultra conservative position and actively work with the new conservation groups to find common ground—the mutual good. The forestry profession needs to consider that their values and resource management paradigms are often too slow to change because of organizational cultures, professionalism and bureaucracies. Forestry professionals need to accept that their role is to implement societies' choices, not to make the choices for society. Bold leadership by all parties is required.

7) **The opportunity for a new forest policy**

a) Vision: I am responsible for sustaining life on earth by achieving both the environmental and economic bottom line in a socially acceptable manner.

b) Forestry has a lot to contribute towards achieving this vision. Our best entry court will be the *ECE* discussions suggested by Thomas Friedman.

c) To achieve the vision, landowners must have public permission to manage through public policies that:

i) Recognize that our ecosystems are ambulatory *(Ron Neilson, USDA Forest Service-- Climate Change, Uncertainty and Forecasts of Global to Landscape Ecosystem Dynamics)*;

ii) Re-ordering our tax policies, regulations, and public investment policies to bring out the entrepreneurial spirit of agencies, NGO's, and landowners consistent with public investment policies;

iii) We need an accountability system to ensure fair play, much like the Dutch green planning approach—both for the landowner and the consuming public;

iv) Help the public understand what is at stake and why they should care—in contemporary terms their concerns revolve around climate change, biodiversity, energy, open space and associated values, and yes, affordable commercial forest products. Society has much to lose or gain based on the policy outcome. These values are not free to protect. The public has an obligation to help pay for them. They must be held accountable for their actions and decisions;

v) Bold action, in Oregon style, is required—one that recognizes ecosystems are ambulatory. One that recognizes the different ownerships play different roles in providing social, economic, and environmental services. One that recognizes there will be temporary impacts from land management:

(1) Work with interested parties to develop new tools to help keep strategic forest lands as forest lands. An example would be a HBU mitigation bank, similar to a wetland mitigation bank.

(2) Invest in community leader visits to develop the political capital necessary to solve this issue.

(3) Cultivate working relationships with the new conservation groups and landowners that get it—they have a vested interest in finding solutions.

(4) When making decisions, policy makers have a responsibility to foster a public debate to find the public interest. They should use the best that science and scientists have to offer. Scientists have a responsibility to be clear about what they know versus what they think or value.

vi) This will be a trial and error discussion that will take time to resolve—there are no silver bullets.

8) **Closing thoughts:**

a) Some civilizations have failed because they made choices that did not sustain their forests in the face of other forces of change.

b) Oregon today is not what is was, nor what it will be.

c) Change is never ending. Our history is about change and nature, change and people, and change and mysteries. Some change processes are better understood than others. Human activity does influence change processes. Cataclysmic changes have occurred in the past and are likely to occur in the future.

d) Humans tend to view change as negative and implement efforts to limit the scope or impacts of change.

e) Conservation is about managing dynamic systems based upon adequate spatial and temporal scales.

f) We need a policy framework that meets the needs of urban and rural citizens today and tomorrow while holding the individual accountable for their consumption decisions. This is the pathway to sustainable forestry, but can only be achieved through an inclusive public discussion lead by political leaders—for sustainability is not nirvana, but rather a social/political decision—a trail of discovery.

g) Decision-making processes are broken. If not fixed, those holding radical views will prevent necessary changes. Given the increasing fundamentalism on some values, every effort needs to be taken to prevent behaviors that undermine our democratic principles.

h) If continued growth and urbanization of our society occurs it will increase fragmentation of our working landscapes. This could be accentuated in 15 years as the REIT's and TIMO's re-evaluate their investments. Additionally, as the family forest lands transition from the depression era owners to the next generation, additional fragmentation will likely occur. In both cases the best outcome would be that land sold during this transition period will be bought by interests that want to sustain forest lands.

i) Protecting some public values will become more important and more contentious as the public becomes unhappy with the fragmentation trend that develops and the associated loss of values of importance to them—i.e., recreation, clean water, climate change.

j) Regulatory systems will not and cannot meet the public's new expectations, which will frustrate them.

k) We will see a continued loss of GF appropriated to natural resource agencies unless the state rebalances its tax structure. This is not likely to happen any time soon. Thus, other funding sources will need to be developed—sources that

recognize landowners get little return for providing public values. Added cost to the landowner will only aggravate the fragmentation issue.

l) Climate change can provide the political imperative for a new forest policy discussion. There will be a major political discussion at the world, national, and state levels on this subject. Forestry has the opportunity to be a key part of the conversation, particularly in carbon storage and energy production

m) Science fiction writer Arthur C. Clarke famously observed: "Any sufficiently advanced technology is indistinguishable from magic." So is the social/political process.

Sustainable forestry is a social/political conversation searching for the public interest…I am responsible for achieving both the economic and environmental bottom line, for that is the only pathway to sustainable societies.