CFTM
Committee on Forest Land Taxation Methodology
August 5, 2004
10:00 AM
STC 5CR1 Boise, Idaho

Chairman Watson called the meeting to order at 10:00 AM. Members and guests introduced themselves and indicated whom they represented. Following is a list of those in attendance.

Name	Representing	E-Mail
Larry Watson	ISTC Commissioner	lwatson@tax.state.id.us
Mark Munkittrick	IFOA – CDA	baronflyer@icehouse.net
Phil Davis	Valley Cty Commissioner	pdavis@co.valley.id.us
Dave Ryals	Boundary Cty Assessor	dryals@boundarycounty.org
Stan Leach	Clearwater Cty Commissioner	commissioners@clearwatercounty.org
Steve Fiscus	Latah County Assessor	sfiscus@latah.id.us
Mellisa Stewart	Clearwater County Assessor	mstewart@clearwatercounty.org
Gregory Cade	ISTC	gcade@tax.state.id.us
Rod Brevig	ISTC	rbrevig@tax.state.id.us
Duane Little	Guest	duanelittle@hotmail.com
Don Pischner	Guest/Stimson Lumber Co.	pischcda@aol.com
John Currin	Potlatch Corporation	John.Currin@potlatchcorp.com
Vincent Corrao	NW Management Inc.	Corrao@consulting-foresters.com
Roy Eiguren	Boise Cascade	RoyEiguren@givenspursley.com
George B. Perala	Boise Cascade	georgeperala@bc.com
Dennis Parent	Inland Empire Paper	Dennis_Parent@iepco.com
Scott Gray	Stimson Lumber	sgray@stimsonlumber.com
Mark Benson	Potlatch Corporation	Mark.benson@potlatchcorp.com
Kevin Boling	Forest Capital	kboling@forestcap.com
Daniel G. Chadwick	IAC	dchadwick@idcounties.org
Michael G. McDowell	Kootenai Cty Assessor	mmcdowell@kcgov.us
Dr. William Schlosser	NW Management Inc.	schlosser@consulting-foresters.com
Ron Craig	ISTC	cadist1@direcway.com
Jane Gorsuch	IFA – Boise	jane@intforest.org

Commissioner Watson asked for an acceptance of minutes of the last meeting with miner corrections offered by Mark Benson. It was moved and seconded for approval; the minutes with the minor revisions were accepted unanimously.

Commissioner Watson turned the meeting over to Dr. Schlosser. Dr. Schlosser asked the committee members to take a few minutes to review the material he had supplied in a five-page letter to the CFTM dated August 2, 2004.

Dr. Schlosser asked if we had left the last meeting with the general agreement that the NPV and SEV are an appropriate process to value forest land.

Steve Fiscus responded that the agreement with the method depends on the input variables to the model.

Dr. Schlosser replied, yes, and that is the course of our discussion today.

Mark Benson suggested that the NPV model might not result in a value that an investor would make for property expecting a return on his investment.

Dr. Schlosser added that the code seems to agree with that statement because it directs that forestland be valued exclusive of timber. Idaho Code 63-1705 (2) "The inventory of timber and other forest products growing on large size forest tracts shall not be included as a part of the total forest asset".

Mark Benson added that an investor would not pay the NPV because he would discount the NPV by enough to obtain a return on his investment.

Dr. Schlosser responded that it is possible for one investor perhaps expecting a 12% return on his investment would not be competitive with an investor who would accept a return of 7% on his investment, thus being excluded from the marketplace. He continued that the difference between the SEV and NPV models could be large in instances of low inflation and could have a difference of only a penny if there is a period of high inflation. The other input variables are; rotation, volume, value, and annual costs. He continued; as I suggested in my letter the other point might be the need to set a rotation age at half of the actual rotation age to recognize that not all of the land has mature timber on it. Along with this assumption is the need to recognize that smaller trees mean increased costs of harvest that exist with denser stocking if the stand were to be managed at a young age.

Mark MunKittrick asked if it is important to choose between the NPV and the SEV models or will the magnitude of the difference in the variables make the selection of the model immaterial?

Dr. Schlosser responded that we will need both of the models to work in harmony with one another. We need to calculate the NPV to determine the SEV. He asked if the committee could turn their attention to the discount rate. He discussed the point that inflation impacts the discount rate. In the past we used the Farm Credit System as a basis for the rate. There is also a problem with the prime rate because it is subject to variations determined by the political climate in the nation at the time. On the other hand, Treasury Bills are determined by open market prices and mirror the general economic conditions that can be found in the country at any particular point in time. He directed the attention of the committee to the chart included in his letter that graphs the 10-year Treasury Bills using a five-year average. He acknowledged that there are other proxies that could be used as a basis for the discount rate but he asked the committee to consider this proposal and determine in their minds if it could be an acceptable starting point for the discount rate?

John Currin said that he had done a lot of work on this subject and suggested that the 30-year rate might be a better rate to use than the 10-year rate. The 30-year rate is more reflective of the long-term mindset that timberland investors display than is the 10-year rate. He suggested a second alternative, which would be a rate that is the average between the 10-year and the 30-year rates.

Dr. Schlosser responded that he likes the idea of the average of the two rates. He inquired if the 30-year rate is only published twice each year?

John Currin suggested that since we only set the rate once a year, if the rate is published twice each year there should not be a problem in selecting a rate that would be useful in our calculations. Additionally, if we were using a 5-year average there would be no problem because there would be a lot of historical figures, which could be used in developing the rate.

Phil Davis asked if these two rates would be a reasonable return if taxes were included in the discount rate that is used?

Dr. Schlosser pointed out that the 10-year rate is pretax and that is one of the reasons why it is attractive to use in this application.

Kevin Boling said that his investors don't think of a timberland investment as being low risk.

Dr. Schlosser responded by stating that the treasury bills are not high-risk investments.

Mark Benson asked if we should consider the prime rate more closely?

Dr. Schlosser stated that the prime rate is currently very low and it has been quite high in the past, being as high as 18% in the mid 1980's.

Roy Eiguren suggested that the Farm Credit rate has worked well in the past and could be useful in the future. We should continue to consider it as an alternative.

Mark Benson asked if there isn't a better rate to consider than the 10-year T-bill? Potlatch is a very credit worthy company and he knows that they have been unable to obtain financing for forestry investments at a rate of 5%, which the 10-year T-bills are currently at.

Dr. Schlosser asked if an investor's rate would track the 10-year T-Bill rate over time?

Mark Benson agreed that it would.

Dr. Schlosser asked if it would be appropriate to add an equity risk premium to the 10-year T-bill that would accommodate the difference between the two rates.

John Currin suggested a Beta of some kind could do just that. John mentioned that a Beta is available for the wood products industry, and this figure could be examined for its acceptance in this application.

Dr. Schlosser demonstrated how an equity risk premium (beta) would effect the five-year average 10-year T-Bill average he had charted before. He added 3% and it moved the rates to a current rate of 8% and a high of 15% in the mid 1980's.

Dennis Parent asked if there are other sources for information specific to the forest products industry.

Dr. Schlosser responded that there are a number of rates around and each would have positive and negative aspects.

Mike McDowell suggested that multiple housing rates are plentiful in the market and might have some application for our purposes. Currently those rates are in the 6% range.

Dr. Schlosser responded that the rate of interest is a measure of the credit worthiness of the borrower rather than a strict measure of the viability of the investment. There are all kinds of subsidies that keep the rate of borrowing on multifamily building at a low level.

Mike McDowell pointed out that these types of investments offer a measure of risk just as forestland might.

Phil Davis suggested that the risk found in farming is similar to the risk in raising trees and the Farm Credit System rate continues to provide a viable surrogate for the business of raising trees.

Dr. Schlosser responded that the Farm Credit System rate is not a good rate because there are other commodities included in the rate.

Phil Davis responded that the Farm Credit System is a good rate because it is the best surrogate for what actually takes place with those who have their money in timberland.

John Currin argued that the Farm Credit System only has 1% of their portfolio in timberland investments.

George Perala followed, stating that when he went and talked with the folks at the Spokane office of the Farm Credit System they told him that they stopped making their portfolio rate available because they didn't want it to be used for other purposes.

Additionally, they have now combined the Omaha and the Spokane offices so there is no longer a rate available for an office that is close to our geographic region. The 2032A rate that we are using now is a close proxy for the rate that had come from the Farm Credit System in the past.

Mark Benson stated that there is no insurance available on forestland investments because insurance companies don't want to get involved in the assessment of the risk for forestland investments. There is insurance available for farm crops, or multifamily housing or other types of investments.

Jane Gorsuch added that there is insurance for other crops and commodities but not for forestland.

Dr. Schlosser agreed that the risk profile is different for forestry than for other types of investments.

Mike McDowell asked why there are so many institutional investors going into forestry investments now if it's so risky? They have the capital to go into any investment they would choose. Why are they choosing forestry investments at this time?

Dr. Schlosser suggested that forestry investments tend to be counter cyclical to stock portfolios offering institutional investors greater security through diversity and lowering the overall risks in their portfolios.

Kevin Boling said that for his investor's forestland investments offer an opportunity to buy a hard asset that they own outright. Forestland is a very small portion of their total portfolio so whatever happens to the asset will not impact the overall viability of their portfolio over the long term. Kevin added that rather than beat around the bush about different rates we need to focus on the rate that is being suggested. He feels that the 10-year T-bill could be a viable source for the base of the discount rate but he continues to have reservations about its application.

Mark MunKittrick asked if it isn't a problem to have the rate and the stumpage value opposite each other in the model. While if they run counter to one another they can offset each other, but if they both run in the same direction they can compound each other.

Dr. Schlosser suggested that the NPV model works better than the old model because it has a rate on the top and bottom of the equation so the chance of the differences tending to compound one another are lessened.

John Currin added that in his research he has found that the long-term rates express more confidence on the part of investors than the short-term rates do. If we average the long term and shorter-term rates and use the 5-year average we will tend to moderate these influences. John suggested again that a Beta is available for the forest products industry and we should examine if this Beta would be applicable for our rate.

Kevin Boling asked if it would be appropriate to caucus at this point so that we can determine where each group is at in reference to the equity risk premium that should be used in this discount rate.

Steve Fiscus suggested that their group doesn't have a rate in mind.

Phil Davis suggested again that the Farm Credit System rates do have applicability and should be considered. These rates are in the area of 7 to 7.5%, which seem pretty realistic to him.

Jane Gorsuch argued that the Farm Credit System has stopped publishing their rate. She remembers receiving a letter to the effect that they will not publish their rates in the future.

George Perala added that they have spoken with the Farm Credit folks and they don't want their rate used, so stop asking.

Phil Davis said that he is sure that the rates are available because he knows the folks in the Spokane office of the Farm Credit System and he is confident he could obtain their numbers from them. He said it is a lot better managed now than when they lost all that money on fishing boats in the 1980's. Phil stated that there are good loans and bad loans and which category they are in will make a lot of difference in the rate that is being considered. He asked, what are we looking at?

Dr. Schlosser said that the rates from lenders such as the Farm Credit System are dependent on their experience with individual investors, whereas the 30-year or 15-year T-Bill rates are not influenced by loan defaults. He added 2% to the 5-year average 10-year T-bill rates that he had charted for the committee to continue to analyze these rates.

Vincent Corrao encouraged the committee to remember that the rate has to remain public so that it is accessible to anyone who would want to research the rate and confirm its accurate development and administration. The alternative is a continuing dialogue on the part of this committee into the future.

George Perala asked Dr. Schlosser how property taxes would be taken care of in the model?

Dr. Schlosser responded that taxes are easy to take care of when we get to that place in the model calibration. Taxes can be considered as a portion of the expense or part of the cap rate without much effect on the outcome.

The committee decided to caucus for one hour over lunch to discuss where they need to be in reference to the discount rate that would be acceptable to them. The committee met back again at 1P.M.

Mark Benson said that in the spirit of the caucuses they tried to come up with a rate that should work for them. They feel that the 10-year T-bill rate with a five-year rolling average is realistic as a base rate. The equity risk premium (beta) they would consider is in the 3 or 4% range. They would feel a need to determine what the Beta for the industrial sector would be and that would assist them in determining where they need to be with their suggestion for the equity risk premium.

Steve Fiscus said that their group feels that the base rate should come from the average between the 10 and 30-year T-bill rates. They favor an equity risk premium of 1.9%. They also feel a need to see where the Beta for the forest products sector would be to make a final determination.

Greg Cade said that he was able to do some research over lunch and determine that the 30-year T-bill is no longer marketed they ended in 2001. There is some information on yields for these rates that is still available but they will go away in the future. He added that there are 5, 10 and 15-year rates that are available. There is a Beta that can be examined and he recommended the Robert Morris publication as a good source of information. He said that the advantage of the Robert Morris publication is that it doesn't commingle commodities and conversion facilities in the rate.

Dr. Schlosser asked the committee if the 10-year T-bill with a 5-year rolling average could be used for this application in the opinion of the committee, with either a 3 or 4 or 1 or 2% equity risk premium in the mix.

Mike McDowell asked if there had been a check on resources during the break, and if so what information was determined?

Greg Cade responded that there was an attempt to find resources during the break without much success. There are additional resources that can be researched and the results will be made available to the committee at our next meeting.

Kevin Boling asked Steve Fiscus how long he felt that the rate should be fixed for?

Steve Fiscus responded that five years might be appropriate depending on the volatility in the Beta.

Dr. Schlosser said that there is no justification theoretically to fix the Beta. It should flow with the market so that it can stay sensitive to the market. The Beta is more reflective of the market than the individual investor.

Greg Cade said that the telecoms were at a Beta of 1.9% a few years ago but now they are at a rate of 5 or 6%.

Dr. Schlosser asked that two things be developed prior to the next meeting. First, that the model development be documented and second that the Beta data be developed so that it can be reported on at the next meeting.

Steve Fiscus asked if we could determine whether the tax rate should be included as a cost or as part of the discount rate. While he acknowledged that it might serve a small part in the valuation model it is still important that it be included.

Dr. Schlosser congratulated the committee on being able to refine their positions concerning the equity risk premium over the course of the discussions today. He encouraged the committee to recognize that there is not a great deal of difference in their positions in regard to the level of the equity risk premium.

Dr. Schlosser continued the discussion by introducing the subject of the rotation age. He used the stand table developed from the SVS model constructed by Jim Arney. He had included it in his letter and now displayed it on the screen. He pointed out where the growth rates were in the present code and that they reflected natural growing conditions without the influence, whether negative or positive from management.

Mike McDowell asked; if we are looking at average growth rates wouldn't it be appropriate to look at average cost structures also?

Dr. Schlosser responded that while that is true, we would be getting ahead of ourselves to consider it at this point in time. He asked Dennis Parent if he knew where the growth rates had come from.

Dennis Parent responded that he was very familiar with them because he helped develop them twenty years ago.

Dr. Schlosser asked if the rotation ages he had placed in his letter of 60 years for good, 70 years for medium and 80 years for poor would work for the committee.

Kevin Boling said that he thinks they are pretty close to where they should be.

Mark Benson indicated that he thinks that the current trend is for longer rotations not shorter ones. With the set asides for riparian areas, and buffer strips, he senses that the rotations are getting longer.

Kevin Boling said that historically they used to treat every acre the same. Now they cannot do that. They manage the land carefully giving great attention to how much each acre is going to return to them under a given management regime before it's put into application.

Dr. Schlosser asked if we could get consensus on the 60/70/80 year rotations.

The proposal passed unanimously.

Vincent Corrao suggested that in some regards managed and unmanaged land cannot be compared. We can grow more wood on fewer acres if we manage those acres.

Dr. Schlosser added that if we cut the best and leave the rest the genetics of the stand would be influenced over time. Genetically the stand will get worse.

Kevin Boling added that if you pick around in a stand you will end up managing for grand fir rather than the early seral's that would grow faster.

Steve Fiscus suggested that we want to look for typical management not good or bad management because it is difficult to gain consensus if we argue either extreme.

Vincent Corrao added that he gave Tom Richards the numbers from our forest tax law and Tom confirmed that the growth rates listed in code seems to work.

Dennis Parent suggested that you could grow the harvestable volume earlier if you manage the stand but the volume per acre in terms of board feet doesn't really change with management. You are able to utilize the material earlier in the rotation and shorten your holding period, but in terms of board feet you will not change the volume over the rotation with earlier entries.

Phil Davis said that you could mitigate the fire hazard through management and take some of the risk out of the timber growing business.

Vincent Corrao said that if you get past "custodial" management then you increase the costs and reduce the net income from the property.

There was a general discussion of Irvin Haig and the work that he did in the 1930's in developing yield curves for forestland in Idaho.

Dennis Parent said that the cost for regeneration is about the same whether the stand is planted or regenerates naturally. An argument can be made that the costs can be similar because there is a cost associated with leaving seed trees on the ground until the new stand is established. Additionally, natural regeneration takes longer to get established and the cost of holding the land that additional time contributes to the costs associated with the development of the new stand.

Dr. Schlosser suggested that by agreeing on the rotation length we are also agreeing to the volume that will be produced. Another agreement for the day, no further discussion on this point, we need to move on.

Dr. Schlosser began a discussion on the stumpage values and how they would be generated. He pointed out that using current stumpage values makes sense because we don't have to take into account different ideas about where values might be under different circumstances.

Dr. Schlosser asked that the STC explain where the stumpage values come from under the current administration of the forest tax law.

Rod Brevig explained that the current stumpage values come from a yearly survey sent to all the forest products companies and major forest landowners in Idaho each year. The results of the survey, which includes hundreds of millions of board feet, are compiled and a five-year average is used to determine stumpage values that are used in the valuation process.

John Currin added that the establishment of the stumpage values is the most open part of the valuation process. If there is a problem with the stumpage values it is taken care of during the discussions at the open meeting. John clarified that there is a seven-year time period involved in the process because, as an example, the latest data available for 2005 is 2003 stumpage values.

Dr. Schlosser moved on by starting a discussion of the operating costs allowed in the administration of the current forest tax law. He calculated the allowances for cost in Forest Value Zone 1 and established that the allowance in 2004 was for $24.05 per acre for the Good category, $15.39 per acre for Medium and $6.73 per acre for the Poor category. The cost allowance conceptually would come back to the $18.85 per acre average, which came from the cost study that was done in 1998.

Vincent Corrao said that in working with the original study the problem was with the statistical validity of the NIPF portion of the data sets.

Jane Gorsuch said that her timber committee had discussed the 1998 cost study after our meeting on June 15th. They had decided that they feel more comfortable with the results of the study than she had last reported. She said that the cost of managing forestland continues to go up because of the costs associated with certification and water quality. She suggested that the increasing costs could be documented by a survey sent out every five years by the STC.

Vincent Corrao said that the cost study didn't ask questions that were as specific as Jane is suggesting. If the questions on future surveys are more limited than those in the 1998 survey it would help to generate data that could be easier to analyze and easier to respond to.

Mark Benson apologized for not following the discussion more closely but he wanted to say that he doesn't think that the cost allowance in FVZ 2 from $21.30 for the Good category to $5.97 for the Poor category is realistic.

Vincent Corrao continued that it is very difficult to work with the data set generated from a survey such as the one done in 1998 because the objectives of forestland owners are so variable.

Commissioner Watson asked what the cost of the 1998 cost survey was.

Rod Brevig responded that the overall cost of the survey, which was conducted by Northwest Management Inc. was $25,000, which was evenly split between the STC and IFA.

Vincent Corrao suggested that if we could simplify the questionnaire that is used for the survey to 4 to 6 questions there would be a higher rate of response.

Dennis Parent asked that the survey only be for one year instead of multiple years and the survey be repeated every five years. He testified that it was very difficult to come up with several years' data when it was requested for the last survey. He said that in his mind the response is also likely to be artificially low when several years' data is requested because the tendency is to forget costs rather than add costs, unless of course a person is going to provide a fraudulent response.

Dr. Schlosser suggested that a way to get information for the NIPF sector would be to ask the forestry consultants in the state what the NIPF costs would be.

Commissioner Watson asked if there could be agreement on the components of the model that we have considered today and a vote taken on their acceptance.

Input Variables Considered During the Day

'i' = **discount rate** = (the 5-year rolling average 10 year T-Bill) + Risk Rate (1 to 5%)
n = **rotation length** --- 60 years good, 70 years medium, and 80 years poor
vol. = **volume** in year n --- " " "
value = **stumpage** (process of annual surveys as conducted by the ISTC compared to IDL stumpage values for the same period)
annual costs = survey conducted every 5 years by ISTC of large landowners and forestry consultants as a surrogate for NIPF owners.

Steve Fiscus suggested that he didn't think that the CFTM could agree on these figures until the outcome is determined. He added that these figures seem to be reasonable and that his group is satisfied that the figures are determined by a valid process.

Dr. Schlosser suggested that there has been a great deal accomplished today in narrowing the areas of uncertainty and obtaining agreement on some of the fundamental variables that the model is dependant on.

Steve Fiscus asked if we could establish how we take care of the property tax cost in the model.

Mark Benson asked if the CFTM could give support to the request of Commissioner Watson in memorializing the accomplishments of the day. He moved and Phil Davis seconded that the CFTM has conditionally accepted these figures to use in the model.

Commissioner Watson asked again if the CFTM could memorialize the areas of agreement that were accomplished so that the committee doesn't backslide during the discussions that will take place over the next few meetings. There was a general consensus that these figures were conditionally acceptable.

Greg Cade asked if we should continue to do research on the Beta and see if a figure can be developed with some supporting information for the consideration of the CFTM when they next meet?

Commissioner Watson asked staff to continue this research and provide input at the next CFTM meeting.

Dr. Schlosser asked if he could meet with STC staff in the interim and work on some of the documentation and input variables that need further discussion. STC staff is committed to making themselves available. The next meeting time for the CFTM was changed from August 27th to September 2nd in Boise and the start time for the meeting was changed to 8 AM instead of 10 AM.

Commissioner Watson closed the meeting at 4 PM.