W.S.D.

SUPPLEMENTAL MEMO SUPPLEMENTAL MATERIAL

DATE OF MEMO: September 17, 2004

TO: Board of County Commissioners

FROM: Jerry Kendall/JK Land Management Division

RE: FOURTH READING AND DELIBERATION/Ordinance No. PA 1210- In the Matter of Amending the Rural Comprehensive Plan to Redesignate Land From "Agricultural" to "Marginal Land" and Rezoning That Land From "E-40/Exclusive Farm Use" to "Ml/Marginal Land", and Adopting Savings and Severability Clauses (File PA 02-5838; Ogle) (NBA & PM 6/23/04, 7/14/04 & 8/25/04)

Scheduled board date for fourth reading: September 22, 2004

Procedural Issue: Whereas the applicant's agent, Mr. Farthing, raised a procedural objection over alleged submittal of new evidence by Mr. Just (Goal 1 Coalition) during the second comment period which ended on August 11, the Board, at the 3rd reading, reopened the record in the following manner:

- Until September 8 for submittal of written evidence and/or written argument in response to materials submitted during the second comment period, and the third period, which was for the applicant's final rebuttal.
- Until September 15 for applicant's final argument only rebuttal.

A fourth reading and deliberation was then set for September 22. However, complications have arisen again. As noted by Mr. Just in his submittal of September 13 (attachment #5, p.2, 2nd last para.), new evidence was submitted by Mr. Farthing in the September 8 materials (attachment #4). Staff agrees, and will detail those additions, beyond as described by Mr. Just, at the fourth reading, if the Board so desires. New additions of evidence to the record during reopened record periods allow any participant to request an opportunity to respond.

Mr. Just has suggested two alternatives: either exclude the new materials from the record, or re-open the record to allow written comments in response to the new materials. Staff recommends the latter, as excluding (or retaining) materials which in some cases are a blend of information already in the record with information added, can muddy the file record and result in a remand from LUBA. Staff recommends the Board set a fifth reading and deliberation for November 3, 2004 and that the record be re-opened in the following manner:

- Until October 8 for submittal of new written evidence, arguments or testimony in response to new evidence submitted during the previous reopened record period (August 25 through September 15, 2004).
- Until October 22 for submittal of final written argument rebuttal by applicant (argument only/no new evidence).

Revised Findings: Mr. Farthing has offered an addendum to the ordinance findings which incorporate the new materials. This revision is found in his submittal of September 15 (attachment #6, last page). It behooves the Board to allow this addendum to make the ordinance complete. Accordingly, if the Board allows the addendum, the ordinance would need to reflect such addition. A revised ordinance, incorporating the addendum, is attached (#7).

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

Attachments

Dates indicate when the material was received.

1. August 19: from J. Just—10pp.
2. August 30: from J. Just—1p.
3. September 1: from J. Just—2pp.
4. September 8: from M. Farthing—47pp.
5. September 13: from J. Just—4pp.
6. September 15: from M. Farthing—6pp.
7. Revised Ordinance No. PA 1210 (without Exhibits A, B, or C)—1p.

KENDALL Jerry

From: Jim Just [goal1@pacifier.com]

Sent: Thursday, August 19, 2004 3:32 PM

To: Jerry Kendall

Cc: Lauri Segel

Subject: Ogle: response to Farthing objection & to new evidence submitted in final rebuttal

Jerry,

Attached is a response to Farthing's procedural objection and to the new information included in Farthing's final rebuttal, should the board decide to admit that new evidence.

A hard copy will follow.

Jim Just, Executive Director
Goal One Coalition
39625 Almen Drive
Lebanon, OR 97355
phone: 541.258.6074
fax: 541.258.6810
www.goal1.org

Championing citizen participation in realizing sustainable communities, economies, and environments

Dcc Attch. 1 – 10 pp.

GOAL ONE COALITION

39625 Almen Drive
Lebanon, Oregon 97355
Phone: 541-258-6074
Fax: 541-258-6810
goal1@pacifier.com

August 19, 2004

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

RE: PA 02-5838, Ogle marginal lands application: objection and response to applicant's final rebuttal

Dear Commissioners:

The Goal One Coalition (Coalition) is a nonprofit organization whose mission is to provide assistance and support to Oregonians in matters affecting their communities. The Coalition is appearing in these proceedings at the request of and on behalf of its membership residing in Lane County. Mr. Just is appearing in these proceedings on behalf of the Coalition, LandWatch Lane County, and himself.

Mr. Farthing has, in a letter dated August 18, 2004, purported to provide the applicant's final rebuttal in the above-referenced matter. In this letter Mr. Farthing has raised new issues and introduced new evidence. Parties are entitled to an opportunity to present and rebut evidence and to respond to issues raised. *Fasano v. Washington Co. Comm.*, 264 Or 574, 588, 507 P2d 23 (1973).

ORS 197.763(6) provides, in relevant part:

> "(c) If the hearings authority leaves the record open for additional written evidence, arguments or testimony, the record shall be left open for at least seven days. Any participant may file a written request with the local government for an opportunity to respond to new evidence submitted during the period the record was left open. If such a request is filed, the hearings authority shall reopen the record pursuant to subsection (7) of this section.
>
> "* * *
>
> "(e) Unless waived by the applicant, the local government shall allow the applicant at least seven days after the record is closed to all other parties to submit final written arguments in support of the application. The applicant's final submittal shall be considered part of the record, but shall not include any new evidence. This seven-day

period shall not be subject to the limitations of ORS 215.427 or 227.178 and ORS 215.429 or 227.179.

Thus ORS 197.763 allows the submission of additional written evidence, arguments or testimony during an open record period, but does prohibit an applicant's final rebuttal from including new evidence.

Mr. Farthing introduced a new issue in his final rebuttal, that the Goal One Coalition's letter dated August 6, 2004 contained "a significant amount of new information in violation of the post-hearing briefing rules established by the Board at the July 14 public hearing" which "[Mr. Just] relies upon to raise new issues." Mr. Farthing also introduced new written evidence, i.e. saw log specifications for Douglas fir and Ponderosa pine.

Mr. Kendall's email of August 4. 2004 reiterates that the Board left the record open:

- Until July 28 for any party to comment on any aspect
- Until August 11 for any party to comment on materials received during the 1st comment period above, and
- Until August 18 for the applicant's final rebuttal.

Mr. Farthing claims that it was his clear understanding that the evidentiary record for this matter closed on July 28. Mr. Kendall's recitation of the Board's instructions establish otherwise. The timeline for submittal of additional materials to the record was clearly established. "Comment" specifically does not exclude written or other materials.

Mr. Farthing's "final submittal of new information" dated July 28, 2004 contained a substantial amount of new evidence, including a revised table of soil units, site indexes and tables for ponderosa pine for eastern Oregon, Lane County forest soils ratings. The July 28 material also raised several new issues, including that KMX is not recognized by the State of Oregon as a species which can be used for reforestation; the appropriateness of using, for Valley ponderosa pine, ponderosa pine site indexes and tables for eastern Oregon; and the validity of creating the soil unit "Grassland with exposed rock," the qualifications of a forester to do so, and the appropriateness of assigning that unit a productivity of "0".

The Goal One Coalition has the right to respond to new issues raised and new evidence submitted. The Coalition's response appropriately included additional materials and evidence in addition to comments. In submitting its response to additional material submitted by the applicant, the Coalition complied with the guidelines established by the Board.

The Coalition objects to the new evidence submitted by the applicant's representative in his final rebuttal, and requests that it not be considered part of the record.

The Coalition requests that the Board accept the applicant's final rebuttal, excluding any new evidence presented. The Coalition requests that the Board adhere to the schedule set for this matter, and that the record now be considered closed.

In the alternative, should the Board admit the new evidence included in the final rebuttal into the record, the Coalition requests opportunity to raise new issues and provide new evidence, arguments, and testimony relating to that new evidence. The Coalition's response to that new evidence is attached as Exhibit 1.

The Coalition requests that it be sent notice and a copy of any decision in this matter.

Respectfully submitted,

Jim Just
as an individual and as Executive Director, Goal One Coalition

EXHIBIT 1

Mr. Farthing's final response and rebuttal dated August 18, 2004 contained new evidence, i.e. saw log specifications for Douglas fir and Ponderosa pine. This evidence is stated to establish that Ponderosa pine grade 2S is not equivalent to Douglas fir grade 2S, and that the Ponderosa pine grade 4S most closely corresponds to Douglas fir 2S.

The Goal One Coalition offered evidence of pricing for 2S Ponderosa pine for the purpose of establishing that Ponderosa pine was and is in fact considered a merchantable forest tree species. The fact that Ponderosa pine grades do not exactly correspond to Douglas fir grades is not relevant to the issue of whether Ponderosa pine is a merchantable species and does not diminish the merchantability of Ponderosa pine.

As the following information provided by the Oregon Department of Forestry demonstrates, Ponderosa pine was a merchantable species when ORS 197.247 was enacted and remains a merchantable species today. Grades vary from peeler to utiility, with prices corresponding to grades. Prices have varied widely over the last two decades, with lows in the mid-1980s and highs in the early 1990s.

Oregon Department of Forestry
Forest Management Division, Salem
503-945-7381

LOG PRICES
Domestically Processed Logs
(Delivered to a mill; "Pond Value")

(1st QUARTER PRICES, GRANTS PASS UNIT)

1983

Ponderosa Pine	
Peeler	$ 575
1S	$ 495
SM	$ 300
2S	$ 400
3S	$ 280
4S	$ 250
5S	$ 180
6S	$ 150
CR	$ 260
Utility	$ 80

1984

Ponderosa Pine

SM	$ 300
2S	$ 450
3S	$ 375
4S	$ 225
5S	$ 200
6S	$ 160
CR	$ 240

1985

Ponderosa Pine

1S	$ 525
SM	$ 250
2S	$ 425
3S	$ 350
4S	$ 210
5S	$ 170
6S	$ 60
Utility	$ 40

1986

Ponderosa Pine

1S	$ 600
SM	$ 300
2S	$ 530
3S	$ 400
4S	$ 200
5S	$ 175
6S	$ 60
Utility	$ 40
CR	$ 150

1987

Ponderosa Pine

SM	$ 325
1S	$ 565
2S	$ 465
3S	$ 365
4S	$ 290
5S	$ 240
6S	$ 80
Utility	$ 35
CR	$ 310

1988

Ponderosa Pine

SM	$ 325
1S	$ 665
2S	$ 565
3S	$ 465
4S	$ 290
5S	$ 255
6S	$ 120
Utility	$ 35

1989

Ponderosa Pine

SM	$ 550
1S	$ 875
2S	$ 775
3S	$ 650
4S	$ 385
5S	$ 285
6S	$ 190
Utility	$ 35

1990

Ponderosa Pine

SM	$ 615
1S	$ 925
2S	$ 815
3S	$ 725
4S	$ 440
5S	$ 340
6S	$ 175
Utility	$ 90

1991

Ponderosa Pine

SM	$ 500
1S	$ 900
2S	$ 800
3S	$ 675
4S	$ 375
5S	$ 300
6S	$ 175
Utility	$ 115

1992

Ponderosa Pine

SM	$ 615
1S	$1,125
2S	$ 990
3S	$ 825
4S	$ 540
5S	$ 465
6S	$ 240
Utility	$ 150

1993

Ponderosa Pine

SM	$ 950
1S	$1,450
2S	$1,350
3S	$1,200
4S	$ 900
5S	$ 850
6S	$ 450

Utility	$ 130

1994

Ponderosa Pine

SM	$ 925
1S	$1,400
2S	$1,250
3S	$1,075
4S	$ 775
5S	$ 650
6S	$ 465
Utility	$ 155

1995

Ponderosa Pine

SM	$ 925
1S	$1,435
2S	$1,215
3S	$1,050
4S	$ 810
5S	$ 665
6S	$ 460
Utility	$ 155

1996

Ponderosa Pine

SM	$ 800
1S	$1,200
2S	$1,065
3S	$ 900
4S	$ 675
5S	$ 540
6S	$ 465
Utility	$ 130

1997

Ponderosa Pine

SM	$ 725
1S	$1,050
2S	$ 950
3S	$ 850
4S	$ 665
5S	$ 575
6S	$ 450
Utility	$ 85

1998

Ponderosa Pine

SM	$ 700
1S	$1,050
2S	$ 950
3S	$ 850
4S	$ 650
5S	$ 525

6S	$ 425
Utility	$ 140

1999

Ponderosa Pine

SM	$ 725
1S	$1,025
2S	$ 950
3S	$ 850
4S	$ 675
5S	$ 575
6S	$ 350
Utility	$ 75

2000

Ponderosa Pine

SM	$ 750
1S	$1,000
2S	$ 950
3S	$ 875
4S	$ 700
5S	$ 650
6S	$ 400
Utility	$ 75

2001

Ponderosa Pine

SM	$ 700
1S	$1,000
2S	$ 900
3S	$ 800
4S	$ 625
5S	$ 575
6S	$ 325
Utility	$ 75

2002

Ponderosa Pine

SM	$ 700
1S	$1,000
2S	$ 900
3S	$ 800
4S	$ 600
5S	$ 500
6S	$ 300
Utility	$ 50

2003

Ponderosa Pine

SM	$ 750
1S	$ 950
2S	$ 840
3S	$ 785

4S	$ 565
5S	$ 465
6S	$ 300
Utility	$ 75

2004

Ponderosa Pine	
SM	$ 775
1S	$ 990
2S	$ 885
3S	$ 795
4S	$ 605
5S	$ 500
6S	$ 315
Utility	$ 90

ATTACHMENT DIVIDER

KENDALL Jerry

From: Jim Just [goal1@pacifier.com]
Sent: Monday, August 30, 2004 10:39 AM
To: KENDALL Jerry; FARTHING Michael (SMTP)
Cc: SEGEL Lauri (SMTP)
Subject: Re: Ogle: proposed timelines

Jerry,

The proposed timelines leave open the possibility that new evidence could be introduced (on September 8, for example) that I would not have the opportunity to respond to. I reserve our right to respond to issues raised by any new evidence submitted.

Jim Just, Executive Director
Goal One Coalition
39625 Almen Drive
Lebanon, OR 97355
phone: 541.258.6074
fax: 541.258.6810
www.goal1.org

Championing citizen participation in realizing sustainable communities, economies, and environments

----- Original Message -----
From: "KENDALL Jerry" <Jerry.KENDALL@co.lane.or.us>
To: "FARTHING Michael (SMTP)" <mefarthing@yahoo.com>; <goal1@pacifier.com>
Cc: "SEGEL Lauri (SMTP)" <lauri@friends.org>
Sent: Wednesday, August 25, 2004 9:37 AM
Subject: RE: Ogle: proposed timelines

> FYI: the Board moved to a 4th reading/deliberation exactly per the italics
> below, with identical timelines.
>
> > -----Original Message-----
> > From: KENDALL Jerry
> > Sent: Tuesday, August 24, 2004 4:18 PM
> > To: FARTHING Michael (SMTP); 'goal1@pacifier.com'
> > Cc: SEGEL Lauri (SMTP)
> > Subject: Ogle: proposed timelines
> >
> > FYI, Here is what I will propose to the BCC at the reading tomorrow:
> >
> > "In order to resolve the charges of procedural error and potential for a
> > LUBA remand upon appeal, the Board may choose to re-open the record for
> a
> > limited time, in order to allow for the submittal of written evidence
> > and/or written argument in response to materials submitted during the
> > second comment period (which ended on August 11) and the third period,
> > which was for final applicant rebuttal (and closed on August 18).
> >
> > I would suggest September 8 as a deadline for such submittals, followed
> > by a one week period to September 15 for the applicant's final argument
> > only rebuttal. The 4th reading and deliberation would occur on September
> > 22. LMD will send out notice of such re-opening to those who are party
> to
> > this item."
> >
> >
> >

BCC ATTCH. 2 - 1P.

ATTACHMENT DIVIDER

KENDALL Jerry

From: Jim Just [goal1@pacifier.com]
Sent: Wednesday, September 01, 2004 11:47 AM
To: Jerry Kendall
Cc: Lauri Segel
Subject: Fw: NON-NATIVE SPECIES -KMX

Jerry,

Please enter this email in the record of Ogle, PA 02-5838, as evidence that ODF considers ponderosa pine to be a commercial forest tree species under OAR 629-610-0050.

Jim Just, Executive Director
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39625 Almen Drive
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----- Original Message -----
From: "DEGENHARDT Dave A" <DDEGENHARD@ODF.STATE.OR.US>
To: "Jim Just" <goal1@pacifier.com>
Cc: "DEGENHARDT Dave A" <Dave.A.Degenhardt@state.or.us>; "BIRCH Kevin R" <Kevin.R.Birch@state.or.us>
Sent: Wednesday, September 01, 2004 11:26 AM
Subject: RE: NON-NATIVE SPECIES -KMX

Yes, since valley ponderosa pine is a commercially viable species, it is acceptable for reforestation on sites where it will grow to commercial size.

-----Original Message-----
From: Jim Just [mailto:goal1@pacifier.com]
Sent: Monday, August 30, 2004 9:01 AM
To: DEGENHARDT Dave A
Cc: DEGENHARDT Dave A; BIRCH Kevin R
Subject: Re: NON-NATIVE SPECIES -KMX

Dave,

Pursuant to OAR 629-610-0050, has the state forester "determined" that Valley ponderosa pine is a species suitable for reforestation on suitable sites in the Willamette Valley? How are such determinations made?

Jim Just, Executive Director
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39625 Almen Drive
Lebanon, OR 97355
phone: 541.258.6074
fax: 541.258.6810
www.goal1.org

Championing citizen participation in realizing sustainable communities, economies, and environments

----- Original Message -----
From: "DEGENHARDT Dave A" <DDEGENHARD@ODF.STATE.OR.US>

BCC ATTCH. 3 - 2 pp.

To: <goall@pacifier.com>
Cc: "DEGENHARDT Dave A" <DDEGENHARD@ODF.STATE.OR.US>; "BIRCH Kevin R" <KBIRCH@ODF.STATE.OR.US>
Sent: Tuesday, August 10, 2004 9:24 AM
Subject: NON-NATIVE SPECIES -KMX

The criteria for an acceptable species are listed in OAR 629-610-0050 & -0060. They are: a) ecological suitability for the site; capability to produce a marketable forest product in the foreseeable future; and c) evidence of success with the species on similar sites.

If the KMX tree has been used successfully, there should be no question of its suitability to the site.

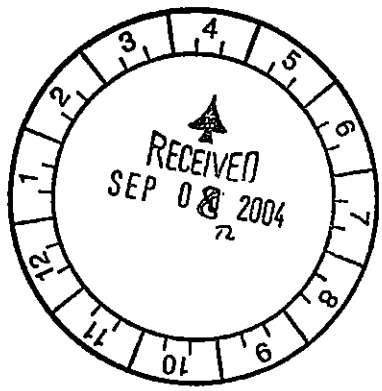
Dave Degenhardt
Oregon Department of Forestry
Field Coordinator - P&CF
503-945-7473
ddegenhard@odf.state.or.us

ATTACHMENT DIVIDER

Michael E. Farthing
Attorney at Law

Smeede Hotel Building
767 Willamette Street, Suite 203
Eugene, Oregon 97401
Office (541) 485-1141 – Fax (541) 485-1174
email - mefarthing@yahoo.com

September 8, 2004



Lane County Board of Commissioners
c/o Jerry Kendall
Land Management Division
Lane County Courthouse/PSB
125 East 8th Avenue
Eugene, OR 97401

Re: Plan Amendment/Zone Change Applications
Agriculture (E-40) to Marginal Lands (ML)
Ogle-Child (PA 02-5838)

Chair Green and Commissioners:

This letter and the attached exhibits are submitted to the Board on behalf of Brad Ogle and Mark Childs, the Applicants for the above-referenced plan amendment and zone change. This response specifically addresses the materials and evidence submitted into the record by James Just, the Goal One Coalition and LandWatch Lane County (collectively known as "Goal One") with their August 6 and August 19 letters to the Board.

We have carefully reviewed Goal One's most recent submittals, including the eight exhibits, that were attached to the August 6 letter. Based on that review, Mr. Setchko and I have concluded that while there is a significant amount of information which generally concerns the issues in this application, Goal One has not provided any substantive information that specifically addresses the Subject Property's ability to grow merchantable timber in excess of 85 cubic feet per acre per year. Instead, Goal One has raised a number of technical and procedural issues which has substantially lengthened the County's review process and the time and cost for staff to react to these matters. As Mr. Kendall noted in his August 18 SUPPLEMENTAL MEMO to the Board, ".... the bulk of the discussion within the submittals [Goal One's August 6 and 19 letters] is a repetition of issues discussed prior to the close of the July 14 hearing, so there is no need for further discussion in this memo."

In the end, Goal One has not provided any information, evidence, or other materials that specifically addresses the 85 cubic foot standard in ORS 197.247(1)(b)(C)[1] as applied to the

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1 ORS 197(1)(b)(C) provides:

"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)."

BCC ATTCH. 4-47

Subject Property. Mr. Setchko has provided and continues to provide the only professional forester's opinion regarding the timber productivity capability of the Subject Property. Neither Mr. Just, Goal One or LandWatch have produced any credible analysis of the site's timber productivity capability prepared in accordance with professional forestry standards and practices.

Enclosed with this letter is Mr. Setchko's detailed response to Goal One's most recent submittals. In many instances, Mr. Setchko is repeating information and analysis that he has previously provided. I asked him to repeat these responses for two reasons. First, it needs to be noted that Mr. Just is continuing to make the same arguments and assertions that were erroneous and unfounded the first time he made them and continue to be the second, third and sometimes, even the fourth time. The second reason is far more basic: my clients are the applicants and as such, always have the burden of proof and persuasion. This includes the affirmative obligation to respond to all relevant issues and arguments that are raised during the public hearing process. Mr. Just has raised issues, some repeatedly, that no matter how tangential or irrelevant, require the Applicants' consideration and response. We have no choice but to respond, one more time.

Mr. Setchko's enclosed report addresses the issues raised by Goal One with regard to Ponderosa Pine, Hybrid Poplar and KMX. Mr. Setchko's report discusses the growth potential and the present market for each of these species. More importantly, Mr. Setchko repeats earlier testimony he provided to the Planning Commission in which he explains why there is no present market for most, if not all, of "the other species" that Goal One continues to emphasize. If there is no present market for a particular tree species, a reasonable and prudent forester or small woodlands owner would not plant and manage that species. These are decisions that are being made repeatedly as timber is harvested followed by the required reforestation.

The Staff's August 18 SUPPLEMENTAL MEMO provides a definition of "merchantable" from Webster's Third New International Dictionary ("Webster's") for use in applying the 85 cubic foot growth standard. Lane Code 16.090, "Definitions", requires use of Webster's Dictionary "where terms are not defined" as in the case with "merchantable". It is reasonable and consistent with the acknowledged County's Land Use Code (Chapter 16) and comprehensive plan ("the RCP") to use Webster's Dictionary for a definition of "merchantable".[2] See Carlson v. Benton County, 154 Or App 62, 68-69 (1998).

As applied to the Subject Property, and except for Douglas Fir, there is no other tree species that is both merchantable and that comes close or equal to the growth rate for Douglas Fir. None of the opponents have submitted credible or reliable evidence or facts that refutes, contradicts or challenges this conclusion. There is no present market in Lane County for land owners who have planted or are considering planting Ponderosa Pine, Hybrid Poplar or KMX. These species are not salable now nor is there a reasonable prospect there will be a market in the foreseeable future. A person owning the Subject Property would not, after seeking the advice of a consulting forester, plant anything but Douglas Fir, which is the only species of

[2] "**Merchantable**: of commercial quality; acceptable to buyers; salable.

commercial quality, i.e. it is the only species that is "salable". Again, there is nothing in the record that refutes these conclusions.

Powerlines and Exposed Rock

Goal One asserts that Mr. Setchko has not adequately assessed the productivity of the areas under the powerlines and with thin soil and exposed rock. As Mr. Setchko indicates in the attached submittal (p. 2), he did not conduct a soil survey because it was not necessary. As a professional forester, he knows that neither BPA or EWEB will allow trees to be grown within or even next to their right-of ways. Attached are copies of those lease agreements which are easements of record against the title of the Subject Property. These utility corridors will not be relinquished and, if anything, could be expanded in the future. It is ridiculous for Goal One to suggest that trees could be grown in these right-of-ways.

As for the areas of "grassland with exposed rock" that are outside the power line right-of-way, Mr. Setchko has concluded, as a professional forester, that the areas depicted on Exhibits 1 and 2 of his enclosed report will not sustain tree growth of any kind. Attached to this letter are 1936 and 1947 aerial photos which show the same treeless areas that Mr. Setchko described in his report. His conclusion is based upon on-site observations and analysis of the Subject Property's timber productivity capabilities for Ponderosa Pine. He was not typing soils nor was he conducting a soil analysis. As he notes, the general soil survey takes a back seat to the actual existing site conditions. A professional forester, like Mr. Setchko, does not need a soil scientist to tell him that trees will not grow in these specific areas. Mr. Setchko knows this and he would not recommend planting trees of any type in these areas.

Mr. Setchko's analysis of the Subject Property is consistent with the professional guidelines and standards of consulting foresters. More importantly, his analysis of the Subject Property's timber potential is consistent with the methodology outlined in the Department of Forestry's "LAND USE PLANNING NOTES, Number 3, April 1998 " ("the ODF Notes") that were originally submitted into the record as Exhibit 1 to Goal One's August 6 letter. In these circumstances, and because there are no productivity tables for Ponderosa Pine grown in the Willamette Valley, the ODF Notes outline a "methodology for calculating site productivity which begins with:

> "2. The landowner must have an independent, knowledgeable person, like a consulting forester, measure the trees on the property and calculate the cubic foot site class using the approved methods. Plots must be taken to measure the productivity of each different soil type and aspect on the property. The consultant must use care when selecting site trees to obtain an accurate measurement, and the consultant's report must provide adequate detail to determine whether the approved methods were followed.
>
> 3. The consultant shall provide a copy of the report to the county to use in making

> land use decisions. If the county has questions about whether the consultant followed the methodology, the Department of Forestry may need to review the report. However, because this is a land use decision, the county must make the final decision to accept or reject the work of the consultant."

ODF Notes, p. 4. This is precisely what Mr. Setchko did in order to arrive at the productivity tables at pages 4-5 of his enclosed report. A fully-stocked stand of Douglas Fir and Ponderosa Pine, as described in Mr. Setchko's report, is not capable of producing more than 85 cubic feet of growth per year. There is no requirement that it be submitted to ODF because Mr. Setchko followed its published guidelines.

Neither the August 6 or August 19 letters from Goal One challenged Mr. Setchko's calculations. Instead, Goal One criticizes Mr. Setchko's assignment of a 0 cubic foot growth rating to land within major powerline corridors or which has little or no soil for timber growth. However, Goal One does not state why Mr. Setchko is not qualified to calculate the timber productivity for the Subject Property based on these variables. This is what he does for a living. Moreover, the ODF Notes clearly state:

> " The Department of Forestry does not measure sites for landowners. The landowner needs to have an independent qualified person, such as a consulting forester take the measurements and calculate cubic foot site class...."

ODF Notes, p. 4. (emphasis supplied). Mr. Setchko has walked the property, examined the trees and ground, taken the measurements and calculated cubic foot site class for a mixed, fully-stocked stand of Douglas Fir and Ponderosa Pine. He is a qualified, consulting forester. Goal One's objections are groundless in this regard.

Merchantable Timber

Mr. Kendall's August 18 Supplemental Memo succinctly and clearly addresses the definition of merchantability as it relates to the criterion in ORS 197.247(1)(b)(C) which states, in part, "the proposed marginal land...is not capable of producing 85 cubic feet of merchantable timber..."(emphasis supplied). Mr. Kendall's definition from Webster's is straightforward and its use is directed by Lane Code. To be "merchantable", a tree species must be salable and of commercial quality.

In order to address this issue from a commercial forester's perspective, I asked Mr. Setchko two questions if he were consulted by a private landowner:

(1) Would you recommend that a person with 50 year or older Ponderosa Pine harvest it now? Why?

(2) Would you recommend that a person reforest their property with Ponderosa Pine? Why?

The answer in both cases is NO and the reason is simple: there is no market for Ponderosa Pine in the Willamette Valley. See Setchko attached letter at p. 9. For owners of stands of Ponderosa Pine in Lane County, that particular species is not commercially marketable. A landowner would lose money if they harvested Ponderosa Pine and then paid to transport it to where there is a market. By definition, Ponderosa Pine, like KMX and many of the "other species" cited by Goal One, is not "merchantable" because there is no merchant who will purchase it for a price that covers the costs of logging, harvest tax and reforestation and also provides some kind of return beyond these fixed costs. There is no available market for Lane County landowners to sell their logs of these species.

Goal One argues the definition of "merchantable" means it is salable "regardless of whether sold for profit or loss." They cites an Oregon Tax Court case, Ellingson Lumber Co. v. Dept. Of Revenue, 8 OTR 273 (1980) as support for this decision. That reliance is misplaced because the Ellingson case was dealing with the amount of tax due upon harvest. The issue was whether so-called "cull logs" had a value that should be taxed. The case has nothing to do with whether there is a market for Ponderosa Pine in Lane County, it did not define "merchantable" for purposes of the 85 cf/ac/yr standard in the Marginal Lands statutes and, most importantly, the case does not state or hold that "merchantable" means "salable, whether for profit or loss". What it does say is that a tax will be imposed upon a forest product that is "reasonably capable of being sold". The Court then finds:

" The determination of merchantability will be made by the taxpayer at harvesting..."

8 OTR at 278. This point is precisely what Mr. Setchko has addressed in his answers to my questions: a reasonable and prudent landowner in Lane County will elect not to harvest Ponderosa Pine because they would lose money. For that person, Ponderosa Pine is not merchantable because there is nothing to harvest at this time.

Subject Property Not Forest Land

It is important to clarify and respond to Goal One's assumption that the Subject Property is "forest land" as defined by Statewide Planning Goal 4. **It is not forest land.** Goal 4 defines "forest land" as:

" Forest lands are those land acknowledged as forest lands as of the date of adoption of this goal amendment. Where a plan is not acknowledged or a plan amendment involving forest lands is proposed, forest land shall include lands which are suitable for commercial forest uses including adjacent or

> nearby lands which are necessary to permit forest operations or practices and other forested lands that maintain soil, air, water and fish and wildlife resources.

(emphasis supplied). The Subject Property was not acknowledged by Lane County as forest lands on the date Goal 4 was amended. Lane County's plan is acknowledged and the present plan amendment does not involve forest lands because the Subject Property is designated Agriculture and zoned Exclusive Farm Use (EFU). Therefore, the second sentence of the above definition does not apply in these circumstances.

This does not mean we do not have to address Goal 4 or the Marginal Lands (ML) criteria as part of our application. We do and we have addressed Goal 4 and the ML criteria that address the potential timber productivity of the site as well as past income from forest operations conducted on the Subject Property. However, because the Subject Property is not forest land, OAR 660-006 does not apply to this application. OAR 660-006-0003(1). This means that all of Goal One's references to definitions and other materials in Division 6 of OAR 660 (entitled "Goal 4, FOREST LANDS") are not applicable to this plan amendment.

Having noted that, we also want to confirm that the application and particularly Mr. Setchko's reports have all been consistent with those regulations and, as described previously, have been based on analyses and tests that have followed methodologies established by ODF. The point is that Goal One makes many unfounded assumptions which lead to faulty conclusions of reasoning that do not make sense and certainly are not consistent with basic land use law and professional forestry standards (e.g. Goal One's erroneous comparisons of 2S Douglas Fir logs to 2S Ponderosa Pine logs when, in fact, a 2S Douglas Fir is the equivalent grade of a 4S Ponderosa Pine log).

The other point about the forest land issue is that Marginal Lands is a resource designation and zone. The Board's 1997 Interpretation describes the "Marginal Lands concept":

> "The Board recognized that marginal land is intended to be a sub-set of resource land, i.e., there are "prime" resource lands and "marginal" resource lands. The marginal lands are to be available for occupancy and use as smaller tracts than are required in the better resource lands. The criteria in the law define which lands may be designated as marginal. Evidence for this position is found in the legislative history and the fact that marginal lands are recognized in both Statewide Goal 3 - Agricultural Lands and Goal 4 - Forest Lands."

Marginal Lands, like the Subject Property, are resource lands that are not prime. An exception to Goals 3 and 4 is not required for Marginal Lands to be applied to this property. In fact, by allowing smaller tracts for limited occupancy, there is a good possibility that those limited areas of good resource soil might be more intensively managed by an owner-occupant. We suspect this is the case of Mr. Just and his neighbor, Mr. Monroe, who apparently have the time required

to grow exotic, non-native trees, KMX, without any reasonable expectation that either of them will ever receive a dime for their efforts. Such activities, while commendable from a research standpoint, do not rise above the level of a hobby or personal experimentation and certainly do not qualify as commercial stands of merchantable timber.

SUMMARY

The issues addressed above and by Mr. Setchko have been rehashed several times by all the parties and your staff but always with the same conclusion: the Subject Property is marginal farm and forest land. This is evidenced by a preponderance of poor soils (no soils in some areas) and the lack of any farm or forest activities ever being conducted on the land. The aerial photos over the last 80 years provide graphic evidence of the marginal character of the land. In addition, EWEB and BPA maintain separate electrical power lines in established utility corridors that actually converge on the Subject Property. At least 8% or more of the Subject Property is restricted by these utility easements and facilities.

Mr. Setchko's reports and analyses of the on-site conditions and potential for timber growth are based on well-established tables or, when those are not available (e.g. Valley Ponderosa Pine), his on-site observations and measurements. There has been no challenge to his qualifications as a professional, certified forester with 27 years of field and consulting experience. Therefore, with the present record, his conclusion that no trees (regardless of species) will grow in certain areas of the Subject Property is unassailable. The aerial photos dramatically corroborate this point.

Finally, we suggest the Board and staff critically examine the evidence presented by the Applicants and the opponents (Goal One). If there is a particular issue (e.g. growth of rate for Ponderosa Pine or definition of "marketability"), compare the evidence and analysis submitted by all parties, including your staff, on that particular issue. We believe the Applicants have demonstrated, with substantial evidence, that all relevant criteria have been fully addressed.

We urge your approval.

Sincerely,

Michael E. Farthing

MEF/bk

cc: Brad Ogle
Marc Setchko

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September 8, 2004

Lane County Board of Commissioners

RE: Lane County File #PA 02-5838, Ogle; Response to Goal One Coalition Letters dated August 6 and 19, 2004

Members of the Board of Commissioners:

In conjunction with my testimony, which I presented on Wednesday afternoon, July 14, 2004, and my letter dated July 26, 2004, I have enclosed the following written reponse to the August 6 and 19 Goal One letters written by Jim Just. I have addressed each issue as presented in the letters, most of which I also addressed with my testimony. I am answering these questions as a qualified, Society of American Foresters Certified Professional Forester (#2953), with 27 years of experience including 17 years as a consultant, with Bachelor of Science (Cal Poly, SLO) and Master of Forestry (Oregon State) Degrees.

Responses to questions raised in August 6, 2004, letter from Goal One.

Page 2: Mr. Just states that I have reclassified a substantial portion of the NRCS-identified 107 and 108 Philomath units. From an on site analysis I am stating that these areas of extremely thin soils over rock, with exposed rock showing in many places, are incapable of supporting tree growth. Trees are not growing there now; trees were not growing there 68 years ago (see Photo Exhibits 1-1, 2-1, 2-2). I am not retyping the soils, I am making an **on site observation** that trees will not grow here; the primary reason being that the soil depth is limited, or nonexistent due to rock. There is not enough soil for tree roots to establish themselves.

Page 3: Mr. Just cites Land Use Planning Notes Number 3, April 1998, as the methodology for determining site productivity. Number 1 is that plots must be taken to measure productivity of a soil type. This is true. This is how the NRCS and ODF have arrived at the productivity figures which are published in their tables. These are the productivity figures I am using, I am not trying to create new productivity tables. I am simply taking site trees as described in step number 2, so that I can then use the productivity tables. I **have not** deviated from the methodology as described in these notes.

Page 4: Mr. Just states that I do not provide any productivity data for the "grassland with exposed rock". From an on site analysis and aerial photos from 1936, 1952 and 2000, it can be seen that trees have not grown in these areas for the last 68 years (see Exhibits 1 and 2). Since the 1936 photos show no trees it can logically be assumed that trees did not grow for a time period prior to this. The same conditions exist today that existed 68 years ago; very thin soils on top of rock, with not enough soil for a tree to establish a root system. For these reasons I have assigned a productivity rating of "0" to these areas (see Exhibit 1-1)

Mr. Just then states that I concede no site trees were measured. This is not true. I **state** in my July 26th letter that I bored site trees on the property. I did not bore site trees in the grassland areas because **no trees exist** to bore. He then states that a more detailed soil survey is required. I am not changing a soil type; I am merely stating that from a site analysis, and looking at aerial photos, no trees have grown in these areas as far back as the records go and are not growing there now.

Page 4: Mr. Just states I do not give a date for my site analysis; I visited the property on **July 26, 2004**. At this time I bored ten site trees (shown on page 3). I have visited the site previously; this is the date I bored site trees. From a forestry standpoint this is the accepted standard for industry and the U.S. Forest Service as well. This is also the standard as cited by Mr. Just (see page 4 of his August 6th letter).

Page 4: Mr. Just states I did not submit a soils report; I **will repeat again** that I am not determining a soil type, I am making a **site specific** observation that no trees are growing in these areas. I have included aerial photos delineating the areas under discussion (see Exhibits 1 and 2). The approximate scale for these photos has also been included on the photos. I bored the site trees in the areas underlaid by the Philomath soils (107C and 108F). I bored **ponderosa pine** in **these areas (soil types 107C and 108F)** because Mr. Just has accepted the **Douglas-fir** growth figures from Lane County Soil tables for the other soils; the McDuff clay loam (81D), the Panther silty clay loam (102C) and the Ritner cobbly silty clay loam (113E & G). These soils have a high growth rate for Douglas-fir; in fact Douglas-fir growth will exceed ponderosa pine growth on the better soils. **At no time** has Mr. Just disagreed with my original Douglas-fir growth figures **for these soils. At no time** has he presented any ponderosa pine growth figures for these soils. Therefore I did not bore ponderosa pine trees on these soil types.

Page 4: Mr. Just states that I have not noted any limitations encountered on the site. **I will repeat again,** from an on site analysis it can be seen that there is exposed rock throughout the property. This would indicate a very thin soil layer. The absence of trees (see aerial photos) would also indicate thin soils; trees need enough soil for roots to establish themselves. These statements are made from a **visual** observation, combined with years of experience trying to establish trees in this type of ground. Trees will not grow from rock or in very shallow soils. I cannot make statements concerning an overview of the geology, bedrock, etc. because I am not a soil scientist. I did not describe on-site and adjacent hydrology, including surface and subsurface features, intermittent versus perennial, flood plain and floodways and other related information because a **water expert has already done so**. The remaining points brought up by Mr. Just, such as describing landforms and topography, confirming the relationship of landforms to soil mapping units, describing revised soil mapping units with their range of characteristics and explaining how and why they differ from NRCS mapping, are confusing. I am not sure what any of this has to do with my on site observation that trees have not, are not and will not grow on the rocky, thin soiled areas. Mr. Just also infers (although this is very confusing) that I have not descibed the site or the natural vegetation present. In my original productivity analysis submitted in December, 2003, I describe the aspect, slopes and vegetation on the parcel. Apparently Mr. Just did not read my original analysis.

Page 4: Following these statements Mr. Just then says that the Philomath soils (107C and 108F) were "typed". He then states that this report (I am not sure which report he is referring to) has not been reviewed by ODF to confirm ODF-approved methodology was followed. I do not understand the point in these statements; I simply used the soil types **as delineated by Lane County** to determine where these soils exist on the subject parcel.

Mr. Just then states that it is not explained how adequately stocked plots were identified and delineated. I have **no idea** what he means by this statement; adequately stocked plots of what? I bored site trees to determine the site index, then used growth figures from tables; I did not cruise the property to determine volumes or stocking levels. If I had it would show much lower volume figures per acre than the tables show, as the productivity tables **assume full stocking**. Full stocking levels are not needed in order to take site trees. To wit: site index determines tree **height**, stocking levels determine tree **diameter.** Tree **diameters are not taken** to determine a site index.

Last paragraph page 4: The next statement "It has not been that a sufficient number of appropriate dominant or co-dominant site trees selected and sampled for each plot" is indecipherable. I cannot figure out what he is trying to say here. In my July 26th letter (see page 2) I state that I bored trees to determine the site index, however, I did not include the data collected. I am providing the data now (see below). Mr. Just then states that "No data on plot and tariff trees is included in the record". Plots are taken for information on tree species, volume, log grades, etc.; tariff trees are one method of taking sample trees for a cruise. Site trees to determine site index are just that, they are not "plots" or "tariff trees". Site trees are simply individual trees taken within a stand to determine site index; they **do not** have to be taken in plots and tariff trees have **nothing** to do with site index, they are sampled trees which are used to determine **volume** per acre. You **do not** have to take plots or tariff trees to accurately determine site index.

Site index is a function of two factors, climate and soil (see Exhibit 3). Site index (or site quality) is changed only by modifying the soil or climatic factors. Climatic conditions can vary substantially from site to site, this occurs naturally. The soil tables created for growth are extrapolated from huge sample data bases and then averaged for that particular soil. In other words; soil productivity figures for a particular soil are averages for that soil type over a wide range of conditions. These conditions vary from site to site depending on aspect, slope, rainfall, temperature, etc. These are the climatic factors mentioned above. If you take the **same soil** and place it on a north aspect you will get better growth than if the soil is on a south aspect. The **same soil** will produce higher growth in an area of higher rainfall than another area. In short, different conditions on the site produce different growth rates from the same soil. These differences show up in tree growth which can be measured by boring trees to obtain a site index. In other words the growth of the trees is a reflection of the site index; i.e., the **same soil** can have many **different** site index numbers. This is the reason a **site specific** analysis is conducted.

Site Trees Bored on the Site:

Breast Height Age	Total Age*	Total Height	Site Index**
47	54	67'	100
48	55	77'	110
47	54	53'	80
52	59	81'	106
53	60	81'	110
47	54	60'	90
52	59	79'	110
46	53	68'	100
50	57	77'	105
48	55	73'	105
			1,016

Throwing out the lowest site index of 80 leaves 936 ÷ 9 = Site Index 104

*Total age includes adding 7 years, which errs on the optimistic side (see Exhibit 3). You must add between 5 and 10 years to a breast height age; 5 years being Site I ground, 10 years being Site IV ground. The Ogle parcel **is not** Site I ground.
**Interpolated using Meyer's eastern Oregon tables (see Exhibit 3).

From my on site analysis and photo delineation of the soil types (using a light table and overlaying the **Lane County soil maps** on the aerial photos, see Exhibit 1) in question, I have created the following tables. These soil maps are in the record already. To arrive at the acreages shown I used the acres presented by Lane County and took proportions of these acres by dividing the amount of grassland shown on the photo with the acreages presented by the county. Since the counties acreages are the **accepted acreages** this is a more accurate calculation of acres than using the approximate scale shown on the photo.

I used a figure of 110 cf/ac/yr. for the ponderosa pine growth for this site index of 104(see Exhibit 4). If I use the ponderosa pine table presented by Mr. Just (see Exhibit 5), and follow the included directions on how to obtain a growth figure (also Exhibit 5-1) I arrive at a figure of 108 cf/ac/yr for this site class. This figure was obtained using interpolation (see Exhibit 5-3). I will use the higher figure to error on the optimistic side. Using the tables presented by Mr. Just will result in lower figures, therefore I have used the eastern Oregon tables. Mr. Just presents higher figures (141 cf/ac/yr) using a site index of 120. However, he does not show where he obtained a site index of 120.

Note on using eastern Oregon productivity figures: On Page 5 Mr. Just states that I am wrong in using eastern Oregon site index tables because I should be using northern California and southwest Oregon site index tables, which **do not exist according to his own Exhibits** (see Exhibit 5-1). Mr. Just then states that I should be using data compiled from **two very limited** research papers from northern California. I am not sure how limited data from a different state, further away from the Willamette Valley than eastern Oregon, is more appropriate for use than the eastern Oregon tables. I then explain how I come up with my productivity figures; from trees bored on the site, I obtained a site index number using the eastern Oregon site index created by Meyer. I have also explained (see above) that using the tables presented by Mr. Just result in lower productivity numbers.

The DF productivity figures are from both my original tables and Mr. Just's tables.

In Tax Lot 303 there are 8.766 acres within the 107C soil type and 4.715 acres within the 108F soil type which are thin soils over rock; in Tax Lot 304 there are 2.575 acres within the 107C soil type and 1.897 acres within the 108F soil type which are thin soils over rock. These areas have not grown trees for as long as aerial records have been kept (see Exhibits 1 and 2). I have shown these acres on the bottom of each table. I have used 45 cu.ft./ac./yr. for the Panther 102C soil since this is the number shown on the SCS tables (see Exhibit 6).

Note on the Panther 102C soil: On page 5 (Goal One August 6, 2004 letter) Mr. Just states that I am wrong in using 45 cf/ac/yr for the Panther soil unit. I obtained this figure from the most recent table available with a figure. The 1997 Lane County Soil Ratings Table has a rating of none for this soil. Therefore I went back in time to the **most recent** table with a rating. This is the February , 1990 Foresters Memo published by ODF and included with my original analysis. This is the memo that Mr. Just stated unequivocally **did not exist.** He then found an **older** Foresters Memo which has a 50 cf/ac/yr rating. Both of these tables begin by stating that **if a rating has changed, the new number supersedes the old number.** Therefore, I have used 45 cf/ac/yr for the Panther soil.

PRODUCTIVITY TABLES FOR TAX LOTS 303 &304

Tax Lot 303	Acres	Growth/Year	Total
Growth			
81D McDuff clay loam	5.600	158 Cu.Ft./Ac.	884.80 Cu.Ft.
102C Panther silty clay loam	1.747	45 Cu.Ft./Ac.	78.615 Cu.Ft.
107C Philomath silty clay*	9.510	110 Cu.Ft./Ac.	1,046.10 Cu.Ft.
108F Philomath cobbly silty clay*	2.327	110 Cu.Ft./Ac.	255.97 Cu.Ft.
113G Ritner cobbly silty clay loam	6.914	149 Cu.Ft./Ac.	1,030.186 Cu.Ft.
Grassland with exposed rock	13.481	0 Cu.Ft./Ac.	0 Cu.Ft.
Totals	39.579		3,295.671 Cu.Ft.

Average Growth Potential -- 39.579 Acres ÷ 3,295.671 Cu.Ft. = 83.268 Cu.Ft./Ac./Yr.

Tax Lot 304 Growth	Acres	Growth/Year	Total
102C Panther silty clay loam	12.936	45 Cu.Ft./Ac.	582.120 Cu.Ft.
107C Philomath silty clay*	10.278	110 Cu.Ft./Ac.	1,130.580 Cu.Ft.
108F Philomath cobbly silty clay*	3.731	110 Cu.Ft./Ac.	410.410 Cu.Ft.
113G Ritner cobbly silty clay loam	2.741	149 Cu.Ft./Ac.	408.409 Cu.Ft.
Grassland with exposed rock	4.472	0 Cu.Ft./Ac.	0 Cu.Ft.
Totals	34.158		2,531.519 Cu.Ft.

Average Growth Potential -- 34.158 Acres ÷ 2,531.519 Cu.Ft. = 74.112 Cu.Ft./Ac./Yr.

*These growth figures are for ponderosa pine for Site Index 104 (see Exhibit 4). All other growth figures are for Douglas-fir.

A portion of the acres delineated as grassland with exposed rock are underneath the two powerlines crossing the property (see Exhibit 1). These areas will never grow trees due to the power companies continually cutting them down to keep their corridors clear. On page 5 (Goal One Letter) Mr. Just states that just because you cannot grow trees under the powerlines (due to powerline regulations) does not mean I should not consider this ground. Michael Farthing will address this issue.

The productivity tables shown below deduct the remaining powerline acreage, which have no trees at the present time and will not have trees in the future.

Tax Lot 303 Growth	Acres	Growth/Year	Total
81D McDuff clay loam	5.600	158 Cu.Ft./Ac.	884.80 Cu.Ft.
102C Panther silty clay loam	0.287	45 Cu.Ft./Ac.	12.915 Cu.Ft.
107C Philomath silty clay*	7.915	110 Cu.Ft./Ac.	870.650 Cu.Ft.
108F Philomath cobbly silty clay*	2.327	110 Cu.Ft./Ac.	255.970 Cu.Ft.
113G Ritner cobbly silty clay loam	6.914	149 Cu.Ft./Ac.	1,030.186 Cu.Ft.
Powerline	3.055	0 Cu.Ft./Ac.	0 Cu.Ft.
Grassland with exposed rock	13.481	0 Cu.Ft./Ac.	0 Cu.Ft.
Totals	39.579		3,054.521 Cu.Ft.

Average Growth Potential -- 39.579 Acres ÷ 3,054.521 Cu.Ft. = 77.175 Cu.Ft./Ac./Yr.

Tax Lot 304 Growth	Acres	Growth/Year	Total
102C Panther silty clay loam	12.326	45 Cu.Ft./Ac.	554.670 Cu.Ft.
107C Philomath silty clay*	9.329	110 Cu.Ft./Ac.	1,026.190 Cu.Ft.
108F Philomath cobbly silty clay*	2.782	110 Cu.Ft./Ac.	306.020 Cu.Ft.
113G Ritner cobbly silty clay loam	2.741	149 Cu.Ft./Ac.	408.409 Cu.Ft.
Powerline	2.508	0 Cu.Ft./Ac.	0 Cu.Ft.
Grassland with exposed rock	4.472	0 Cu.Ft./Ac.	0 Cu.Ft.
Totals	34.158		2,295.289 Cu.Ft.

Average Growth Potential -- 34.158 Acres ÷ 2,295.289 Cu.Ft. = 67.196 Cu.Ft./Ac./Yr.

*These growth figures are for ponderosa pine for Site Index 104 (see Exhibit 4). All other growth figures are for Douglas-fir.

Page 5: Mr. Just states that virtually all of the Valley ponderosa pine was harvested in the years following settlement. This is true; along with every other conifer species in the valley.

Mr. Just then states a site index of 104 from *Establishing and Managing Ponderosa Pine in the Willamette Valley.* In this paper it **repeatedly** states that this data is from a **very small sample** and **should not be used** at this time, until more long term data can be collected. He then makes a quatuam leap to a site index of 150 (without showing where this comes from) and states this site would have a growth productivity of 210 cf/ac/yr. This type of growth can only be obtained on the **very best (Site I ground)** ponderosa pine sites. These sites for pine are, **generally speaking**, in eastern Oregon. On high site ground in western Oregon, Douglas-fir will easily out grow and outproduce ponderosa pine. The primary example of this is coastal ground where ponderosa pine would be very difficult to find, if it could be found at all.

Mr. Just points out that I challenge the capability of the Panther soil to support hybrid poplar. I stated that hybrid poplar will not grow in the Panther soil on **this site, not that it would not grow in the Panther soil.** Hybrid poplars attain the best growth on deep, fertile, alluvial soils that have adequate moisture (see Exhibit 7). This site has very shallow soils (or none at all on the exposed rock), a south to southwest aspect (hot and dry summers, harsh tree growing conditions) and does not have adequate water.

Hybrid poplar plantations are established in the same manner as an agricultural crop. In fact the state of Oregon considers it an agricultural crop through the age of 12 years, because it was originally intended that the trees would be harvested between 8 to 10 years old. To establish a poplar plantation, all old stumps must be removed, the soil tilled by plowing or ripping, competing vegetation must be controlled and drainage must be improved by using either surface ditches or subsurface tile (see Exhibit 7). These are agricultural practices which are done using machinery; **plowing and improving drainage are not forestry practices.** The use of such machinery means the slope of the land should not be steep, preferably under a 5% slope. The Ogle parcel is considerably steeper than 5%, in places it exceeds 35%. This is far to steep for agricultural machinery to operate on. For hybrid poplar stands to approach the productivity figures cited by Mr. Just the landowner must carry out intensive weed control, fertilize, thin, prune and protect the stand from animals, insects and diseases (see Exhibit 7). Especially important is weed control. If not controlled the hybrids will grow slowly and may not survive (see Exhibit 7). The majority this of these activities are done with machinery. The poplar stands cited by Mr. Just, with the accompanying growth figures, are only capable of these growth figures because all of the above activities have been carried out.

Mr. Just cites plantations growing west of the Cascades in areas of "ample rainfall". These are plantations, on flat ground, on the western slopes of the Cascades, where rainfall is higher than the rainfall in the Willamette Valley. Rainfall in Oregon is highest on the western slopes of the coast range and second highest on the western slopes of the Cascades. The east slopes of the coast range and Cascades are in a rain shadow and are considerably drier. This is why vineyards do so well on the east slopes of the coast range. Rainfall amounts incease as you go from the coast range rain shadow to the west slopes or the Cascades. Mr. Just then states that the Panther soils are found in areas of ample rainfall and that the soil units characteristics match those of soils supporting hybrid poplar. This could be stated for dozens of soils; I am truly confused as to what this is supposed to prove. If site conditions are conducive to the growth of hybrid poplar, the tree will grow. On the Ogle parcel the on site conditions, i.e. slope, aspect, actual soil conditions, etc., will not support the growth of hybrid poplar regardless of soil type.

Page 6: Mr. Just states that a tree species is "merchantable timber" if it can possibly be marketable in the foreseeable future. This is the definition for determining whether or not a tree species can be used for reforestation; **not the determining factor** for a merchantable timber species under the marginal land definition. OAR 629-610-0050(1)(c) is not applicable to land use law. Michael Farthing will discuss this point in more detail.

Mr. Just operates a tree farm; he states that ODF assisted with reforestation planning and he received cost-share assistance and tax credits for the reforestation. Was that for the KMX trees planted or the other species planted and other reforestation activities (if any) carried out? Mr. Just does not say. In his opinion, as a landowner, **not** a professional forester or log buyer, he states that the trees growing are straight and well formed. From pictures in his own exhibits I see twisted, S shaped trees with knots left from pruned limbs that are almost as large as the bole of the tree. Mr. Just further states that his neighbor, Mr. Monroe, has reforested with KMX and his trees are now large, straight and well-formed.

In my discussions with foresters from Roseburg Lumber, Seneca and Lone Rock Timber, three companies which have planted this tree, I have gotten the opposite. They have all stated that the trees are like bushes, are incredibly limby and of very poor form. This is what I personally have observed with KMX trees. In addition, many of the trees growing are now dying from foliar diseases. In short, none of these companies will plant KMX again. Furthermore, the state foresters I have talked to, including those in Linn County, discourage planting KMX; as a professional consulting forester managing private owners small woodlands, I would **not** recommend planting KMX.

Mr. Just further states that in **limited** testing, **of the caracteristics of KMX (not actual KMX saw logs),** it produces high quality pulp and is suitable for studs and dimension lumber. Talking with mills and log buyers throughout the state of Oregon shows otherwise. The pulp is so high in resin content that it gums up the machinery in the mills; they will not use it for pulp. **No mill** will purchase **KMX logs** with a purchase order. No **mills** will purchase ponderosa pine or KMX pulp logs. There are two chip/pulp plants in the area that will **occasionally** purchase ponderosa pine pulp logs; they **will not** purchase KMX for pulp.

The final argument for merchantibility of KMX concerns the use of KMX for firewood. To begin with it is hard to conceive of someone planting KMX to grow for firewood. The next point is whether or not it makes good firewood, not just will it burn. Anything will burn, given enough fuel. Ponderosa pine is horrible as firewood. It is extremely pitchy and resinous; both of these substances create creosote in chimneys, whether burned in an open fireplace or a wood stove. Creosote creates an extreme fire hazard. Furthermore, unless ponderosa pine is extremely dry, it is hard to light and burns poorly, which creates huge amounts of smoke. In today's world this is extremely undesirable and under certain conditions in Lane County (when it is put out on the news to not burn wood due to atmospheric conditions) it is illegal. KMX has even more resin than ponderosa pine which would mean it produces even more smoke than ponderosa pine produces. Although it may happen, I have never seen anyone selling KMX as firewood from the back of their pickup.

Page 7: Mr. Just states that Monterey pine in New Zealand and Australia produce merchantable timber. This is true. He then makes a quantum leap and states that there is no reason to believe KMX will not produce merchantable timber. This is simply not true. The characteristics of the wood in KMX are different from Monterey pine just like Monterey pine is different from ponderosa pine. Because one species of pine is merchantable **does not** mean another pine species is merchantable.

Mr. Just states that I do not explain my use of a 50-year rotation cycle for my calculations. I will **repeat again;** I have used 50 years because Lane County has determined that this is the cycle which will be used. I originally used a 60-year cycle; Mr. Just assailed this as incorrect and stated I should be using a 50-year cycle as required by Lane County. Mr. Just further states that the rotation age should be changed because the 50-year growth cycle does not "constitute reasonable management practices". This is the **exact same statement** he originally made concerning the 60-year cycle I used.

Page 8: Mr. Just statements concerning the length of an appropriate growth cycle (for calculation of income) cites a graph (see Mr. Just's Exhibit 3-13, my Exhibit 8) showing the culmination of mean annual increment, the point in time that the periodic annual increment intersects the mean annual increment. While the culmination of mean increment may be 80 years that is not when a company or landowner would log in order to maximize income. Culmination of mean annual increment is the point in time that the stand is mature, not necessarily when it should be harvested (see Exhibit 8). It can be seen that the periodic annual increment peaks between 40-50 years; this is the point in time a company would log, as well as a landowner wishing to maximize their income. Up to this point in time the growth is increasing, after this point in time the growth rate is slowing down. From a companies standpoint this is the point in time where the cost of holding on to the timber is increasing because the growth is decreasing. Therefore from a profit standpoint, a company and a private landowner would harvest at this time (see Exhibit 8). As most private individual tree farmers are interested in income (or cash flow), as well as growing trees, a reasonable management practice would be to harvest between 40 and 50 years. While some owners would not harvest at this point in time, it would be for other reasons than maximizing their income.

Mr. Just sites testimony from Jesse and Jo Ann Ulloa confirming that "substantial" amounts of western red cedar and ponderosa pine were logged from the subject properties; did they go onto the property with a forester who knows how to identify trees? As I have **repeatedly** stated, **incense cedar** and ponderosa pine as well as Douglas-fir were harvested from the property. As I have **repeatedly** stated **incense cedar** did grow and does currently grow on the property, but at a considerably slower growth rate than Douglas-fir and well below the 85 cf/ac/yr standard accepted by Lane County.

I stated that prices for 250-350 year old "yellow belly" ponderosa pine, primarily from central and eastern Oregon, were not the same as 50 year old Douglas-fir 2S grade. Mr. Just states that I am incorrect because his prices were from the Grants Pass Unit, for southwestern Oregon pine and ponderosa pine peelers. I am not sure what he is trying to prove with this statement. Ponderosa pine grades are the same regardless of where the tree grows, I simply stated that the majority of old growth pine comes from central and eastern Oregon. In other words the **price** may be different in the Grants Pass Unit but the **grades** are the same as anywhere else. Mr. Just states the prices presented are for southwestern Oregon pine and ponderosa pine peelers. To **clarity; pine peelers** are an Oregon pine grade. You **cannot** have a peeler grade pine log in a 50 year old ponderosa pine tree, the rotation age being discussed in this analysis.

As a follow up to the price issue Mr. Just has presented 20 years worth of ponderosa pine prices in an August 19th letter. He presents this information as proof that ponderosa pine is a merchantable tree species. At **no point** have I stated ponderosa pine is not merchantable; my statements have been made in regards to the much lower value of ponderosa pine logs than Douglas-fir logs. Mr. Just then tries to compare 2S Douglas-fir to 2S ponderosa pine; this is comparing apples to oranges. A 2S Douglas-fir log is equivalent to a 4S ponderosa pine log (see Exhibit 9).

Notes on discussions of productivity. Mr. Just repeatedly brings up the issue of **"reasonable management practices".** Generally speaking, forest management activities carried out on forestland are conducted in order **to produce an income as well as manage the forest**. A reasonable person would want these activities to be profitable, not necessarily in the short term, but definitely over time. Most of the activities espoused by Mr. Just would cost the landowner substantial amounts of money, with very little return. Most people managing forestland seek some sort of return. Growing tree species which you cannot sell on today's market would not be a prudent or reasonable management practice. Very few people are willing to plant a tree species based on the hope that it **may be** merchantable in the future. Furthermore, there are few tree farmers who are in the business to lose money. The practices Mr. Just proposes would be prohibitively expensive to carry out and in most cases cause the landowner to lose money. These practices would also take ground out of production from an income producing standpoint.

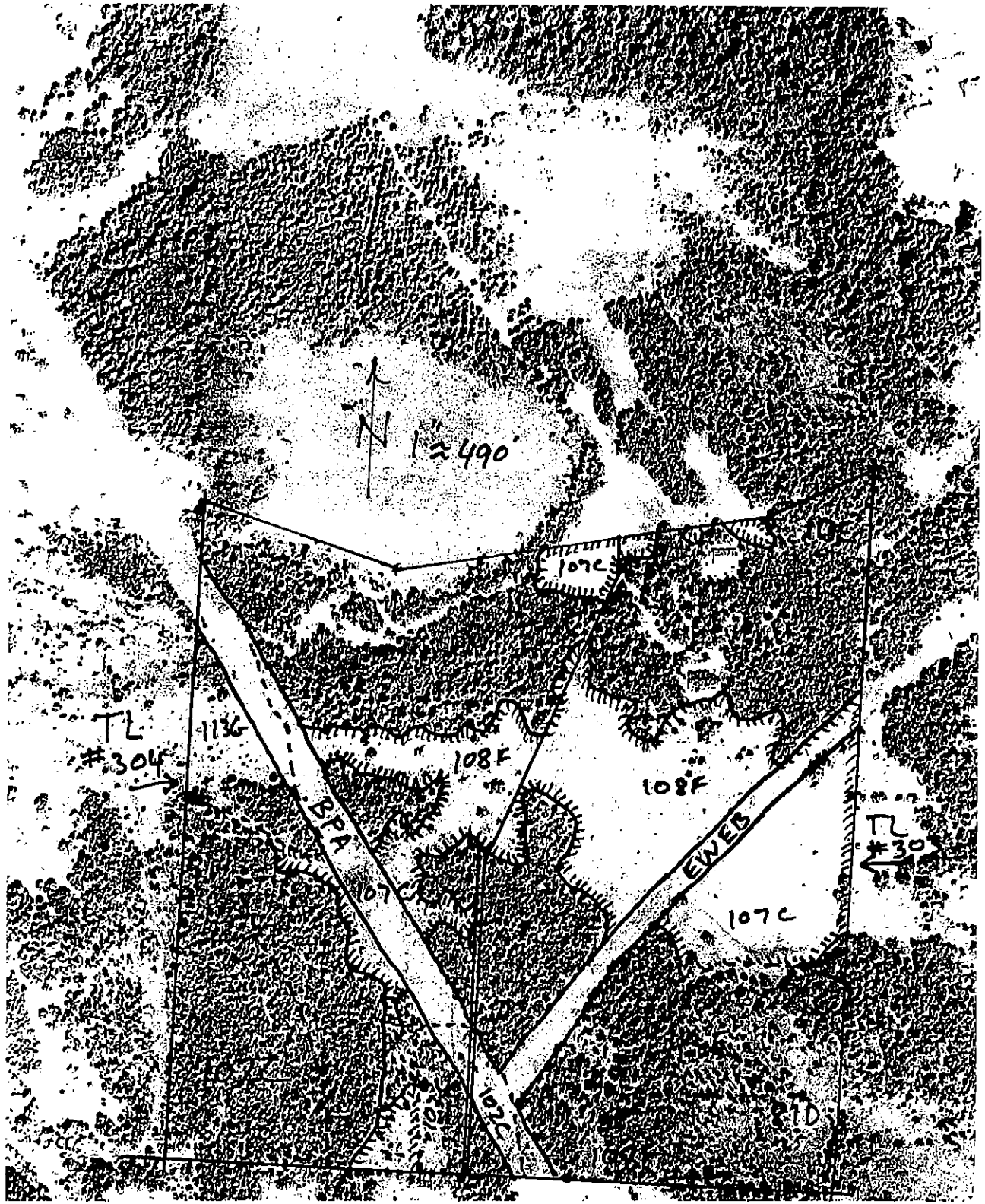
In conclusion, as a practicing professional forester, I would not consider planting ponderosa pine, KMX, or hybrid poplar a reasonable or prudent practice to carry out. The KMX tree species is not a commercially marketable species; planting it would cost a substantial amount of money, with no return in the foreseeable future. Hybrid poplar would be all but impossible to plant and maintain on this site (see explanation on page 6), it would also be prohibitively expensive even if it was possible. Furthermore, while a market for the wood may exist in isolated areas (such as near Pendleton), it would be prohibitively expensive to truck the wood there (it is a very heavy wood, chip trucks reach their maximum weight before the truck is full). Planting valley ponderosa pine at this point in time is also a huge risk; the IPS beetle (which attacks freshly cut ponderosa pine) is becoming a real problem, currently there is not a good market for pine and even when you can sell it the delivered price paid will not cover the cost of getting the logs to a mill. As a professional forester managing private owners forestland, I **would not** recommend planting any of these species. The large amounts of capital needed to grow these trees would be better spent on brush and grass control to establish Douglas-fir, the highest value conifer growing today.

Sincerely,

Marc E Settle

EXHIBIT
1-1

OGLE
PARCEL



ONLY AREAS WITHIN THE 107C & 108F SOIL TYPES HAVE BEEN DEDUCTED

THE POWERLINE BOUNDARIES ARE CLEARLY DEFINED.

EXHIBIT 1-2

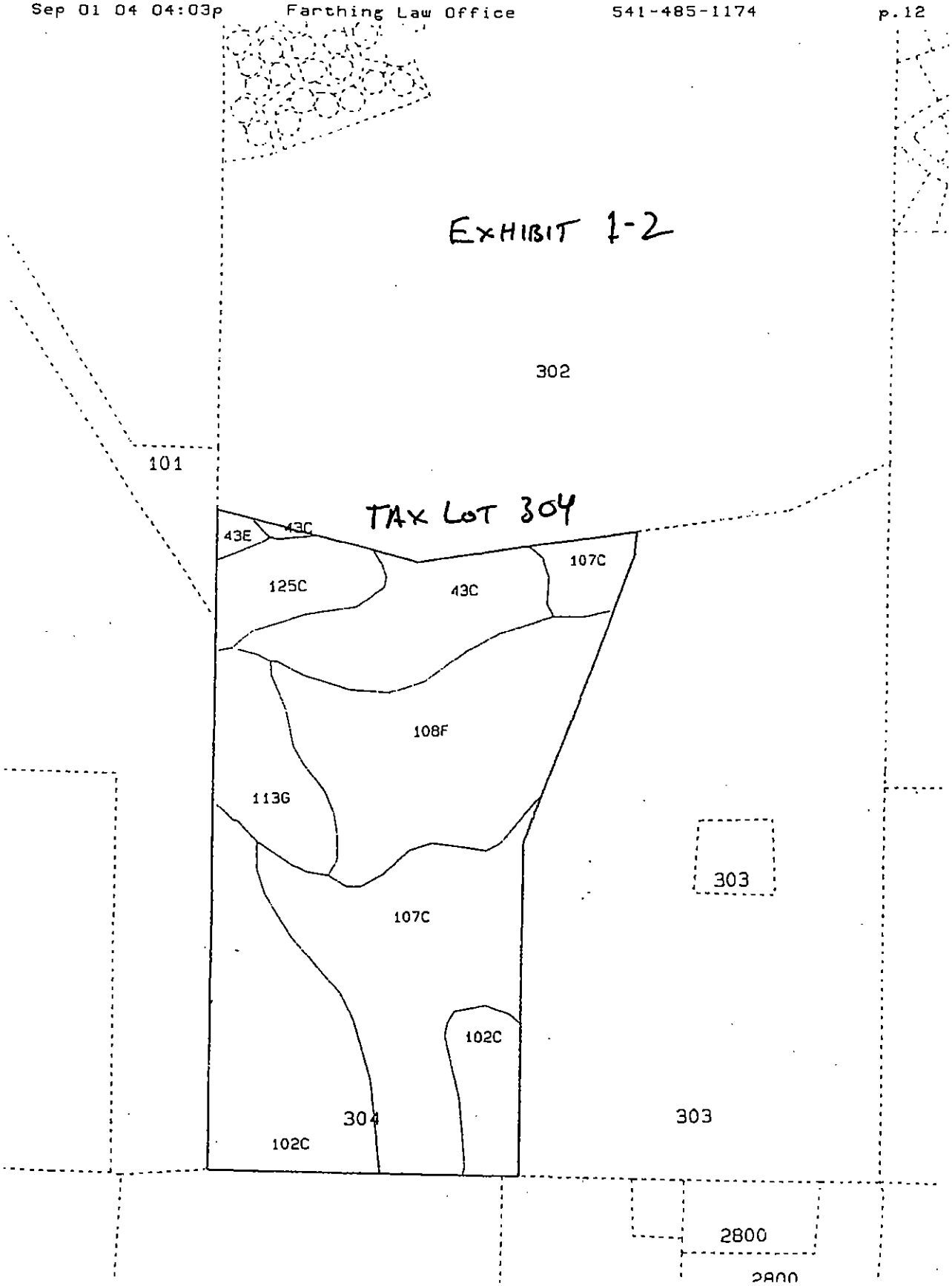
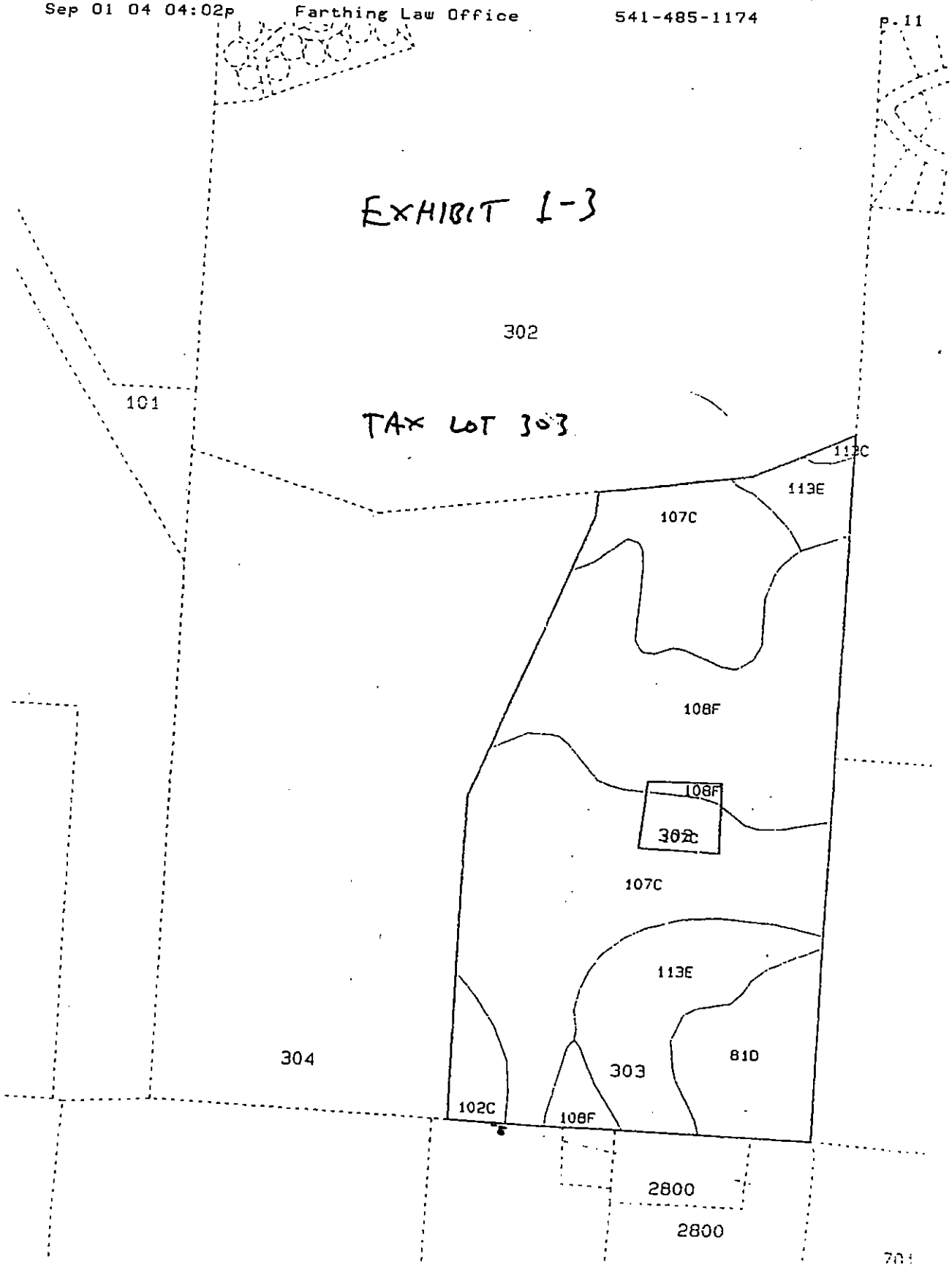

302
101
TAX LOT 304
43E
43C
125C
43C
107C
108F
113G
107C
102C
304
102C
303
303
2800

EXHIBIT 1-3


302
TAX LOT 303
101
112C
113E
107C
108F
108F
302
107C
113E
304
303
810
102C
108F
2800
2800

OGLE PARCEL IN 1952 (AUGUST PHOTO)

EXHIBIT 2-1

OGLE PARCEL IN 1936
EXHIBIT 2-2

EC 1128
Reprinted August 1997
$1.00

The Woodland Workbook

EXHIBIT 3

Forest Measurements

Estimating Site Productivity on Your Woodland

S. Woodard

For years, foresters evaluated land quality by looking at the trees growing on a site. They knew that tall trees meant favorable soil and climate, and that short trees indicated an area with less potential.

Site indexes and site classes are refinements of these observations. They are productivity rankings used for management decision making, tax classification, and land-use planning and zoning.

Woodland owners need site classification information for the same reasons as other owners, managers, and officials. Fortunately, it is available for most areas.

Site index is the most common unit of measurement for potential productivity of forest land. It is the anticipated height *in feet* of trees growing in a particular place when they reach a specified age, usually 50 or 100 years. The taller trees are at a given age, the higher we expect the site productivity to be.

Because site indexes include a wide range of numbers, for convenience they are grouped into *site classes*. Each site class includes a range of site indexes (for example, in Appendix A, site class III includes indexes from about 125 to 155).

Ordinarily, site classes are identified with Roman numerals that range from I (the best sites) to V or VII (the poorest). Because government agencies and various organizations sometimes define site classes for specific purposes, the ratings themselves will vary, depending on which agency provides the information.

Table 1.—*Site relationships.*

		Site class I ---------- V	
Causes	Climate	humid	dry
	Soils	deep	shallow
		loam	heavy clays, excess sand, excess rocks
		good drainage	poor drainage
Effects	Tree growth	excellent	poor
	Site quality	high	low
	Site index	high	low

Why sites differ

Site index reflects the combined effects of climate and soil on tree height growth. In general, you find poor sites in areas with drier climates and associated with soils that have limited ability to provide trees with necessary water and nutrients (Table 1).

Species

Site indexes usually are estimated for a single species. However, they can be prepared for any of several species on a given parcel of land.

Your property may be capable of growing alder, hemlock, and Douglas-fir. Since each species grows at a different rate, each one will have a special site index based on its height at a given age.

Areas that are too wet for survival of native conifers will not have a site index for Douglas-fir. The same areas may support a good stand of Oregon ash—a species that thrives on wet soils. You could, therefore, calculate a site index for Oregon ash.

Index age

Site indexes are based on a certain age for the species being considered. Although it's possible to use any age, 50 and 100 years are the most common. A Douglas-fir site, for example, might grow trees 104 feet tall in 50 years. The same trees should reach 140 feet in 100 years.

Systems for Douglas-fir originally were based on height at age 100 (D-f SI_{100}—Douglas-fir site index at

OREGON STATE UNIVERSITY EXTENSION SERVICE

Steve Woodard, Extension forestry agent emeritus, Lane and Benton counties, Oregon State University.

100 years). It now is common to use one based on height at 50 years (D-f SI_{50}—Douglas-fir site index at 50 years). Usually, the 50-year system is more appropriate for young-growth forests.

Sources of site information

Various government agencies gather information that you can use to determine site class. They also assign their own site classification to a particular location. The Natural Resources Conservation Service, Oregon Department of Revenue, and Oregon Department of Forestry may have information about your land.

Natural Resources Conservation Service (NRCS)

NRCS examined forest soils and assigned names to each type of soil. NRCS determines one or more site indexes for each soil. You may obtain valuable information about your site index and class from the NRCS office in your county.

Oregon Department of Revenue (ODR)

ODR determines the quality of most private forest land with site classes it developed. For Douglas-fir sites, ODR uses a letter series from FA (best) through FB, FC, FD, FE, and FF, to FG (the poorest site class still considered commercial). See Appendices A and B.

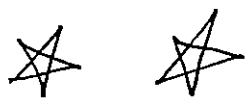
Oregon Department of Forestry (ODF)

ODF inspects lands classified under the Western Oregon Small Tract Optional Tax (WOSTOT) and assigns a site class, using still another classification. Its site classes range from I (best) through II, III, and IV, to V (poorest). See Appendix A.

Uses for site index

Any landowner who plans to buy or sell forest land or who wants to compare economic returns of various forest practices should consider site index. It's an important basis for calculating future growth of forest crops—and for estimating harvest volumes and income. And it's necessary for reading most yield tables!

Most tax systems that require you to assign values to forest land are based on site index. It recently has become the basis for some land-use planning and zoning—generally, to keep the best land available for forest uses.



Changes in site index

Site quality is changed only by modifying the soil or climatic factors that influence tree growth. You may increase tree growth by making more water or nutrients available on the site.

It's also possible to divide the available resources among fewer trees or keep only the most efficient trees on the site. This leads to *apparent* changes in site quality, rather than actual changes.

Actual changes

Fertilizing, irrigating, draining, and tilling may *improve* a site, either temporarily or permanently, for a particular species. Likewise, poor management practices and natural events may damage a site. Soil compaction, soil erosion, and excessive burning can affect tree growth by reducing the amount or availability of necessary air, water, and nutrients in the soil.

Apparent changes

Site index measurements normally are based on trees in unmanaged stands. It's possible to obtain artificially high site index readings in intensively managed stands. Brush control and thinning leave fewer plants to compete for the available resources.

If trees are genetically more efficient than average, you may obtain high site index readings with no real change in site quality. The change is in the ruler that measured the site quality.

Limitations of site index

Basically, a good site is preferable to a poor one. Other considerations can, however, be as important as site quality if you plan to manage your land for timber production. Let's compare two parcels of land to illustrate some of the factors you should consider.

The Jones family has a large parcel of poor-quality land that's well-stocked with Douglas-fir. It's simple to manage the property because the ground is gentle and there are no streams or neighbors to limit management options.

The Smiths are blessed with high-site land. Unfortunately, it grows brush at least as well as trees.

Past practices have created a poorly stocked stand of low-value trees. Steep ground makes it difficult to operate tractors, and boundary lines halfway up the hill make it risky to use prescribed fire.

In addition, neighbors who object to certain management practices may make it difficult to improve production. Table 2 summarizes both situations.

Table 2.—*Some characteristics that influence management on the Jones and Smith woodlands.*

Characteristics	Jones place	Smith place
Site index (D-f_{50})	90	120
Site class	IV	II
Size (acres)	80	10
Topography	Gentle	Steep, broken
Access	Good	Poor
Stand condition	Good	Poor
Neighbors	Few	Many
Timber management potential*	Very good	Poor

*Although the Smiths have better soil than the Jones's (SI 120 vs 90 and site class II vs IV), their opportunity to manage for timber production is limited by each of the other characteristics listed.

Determining site index

Professionals with sophisticated tools and techniques usually determine site indexes. You can make your own estimates if you wish.

Some tools to help you are a clinometer, increment borer, and tape. You'll find a description of each in EC 1129, *Tools for Measuring Your Forest* (available for $1.50 from Extension and Station Communications, Oregon State University, 422 Kerr Administration, Corvallis, OR 97331-2119).

Determine site index by measuring the age and height of trees that dominate their neighbors. Here's how:

Select at least three of the taller trees for each area you wish to sample.

Estimate the age of each sample tree. Annual rings—the layers of wood a tree produces in a year's growth—provide a good record of age.

You can obtain a core sample (see Figure 1) with an increment borer, a hollow drill that is used most conveniently at breast height (b.h.=4.5 feet above the ground). Your ring count estimates the b.h. age.

For most site index systems, you need to know the total age of the tree. In such cases, you must add 5 to 10 years to allow for the time it took the tree to grow to 4.5 feet.

It may be necessary, or more convenient, to count the rings on the surface of a stump. This will provide an answer that is closer to the total age of the tree.

For stumps less than a foot tall, the ring count may be only 2 years less than the total age of the tree. The same stumps would have fewer rings showing if they were cut 3 feet tall because it may take 5 years for the tree to grow that tall.

You can estimate the age of young trees by counting the layers of branches (whorls).

This works well on species that form one distinct layer of branches each year such as pines, true firs, and Douglas-fir. It does not work on cedars, hemlocks, and alder because they lack this particular branching habit.

It is easy to count the whorls for about the first 30 years, but trees growing closely together in dense stands often lose their lower branches because of natural pruning. In such cases, you can look for limb scars or knot indicators.

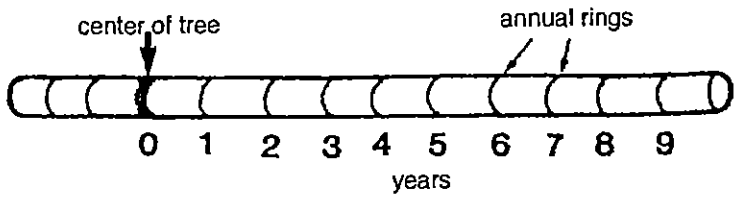


Figure 1.—*Counting the rings: a band of light wood is formed in the spring of each year and is followed by a darker band of denser summer wood.*

Broken tops can cause you to underestimate age, and false whorls (Figure 2) can cause you to overestimate age.

Estimate height of the sample trees. Measure to the nearest foot if it is possible with your tools. Windthrown trees can provide good height estimates if they were dominant, healthy trees before they fell.

After you estimate age and height of your trees, you can determine site index. To do this, refer to the appendices (or similar tables) and find the age of the tree in the left column. Look to the right on the same line to find tree height. Follow this column down to find the site index and various groupings of site indexes.

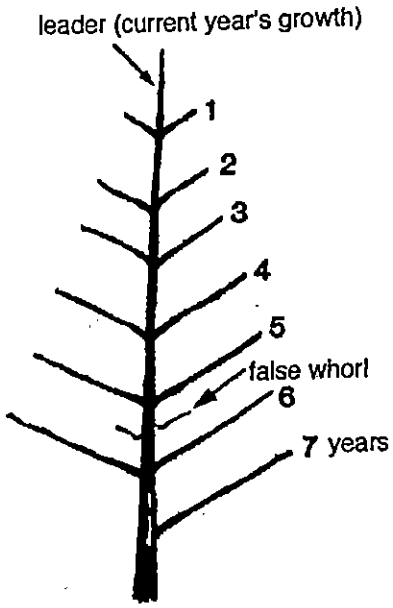


Figure 2.—*Determining the age of a tree by counting the whorls.*

Appendix A.—*Site index and site class for Douglas-fir, 100-year basis.*

Total age (years)	Tree height (feet)													
20	21	24	26	29	31	34	37	39	42	44	47	49	52	54
30	37	41	46	50	55	60	64	69	74	78	83	88	92	96
40	48	54	60	66	72	78	84	90	96	102	108	114	120	126
50	56	63	70	77	84	91	98	105	112	119	125	132	139	146
60	63	70	78	86	93	101	109	117	124	132	140	148	156	163
70	68	77	85	94	102	110	119	127	135	144	152	161	170	178
80	73	82	91	100	109	118	127	136	145	154	163	172	181	190
90	77	86	96	105	115	125	134	144	153	163	172	182	192	201
100	80	90	100	110	120	130	140	150	160	170	180	190	200	210
Site index	80	90	100	110	120	130	140	150	160	170	180	190	200	210
Site class	V		IV			III			II			I		
ODR* tax site class	FG		FF		FE	FD		FC	FB			FA		

*Oregon Department of Revenue.

Appendix B.—*Site index and site class for Douglas-fir, western Oregon, 50-year basis.*

b.h. age (years)	Total height (feet)									
10	16	18	20	22	24	27	29	32	34	37
20	30	35	40	44	49	54	59	63	68	73
30	42	49	56	63	70	76	83	90	97	103
40	53	61	69	78	86	95	103	112	120	129
50	60	70	80	90	100	110	120	130	140	150
Site index	60	70	80	90	100	110	120	130	140	150
Site class	V		IV		III		II		I	
ODR* site class	FG		FF	FE	FD		FC		FB	FA

*Oregon Department of Revenue.

Appendix C.—*Site index and site class for ponderosa pine, 100-year basis.*

Total age (years)	Total height (feet)												
20	6	9	12	16	20	25	30	35	40	45	50	55	60
30	11	15	20	26	32	38	44	51	57	64	70	77	84
40	16	22	28	35	42	49	55	63	70	77	85	93	100
50	21	28	35	43	51	58	65	73	80	89	97	105	113
60	26	34	42	50	58	66	73	81	90	99	107	115	124
70	30	39	47	56	64	73	80	89	98	108	116	125	134
80	34	43	52	61	70	79	88	97	106	116	124	133	143
90	37	47	57	66	75	85	94	104	113	123	132	142	152
100	40	50	60	70	80	90	100	110	120	130	140	150	160
Site index	40	50	60	70	80	90	100	110	120	130	140	150	160
Site class	VI		V		IV		III	II		I			

Appendix D.—*Site index and site class for Sitka spruce and western hemlock, 100-year basis.*

Total age (years)	Total height (feet)							
20	13	17	21	25	30	34	38	43
30	23	30	37	45	52	60	67	75
40	31	41	51	62	72	82	92	103
50	38	51	63	76	88	101	114	126
60	44	58	73	87	102	117	131	146
70	49	64	81	97	114	130	146	162
80	53	70	88	105	123	140	158	176
90	56	75	94	113	132	151	169	188
100	60	80	100	120	140	160	180	200
Site index	60	80	100	120	140	160	180	200
Site class		V		IV		III	II	I

Appendix E.—*Site index and site class for alder, 50-year basis.*

Total age (years)	Total height (feet)						
10	23	27	31	35	39	42	46
20	37	44	50	56	63	69	75
30	47	55	63	71	79	87	95
40	54	63	72	81	91	100	109
50	60	70	80	90	100	110	120
Site index	60	70	80	90	100	110	120
Site class	IV		III		II		I

SITE INDEX FOUND FOR EACH TREE BY INTERPOLATION. TREE HEIGHT (TOP) IS MATCHED WITH TOTAL TREE AGE (LEFT) TO ARRIVE AT SITE CLASS FOR EACH TREE (SEE 3-5 FOR EXAMPLE)

3-4

The Woodland Workbook is a collection of publications prepared by the Oregon State University Extension Service specifically for owners and managers of private, nonindustrial woodlands. The Workbook is organized into separate sections, containing information of long-range and day-to-day value for anyone interested in wise management, conservation, and use of woodland properties. It's available in a 3-ring binder with tabbed dividers for each section.

For information about how to order, and for a current list of titles and prices, inquire at the office of the OSU Extension Service that serves your county.

This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties. Oregon State University Extension Service offers educational programs, activities, and materials—*without regard to race, color, religion, sex, sexual orientation, national origin, age, marital status, disability, and disabled veteran or Vietnam-era veteran status*—as required by Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. Oregon State University Extension Service is an Equal Opportunity Employer.

Appendix B.—*Site index and site class for Douglas-fir, western Oregon, 50-year basis.*

b.h. age (years)	Total height (feet)									
10	16	18	20	22	24	27	29	32	34	37
20	30	35	40	44	49	54	59	63	68	73
30	42	49	56	63	70	76	83	90	97	103
40	53	61	69	78	86	95	103	112	120	129
50	60	70	80	90	100	110	120	130	140	150
Site index	60	70	80	90	100	110	120	130	140	150
Site class	V		IV		III		II		I	
ODR* site class	FG		FF	FE	FD		FC	FB	FA	

*Oregon Department of Revenue.

Appendix D.—*Site index and site class for Sitka spruce and western hemlock, 100-year basis.*

Total age (years)	Total height (feet)							
20	13	17	21	25	30	34	38	43
30	23	30	37	45	52	60	67	75
40	31	41	51	62	72	82	92	103
50	38	51	63	76	88	101	114	126
60	44	58	73	87	102	117	131	146
70	49	64	81	97	114	130	146	162
80	53	70	88	105	123	140	158	176
90	56	75	94	113	132	151	169	188
100	60	80	100	120	140	160	180	200
Site index	60	80	100	120	140	160	180	200
Site class		V		IV	III		II	I

Appendix C.—*Site index and site class for ponderosa pine, 100-year basis.*

Total age (years)	Total height (feet)												
20	6	9	12	16	20	25	30	35	40	45	50	55	60
30	11	15	20	26	32	38	44	51	57	64	70	77	84
40	16	22	28	35	42	49	55	63	70	77	85	93	100
50	21	28	35	43	51	58	65	73	80	89	97	105	113
60	26	34	42	50	58	66	73	81	90	99	107	115	124
70	30	39	47	56	64	73	80	89	98	108	116	125	134
80	34	43	52	61	70	79	88	97	106	116	124	133	143
90	37	47	57	66	75	85	94	104	113	123	132	142	152
100	40	50	60	70	80	90	100	110	120	130	140	150	160
Site index	40	50	60	70	80	90	100	110	120	130	140	150	160
Site class	VI		V		IV		III	II	I				

Appendix E.—*Site index and site class for alder, 50-year basis.*

Total age (years)	Total height (feet)						
10	23	27	31	35	39	42	46
20	37	44	50	56	63	69	75
30	47	55	63	71	79	87	95
40	54	63	72	81	91	100	109
50	60	70	80	90	100	110	120
Site index	60	70	80	90	100	110	120
Site class	IV		III		II		I

EXAMPLE: 60 YRS. TOTAL AGE
81' TOTAL HEIGHT
= SITE INDEX AND CLASS 3-5
SITE INDEX
IS 110 FOR THIS TREE

The Woodland Workbook is a collection of publications prepared by the Oregon State University Extension Service specifically for owners and managers of private, nonindustrial woodlands. The Workbook is organized into separate sections, containing information of long-range and day-to-day value for anyone interested in wise management, conservation, and use of woodland properties. It's available in a 3-ring binder with tabbed dividers for each section.

For information about how to order, and for a current list of titles and prices, inquire at the office of the OSU Extension Service that serves your county.

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EXHIBIT 4

SITE INDEX	CMAI FOR PONDEROSA PINE 100 YR. TABLE (PIPO) 600-MEYER								CMAI FOR LODGEPOLE PINE 100 YR. TABLE (PICO) 520-ALEXANDER			CMAI FOR WESTERN LARCH 50 YR. TABLE (LAOC) 265-SCHMIDT		
	CU.FT./ AC./YR.	CU.M./ HA./YR.	TOTAL AGE	SCRIBNER BD.FT./ AC./YR.	TOTAL AGE	INTER.1/8" BD.FT./ AC./YR.	TOTAL AGE		CU.FT./ AC./YR.	CU.M./ HA./YR.	TOTAL AGE	CU.FT./ AC./YR.	CU.M./ HA./YR.	TOTAL AGE
70	55	3.8	50	172	160	232	130		59	4.1	90	101	7.1	70
71	56	3.9	50	177	160	240	130		60	4.2	90	103	7.2	70
72	58	4.1	50	182	160	247	130		61	4.3	90	105	7.3	70
73	59	4.1	50	188	160	255	130		62	4.3	90	107	7.5	70
74	60	4.2	50	193	160	263	130		63	4.4	90	109	7.6	70
75	62	4.3	50	198	160	270	130		64	4.5	90	111	7.8	70
76	63	4.4	50	203	160	278	130		65	4.5	90	113	7.9	70
77	64	4.5	50	209	160	285	130		66	4.6	90	116	8.1	70
78	65	4.5	50	214	160	293	130		67	4.7	90	118	8.3	70
79	67	4.7	50	219	160	300	130		68	4.8	90	120	8.4	70
80	69	4.8	40	225	150	313	110		69	4.8	90	122	8.5	70
81	70	4.9	40	232	150	321	110		70	4.9	90			
82	72	5.0	40	238	150	330	110		71	5.0	90			
83	74	5.2	40	245	150	339	110		72	5.0	90			
84	75	5.2	40	252	150	347	110		73	5.1	90			
85	77	5.4	40	258	150	356	110		74	5.2	90			
86	78	5.5	40	265	150	365	110		75	5.2	90			
87	80	5.6	40	271	150	373	110		76	5.3	90			
88	82	5.7	40	278	150	382	110		77	5.4	90			
89	83	5.8	40	284	150	391	110		78	5.5	90			
90	85	5.9	40	292	130	403	100		79	5.5	90			
91	87	6.1	40	300	130	413	100		80	5.6	90			
92	88	6.2	40	308	130	423	100		81	5.7	90			
93	90	6.3	40	316	130	433	100		82	5.7	90			
94	92	6.4	40	324	130	443	100		83	5.8	90			
95	94	6.6	40	332	130	453	100		84	5.9	90			
96	96	6.7	40	340	130	463	100		85	5.9	90			
97	97	6.8	40	348	130	473	100		86	6.0	90			
98	99	6.9	40	356	130	483	100		87	6.1	90			
99	101	7.1	40	364	130	493	100		88	6.2	90			
100	102	7.1	40	372	120	507	90		89	6.2	90			
101	104	7.3	40	381	120	519	90		90	6.3	90			
102	106	7.4	40	390	120	530	90		91	6.4	90			
103	108	7.6	40	399	120	542	90		92	6.4	90			
* 104	110	7.7	40	408	120	554	90		93	6.5	90			
105	112	7.8	40	417	120	566	90		94	6.6	90			
106	114	8.0	40	426	120	578	90		95	6.6	90			
107	116	8.1	40	435	120	590	90		96	6.7	90			
108	118	8.3	40	444	120	602	90		97	6.8	90			
109	120	8.4	40	453	120	614	90		98	6.9	90			

EXHIBIT 5

Jim Just

From: "Bennett, Max" <max.bennett@oregonstate.edu>
To: "Fletcher, Rick" <rick.fletcher@oregonstate.edu>; "Jim Just" <goal1@pacifier.com>
Sent: Tuesday, January 27, 2004 5:09 PM
Subject: RE: ponderosa pine soils ratings

Jim & Rick:

I don't have any SW OR volume tables for ponderosa pine I can lay my hands on easily. Not sure they even exist per se. Maybe the closest we can come is from the following two pubs:

Oliver, W.W. and R.F. Powers. 1978. Growth models for ponderosa pine: I. Yield of unthinned plantations in northern California. Research Paper PSW-133. Berkeley CA: Pacific Southwest Forest and Range Experiment Station, Forest Service, USDA. 21 p.
Powers, R.F. and W.W. Oliver. 1978. Site classification of ponderosa pine stands under stocking control in California. Research Paper PSW-128. Berkeley CA: Pacific Southwest Forest and Range Experiment Station, Forest Service, USDA. 9 p.

I don't have copies, they are probably at the OSU library.
On the modelling front, there is SYSTUM-1, which models young stands up to age 20, at which point ORGANON takes over. Actual or hypothetical stand data is required. These models are calibrated with SW OR and N. CA stand data.

INSTRUCTIONS FOR USE OF TABLE

As a rough approximation, the Silvics handbook has the following yield table. To calculate the cubic ft/ac/year, determine the mean annual increment (MAI, = total stand volume divided by age) for a given site index. For example, for SI=120, the MAI at age 40 is 5,650 cubic ft / 40 years = 141 cubic ft per acre per year. FOr a 50 year base site index, would have to first convert to 100-base value.

Max

Table 1- Total volume inside bark of ponderosa pine 1.5 cm (0.6 in) and larger in d.b.h. (*39*)

Age	Site index at base age 100 years[1]			
	18 m or 60 ft	27 m or 90 ft	37 m or 120 ft	46 m or 150 ft
yr	m^3/ha			
20	28	94	168	262
40	122	238	396	588
60	192	340	570	861
80	238	413	696	1060
100	273	472	794	1204
120	308	518	868	-
140	336	556	928	-
yr	ft^3/acre			
20	400	1,350	2,400	3,750

GOAL ONE EXHIBIT NUMBER

Exhibit 2-1 1/28/2004

5-1

40	1,750	3,400	5,650	8,400
60	2,750	4,850	8,150	12,300
80	3,400	5,900	9,950	15,150
100	3,900	6,750	11,350	17,200
120	4,400	7,400	12,400	-
140	4,800	7,950	13,250	-
[1]Height of dominant and codominant trees of average d.b.h.				

: Fletcher, Rick
Sent: Tuesday, January 27, 2004 9:40 AM
To: Jim Just
Cc: Bennett, Max
Subject: RE: ponderosa pine soils ratings

Jim:

There are no published yield tables for Valley ponderosa like there are for Douglas-fir and other species. One logical approach would be to use the volume tables for ponderosa in SW Oregon. Max Bennett, our agent in Medford has some experience with Valley ponderosa and ponderosa in SW Oregon, so he may be able to help with this. I have included him in this email. Let's see what he might suggest.

Rick

From: Jim Just [mailto:goal1@pacifier.com]
Sent: Mon 1/26/2004 3:51 PM
To: Fletcher, Rick
Subject: ponderosa pine soils ratings

Rick,
How would you convert a site index for ponderosa pine into a cf/ac/yr rating? i.e. for Philomath soils, what cf/ac/yr rating could be expected from a site index of 104?

Thanks for your help.

Jim Just, Executive Director
Goal One Coalition
39625 Almen Drive
Lebanon, OR 97355
phone/fax: 541.258.6074

Championing the role of citizens in decisions affecting the livability of their communities and the sustainability of the natural environment

GOAL ONE EXHIBIT NUMBER

5-2

Exhibit 2-2 1/28/2004

YR.		ft³/ACRE		
40	1,750	3,400	5,650	8,400
60	2,750	4,850	8,150	12,300
80	3,400	5,900	9,950	15,150
100	3,900	6,750	11,350	17,200
120	4,400	7,400	12,400	-
140	4,800	7,950	13,250	-

[1]Height of dominant and codominant trees of average d.b.h.

EXAMPLE: 104 SITE INDEX: 50 YEAR ROTATION

INTERPOLATION PUTS TOTAL ft³/ACRE HERE = 5420 cu. ft.

5420 cu. ft. ÷ 50 YEAR ROTATION = 108.4 cf/AC/YR.

: Fletcher, Rick
Sent: Tuesday, January 27, 2004 9:40 AM
To: Jim Just
Cc: Bennett, Max
Subject: RE: ponderosa pine soils ratings

Jim:

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Championing the role of citizens in decisions affecting the livability of their communities and the sustainability of the natural environment

GOAL ONE EXHIBIT NUMBER

5-3

Exhibit 22 1/28/2004

EXHIBIT 6

2-7-90

-47e

LANE COUNTY - FOREST SOILS RATINGS

SCS #	SCS Name	(Site Index) Rating	SCS Acreage	Cuft/Ac per yr
004G	Atring-Rock Outcrop Complex. 30-60%	Med 120	1140	86
005	Awbrig sicl	3	9890	est 40
006	Awbrig Urban Land complex	3	350	est 20
008	Bashaw c	3	9650	est 30
009	Bashaw-Urban Land complex	3	350	est 20
010	Beaches	3	1000	
017	Brallier muck, drained	3	1160	
018	Brallier muck, tidal	3	930	
019	Brenner sicl	3	860	
021B	Bullards-Ferrelo loams. 0-7%	Med 144	510	est 80
021C	Bullards-Ferrelo loams. 7-12%	Med 144	1560	est 80
021E	Bullards-Ferrelo loams. 12-30%	Med 144	1210	est 80
021G	Bullards-Ferrelo loams. 30-60%	Med 144	850	est 80
022	Camas gr si. occ flooded	3	6370	est 40
023	Camas-Urban land complex	3	600	est 20
028C	Chehulpum sil. 3-12%	3	1970	est 40
028E	Chehulpum sil. 12-40%	3	440	est 40
033	Conser sicl	3	4200	est 45
034	Courtney gr sicl	3	2920	est 40
041	Dayton, sil, clay sub	3	4280	est 40
042E	Dixonville-Hazelair-Urban Land. 12-35%	Low	640	est 35
043C	Dixonville-Philomath-Hazelair. 3-12%	Med	11480	est 45
043E	Dixonville-Philomath-Hazelair. 12-35%	Med	22990	est 45
044	Dune Land	3	5870	
045C	Dupee sil. 3-20%	Med	20190	est70 *
048	Fluvents, Nearly Level	3	9550	
052B	Hazelair sicl. 2-7%	Low	5680	est 40
052D	Hazelair, 7-20%	Low	41510	est 40
053	Heceta fs	3	2010	est 20
073	Linslaw l	2	5700	est 80
075	Malabon sicl	2	15350	est 65
076	Malabon-Urban Land complex	2	6420	est 50
077B	Marcola cob sicl. 2-7%	Med	690	est 70
085	Natroy sicl	3	15170	est 60
086	Natroy sic	3	2100	est 60
087	Natroy-Urban Land Complex	3	610	est 40
094C	Netarts fs. 3-12%	Med 80	1060	58
094E	Netarts fs. 12-30%	Med 80	420	58
098	Noti l	3	3860	est 30
100	Oxley gr sil	2	2010	est 80
101	Oxley-Urban land complex	2	870	est 60
102C	Panther sicl. 2-12%	3	8400	est 45
103C	Panther-Urban Land complex. 2-12%	3	440	est 40
105A	Pengra sil. 1-4%	3	5070	est 45
106A	Pengra-Urban land complex. 1-4%	3	780	est 30
107C	Philomath sic. 3-12%	Low	2280	est 45
108C	Philomath cob sic. 3-12%	Low	2280	est 45
108F	Philomath cob sic. 12-45%	Low	7090	est 45
109F	Philomath-Urban land complex. 12-45%	Low	270	est 20

EXHIBIT 7

Washington State University

WSU-Puyallup

Hybrid Poplar Research Program

Establishing High Yield Plantations

In most cases, high yield plantations will be established on cleared land. In western Washington and Oregon, consider agricultural lands not currently suited for cultivated crops. Usually, such lands are in grass for hay or pasture. Quality cropland also can be used, since methods are available to eliminate the stumps and return the field to agriculture. Special considerations required to establish plantations on grasslands are discussed below. For more details please refer to "High Yield Hybrid Poplar Plantations i the Pacific Northwest."

Genetic Diversity - Use of a single clone in plantations increases risk from insects and disease. Therefore, in extensive plantings (over 40 acres), plant several clones, either in pure blocks or in mixed clone stands.

Suitable soils - Hybrid poplars attain the best growth on deep, fertile, alluvial soils that have adequate moisture. One reason for their high productivity is their ability to fully use such soils. Light textured soils, such as sandy loams abd silt loams, are generally best, b heavier textured soils can produce excellent growth if the soil is relatively loose and friabl

Where can hybrid poplar be grown? - Use caution in planting hybrids developed for the Pacific Northwest in regions of the world that have unsuitable climates and significantly different latitudes. Even in similar climates, susceptibility to local diseases can limit hybri growth.

Cold Injury - Most serious cold injury has resulted from sudden cold in fall. Low temperatures occurring later, when the trees are fully dormant, is of little concern. Spring frosts can injure newly emerging leaves and succulent stems. Such damage occurs both east and west of the Cascades in Washington, but rarely kills trees. The other type of col injury noted with older specimens of certain clones is frost cracking of the trunk.

Choosing the spacing - If trees will be harvested as biomass fuel, small sized trees as young as one year can be used. Expect resrouting for subsequent harvests (provided harvesting is done in the dormant season). Under such conditions, use close spacing - 2 4 feet or 4 x 4 feet. Spacing for longer cycle cuttings can range up to 20 x 20 feet, depending on the size of the tree desired.

Land Preparation - Proper land preparation is vital for ensuring high productivity plantations. The major objectives in land preparation include:

7-1

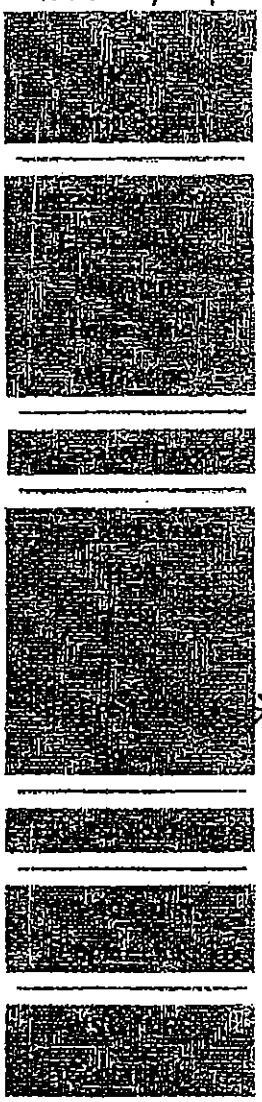
1. controlling competing vegetation
2. loosening the soil by plowing, ripping, subsoiling, and
3. Improving drainage by using either surface ditches or subsurface tile.

Cost share assistance - Establishment of hybrid poplar plantations may be eligible for USDA cost-sharing funds if harvest rotations exceed 10 years. Local offices of the USDA Agricultural Stabilization and Conservation Service (ASCS) or your state forestry agency. Washington State Department of Natural Resources, Oregon Department of Forestry, or Idaho Department of Lands can advise you regarding the eligibility of hybrid poplar in you area.

Washington State University

WSU-Puyallup

Hybrid Poplar Research Program



Managing Plantations:

Plantation management needs to address several concerns:

* 1) weed control
* 2) need for fertilizer
* 3) thinning and pruning where appropriate; and
* 4) protection against animals, insects and diseases.

The following discussion is intended to introduce you to the different aspects of managing hybrid poplar plantation. For further details please refer to "High Yield Poplar Plantations the Pacific Northwest."

Weed Control -

If the grower does not control weeds and grass adequately, hybrids will grow slowly and may not survive. Furthermore, weeds and grasses provide cover to voles, which can girdle and kill trees as old as 4 years. Growers usually control weeds in plantations by combining cultivation and herbicides, starting with a chemical spray before or soon after planting.

A number of effective weed control treatments that employ herbicides are used. The Pacific Northwest Weed Control Handbook lists the most commonly used materials and is updated annually. Refer herbicide questions to your Cooperative Extension agent.

Fertilization -

A vigorous plantation takes up as much as 200 lb of nitrogen (N) per acre per year. However, from 50 to 150 lb of N per acre per year is generally the rate applied. On fertile soils, including some old pastures, the nitrogen released from soil organic matter can be sufficient to carry the plantation for several years without need for added fertilizer. Usually fertilizer is not broadcast before planting or applied during the first year of growth.

Appearance of plants can indicate need for nitrogen. Leaves of nitrogen deficient plants are generally smaller, light green and sometimes even yellowish. When nitrogen deficien the entire leaf becomes a uniform light green or yellow. Need for other nutrients has not been demonstrated in western Washington. However, zinc fertilization can be very beneficial on calcareous soils east of the Cascades.

7-2

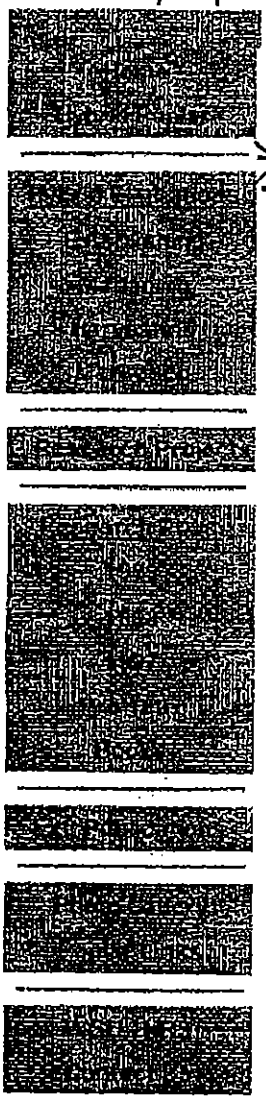
Thinning and Pruning -

For all but biomass harvests, practice early thinning to one stem per stump before the second growing season; extra stems can be used for cuttings. Thinning or partial harves of trees later in the life of the plantation may be desirable to make space for larger, better formed trees for lumber or plywood. Clear, knot free wood adds value to such trees. For that reason, pruning of branches starting as early as year 1 or 2 in plantations for lumber plywood may be advisable.

Washington State University

WSU-Puyallup

Hybrid Poplar Research Program



Harvesting Plantations

One important advantage of intensive culture of plantations is the suitability of such plantations for mechanized harvest. Considerable effort has been made in developing ne machines and in modifying existing equipment for more efficient harvest of short rotation material. Growers should consider the harvest operation in planning the layout and spaci of biomass plantations. This section briefly discusses harvest options. For a more in dep discussion please refer to "High Yield Hybrid Poplar Plantations in the Pacific Northwest."

Small Scale Plantations -

Recommendations for establishment and culture of smaller plantations are similar to thos for commercial plantations. The major difference in operations between large and small plantations is in the harvesting scale. Felling in a small scale harvest is generally done w a chain saw.

Larger Plantations -

Although harvest in large plantations can involve highly efficient yarding equipment, chainsaws are an option for felling trees. Most harvesting presently underway in the Northwest uses conventional feller bunchers and grapple skidders.

Soil and Plant Considerations in harvest timing -

Harvesting in the dormant season is desirable under two situations. The first occurs whe resprouting is needed. Dormant season harvests give the most consistent and vigorous resprouting. The second is where year-round supply of wood is required, such as for a pı mill. Soild suited for these plantations may not support harvesting equipment during wet periods without sustaining compaction. Considerable effort is required to restore puddlec and compacted soil to former productivity.

7-3

EXHIBIT 8

Step 6. Calculate periodic annual increment (PAI)

The average annual volume growth of a timber stand measured over a specific period is its periodic annual increment (PAI). This figure is useful because volume growth per acre can vary substantially as the stand ages. The PAI of either board-foot or cubic-foot volumes can be calculated for any period, but 5- or 10-year periods are most common. Calculate PAI:

Periodic annual increment = (Total volume/acre at end of period – Total volume/acre at beginning of period) ÷ Number of years in the period

PAI can measure previous growth or project future growth. Core samples enable you to take measurements back from the present, and your calculated growth projection factor enables you to estimate a future periodic annual increment. This enables you to determine how your stand is growing by taking a "snapshot" in time.

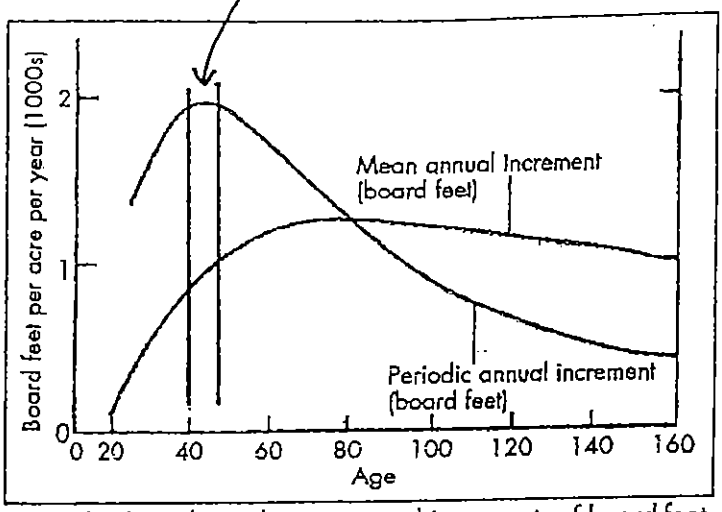


Figure 5.—Periodic and mean annual increments of board-foot volume for Douglas-fir, showing culmination of mean annual increment at about 80 years. Absolute age of culmination varies, but the pattern in this graph is similar for all species. Adapted from McArdle et al., *The Yield of Douglas Fir in the Pacific Northwest*, USDA Technical Bulletin 201, 1961.

Hypothetical ideal harvest time

Foresters have a long tradition of analyzing timber stand growth. Figure 5 shows the growth pattern for Douglas-fir, but the pattern for even-age stands tends to be similar for all tree species.

From analyses and long experience, foresters have derived the general rule that when PAI falls below MAI, the timber stand is "mature"—that is, it has passed its peak of wood growth production in the biological sense. Thus, the stand might be harvested if growth rate is the overriding factor in the harvest decision.

The point where the PAI line crosses the MAI line also is the highest value for MAI. This point, therefore, is referred to as *culmination* of MAI. The stand will continue to add volume after this point but at a slower rate than before. Thus, by comparing estimates of PAI and MAI, we can test whether our stands are biologically mature. Thinning stands can boost the growth of residual trees and delay the culmination of MAI.

Often, factors such as cash flow or market cycles dictate a timber harvest before or after culmination of MAI. By combining this biological information with financial analysis, you can tailor your management decisions to your own situation and objectives.

Where to go from here

Good stand information is essential to making the decisions necessary for managing your woodland property. Stand measurements are critical to logging and marketing options. They are also important as indicators of a stand's health and vigor and its susceptibility to insect and disease problems. And, measurements might be important in deciding whether a harvest operation will generate the desired cash flow.

Measurements taken according to the procedures described here are suitable for understanding how a timber stand may develop over time; however, they're no substitute for professional timber appraisals or inventories done by foresters.

If you want to refine these techniques or to study timber growth further, contact your Extension forestry agent for possible opportunities.

GOAL ONE EXHIBIT NUMBER

Ex 3-13

EXHIBIT 9

PONDEROSA AND SUGAR PINE LOGS

(Pinus ponderosa and Pinus lambertiana)

Peeler Ponderosa & Sugar Pine

Logs shall be old growth and suitable for the rotary cutting of clear, uniform-colored face stock veneer to an amount of not less than 50% of the NET scale. Such logs shall meet at least the following minimum exterior characteristics:

Gross Diameter – 30 inches.
Gross Length – 17 feet.
Surface – 100% clear.
Annual Ring Count – 8 per inch.
Slope of Grain – Not to exceed:
1½" per foot on logs 30" thru 50" diameter.
2½" per foot on logs 51" and over.

Peeler Blocks Ponderosa & Sugar Pine

Logs of Peeler Quality under 17" in length shall be graded as Peeler Blocks with the volume extended on the log scale basis. Peeler Blocks shall meet all the other minimum specifications required of Peeler grade logs.

No. 1 Sawmill Ponderosa & Sugar Pine

Logs shall be old growth and suitable for the manufacture of D select and Better lumber to an amount of not less than 50% of the NET scale. Such logs shall meet at least the following minimum exterior characteristics:

Gross Diameter – 30 inches.
Gross Length – 16 feet.
Surface – 90% clear.
Annual Ring Count – 8 per inch.
Slope of Grain – Not to exceed:
1½" per foot on logs 30" thru 50" diameter.
2½" per foot on logs 51" and over.

No. 2 Sawmill Ponderosa & Sugar Pine

Logs shall be old growth and suitable for the manufacture of D select and Better lumber to an amount of not less than 35% of the NET scale. Such logs shall meet at least the following minimum exterior characteristics:

Gross Diameter – 24 inches. LARGE, OLD TREE

Gross Length – 12 feet.
Surface – 75% clear.
Annual Ring Count – 8 per inch.
Slope of Grain – Not to exceed 3" per foot.

No. 3 Sawmill (Shop Grade) Ponderosa & Sugar Pine

Logs shall be old growth and suitable for the manufacture of No. 2 Shop and Better lumber to an amount of not less than 50% of the NET scale. Such logs shall meet at least the following minimum exterior characteristics:

Gross Diameter – 24 inches.
Gross Length – 12 feet.
Surface – 50% clear (collectively), with knots spaced to allow 6'-long clear cuttings.
Annual Ring Count – 8 per inch.
Slope of Grain – Not excessive.

No. 4 Sawmill Ponderosa & Sugar Pine

Logs shall be suitable for the manufacture of No. 2 Common (Sterling) and Better lumber to an amount of not less than 50% of the NET scale. Such logs shall meet at least the following minimum exterior characteristics:

Gross Diameter – 12 inches.
Gross Length – 12 feet.
Surface – Sound, tight knots, not to exceed 2½" diameter. Any larger knots shall be spaced same as No. 3 Sawmill (Shop) logs.

No. 5 Sawmill Ponderosa & Sugar Pine

Logs shall be suitable for the manufacture of No. 3 Common (Standard) and Better grades of lumber to an amount of not less than 33⅓% of the GROSS scale. Such logs shall meet at least the following minimum exterior characteristics:

Gross Diameter – 6 inches.
Gross Length – 12 feet.

No. 6 Sawmill Ponderosa & Sugar Pine

Logs shall be suitable for the manufacture of No. 3 Common (Standard) and Better grades of lumber to an amount of not less than 33⅓% of the GROSS scale. Such logs shall meet at least the following minimum exterior characteristics:

Gross Diameter – 5 inches.
Gross Length – 12 feet.
Minimum Volume – 10 board feet NET scale.

9-1

DOUGLAS FIR PEELER LOGS
(Psuedotsuga menziesii)

No. 1 Peeler Douglas Fir

Logs shall be suitable for rotary cutting of clear, uniform-colored face stock veneer to an amount of not less than 50% of the NET scale. Such logs shall meet at least the following minimum exterior characteristics:

Gross Diameter – 30 inches.

Gross Length – 17 feet.

Surface – 90% clear. May include logs with not more than two (2) knots.

Annual Ring Count – 8 per inch.

Slope of Grain – Not to exceed 3" per foot.

Heart off-Center – Allowable to the extent that required recovery can be met.

No. 2 Peeler Douglas Fir.

Logs shall be suitable for rotary cutting of clear, uniform-colored face stock veneer to an amount of not less than 35% of the NET scale. Such logs shall meet at least the following minimum exterior characteristics:

Gross Diameter – 30 inches.

Gross Length – 17 feet.

Surface – 75% clear. May include logs with not more than two (2) knots.

Annual Ring Count – 8 per inch.

Slope of Grain – Not to exceed 3" per foot.

Heart off-Center – Allowable to the extent that required recovery can be met.

No. 3 Peeler Douglas Fir.

Logs shall be suitable for rotary cutting of veneer center core, cross core, backs and better to an amount equal to 100% of the NET scale. Such logs shall meet at least the following minimum exterior characteristics:

Gross Diameter – 24 inches.

Gross Length – 17 feet.

Surface – Limited to knot indicators, not more than 1½" in diameter. The maximum number of knot indicators should not exceed an average of one per foot of log length. Knot indicators ½ inch and under in diameter shall not be considered a determining factor. This grading may include a log with not more than two knots.

Annual Ring Count – 6 per inch.

9-2

Slope of Grain – Not to exceed 3" per foot.

Heart off-Center – Allowable to the extent that required recovery can be met.

DOUGLAS FIR PEELER BLOCKS

Logs of Peeler quality under 17' but not less than 4' in length shall be graded as Peeler Blocks with the volume extended on log scale basis. No 1, No. 2, and No. 3 Peeler Blocks must meet the same grade requirements as the similar grade of Peeler logs as to minimum diameter, annual ring count, slope of grain, and grade recovery requirements.

DOUGLAS FIR SAWMILL LOGS

No. 1 Sawmill Douglas Fir

Logs shall be suitable for the manufacture of B and Better lumber to an amount of not less than 50% of the NET scale. Such logs shall meet at least the following minimum exterior characteristics:

Gross Diameter – 30 inches.

Gross Length – 16 feet.

Surface – 90% clear.

Annual Ring Count – 8 per inch.

Slope of Grain – Not to exceed 3" per foot.

No. 2 Sawmill Douglas Fir

Logs shall be suitable for the manufacture of (1) Construction and Better grades of lumber to an amount of not less than 65% of NET scale, or (2) B and Better or equivalent grades of lumber to an amount of not less than 25% of the NET scale. Such logs shall meet at least the following minimum exterior characteristics:

Gross Diameter – 12 inches.

Gross Length – 12 feet.

Minimum Volume – 60 board feet NET scale.

Surface – Sound, tight knots, not to exceed 2½" in diameter. Any larger knots, knot clusters, and burls shall be so distributed as to permit the required recovery.

Slope of Grain – Not to exceed:
2" per foot on logs 12" thru 20"
3" per foot on logs 21" thru 35"
4" per foot on logs 36" thru 50"
5" per foot on logs 51" and over.

No. 3 Sawmill Douglas Fir

Logs shall be suitable for the manufacture of Standard and Better grades of lumber to an amount of not less than 33⅓% of the GROSS scale. Such logs shall

BPA-491
(Rev. 5-16-46)

Tract No. EG-28

TRANSMISSION LINE EASEMENT

The GRANTOR, herein so styled whether one or more, JOE MAUGHAN and LILLIAN W. MAUGHAN, husband and wife

for and in consideration of the sum of THREE HUNDRED SEVENTY-FIVE - Dollars ($ 375.00 - -)

in hand paid by the UNITED STATES OF AMERICA, receipt of which is hereby acknowledged, hereby grants, bargains, sells, and conveys to the UNITED STATES OF AMERICA and its assigns, a perpetual easement and right to enter and erect, operate, maintain, repair, rebuild, and patrol one or more electric power transmission lines and appurtenant signal lines, poles, towers, wires, cables, and appliances necessary in connection therewith, in, upon, over, under, and across the following-described parcel of land in the County of Lane, in the State of Oregon, to wit:

That portion of that part of the $E\frac{1}{2}SE\frac{1}{4}$ of Section 10 and $SW\frac{1}{4}SW\frac{1}{4}$ of Section 11, all being in Township 18 South, Range 4 West of the Willamette Meridian, Lane County, Oregon, lying within a tract of land described as: Beginning at the southeast corner of the $SW\frac{1}{4}SW\frac{1}{4}$ of Section 11, Township 18 South, Range 4 West, Willamette Meridian; thence North a distance of 34.38 chains; thence West a distance of 35.00 chains; thence South a distance of 34.28 chains; thence East a distance of 35.00 chains to the point of beginning, which lies within a strip of land 150 feet in width, the boundaries of said strip lying 50 feet distant westerly from, and 100 feet distant easterly from, and parallel to the survey line of the Eugene-Goshen No. 2 transmission line, as now located and staked on the ground over, across, upon, and/or adjacent to the above described property, said survey line being particularly described as follows:

Beginning at survey station 249 + 15.0 a point on the north line of Section 10, Township 18 South, Range 4 West, Willamette Meridian, said point being N. 88° 36' W. a distance of 530.7 feet from the quarter section corner on the north line of said Section 10; thence S. 31° 31' E. a distance of 6351.7 feet to survey station 312 + 66.7 a point on the south line of Section 11, Township 18 South, Range 4 West, Willamette Meridian, said point being S. 88° 16' E. a distance of 271.3 feet from the southwest corner of said Section 11.

[redacted]

BPA EASEMENT

together with the right to clear said parcel of land and keep the same clear of all brush, timber, structures, and fire hazards; provided, however, the words "fire hazards" shall not be interpreted to include growing crops; and also the present and future right to top, limb, fell, and remove all growing trees, dead trees or snags (collectively called "danger trees") located on Grantor's land adjacent to said parcel of land, which could fall upon or against said transmission and signal line facilities.

TO HAVE AND TO HOLD said easement and rights unto the UNITED STATES OF AMERICA and its assigns, forever.

The Grantor covenants to and with the UNITED STATES OF AMERICA and its assigns that the title to all brush and timber cut and removed from said parcel of land and also all growing trees, dead trees or snags (collectively called "danger trees") cut and removed from Grantor's land adjacent to said parcel of land, is and shall be vested in the UNITED STATES OF AMERICA and its assigns and that the consideration paid for conveying said easement and rights herein described is accepted as full compensation for all damages incidental to the exercise of any of said rights.

The Grantor also covenants to and with the UNITED STATES OF AMERICA that Grantor is lawfully seized and possessed of the lands aforesaid; has a good and lawful right and power to sell and convey same; that same are free and clear of encumbrances, except as above indicated; and that Grantor will forever warrant and defend the title to said easement and the quiet possession thereof against the lawful claims and demands of all persons whomsoever.

Dated this 3rd day of January, 1950.

Joe Maughan

Joe Maughan

Lillian W. Maughan

Lillian W. Maughan

STATE OF Oregon)
) ss:
COUNTY OF Lane)

On the 3rd day of January, 1950, personally came before me, a notary public in and for said County and State, the within-named JOE MAUGHAN and LILLIAN W. MAUGHAN

to me personally known to be the identical persons described in and who executed the within and foregoing instrument and acknowledged to me that they executed the same as their own free and voluntary act and deed, for the uses and purposes therein mentioned.

GIVEN under my hand and official seal the day and year last above written.

Harry L. McGee
Notary Public in and for the
State of Oregon
Residing at Eugene Oregon

My commission expires: Aug. 20, 1950

HARRY L. MCGEE NOTARY PUBLIC STATE OF OREGON (SEAL)

State of Oregon,
County of Lane—ss.
I, Harry L. Chase, County Clerk and ex-officio Recorder of Conveyances, in and for said County, do hereby certify that the within instrument was received for record at

1950 Jan 11 35

and Recorded In Book 408 on Page 249-51
Lane County Deeds Records.
HARRY L. CHASE, County Clerk.
By Lois S. Duckworth Deputy.

1050

7718035

POWER LINE EASEMENT

The undersigned, J. T. Breeden, Trustee

for and in consideration of the payment of the sum of Nineteen Thousand Three Hundred Fifty and no/100 Dollars ($19,350.00), the receipt whereof is hereby acknowledged, grants to the City of Eugene, a municipal corporation, for the use and benefit of the Eugene Water & Electric Board, hereinafter called the City, a perpetual easement and right-of-way over a strip of land 80 feet in width, in, under, over, upon and across that ~~certain tract of~~ land located in 18-05-11, ~~County of Lane, State of Oregon, described in the~~ instrument signed ~~_____~~, 19~~___~~, and recorded on ~~_____~~, 19~~___~~, as No. ~~_____~~, in Book ~~_____~~, on Page ~~___~~, on Reel ~~_____~~, Lane County Oregon Deed Records.

The route to be taken by said line or lines across said lands is to be continuous with and a part of ~~the general route across other adjacent lands and~~ is more particularly described as follows:

That part of that tract of land described by that deed recorded as Instrument 72521, Reel 250 of ~~Lane County Oregon Deed Records~~ included in a strip of land 80 feet in width for transmission line purposes and a parcel of land for transmission line tap structures more particularly described as follows:

Transmission Line Strip

A strip of land 80 feet in width lying 40 feet on each side of an electric transmission line centerline described as follows:

Commencing at the north quarter corner of said Section 11, Township 18 South, Range 4 West, Willamette ~~Meridian, and being marked by a 1 inch diameter~~ pin driven in the ground and running thence South 0°11'45" West 2603.4 feet to a point marked by a 5/8" diameter pin driven in the ground ~~to mark the center~~ of said Section 11 according to that survey filed as reception number 13782 of Lane County Oregon Surveyor's Records; thence South 81 feet and East 93 feet to the TRUE POINT OF BEGINNING; ~~thence South 61°16' West 301.2 feet; thence South 57°13' West 633.0 feet;~~ thence South 51°54' West 391.2 feet; thence South 49°53' West 621.5 feet; thence South ~~42°17' West 479.6 feet; thence South 40°50' West~~ 541.2 feet to Engineer's centerline Station 31+56.5 and there terminating.

Parcel for Transmission Line Tap

Beginning at above described Engineer's Station 31+56.5 running thence south 61°31' east 40 feet; thence south 28°29' west 522.0 feet to the east line of the BPA Transmission line right-of-way; thence north 33°14' west 221.3 feet along said BPA right-of-way; thence north 43°41' east 443.1 feet; thence south 46°19' east 40 feet to the TRUE POINT OF BEGINNING.

together with the right at all times of ingress to and egress from the right of way by the most convenient and practical roads and ~~routes over the said~~ property, and together with the present and future right to cop, limb, or fell all dangerous growing and dead trees, located on land owned by the undersigned, and adjacent to

H 3 • 5850 0001.50

EWEB EASEMENTS

the right of way, which, if they should fall, could fall upon or against the transmission line facilities as hereinafter described, the City to be the sole judge as to what trees are dangerous trees.

Said easement and right of way shall be for the following purposes: Namely, the perpetual right to enter and to erect, maintain, repair, rebuild, operate and patrol one or more electric power transmission lines and appurtenant signal lines, including the right to erect such poles and other transmission line structures, wires, cables and appurtenances as are necessary thereto, together with the present and future right to clear said right of way and keep the same clear of brush, timber, inflammable structures and fire hazards, provided that fire hazards shall not be interpreted to including growing crops, other than trees.

It is further understood and agreed that, if lawns, shrubs or other property be damaged by the City or its agents after construction work has been completed, as in the maintenance, repair or replacement of said transmission line or lines, then the undersigned shall be paid the amount of such damages as and when they occur.

It is further understood and agreed that the City may construct and maintain gates with locks at any or all fences crossed by said power lines.

It is further understood and agreed that no buildings or structures are to be erected within the above described 80 foot easement and right of way.

TO HAVE AND TO HOLD the same unto the Grantee, its successors and assigns forever; and the rights, conditions and provisions of this easement shall inure to the benefit of and be binding upon the heirs, executors, administrators, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the undersigned have executed this instrument this 30 day of March, 1977.

Witnesses:

James A. Brickey trustee

7718035

STATE OF OREGON)
(ss.
COUNTY OF LANE)

On this day personally appeared before me J. T. Breeden, Trustee

to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that signed the same as free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 30 day of March, 1977.

JORGEN S. SORENSEN
NOTARY PUBLIC

Notary Public in and for the State of Oregon

Residing at Eugene

My Commission Expires: 3-4-77

7718035

State of Oregon,
County of Lane—ss.
I, D.M. Penfold, Director of the Department of General Services, in and for the said County, do hereby certify that the within instrument was received for record at

1977 MAR 30 AM 10 54

Reel 840 R

Lane County OFFICIAL Records.

D.M. Penfold, Director of the Department of General Services.

By [signature] Deputy

Fee [illegible]

350

7723708

KNOW ALL MEN BY THESE PRESENTS:

For true and actual consideration of No Dollars, the undersigned hereby grants a perpetual easement to the City of Eugene, Oregon, a municipal corporation of Lane County, Oregon, by and through the Eugene Water & Electric Board, together with any joint user with whom it may contract, with the right to place, construct, operate, maintain, inspect, reconstruct, repair, keep clear and remove, electric lines, electric power, telephone and telegraph equipment, lines, poles, guys and appliances necessary or convenient in connection therewith, upon, across, over and/or under the following described property situated in Lane County, Oregon:

A parcel of land being that part of that tract of land described by that deed recorded as Instrument No. 72521, Reel 250 of Lane County Oregon Deed Records, said parcel being more particularly described as follows:

Commencing at the North quarter corner of Section 11, Township 18 South, Range 4 West, Willamette Meridian, and being marked by a one (1) inch diameter pin driven in the ground and running thence South 0°11'45" west 2603.4 feet to a point marked by a 5/8" diameter pin driven in the ground to mark that center of said Section 11 according to that survey filed as Reception Number 13702 of Lane County Oregon Surveyors' Records; thence South 1985.5 feet and west 2179.78 feet to EWEB Hawkins-BPA transmission line centerline station 31+56.5; thence South 61°31' east 40 feet; thence South 28°29' West 522.0 feet to the east line of BPA transmission line right of way being the TRUE POINT OF BEGINNING; thence continuing South 28°29' West 170.3 feet to the West line of BPA transmission line right of way; thence North 33°14' West 267.1 feet along the Westerly right of way line of BPA transmission line; thence North 43°41' East 154.0 feet to the east line of BPA transmission line right of way; thence along the east right of way of BPA transmission line South 33°14' East 221.3 feet to the TRUE POINT OF BEGINNING.

Said easement is non-exclusive.

The grantee and its joint users shall at all times have the rights and privileges therein necessary or convenient for the full enjoyment and use thereof for the purposes above described, including the right of ingress and egress to and from the real property of the grantors for the purposes herein mentioned; and also the right to remove trees, limbs of trees, undergrowth or other obstructions on said property of the grantors, that overhang or otherwise endanger the property of the grantee. TO HAVE AND TO HOLD the same unto the Grantee, its successors and assigns forever; and the rights, conditions and provisions of this easement shall inure to the benefit of and be binding upon the heirs, executors, administrators, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the undersigned has executed this instrument this 20 day of April, 1977.

Witness:

_______________ [signature: Breeden]

_______________ _______________

_______________ _______________

STATE OF OREGON)
COUNTY OF LANE)ss.

L 5 - 0471151 #0003 50

On this day personally appeared before me I. T. Breeden, Trustee

to me known to be the individual described in and who executed the within and foregoing instrument, and acknowledged that he signed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 22 day of April, 1977.

NOTARY PUBLIC

[signature]
Notary Public in and for the state of Oregon
residing at Eugene

My commission expires:

7723708

State of Oregon,
County of Lane—ss.

I, D.M. Penfold, Director of the Department of General Services, in and for the said County, do hereby certify that the within instrument was received for record at

1977 APR 22 PM 1 58

Reel 843 R

Lane County OFFICIAL Records,
D.M. Penfold, Director of the Department of General Services.

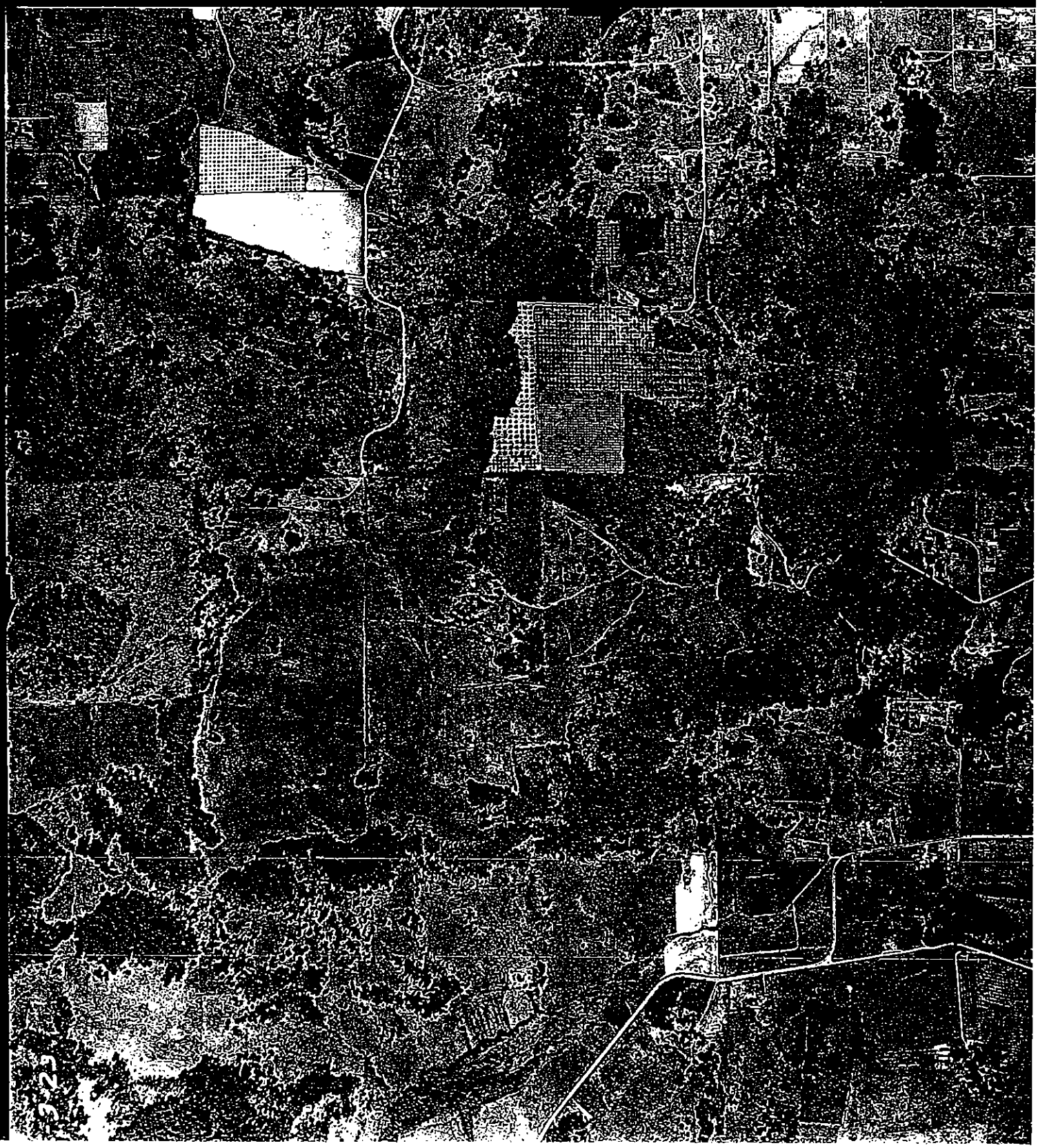
By S. Hauenschild
Deputy

C3643

1936

3938 - -15 PSC(8-15-36 IIA)(12-15000)WILLAMETTE VALLEY PROJECT, ORE.

1947



ATTACHMENT DIVIDER

KENDALL Jerry

From: Jim Just [goal1@pacifier.com]
Sent: Monday, September 13, 2004 4:21 PM
To: Jerry Kendall
Cc: Lauri Segel
Subject: objection/request to reopen record

RE: Ogle, PA 02-5838

Jerry,

Attached is a letter objecting to the new materials submitted in Mr. Farthing's submittal of 9-8-04, and requesting either that the new evidence be excluded or that we be offered the opportunity to respond to that material. Please enter the attached document into the record.

Jim Just, Executive Director
Goal One Coalition
39625 Almen Drive
Lebanon, OR 97355
phone: 541.258.6074
fax: 541.258.6810
www.goal1.org

Championing citizen participation in realizing sustainable communities, economies, and environments

BCC ATTCH. 5-4

GOAL ONE COALITION

39625 Almen Drive
Lebanon, Oregon 97355
Phone: 541-258-6074
Fax: 541-258-6810
goal1@pacifier.com

September 13, 2004

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

RE: PA 02-5838, Ogle marginal lands application: objection to applicant's submittal of September 8, 2004

Dear Commissioners:

The purpose of this letter is to place an objection in the record to procedures that have allowed for the submittal of evidence into the record without offering the opportunity for the Goal One Coalition and other parties to respond to issues raised by that evidence.

On August 25, 2004, I received the following email message from Mr. Kendall:

> FYI: the Board moved to a 4th reading/deliberation exactly per the italics below, with identical timelines.
>
> FYI, Here is what I will propose to the BCC at the reading tomorrow:
>
> "In order to resolve the charges of procedural error and potential for a LUBA remand upon appeal, the Board may choose to re-open the record for a limited time, in order to allow for the submittal of written evidence and/or written argument in response to materials submitted during the second comment period (which ended on August 11) and the third period, which was for final applicant rebuttal (and closed on August 18).
>
> I would suggest September 8 as a deadline for such submittals, followed by a one week period to September 15 for the applicant's final argument only rebuttal. The 4th reading and deliberation would occur on September 22. LMD will send out notice of such re-opening to those who are party to this item."

On Aug. 30, I sent the following email message to Mr. Kendall in response to his email of August 25, 2004:

> "The proposed timelines leave open the possibility that new evidence could be introduced (on September 8, for example) that I would not have the opportunity to

respond to. I reserve our right to respond to issues raised by any new evidence submitted."

On September 8, 2004 Mr. Farthing submitted 48 pages of additional material into the record of this matter. Mr. Farthing's submittal of September 8, 2004 has introduced new evidence which raises additional issues. Parties are entitled to an opportunity to present and rebut evidence and to respond to issues raised. *Fasano v. Washington Co. Comm.*, 264 Or 574, 588, 507 P2d 23 (1973).

ORS 197.763(6) provides, in relevant part:

"(c) If the hearings authority leaves the record open for additional written evidence, arguments or testimony, the record shall be left open for at least seven days. Any participant may file a written request with the local government for an opportunity to respond to new evidence submitted during the period the record was left open. If such a request is filed, the hearings authority shall reopen the record pursuant to subsection (7) of this section.

"* * *

"(e) Unless waived by the applicant, the local government shall allow the applicant at least seven days after the record is closed to all other parties to submit final written arguments in support of the application. The applicant's final submittal shall be considered part of the record, but shall not include any new evidence. This seven-day period shall not be subject to the limitations of ORS 215.427 or 227.178 and ORS 215.429 or 227.179.

Thus ORS 197.763 allows the submission of additional written evidence, arguments or testimony during an open record period. ORS 197.763 further prohibits an applicant's final rebuttal from including new evidence.

New evidence introduced by Mr. Farthing includes a letter from Marc Setchko, Consulting Forester, dated September 28, 2004. That letter contains new information including a table of site trees bored on site, p. 3; and productivity tables for tax lots 303 and 304 at pp. 4-5. Examples of other material included in Mr. Farthing's submittal are: a number of additional photos and maps, excerpts from a WSU-Puyallup Hybrid Research Program publication; excerpts from an unidentified publication discussing saw log grades; and documents concerning a BPA easement.

The Coalition objects to the new evidence submitted by the applicant's representative in his final rebuttal, and requests that it not be considered part of the record. In the alternative, the Coalition requests opportunity to raise new issues and provide new evidence, arguments, and testimony relating to that new evidence.

Respectfully submitted,

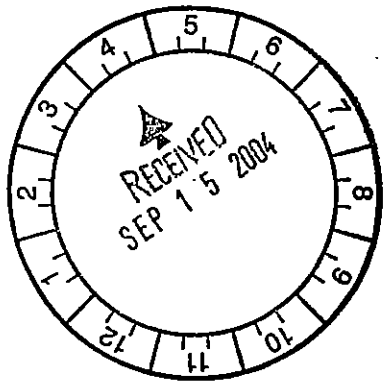
/s/ Jim Just

Jim Just
as an individual and as Executive Director, Goal One Coalition

ATTACHMENT DIVIDER

Michael E. Farthing
Attorney at Law

Smeede Hotel Building
767 Willamette Street, Suite 203
Eugene, Oregon 97401
Office (541) 485-1141 – Fax (541) 485-1174
email - mefarthing@yahoo.com



September 15, 2004

Lane County Board of Commissioners
c/o Jerry Kendall
Land Management Division
Lane County Courthouse/PSB
125 East 8th Avenue
Eugene, OR 97401

Re: Plan Amendment/Zone Change Applications
Agriculture (E-40) to Marginal Lands (ML)
Ogle-Child (PA 02-5838)

Chair Green and Commissioners:

This is the final rebuttal of the applicants for the above-referenced plan amendment and zone change applications. It has been a long process that hopefully will conclude with your deliberation and decision on September 22.

The Opponents

Numerous issues have been raised by the opponents, primarily by Jim Just of the Goal One Coalition, to which the applicants have countered with responses from me and our forester, Marc Setchko. Those detailed responses are in our July 28, August 18 and September 8 submittals to the Board. They address issues ranging from the ability of the site to grow "other species", e.g. Ponderosa pine, hybrid poplar, KMX, etc., (all submittals) to whether land under powerlines can be used to grow trees (September 8 submittal). One of the last issues to be addressed concerned the definition of "merchantable" as that term is used in the criterion that assesses whether the Subject Property is capable of producing 85 cubic feet of growth per acre per year. The record conclusively supports the conclusion that it will not produce this level of growth for any species, including Douglas fir.

We urge you to review those responses and particularly Mr. Setchko's analysis of the forestry issues raised by Goal One. It is fair to say that <u>all</u> of Goal One's objections are technical, i.e. they suggest a different interpretation or definition of a term or disagree with a policy directive. Goal One does not directly dispute Mr. Setchko's analysis, as a professional, consulting forester with 27 years of experience, that the Subject Property is marginal forest land. In fact, there is nothing in the present record that contradicts or challenges Mr. Setchko's analysis

BCC ATTCH. 6-6pp

of the site's timber growing capabilities. Finally, Goal One has never provided direct evidence that explains why they Subject Property does not qualify as Marginal Land.

The Evidentiary Record

From the perspective as the applicants' attorney, my primary focus is on the sufficiency of the evidentiary record and whether that record supports affirmative findings of fact and conclusions of law for each applicable criteria. That is the burden of the applicants and my job is to be the worst critic of our application and, particularly, of Mr. Setchko's work, before it is submitted into the record. Fortunately, my job was relatively easy because Mr. Setchko is so thorough and knowledgeable and his reports are based on professional forestry practices. In contrast, Goal One's "evidence" consists of hyper-technical arguments that often are based on faulty data or assumptions, or in some cases, involve misuse and misapplication of published information (e.g. equating 2S Douglas fir logs with 2S Ponderosa pine).

In the only marginal lands case before LUBA (DLCD v. Lane County, 23 Or LUBA 33 (1992), commonly referred to as "the Ericsson case"), LUBA addressed the sufficiency of the evidence in the record. In this case, LCDC's staff, the Department of Land Conservation and Development ("DLCD") appealed the County's approval of a marginal lands application. LUBA affirmed the County's approval primarily on the weight of the applicant's forester's analysis of the marginal productivity of the property. LUBA quoted the County's findings in affirming the County's approval:

> "'4. [Applicant's expert] analyzed another parcel in the area that contained soils similar to the Subject Property which has a well stocked stand of 60-year timber. From this analysis, he applied his findings to the Subject Property to determine its productivity over a 90-year growth cycle. He concluded that the volume of timber would only produce an average of $7,000 to $7,500 annual gross income.
>
> '5. [The applicant's expert] did not question or dispute the Oregon Department of Forestry's timber growth rate estimates for the various soil types on the Subject Property. He concluded, however, that those growth rates were not being achieved for the timber that was actually growing on the Subject Property, nor would it be achieved, even if the property were fully stocked. [Applicant's expert] stated he did not know the reason for the lower growth rates on the subject property but speculated it could be a combination of factors, including, but not limited to, soil compaction, exposure poor drainage, soil depths, and over grazing.

'6. [Applicant's expert] affirmed, based on his on-site analysis, the fact that the] Subject Property was not managed as a forest operation capable of producing $10,000 annual gross income between 1978 and 1983.

'* * * * *' Record 5.

We conclude the challenged decision correctly applies ORS 197.247(1)(a), and determines that the property is not capable of producing, if reasonably managed, an average annual gross income of $10,000 over the growth cycle of the trees.

The first and second assignments of error are denied.

The county's decision is affirmed."

The present evidentiary record is far superior to the Ericsson record simply because Mr. Setchko has had to respond to so many more issues than the Ericsson forester.

The primary point of the Ericsson case was that testimony from a qualified forestry expert based on a site-specific evaluation of the Subject property, will prevail over generalized timber growth rates for soil types. The Board's 1997 Interpretation recognized this holding in Issue 6 when it found:

> "[O]ne of the main holdings of the Ericsson case, which arose in Lane County, is that on-site evaluation by a qualified expert is weightier evidence than published date..."

This is precisely the evidence that Mr. Setchko has provided.

We urge the Board to give the appropriate weight to Mr. Setchko's testimony as directed by LUBA and the Ericsson case and confirmed in the Board's 1997 Interpretation. Mr. Setchko is the only forestry expert who has submitted substantive testimony into the record regarding the timber-growing capabilities of the Subject Property. That testimony conclusively supports approval of these applications.

Findings

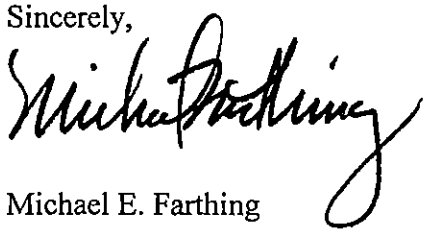
If the Board votes to approve the applications, I am prepared to work with Mr. Kendall and Mr. Vorhes to prepare findings of fact and conclusion of law to support that decision. The applicants have previously submitted draft Findings of Fact and Conclusions of law. Attached are supplemental findings that address additional issues that have been raised during the Board's review process. I am prepared to incorporate these findings into the previously-filed findings or

they can be adopted separately. My clients and I are comfortable with the current draft and the enclosed supplement in the event your approval is appealed.

Conclusion

The Subject Property is Marginal Land.

Sincerely,



Michael E. Farthing

MEF/bk

Enclosure

cc: Brad Ogle
Marc Childs

SUPPLEMENTAL
FINDINGS OF FACT AND CONCLUSIONS OF LAW IN
SUPPORT OF A MINOR PLAN AMENDMENT AND ZONE CHANGE

From:	AGRICULTURE and E40, EXCLUSIVE FARM USE ZONE
To:	MARGINAL LANDS and ML,, MARGINAL LANDS ZONE
File No.:	PA 02-5838
Co-Applicants:	BRAD and JULIE OGLE – MARK and CINDI CHILDS

The following findings of fact and conclusions of law supplement previous findings and conclusions previously submitted into the record after the Planning Commission unanimously recommended approval of these applications. Together, those findings and conclusions support an affirmative decision by the Board to approve the proposed plan amendment and concurrent zone change for the Subject Property. They address issues that were raised before the Board by opponents to the applications.

The following findings of fact are based on the applicants' submittals of July 28, August 18, and September 8, and more particularly, on Mr. Setchko's responses to issues raised by the Goal One Coalition. These findings primarily address the 85 cubic foot per acre per year criterion in ORS 197.247(1)(b)(C).

1. Most of the soils on the Subject Property do not have high forest site index classification for Douglas fir.

2. There are not site index tables for Valley Ponderosa pine or any other tree species for the Subject Property, other than Douglas fir.

3. There are utility corridors and grassy areas with exposed rock that further limit the Subject Property's ability to grow trees. The utility easements comprise approximately 7 ½% of the Subject Property and effectively prohibit the growth of trees and other vegetation within the easement areas. Aerial photos dating back nearly 80 years conclusively establish the location within the Subject Property, of areas that have never grown trees. These areas have been identified and mapped by Mr. Setchko and comprise nearly a quarter of the Subject Property.

4. Douglas fir is, by far, the most profitable and productive, in terms of growth, tree species that can be grown on this site.

5. There is presently no commercial market for Ponderosa pine, KMX or hybrid poplar in Lane County or in the Willamette Valley.

6. Because the site is dry the site's capability to grow Ponderosa pine is further limited.

7. The Subject Property has been physically examined and analyzed by a professional consulting forester (Marc Setchko) who has concluded that:

   a. It was not part of a forest operation capable of producing $10,000 of annual income during the growth cycle, and

   b. It is not capable of producing 85 cf/ac/yr of merchantable timber over the growth cycle.

   There is no substantive evidence in the record that contradicts these conclusions.

8. The methodology used by Mr. Setchko is consistent with State law, relevant court decisions, the Board's 1997 Interpretation and the Department of Forestry's published and approved methodologies and should be given evidentiary weight as suggested by LUBA in the Ericsson case and confirmed in our 1997 Interpretation.

9. The evidence and testimony submitted by Goal One, while interesting and informative, did not substantively address the relevant marginal lands criteria nor did it provide evidence that directly contradicted the findings and conclusions of the Applicant's forester, Mr. Setchko.

Based on the above findings, the Board concludes:

1. The Subject Property is Marginal Land as described and defined in ORS 197.247, which means it is resource land that has limited capacity to grow merchantable forest products or agricultural crops.

2. The soils on the Subject Property are predominantly of poor resource quality and potential. The site's capacity to be used for farm and forest uses is further limited by powerline corridors that intersect on the site and the existence of large areas of thin or no topsoil which are underlain by rock. We conclude that these areas cannot maintain any tree growth of any kind.

3. The definition of "merchantable" in ORS 197.247 mean "salable" and is the same as (1)(b)(C) "marketability". At present, there is no active market for any tree species, other Douglas fir, that is capable of being grown on this site. There is no tree species that can be grown on the Subject Property which is capable of producing 85 cubic feet of growth per acre per year.

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF LANE COUNTY, OREGON

ORDINANCE NO. PA 1210) IN THE MATTER OF AMENDING THE RURAL COMPREHENSIVE PLAN TO
) REDESIGNATE LAND FROM "AGRICULTURAL" TO
) "MARGINAL LAND" AND REZONING THAT LAND FROM "E-40/EXCLUSIVE
) FARM USE" TO "ML/MARGINAL LAND", AND ADOPTING SAVINGS AND
) SEVERABILITY CLAUSES (file PA 02-5838; Ogle)

WHEREAS, the Board of County Commissioners of Lane County, through enactment of Ordinance PA 884, has adopted Land Use Designations and Zoning for lands within the planning jurisdiction of the Lane County Rural Comprehensive Plan; and

WHEREAS, Lane Code 16.400 sets forth procedures for amendment of the Rural Comprehensive Plan, and Lane Code 16.252 sets forth procedures for rezoning lands within the jurisdiction of the Rural Comprehensive Plan; and

WHEREAS, in August 2002, application no. PA 02-5838 was made for a minor amendment to redesignate portions of tax lots 303 and 304 of map 18-04-11, from "Agriculture Land" to "Marginal Land" and concurrently rezone the property from "E-40/Exclusive Farm Use " to "ML/Marginal Land"; and

WHEREAS, the Lane County Planning Commission reviewed the proposal in public hearing of January 20, 2004, and on March 2, 2004, deliberated and forwarded the matter to the Board with a recommendation for approval; and

WHEREAS, evidence exists within the record indicating that the proposal meets the requirements of Lane Code Chapter 16, and the requirements of applicable state and local law; and

WHEREAS, the Board of County Commissioners has conducted a public hearing and is now ready to take action;

NOW, THEREFORE, the Board of County Commissioners of Lane County Ordains as follows:

Section 1. The Lane County Rural Comprehensive Plan is amended by the redesignation the portions tax lots 303 and 304 of map 18-04-11, which are not already plan designated as Marginal Land, from "Agricultural Land" to "Marginal Land," such territory depicted on Plan Plot 319 and further identified as Exhibit "A" attached and incorporated herein.

Section 2. Portions of tax lots 303 and 304 of map 18-04-11, which are not already zoned as Marginal Land, are rezoned from "E-40/Exclusive Farm Use" (Lane Code 16.212) to "ML/Marginal Land" (Lane Code 16.214), such territory depicted on Rural Zoning Plot 319 and further identified as Exhibit "B" attached and incorporated herein.

FURTHER, although not a part of this Ordinance, the Board of County Commissioners adopts Findings as set forth in Exhibit **"C"** and **"C-1"** attached, in support of this action.

The prior designation and zone repealed by this Ordinance remain in full force and effect to authorize prosecution of persons in violation thereof prior to the effective date of this Ordinance.

If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not effect the validity to the remaining portions hereof.

ENACTED this _____day of _____, 2004.

_____
Chair, Lane County Board of County Commissioners

_____
Recording Secretary for this Meeting of the Board