



Jan. 24, 2013

Mr. Richard Morrill

Baxter State Park

64 Balsam Drive,

Millinocket, Maine 04462

Dear Rick,

Glad we could talk over your needs for financial analysis at Orono the other day.

I offer this note as an initial sketch of a workplan and budget for the project. The outline suggests flexibility as time needed for some of the tasks is not readily predictable in advance. The options presented should give you a way to set priorities. I attach at the end a list of background on myself for the information of others who may not be familiar.

Your basic question is: “What has been the return on investment” of the SFMA over its lifetime? Put another way, “has it been profitable?”

This question needs some unpacking and defining in order to provide useful answers. We noted some of those in our chat last week. “Return” can be defined in purely financial terms, and there is reason for this, as the operation does need to sustain itself financially. But the wider goal of the SFMA was to demonstrate sustainable management practices. Presumably it is meant to demonstrate management for *private* owners, especially given that over most of Governor Baxter’s career, and at the time of donation there was little *publicly* owned forest land in Maine.

Pro Formas as if Private

Hence, it would be sensible to develop pro forma balance sheets and income statements for the SFMA *as if it were a privately owned property*. This will of course involve some re-formatting of existing accounting data and will entail numerous

assumptions. The Authority's accounts, its management plan, and records of past investments in roads and structures will be employed. Rough assumptions concerning valuation of the timber assets and depreciation on long-lived depreciable assets will be needed. Based on this analysis, a number of metrics of investment performance will be calculated. Depending on data availability, it may be possible to show this on an annual basis and assess volatility of returns as well as the longterm picture.

A stylized analysis for the period since active management began on the SFMA will be done. Note will be made of exceptional aspects of that period that would affect the outlook. Further, the timber analysis and projections in the Management Plan will be reviewed to highlight issues in future that could affect interpretation of the results.

A useful outcome of this process could be a "crosswalk" that would enable the production of updates of this pro forma at any time. Further, it should be possible to indicate how financial performance results have been affected by various factors, including stumpage markets, operating costs, needed investments in infrastructure, and other factors.

Benchmarking

To assess the relevance of the BSP's experience as a demonstration forest, some at least rough comparison with similarly situated private lands is unavoidable. One benchmark would be the annual returns component of the NCREIF index, a widely used barometer of performance for TIMOs. This indicator includes properties nationally, and there is no good component for the Northeast. Also, using existing data, it should be possible to compare volume of harvests with regional levels. Such methods, however, do not yield much insight into why any differences exist.

For management reasons, it would be desirable to be able to benchmark SFMA against managed properties of similar size and traits in Maine. This should allow for comparisons of both income generation per acre as well as costs. The SFMA has fairly generous provisions for reserves and water protection buffers. This need not affect comparisons as we can compare the managed land area of SFMA to managed land area of similar private lands.

The challenge here is to find owners willing to share information. Some of the best "comps" are unlikely to do so. Comparing capital investments in roads, bridges, and structures would pose difficulties, but these can be handled if properly presented. It may be necessary to work with appraisers and others able to supply general averages, and this would be at a cost. But unless some effort at benchmarking is made, the SFMA's data will sit in a vacuum and it will be difficult to draw useful conclusions.

Learning from Others

Trust lands in other states and areas have been faced with the same question: are we profitable? This is often the case for lands in the West whose revenues are dedicated by law to schools or other public purposes. In several instances (Idaho and Montana)

these issues have been studied for forest lands or are regularly tracked. We will pursue due diligence on this issue to learn best practice methods from others who have examined the same questions.

Tasks and Schedule

An early trip to Millinocket to meet with key staff, review the existing accounts and operation history, and identify loose ends will be needed. This can be combined with a field trip to view the land and recent operations.

Analysis of the financial data in a Pro forma format can begin promptly with the existing information and be revised and updated on review and availability of additional data. I expect this will entail several iterations over a period of months.

The next step would be benchmarking. This can be initiated immediately.

Depending on when we can set our initial meeting to review data and options for exploration, and depending on completion of data issues, this work can be completed readily by the end of the summer. Earlier completion of specific modules will be possible.

At the end of the project a briefing can be scheduled at a suitable location to review results with interested staff and others.

Budget

To estimate in advance the time needed to conduct the above work is difficult, and risky for both parties. I suggest we talk some more about the details of work to be done, and I would like to talk to several potential suppliers of benchmarking data to get what it would cost us before we decide on that one way or the other. I have a hard time seeing how the above could be done for any less than about 12 days work, counting travel time. I would be happy to barter the closing briefing for, say, two nights stay for 2 in the Park. At \$500/day, plus, say \$1500 for travel and expenses, this would total \$7500.00, not including whatever we may need for appraiser advice on benchmark costs/revenues.

I hope this proposal provides a basis for us to work together to design a project that works for the Authority. I am pleased to be asked to assist you in this important work. Perhaps after you have considered this e can talk over any changes, and look at time windows suitable for a visit to Millinocket and signing of the formal papers needed.

Sincerely,



Lloyd C. Ireland, President

Scientific Forestry Management Area

Notes on Accounting for Return on Assets

LCI Mar 25

General: I suggest we leave to one side all central office overheads (not fringes, tho) at this stage. Those can be overlaid later if necessary.

I think we both want to keep this simple and practical, minimize time just hunting for figures. If we run into murky areas, make an assumption or estimate that seems reasonable, and document it in a "Remarks" column. We will have much of this and others will want to refine some items in future.

Usually an imperfect way of recognizing and estimating an economically important factor is better than ignoring it, or than burying costs in the wrong places.

But we do want some kind of crosswalk from the existing accounts into a format that will enable us to get the data as straight as may be achieved to yield a reasonable estimate of actual returns, return on investment, and a pro forma that can be compared to other owners' results, public or private. There is nothing wrong with the state's system, it's just not set up to measure profitability.

Timer period for past accounts: I think we've discussed. I'd say don't spend much effort trying to reconstruct older accounts than what you have already done. If desired to go back farther, we can be fine with just the totals, and not account details.

1. Managed vs unmanaged lands.
 - a. Need to think about this a bit more. There may be no one answer.
 - b. We should probably look at costs/revenues per acre of the **managed** forest area.
 - c. Estimate operating costs as if there were no scientific forestry in SFMA. can we estimate the costs of the area if it were managed as

the rest of the Park is? Arguably the costs of the forest management program should not include these.

- d. Then, if we can estimate ©, we subtract that from total costs, which may yield a better estimate of SFMA costs than simply allocating the budget by acres (e.g. Managed v unmanaged)
2. Current Expenses
 - a. We need to get the expense data sorted out to make sure we can develop a realistic estimate of typical **annual** costs.
 - b. We will encounter roads again below, but we need to somehow strip out the investment component (if we can) from annual expenditures.
 - i. In past years, stumpage would have been sold on an unroaded basis – basically trading wood for roads.
 - ii. Currently with CLS operations the same thing basically happens unless we do road building ourselves and then we have the numbers.
 - c. The key objective is to have a good basis for showing that the heavy costs for roads/bridges are largely behind us, and for having a realistic projection of costs in coming years.
 3. Current Operating Costs
 - a. Annual Staff, office expenses, fuel, maintenance etc
 - b. Averages for items like trucks, computers, radios with modest service lives: develop a realistic annual average amount
 - c. Annual maintenance of buildings, vehicles, roads, etc.
 - d. Keep major periodic replacements (e.g. new roofs) in their own category and do not mix with annual items, or separate by some arbitrary definition based on dollar amount.
 4. Long-lived Depreciable Capital – principally buildings, bridges, & similar structures
 - a. Estimated asset values
 - i. Historical cost if available
 - ii. Current replacement cost for estimating future depreciation
 - b. Estimated service lives -- as we'd estimate it.
 - i. May want to consult IRS rules. They have a table.
 5. Non-depreciable Capital: Principally the “road prism” We’ve discussed.
 6. Depletable assets
 - a. The timber. For the moment we will probably not establish a depletion account. Can be done later. But we do want to measure

how the value of the inventory has changed under management and how it will change in future¹

- b. You have the inventory volumes; I'll need to look at the details.
 - i. We may be able to make only the roughest distinctions as to species groups/grades, as we will have limited species details on values. Hopefully we'll have:
 - 1. Spruce-fir logs, pulp
 - 2. Other softwood logs, pulp
 - 3. Hardwood logs, pulp
 - 4. Other, if relevant
 - 5. If we can associate inventory volumes and prices with these kinds of categories, we can then show how the imputed total inventory value has changed.
 - a. This will enable us to show that management has upgraded quality and unit value. An important result of management
 - b. In inventory comparisons we'll want to track fir component if we can, as a reduced fir component has to be valuable (budworm), even if we cannot separately place dollar values on it.
 - c. Also, anything on regeneration status that you have will be valuable to characterize condition of the property, even tho we will not value it financially.
- c. Gravel. Will be the other one. I assume you use your own? But do not sell to others?

7. Taxes.

- a. I propose we rely on our experts on private lands to give us a guesstimate of realistic effective state and federal tax rates. SFMA's could even be lower than some private properties due to their history (can explain later).
- b. For management planning, an estimate on depreciation is needed, but we'll not go into that on the tax side.

¹ A cool thing to do – some other day -- would be to simulate how the inventory would look in 2013 had there been NO management at all. This would yield a true with/without sense of the impact of the management program. Great MS thesis for a modeler.

- c. I'll produce an estimate of what the property taxes would be (TGT) if in private ownership.
8. Outlook – *postpone working on this till above items in satisfactory shape.*
- a. Perhaps we can project 20 to 30 yr out using the Modelling already done. We'll look at both annual harvest and inventory increases in order to capture total return.
 - b. In this we'll want to distinguish future production and inventory on the current landbase from incremental production on the lands that move into the active management category.

For ease of handling, I paste in my recent e-mail --

Thinking about "Total Returns"

One thing you often do in work like we are planning is look for benchmarks. The proposal from Don M is one; Jensen's effort to share data with other NGOs is another.

Nationally, there are two. Now there are many reasons why a national benchmark should NOT be used as a comparison for timber in northern Maine -- the important point here is the concept.

There are two principal national benchmarks, the NCREIF Index, of institutionally managed timber properties, and the FTR index of traded REITs.

I attach examples.

When we looked at your projected returns vs inventory values the other day we were only looking at current returns relative to timber capital.

It is also relevant, though, that the value of the growing stock in the past 20 years has likely increased, and will continue to do so.

So, current cash income is not the only element of return -- improvement in inventory value is also important.

Total Return is a concept combining both. The NCREIF data show this neatly.

(In fact, later, we'll want to compare inventories and see to what extent the gross volumes conceal changes in unit values, e.g. spruce v fir, larger vs smaller wood, etc.)

Now there may be a question as to whether BSP considers itself a total return investor. We can look at the numbers both ways, as the perspective is informative.

It is also probably true that holding more growing stock increases risk. We may only be able to discuss that qualitatively.

I am away most of next wk and will try to have some things for you on the capital side

Several attachments were provided -- not included here.