



# U.S. Forest Service Land



Watershed	Hydro-power (mW)	Forest restoration			
		Net benefit (\$mil)		Benefit-cost ratio	
		Low	High	Low	High
Mokelumne River	245	24	19	2.1	1.2
Butte Creek	26	3	0	1.8	1.0
Bear River	188	2	-1	1.7	0.9
Yuba River	419	24	-80	1.4	0.8
Feather River	1,789	44	-446	1.2	0.7
American River	1,172	18	-142	1.2	0.7

Net cost = \$324-1,697 thinning + fire  
 Duration of water impact = 10 years  
 Water benefits = hydropower, agriculture and municipal & industrial

## Next Steps:

1. NFWF Grant Proposal: Truckee River, RIOS model, water quality and quantity - Explore potential connections with BoR Truckee River Basin Study
2. Sagehen Thinning and Water Yield Study: Dr. Hogue
3. Sierra Nevada Blueprint: Ed Smith, The Nature Conservancy

U.S. Forest Service 2002-2012 forest treatment FACTs database = 46,836 acres/year

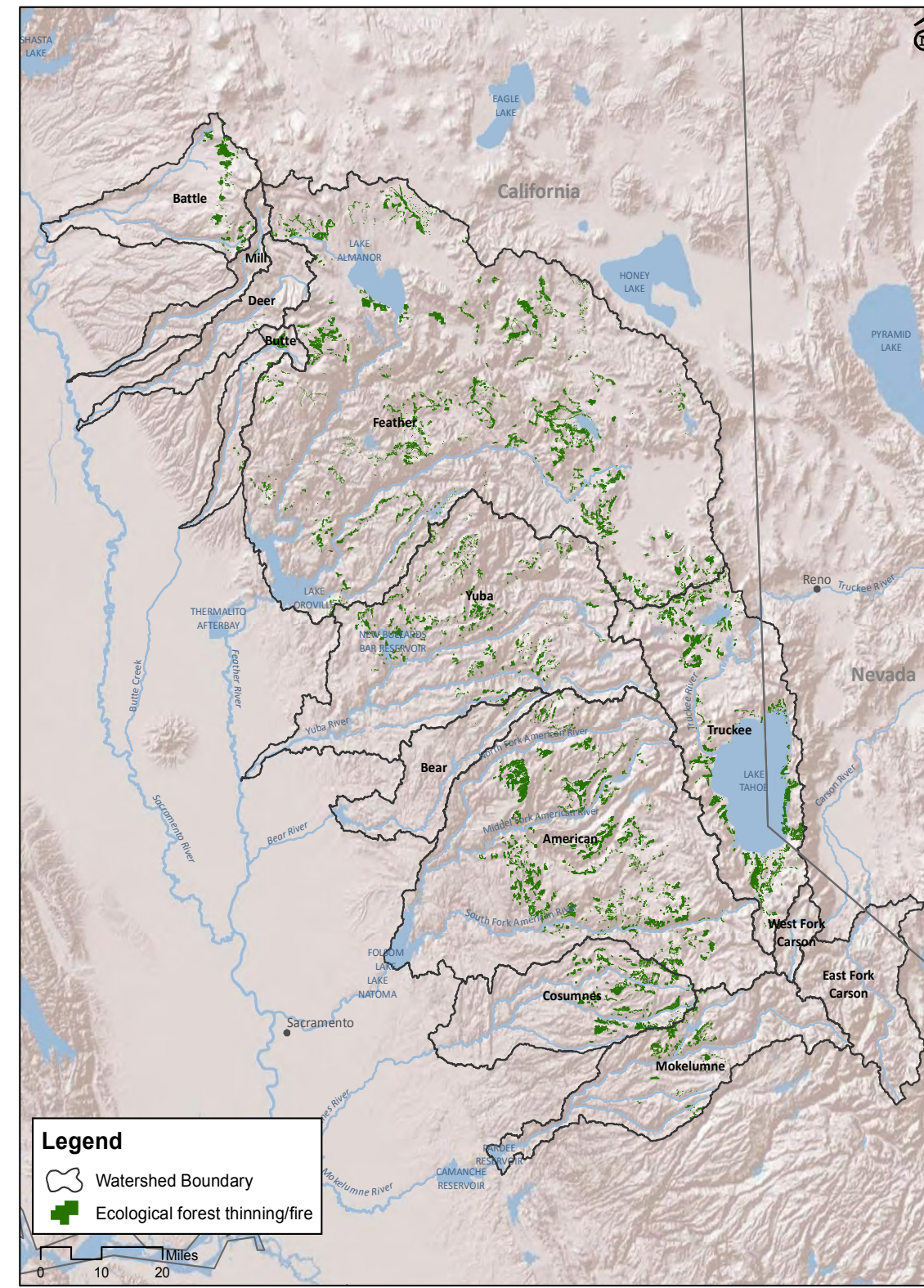


Figure x. Forest thinning/fire activities within the past 10 yrs.

Projected need to reduce wildfire risk and increase water yield = 182,529 acres/year

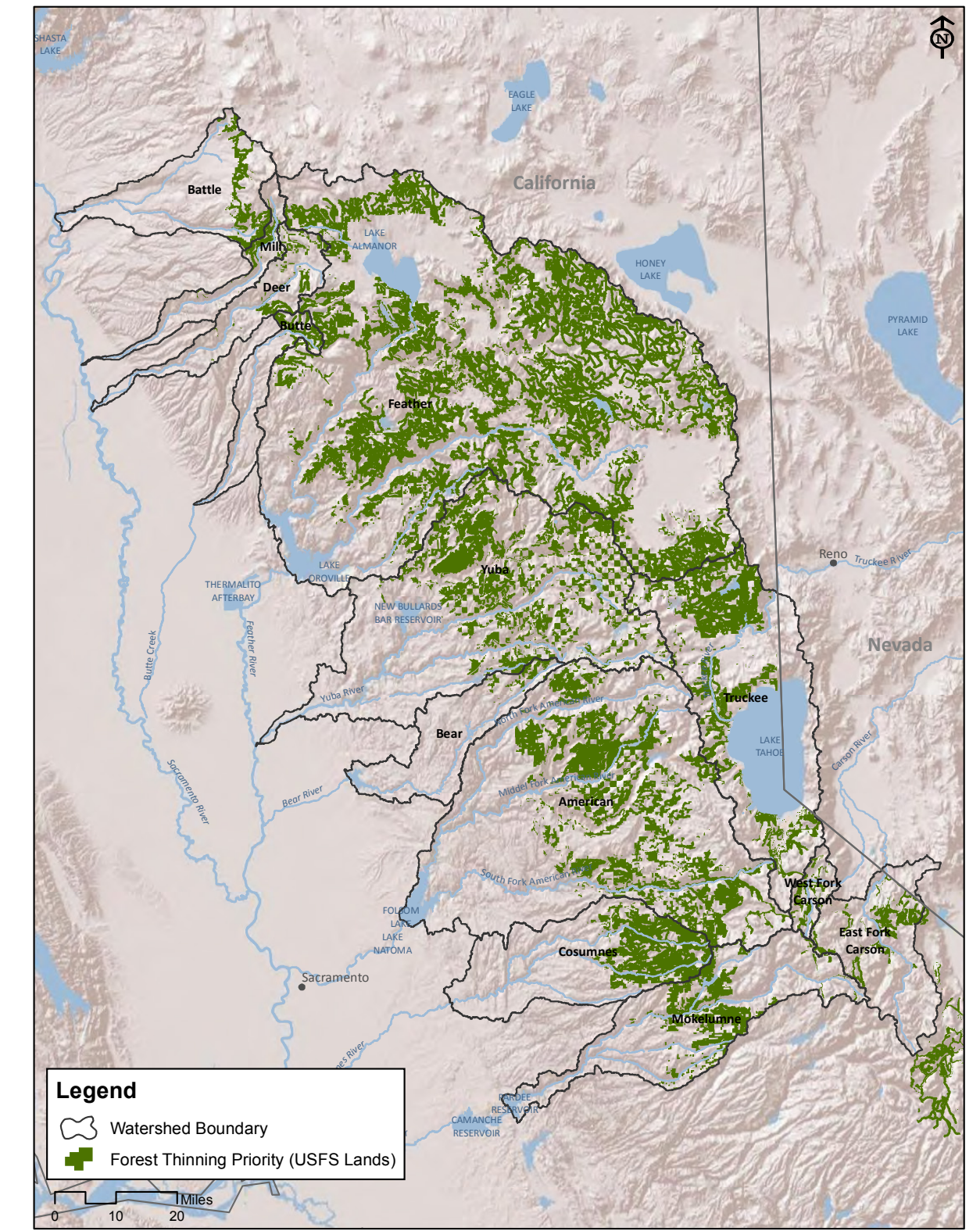


Figure 3. Forest thinning priority areas by watershed.

Operable, >1,000 ft. elevation

## The RIOS Approach: East Cauca Valley, Colombia

