

Amador Calaveras Consensus Group (ACCG) Goals, Plans and Achievements with Emphasis on Water

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Glencoe, Calaveras County

Amador Calaveras Consensus Group

History

In December 2008, a small group of citizens from greater West Point, NE Calaveras County, met with regional, state and federal organizations to deal with the chronic unemployment and poverty that followed the collapse of the timber industry in 1969.

In 2010, the group annexed Amador County, grew to 40+ members, and formed the ACCG to put our neighbors back to work in the forest restoration industry.

ACCG Home

West Point Veterans Hall

Low overhead & free parking



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ACCG Mission

The Amador Calaveras Consensus Group is a community-based organization that promotes:

- Fire Safe Communities
- Healthy Forest Watersheds
- Sustainable Local Economies

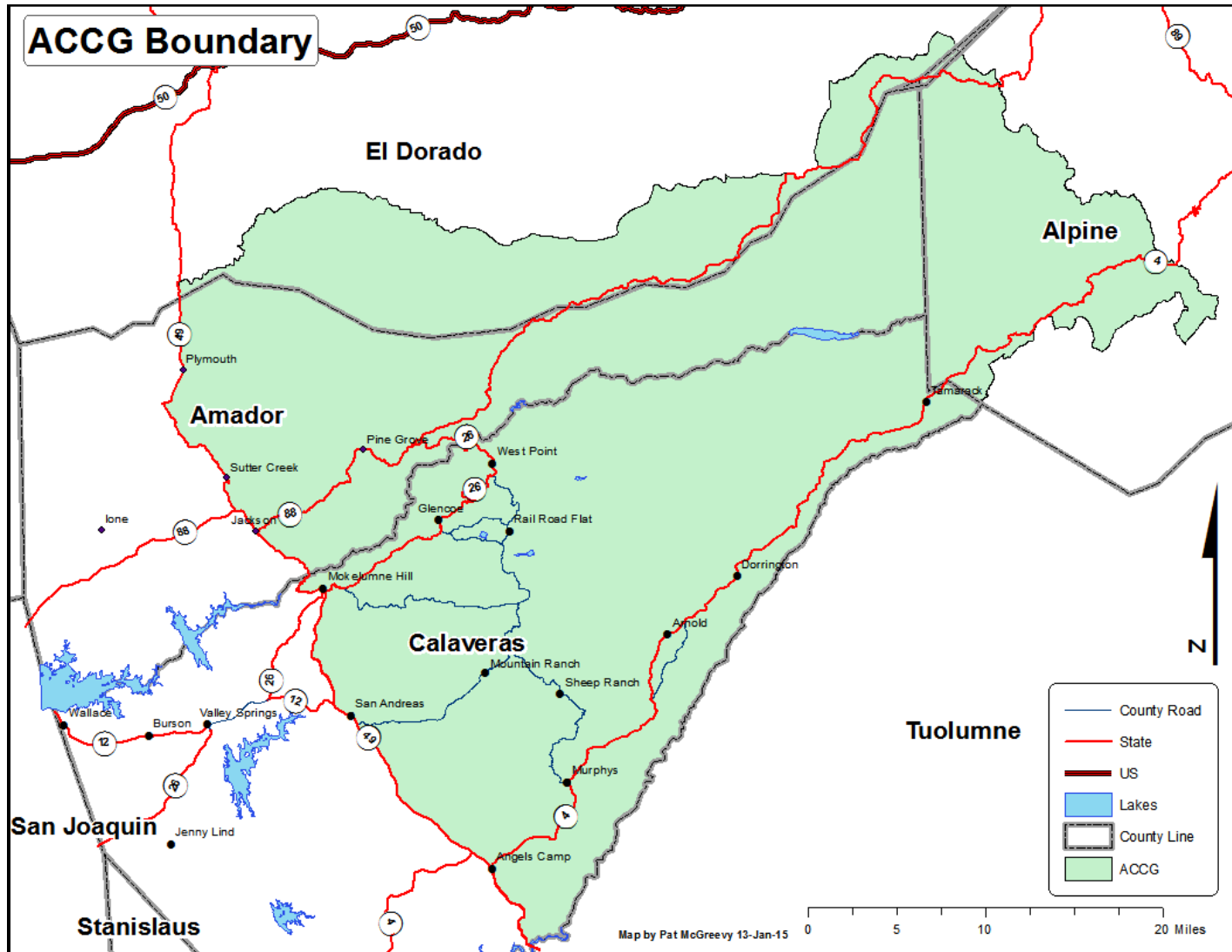
Projects are designed to provide three local benefits:

- Ecologic Benefits- Fire & disease resilient forests
- Economic benefits- Jobs, CoGen plant, forest products...
- Social benefits- Recreation, education, docent led tours...

ACCG Boundary

All-lands lands east of Hwy 49

Calaveras, Amador and parts of Alpine and El Dorado Counties



ACCG Membership

Amador-Calaveras Cooperative Association for Biomass Utilization

(Emerson Logging, Martin Fisher Logging, CHIPS, Sarott
Construction, Noble & Sons)

Amador County Veterans Organization

Amador Firesafe Council

Blue Mountain Community Renewal Council

Blue Mountain GIS, Kim Grissom

Blue Mountain Emergency Preparedness Committee

Buena Vista Biomass Power

Calaveras Foothills Firesafe Council

CalFauna Foundation

CalFire Amador- El Dorado

CalFire- Tuolumne Calaveras Unit

CA Department of Fish and Game

CA Indian Manpower Consortium

Central Sierra Environmental Resource Center

Central Sierra Resource Conservation and Development Council

Charles Jonard (Community Member)

Chris Wright, Supervisor, Calaveras County District 2

Dick McCleary (Community Member)

Ebbetts Pass Forest Watch

Foothill Conservancy

Heissenbuttel Natural Resource Consulting

Hofmann Consulting

Mary Boblet (Community Member)

Motherlode Job Training

Pacific Gas and Electric Company

Pat McGreevy (Community Member)

Richard L. Torgerson (Community Member)

Sierra Forest Legacy

Sierra Nevada Conservancy

Smith's Grinding

Steve Wilensky (Community Member)

Susan McMorris (Community Member)

The Nature Conservancy

Trout Unlimited Sac/Sierra Chapter

USDA Natural Resource Conservation Service

USDA Forest Service – El Dorado NF

USDA Forest Service – Stanislaus NF

USDOI Bureau of Land Management- Mother Lode Field Office

Vicini Brothers Green Material Recycling

West Point Fire District

ACCG Participants in Operations Working Group

CONTRACTORS

- Bob Noble & Sons
- Blackjack Enterprises
- Bordges Timber, Inc.
- Burgess Paving Company
- Buena Vista Biomass Power
- Calaveras Healthy Impact Product Solutions (CHIPS)
- Greers Tree Service
- JD Jones Trucking
- Rocky Mountain Landscape
- Sarott Construction
- Scott Zellers Trucking and Excavating
- Sierra Pacific Industries
- Sluitte Timber Company
- Smith'S Grinding
- The Welcome Home Workshop
- Vicini Brothers Green Material Recycling
- Wood-Land Expansion, Inc

• **CONTRACT ADMINISTRATION**

- USFS Amador Ranger District
- USFS Calaveras Ranger District
- USFS El Dorado National Forest
- USFS Region 5 Regional Office
- USDOJ Bureau of Land Management
 - Mother Lode Field Office

• **CONTRACT CONSULTANTS**

- California Forestry Association
- Foothill Conservancy
- Heissenbuttel Natural Resource Consulting
- Hoffman Consulting
- Small Business Administration
- Sierra Institute for Community and Environment

CHIPS

Calaveras Healthy Impact Product Solutions, 501(c)(3)

- Founded in 2004 to put people to work:
 - Forest & meadow restoration
 - Watershed stewardship
 - Cultural site restoration
 - Fuel Reduction
 - 100' home defensible space
 - Door to door chipping
 - WUI Fuel break construction
- Based in West Point and serving Calaveras and Amador Counties;
- Purchased trucks, chippers and hand tools from startup grants;
- Created 20 jobs including members of the Miwok community.
- Now a self-sustaining non-profit



CHIPS' Product Yard in Wilseyville

Biomass energy project

- Use 24,000 BDT of biomass per year from forest, Ag & private sector inside a 50 mile radius
- Generate heat for drying feedstock
- Generate 3 MW of electricity (3,000 homes)
- Produce Biochar, a byproduct of the gasification process, to be sold as a soil amendment (2,550 tons/year)
- Expected to go online in late 2016
- Create 16 jobs

Other products

- Small log mill
- Posts
- Poles

ACCG's Cornerstone Project

Amador and Calaveras Ranger Districts

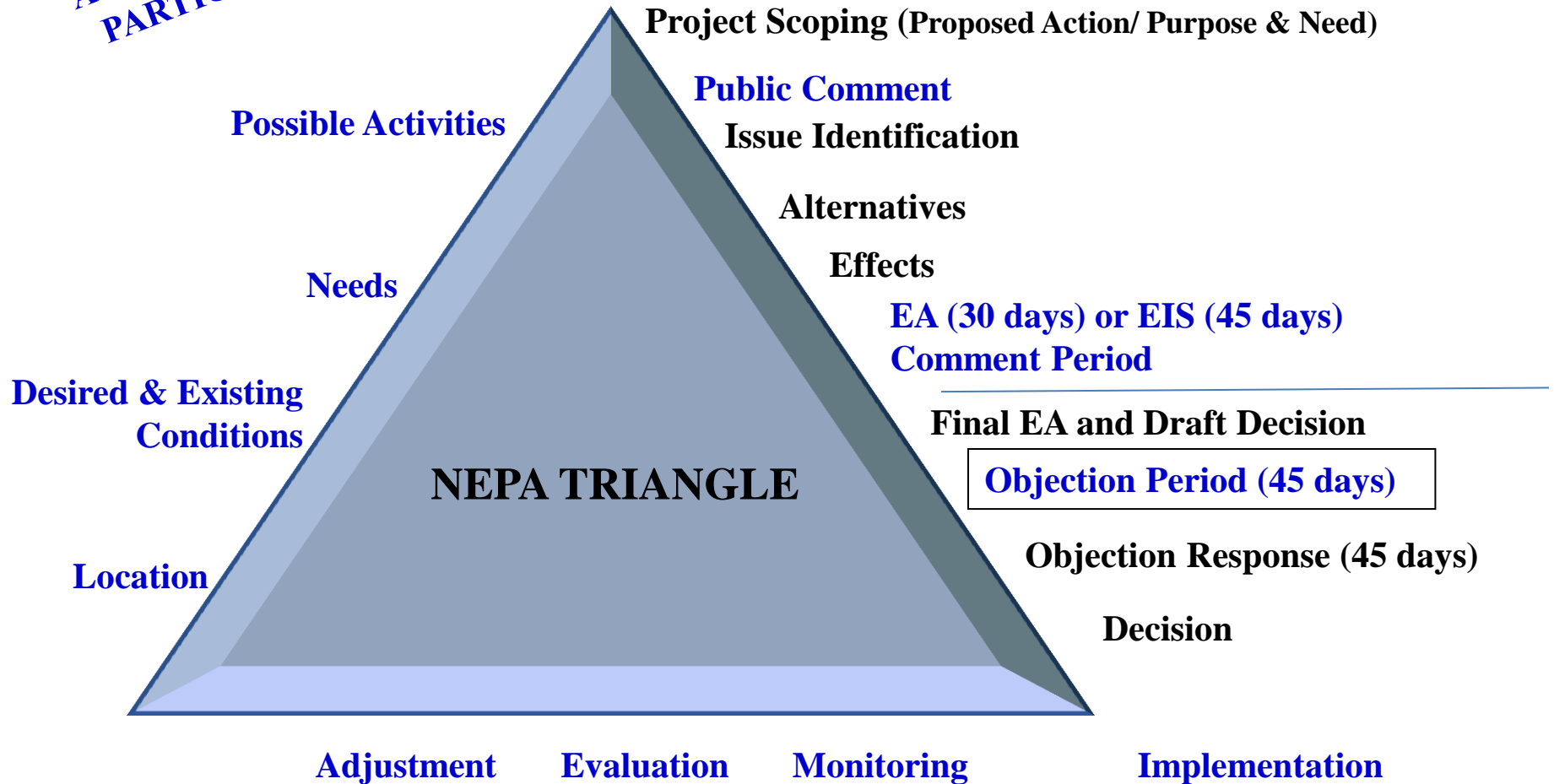
- Project focuses on the restoration of 391,000 acres in the Mokelumne River headwater area over ten years.
- In 2012, Cornerstone was funded with \$17,000,000 under the USDA 'Collaborative Forest Landscape Restoration Program' that encourages environmentalists, industry, USFS and local communities to work together to build healthier forests and contribute to local economies.
- Projects include fuels reduction, reforestation, post-fire salvage, meadow restoration, erosion control, invasive plants, recreation ...

Private and public lands east of Hwy 49
in Calaveras, Amador and parts of Alpine and El Dorado counties



**ACCG and PUBLIC
PARTICIPATION**

**ACCG Planning Work Group
Mitigate issues early
Avoid litigation later**



Eldorado National Forest

Stanislaus National Forest

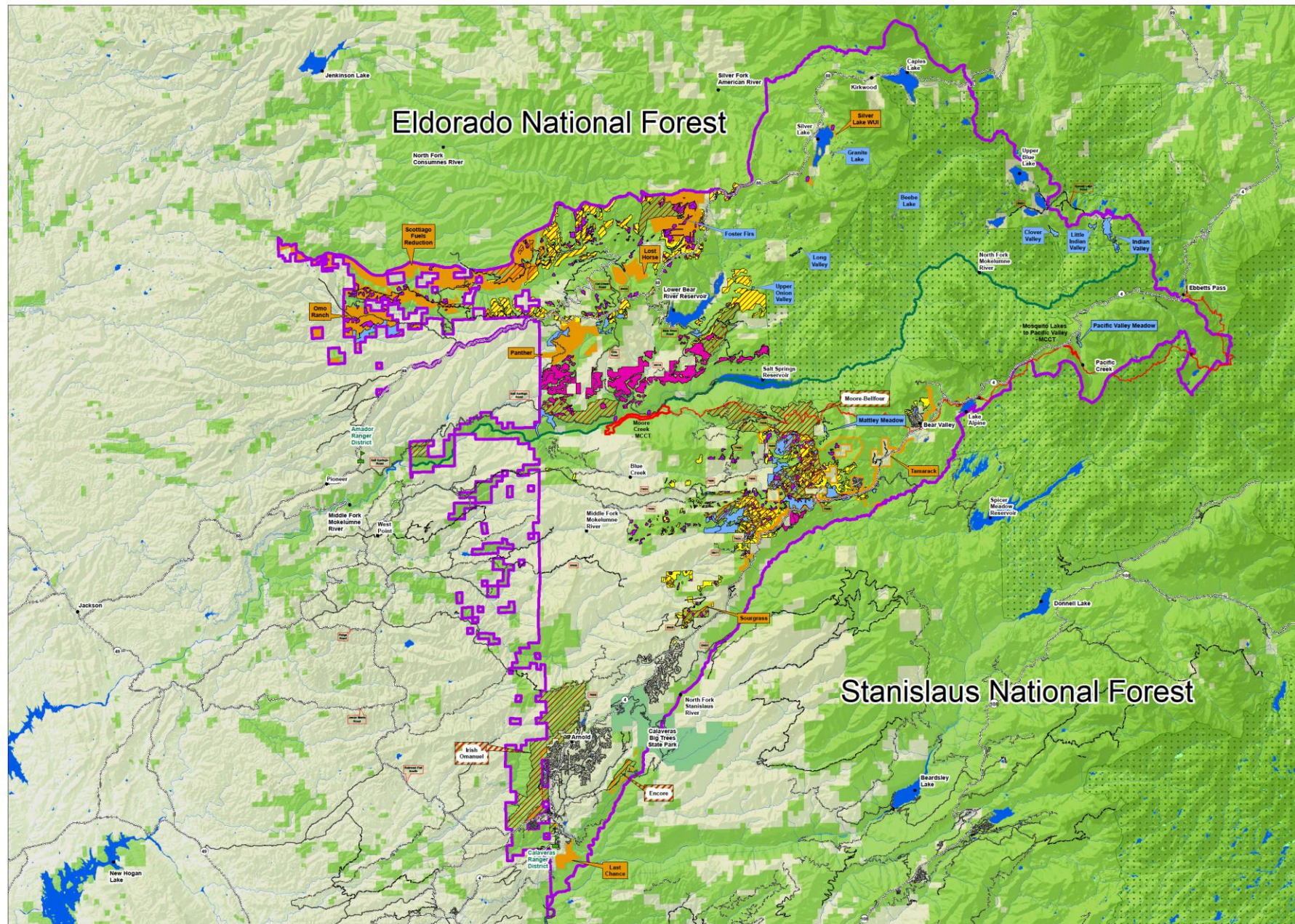
ACCG Cornerstone Project Area & Treatments

0 5 10 Miles



Scale = 1:90,000
NAD 1983 UTM Zone 10N
Autumn Olsen

- | | | |
|---------------------|------------------------|---------------------------------|
| Prescribed Fire | Habitat Restoration | State/Federal Land |
| Fuels Reduction | Precommercial Thinning | Wilderness Area |
| Power & Ramsey Fire | Commercial Thinning | Amador RD Calaveras RD Boundary |
| Private Land | MCCT_Draft | Cornerstone Boundary |



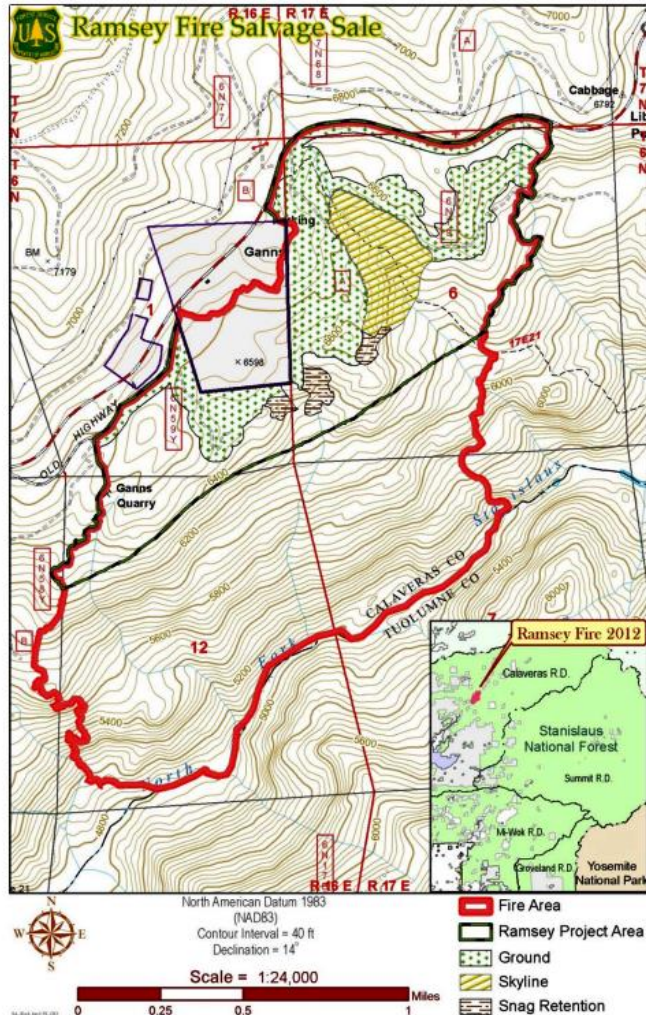
Ramsey Fire at Gann's Meadow near Hwy 4 in 2012

- 11 Aug: Wildfire started from campfire .
- 11-22 Aug: Attack phase by 430 firefighters managed by the USFS.
- 23-Aug: Fire 100% controlled after 1,137 acres burned.
- 29-Aug: Burned Area Emergency Response Team assessed damage and needed restoration.
- 7-Sep: USFS closes burn area.



Cornerstone: Ramsey Salvage & Restoration at Gann's

Ramsey Salvage Planning



ACCG Field Trip (8-May-13)



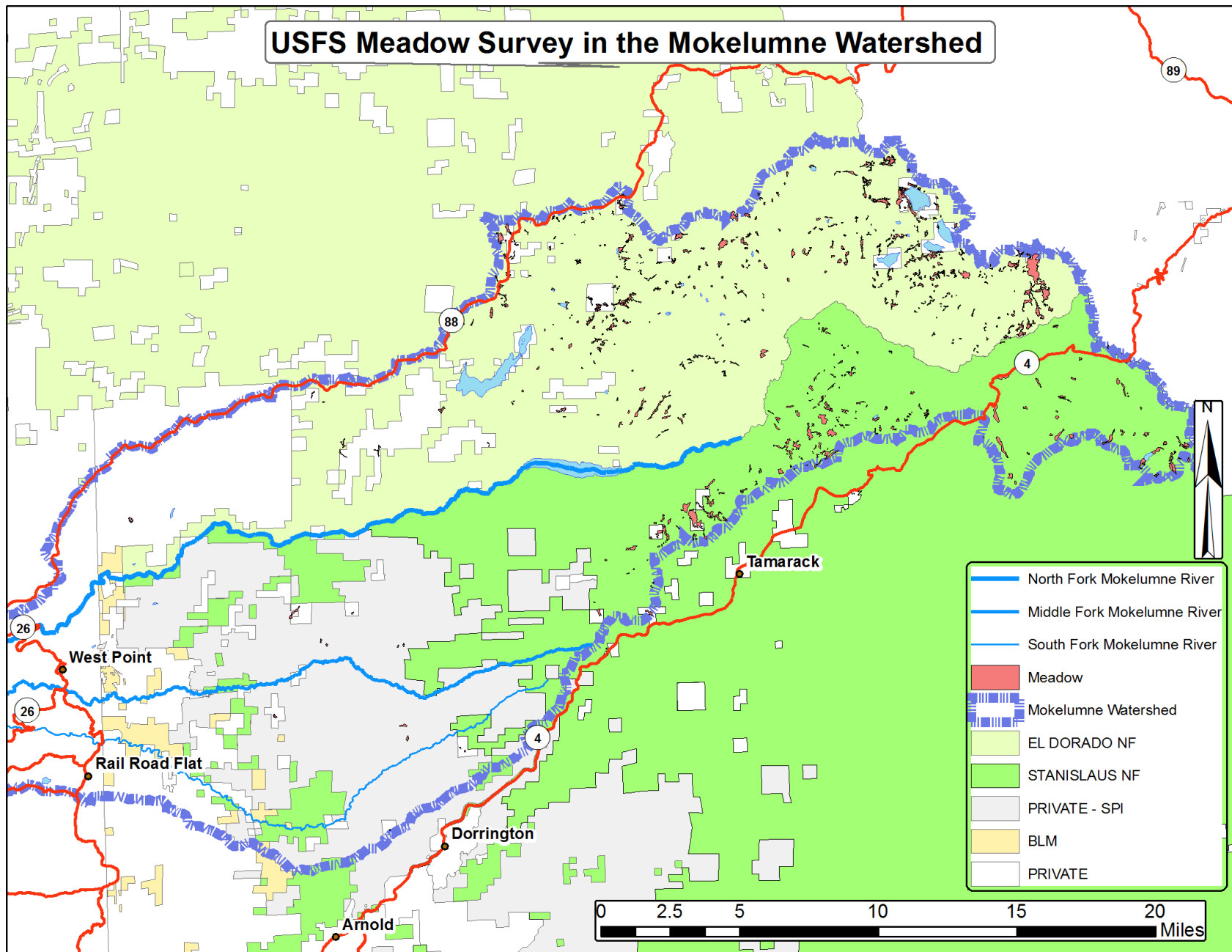
Caples Meadow in Drought Year Three
Built and Maintained by Castor canadensis
Caples Creek, Lake Margaret Trail, Hwy 88, 9-Sep-14



Number and area of meadows in the Mokelumne Watershed determined by aerial imagery. About 50 meadows have been ground truthed.

Cohort Acres	STF		ENF		Total	
	Frequenc y	Acres	Frequency	Acres	Frequency	Acres
<2	100	93.3	243	224.4	343	317.7
2- <5	48	168.6	123	385.6	171	554.2
5- <10	33	168.6	50	335.8	83	504.4
10- <15	10	122.9	15	177.1	25	300.0
15- <25	13	251.9	14	260.7	27	512.6
25- <50	10	359.6	12	414.6	22	774.2
>50	1	86.8	3	433.8	4	520.6
Total	215	1,251.7	460	2,232.0	675	3,483.7

USFS Meadow Survey in the Mokelumne Watershed



Mattley Meadow
West of Bear Valley off Hwy 4
Drains into Mattley Creek and Salt Springs Reservoir

Wet Meadow

Facing south 2-Jul-2014



Dry Meadow

Facing south 23-Sep-2014



Mattley Meadow Discharge

**Summer discharge
Facing south 2-Jul-2014**



**Fall discharge
Facing south Oct-2014**



Mattley Meadow

Road Compaction & Conifer Invasion

Road Block
Facing NE 2-Jul-14



Conifer invasion
Facing south 2-Jul-14



Mattley Mdw Gullies

Scale 1:4,000



To Mattley Cr

East Gully

To Mattley Cr

Middle Gully

West Gully

Road Dip

- △ Moraine Exit
- Breached Rock Dam
- Sheet Metal Dam

Map by McGreevy 1-Oct-14

Source: Esri

0 500 1,000 Feet

Mattley Meadow Deep Gullies

Facing north 2-Jul-2014



ACCG Meadow Survey

- Create a set of meadow attributes to evaluate ecologic function using aerial imagery and select a short list of meadows for restoration.
- Make site visits to prioritize listed meadows according to their physical and ecologic characteristics.
- Contract professional hydrologist and engineer to design restoration projects with cost estimates for selected meadows.

Watershed Management and the West Point Water System

Water yield, filtration, storage capacity and sustainable flow

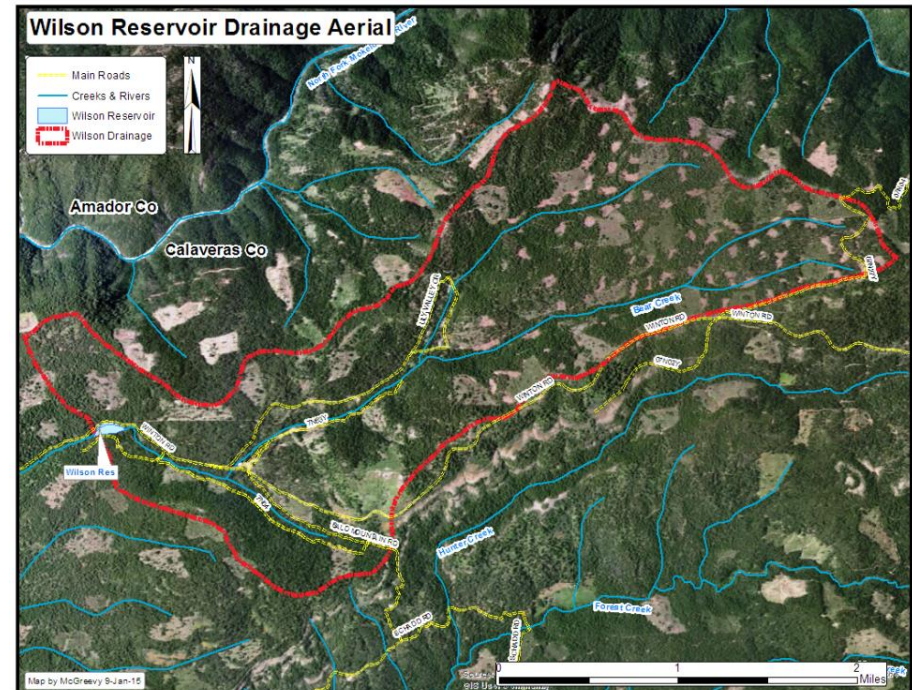
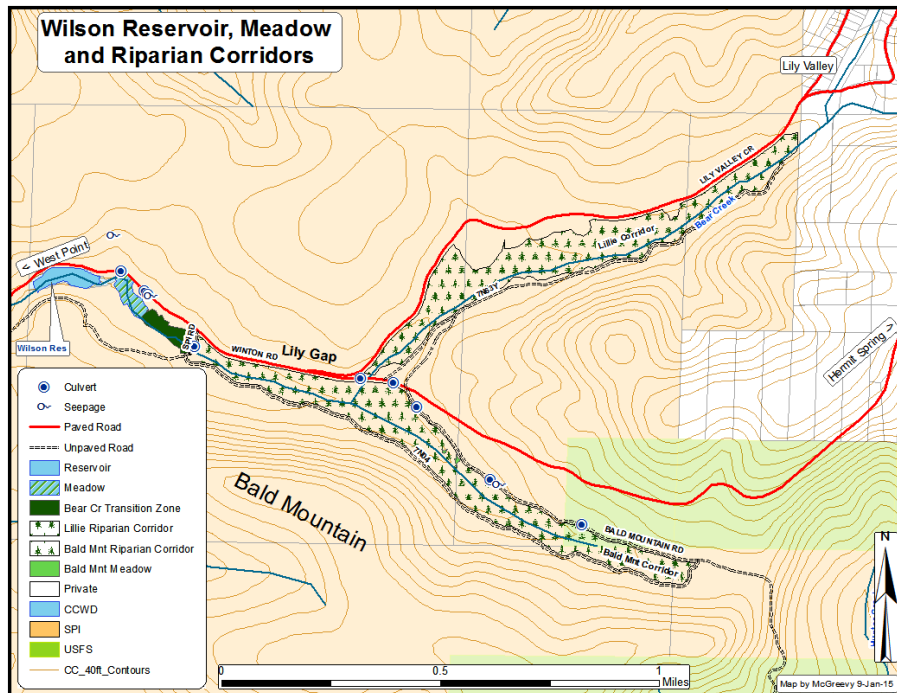
Joint ownership- CCWD, SPI and USFS

Bear Cr-> MF Mokelumne R-> NF Mokelumne R

Winton Rd 5 miles east of West Point Mon-YYYY

Watershed is ~5 mi²

~79 plantations and ~30 miles of dirt roads



Watershed: Degradation @ Lily Gap

Riparian corridors have abundant surface & ladder fuel
Dense conifers and each >30" dbh pump 75+ gal/day
Unstable banks cause erosion
Bald Mountain Corridor 29-Oct-14



Wet meadow area diminishing from conifer invasion
Retention and filtration down
Creek flow stops in fall of drought years 20-Sep-14



Water Yield & Stand Structure In the Mokelumne Watershed

Roger Bales, UC Merced & Kevin O'Hara, UC Berkeley

- **Hypothesis-** Low stand density will increase snow retention, increase water yield and late season flow.
- **Experiment-** Compare snow depth, water retention and runoff from three catchments in the Blue Creek Drainage, Mokelumne Watershed:
 1. Vegetation thinned to a forest restoration density;
 2. Vegetation thinned to 50% restoration density;
 3. Vegetation not thinned.

Take Home Message

Cornerstone Projects in Mokelumne Watershed

- Forest restoration on 13% of 391,000 acres in planning or implementation phases.
- Relationship of forest architecture to water yield in planning phase in the Mattley and Hemlock Projects.
- Water Retention with slow flows thru the dry season demonstrated at Indian Valley; Validation studies are in planning phase at six additional meadows.
- Aerial imagery has identified 161 meadows over two acres with a total area 213,878 acres in the Upper Mokelumne Watershed.
- Skilled teams are needed to survey meadows, develop restoration designs, contract landscapers and maintain functionality in the future.

For docent led tours of ACCG projects contact

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