

MINUTES

Jackson Demonstration State Forest Advisory Group

Fort Bragg, CA

April 3 - 4, 2009

Summary

Staff will investigate the possibility of using a CAL FIRE web site instead of Google Groups to host JAG online communications.

The JAG passed a motion to request John to investigate the feasibility of organizing a new redwood symposium.

The JAG passed a motion to adopt the tables in exhibit A of these minutes.

The following motion passed unanimously: "the economics committee recommends the research committee include a focus on research to improve data available to understand carbon budgets in redwood forests and on JDSF."

The JAG approved the addition of Vince Taylor to the economics committee.

The following motion passed unanimously: the JAG requests that the economics committee consider developing principles that guide prudent financial management, including an appropriate secure reserve to survive downturns in financial markets.

Upcoming THPs include Dunlap South, Upper Parlin, and South Whiskey Springs.

The fish ladders have been completed and approved.

Friday, April 3

Advisory Group Members Present:

John Helms, Chairman
Vince Taylor, Vice Chairman
Mike Anderson
Kathy Bailey
Linwood Gill
Mike Liquori
Jere Melo
Forest Tilley
Brad Valentine

Department Staff:

Giny Chandler
Marc Jameson,
Russ Henly,
Helge Eng
Lynn Webb

Meeting Facilitator:

Steve Zuieback, Synectics, LLC

Public:

Lorraine Duff
Ray Duff

1. Call to Order and Introductions

The meeting was called to order at 9:04 am.

2. Review and Acceptance of Agenda

The agenda was accepted as written.

3. Approval of Minutes

The draft minutes of the February 2009 meeting were approved with the following changes: 1) Forrest was present on both days. 2) Page 7, Linwood expressed the opinion that it was not a JAG function to create a growth model. Page 12, Jere was present on the second day. Page 12, Forest needs to be added to the list of attendees at the Economics Committee meeting.

4. Bagley-Keene Concerns

Bagley-Keene is more restrictive than the Brown Act. The Brown Act defines a committee that must be agendized and noticed as 3 members, Bagley-Keene defines it as two. Whether two people have a conversation, or a committee meeting occurs with two people is immaterial. If Brad and Mike have a conversation and Mike turns around and repeats it to John, you now have had a serial meeting and violated Bagley-Keene.

We cannot use email to develop a collective concurrence on an issue. The biggest issue with Bagley-Keene is whether the contributions are evidence or opinion. The whole idea of Bagley-Keene is to avoid ex parte consensus. Consensus should be arrived at in a public forum.

There are two pieces to it: first, dissemination of information. A recommended way to deal with information obtained not at the public meeting is to disclose it at the next public meeting: "I had a conversation with person X, and here is the information we discussed". A second, more difficult issue is defining the point at which exchanges of information and opinions become persuasion toward consensus, which is forbidden under Bagley-Keene.

One way to solve the problem of not everybody being in the same geographic area is to have a phone/video conference line that is open to the public to call into. Everyone including the public is aware of the time and the call-in number, a 10-day advance agenda is posted and the conversation is recorded¹. Recording allows members who were absent but want to vote on an issue to review the conversation so that everybody is operating from the same pool of information.

In contrast, Google Groups does not constitute an agendized event in which the public can join. There is no well defined line in Bagley-Keene of what constitutes a violation. Commenting on a previously posted item in Google Groups is probably erring on the wrong side, because someone reading those comments can be influenced in their decision process. This may qualify as developing concurrence.

Giny expressed concerns over the JAG Google Groups postings she has reviewed. Some of them are clearly comments and therefore push the limits of Bagley-Keene. The BOF protocol is an example to follow, wherein it is a staff function to distribute information and comments to the whole group.

Jere stated he will not participate in Google Groups, and he does not believe it is open to the public.

Communications to schedule and organize meetings is fine. It is content and decision-making that is the issue.

What are the rules on commenting if you have a committee meeting with members that are not a member of the committee? As long as you make it clear that you are commenting not as a committee member but a JAG member or possibly an outside interest, you are OK. Giny recommended the JAG be a little more formal about who sits on a committee, and designate a membership, who will take action and make decisions. The cleanest way for a JAG member who is not a committee member to influence committee decisions is to speak as a member of the public. Whether or not the committee makes any decisions is irrelevant. The members are still going to take the impressions from the discuss back with them as members of the full JAG.

There may be a potential problem if a committee, such as the landscape committee, is too large, i.e. a majority of the JAG. Recommendations from such a committee might as well be made by the whole JAG.

The cleanest way to deal with the Bagley-Keene issue is probably to have a Department site, managed by Department staff, with all the information going through an executive officer. Staff should not censor any contributions but rather rely on JAG members themselves complying with decisional versus informational Bagley-Keene requirements. The executive officer will work with the JAG Chair to determine how much of that information will be agendized and made available for the next JAG meeting. One idea is to have a standing agenda item of ex parte

¹ If a supermajority of the JAG agrees, an agenda item can be added after the 10-day notice is posted.

communications for every JAG meeting. Giny also suggested indexing online postings by author, title and date.

Russ will explore the feasibility of a Department site replacing Google Groups. A good interim solution is when you post material on Google Groups, also make it available to the JAG for the next meeting.

All materials to be discussed at a committee meeting or JAG meeting or JAG meeting must be made available 10 days in advance, like the agenda.

How does the JAG communicate during the process of crafting their own documents? The best solution would probably be to send them to staff and have staff circulate them around. Staff would also be in the best position to edit and consolidate these documents.

Conflict of interest: Material financial interest is the key word. If you as a JAG member vote on an issue pertaining to JDSF that will change the value of your property or business interest, then you have a conflict of interest and need to exclude yourself from the discussions and decisions. This is between each JAG member and the Fair Political Practices Committee. They will respond to your questions although it takes time.

5. Landscape Committee Report

The landscape committee met in Santa Rosa on March 13. There are two sets of notes, from Marc and Vince. The landscape committee has agreed to use ecological principles for forest stand dynamics to support landscape allocations and silviculture to achieve those.

The landscape committee spent considerable time discussing desired landscape allocations and the silviculture that will be used to achieve those.

Under the rubric of natural forestry, the committee identified the type and extent of natural disturbances from east to west on JDSF. On the west side, most natural disturbances tend to be small scale, such as windthrow and mortality, while on the east side you may have stand replacing fires. The idea on the west side would be more of a single tree or group selection harvest. Group selection would be favored on north facing slopes to help regenerate fir stands. On the east side, you would probably have more openings such as group selection and small clearcuts (10 acres or less). Even within the 10 acres there would be some cluster retention within the openings.

These would be the fallback methods for applied research and demonstration associated with harvests focused on maintaining the balance of desired structure conditions, outside the older forest structure zone and late seral areas. Specific research projects would override these criteria if necessary.

The landscape committee continue to discuss criteria for determining when desired future conditions have been reached.

JDSF staff provided a map of adjacent landowners at the request of the landscape committee, to aid in evaluating landowners' objectives in relation to the landscape committee's recommendations. Staff also provided a discussion and justification of table 7 and map figure 5 in the current management plan.

The landscape committee discussed two alternatives for a reserve area around Mitchell Creek, as a transition between coastal pine/cypress and inland forest types. JDSF staff analyzed potential lost revenue and volume for both alternatives. Linwood stated he would abstain from any JAG business concerning this area.

Brad expressed a need for stakeholder and expert input to inform the committee. There was some discussion of research committee input to the landscape committee in order to guide allocation of forest structure classes across the Forest. There seemed to be agreement that the priorities set for research may affect landscape allocation. Conversely, landscape allocation can preclude or encourage certain types of research.

Linwood and John recommended studying the current management plan's allocation to determine how if at all, it needs to be modified to meet research needs, instead of starting from scratch every time.

The issue of a wide variety of seral stages keeps coming up, but a more final determination of amount and types of seral stages for research would be desirable. A key issue for the landscape committee is to determine whether or not to maintain a wide range of structural conditions on JDSF from early to late successional. This should be informed by stakeholders, researchers, statutes and policies.

6. Research Committee

The research committee has reached a crossroads where it needs stakeholder input. Mike discussed some questions regarding stakeholder input: How aggressively should we pursue stakeholder input if a lot of research or management will not take place for a couple of years? How to engage stakeholders? Email or written contact is not ideal. Should we gather questions as we go along and then reach out to experts for answers?

There was some discussion of a new redwood symposium, focused on information needs. A symposium will take 12-18 months to set up. The role of the JAG as a catalyst /collaborator was discussed. The JAG passed a motion to request John to explore the feasibility of setting up a new redwood conference.

There was discussion of the level of specificity of research recommendations, given that JDSF has research programs, the State Forests program has a State-wide research advisory group, and the BOF has a research committee.

The research committee scheduled a field tour of the Caspar Creek study site on Saturday during lunch hour.

There was some discussion of the timeliness of the JAG's process. Brad felt the allocation needs some deeper thoughts. We need explicit principles for allocation that have some basis in science. He does not think we can pass the "red face" test at this time.

7. Blodgett Research Forest

Rob York (forest manager) discussed the management of Blodgett Research Forest, a 4,400 acres property in the Sierra mixed conifer forest type near Georgetown in Eldorado county. User groups include researchers, foresters, teachers and students. Other UC research forests include Baker (80 acres), Russell (280 acres) and Whitaker (820 acres). Each property is generally self-sustaining financially, although loans occur between properties in the short term to even out market fluctuations. Baker Forest is the site of the annual UC Forestry Camp. Much of the research on Whittaker focus on giant sequoia physiology and regeneration.

Blodgett was acquired in the 1930's. About 100 years ago, Blodgett was harvested in its entirety using even-aged methods, typically a seed tree cut, leaving about six seed trees per acre. Even-

aged harvest started again in the 1970's. Some of the third growth stands received a commercial thin two years ago.

The Forest is supposed to be self-sustaining. Largely that has been the case, 90% of costs have been covered through period timber harvest. Harvests reflect application of alternative silvicultural treatments. These alternatives form the basis of their experiments, and are monitored and studied over time.

Research is the number one priority for management of the Forest. Controls are in place and are protected. Monitoring data are collected with research level precision.

Blodgett Forest puts a high priority on collecting and maintaining data, and making it available to researchers. Since the inception of Blodgett Forest, they have had a 400x400 feet square grid across the Forest, consisting of 1/10 acre permanent plots. In places, the grid is intensified in areas where additional information is needed for research purposes, typically to 200x200 feet. The system is stand-based in the sense that the stands were delineated before the grid. A plot was identified in each stand from a random starting point in the stand, and the grid was established from that plot. Stands have changed over time, but the grid obviously has remained fixed.

Vegetation monitoring: all plots were measured initially at the same time (over a period of about 10 years). Approximately two percent of the total area of Blodgett Forest (sampling intensity, not sampling frequency) is sampled every 5 years in managed stands or 10 years in reserve stands.

Height is measured on every tree with clinometers. Age is not measured except for site estimation. Understory species (presence/density) and canopy cover is measured on every plot. Precision and measurement error is checked through quality control remeasurement on some plots the year after the first measurement.

Wish list: he would have preferred some well-placed stem maps, larger plots on the order of 2 acres (for tree demography), where each tree is located spatially. Also a long term commitment to database maintenance would have been preferred.

Their database includes vegetation, wildlife and weather data. The cost of inventories, measuring data and maintaining the database, costs somewhere between \$45,000 and \$60,000 per year.

Most research is applied forestry research, applying to forest management in a working forest.

Blodgett Forest have established guidelines for allocating the Forest management alternatives, but they avoid hard target at the stand level. Generally, silvicultural decisions are driven by both stand level criteria and forest wide goals. Land allocation between management alternatives for Blodgett:

40% is even-aged management. They disturb the landscape with primarily clearcut or shelterwood, to create a variety of age classes over time. They manage with area regulation. Within even-aged areas, they have two categories: 1) clearcut/young growth reserves. These are subject to final harvest but no other follow-up treatments until the next final harvest. 2) Intensive management. These are subject to a variety of silvicultural treatment throughout the life of a stand, such as thinning or vegetation control to meet certain objectives of growth and yield, typically maximize long term productivity. Clearcut reserves serve as experimental controls for the intensive management areas. After 10 years, 80% of the growing space should be occupied by vigorous conifer seedlings, 10% hardwoods and 10% understory shrub. This is followed by precommercial and commercial thinning. Roughly 65% of even-aged stands are clearcut reserves. A 90-year rotation age is the basis for their planning and harvest scheduling. They have not reached that age yet of course.

40% is uneven-aged management. They do not use maximum diameter as a regulation tool, but rather create small openings, in about 10% of the area every 10 years, resulting an approximate 100-years rotation. The decision to harvest trees of different size classes is based on an evaluation of what areas are over- or under-represented by certain size classes. He often leaves the large trees because they are under-represented. About half of the area is single tree selection, half is group selection. The density of the stand is the primary criteria for making decisions on cutting cycle and harvest intensity. Ten year is a common return interval. Group selection is more area control in which 10 percent of the area is converted to openings every 10 years resulting in an effective 100 years rotation.

About 20 percent of Blodgett Forest are reserves that are either in a late seral condition or late seral recruitment status. The reserves are not managed and do not rotate across the landscape. They are fixed areas, fairly well distributed across the Forest. They serve as controls on the managed stands. They are untouched except they suppress fire. Average size is 40 acres. They range from 5 to 70 acres.

Research is the top priority, recreation is a second priority. Most adjacent land is US Forest Service, which absorbs a lot of the recreation demand. Forty-five % of publications have come from research on even-aged stands, 32% come from uneven-aged stands, 22% come from reserves.

What would be the effects of a hypothetical change in silvicultural allocation on Blodgett Forest to 100% uneven aged management? From a research perspective, their clientele would change from large landowners to small landowners. Economically, we do not know whether one or the other is consistently superior economically. Research suggests they are comparable.

What would he have done differently if he could start over? He would have preferred a more equal acreage distribution of even aged, uneven aged and reserves, in order to maximize experimental efficiency, and create diversity. As a researcher, he wants a diversity of treatments and forest structures, so he can detect differences between them. In terms of applicability, he also wants to represent the broad range of structures that exist across the landscape.

What are the successional stage / forest structure implications of the management objectives at Blodgett Forest? Outside the reserves, they aim for a maximum tree age of 90-100 years before they are rotated. This is a balancing act between the desires of researchers at any time, and the revenue and infrastructure needs of the Forest. If there is demand for a longer rotation that suppresses revenue needs, they will need to compensate for that somehow.

Outreach: they have an advisory group. They are also exploring the possibility of having an extension advisor at Blodgett Forest. They have an open house every year.

What are the characteristics of a world class research forest? Doing research, and publishing the results. Having high quality data, and making it available to researchers. Blodgett Forest has a detailed proposal form that prospective researchers need to fill out. It is evaluated by the forest manager and a panel of faculty members. Establish a priority of use, balancing different research projects, outreach and recreation.

Is all harvesting done in the context of research? Every harvest is a part of the overall experiment of management of Blodgett Forest. But every timber harvest operation does not have a specific principal investigator for a study. What data is collected for routine timber harvesting? The THP is a very good record of what is going on. Any time they do something that influences vegetation on the Forest, they complete a treatment and activity report which constitutes metadata for their research and management. Data include what occurred, the time it took to complete, etc. They get most of their data from the permanent plots, and they measure the permanent plots within harvest areas before and after harvest.

How proactive is Blodgett Forest in setting the research agenda for the Forest / do you react to proposals as they come in or do you make an effort to facilitate between researchers and the community to set research priorities? They consider all projects that come in. There is some networking between Forest staff and other professionals. Professional staff brings this forward to faculty researchers for their considerations. This is an informal process. Blodgett Forest has an internal research program in addition to UC faculty. The staff initiates some research.

Current priorities include managing for species composition and how it influences carbon, water yield and quality, fire resistance versus carbon sequestration, biomass utilization, how different management alternatives might interact with a changing climate, species invasions and their interactions with a changing climate.

Would you like a bigger Forest or more money to manage the existing Forest? He would like a bigger Forest. They are restricted to stand level studies due to the modest size of Blodgett Forest. He would like to be able to do landscape level studies, and have more replications of existing studies.

How is your funding structured? They operate a year in advance. The operating expenses for this year were generated last year. In difficult financial times, they have the ability to scale back costs quite a bit without having to lay off staff. Options include charging researchers directly, increase the rent for researchers staying at the Forest, and research grants. In the past, they have been able to plow all revenues back into Blodgett Forest, but the business model of Blodgett Forest will be tested in the next few years. They have been attempting to build up a disaster recovery fund for when a large scale fire will hit the Forest sometime in the future.

8. Committee Breakout Sessions

Economics Committee:

The discussion focused on providing a tool to inform the Landscape Committee and the JAG of the consequences of alternative land allocations. Discussion centered on a simple spreadsheet model that could take land use data from the existing management plan and add a simple growth and harvest model. Rather than providing exact answers, the emphasis would be on comparative analysis of different land use alternatives.

There was concern over making the model too simple, so that not even a comparative analysis would be meaningful. A fair amount of detail will be necessary to capture the forest development and growth differences between different alternatives that are not very far apart.

Committee meetings adjourned at 17:00.

Saturday, April 4

Advisory Group Members Present:

John Helms
Jere Melo
Vince Taylor
Kathy Bailey
Forest Tilley
Mike Liquori
Mike Anderson

Department Staff:

Marc Jameson
Russ Henly
Helge Eng

Meeting Facilitator:

Steve Zuieback, Synectics, LLC

The meeting started at 8:40. From 8:40 to 9:03 the JAG operated without a quorum.

9. Economics Committee Report

Jere discussed a report entitled "Meeting Report, JAG Economics Subcommittee, March 12 2009". Attendees at the March 12 meeting included Forest Tilley, Vince Taylor, Marc Jameson, Peter Braudrick, Jere Melo, John Nickerson (telephone) and Helge Eng (telephone).

The committee requested staff to provide a summary of staff allocation by program area. In response Marc had provided a summary entitled "Current JDSF Staff Allocation". Overall current budget is 39 percent of what is needed to implement the management plan.

The committee discussed revenue requirements needed to meet the current and desired budget. Two tables were presented showing the amount of harvest volume necessary to meet the desired budget, current and desired (Exhibit A). The JAG passed a motion to adopt the tables in exhibit A.

The committee discussed a cap and trade program as a possible revenue source. The following motion passed unanimously: "the economics committee recommends the research committee include a focus on research to improve data available to understand carbon budgets in redwood forests and on JDSF."

The committee discussed the balance between landscape allocation priorities and the need for revenue generation. The committee decided to construct a simple spreadsheet model to serve as decision support for JAG allocation by enabling a comparison of different landscape allocation alternatives.

The JAG approved the addition of Vince Taylor to the economics committee.

10. Economics of Timber Harvest

Russ discussed a table of BOE historical stumpage values, from 1977 to 2009. The version showing constant 2009 \$ is the most insightful.

Financial reserve/rainy day fund; The FRIF language is vague and the Department has sketchy authority to build up a rainy day fund. The JAG considered a recommendation to the Board that JDSF build up a rainy day fund. The following motion passed unanimously: the JAG requests that the economics committee consider developing principles that guide prudent financial management, including an appropriate secure reserve to survive downturns in financial markets.

There was some discussion of what is the minimum price at which JDSF as a public forest should sell its timber in a depressed market, and the amount of timber to sell in such a market. While recognizing it is not optimal to sell timber at depressed prices, the majority of the JAG supported allowing JDSF to make the determination of what constitutes an acceptable minimum bid and sell sufficient timber to support budget needs.

JDSF needs to demonstrate to the public that they have turned the corner and are in a position to generate cash flow. Other arguments for selling timber in this market included maintaining the local economy and local infrastructure, and maintaining funding for a stable research program over time.

In 2007 when the MWG discussed the IIP restrictions on timber harvest, the intent was to minimize impacts and not foreclose future options. Had they had a crystal ball to foresee the current markets, they would never have agreed on the IIP restrictions. The best thing to do would be to urge the Director to change the IIP restrictions.

There are no other plans in the JDSF pipeline for the short term. The best bet is Brandon Gulch and Camp 3. The IIP restrictions are pushing sales over to the east where there is a lot of fir. It is necessary to reduce that fir to maintain species balance, thus lowering the value of the sale. THPs take a long time to write.

The JAG would like to enhance the image of JDSF in the community. JDSF should be a respected part of the community. We should convey the message that we are putting sales on the market and working hard to bring back stability in the community, supporting jobs and being a team player in the community. Options include presentations to the city council and radio interviews (KZYX).

11. Recreation Committee Report

Solicitations for candidates for the recreation user group task force went out. 16 applications came in, including equestrians, bicyclists, shooters, hikers, general community and OHV users. Interviews will be scheduled in the near future. JAG recreation committee members will be invited to the interviews.

There was discussion of OHV use. OHV use is not illegal in and of itself. OHVs with a tag are legal with a license when used on an open, public road. JDSF has received a letter of concern from Jonathan Ambrose (NOAA Fisheries) expressing concerns over OHV use and its effect on water quality.

12. JDSF Update

Marc discussed timber sales. Dunlap North is approved. Northfork Spur has gone through second review and is approaching approval. The timber sale packages for 14 Gulch and Northfork Spur are progressing through the State contracts process. Pre-sale field tours have been conducted.

Upcoming THPs include Dunlap South, Upper Parlin, and South Whiskey Springs. They will be presented to the JAG (the JAG THP committee will need to send their recommendations to the full JAG at least 10 days before the next regularly scheduled JAG meeting).

The fish ladders have been completed and approved. The Salmonid Restoration Foundation have scheduled their annual Coho Confab at JDSF. It is a 3-day campout during which they have training on fisheries restoration practices. It is traditionally widely attended from throughout the western States, 30-70 people.

Lynn Webb will attend a meeting of the redwood genetics group in May, and the spring meeting of the Mendocino pest and weed management group (JDSF is a founding partner of that group).

Staff is working on Camp 3 monitoring plot installation.

They are looking at areas of the Indian fire that can be used as controls to monitor post-fire development.

Campground maintenance is underway, in preparation for the upcoming season.

Mushroom permits are still selling although late in the season.

Winter road inspections are ongoing. No major problems have been observed.

JDSF prevailed on Mr. Powers to replace the sign on his property on the west side of Road 500. The plans for a third sign on the county road has therefore been abandoned.

Monitoring Plots in Brandon Gulch: Vince suggested monitoring plots in Brandon Gulch to capture effects of late seral silviculture. There was discussion of costs and benefits. One permanent plot can easily cost \$400-500. If someone raised \$10,000 it would go a long way.

13. Next Steps for Making Progress in Work Plan

There was discussion of bringing in outside experts to discuss issues facing the landscape and research committees, particularly the issue of land allocation.

Candidates mentioned included Yana Yalanovich, Green Diamond, Soper-Wheeler, SPI, Swanton-Pacific (Cal Poly) and landowners. John would like to hear from clients regarding the need for and amount of early-, mid- and late-seral forest structures.

A brief discussion of the connection between silviculture and landscape allocation: Vince stated the position that if we are going to rotate stands, he will want to see more of the Forest in late seral and reserves. If we are going to manage stands but let some continue to old growth, then he is fine with less acreages in reserves. Mike felt we needed to focus on knowable questions, and he was concerned some of the elements of this evaluation are unknowable.

Some JAG members felt a facilitator is needed for the landscape committee. They keep coming back to the same issues, although progress is being made. There are many simultaneous conversations.

14. Other

Marc led a sub-group of the JAG on a field tour of the Caspar Creek study.

The meeting adjourned at 12:30.

Exhibit A

JDSF Advisory Group

Economics Committee

Question 3 from the Work Plan: "What revenue requirements are needed to meet the desired budget?"

Given Information: JDSF staff estimates that the revenue requirements to implement the Management Plan, as adopted by the Board of Forestry, are about \$5.974 million. For the purpose of this table, revenue requirements are rounded to \$6.0 million.

Given Information: The Management Plan provides for a timber harvest of between 20 to 25 million board feet (MMBF) per year, not to exceed 35 million board feet (MMBF) in any single year.

Assumption: JDSF is directed to cover its costs by raising revenues. The primary source of revenue has been the sale of timber. For a number of years, while JDSF had an active timber sale program, the basis of bids was for a single price per thousand board feet (MBF), regardless of species. This allows for a simple calculation to show the relationship between a level of harvest, based on the bid price for timber, to raise \$6.0 million.

This table reflects the Economics Committee understanding for a full budget to implement the Management Plan as adopted by the Board of Forestry:

<u>Bid Price. \$/MBF</u>	<u>MMBF to Raise \$6.0 million (1)</u>		
\$50	120	million	board feet
\$100	60	"	"
\$150	40	"	"
\$200	30	"	"
\$250	24	"	"
\$300	20	"	"
\$350	17	"	"
\$400	15	"	"
\$450	13	"	"
\$500	12	"	"
\$550	11	"	"
\$600	10	"	"
\$650	9	"	"
\$700	9	"	"
\$750	8	"	"
\$800	8	"	"

This table reflects the current budget for fiscal year 2008-2009:

Stumpage price, \$/MBF	MMBF to Raise \$2,331,4239 (Current Year's Budget)
100	23.3
150	15.5
200	11.7
250	9.3
300	7.8
350	6.7
400	5.8
450	5.2
500	4.7
550	4.2
600	3.9
650	3.6
700	3.3
750	3.1
800	2.9
850	2.7
900	2.6
950	2.5
1000	2.3

(1) Timber volumes rounded to the nearest 1 million board feet to match the JDSF Management Plan harvest numbers.