

Benchmark Comparison Tables – Version 2

This rough design is intended to give an idea of what this comparison might look like. Because of variations in activities and markets over time, multi-year averages may be needed. Filling all rows for all properties may not be possible.

	Benchmark	Baxter SFMA or Enter your property (confid.)	Remarks Please add any qualifying/amplifying remarks to ensure the numbers given are correctly understood. Or attach a note in separate document.												
1.	Managed area % of total	69% in active mgt out of total forested area	19,250ac in active mgt 27,783ac Forested area (no wetland, water, ROW acres) Reserve Area (no harvest) 3,917ac 29,836ac total ownership area												
2	Some measure of haul distance to markets?	Mill 1: 100 miles Mill 2: 60 miles Biomass Mill: 60 miles	Average total haul distance for majority of wood harvested.												
3	Recreation use/Ac	A. \$0.184/Ac/Yr B. 0.03 count of users /Ac/Yr	Estimate of actual annual revenue generated on all 29,836ac. Count of individual users /acre/yr												
4	Some measure of road density	227 acres/Road Mile Mgt Area	See 2012 FMP D.14 85 Miles of road total(includes winter rd)												
5	Annual harvest tons/managed Ac	0.71 tons/acre	13,665 tons (avg harv 2010-2013)/19,250 ac												
6	Some measure of typical harvest practice	<table border="1"> <thead> <tr> <th>MFS Treatment Type</th> <th>Avg % of Total Treated Acres</th> </tr> </thead> <tbody> <tr> <td>Clear-cut Harvest</td> <td>1%</td> </tr> <tr> <td>OSR</td> <td>14%</td> </tr> <tr> <td>Partial Cut Harvest</td> <td>13%</td> </tr> <tr> <td>SW Initial/Intermediate</td> <td>49%</td> </tr> <tr> <td>SW OSR</td> <td>23%</td> </tr> </tbody> </table>	MFS Treatment Type	Avg % of Total Treated Acres	Clear-cut Harvest	1%	OSR	14%	Partial Cut Harvest	13%	SW Initial/Intermediate	49%	SW OSR	23%	MFS Landowner report silvicultural classification system. Using MFS classes, calculated % area of acres treated between 1995 and 2013.
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7	Some measure of % area harvested annually	3.31% of managed area/yr 2.29% of total forest area/yr	636 ac/treated/year												
8	Average annual revenue per ton or cd	\$25.00/cord \$11.50/ton	1998-2013 revenues/harvest volume (2.18 Cords/Tons conversion)												
9	Average revenue / Ac/Yr.	\$10.11/managed acres \$7.04/ forested acres	\$195,160 avg net rev/19,250ac \$195,160 avg net rev /27,783ac												
10	Capital costs/ Ac/Yr.	\$1.39 Ac/Yr	\$26,832 Depreciation/Yr /19,250ac												
11	Facility maint. Costs / Ac/Yr.	\$2.01Ac/Yr	\$38,787 Yr /19,250ac												
12	Management costs/ Ac/Yr.	\$9.28 Ac/Yr	<table border="1"> <thead> <tr> <th></th> <th>Total Cost</th> <th>\$/Mgt Ac</th> </tr> </thead> <tbody> <tr> <td>Annual Exp</td> <td>\$ 30,041.00</td> <td>\$ 1.56</td> </tr> <tr> <td>Staffing</td> <td>\$ 148,556.00</td> <td>\$ 7.72</td> </tr> <tr> <td>Total</td> <td>\$ 178,597.00</td> <td>\$ 9.28</td> </tr> </tbody> </table>		Total Cost	\$/Mgt Ac	Annual Exp	\$ 30,041.00	\$ 1.56	Staffing	\$ 148,556.00	\$ 7.72	Total	\$ 178,597.00	\$ 9.28
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13	Average net revenue/Ac/Yr	-\$2.59/Ac/Yr	Still working on the revenue side and categorizing expenses here, number likely to change in the + direction.												
14	Staff FTE per acre	2.25	Based on total staff time spent on management activities within SFMA.												

Immediate Objective: Benchmark v. 1.0

An exercise like this can be made complex and difficult, or it can be made straightforward. We hope it can be made straightforward, and that its value can be assured by

clarity in what and how we are measuring. When you've never done something before there will be gaps, weaknesses, and qualifications. Probably this effort ought to be seen as version 1.0 of a potential ongoing series of upgrades to be made at suitable future intervals. So, will our results be open to questions and criticism? We're sure of it. We understand that a lot that's important does not get measured in this way, and we will be clear on that in summarizing the information.

Comments on Benchmarks

Making precise comparisons on many of these benchmarks will be difficult. What we will need will be explanations in cases where answers are ambiguous, where they rely on management judgments instead of primary data, or for other reasons.

1. Area on which timber management is generally practiced compared to total land area of property.
2. Road haul distances to the 2 mills who are generally the largest buyers of pulp and logs, and the largest single buyer of biomass. Please do not include nearby woodyards as those still must haul to the end users.
3. Recreation use per acre – we recognize a need for judgment here. Perhaps some owners will be able to supply number of campsites or some such data as a proxy.
4. Measure of road density. We'd say miles of all weather road per acre of property might work.
5. Annual harvest per acre. Give in tons or cords, some standard unit. Separately for solid wood vs biomass. On this, the more detail the better
6. Measure of typical harvest practice. This may best be done in a brief bullet list instead of boiling to a single number. SFMA figures based on MFS landowner report harvest categories.
7. Percent of area harvested annually. By silvicultural practice would be best. Percent of managed area.
8. Average Revenues per unit of wood. We will ultimately want to compare using some overall aggregate, per acre and per ton or cord. The more detail we could have on the composition of cut by species/product the more we'll be able to understand differences in revenue generation. These would be wood sales net of harvesting or other service costs, and road tolls if any. Or, stumpage fees if managed in that manner.

9. From above getting to average revenue per managed acre should be straightforward.
10. Capital costs/ A. This would primarily refer to all weather roads, but bridges, major culvert replacements, and buildings would be involved. If depreciation estimates are routinely developed, we would be interested to see summaries.
11. Facility maintenance costs this would include roads and buildings.
12. Management costs. This would be annual management costs for staff, contractors, and identifiable direct expenses. I'd say we are looking at "plant-level" costs here, not overall organizational overhead.
13. Net revenue per managed acre. This would just be revenues minus expenses. We may want to compare some version of EBIT (before depreciation).
14. Staff FTE per acre. We think boots on the ground is an important measure of attention to detail in silviculture and management. This is less a cost concern than a quality question.

Time Periods for Analysis

The past decade has seen huge variations in harvests and revenues per cord for SFMA; we suppose others have seen the same. The Park does not have strong accounting records, electronic and formatted in ways we can use, on SFMA earlier than about 1998, and so we rely on these more recent years. We recognize that some management programs being benchmarked are more recent than this and so will need to be very flexible on this. Naturally, as close to calendar 2013 as we can get would be good.

Allocations of Cost to Forest Management vs Other Activities

BSAP has prepared estimates of its management costs and depreciation, estimating those items reasonably allocatable to the timber management activity in contrast to other tasks. We expect that few organizations maintain time sheets allocating time to tasks, but we do believe that managers would be able to make plausible estimates based on experience.

Notes on Initial Conditions

The SFMA has been under increasingly active management for some 30 years, though with a bumpy start for the first decade or more. As of 1980 the forest had seen little

harvesting in decades. Active management began in the wake of a budworm outbreak, and was largely unroaded in 1980. Management was initiated at a time when wood demand was strong. Especially for more recently initiated projects, initial conditions probably differed markedly from these. In order to set clear context, we would like a brief set of bullets characterizing the principal points, the more specific data the better. This may not lend itself well to a standard data sheet but if desired we can try to develop one.

Policy and Financial Variables affecting management policy

In addition to a property's initial conditions at the onset of the current management system, policy goals and objectives will vary across the properties being compared. One proxy is "managed area as percent of total" but this probably does not fully convey the needed context. Brief observations from you on points like this will be important.

Notes on Outlook

What has happened in the past, especially in this recent market collapse, does not necessarily indicate the future. For the SFMA we plan a brief look at projected timber outputs and at least general observations on the financial outlook. In your case, if there are major foreseeable changes in any of the benchmarked items that rely on past records, we'd like to know about those in a bullet summary.

Confidentiality

Depending on concerns for confidentiality, we may need to avoid presenting data on time periods for which data are provide in order to avoid tipping identities of comparables. Probably need to think about this more.