

Please accept the following written testimony on HB 3226

## Summary

Forestry as if the Money Mattered,

We can all agree many aspects of forest management are controversial. Passionate extremes argue the issues. The timber industry is desperate for logs while externalizing the damage done to watersheds. Rural citizens are extremely upset at the spraying, damage to the watersheds and the ugly changes as result of industrial management.

I would submit there is more money to be made in an approach to forestry where the land owner internalizes forest values of dynamic habitat, stable watershed and natural beauty; making them assets and practicing a selective harvest of trees in this forest. This paper is my attempt to compare the two styles of management; selective harvest and industrial clear cutting, on a monetary analysis and show the net cash to be earned by the landowner of a forest is much greater with thoughtful selective management. Clearly when you see muddy rivers the current rules and/or enforcement are not working well enough.

If you compare industrial clear cutting to selective harvest models it is clear to me the long term profits are in the selective harvest. With a clear cut a landowner gets a large chunk of money one time. The real estate value is at rock bottom and there are no harvest options for one lifetime at least. With selective harvest modest volumes of logs are harvested when the price is high and the forest continues to grow. Real Estate value is preserved and the landowner retains harvest and management options except reforestation obligations because the trees reseed themselves. The beauty and watershed value is preserved and harvest options remain open.

At the end of this document I offer some solutions and suggestions to move this discussion into what can be done. I am tired of fighting over forest practices and see this legislation as a positive opportunity. I would seek tax and financial incentives rather than rules.

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## **Forestry as if the Money Mattered**

We one thing upon which we can all agree is that many aspects of forest management are controversial. Passionate extremes argue the issues. Those citizens who value water quality and natural beauty have a difficult time arguing against the straight line cash flow of the industrial model. After decades we have devolved into a nasty debate between citizens outraged by clear cuts and spraying, a cornered timber industry desperate for logs, state agencies that burn the clock discussing technicalities while out of state investors export logs to the Far East.

I would submit there is more far more money to be made in an approach to forestry where the land owner internalizes forest values of habitat, watershed and beauty; making them assets. There are actually many landowners and managers who do this now and have for generations. They practice selective harvest and thin their stands. This paper is my attempt to compare the two styles of management on a dollars and cents analysis and show the net cash to be earned by the landowner of a forest is much greater with thoughtful selective management. It is also fair to offer some proposals about how to put some of these ideas into practice.

I love logging and the beautiful forest products we create here in Oregon. I like the selective approach because it is a lot less work, with lighter equipment and the woods grow back. I originally started with 280 thousand board feet. My goal was to take all of that volume of timber but at the same time keep a canopy across all of my 66 acres. To date I have harvested over

400 thousand board feet and there is more than that growing. The beauty and utility of my forest land is more valuable every year. That is forestry as if we were doing it for the money.

I believe there are 6 factors to calculate the value of a forest. The first is the gross cash sale value of logs at the mill. Most people do not figure much past this number and they think in terms of gross value not the net after taxes. There is also value in standing timber that has been cruised. A cruise gives a mill a description of condition and volume of the forest. Loans as well as timber deeds are readily available with a cruise. Time, effort, and equipment cost are highly underrated values to important to carefully consider. Forests are growing, exist for centuries and management is an investment over time and for generations. Time on heavy equipment and labor is also expensive and the trick is to get the greatest amount of positive work accomplished for the least amount of labor and equipment invested. A fourth value is the real estate value of a given tract of forest land if it were placed on the market for sale. This is not to say an owner should sell the property but management decisions do affect value and this is an important gauge of management decisions.

In the greater sense this aspect of owning a forest is beyond money; it is priceless. It is risky to try and put a price on a healthy functioning ecosystem, a dynamic engine of living creatures from microbes to trees of many ages and varieties as well as all of the living creatures, including human beings, in between. Think about it from the other direction. How long will a bare hillside grow a healthy functioning forest? Healing

takes time and no amount of money can buy it. Where can water be bought when the water has all dried up? The slow flow of cool ground water feeds springs and streams and water is life. What is more conservative than protecting your source of water? The amenity value of the forest is measured in the price you can get for beauty, water and a healthy ecosystem of a growing forest. It is common sense that people will pay substantially more for a beautiful forest than the same place freshly logged.

There are two other factors in the value of a forest that need better understanding which is difficult because they are moving targets; climate change and wild fire. The climate across southwest Oregon is a transition between the wet northern fir forests and the dry oak and pine forests to the south. These dry southern forests are marching north. Fir forests are dying out and Cedars and Pine are coming in. The level of clear cutting on private industrial land has put larger and larger acreages in freshly planted status. The industry model of reforestation with only fir or ponderosa pine seedlings might be more of a gamble than they realize as the climate changes. One of the great follies of the industrial model is the idea of general rules as a cookie cutter for timber land across the landscape. There is only one rule about land but it is absolute. Each and every slope and exposure is different; each place and local biosphere is unique and the Umpqua region is the edge of these changes as they move north. Selective Harvest is to seek an appropriate way to thin for each unique situation and ecosystem. We shift from esoteric arguments about the rules to ground truth.

Let us compare two parcels each 100 acres and each containing 10,000 board feet of timber per acre or 1 million board feet total. These volumes are not outside of what is found in actuality but this is fairly large timber not commonly found in second growth stands under 40 or 50 years of age. The industrial model is to cut all million board feet and sell the logs. As I write the price of timber is running around \$700 per thousand but this is a very dynamic number and subject to all sorts of market forces. \$700 is a decent price for logs. So at this price, the gross income on 1,000 thousands of logs delivered to the mill is \$700,000. The cost of logging, road building and taxes is going to run about 50% so let's use that as a round number. Much of the cost of this work is the construction of roads and landings that will not be used again for decades. Reforestation if done at all (not planting is against the "law" but is common) will run over \$1.00 per seedling figuring the cost of the seedlings, planting and supervision. On 100 acres this is going to run about \$50,000. The true cost is the number of seedlings actually growing at the end of 5 years divided into the cost of reforestation. On a tough site with a couple of hot dry summers this could easily reach \$5.00 per tree. The Seller now has realized \$300,000 as a net profit one time in a lifetime. The real estate value has been reduced to a minimum and there are no other management options but spending money.

One of the ways the industrial managers spend money is to spray and respray recently planted seedlings. Of all of the aspect of industrial forestry the spraying of deadly chemicals is, in my opinion, the most destructive, damaging and disgraceful. The industry is well aware of the anger and hostility towards

this practice but use the Forest Practices rules as we now know them to ignore the public and have not backed off an inch in forty years. The first time I ever saw a sprayed unit was over 30 years ago. I was hiking with hound, Ernie. We came to this unit and I walked in a hundred feet or so but Ernie backed out and stayed on the edge watching me. I sat there for ten or fifteen minutes knowing something was not right but not knowing what it was. Suddenly the realization hit me. There was not a bug, a bird, a lizard or living creature of any kind. This recently sprayed Oregon hillside was devoid of life. The Feds stopped spraying decades ago and seem to be growing forests but the industrial managers have been allowed to continue to poison Oregon.

The owner of this clear cut land has a huge exposure to forest fire in the young regrowth timber for at least 15 years in the best site locations. Down in Southern Oregon the exposure, if brush grows in, could be 50 years. One wild fire and it is all gone and back to square one. The best defense against forest fires is the have a good canopy up off the ground 30 or 40 feet, or more. The fire in such a stand would burn on the ground under the canopy. In the forest ownership checkerboard, industrial reproduction stands are sprayed. These industrial stands are chock full full of tinder dry standing dead brush and hardwood among the Fir ready to burn it to a crisp. Wildfire explodes in the industrial reprod but goes to the ground on older stands with a canopy up off the ground but the taxpayers get to pay for the cost of fighting a forest on public and private land both.

Another huge value of a healthy canopy is the effects on water. Rain falling on a canopy runs down the bark and into the soil where the roots carry it deep into the earth. Snow falling on the canopy warms up and melts out of the branches to fall to the forest floor in hard plops that melt slowly in the shade. Rain falling on a clear cut quickly runs off into roadside ditches accelerating the flow of water into muddy streams. Snow quickly melts off a sunny clear cut into the same erosion. The natural ground flow of water into creeks and rivers is interrupted and channeled into a high muddy winter flow and dried up hillsides in summer. We are going to start learning the price of water.

A selective harvest would come into this patch of timber and built some roads to a landing and cut 5 or 10 % of the volume of timber, about one third of the marketable trees on 15 acres. We would harvest approximately 50 thousand board feet and realize a gross of \$35,000. The cost of logging and taxes is still 50% or \$17,500 but the roads are an asset to the tax basis of the value of the property because you will use them over and over again. There has been little or no impact on the real estate value of the property, the value of the useable roads and fixing other access issues adds value to offset the removal of the trees sent to market. The money is made with the trees you do **not** cut. The trees left to grow will reseed perfect trees for this land at no cost to the owner.

The real beauty of this approach is that the trees you do not cut respond to being opened up and rapidly replace to volume of the trees harvested with bigger more valuable trees

with modest disturbance to the ecosystem that quickly heals. Slash and large woody debris will rot and is how soil is made. Snakes, lizards and rodents all feed on the insects that break down the woody debris and the birds of prey live on the reptiles and rodents. The point is that these creatures and the dynamic biosphere they represent is alive and well with no cost to the owners except a little forbearance.

Stop and think about the effect of time on such a managed forest and what that means in terms of the money. If there was a spike in prices for logs to \$1,000 or even \$1500 per thousand the owner with intact stands can take advantage and have logs to sell. **This is where the money is made.** The owner of the clear cut land has given up all harvest options in their lifetime even if they are young men. Let's say the opposite and the price drops to \$150 per thousand, an owner can let it grow until the price comes up. Over time you can realize the \$15,000 to \$20,000 per entry over and over again while the forest regrows the volume taken and the real estate value climbs. What will the value of trees in a forest be in 20 or 30 years? What is the real estate value in 20 to 30 years? It is a choice between money and value. A choice between short term profit and a wasted asset or long term investments that have a steady return and the financial options.

By allowing the forest to grow you can also go to this forest and harvest the other herbs, foliage and flowers of value, poles, building materials and firewood. A landowner can also consider downstream manufacturing of forest resources so they are selling finished products if they knew they had a

dependable source of the raw materials. A landowner can also go there to simply enjoy the place and charge others to picnic and hunt.

There is nothing new or surprising about selective harvest; these methods have been in use for a long time. Why then, does the timber industry prefer the clear cut? It is risky to project what I think onto what someone else thinks. I know selective harvesting requires skilled loggers who know how to fall timber. Shifting to a selective harvest approach would require substantial numbers of loggers thinning over acreage where they can work for decades. Such stability is hard to bully or manipulate. Clear cutting logging is more and more mechanized so fewer and fewer men are needed every year. It keeps workers hungry. One thing about forestry in Oregon, however it is done, whoever does the work and which companies get the wood; the forest will stay right here in Oregon.

### **Solutions:**

All this is fine and good but how can we shift the overall management of our forests so that the mills get the logs they need and the woods are better managed so that we fight less and fish more? After all my criticism it seems only reasonable to suggest some ways we could practically make some improvements. Here is a little brainstorming just to give people some points to think about.

First of all, everyone needs to get something enough that it is worth trying. Everyone has reasonable points and we all

need to get a genuine improvement. The environmental communities need to be heard and the local mills deserve logs. People need both jobs and to be safe in their homes. Oregon's natural beauty is an asset to every home in the state. Landowners of any political stripe respond better to incentives rather than penalties. Log exporters should have big tax penalties to encourage domestic sales so local mills getting the logs they need. Commercial thinning should enjoy big tax advantages and value added forest products should be an incentive priority as well.

End the deeply divided management of Oregon's natural resources between the ODF and OD of F&W by combining them into the Oregon Dept. of Natural Resources. Make Forestry admit watersheds begin at ridge tops and force the agencies to pull together rather than act like they occupy different planets. Both agencies waste money and neither does the public the benefits we expect. I would respectfully suggest you seek the advice of Dr. Jerry Franklin and Dr. Norm Johnson in some of these matters. These two retired forestry professors have some profound insights into how forests could be managed in an integrated manner and are well worth considering.

If you want to restore watersheds return the beaver, nature's dam builder. They build thousands of very effective small water impoundments without an EIS or any paperwork, permits or administrative cost. I think we ought to work to restore the beaver in all our head water streams and make beaver restoration a management priority. The beaver dams slows down the rate of flow in streams, and catches silt. The

water held in ponds perfect for salmon and trout is slowly released into streams all summer long. Their fur is still valuable and is what first drew white men to Oregon.

When you fly over the coast range and you should, when you see the tiny patches and blocks of any older forests they are almost always on some sort of publicly owned land usually managed by the BLM. In this expansive and extensive moonscape of clear cuts these islands of unsprayed genetic diversity are absolutely priceless and need to be protected. These are the fountain heads of the healthy forest biosphere and are in great jeopardy.

Write laws to allow a return to worker owner reforestation crews such as the Hodads, Green Side Up and the Golden Rockets. Local workers and local crews will deliver a much higher level of performance. As a member of a worker owned co-op we made a good living until we elected a county commissioner in Lane County and openly questioned the benefits of spraying and clear cutting in general. The SAIF, BLM and ODF changed the laws and put thousands of young local activists out of business. You might also note that when these local young people could go out and plant the trees to help heal the hills there was much less radical argument and activism in the streets. Earth First did not get off the ground until the co-op work crews were made illegal.

If there are real shifts in the policies and taxation of forest properties the big out of state investment groups or multinational corporations will notice. Since they have cut out a lot of the timber on their holdings they **WILL** sell their cutover

land. I think there ought to be some sort of long term federal loans for the Native American tribes to purchase this land and manage under selective harvest concepts. If they do not own a mill they are not cornered to cut and they can pay off the loans over time as they do harvest. The tribes are not going anywhere and can receive title to the land. Another option would be for communities to have access to money to buy watersheds as land trusts to hold forest lands for the centuries these hills of Oregon will be growing forests. There ought to also be some recognition that families would hold land for generations if there was a legal mechanism for them to own land over centuries.

This dovetails with the current administration's ideas about selling or otherwise releasing Public lands to private entities. If and when this happens it will become conceivable that mature second growth or even old growth be harvested. Few domestic mills buy these big logs but buyers in the Far East do. If anyone is caught selling big nice logs from what was public timber land the penalties ought to be extremely harsh. Seizure of company and personal assets; seizure of lands as well as prison sentences for CEOs and members of the board come to my mind. There are details to be considered but the out of state investment groups bought the land when the previous owners cut it out and sold the replanted acreage and these owners will do the same thing. Think a few squares down the board and create some positive entities to receive this land; it will come on the market.

Go to places where forests have been managed for centuries; places like China and Europe and see how they have done. White Europeans have only been in Oregon for a few generations. Foresters in Scotland, China, Denmark, Germany and Italy have been tending their forests for centuries. You would be impressed by the suggestions they would offer.