Exhibit No. 7

Date 2-3-09

Bill No. _____

2009 Forest Land Reappraisal Information

Joint Select Committee on Reappraisal

2/2/2009 4:57 PM

Montana
Forest Tax Presentation

February 3, 2009

Montana Forest Land Statistics

- More than 14,000 forest landowners

- Approximately 3.9 million acres of privately owned forestland (2008)
- $1.9 billion in productivity value (2008)

- Estimated forest tax collected in 2008 was $3.375 million
  - Forest land is Class 10; taxable percentage =.35%
  - Average tax per acre = $0.83

Steps in Determining Forest Land Classification, Productivity and Value

- Preliminary Classification by DOR
- UM productivity model
  - Identifies acreage meeting minimum productivity standard
- UM determination of weighted productivity
  - Weighted per commercial forest land polygon
- Create forest land files in GIS

Classify

Criteria for Forestland Classification

- Contiguous land of 15 acres or more in one ownership that is capable of producing softwood timber species that can be harvested in commercial quantity and ***is producing timber***
  - ***Softwoods such as: ponderosa pine, Douglas-fir, lodgepole pine, alpine fir and engelmann spruce***
  - ***Hardwoods are considered "non-commercial" and are classified as non- forest land for property tax purposes.***
  - ***Evergreen species such as juniper, limber pine and white bark pine are noncommercial species***
- Land that has had the trees removed by logging or natural disasters

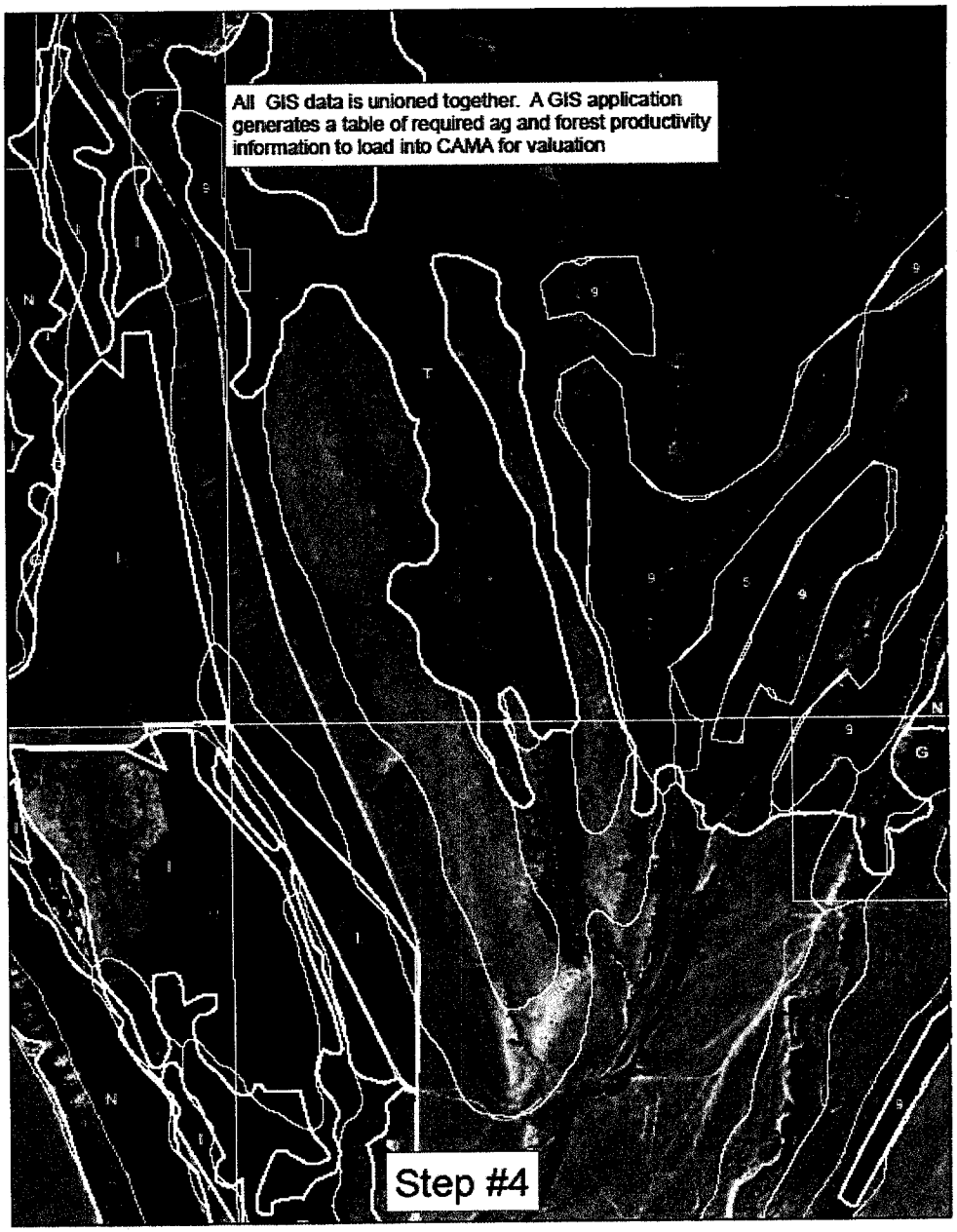
Criteria for Forestland Classification

- Cannot be forested land if it is not capable of yielding wood products because of adverse site conditions or which are so physically inaccessible as to be unavailable now or **prospectively**

- Land that has not been withdrawn from timber utilization by statute, ordinance, covenant, court order, or administrative order, or other operation of law

UM Determines Average Weighted Productivity

Create


All GIS data is unioned together. A GIS application generates a table of required ag and forest productivity information to load into CAMA for valuation
Step #4

Valuation Formula

V = per acre forest and other agricultural productivity value

I = per acre net income of forest lands

R = capitalization formula

The forest valuation formula can be further defined as:

$$V = \frac{(((M \times SV) + AI) - C)}{R}$$

Where:

M = mean annual net wood production

SV = stumpage value

AI = per acre agricultural-related income

C = per unit cost of the forest product and the agricultural product

Valuation Formula

(Forest Zone 1 – NW Montana)

Mean Annual Net Wood Production	= 200 board feet per acre
Stumpage Values	= $0.3389 per BF
Agricultural Income	= $1.61
Cost	= $14.94
Cap Rate	= 6.27%

Per Acre Value = (200 X $0 .3389) + ($1.61) - ($14.94) = $54.45 NI

$$\frac{\$54.45}{R = 6.27\%} = \$868.43 \text{ per acre value}$$

2009 Appraisal Cycle

Class 10 Forest land

- 5-year rolling average of income & expense data (2003-2007)
- DNRC actual forest cost expenditures are used rather than budgeted figures
- Values that increase are phased-in over the length of the appraisal cycle
- Values that decrease are applied immediately
- Dr. David Jackson, professor emeritus in forest economics of UM determines forest valuation zones and average stumpage values for each zone

Income

Timber

Multiple Regression models

Stumpage values from state timber sales from each forestland zone

Agriculture

Average grazing rents for private land from each forestland zone

Grazing rents applied to average forestland carrying capacity within the forested area

Costs

Timber

Cost source from the Department of Natural Resource & Conservation:

a. reforestation
b. slash disposal
c. forest fire assessments
d. timber stand assessments
e. forest improvements
f. timber harvest
g. forest practices
h. administration

Capitalization Rate

- Capitalization Rate = Discount Rate + Effective Tax Rate
- Discount Rate is the annual agricultural loan rate used by the Northwest Farm Credit Services in Spokane for the base period.
- Effective Tax Rate expresses the relationship between the forestland appraised value and the forestland tax.

Forest Land Reappraisal
Capitalization Rate Comparison

CLASS 10 FOREST LAND

2003 APPRAISAL CYCLE CAPITALIZATION RATE			
ZONE	EFFECTIVE TAX RATE	DISCOUNT RATE	CAPITALIZATION RATE
1	0.23	8.18	8.40%
2	0.27	8.18	8.44%
3	0.28	8.18	8.45%
4	0.23	8.18	8.40%
5	0.22	8.18	8.39%
2003 Statewide Average			8.42%

2009 APPRAISAL CYCLE CAPITALIZATION RATE			
ZONE	EFFECTIVE TAX RATE	DISCOUNT RATE	CAPITALIZATION RATE
1	0.16	6.11	6.27%
2	0.18	6.11	6.29%
3	0.16	6.11	6.27%
4	0.16	6.11	6.27%
2009 Statewide Average			6.28%

Difference in Statewide Average	-25.44%

2009 Forestland Reappraisal

- Update forest income & expense data
- Reduction of valuation zones from five to four zones
- Realignment of counties in three of the four remaining forestland valuation zones
- Re-mapping forest/nonforest boundaries
- Re-evaluation of forestland productivity

2009 Forestland Reappraisal

(Continued)

- Replace cubic foot volume with board foot volume as a measure of productivity and valuation
- Use the weighted average production for forest land areas to determine per-acre value
- Replacement of a manual, labor intensive appraisal with a fully automated geographical information system

Tax Reduction Due to Fires and Natural Disasters

Standing timber destroyed by natural disasters such fire, insects, wind or disease is eligible for a **50 percent reduction** in the productivity value for the **next 20 years**.

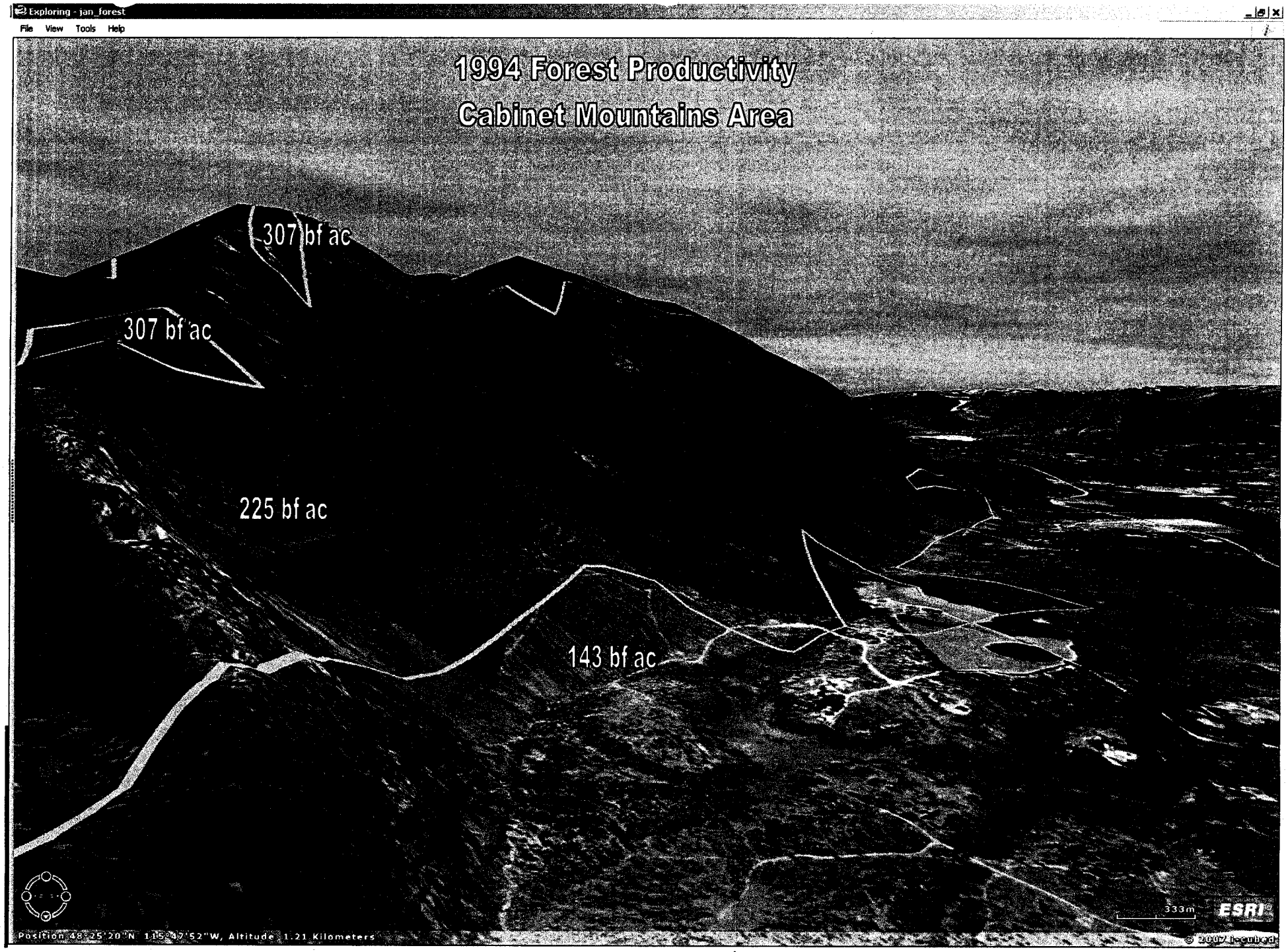
2009 Reappraisal Impacts

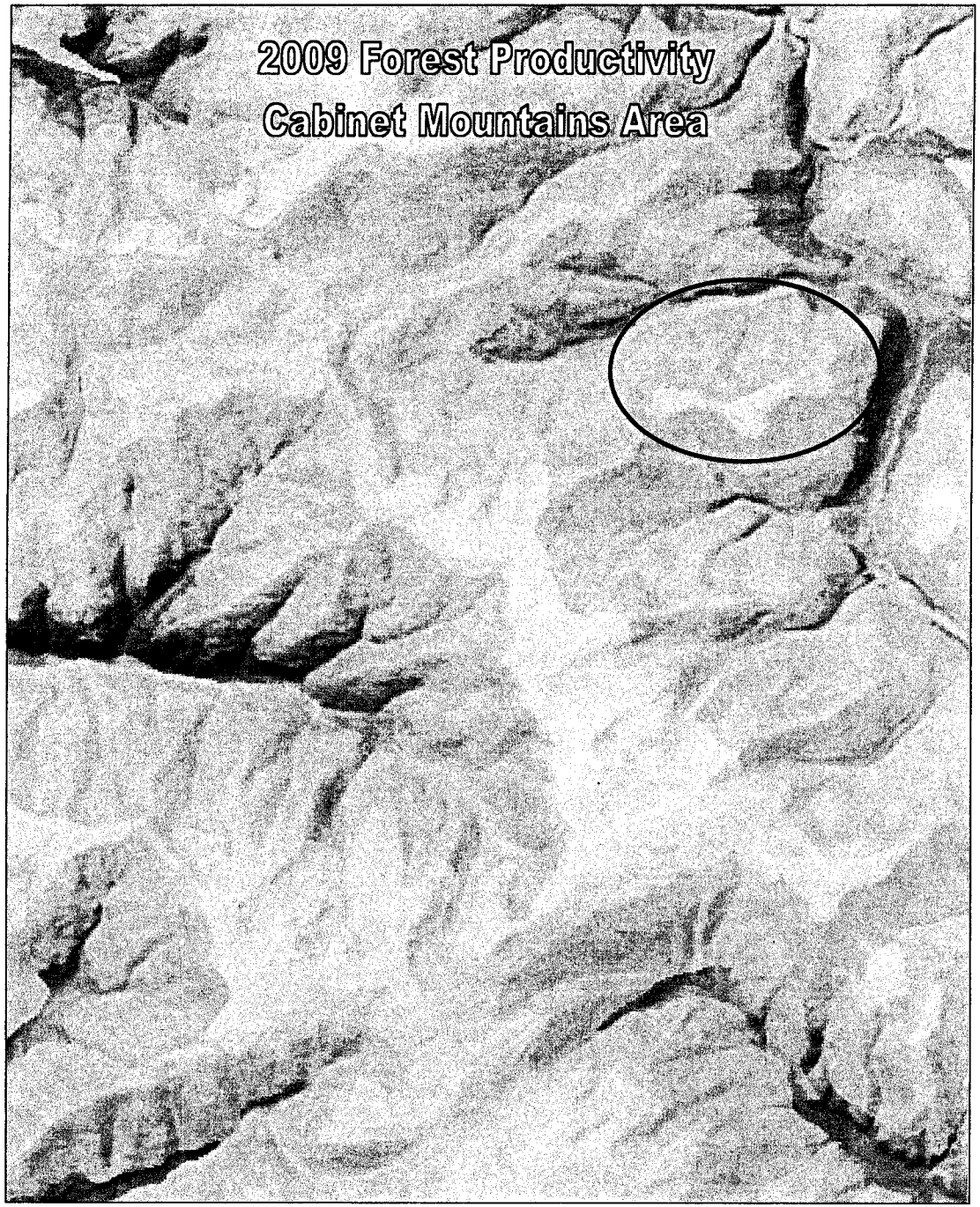
- 5.8% increase in forestland acres
- 1.9% increase in estimated productivity
- 51.72% increase in statewide productivity value
- 43.40% increase in the per-acre forestland productivity values

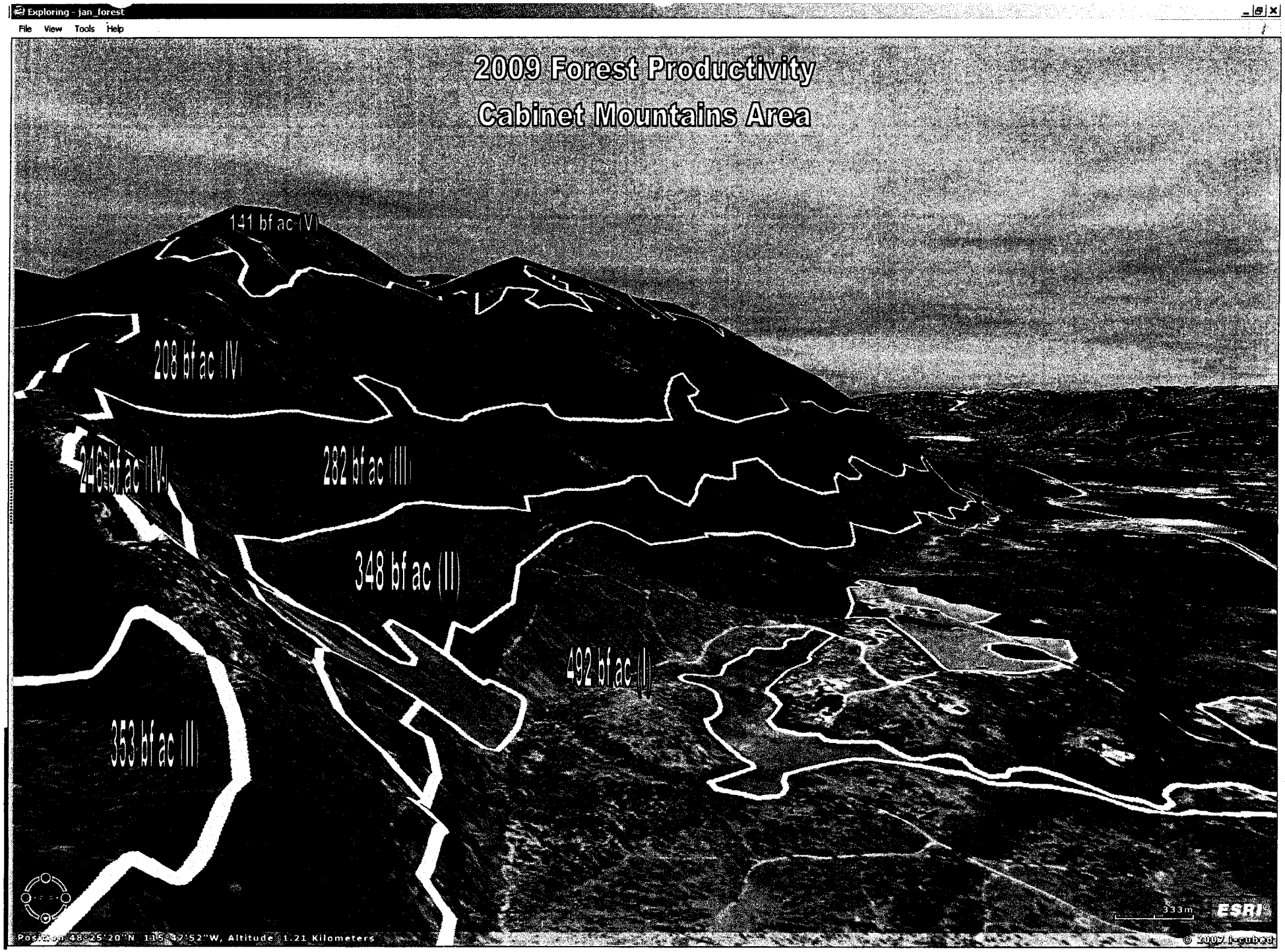
Montana Forest Land Statistics

- More than 14,000 forest landowners
- Approximately 4.1 million acres of privately owned forestland (2009)
- $2.99 billion in productivity value (2009)
- Forest land is Class 10; taxable percentage =.35%

1994 Forest Productivity
Cabinet Mountains Area


Exploring - jan_forest
File View Tools Help
1994 Forest Productivity
Cabinet Mountains Area
307 bf ac
307 bf ac
225 bf ac
143 bf ac
333m
ESRI
Position 48°25'20"N 115°47'52"W, Altitude 1.21 Kilometers


2009 Forest Productivity
Cabinet Mountains Area


Exploring - jan_forest
File View Tools Help
2009 Forest Productivity
Cabinet Mountains Area
141 bf ac (V)
208 bf ac (IV)
246 bf ac (IV)
282 bf ac (III)
348 bf ac (II)
492 bf ac (I)
353 bf ac (III)
333m
ESRI
Position 48°25'20"N 115°47'52"W, Altitude 1.21 Kilometers
© 2007 i-cubed