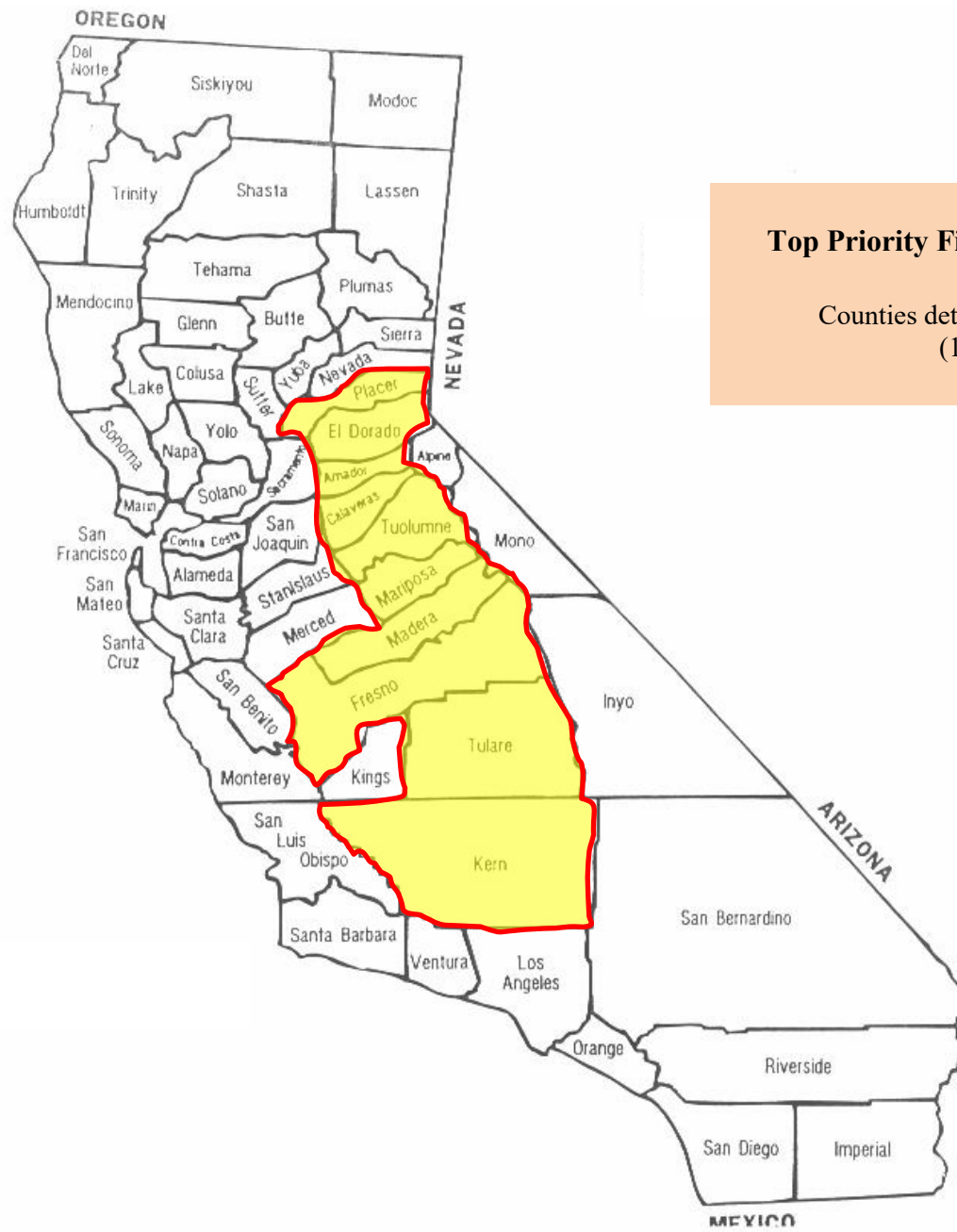


Figure A



Top Priority Fire Treatment Counties
Counties determined by CALFIRE
(10 counties)

**Mortality on National Forests
within “bufferwood” counties in 2018**

Total Deadwood Acres in the State = 1,232,900
Total Dead Trees in the State = 11,431,000

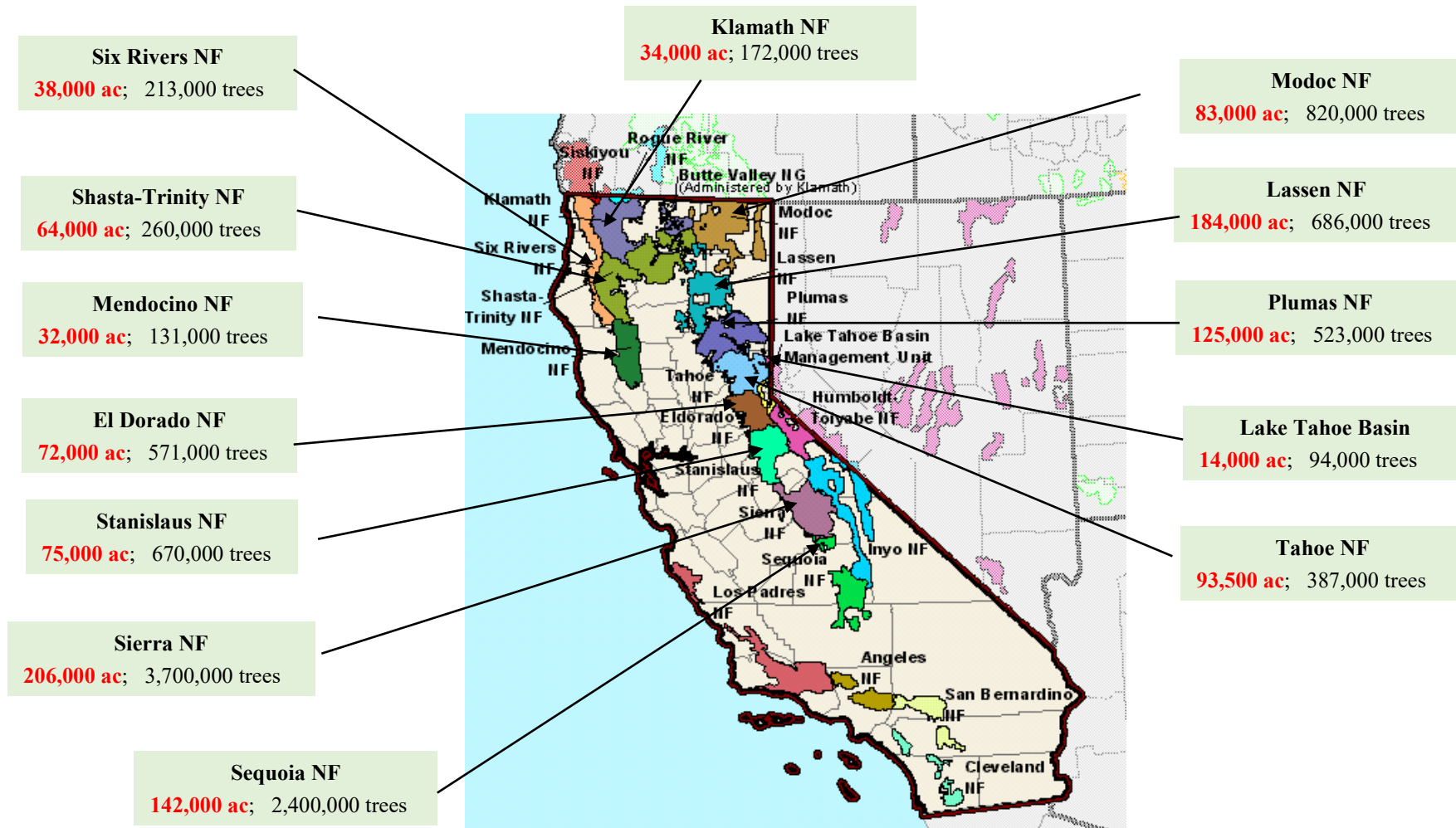


Figure D

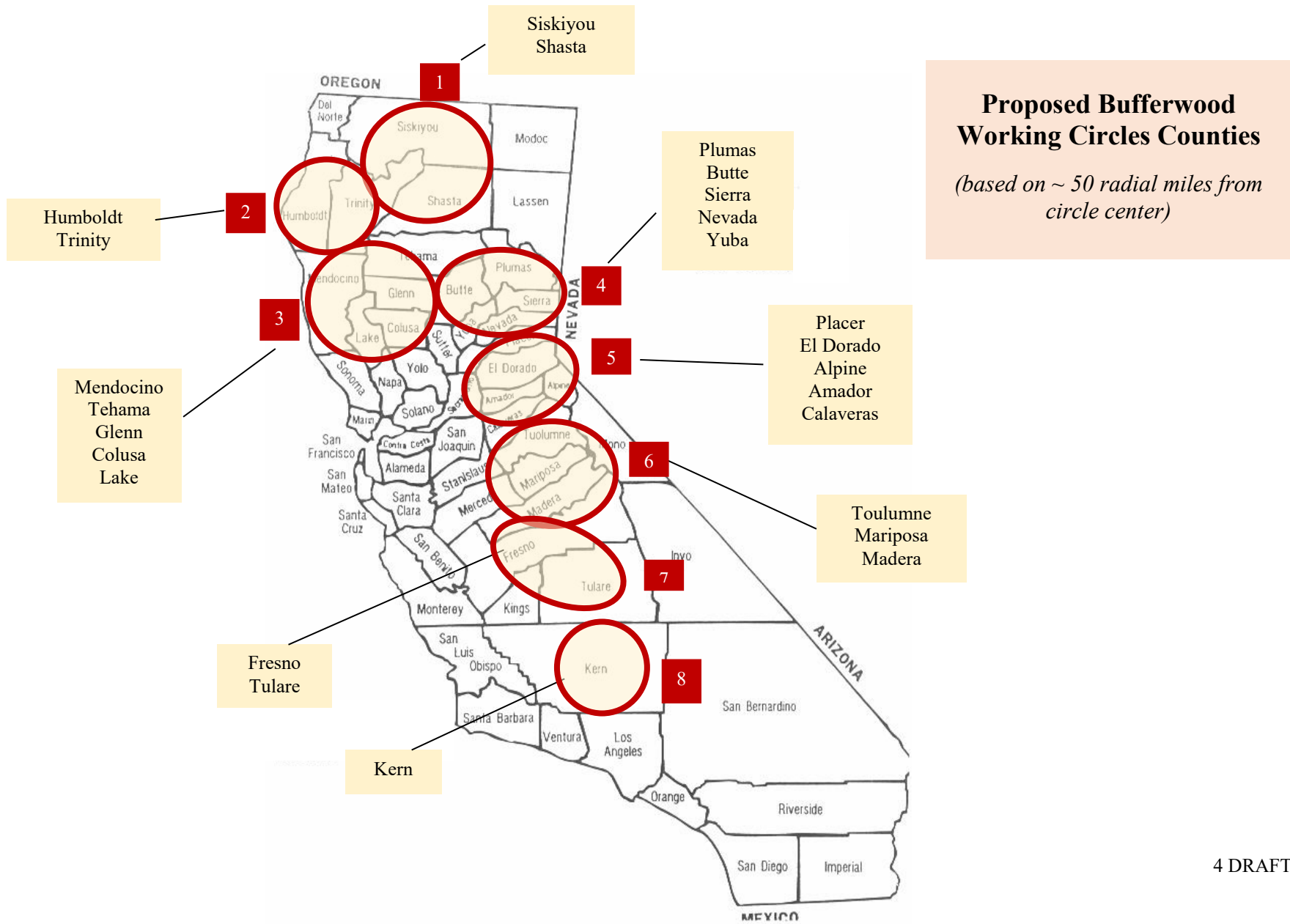


Figure E

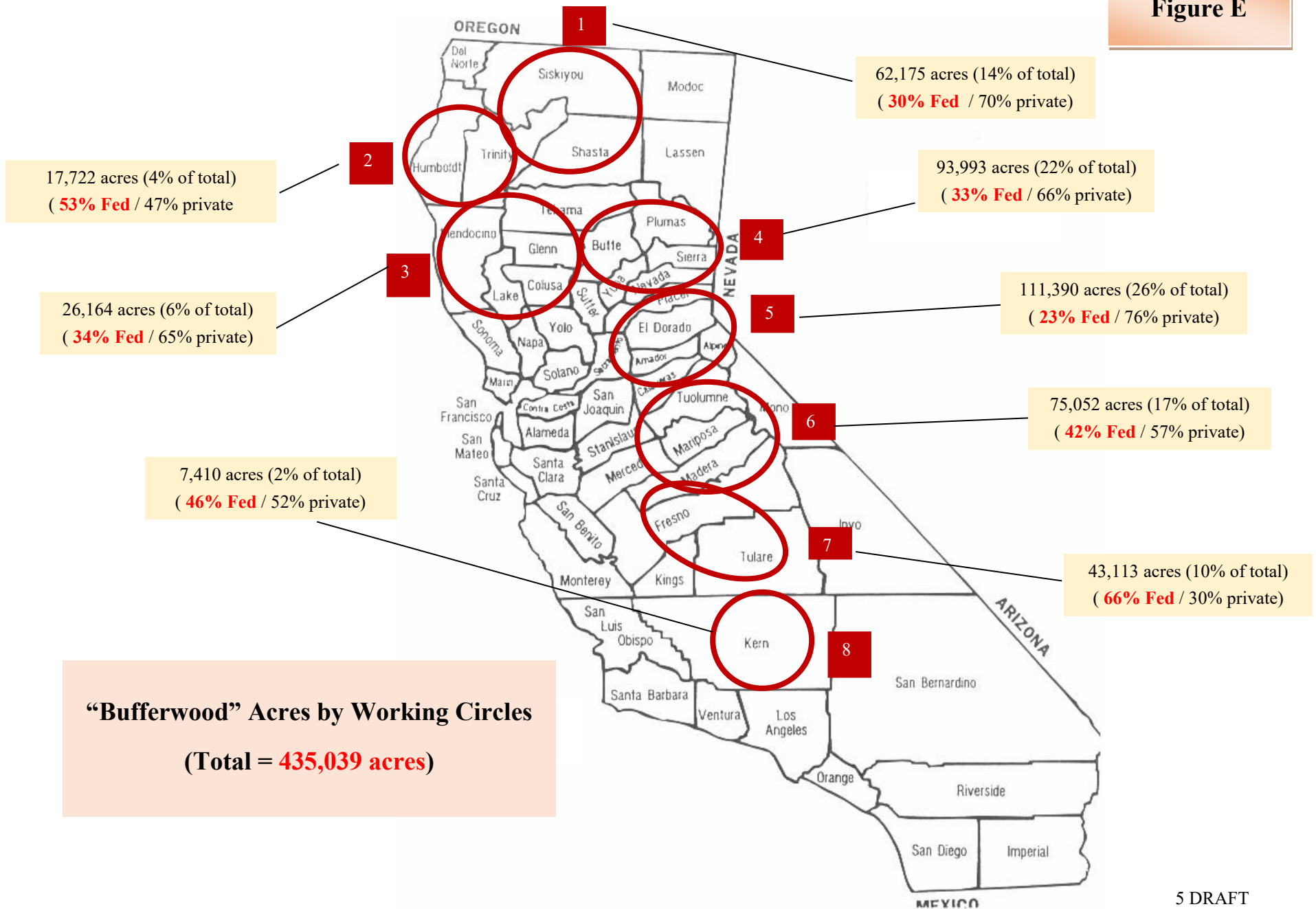
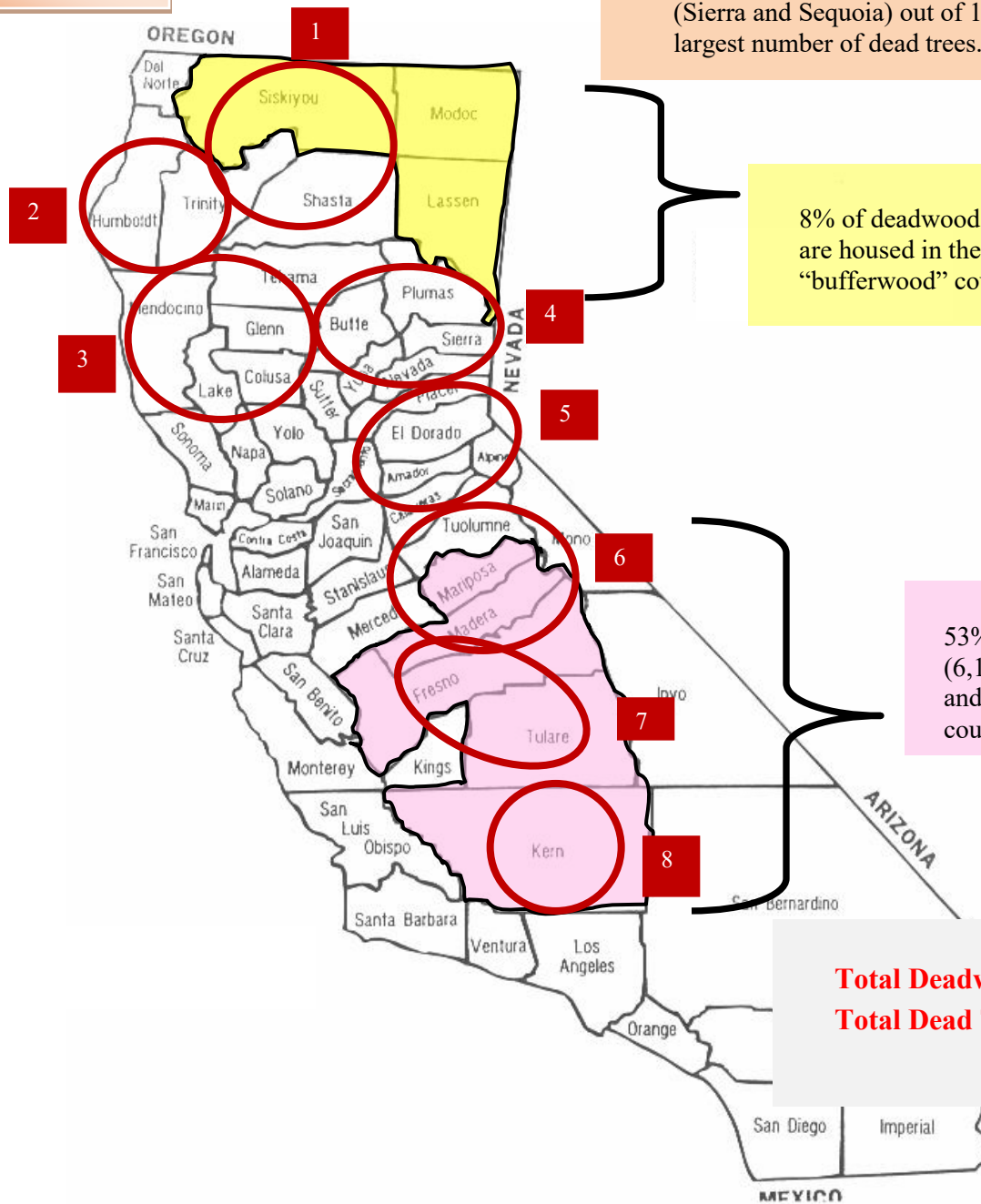


Figure F

Number of dead trees by “bufferwood” working circles

(2018 data)

Over 50% of deadwood trees are located in two National Forests (Sierra and Sequoia) out of 18 statewide. Modoc NF housed the 3rd largest number of dead trees.



8% of deadwood trees in the state (870,000 trees) are housed in the Modoc NF affecting 3 “bufferwood” counties.

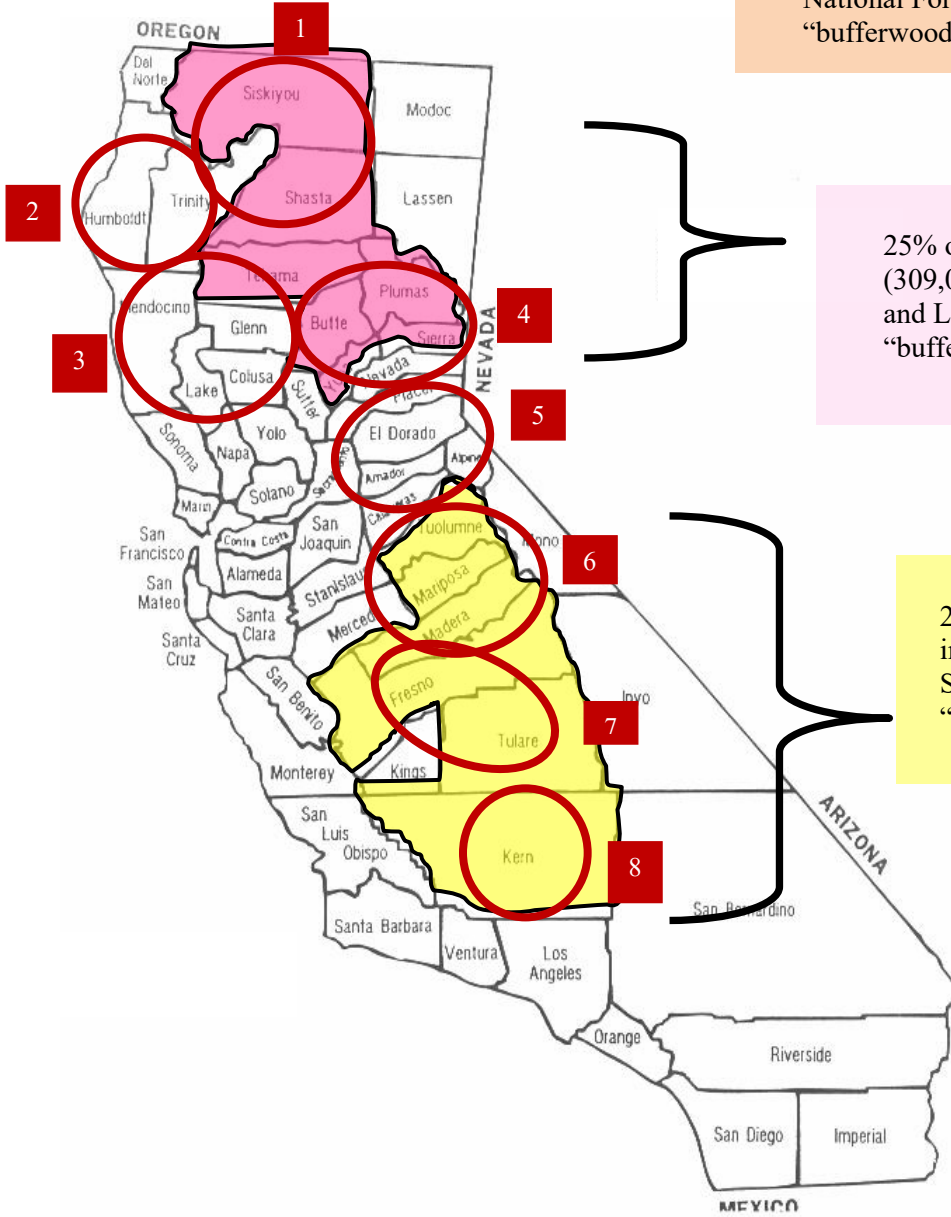
53% of deadwood trees in the state (6,100,000 trees) are housed in the Sierra and Sequoia NFs affecting 5 “bufferwood” counties.

Total Deadwood Acres in the State = 1,232,900
Total Dead Trees in the State = 11,431,000

Figure G

Acres of deadwood by “bufferwood” working circles
(2018 data)

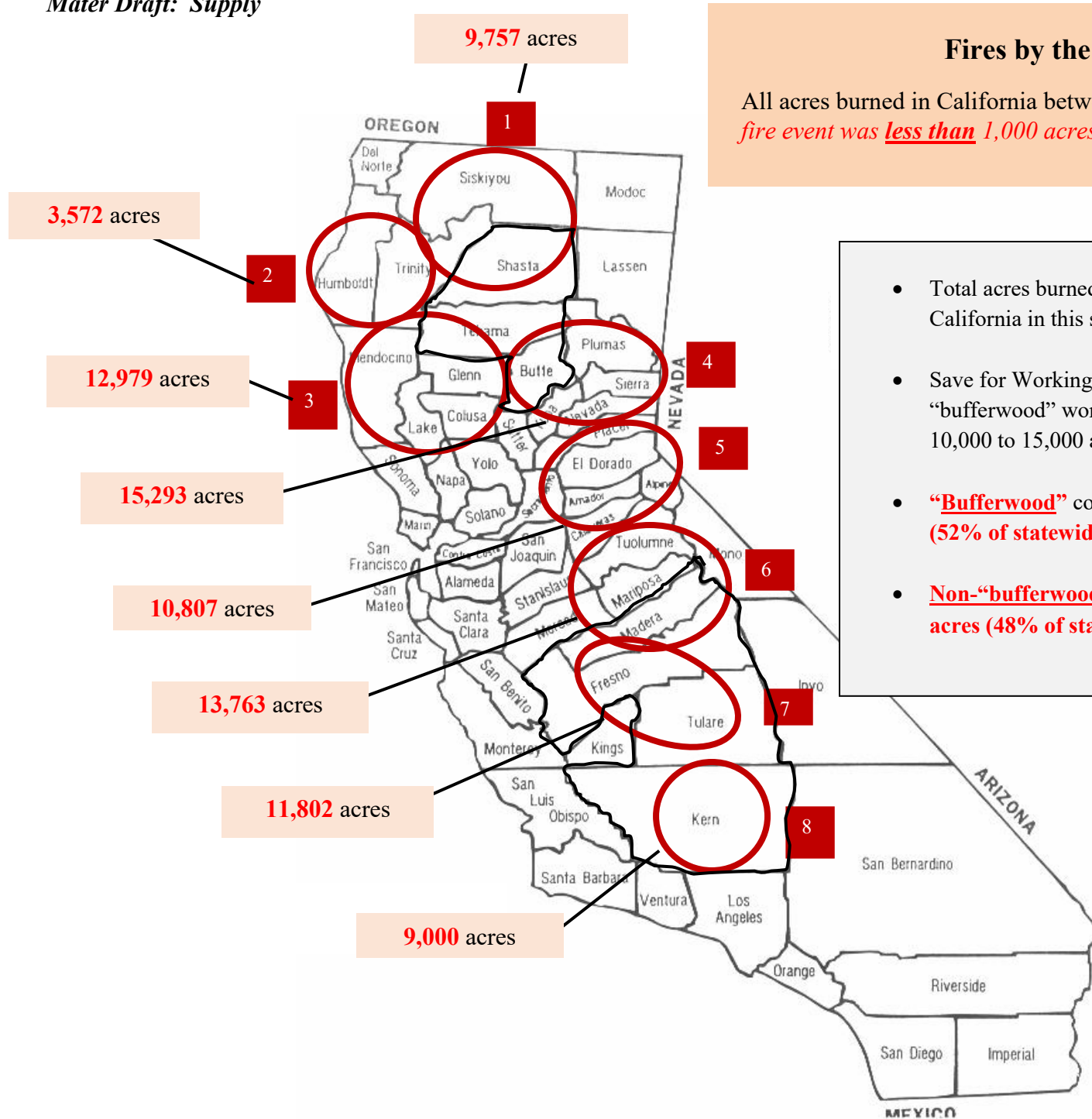
Over 50% of all deadwood acres in the state are located in four (4) National Forests (Plumas, Lassen, Sierra, Sequoia) affecting many “bufferwood” counties



25% of all deadwood acres in the state (309,000 ac) are housed in the Plumas and Lassen National Forests affecting 6 “bufferwood” counties.

29% of all deadwood acres (348,000 ac) in the state are housed in the Sierra and Sequoia National Forests affecting 6 “bufferwood” counties

Total Deadwood Acres in the State = 1,232,900
Total Dead Trees in the State = 11,431,000



Fires by the Numbers

All acres burned in California between 2013 thru 2019 *where each fire event was less than 1,000 acres in size.*

- Total acres burned between 2013 through 2019 in California in this size category = **166,590 acres.**
- Save for Working Circles 2 and 8, all other “bufferwood” working circles each had between 10,000 to 15,000 acres burned in this size category.
- **“Bufferwood”** county acres burned = **86,973 acres (52% of statewide total).**
- **Non-“bufferwood”** county acres burned = **79,617 acres (48% of statewide total)**

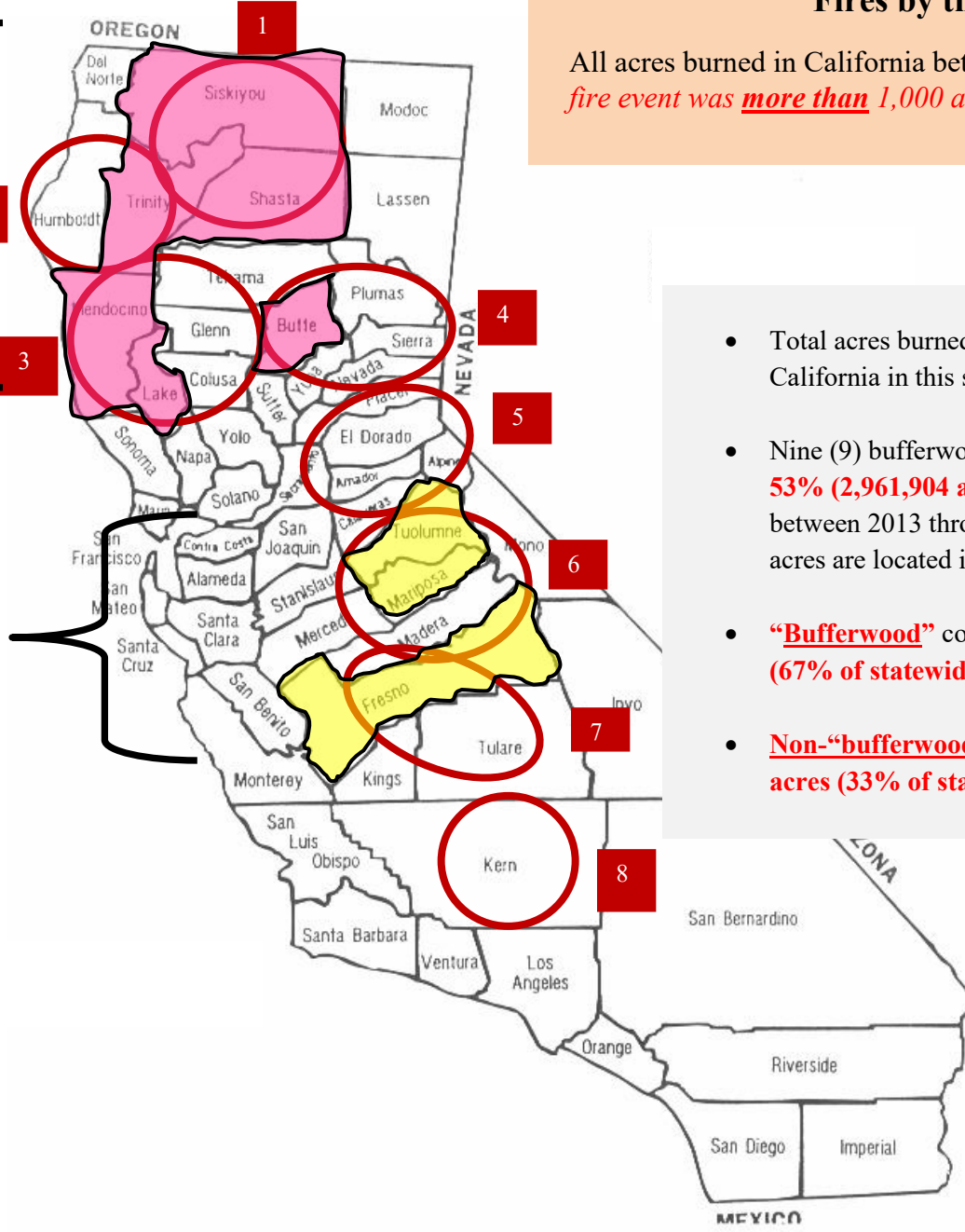
Figure H

Fires by the Numbers

All acres burned in California between 2013 thru 2019 *where each fire event was more than 1,000 acres in size*.

2,062,082 acres
(37% of total statewide acres burned in six counties)

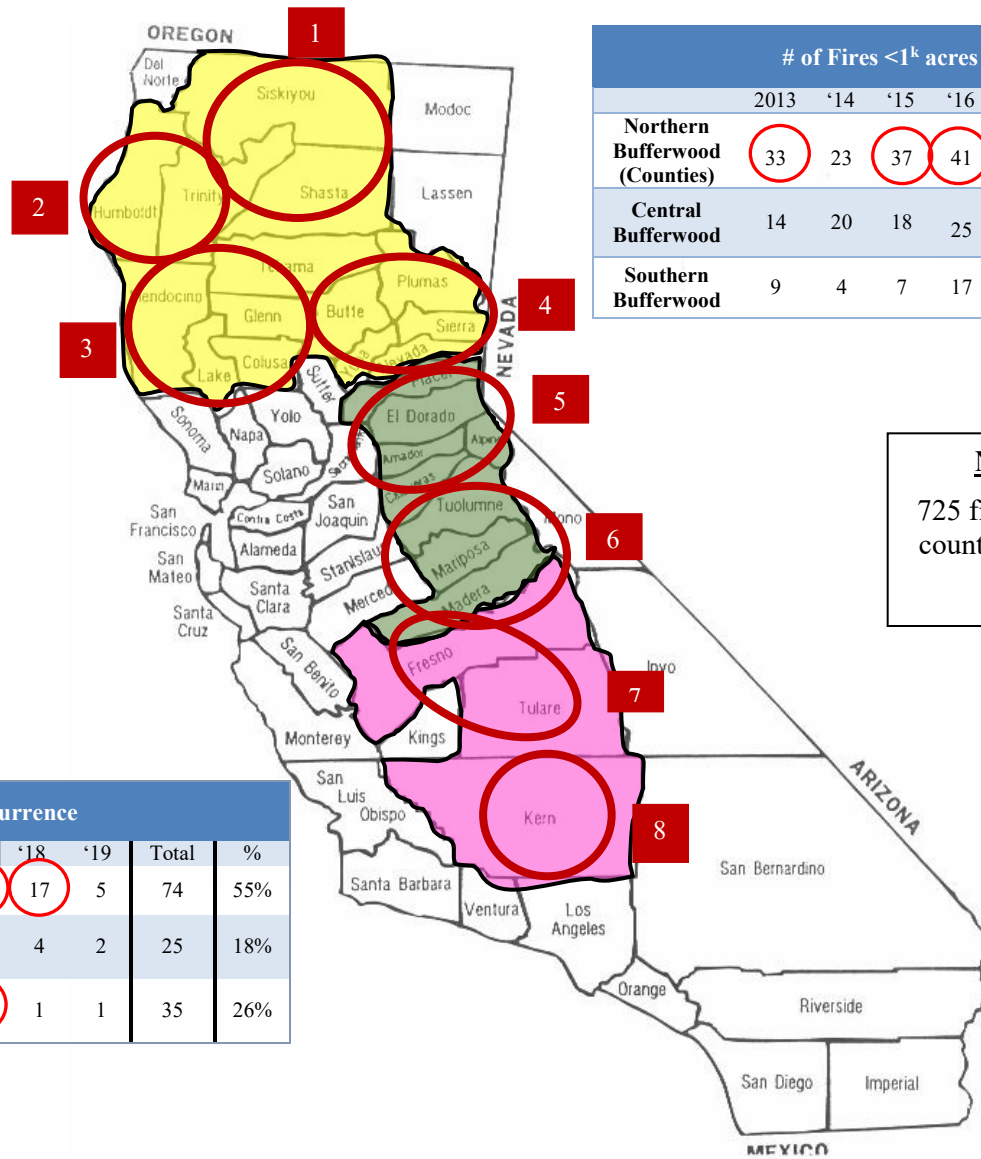
718,365 acres
(13% of total statewide acres burned in three counties)



- Total acres burned between 2013 through 2019 in California in this size category = **5,637,375 acres**.
- Nine (9) bufferwood counties in this size category housed **53% (2,961,904 ac)** of all acres burned in the state between 2013 through 2019. 70% of these bufferwood acres are located in working circles 1,2 and 3.
- **“Bufferwood”** county acres burned = **3,771,444 acres (67% of statewide total)**.
- **Non-“bufferwood”** county acres burned = **1,845,931 acres (33% of statewide total)**

Figure I

- = Northern Bufferwood (wc 1-4)
- = Central Bufferwood (wc 5-6)
- = Southern Bufferwood (wc 7-8)

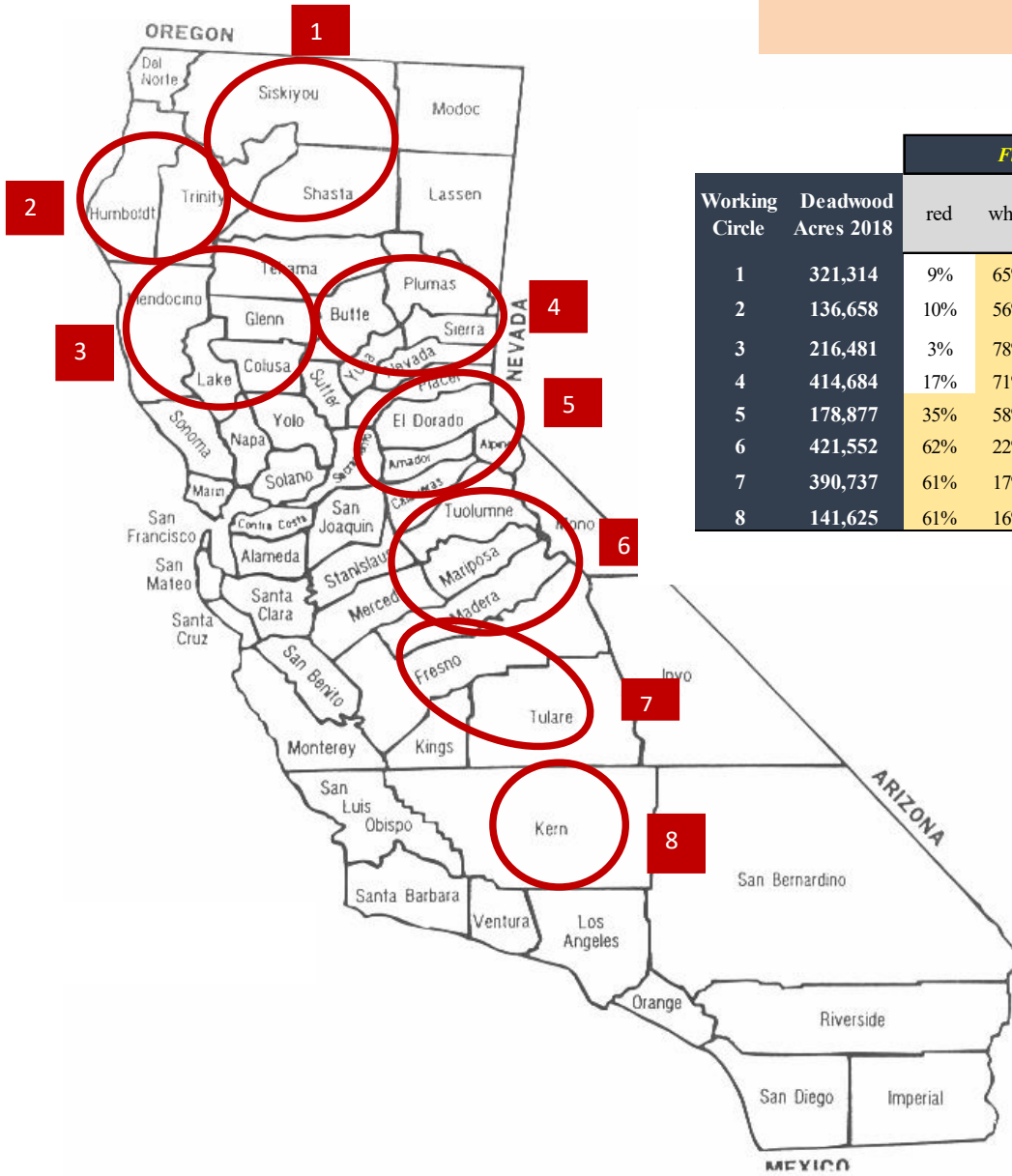


# of Fires <1 ^k acres per occurrence									
	2013	'14	'15	'16	'17	'18	'19	Total	%
Northern Bufferwood (Counties)	33	23	37	41	77	63	51	325	55%
Central Bufferwood	14	20	18	25	32	25	18	152	26%
Southern Bufferwood	9	4	7	17	43	19	15	114	19%

Number of Fires:
725 fires within bufferwood counties from 2013 through October 2019

# of Fires > 1 ^k acres per occurrence									
	2013	'14	'15	'16	'17	'18	'19	Total	%
Northern Bufferwood	7	11	12	3	19	17	5	74	55%
Central Bufferwood	4	6	2	2	5	4	2	25	18%
Southern Bufferwood	3	3	2	9	16	1	1	35	26%

Mortality by species in “bufferwood” working circles
(2018 data)



Working Circle	Deadwood Acres 2018	Firs			Pines				tan oak	National Forests
		red	white	Douglas	jeffrey	ponderosa	lodgepole	other		
1	321,314	9%	65%	4%	13%	1%	4%	0%	3%	Lassen, Shasta-Trinity, Six Rivers, Klamath
2	136,658	10%	56%	9%	5%	12%	0%	1%	7%	Mendocino, Shasta-Trinity, Six Rivers
3	216,481	3%	78%	0%	3%	14%	1%	1%		Lassen, Mendocino
4	414,684	17%	71%		3%	8%	1%			Lassen, Plumas, Lake Tahoe, Tahoe
5	178,877	35%	58%		3%	3%	1%			El Dorado, Lake Tahoe, Tahoe
6	421,552	62%	22%		8%	6%	2%			Sierra, Inyo, Stanislaus
7	390,737	61%	17%		9%	5%	4%	4%		Sierra, Inyo, Sequoia
8	141,625	61%	16%		14%	6%	3%			Sequoia

Based on mortality, key focus should be on product applications for red fir and white fir, and to a lesser extent ponderosa pine.

Mater Draft: Supply

Net cumulative sawtimber and fuelwood volume (mbf) sold and cut in CA National Forests housed in "Bufferwood" counties during 2009 thru 2018

(Total 10-yr cumulative *sawtimber sold but not cut* = 355 mmbf)
 (Total 10-yr cumulative *fuelwood volume cut but not sold* = 19 mmbf)

Figure L

Klamath NF:
 More sawtimber sold than cut: 72,958 mbf
 More fuelwood cut than sold: 1,921 mbf
 Key purchasers: Siskiyou Cascades Resources
 Croman Corp

Six Rivers NF:
 More sawtimber sold than cut: 26,094 mbf
 More fuelwood cut than sold: 532 mbf
 Key purchaser: Trinity River Lbr

Shasta-Trinity NF:
 More sawtimber cut than sold: -21,756 mbf
 More fuelwood sold than cut: 1,317 mbf
 Key purchasers: Scott Timber; SPI

Mendocino NF:
 More sawtimber sold than cut: 19,502 mbf
 More fuelwood cut than sold: 207 mbf
 Key purchaser: SPI

Tahoe NF:
 More sawtimber sold than cut: 20,093 mbf
 More fuelwood cut than sold: 359 mbf
 Key purchaser: SPI

El Dorado NF:
 More sawtimber sold than cut: 54,395 mbf
 More fuelwood cut than sold: 229 mbf
 Key purchasers: SPI; JW Bamford

Stanislaus NF:
 More sawtimber sold than cut: 45,195 mbf
 More fuelwood cut than sold: 945 mbf
 Key purchasers: SPI; Crook Logging

Modoc NF:
 More sawtimber sold than cut: 31,818 mbf
 More fuelwood cut than sold: 607 mbf
 Key purchasers: Franklin Logging; Flying K Logging

Lassen NF:
 More sawtimber sold than cut: 19,932 mbf
 More fuelwood cut than sold: 1,075 mbf
 Key purchasers: SPI, Frank Foley

Plumas NF:
 More sawtimber sold than cut: 10,019 mbf
 More fuelwood cut than sold: 461 mbf
 Key purchasers: SPI; JW Bamford

Lake Tahoe NF:
 More sawtimber sold than cut: 7,317 mbf
 More fuelwood cut than sold: 568 mbf
 Key purchasers: SPI

Sierra NF:
 More sawtimber sold than cut: 46,712 mbf
 More fuelwood cut than sold: 11,040 mbf
 Key purchaser: SPI

Sequoia NF:
 More sawtimber sold than cut: 678 mbf
 More fuelwood cut than sold: 624 mbf
 Key purchaser: SPI

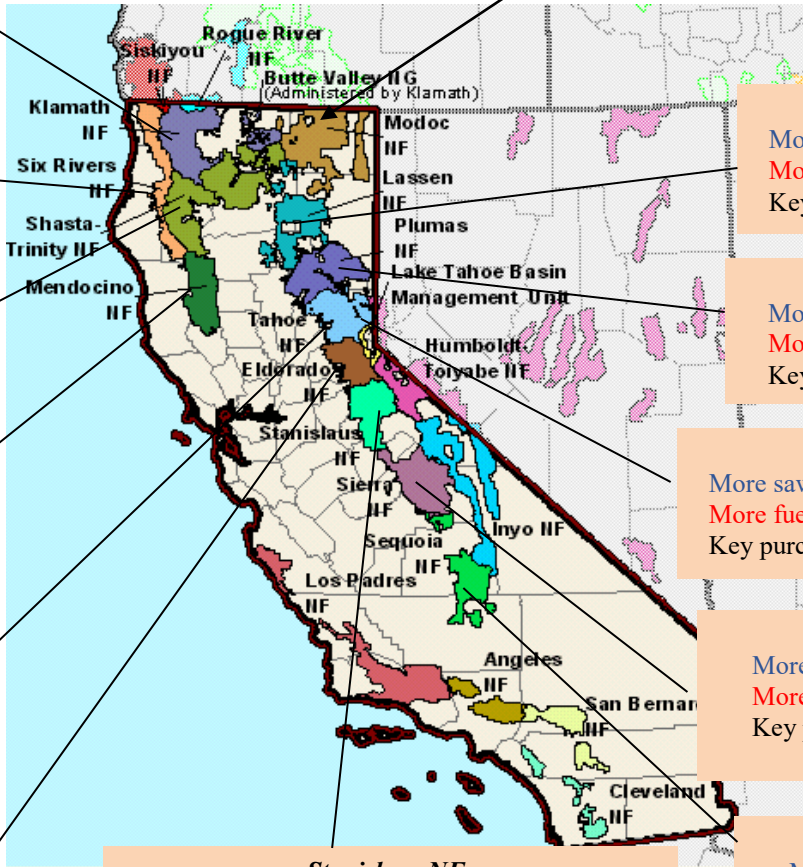
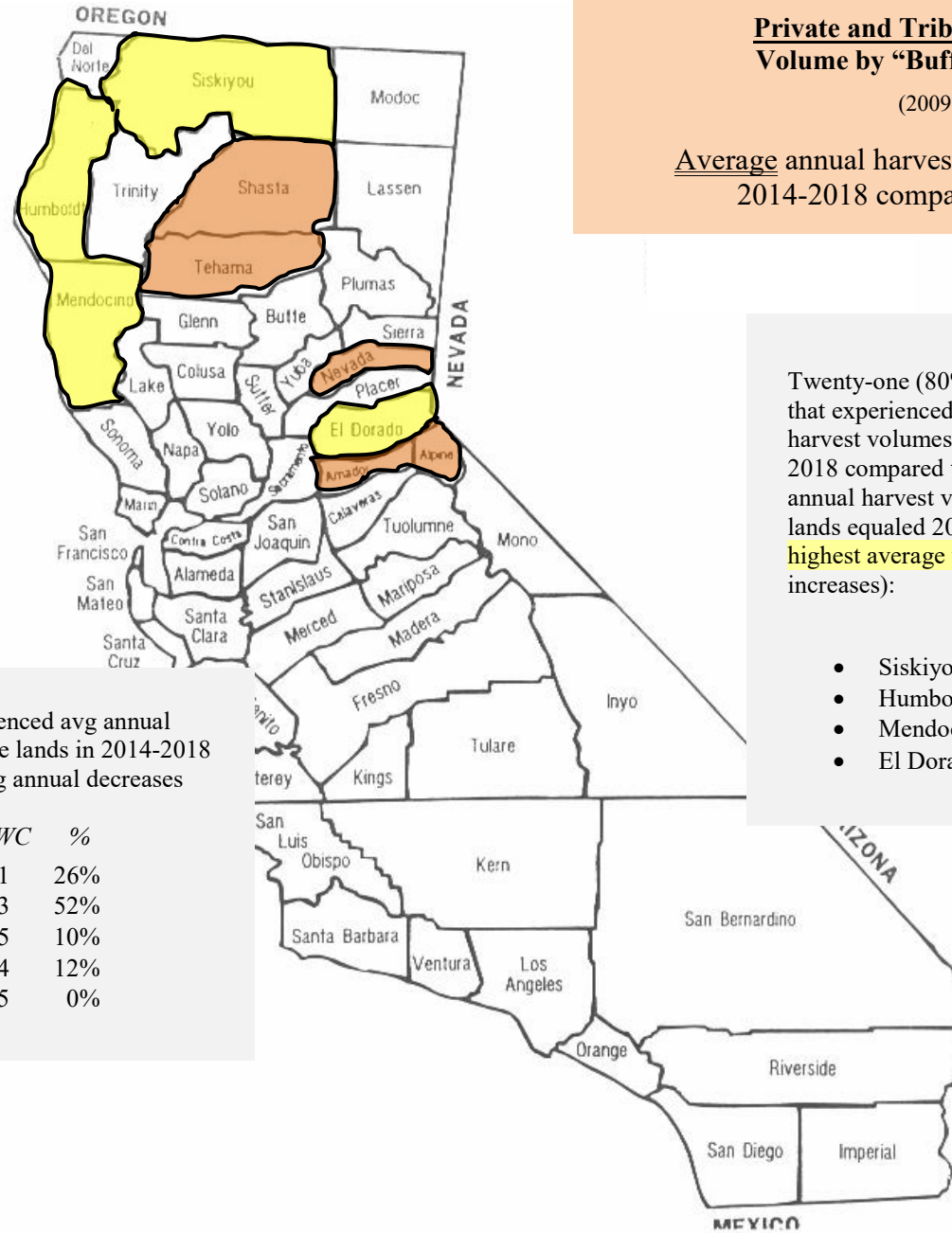


Figure M



Private and Tribal Lands Harvest Volume by “Bufferwood” County
(2009-2018)

Average annual harvest increases/decreases in 2014-2018 compared to 2009-2013.

Twenty-one (80%) of “bufferwood” counties that experienced the increases in avg annual harvest volumes from private lands in 2014-2018 compared to 2009-2013. The total avg annual harvest volume increase from private lands equaled 202 mmbf. **Counties with the highest average volume increases (68% of increases):**

	<i>m</i> bf	<i>WC</i>	%
• Siskiyou	= 35,006	1	17%
• Humboldt	= 38,244	2	19%
• Mendocino	= 28,829	3	14%
• El Dorado	= 36,455	5	18%

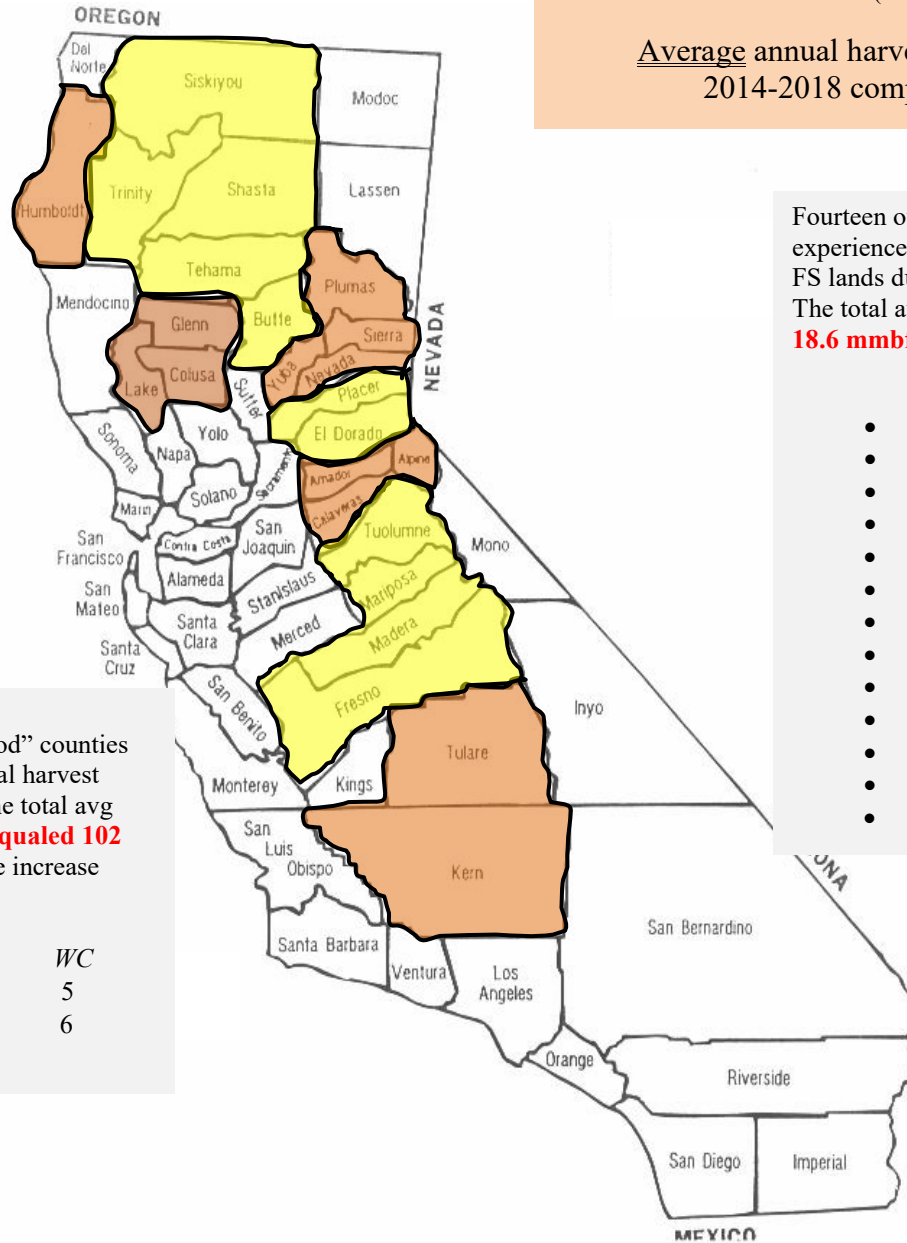
Only 5 “bufferwood” counties experienced avg annual harvest volume **decreases** from private lands in 2014-2018 compared to 2009-2013. The total avg annual decreases equaled over 50 mmbf.

	<i>m</i> bf	<i>WC</i>	%
• Shasta	= (- 12,854)	1	26%
• Tehama	= (- 26,302)	3	52%
• Amador	= (- 4,915)	5	10%
• Nevada	= (- 6,158)	4	12%
• Alpine	= (- 6)	5	0%

**USFS Lands Harvest
Volume by “Bufferwood” County**
(2009-2018)

Average annual harvest increases/decreases in
2014-2018 compared to 2009-2013.

Figure N



Fourteen out of 25 (56%) “bufferwood” counties experienced **decreases** in avg annual harvest volumes from FS lands during the last 5 years compared to 2009-2013. The total avg annual harvest volume **decreases equaled 18.6 mmbf.**

	<i>mbf</i>	<i>WC</i>
• Humboldt	= (- 762)	2
• Glenn	= (- 1,203)	3
• Lake	= (- 645)	3
• Colusa	= (- 362)	3
• Plumas	= (- 2,708)	4
• Sierra	= (- 3,479)	4
• Yuba	= (- 1,060)	4
• Nevada	= (- 977)	4
• Amador	= (- 846)	5
• Alpine	= (- 1,131)	5
• Calaveras	= (- 2,438)	5
• Tulare	= (- 512)	7
• Kern	= (- 2,487)	8

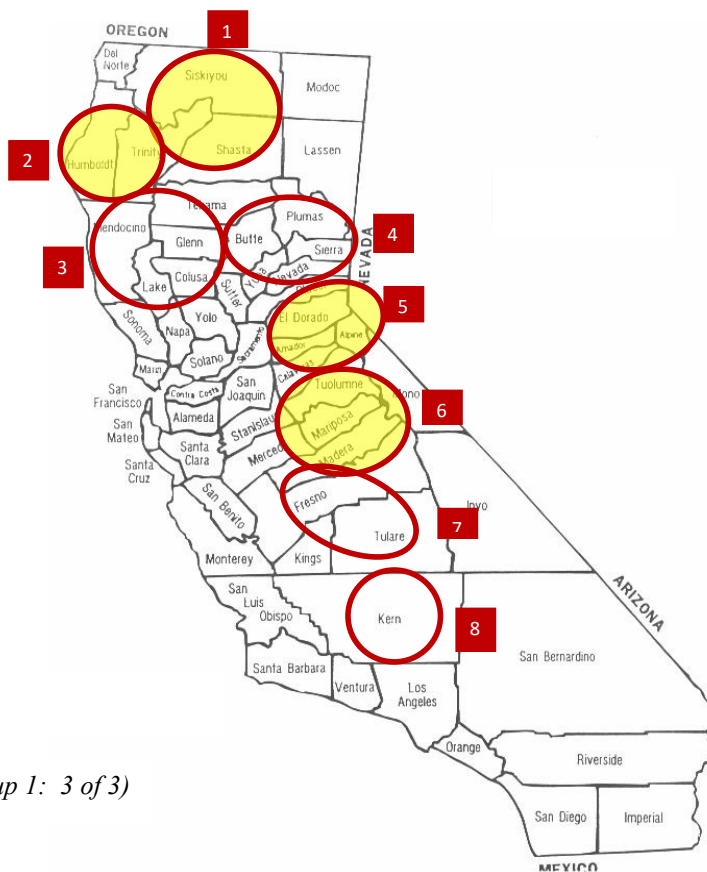
Eleven out of 25 (44%) “bufferwood” counties experienced **increases** in avg annual harvest volumes from National Forests. The total avg annual harvest volume **increases equaled 102 mmbf.** Almost 60% of that volume increase occurred in 2 counties:

	<i>mbf</i>	<i>WC</i>
• Placer	= 26,723	5
• Toulumne	= 31,289	6

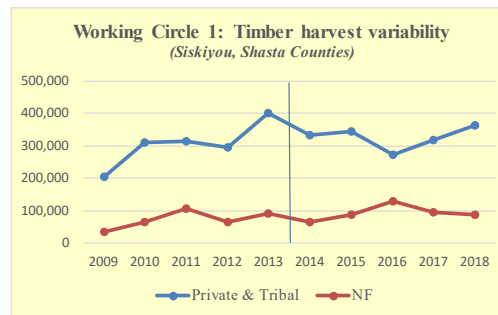
Mater Draft: Supply

Best bets in “bufferwood” working circles for added future timber supply:

- Charts to the right show total average annual increases in harvested volumes for 2014-2018 compared to 2009-2013 in “bufferwood” counties within working circles.
- Assuming 2020-2024 avg annual harvest volumes equals an additional **50% above** the percentage increases in avg annual harvest volumes that occurred in each working circle during the second half decade, best bets for increased supply are from four “bufferwood” working circles (1,2,5, and 6).



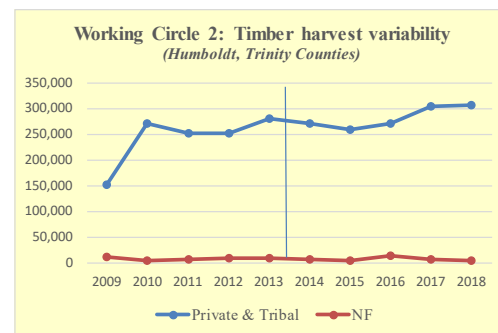
Group 1: 3 of 3



Private/Tribal: **increase of avg annual harvest of 22,152 mbf**

National Forests: Lassen, Shasta-Trinity, Six Rivers
increase of avg annual harvest of 19,839 mbf

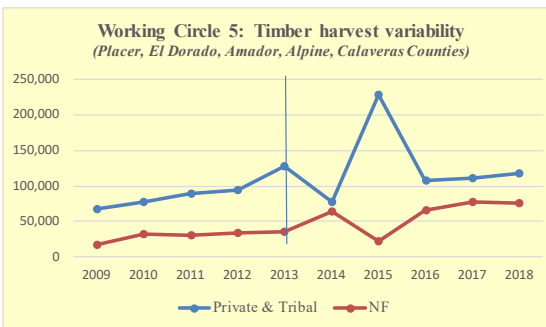
Total avg annual increase: 41,990 mbf (+11%) **Projected 2020-2024: + 21 mmbf/yr**



Private/Tribal: **increase of avg annual harvest of 41,170 mbf**

National Forests: Mendocino, Shasta-Trinity, Six Rivers
decrease of avg annual 463 mbf

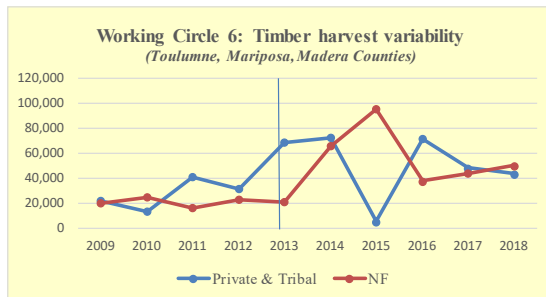
Total avg annual increase: 40,708 mbf (+16%) **Projected 2020-2024: + 23 mmbf/yr**



Private/Tribal: **increase of avg annual harvest of 37,359 mbf**

National Forests: El Dorado, Lake Tahoe, Tahoe
increase of avg annual harvest of 31,135 mbf

Total avg annual increase: 68,493 mbf (+57%) **Projected 2020-2024: + 54 mmbf/yr**



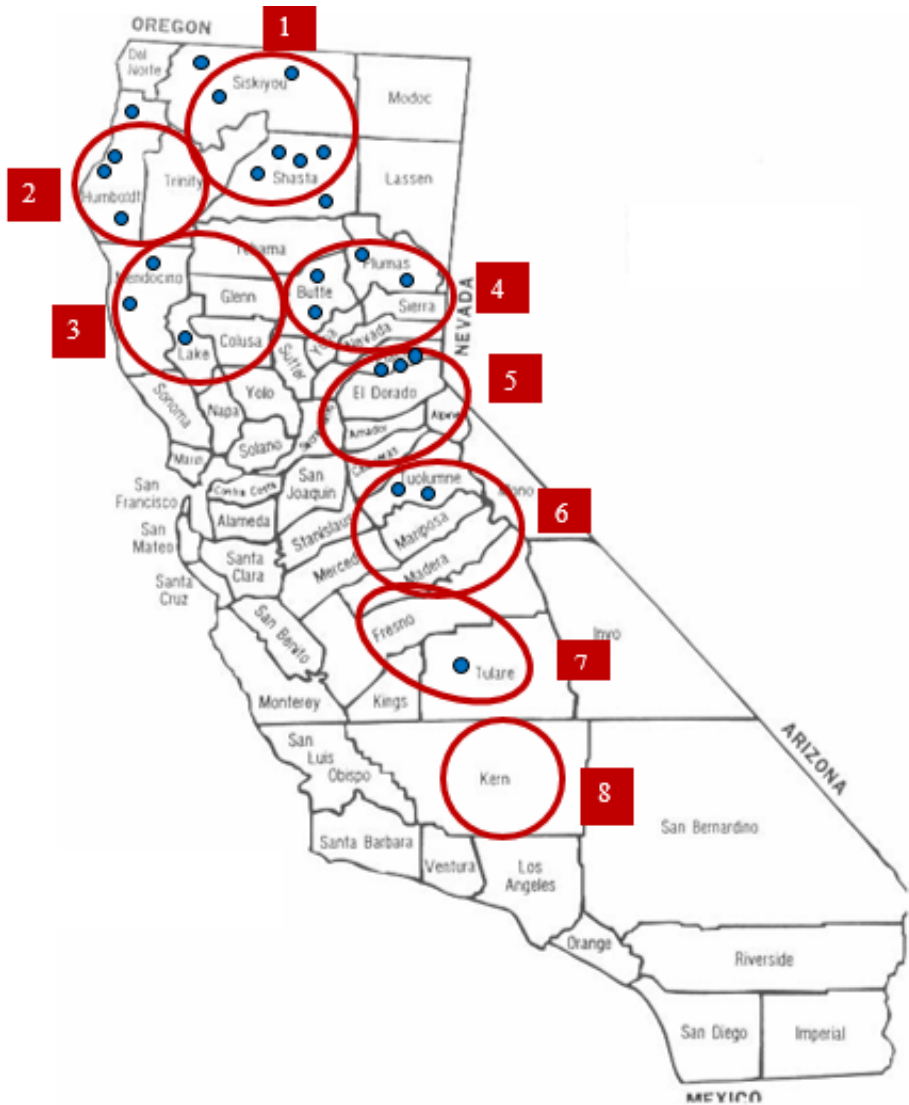
Private/Tribal: **increase of avg annual harvest of 12,961 mbf/yr**

National Forests: Sierra, Stanislaus, Inyo
increase of avg annual harvest of 37,455 mbf

Total avg annual increase: 50,416 mbf (+89%) **Projected 2020-2024: + 47.5 mmbf/yr**

Figure P

Sawmills in operation in 2019



Working Circle	Company	City
1	Sierra Pacific	Anderson
1	Shasta Green Sawmill	Burney
1	Sierra Pacific	Burney
1	Sierra Pacific	Redding
1	Alta California Roundwood	Anderson
1	Roseburg Forest Products Veneer Mill	Weed
1	Fruit Growers Supply Co	Yreka
1	Timber Products Co	Yreka
2	Schmidbauer Lumber	Eureka
2	Arcata Forest Products	Arcata
2	North Fork Lumber Co	Korbel
2	Arcata Forest Products	Arcada
3	Collins Pine	Lakeview
3	Agwood Mill & Lumber Co	Ukiah
3	Mendocino Forest Products	Ukiah
4	Sierra Pacific	Oroville
4	Apex Lumber	Oroville
4	Collins Pine	Chester
4	Sierra Pacific	Quincy
5	Sierra Pacific	Lincoln
5	Bohemia	Lincoln
5	California Hardwood Producers	Auburn
6	Sierra Pacific	Chinese Camp
6	Sierra Pacific	Sonora
7	Sierra Forest Products	Terra Bella

Figure Q

Sawmills idle in 2019

