## SUPPLEMENTAL MEMO

## SUPPLEMENTAL MATERIAL

DATE OF MEMO: April 18, 2006

TO:

**Board of County Commissioners** 

FROM:

Jerry Kendall/Land Management Division

RE:

ORDINANCE NO. PA 1231 -- IN THE MATTER OF AMENDING THE RURAL COMPREHENSIVE PLAN TO REDESIGNATE LAND FROM "AGRICULTURAL" TO "MARGINAL LAND" AND REZONING OF THAT LAND FROM "E-40/EXCLUSIVE FARM USE" TO "ML/SR" ("MARGINAL LAND WITH SITE REVIEW"), AND ADOPTING SAVINGS AND SEVERABILITY CLAUSES (file PA 04-6092, Dahlen)

LAND MANAGEMENT DIVISION

http://www.LaneCounty.org/PW\_LMD/

Scheduled board date for second reading/public hearing is April 19, 2006.

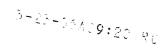
This memo simply provides the Board with copies of letters and emails received for this item after the Board packet was generated on March 20.

Any party may request a continuance to respond to these items, some of which are lengthily and received a day before the hearing.

Please contact me at x4057 if you have any questions or comments.

## Attachments (with date received):

- 1. 3-23-06/letter from M. McMillen—4pp.
- 2. 4-11-06/letter from G. O'Rourke Maggard and S. Maggard—1p.
- 3. 4-12-06/letter from L. Walker—2pp.
- 4. 4-18-06/packet from J. Just, with attachments—113pp.
- 5. 4-18-06/email from C. Bowers—1p.
- 6. 4-18-06/email from S. Wolling—2pp.



Mr. Jerry Kendall Lane County Land Management Division Public Service Building 125 East 8<sup>th</sup> Ave. Eugene, OR 97401

March 22, 2006

Re: Application PA 04-6092

Subject Property: 18-04-24 tax lot 300 (322 acres)

Tax Levy Code 00401

Owner: Karen A. Dahlen Trust

Dear Mr. Kendall,

I am writing to address the application for the rezoning of the above mentioned land parcel from EU /RCP Exclusive Farm Use to ML/RCP Marginal Land.

Last week, Al Gemmel indicated to me that you would be making a new recommendation about this application to the Lane County Board of Commissioners on April 5, 2006. He also said that there would be a new hearing on April 19, 2006. He also presented to me for the first time a letter written by Ralph Christensen. I had not seen this letter before.

I am reentering into the record my letter of February 9, 2005. It includes my concerns prior to this letter. Now, I am entering this letter for the records in response to Ralph Christensen's letter.

In his letter, Mr. Christensen states that "several wells have been replaced in this area which indicates they were clogged from chemical precipitation (including the original Bower well)." As you know, I own that well. The well has been used as proof of a sustainable aquifer. Mr. Christensen has no proven knowledge that this well was clogged from chemical precipitation. We purchased the property with this well in 1987. We began to pump the well in March, 1988. Within one month of moving in, the well was dry. It was sealed and the pump removed. Mr. Christensen had no access to the well. It was pumped for one month. The metal precipitation could not have possibly seeped in that quickly to seal the cracks and reduce the well total yield.

Further, I have since drilled five wells on this five acre parcel, including two this summer, one which was completely dry and the other producing 5 gpm. I have a 1500 gallon holding tank, am the sole user of water in this home and still struggle with water. I try to irrigate the area around my house so that I have a "green belt" in case of fire, which is a real concern in this area.

BCC#1 - 4pp.

Mr. Jerry Kendall Lane County Land Management Division Public Service Building 125 East 8<sup>th</sup> Ave. Eugene, OR 97401

February 9, 2005

Re: Application PA 04-6092

Subject Property: 18-04-24 tax lot 300 (322 acres)

Tax Levy Code 00401

Owner: Karen A. Dahlen Trust

Mr. Kendall:

I am writing to address the application for the rezoning of the above mentioned land parcel from EU/RCP Exclusive Farm Use to ML/RCP Marginal Land.

This proposal must be taken into consideration with application PA 03-5637. That proposal was granted temporary acceptance if contingencies were met. I think they need to be considered together. The only reason for this is that there are several issues that were raised in the first application.

I have enclosed copies of letters that I wrote in 2003. These address my concern about the use of my well as proof of a sustainable aquifer. In fact, there is no viable aquifer, only fissures and streams that can be tapped into and drain other existing wells on the same fissure. I have also enclosed the copies of the forestation application by Ed Moshofsky in 1990. My second letter in 2003 addresses those issues. I have enclosed those as Exhibit A. I would like these readmitted to the current application file.

Further I am addressing issues raised in Lane Code 16.4 (8) (c) (iii) (bb) which address the availability of public and private facilities in the area of the amendment which include water supply. Please review the study of the wells in the area and address the number of well logs that show the many wells that have gone dry.

I read the staff report prepared and available on February 9<sup>th</sup>. I see that the same aquifer study done by EGR and Associates is being used to justify the availability of water for ten acres parcels. Marc Norton, a staff hydro geologist, did notice that there was some information left out about the observation well. That is my well which went dry after two months of living in my home in 1988. Mike Mattick also had some reservations about whether the report met the requirements of the code. The aquifer test must include a storage coefficient. I think someone needs to discuss this with the owners of the wells used in the test. Also noted, is the fact that there should be little or no interference unless wells are drilled close to each other across property lines. What is to prevent that from happening?

Lane Code 16.4 (8) (a) (i) states that an amendment to the Plan justifies the exception solely on the basis that the resource land is already built upon and is irrevocably committed to other uses not allowed by an applicable goal. The logging records indicated that 100 acres were logged in 1990 and reforested by 1994. The county forest department signed off that this was a viable reforestation plan. I think this needs to be researched as mentioned in my earlier letter of last year.

The other concern I have is the potential for the construction of 32 home sites The Dahlen Trust application implies there will be 11 parcels warranted by a deed restriction. The county is not going to support this. Is there a means in which this could be assured? Your footnote states that through the **aquifer study and the traffic impact analysis** there is compliance at the maximum of 32 lot build out. I also noted that you stated that land division approval is not part of the proposal before the Planning Commission. Where will this be presented?

Thank you for your attention to these details.

Martha McMillen 31451 Camas Lane Tax Lot

## Steve Maggard & Gerri O'Rourke Maggard 85782 S. Willamette Street, Eugene, OR 97405 (541) 686-5756

April 9, 2006

Jerry Kendall Lane County Land Management Division 125 East 8th Avenue Eugene, OR 97401

Re: File # PA 04-6092

Subject Property: Map 18-04-24, tax lot 300 (320 acres)

Applicant: Karen Dahlen

Dear Mr. Kendall and Commissioners:

Please accept these comments as public testimony for the April 19 hearing, which we are unable to attend.

My husband and I are probably Karen Dahlen's closest neighbors. Our biggest concern about her proposal to change her land from agricultural to marginal land is future development on land that may not provide adequate water, or worse, may severely impact the water conditions of many of her neighbors.

Indeed, a few of Dahlen's neighbors already have water trucked in due to insufficient water in their wells. We became more concerned after we witnessed repeatedly, a water truck delivering water into Dahlen's property. If she needs trucked-in water, how in the world is she able to request zoning changes to develop her land to house more people with water needs? When my husband and I and a neighbor attended a hearing many months ago, we put that question to Ms. Dahlen and her attorney Steve Cornacchia, who were sitting in front of us. She just shook her head, and we never did receive a satisfactory answer.

Since Karen Dahlen's property was listed for sale in the past, it is only logical that neighbors feel uneasy about potential development and the effects to our water supply, and then, perhaps, no accountability. Yes, water studies were done by the applicant's designee, however, none could be done to refute or agree with the designee's claims of sufficient water.

That water truck could come back to haunt us all, especially if Dahlen's zone-change request for her 300plus acres is granted. And so, we request and urge the Lane County Board of Commissioners to honor Karen Dahlen's request **only** with an 11-parcel limitation.

Sincerely yours,

Gerri O'Rourke Maggard

Stove Maggard

Stove Maggard

Bcc# 2 - 1p.

85861 S. Willamette Eugene, OR 97405 12 March 2006

Lane County Board of Commissioners 125 East 8th Avenue Eugene, Oregon 97401

RE: PA 04-6092, Dahlen Marginal Lands Application

Dear Commissioners:

Ah, dreams of city water! After all, our neighbors on Owl Road have it, why can't those of us south of Blanton Heights have it, too? Extend the Urban Services Boundary and we will all have fire hydrants, green lawns in August, pools, gardens filled with sweet corn and deer -- just like the city folks. According to former Eugene City Council member Nancy Nathanson, it is not going to happen in the lifetimes of most of us (private conversation). We can have our deer, but forget the rest. Why? Partly due to the difficulties EWEB had in piping Blanton Heights. That rock is hard, and the pumping is arduous.

If city water appears in pipelines rather than in tanks on the backs of trucks, those who live on South Willamette will rejoice. Until then, FREEZE the number and size of lots on the Dahlen property. Acreages that will: allow no more than ten home sites on tax parcel 18-04-24 TL 300 are ample. Or, maybe eleven at most.

Anecdotes: several of the Dahlen neighbors, on parcels varying from two to fifty acres or more, have had wells run dry, unexpectedly, usually from July through November. Their household sizes are one to two adults, with no children. They should have wells capable of putting out at least 100 gallons of water per day, all year, on their homesites.

Perhaps anecdotal: In a rural area, south of Salem, approved development plans will permit "building 80 more houses on 215 acres on farmlade where wells are already running dry." (1) That is approximately one house per 2.5 acres. Farmland in the Willamette Valley typically has more available ground water than does marginal such as Dahlen's. If farmland wells, sitting on a supposedly adequate aquifer, run: dry -- why should we expect ample water from wells on marginal, drouthy lands -- marginal lands where the experiences of suddenly dry wells are common?

BCC#3-2pg.

(Continuation of comments on PA 0426092, Dahlen Marginal Lands Application.)

Those of us living between Spencer Butte and W. 52.St. are not sitting atop gravel beds such as those at the lower elevations of Eugene. Our water is found in cracks in the basalt, not in layers of river-fed gravel beds. We can not even grow tree species that need abundant water, such as tulippoplars on our properties. We do well with hardy, deep-rooted drouth-resistant oak trees such as Oregon white and California black. If thirsty tree species do not thrive on much of the her wells, located on fractures in basalt, not in gravel beds?

(1):1000 Friends of Oregon Newsletter. Spring 2006. p.l.

D. e. waller

Luise E. Walker



04-18-06A11:24 RCVD

#### Goal One is Citizen Involvement

Lane County Board of Commissioners 125 East 8<sup>th</sup> Avenue Eugene, Oregon 97401

March 28, 2006

RE: PA 04-6092, Dahlen Marginal Lands Application

Dear Commissioners:

The Goal One Coalition (Goal One) is a nonprofit organization whose mission is to provide assistance and support to Oregonians in matters affecting their communities. Goal One is appearing in these proceedings at the request of and on behalf of its membership residing in Lane County. This testimony is presented on behalf of LandWatch Lane County and its membership in Lane County; the Goal One Coalition; and Lu Walker, 85861 S. Willamette, Eugene, OR 97405 and Jim Just as individuals.

#### I. Introduction

This proposal is to amend the RCP map to redesignate 320.49 acres of land from "Agricultural Lands" to "Marginal Lands," and change the zoning of that land from "Exclusive Farm Use 40" to "Marginal Lands (ML)." The applicant proposes that the subject parcel be subdivided into only 11 parcels following the approval. However, if the applicant could demonstrate that all adjacent property was zoned non-resource, could qualify for re-designation to Marginal Lands, or was otherwise designated for other than resource use, it is possible that 32 10-acre parcels could be developed on the subject property. The applicant proposes to limit the number of potential parcels by deed restriction to 11 parcels until such time as the subject property is included within the Eugene urban growth boundary.

The subject parcel is identified as 18-04-24 TL 300. It is located approximately ½ mile south of the Eugene city limits, west of Willamette Street. The subject property is adjacent to parcels zoned Impacted Forest (F-2) along its southern, northeast, and western boundaries. At the northwest boundary, two adjacent tax lots are zoned Marginal Lands (ML). The 67.16-acre 18-03-19 TL 1300 is adjacent to the subject property along its eastern boundary and is also zoned ML.

#### II. Applicable criteria

The criteria for the designation of marginal land are set out in ORS 197.247 (1991 edition). Because the provisions being applied are provisions of state statute, no deference is due or will be given to local interpretations of ORS 197.247.

A. "Income" tests: ORS 197.247(1)(a)

ORS 197.247 establishes a two-part test for the designation of marginal land. Any proposal for a marginal land designation must first comply with the "income test" requirement of ORS 197.247(1)(a), which requires that the applicant prove that the subject land was not managed, during three of the five calendar years preceding January 1, 1983, as part of a farm operation producing \$20,000 in annual gross income or as part of a forest operation capable of producing an average of \$10,000 in annual gross income over the growth cycle. <sup>1</sup>

## B. "Parcelization" and "productivity" tests: ORS 197.247(1)(b)

The second part of the marginal land test contains three options. ORS 197.247(1)(b)(A) and (B) are "parcelization" tests, which look at parcel sizes of adjacent and nearby lands. ORS 197.247(1)(b)(C) is the "productivity" test, which requires the applicant to demonstrate that the land is predominantly comprised of soils in capability classes V through VIII and is not capable of producing 85 cf/ac/yr of merchantable timber. The applicant has elected to apply the "productivity" option of the second prong of the marginal lands test.

ORS 215.327 and LC 16.214 require a minimum parcel size of 20 acres if the parcel is adjacent to land zoned for farm or forest use that would not qualify as marginal land, and otherwise require that parcels be at least 10 acres in size.

## C. March, 1997 Supplement to Marginal Lands Information Sheet

Lane County has promulgated a document entitled Supplement to Marginal Lands Information Sheet dated March, 1997. This document does not establish legal standards or criteria and is not legal authority for interpretation and administration of ORS 197.247. Rather, the county must directly apply the statute itself. As LUBA has explained, Lane County guidelines not incorporated into the county's comprehensive plan or land use regulations do not substitute for the actual analysis required by applicable state law. Johnson v. Lane County, 31 Or LUBA 454 (1996).

#### III. Soils Report

A "Dahlen Property Soil Report" (Report) has been submitted into the record. The Report was prepared by Mr. Stephen Carnuana, an agronomist whose professional experience includes 15 years with NRCS as a Line Officer and a Staff Specialist (Soil Conservationist, District

<sup>&</sup>lt;sup>1</sup> ORS 197.247 (1991 edition) provides, in relevant part:

<sup>&</sup>quot;(1) In accordance with ORS 197.240 and 197.245, the commission shall amend the goals to authorize counties to designate land as marginal land if the land meets the following criteria and the criteria set out in subsections (2) to (4) of this section:

<sup>&</sup>quot;(a) The proposed marginal land was not managed, during three of the five calendar years preceding January 1, 1983, as part of a farm operation that produced \$20,000 or more in annual gross income or a forest operation capable of producing an average, over the growth cycle, of \$10,000 in annual gross income.

<sup>&</sup>quot;(b) The proposed marginal land also meets at least one of the following tests: "\* \* \*

<sup>&</sup>quot;(C) The proposed marginal land is composed predominantly of soils in capability classes V through VIII in the Agricultural Capability Classification System in use by the United States Department of Agriculture Soil Conservation Service on October 15, 1983, and is not capable of producing fifty cubic feet of merchantable timber per acre per year in those counties east of the summit of the Cascade Range and eighty-five cubic feet of merchantable timber per acre per year in those counties west of the summit of the Cascade Range, as that term is defined in ORS 477.001(21)."

Conservationist, Salmon Recovery Officer) and 11 years as Principal of Agronomic Analytics, a firm which provides consulting services to private and government entities.

Mr. Carnuana performed field examinations of the subject property in August, 2005. The investigation included soil sampling across the property (p. 2). A total of 19 auger and backhoe pits were dug to a maximum depth of 60 inches or until bedrock was reached (pp. 11, 15-16). The published Soil Survey of Lane County Area, Oregon (Soil Survey) is a 2<sup>nd</sup> order survey (p. 9). Insufficient sampling was undertaken to map the soils to the level of a 1<sup>st</sup> order survey. Areas without tree cover were generally not sampled although higher forested areas mapped as Ritner and Witzel were sampled (p. 10). Sampling was concentrated in areas mapped by the NRCS as containing Witzel, Chehulpum, Steiwer, Pengra, McAlpin and Dixonville/Philomath Hazelair complex soil units (pp. 9-10).

The Report states that revision of the existing soil mapping units was beyond the scope of the survey (p. 14). The Report concludes that texture and stoniness in the field were as reported in the *Soil Survey*, although considerable variation from published soil depths was found. The greatest variation noted was in the Steiwer and Chehulpum series, both of which were generally found to be much deeper than the published values, and the Witzel soils were found to be at the shallow end of the expected depth range (p. 15-16).

The Report concedes that "[n]o estimates are made in this report on the value and possible returns that could be expected with modern timber management." (p. 16). The Report made no attempt to map soils by site index or to provide equivalent measures of potential forest productive.

The Report does not assert or establish that the soils on the subject property are not capable of supporting merchantable tree species, including ponderosa pine, or of being managed for timber production. The Report noted that certain soils within the open areas are unrated for timber production; that other soils are rated but are currently without appreciable tree growth; and that the observed pattern of vegetative cover has been influenced by both natural and manmade influences (p. 11). It is well established in law that the lack of a rating in the Soil Survey says nothing about potential productivity. The absence of a rating means nothing more than adequate information regarding forest productivity was not available when the forest productivity tables were produced.

The Report addressed silvicultural requirements for Douglas-fir, noting that Douglas-fir grows poorly on shallows soils, germinates poorly in grassy, overgrown areas, as is especially subject to lethal conditions on hot, dry sites (pp. 11-12). Shallow soils, prevalence of grass and hot, exposed sites present management challenges that can be and are successfully addressed by generally accepted management practices, including species selection, herbicide application, and shade cards. Southern slopes are common in forested areas in Oregon – every hill or mountain has one. While a southern slope may present management challenges, it does not preclude successfully growing trees. On south-facing slopes, where seedlings may be damaged or killed

<sup>&</sup>lt;sup>2</sup> <u>The Woodland Workbook: Reforestation</u>, "Successful Reforestation: An Overview," Oregon State University Extension Service, EC 1498, April 2002, p. 2-6. See Exhibit 13.

by intense sunlight and heat, shading the seedling's lower stem with shade cards (available commercially or homemade) can improve seedling survival.<sup>3</sup>

The *Report* concludes that the large open, grassy areas of the subject property, especially on the hillsides with south and west exposures, are "severely limited for the propagation and survival of desirable tree species" (p. 12). However, the Report identifies and considers only silvicultural requirements for Douglas-fir; other species are not considered. Ponderosa pine thrives in areas and on sites where Douglas-fir does not.<sup>4</sup>

The data shows that the slopes are in fact deeper than typical. Forest managers manage for grass competition and southern exposures regularly and successfully. Even were the *Report*'s conclusion to be supported by data in the *Report*, the conclusion does not refer or apply to ponderosa pine.

The *Report* confirms the accuracy of NRCS data. It does not provide any data or conclusions that would contradict the published productivity data for the Philomath soil units for ponderosa pine, or the on-site ponderosa pine productivity data for the Philomath soil units on the subject property produced by the applicant's forestry consultant.

The available objective, quantitative data establishes that Philomath soil units, on the subject property as elsewhere, have a 100-year site index for ponderosa pine of at least 104 and productivity for ponderosa pine of at least 110 cf/ac/yr. Decisions regarding forest productivity must be based on objective measures of productivity rather than subjective, qualitative evaluations. Wetherell v. Douglas County, \_\_\_ Or LUBA \_\_\_ (LUBA No. 2005-075, 09/30/2005), slip op 10-12.

#### IV. ANALYSIS

#### A. Income test

The focus of the inquiry required under ORS 197.247(1)(a) is the farm or forest "operation." There is no ownership requirement for land managed as part of the operation, and no requirement that lands managed within the operation be contiguous. "Operation" is not defined in statute or Lane Code. The relevant dictionary definition is: "a process or action that is part of a series in some work." This definition imposes neither ownership nor contiguity requirements.

## LC 16.212(8)(a) provides:

"A farm operation is all agricultural activities under a single management. For purposes of this section, it is immaterial whether the activities occur on a single parcel of land, on contiguous parcels of land or on separate parcels of land. It is also immaterial if the operator has less than fee interest in the land on which the agricultural activity occurs."

<sup>&</sup>lt;sup>3</sup> <u>The Woodland Workbook: Reforestation</u>, "Successful Reforestation: An Overview," Oregon State University Extension Service, EC 1498, April 2002, p. 6.

<sup>&</sup>lt;sup>4</sup> Fletcher et al., Establishing and Managing Ponderosa Pine in the Willamette Valley, "EM 8805, OSU Extension Service, May 2003, p. 3. See Exhibit 1-5.

<sup>&</sup>lt;sup>5</sup> Webster's New Universal Unabridged Dictionary, 1983.

Similarly, "operation" in the context of "forest operation" includes neither contiguity nor ownership requirements. "Forest operation" is defined by OAR 660-006-0050(6):

"Forest operation' means any commercial activity relating to the growing or harvesting of any forest tree species as defined in ORS 527.620(6)."

ORS 197.247(5) authorizes counties to use "statistical information compiled by the Oregon State University Extension Service other objective criteria to calculate income[.]" The legislative intent of this provision was to ensure that the marginal lands provisions did not "reward someone who was not industrious." In addressing both the farm and the forest income tests, it is necessary for the applicant to provide objective information regarding the income capability of the farm and forest operations of which the subject property was managed as a part. The affidavit submitted by the applicant from the farm operator is neither income tax records nor calculations based on objective criteria. Similarly, the purported actual income information based on the cut-out records from a subsequent timber harvest does not provide evidence of the income of the farm operator from the entirely of the forest operation over the growth cycle, nor does it constitute "objective criteria to calculate income."

## 1. The applicant has failed to establish that the "farm income" test is met.

ORS 197.247(1)(a) allows land to be designated as marginal land if "[t]he proposed marginal land was not managed, during three of the five calendar years preceding January 1, 1983, as part of a farm operation that produced \$20,000 or more in annual gross income[.]"

As is evident in the legislative history, the intent of the legislature was not to require an inquiry into the actual history of farm income on the proposed marginal land. Rather, the legislature intended that an objective measure of farm income be allowed, such as OSU Extension Service information concerning average yields and prices for crops or livestock. See Exhibit 5 p. 4; Exhibit 6 pp. 2, 12, 16; Exhibit 7.

It is conceded that Art Moshofsky and members of his family owned the subject property during and throughout the period between 1978 and 1983. Affidavits signed by Mr. Moshofsky provide evidence that farm use was made of the subject property during the applicable period the grazing of cattle by C & M Livestock Company. In exchange for use of the Moshofsky property, C & M Cattle Company provided monetary and other consideration. It is therefore undisputed that the proposed marginal land was managed as part of a farm operation. The relevant farm operation is that of the C & M Livestock Company.

ORS 197.247(1)(a) does not require that the proposed marginal land be owned by the farmer, only that it be managed as part of a farm operation. Leased or rented land is not excluded by the statute from being considered as part of the farm operation. Neither does the statute require that lands within the farm operation be contiguous. Farm operations, including cattle operations, commonly include non-contiguous tracts of land. For example, Mr. Just's neighbor Mr. Brown runs a cattle operation that includes seven non-contiguous parcels of land, separated by several miles, totaling several hundreds of acres. Some of these parcels are used for grazing on a rotational basis; some are used to produce hay; one contains a feedlot; and one contains the homestead as well as additional land used for hay production.

The nature and extent of the C & M Livestock Company's farm operation has not been identified or described. The record does not address the total acreage of that farm operation.

The record does not address the total number of cattle produced by that farm operation. The record does not address whether the farm operation produced or sold hay or other products in addition to cattle. The record does not address income produced by the C & M Livestock Company during the 1978-82 period, or whether that operation produced over \$20,000 in annual gross income during three of the five years during that period. The record does not contain any objective measure of what a farm operation of the nature and extent of C & M Livestock Company would be expected to produce in annual gross income.

It is undisputed that the subject property was managed as part of a cattle operation during the 1978-82 period. The following table shows the capability of the subject property for grazing:

TABLE 1: CAPABILITY OF SUBJECT PROPERTY FOR PASTURE

Map#	Soil Name	Acres	AUM*	Total AUM
28C	Chehulpum	79.842	3	240
41C	Dixonville	12.157	6	73
43C	Dixonville-Philomath-Hazelair com.	10.161	4	41
43E	Dixonville-Philomath-Hazelair com.	28.514	4	114
52D	Hazelair	13.864	7	97
78	McAlpin	15.009	9	135
102C	Panther	34.574	5	173
105A	Pengra	11.637	9	105
108C	Philomath	9.746	4	39
113C	Ritner	0.371	6	2
125C	Steiwer	9.042	6	54
125D	Steiwer	3.950	5	20
135E	Willakenzie	27.358	7	192
138E	Witzel	27.256	4	109
138G	Witzel	<u>37.011</u>	2	<u>_74</u>
	·	320.492		1468

<sup>\*</sup>Animal Unit Months, non-irrigated

NRCS data indicates the subject property itself has the capacity to support  $1468 \div 12 = 122$  head of cattle per year. At the average 1978-82 price of \$\$456.68/head, this would result in an annual income of \$55,715.<sup>6</sup> Objective data shows that the farm operation, considering only the subject property itself and not any other lands which were managed as part of the cattle operation, was capable of producing well in excess of the \$20,000 standard established by ORS 197.247(1)(a).

The applicant has not provided income tax returns or other income records showing income actually received by the farm operation over the 1978-82 period. Available objective data shows that the subject property was capable of being managed to produce in excess of \$20,000 in income. The applicant has failed to meet his burden to establish that the proposed marginal

<sup>&</sup>lt;sup>6</sup> Data from OSU OAIN Data Base, http://oregonstate.edu/oain/. See Exhibit 14.

land was not managed as part of a farm operation grossing \$20,000 or more in annual gross income for three of the five years proceeding January 1, 1983.

#### 2. The "forest income" test is not met.

ORS 197.247(1)(a) allows land to be designated as marginal land if "[t]he proposed marginal land was not managed, during three of the five calendar years preceding January 1, 1983, as part of \* \* \* a forest operation capable of producing an average, over the growth cycle, of \$10,000 in annual gross income."

It is conceded that Art Moshofsky and members of his family owned the subject property during and throughout the period between 1978 and 1983; that the subject property was logged in 1990; and that the land was managed as part of a forest operation during the relevant 1978-82 period. ORS 197.247(1)(a) requires an inquiry into the income capability of the entirety of the "forest operation." The nature and extent of the Moshofsky "forest operation" has not been identified, nor has the income potential of that forest operation been addressed. Rather, the applicant has limited consideration to the subject property and to the adjoining 67.16-acre 18-03-19 TL 1300.

The applicant's forestry consultant has provided income information based on actual stocking rates rather on the capability of the forest operation. Mr. Setchko concedes that he considered only income from a partially stocked stand. Mr. Setchko argues that establishing fully stocked stands is "unlikely" due to wet areas, shallow soils, and competition from grasses, brush, and native hardwoods. However, these management challenges are commonly overcome through thorough site preparation, selection of suitable tree species for planting, and subsequent weed, brush, and pest control. See Exhibit 1. The income information provided by the applicant fails to consider the income the forest operation was *capable* of producing.

The applicant's forestry consultant has failed to address the income capability of the adjoining 67.16-acre property. Rather, the "income test" was addressed by "cruising" the actual timber volume growing on the property today and adding to that the actual timber harvested from the property in 1990-91. The March 17, 2005 Setchko Report states that the trees logged 14 years ago were 45-50 years old. The forestry consultant does not address the capability of the forest operation on the two properties, assuming reasonable management practices.

This letter will address the income capability of the subject property. However, since soils data is not found in the record for the adjoining 67.16-acre 18-03-19 TL 1300, it is not possible to determine the income capability of that property, or of the forest operation that included (at a minimum) the two properties together. The application may not be approved unless and until the income capability of 18-03-19 TL 1300 is determined.

As a preliminary matter, it is necessary to address two other issues: what prices should be used, and what is the appropriate growth cycle?

## a. 1978-82 prices must be used.

LUBA has held that legislature intended the gross income test under ORS 197.247(1) to be applied based on the five-year period proceeding January 1, 1983. *Just v. Lane County (Carver)*, \_\_Or LUBA \_\_ (LUBA No. 2005-029, 06/08/05), slip op 8.

Douglas fir prices rose substantially beginning in 1979, peaking in 1981; and then declined dramatically — more than 16% - by 1983. Prices over the 1978-1982 period averaged about 19.4% higher than in 1983. Using 1983 prices substantially underestimates income potential during the relevant time period. See Exhibits 8 and 9.

The applicant's forestry consultant has used 1983 prices in computing potential income. ORS 197.247(1)(a) looks back in time to the 1978-82 period. LUBA in *Carver* pointed out that both the "farm operation" and "forest operation" prongs of the test are specifically linked to January 1, 1983. Tying the test to January 1, 1983 requires that pricing *prior* to the first quarter of 1983 be used, as even first quarter 1983 prices would only begin to apply after January 1, 1983. LUBA further explained that the legislative history is reasonably clear that the legislature intended the gross income test to be applied based on the five-year period *preceding* January 1, 1983.

# b. The use of a 50-year growth cycle has not been justified and is not appropriate.

The applicant uses a 50-year growth cycle to calculate average gross annual income over the growth cycle. This is predicated on the Board's Direction on Issue 5: "What 'growth cycle' should be used to calculate gross annual income?" in its March 1997 Supplement to Marginal Lands Information Sheet. No Lane County interpretation or application of ORS 197.247 or any of its terms or concepts will be due or receive any deference upon review. Marquam Farms Corp. v. Multnomah County, 35 Or LUBA 392, 403 (1999) (ORS 197.829 does not require that LUBA defer to county interpretations of state statutes).

LUBA has explained that the choice of the phrase "capable of producing" in ORS 197.247(1)(a) requires "reasonable management practices over the growth cycle":

"[T]he choice of the word "capable" requires the application of an objective test in determining a parcel's potential productivity. In other words, that a particular forest operator may use poor management techniques, and thereby cannot produce the requisite income from the parcel over the growth cycle, would not establish that the parcel was not "capable" of producing the requisite income level over the growth cycle. The statutory requirement that the land be "capable" of producing the specified annual income "over the growth cycle" requires an evaluation of the income potential of the property assuming the utilization of reasonable forest management practices over the growth cycle." (Emphasis added). DLCD v. Lane County (Ericsson), 23 Or LUBA 33, 36.

Reasonable forest management practices over the growth cycle would include choosing an appropriate growth cycle – one that would result in the highest average annual income over the growth cycle. The applicant and his representatives and experts have not argued that using a 50-year growth cycle reflects reasonable forest management practices. Rather, they rely entirely on the Board's 1997 directive.

The applicant's forestry consultant, for a similar marginal lands application, has produced reports finding that the use of a 60-year growth cycle would result in a 27.2% higher average

gross annual income over the growth cycle than would the use of a 50-yr growth cycle.<sup>7</sup> The applicant's forestry consultant has failed to explain why using a management practice that would result in substantially less income could be considered reasonable.

Harvesting at culmination of mean annual increment would maximize average annual productivity measured in cf/ac/yr. However, harvesting at a cycle corresponding to culmination of mean annual increment would not necessarily result in maximizing average annual income over the growth cycle. Log prices are for units of board feet, not cubic feet. Yield in board feet grows dramatically as logs become older and larger. As the tables in Exhibits 10 and 11 show, a 100-year old Douglas-fir has not yet reached its maximum average annual yield measured in board feet; a ponderosa pine growing in soils with a site index of 125 would reach culmination of mean annual growth, measured in board feet, at 110 years of age. In addition, harvesting at longer rotations would result in higher grading, for which higher prices are received. Harvesting in rotations in excess of 100 years would result in greater average annual board foot volume, higher grading, higher prices, and higher annual income averaged over the growth cycle.

LUBA in *Carver* found that "petitioner does not explain why it is unreasonable to assume a 50-year growth cycle, or why ORS 197.247(1)(a) compels the county to assume a longer or different cycle." The evidence in the record, produced by the applicant's own forestry consultant, establishes that a 60-year cycle would result in substantially higher income averaged over the growth cycle. It would not be reasonable to assume a growth cycle that would result in less income. ORS 197.247(1)(a) requires an inquiry into the capability of a forest operation to produce average annual income over the growth cycle. If a forest operation is capable of producing more income by using a longer growth cycle, that capability must be considered.

#### c. Income calculations

As previously discussed, the capability of the entirety of the Moshofsky forest operation, contiguous and non-contiguous units of land, must be considered.

The following table shows yield in board feet at growth cycles of 50, 60 and 100 years, by site index of soil types on the subject property, for either Douglas-fir or ponderosa pine as most suited for the specific soil.

TABLE 2: YIELD IN BOARD FEET AT GROWTH CYCLES OF 50, 60, AND 100 YEARS

Soil#	Soil name	Site index	Species	Scrib 6" Board Feet/acre, 32' log		
•				50 yr	60 yr	100 yr
28C	Chehulpum	57	DF	3,399	5,615	13,008
41C	Dixonville	109	DF	21,987	32,287	72,627
52C	Hazelair	123	PP	22,776	31,107	57,990
78	McAlpin	125	DDF	30,712	43,977	94,305
102C	Panther	65	DF	5,197	8,431	20,246
105A	Pengra	65	DF	5,197	8,431	20,246

<sup>&</sup>lt;sup>7</sup> Compare Exhibit 4 in Goal One's submittal of February 9, 2005 – Setchko's calculation of average gross annual income over a 50-year cycle - with Exhibit 5 – Setchko's calculation of average gross annual income for the identical property over a 60-year cycle.

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108C	Philomath	131	PP	27,933	37,228	69,519
113G	Ritner	107	DF	20,988	31,048	70,053
125	Steiwer	51	DF	2,050	3,503	7,579
135E	Willakenzie	160	DF	51,595	70,693	138,347
13 <b>8</b> E	Witzel	90	DF	13,263	20,349	48,024

The income calculations in the table below are for the subject property only. Data is for Douglas-fir unless otherwise noted. Douglas-fir site indices are 50 years, ponderosa pine 100 years. Productivity data is highest productivity as reported by Setchko in his letter of February 23, 2004, except for ponderosa pine, for which published data is used. Where data is for ponderosa pine, data is in italics. Data for board feet per acre by species and site class were taken from yield tables appended as Exhibit 12.

TABLE 3: FOREST INCOME CAPABILITY OF THE SUBJECT PROPERTY

Map#	Soil Name	Acres	Site Index	BF volume	-	100
				50 yr.	60 yr	100 yr
28C	Chehulpum	79.842	57*	271,383	448,313	1,038,585
41C	Dixonville	12.157	109	264,865	392,513	882,866
43C <sup>8</sup>	Dixonville-Philomath -Hazelair complex	10.161				
	Dixonville	3.048	109	66,407	98,411	221,352
	Philomath	3.048	131**	85,140	113,471	211,894
	Hazelair	2.540	123**	<i>57,851</i>	94,559	147,295
43E <sup>9</sup>	Dixonville-Philomath -Hazelair complex	28.514				
	Dixonville	9.980	109	217,434	322,224	724,767
	Philomath	8.554	131**	238,939	318,448	594,666
	Hazelair	5.703	123**	129,892	177,403	330,717
52D	Hazelair	13.864	123**	315,766	431,267	803,973
<b>78</b>	McAlpin	15.009	125	460,956	660,351	1,415,424
102C	Panther	34.574	65*	179,681	291,493	699,985
105A	Pengra	11.637	65*	60,665	98,112	235,603
108C	Philomath	9.746	131**	272,235	362,824	677,532
113C	Ritner	0.371	107	7,787	11,519	25,990
125C	Steiwer	9.042	51*	18,536	31,674	68,529
125D	Steiwer	3.950	51*	8,098	13,837	29,937
135E	Willakenzie	27.358	160	1,411,536	1,934,019	3,784,897
138E	Witzel	27.256	90	361,496	554,632	1,308,942
138G	Witzel	<u>37.011</u>	90	490,877	753,137	1,777,416

<sup>&</sup>lt;sup>8</sup> The Lane County Soil Survey states: "This unit is 30 percent Dixonville silty clay loam, 30 percent Philomath cobbly silty clay, and 25 percent Hazelair silty clay loam."

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<sup>&</sup>lt;sup>9</sup> The Lane County Soil Survey states: "This unit is 35 percent Dixonville silty clay loam, 30 percent Philomath cobbly silty clay, and 20 percent Hazelair silty clay loam."

320,492

DF	3,811,934	5,610,235	12,214,293
PP	1,099,823	1,497,972	2,766,077

- \* Data from SCS Technical Notes No. 2, June 1986, Cochran.
- \*\* Ponderosa pine, 100 year site index. Data from Fletcher et al., *Establishing and Managing Ponderosa Pine in the Willamette Valley*, "EM 8805, OSU Extension Service, May 2003, p. 3. Site indices from tables. See Exhibit 1.

Average annual gross income over the growth cycle is then computed by multiplying the quantities times the average prices over the 1978-82 period. Average prices are found in tables appended as Exhibit 8 and 9. Grading assumptions are those used by the applicant's forestry consultant: 40% 2S, 50% 3S, and 10% 4S for Douglas-fir, and 40% 4s, 50% 5S, and 10% 6S for ponderosa pine. These grading assumptions are extremely conservative for the 60-year and 100-year rotations, as a greater percentage of higher grades would be expected.

## TABLE 4: INCOME CAPABILITY OF SUBJECT PROPERTY AT GROWTH CYCLES OF 50, 60, AND 100 YEARS

#### **50-YEAR CYCLE**

## 60-YEAR CYCLE

```
Douglas-fir
```

```
40\% 2S = 2,244,094 \text{ bf } x $316/\text{mbf} = $709,337
50\% 3S = 2,805,118 \text{ bf } x $268/\text{mbf} = $751,772
10\% 4S = 561,024 \text{ bf } x $235/\text{mbf} = $131,841

Ponderosa pine
40\% 4S = 599,189 \text{ bf } x $245/\text{mbf} = $146,801
50\% 5S = 748,986 \text{ bf } x $213/\text{mbf} = $159,534
10\% 6S = 149,797 \text{ bf } x $197/\text{mbf} = $29,510
$1,928,795 \div 60 = $32,147 \text{ per year}
```

#### **100-YEAR CYCLE**

#### Douglas-fir

```
40% 2S = 4,885,717 bf x $316/mbf = $1,543,887

50% 3S = 6,107,147 bf x $268/mbf = $1,636,715

10% 4S = 1,221,429 bf x $235/mbf = $287,036

Ponderosa pine
```

```
40% 4S = 1,106,431 bf x $245/mbf = $ 271,076

50% 5S = 1,383,039 bf x $213/mbf = $ 294,587

10% 6S = 276,608 bf x $197/mbf = $ 54,492

$4,087,793 ÷ 100 = $40,878 per year
```

CONCLUSION: Assuming reasonable management practices, the subject 320.49 acre subject property is capable of producing an average, over the growth cycle, of well over \$10,000 in annual gross income. Assuming a 50-year growth cycle results in substantially less income, averaged over the growth cycle, than does a 60-year or a 100-year growth cycle. In addition, potential income from other lands, contiguous or non-contiguous, managed as part of the Moshofsky forest operation must also be considered.

As the test established by ORS 197.247(1)(a) is not met, the request to redesignate the subject property as marginal lands must be denied.

## B. Productivity test

## 1. The applicant must address potential productivity for ponderosa pine

Regarding forest productivity, the "productivity" test established by ORS 197.247(1)(b)(C) asks whether the proposed marginal land "is not capable of producing \* \* \* eighty-five cubic feet of merchantable timber per acre per year." The inquiry is not and cannot be limited to Douglas-fir as either the "indicator" species or as the most valuable species. The capability of the subject land for producing any and all merchantable tree species for which the soils on the subject property may support. To properly determine whether the land is "capable," the inquiry must consider the species for which particular soils are best suited.

It is apparent that several of the soils on the subject property are not particularly suitable for the production of Douglas-fir. However, these soils may be suited for the production of ponderosa pine, which grows on wet or droughty soils in which Douglas-fir does not thrive. Such soils on the subject property include the Chehulpum, Hazelair, Philomath, Panther, Pengra, Steiwer, and Witzel units.<sup>10</sup> Ponderosa pine is commonly found in association with Oregon white oak and many times in thick patches of poison-oak.<sup>11</sup> See Exhibit 1-5.

As OSU Extension Forester Rick Fletcher has reported in an OSU publication:

"Native ponderosas are commonly found on three general soil types:

- "1. Poorly drained, heavy clay soils on the Valley bottom or in the low foothills.
- "2. Shallow, rocky clay soils in the Valley foothills.
- "3. Well-drained, sandy soils in the flood plain of the Willamette River and it tributaries.

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<sup>&</sup>lt;sup>10</sup> The Soil Survey describes Chehulpum, Panther, Pentra, and Steiwer soils as follows:

Chehulpum: "This shallow, well-drained soil is on low foothills in the Willamette Valley. \* \* \* The vegetation in areas not cultivated is mainly \* \* \* Oregon white oak \* \* \* and poison-oak."

Panther: "This deep, poorly drained soil is in swales and on benches of foothills adjacent to valleys of the Willamette River and its tributaries. \* \* \* The native vegetation is mainly \* \* \* Oregon white oak[.]"

Pengra: "This deep, somewhat poorly drained soil is on toe slopes and fans. \* \* \* The vegetation in areas not cultivated is mainly \* \* \* Oregon white oak \* \* \* and poison-oak."

Steiwer: "This moderately deep, well drained soil is on low foothills adjacent to terraces in the Willamette Valley. \*

\* \* The vegetation in areas not cultivated is mainly \* \* \* Oregon white oak \* \* \* and poison-oak."

<sup>&</sup>lt;sup>11</sup> Fletcher et al., Establishing and Managing Ponderosa Pine in the Willamette Valley, "EM 8805, OSU Extension Service, May 2003, p. 3. See Exhibit 1-5.

"These soil types represent the low end of growth potential for ponderosa pine. It grows better on soils with good drainage and depth." 12

Unfortunately, site indices and cf/ac/yr ratings for ponderosa pine were not prepared or published by the Soil Conservation Service and are not readily available. This does not relieve the applicant of his burden to establish that the soils on the subject property are not capable of producing 85 cf/ac/yr of merchantable timber, considering potential productivity for Douglas-fir on soils suitable for Douglas-fir and potential productivity for ponderosa pine on soils suitable for ponderosa pine.

50-year site indices have been published for Hazelair, Philomath, and Witzel soil units. Tables converting site index to cf/ac/yr productivity require the use of 100-year site indices. Fortunately, the data published by OSU Extension includes height and age data. Tables are available which allow for the determination of 100-year site indices and then cf/ac/yr productivity, as follows<sup>13</sup>:

TABLE 5: PRODUCTIVITY OF SELECTED SOILS FOR PONDEROSA PINE

Soil Type	Height	Age (BH)	Site Index (100)	cf/ac/yr (CMAI)
Hazelair	93	52	123	141
Philomath	87	42	131	168
Witzel	92	98	86	78

OAR 660-006-0010 provides, in relevant part:

"Governing bodies shall include an inventory of 'forest lands' as defined by Goal 4[.] \*

\* \* [T]his inventory shall include a mapping of forest site class. If site information is not available then an equivalent method of determining forest site suitability must be used."

The forest site class system includes site classes from 1 through 7 based on potential yield in cf/ac/yr.<sup>14</sup> "Qualitative" evaluations, even from experts including forestry consultants and soil scientists, do not satisfy the requirement for "objective" site information including a mapping of forest site class or, if site information is not available, the use of an equivalent method of determining forest site suitability.

## 2. Potential forest productivity of the subject parcel

Total forest productivity of the soils on the subject property is shown in the table below.

#### TABLE 6: FORESTRY CAPABILITY

Map # Soil Name Acres Area % cf/ac/yr Potential Productivity

<sup>13</sup> Tables in Fletcher, p. 12, are included at Exhibit 1-14.

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<sup>&</sup>lt;sup>12</sup> Fletcher, p. 3. See Exhibit 1-5.

<sup>&</sup>lt;sup>14</sup> See Exhibit 2. The USDA Forest Service Forest Survey Site Class system is incorporated in ODF administrative rule. See OAR 629-610-0020.

28C	Chehulpum	79.842	24.912	40*	3193.68
41C	Dixonville	12.157	3.793	152	1847.86
43C	Dixonville-Philomath -Hazelair complex <sup>15</sup>	10.161	3.171		
	Dixonville	3.048	0.951	152	463.30
	Philomath	3.048	0.951	168**	512.06
	Hazelair	2.540	0.793	141*	358.14
43E	Dixonville-Philomath -Hazelair complex <sup>16</sup>	28.514	8.897		
	Dixonville	9.980	3.114	152	1516.96
	Philomath	8.554	2.669	168**	1437.07
	Hazelair	5.703	1.779	141**	804.12
52D	Hazelair	13.864	4.326	141**	1954.82
78	McAlpin	15.009	4.683	169*	2536.52
102C	Panther	34.574	10.788	50*	1728.70
105A	Pengra	11.637	3.631	50*	581.85
108C	Philomath	9.746	3.041	168**	1637.39
113C	Ritner	0.371	0.116	149	55.30
125C	Steiwer	9.042	2.821	30*	271.26
125D	Steiwer	3.950	1.233	30*	118.50
135E	Willakenzie	27.358	8.536	154	4213.13
138E	Witzel	27.256	8.504	78**	2125.97
138G	Witzel	<u>37.011</u>	11.548	78**	<u> 2886.08</u>
		320.492	100.00		28242.71

<sup>\*</sup> Douglas-fir productivity data from Office of State Forester memorandum of January 27, 1989. See Exhibit 1, Goal One testimony dated February 9, 2005.

Productivity can be calculated from the data in Table 2 by multiplying the acreage of each soil unit by its productivity, adding the results, and then dividing the total by the total acreage of the subject property. Assuming that ponderosa pine were grown on soils known to be productive for ponderosa pine; and assuming Douglas-fir were grown on all other soils (even on soils not suited to Douglas-fir that may be far better suited for the production of ponderosa pine), potential forest productivity for the subject parcel is:

## $28,242.71 \div 320.492 = 88.12$ cubic feet per acre per year

<sup>\*\*</sup> Ponderosa pine productivity measurements from Fletcher et al., Establishing & Managing Ponderosa Pine in the Willamette Valley, Oregon State University Extension Service EM 8805, May 2003, p. 12. 100-year site indices are derived by applying height and age data in Fletcher to published site index tables. Another table converts site index to cf/ac/yr productivity. The tables used are appended as Exhibit 1A.

<sup>&</sup>lt;sup>15</sup> The Lane County Soil Survey states: "This unit is 30 percent Dixonville silty clay loam, 30 percent Philomath cobbly silty clay, and 25 percent Hazelair silty clay loam."

<sup>&</sup>lt;sup>16</sup> The Lane County Soil Survey states: "This unit is 35 percent Dixonville silty clay loam, 30 percent Philomath cobbly silty clay, and 20 percent Hazelair silty clay loam."

This exceeds the 85 cf/ac/yr standard established by ORS 1197.247(1)(b)(C). If productivity of the Chehulpum, Panther, Pengra, and Steiwer soil units for ponderosa pine were considered, the potential productivity of the subject property would likely be substantially greater.

The subject property does not qualify as marginal lands, and the application must be denied.

## 3. Carver and soil complexes

Mr. Cornacchia asserts that LUBA's decision in *Carver* controls issues pertaining to the treatment of soil complexes, and allows or even requires that the productivity of the complex as a whole be considered rather than the productivity of the individual soil components of the complex.

The issue before LUBA in *Carver* involved the agricultural capability portion of the capability test of ORS 197.247(1)(b)(C), which requires that the "Agricultural Capability Classification System in use by the United States Department of Agriculture Soil Conservation Service on October 15, 1983" be used. LUBA's holding does not extend to the forest portion of the capability test. LUBA in its decision noted that the statute does not impose this requirement on the forest productivity portion of the capability test. *Just v. Lane County*, \_\_ Or LUBA \_\_ (LUBA No. 2005-029, 06/08/2005), slip op 13 n. 11.

The 1987 Soil Survey of Lane County Area, Oregon does not identify or list any complexes as "soils." See Soil Survey p. 368-369.

Further, SCS data then and NRCS data today both report forest capabilities by the individual components of soil complexes. The "green sheets" look at the individual soils comprising the complex, assign capabilities to those sub-units, and do not give a productivity rating for the complex as a whole. Similarly, NRCS data lists soils within complexes separately, and gives site indexes and cf/ac/yr ratings for the individual components and not the complex as a whole. See the "green sheets" for the soil complex found on the subject property, and NRCS forest productivity data, which has been introduced into the record.

#### 3. Office of State Forester Memorandum

A memorandum dated February 8, 1990 from the Office of State Forester (1990 Memo) has been offered as one of the sources of forest productivity data used by the applicant's forestry consultants in calculating the potential productivity of the subject property for merchantable timber.

The 1990 Memo provides no site index number for the #43 Dixonville/Philomath/Hazelair soil units. The 1990 Memo explains that ratings are given using different levels of precision: a specific site index number is stated to be more reliable than the more general "high" "medium," or "low." Cf/ac/yr productivity for the Dixonville/Philomath/Hazelair complex is reported as "estimated." The memorandum indicates that data was compiled not from site information gained by actual measurement, but by "vegetational comparisons."

The site index for the Dixonville/Philomath/Hazelair complexes are reported as "med" and productivity is reported as "est 45." As explained below, this estimate considers only Douglasfir, and apparently assumes that only the Dixonville component of the complex has any productivity for Douglas-fir.

## 4. Lane County Ratings for Forestry and Agriculture methodology

The methodology used to compile productivity data for soil complexes in the August 1997 Lane County Soil Ratings for Forestry and Agriculture is explained at p. 8 of that document as follows:

"The methodology used in this table to calculate forest productivity volume ratings for soil complexes involves applying a weighted average to each component of the complex and then normalizing to base it on 100% excluding the inclusions. The following example illustrates this calculation for a soil complex which has a site index for only one of the two components."

The example given is for the 43C Dixonville/Philomath/Hazelair complex. The text has erroneously described this complex as having only two components. The table computes a "normalized" cf/ac/yr capability of 46. This differs from the capability given in the ratings themselves, in which this unit is listed as having a cf/ac/yr capability of 54.<sup>17</sup>

The Soil Survey of Lane County Area, Oregon (Soil Survey) was published in 1987. The fieldwork for that publication was completed in 1980 and on soil names and descriptions approved in 1981. This information is found in the "green sheets" that were available and in use in 1983. Neither the green sheets nor current NRCS data indicate forest productivity for the 43C or the 43E complexes; rather, productivity is given for the individual soil units which comprise the complexes.

Productivity data is available only for the Dixonville component. See Exhibits 3 and 4. Since no site indices were available for the Philomath and Hazelair units, site indices for those soils could not have been included in any calculation of a composite rating for the complex.

The Soil Survey states that the 43C unit is "30 percent Dixonville silty clay loam, 30 percent Philomath cobbly silty clay, and 25 percent Hazelair silty clay loam. The components of this unit are so intricately intermingled that it was not practical to map them separately at the scale used. Included in this unit are small areas of Panther, Ritner, and Witzel soils and Rock outcrop. Included areas make up about 15 percent of the total acreage."

The Dixonville soil is given a cf/ac/yr rating of 152 in both the Soil Survey and the LC Ratings. The Ritner soil unit, an inclusion in the Dixonville/Philomath/Hazelair complexes, is listed in the LC Ratings as having a cf/ac/yr capability of 149. How was the LC Ratings productivity for the 43C complex derived? The following calculation gives a result which approximates the results found in the LC Ratings, and which probably approximates the methodology used.

The productivity of the complex can be approximated by calculating the productivity of the area for the individual components of the complex and then adding them together to arrive at a total for the complex: multiply 0.3 (area) x 152 (productivity) = 46 cf/ac/yr for the Dixonville soils within the complex; 0.0375 (0.15/4 = 0.0375) x 149 = 6 cf/ac/yr for the Ritner component. Adding the two together gives 46 + 6 = 52 cf/ac/yr, which gives a composite productivity for the complex which is very nearly the same as the 54 cf/ac/yr found in the *LC Ratings*. The small discrepancy could possibly be explained by a difference in the way the inclusions were allocated.

A similar calculation can be done for the 43E unit. The *Soil Survey* states: "This unit is 35 percent Dixonville silty clay loam, 30 percent Philomath cobbly silty clay, and 20 percent Hazelair silty clay loam. \* \* \* Included in this unit are small areas of Ritner and Witzel soils and Rock outcrop. Included areas make up about 15 percent of the total

<sup>&</sup>lt;sup>17</sup> The *LC Ratings* gives a cf/ac/yr rating of 54 for the 43C unit and 63 for the 43E unit. Entrees for the Dixonville/Philomath/Hazelair units are noted with three asterisks. A footnote at p. 6 of that document notes:

<sup>&</sup>quot;\*\*\* Indicates soil complexes with multiple site indices, refer to the CuFt/Acre/Year column for a composite volume rating for the complex."

The discrepancy between the computation of cf/ac/yr in the example and the capability as reported in the ratings is nowhere explained. What is clear is that the methodology assumes zero cf/ac/yr capability for soil components that do not have NRCS productivity ratings for forest productivity. LUBA has rejected the argument that soils lacking a NRCS productivity rating will produce zero cf/ac/yr. Wetherell v. Douglas County, \_\_ Or LUBA \_\_ (2005-045, September 8, 2005), slip op 12.

#### V. Conclusion

The applicant has not identified the nature or the extent of the C & M Cattle Company operation. The subject property was managed as a part of this farm operation. Before the request to redesignate the subject property as marginal land may be approved, the income or income generated by the C & M Cattle Company must be determined and be found to fall below the standard established by ORS 197.247(1)(a).

The applicant has not provided income tax records or other income records pertaining to the farm operation. Objective information shows that the subject property itself, not considering other lands managed as part of the farm operation, could have produced well in excess of \$20,000 in average annual income. The "income" test of ORS 197.247(1)(a) is not met.

Assuming reasonable forest management practices, the subject 320.49 acre subject property is capable of producing well an average, over the growth cycle, of well over \$10,000 in annual gross income. Assuming a 50-year growth cycle results in substantially less income, averaged over the growth cycle, than does a 60-year or a 100-year growth cycle. In addition, potential income from other lands, contiguous or non-contiguous, managed as part of the Moshofsky forest operation must also be considered.

Assuming the reasonable management practice of growing Douglas-fir on soils suited for Douglas-fir and ponderosa pine on soils suited for ponderosa pine, the subject property is capable of producing in excess of 85 cf/ac/yr of merchantable timber. The productivity test of ORS 197.247(1)(b)(C) is not met.

Goal One and other parties whose addresses appear in the first paragraph of this letter request notice and a copy of any decision and findings regarding this matter.

Respectfully submitted,



acreage."  $0.35 \times 152 = 53.2$ ;  $0.05 \times 149 = 7.45$ ; 53.2 + 7.45 = 61, which again is very close to the 64 site index reported in the *LC Ratings*.

As illustrated above, the *LC Ratings* results for the Dixonville/Philomath/Hazelair complexes can only be achieved by assuming zero productivity for the nonrated soils in the complex. As LUBA explained in *Wetherell v. Douglas County*, \_\_ Or LUBA \_\_ (2005-045, September 8, 2005), OAR 660-006-0010 requires that an inventory of forest land be based on objective measures of productivity, and that expert opinion not based on published productivity data or equivalent data is not sufficient to support conclusions regarding potential productivity.

The discrepancy between the computation of cf/ac/yr in the example and the capability as reported in the ratings is nowhere explained. What is clear is that the methodology assumes zero cf/ac/yr capability for soil components that do not have NRCS productivity ratings for forest productivity. LUBA has rejected the argument that soils lacking a NRCS productivity rating will produce zero cf/ac/yr. Wetherell v. Douglas County, \_\_ Or LUBA \_\_ (2005-045, September 8, 2005), slip op 12.

#### V. Conclusion

The applicant has not identified the nature or the extent of the C & M Cattle Company operation. The subject property was managed as a part of this farm operation. Before the request to redesignate the subject property as marginal land may be approved, the income or income generated by the C & M Cattle Company must be determined and be found to fall below the standard established by ORS 197.247(1)(a).

The applicant has not provided income tax records or other income records pertaining to the farm operation. Objective information shows that the subject property itself, not considering other lands managed as part of the farm operation, could have produced well in excess of \$20,000 in average annual income. The "income" test of ORS 197.247(1)(a) is not met.

Assuming reasonable forest management practices, the subject 320.49 acre subject property is capable of producing well an average, over the growth cycle, of well over \$10,000 in annual gross income. Assuming a 50-year growth cycle results in substantially less income, averaged over the growth cycle, than does a 60-year or a 100-year growth cycle. In addition, potential income from other lands, contiguous or non-contiguous, managed as part of the Moshofsky forest operation must also be considered.

Assuming the reasonable management practice of growing Douglas-fir on soils suited for Douglas-fir and ponderosa pine on soils suited for ponderosa pine, the subject property is capable of producing in excess of 85 cf/ac/yr of merchantable timber. The productivity test of ORS 197.247(1)(b)(C) is not met.

Goal One and other parties whose addresses appear in the first paragraph of this letter request notice and a copy of any decision and findings regarding this matter.

Respectfully submitted,

/s/ jím Just

Jim Just, Executive Director

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