

Sugarberry Hazard Tree Cumulative Effects Analysis

Appendix I

Hazard Tree Cumulative Effects Supplement

To the

Sugarberry Project Silviculture Report - Dated: January 10, 2008

Plumas National Forest  
Feather River Ranger District  
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## Sugarberry Hazard Tree Cumulative Effects Analysis

### **Hazard tree project cumulative effects analysis**

Hazard tree removal projects generally remove tree hazards that are within 150 to 200 feet of a roadway, recreation area, or facility. A hazardous tree is defined as any dead or live tree likely to fail in the near future, entirely or in part due to structural decomposition or other factors causing instability of the tree, and is of sufficient size to reach the roadway or facilities. Reducing risks to public health and safety and damage to property is of prime importance in hazard tree abatement.

There is a concern that hazard tree removal projects, particularly, American House, Lexington Hill, and Devil's Gap, in close proximity to and within the Sugarberry Project area raises the possibility of cumulative impacts. However, this is not the case with respect to vegetation attributes of species composition, forest health, canopy cover, stand structure, tree size, basal area, tree density, and so forth. From the hazard tree sale cruise information (i.e., Lexington Hill and American House), less than four trees per acre were marked for removal along the roadways (Table 1 and Table 2).

For the Sugarberry Project area, an average of 3.4 trees per acre for trees greater than 30 inches dbh was marked for removal along the roadways. As stated above, these few trees per acre that are being removed would not affect vegetation attributes or units of measure. The potential number of large trees greater than 30 inches dbh that would be affected within the Sugarberry Project area due to hazard tree removal would be less than .3 percent (Table 3). Overall, less than .7 percent of the large trees greater than 30 inches dbh within the Sugarberry Project area would be affected from all Sugarberry proposed activities (Table 3).

In addition, because less than 3.4 trees per acre would be removed, hazard tree projects would not change seral stage diversity classes nor change the size or density classes of the California wildlife habitat relationship (CWHR) vegetation types. Figures 1 and 2 graphically display the management and subwatershed area boundaries for the Sugarberry Project.

### **Conclusion**

From this analysis, hazard tree projects have been determined to have no direct, indirect, or cumulative effects to vegetation attributes (i.e., species composition, forest health, canopy cover, seral stage diversity, etc.) and would not change seral stage diversity classes nor change the size or density classes of the California wildlife habitat relationship (CWHR) vegetation types.

**List of hazard tree projects analyzed or considered**

- **American House Hazard Tree Project (2007)**

The American House Hazard Tree Sale is inside the Sugarberry Project area and was analyzed under the Sugarberry Environmental Impact Statement (EIS).

- **Black Rock Hazard Tree Project (2005)**

The Black Rock Hazard Tree Project is located outside the Sugarberry Project boundary and is outside the Watershed and wildlife cumulative effects analysis boundary.

- **Devils Gap Hazard Tree Project (2008)**

The Devils Gap Hazard Tree Project is partially located within the Sugarberry Project boundary and is mostly within the Watershed cumulative effects analysis boundary. A portion of the Devils Gap Hazard Tree Project is also within the Wildlife and Fire and Fuels cumulative effects analysis boundary. The Devils Gap Project was analyzed under the Sugarberry Environmental Impact Statement.

- **Fowler Peak Hazard Tree Project (2008)**

The Fowler Peak hazard Tree Project is outside the Sugarberry Project boundary and is outside the watershed and wildlife cumulative effects analysis boundary.

- **Grizzley Summit Hazard Tree Project (2008)**

The Grizzley Summit Hazard Tree Project is outside the Sugarberry Project boundary and is outside the watershed and wildlife cumulative effects analysis boundary.

- **Lexington Hill Hazard Tree Project (2006)**

The Lexington Hill Hazard Tree Project is inside the Sugarberry Project area and was analyzed under the Sugarberry Environmental Impact Statement (EIS).

- **Little Grass Valley Hazard Tree Project (2006).**

The Little Grass Valley Hazard Tree Project is located outside the Sugarberry Project boundary, Watershed cumulative effects analysis boundary and the wildlife cumulative effects analysis boundary.

- **Tamarack Flat (2006), Mule (2007), and Lost Creek (2007) Hazard Tree Projects.**

These sales are located outside the Sugarberry Project boundary and are outside the Watershed and wildlife cumulative effects analysis boundary.

- **Other Hazard Tree or Fuel Reduction Projects listed in the SOPA, but not listed here.**

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Other hazard tree or fuel reduction projects that have been listed in the schedule of proposed actions (SOPA), but not listed here have been determined to be outside the Sugarberry direct, indirect, or cumulative effects boundaries, or the projects not listed here have been determined to have no direct, indirect, or cumulative effects to vegetation attributes (i.e., species composition, forest health, canopy cover, seral stage diversity, etc.) and would not change seral stage diversity classes nor change the size or density classes of the California wildlife habitat relationship (CWHR) vegetation types.

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**APPENDIX A - TABLES**

Table 1.

<b>HAZARD TREE SALE CRUISE INFORMATION -SUGARBERRY PROJECT AREA</b>				
SALE NAME	American House	Devils Gap*	Lexington Hill	AVERAGES
Estimated Acres	100	250	50	75
DBH Size Class	# of Trees	# of Trees	# of Trees	# of Trees
00 - 10" DBH	0		2	1
10 - 20" DBH	38		158	98
20 - 30" DBH	47		99	73
>30" DBH	107		65	86
Total Trees Marked	192		324	258
DBH Size Class	Trees per Acre	Trees per Acre	Trees per Acre	Trees per Acre
00 - 10" DBH TPA	0		0	0
10 - 20" DBH TPA	0.4		3.2	1.3
20 - 30" DBH TPA	0.5		2	1
>30" TPA	1.1		1.3	1.1
Average trees per acre	1.9		6.5	3.4

\*Notes: Devils Gap has not been cruised, but would have similar results

Table 2.

**POTENTIAL NUMBER OF LARGE DIAMETER TREES THAT MAY BE REMOVED DUE TO OPERABILITY AND HAZARD TREE SALES**

CALCULATION OF OPERABILITY ACRES	QTY	ACRES / UNIT	TOTAL ACRES
New Road Construction (Miles)	26	.7	19
New Temporary Road Construction (Miles)	22	1.7	37
New Landing Construction (Each)	190	0.33	63
Reconstruct Existing Landings (Each)	60	0.1	6
Group Acres	1040	0.01	10
<b>TOTAL ACRES</b>			<b>135</b>

NOTES:

Road Construction acres = (5,280' x 14' wide) / 43,560 square feet = 1.7 acres per mile.

Landing Construction acres = 1/3 acre per landing.

Group Acres = 1% of total acres may be affected due to operability.

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Table 3.

<b>CALCULATION OF THE TOTAL NUMBER OF TREES &gt; 30" DBH WITHIN SUGARBERRY PROJECT AREA</b>	<b>TOTAL ACRES</b>	<b>TREES PER ACRE &gt; 30" DBH</b>	<b>TOTAL TREES &gt; 30" DBH</b>
CWHR Size Class 4 & 5 Stands	37290	11	410,190
<b>Total Number of Trees &gt; 30 DBH in the Sugarberry Project Area</b>			<b>410,190</b>

<b>CALCULATION OF TREES &gt; 30" DBH THAT MAY BE REMOVED FOR OPERABILITY</b>	<b>QTY</b>	<b>UNITS</b>
Number of Trees per acre greater than 30" DBH that may be removed.	11	TPA
Number of operability acres.	135	ACRES
Potential number of > 30" DBH Trees that may be removed.	1,385	TREES
Percent of Trees > 30" DBH that may be removed from the project area for operability.	<b>.3%</b>	PERCENT

<b>CALCULATION OF TREES &gt; 30" DBH THAT MAY BE REMOVED FOR ASPEN UNITS</b>	<b>QTY</b>	<b>UNITS</b>
Number of Trees per acre greater than 30" DBH that may be removed.	13	TPA
Number of aspen acres (Approx. 12 of 20 acres)	12	ACRES
Potential number of > 30" DBH Trees that may be removed.	156	TREES
Percent of Trees > 30" DBH that may be removed from the project area within Aspen units	<b>.4%</b>	PERCENT

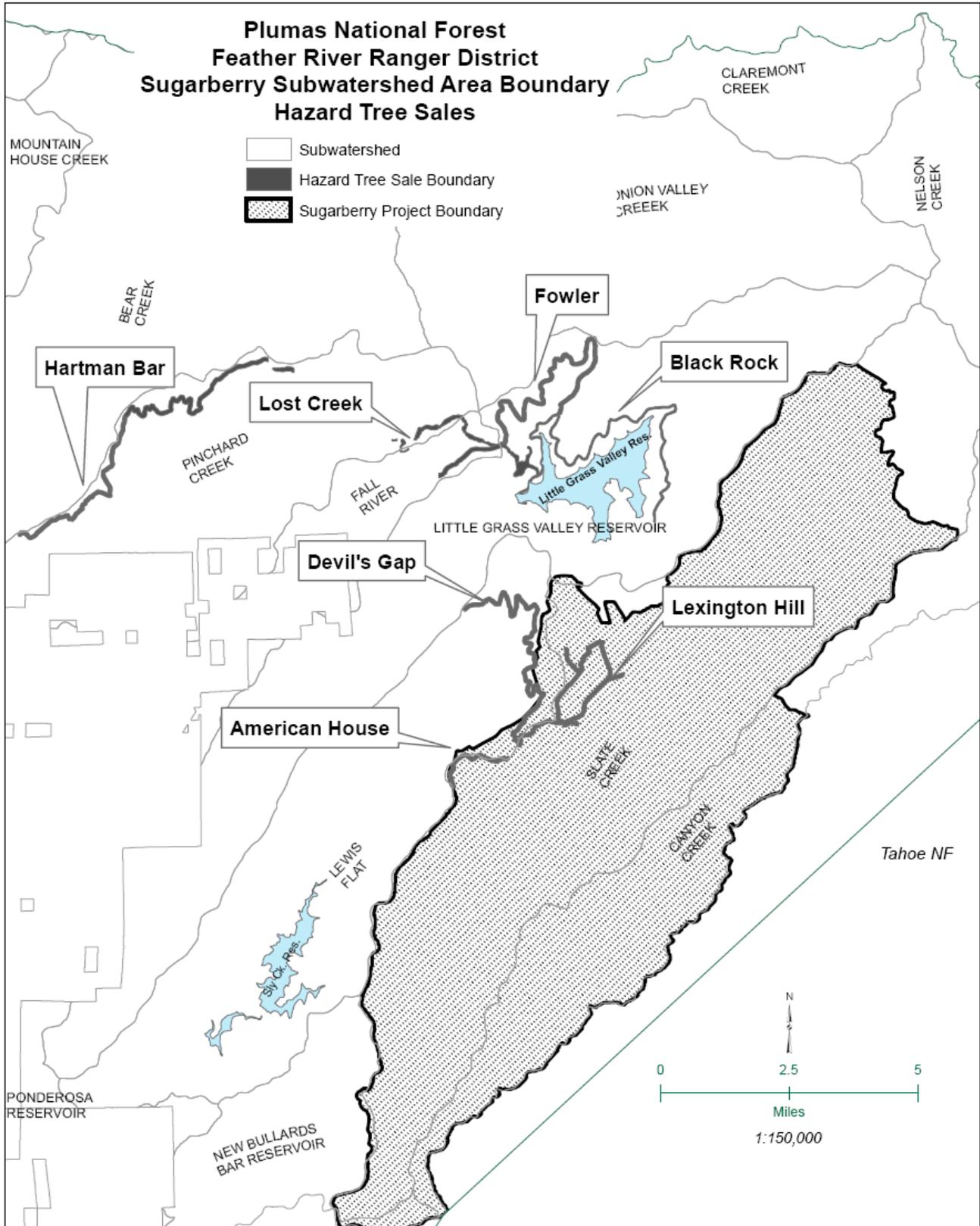
<b>CALCULATION OF TREES &gt; 30" DBH THAT MAY BE REMOVED FROM HAZARD TREE SALES</b>	<b>QTY</b>	<b>UNITS</b>
Number of Trees per acre greater than 30" DBH that may be removed.	3.4	TPA
Number of Hazard Trees within the Sugarberry Project	400	ACRES
Potential number of > 30" DBH Trees that may be removed.	1,360	TREES
Percent of Trees > 30" DBH that may be removed from the project area.	<b>.3%</b>	PERCENT

## Sugarberry Hazard Tree Cumulative Effects Analysis

**Table 4**

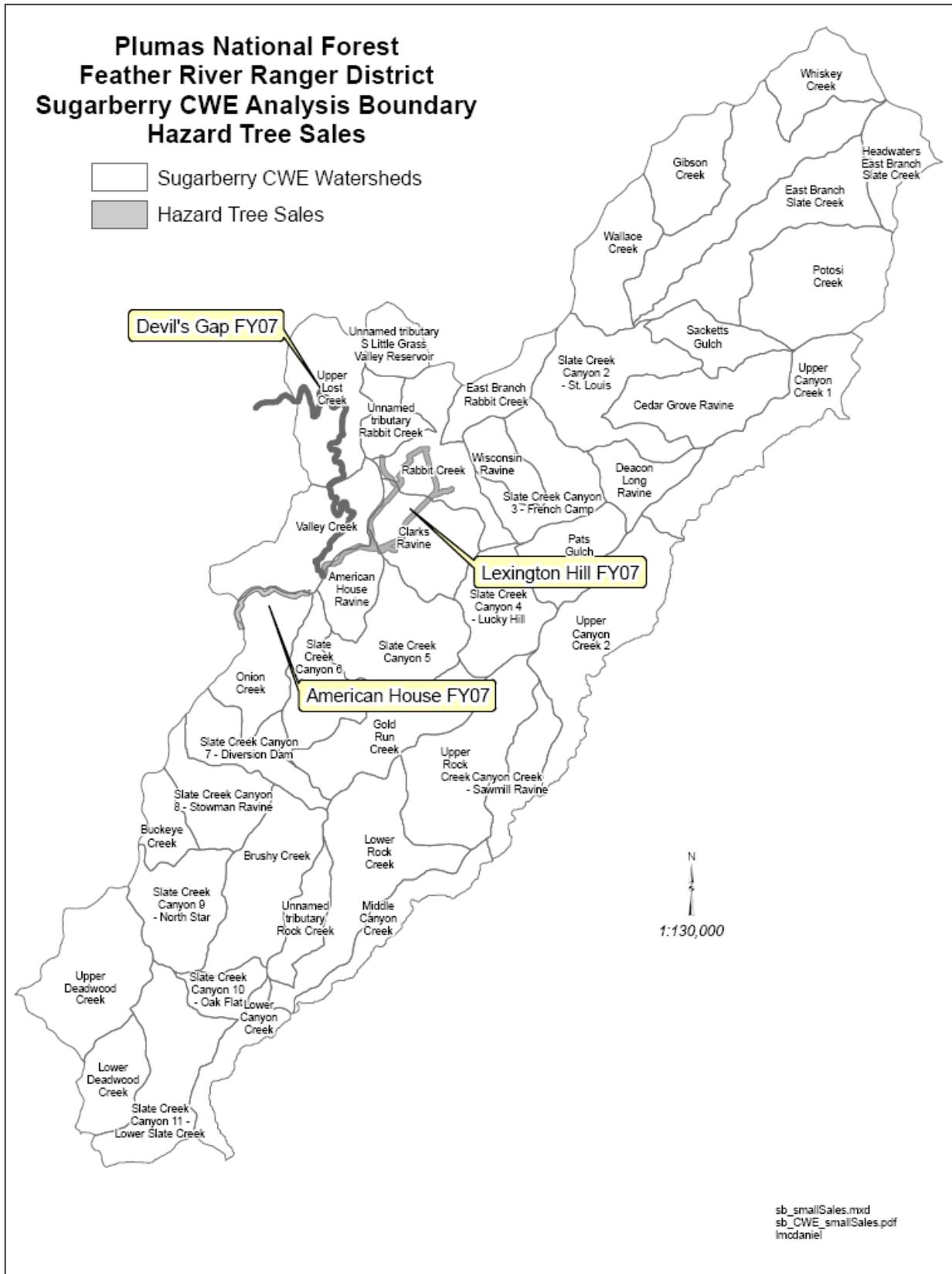
<b>CALCULATION OF TREES &gt; 30" DBH THAT MAY BE REMOVED WITHIN SUGARBERRY PROJECT AREA</b>	<b>QTY</b>	<b>UNITS</b>
Number of Trees per acre greater than 30" DBH that may be removed.	2,901	TREES
Number of 30" Trees within Sugarberry Project	410,190	TREES
Percent of Trees > 30" DBH that may be removed from the project area.	.7%	PERCENT

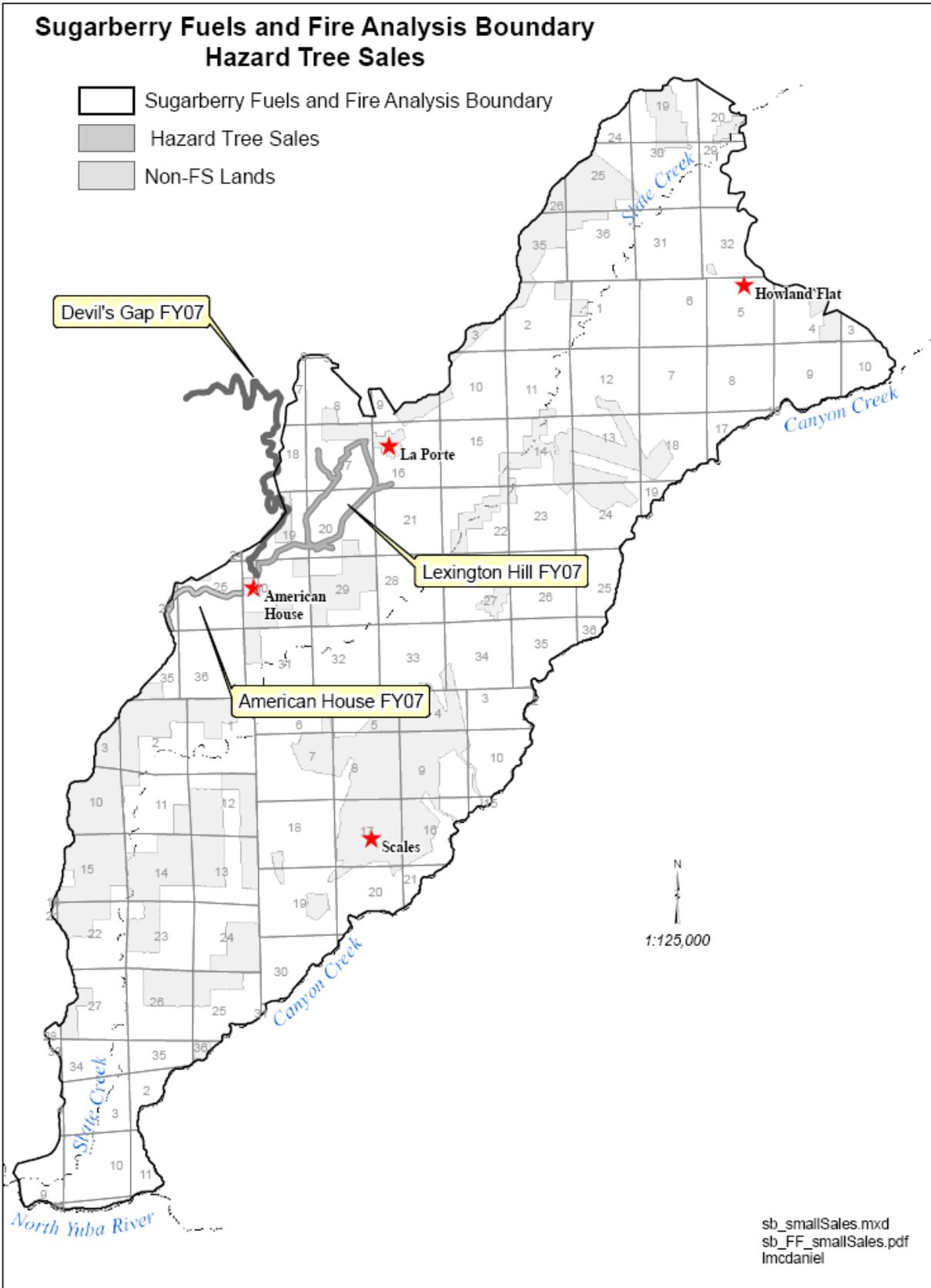
**APPENDIX B – FIGURES**



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