



Photo: Thomas Dunklin

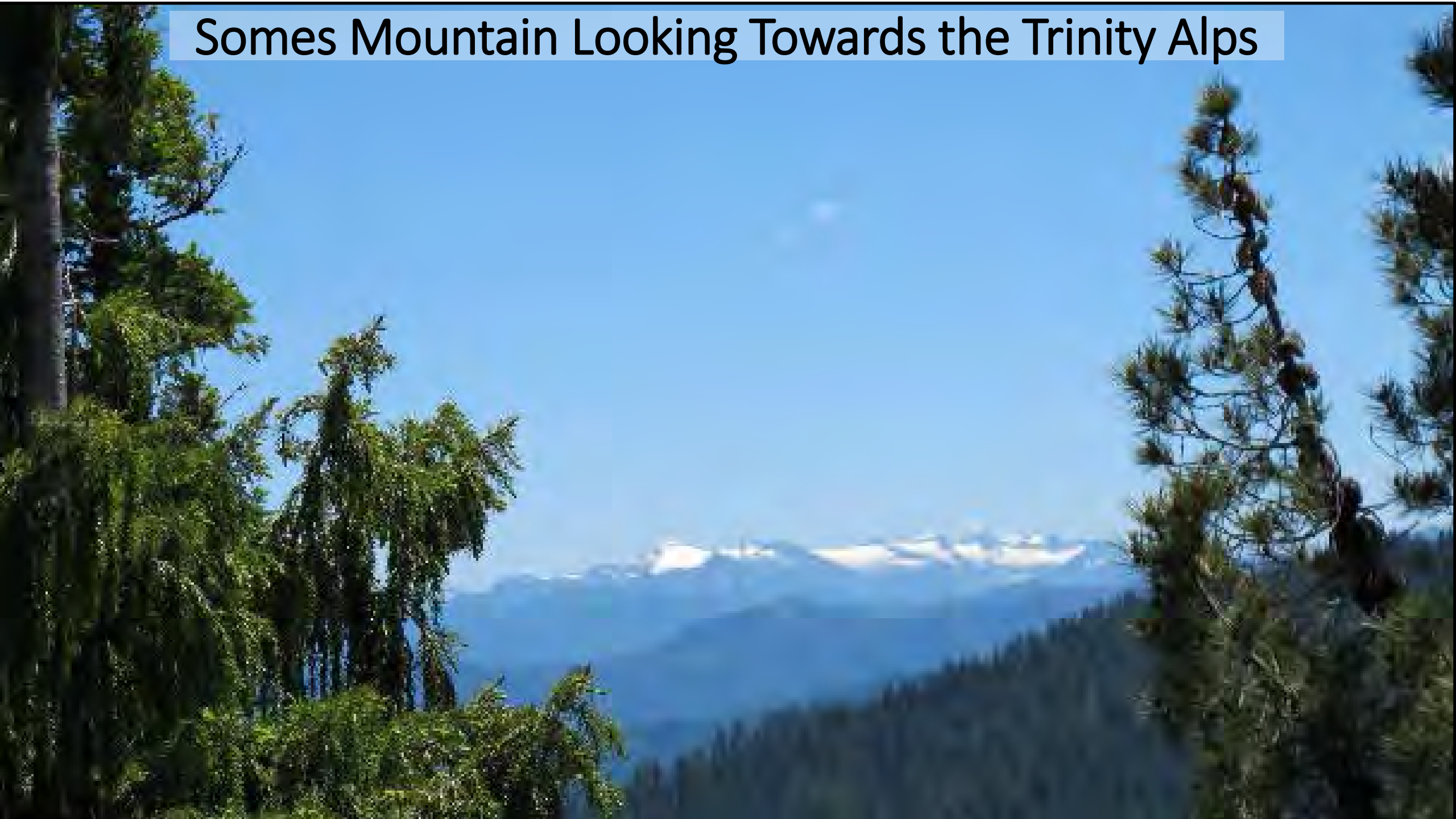
Bringing Good Fire Back to the Klamath Mountains: the Western Klamath Restoration Partnership (WGRP) and the Klamath River Prescribed Fire Training Exchange (TREP)



Will Harling - Director
Mid Klamath Watershed Council & Orleans/Somes Bar Fire Safe Council



Somes Mountain Looking Towards the Trinity Alps



2016 Klamath River Prescribed Fire Training Exchange (TREX)



Photo: Jenny Staats

Offield Mountain



2015 Steinacher Fire in Wooley Creek

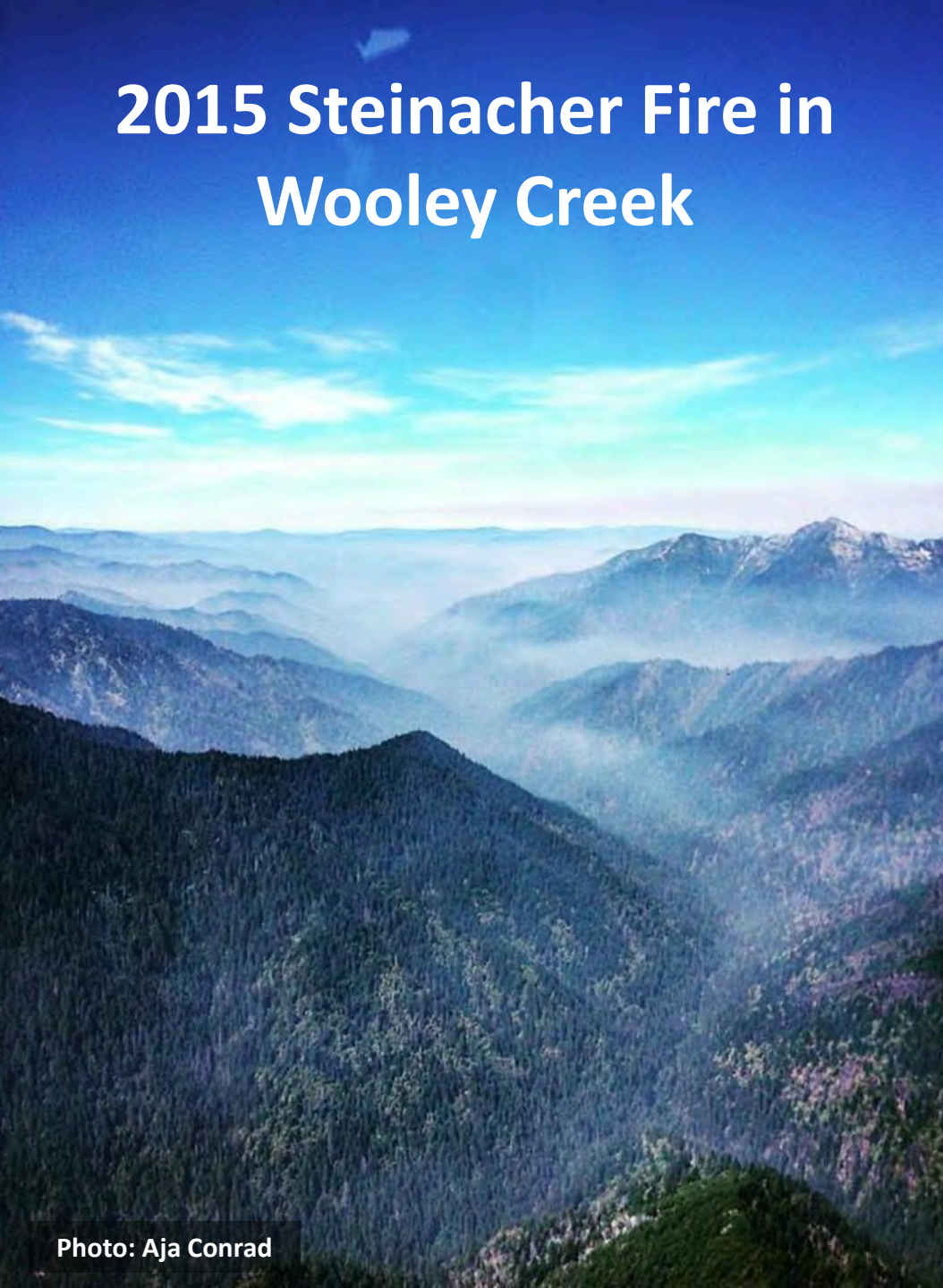
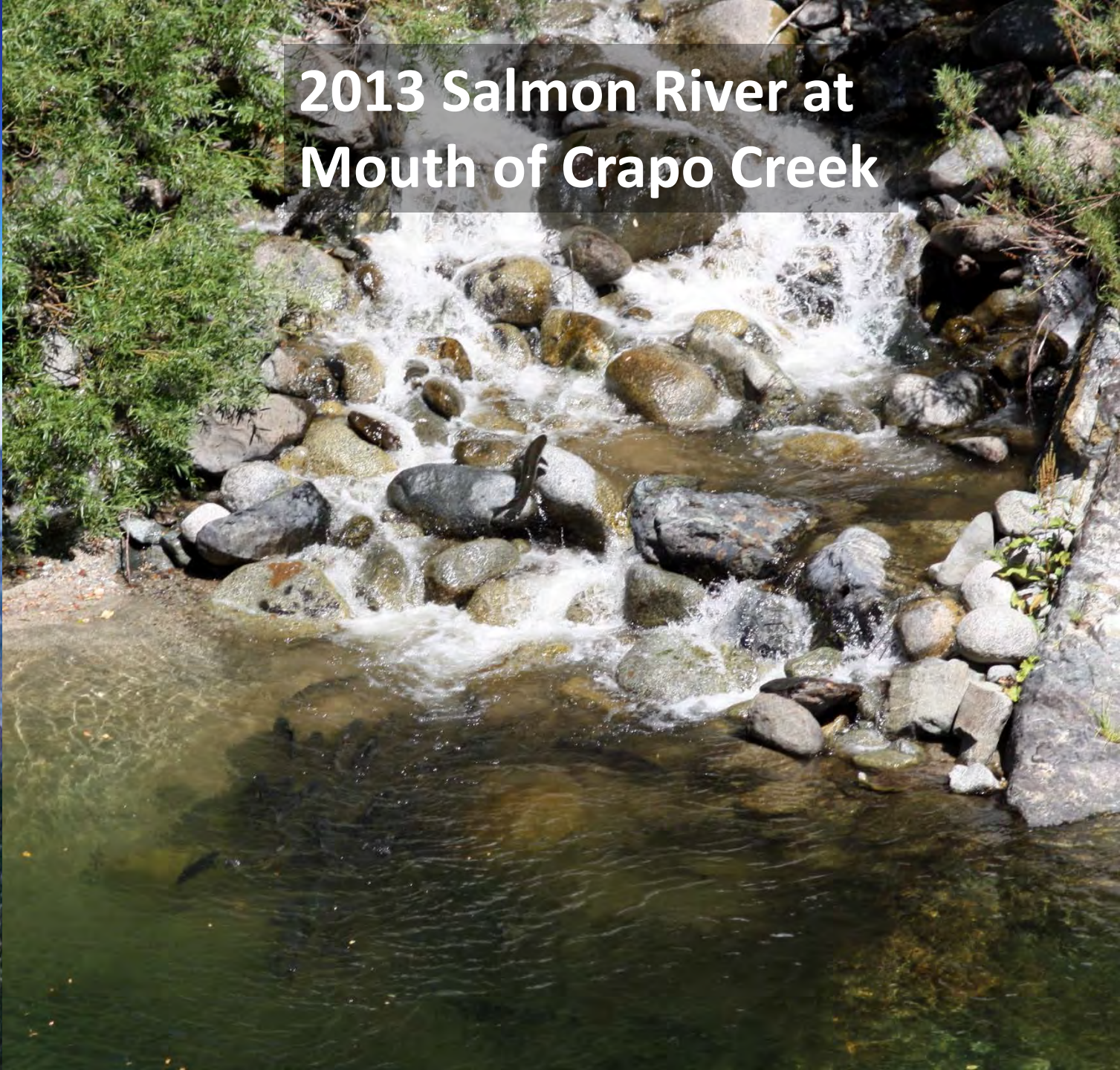


Photo: Aja Conrad

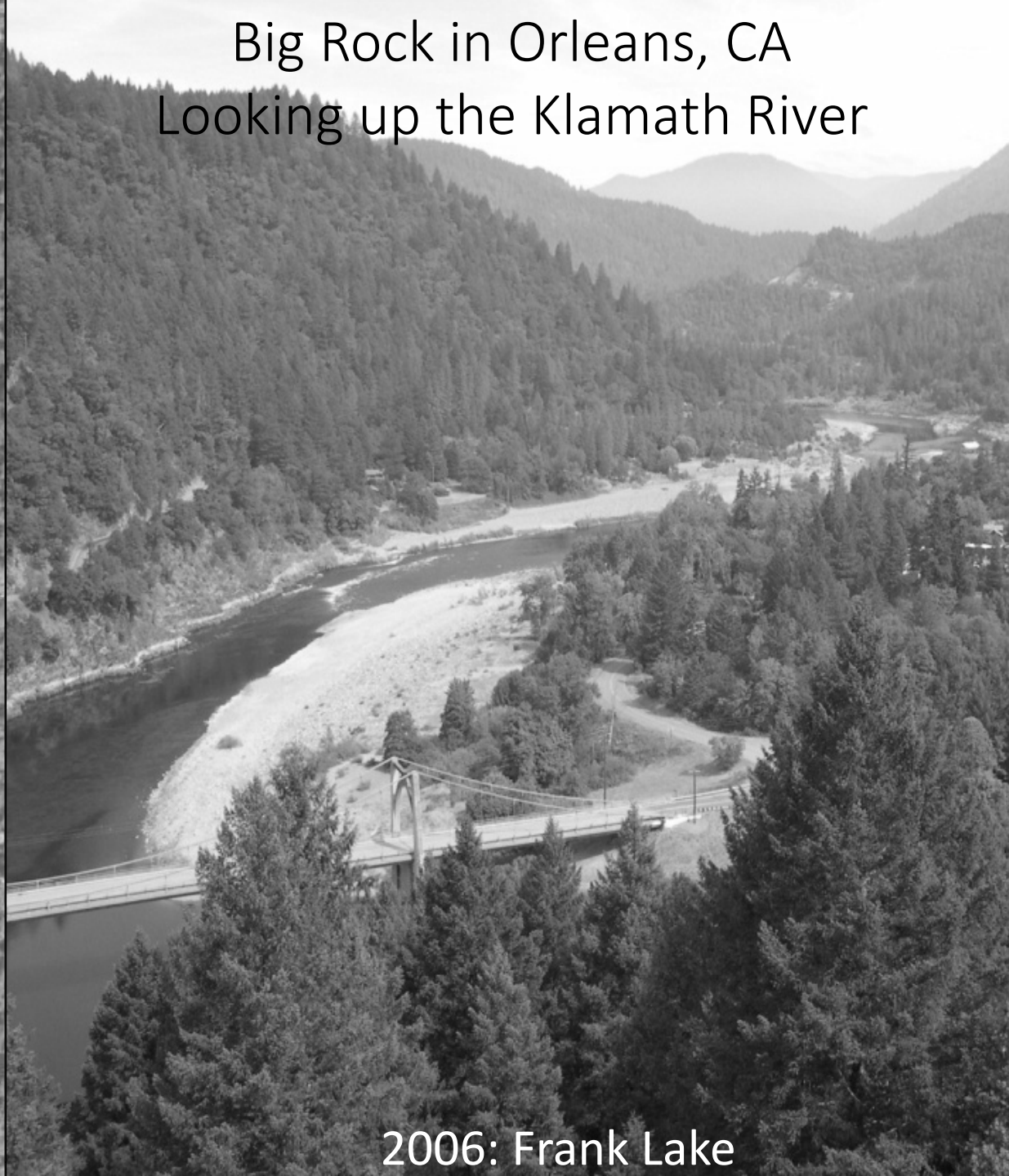
2013 Salmon River at Mouth of Crapo Creek



Red Cap Glade - 2005

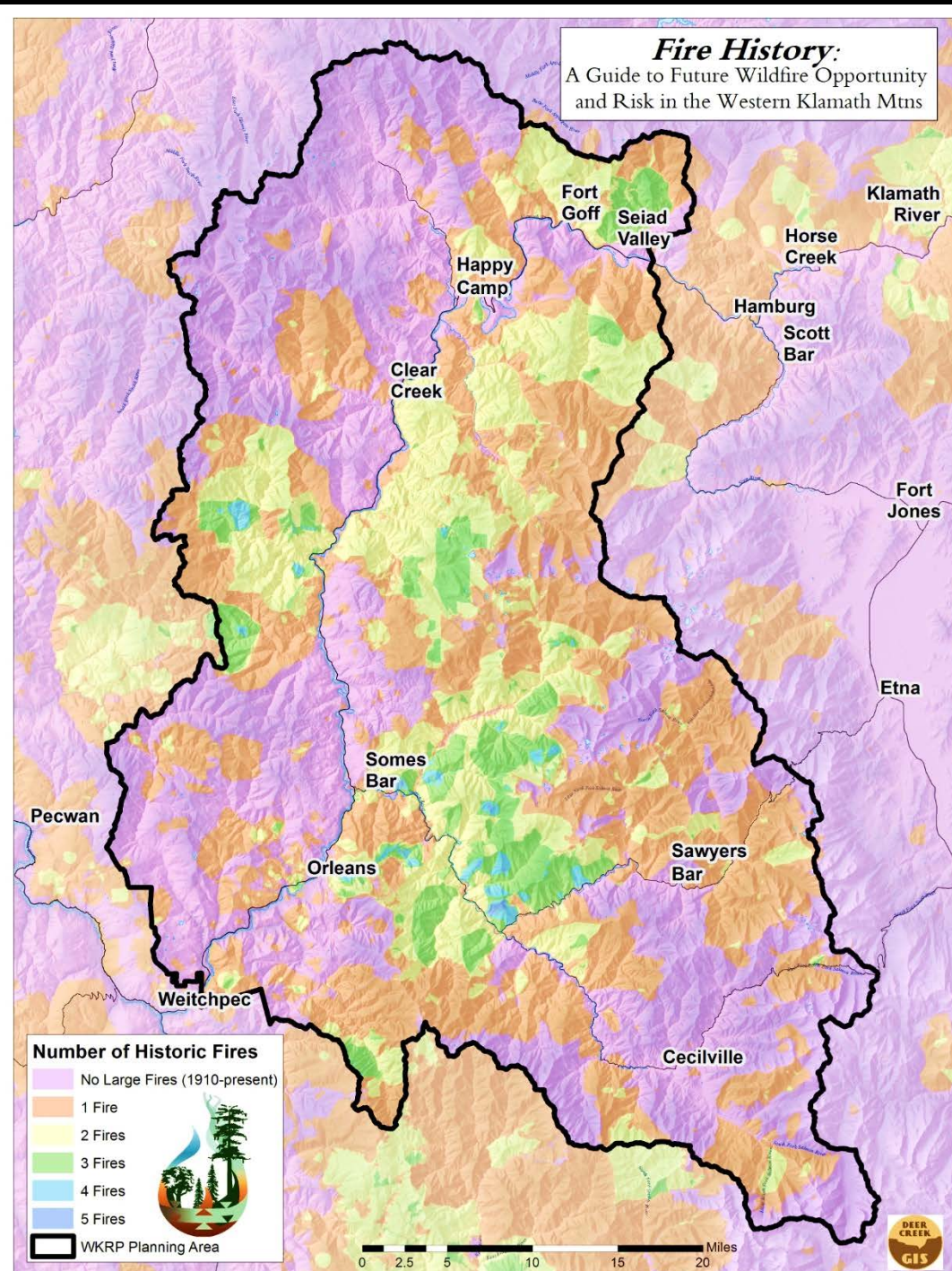


Big Rock in Orleans, CA
Looking up the Klamath River



2006: Frank Lake

Fire History:
A Guide to Future Wildfire Opportunity
and Risk in the Western Klamath Mtns



Grim Realities and Potential Opportunities From Fire History Analysis

- **NO** areas are within their historic fire return intervals, or even remotely close.
- **With no fire exclusion and continued native and early settler burning patterns, we would see smaller self-limiting fire footprints, and some places with 30-100 fire overlaps.**
- **Restore fire process in recent fire footprints (< ~ 11 years old)**

2017: Overlapping Fires Since 1914 in the Klamath Mountains

Number of Fires	Sum of Acres	Percent of Planning Area
0	499432	41.7%
1	406735	34.0%
2	211770	17.7%
3	71322	6.0%
4	7821	0.7%
5	638	0.1%
Total Acres	1, 196,750	100%

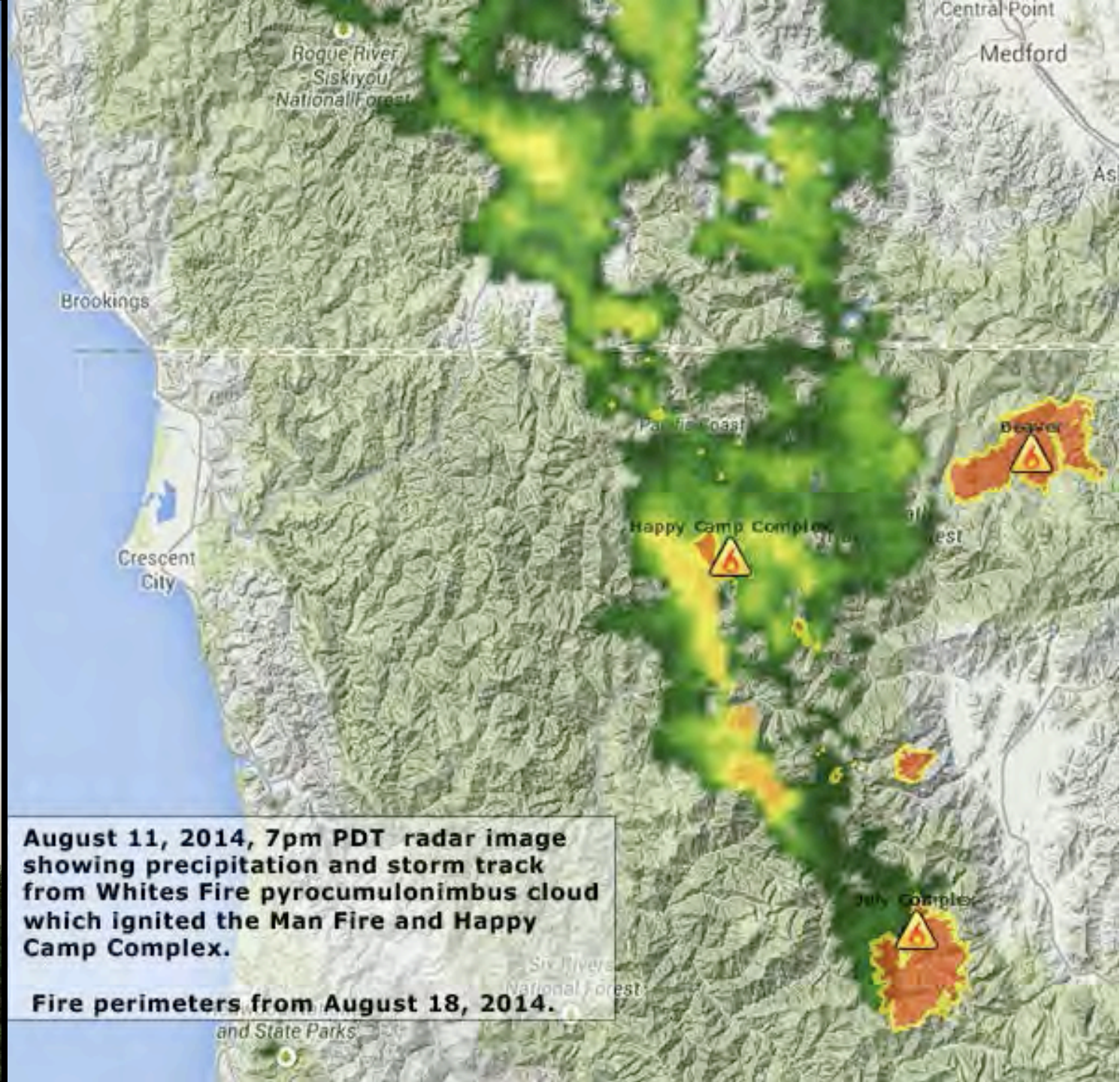


2014 Whites Fire

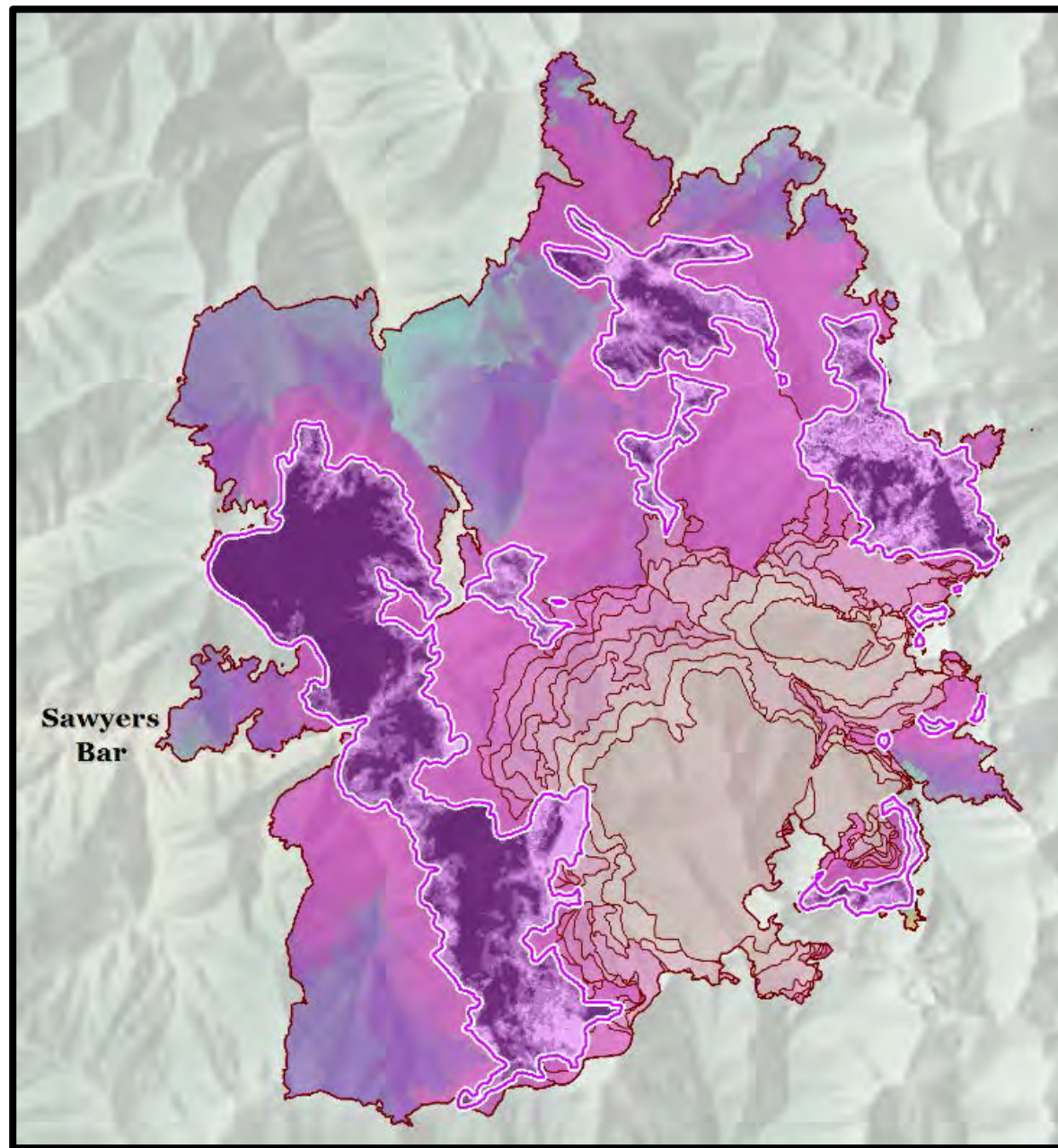
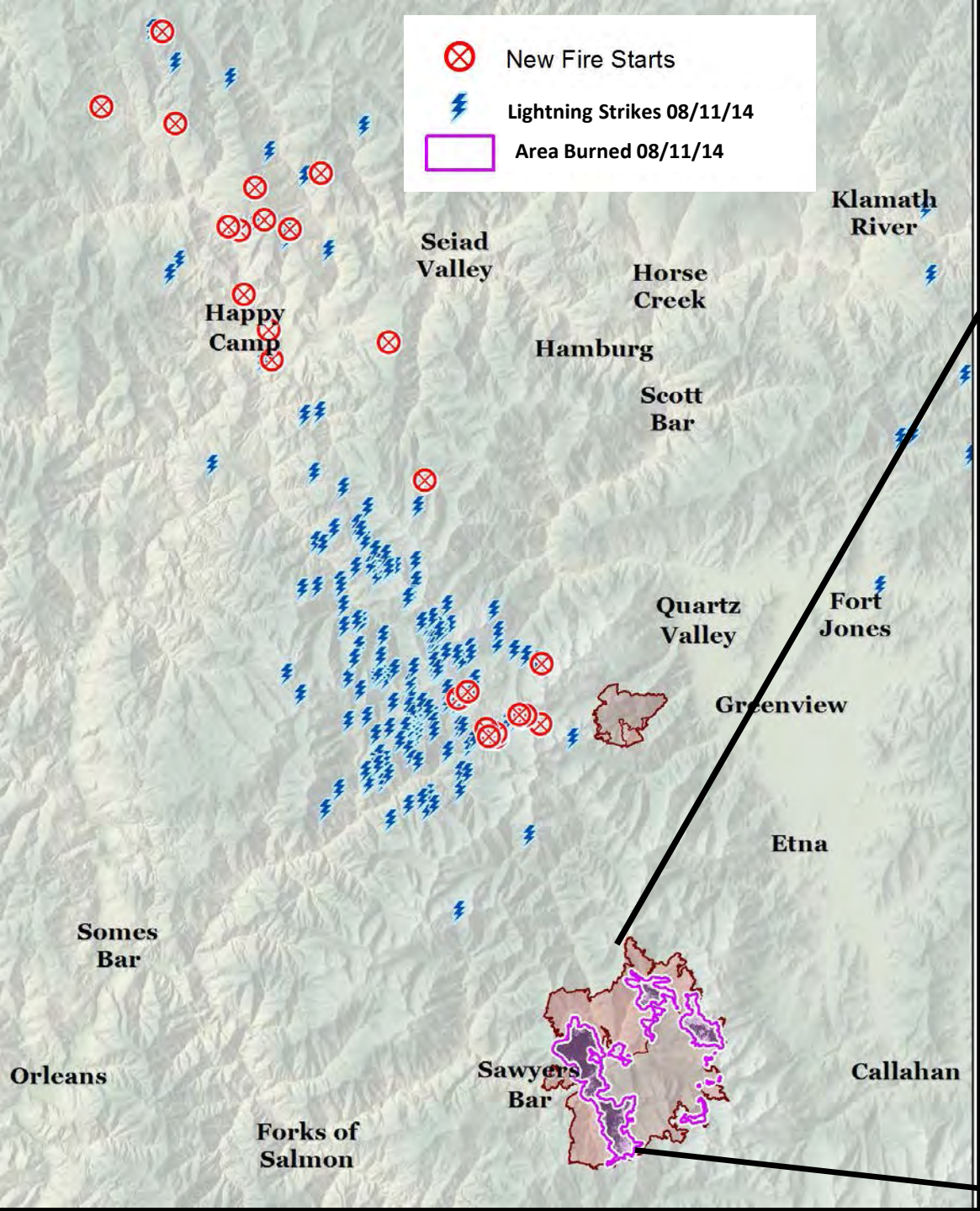
2014 Whites Fire



2014 Whites Fire (Re-defining Spot Fires)



Lightning Fires from Whites Fire Pyrocumulus Started 2014 Happy Camp Complex and 2014 Man Fire



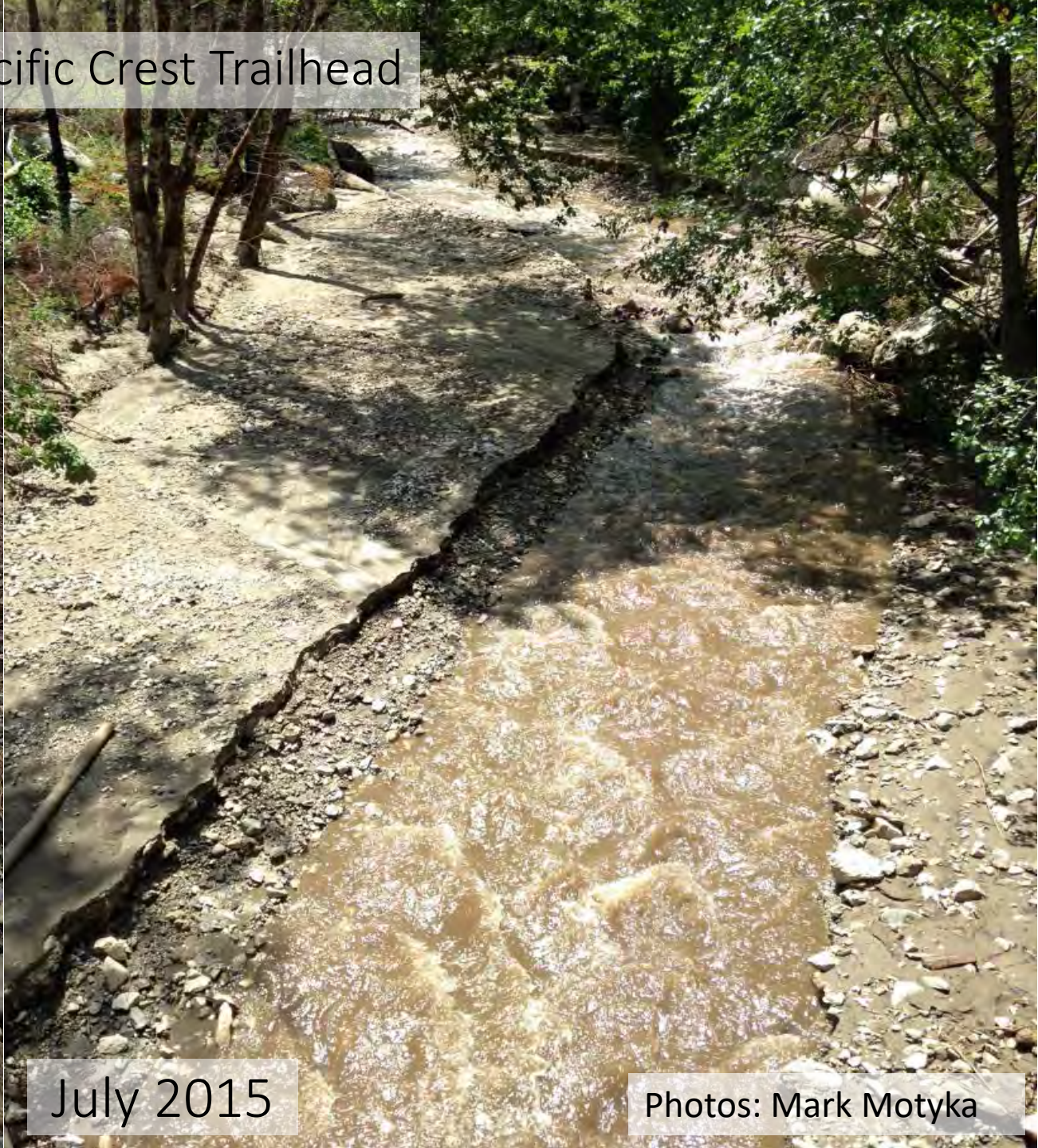
2014 Happy Camp Complex



Grider Creek at Pacific Crest Trailhead



Feb 2015



July 2015

Photos: Mark Motyka



2014 Beaver Fire

Photo: Scott Harding / Lighthawk

Horse Creek – Spawning Coho – Dec 2015

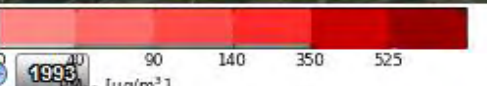
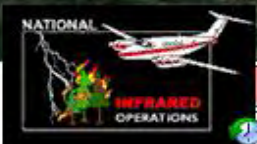


2016 Gap Fire – Horse Creek



■ Heat Perimeter
■ 10/8/2015 5:00 pm
■ Scattered Heat
● Isolated Heat

The output contained within this KMZ represents experimental model output that may or may not be accurate. Use at own risk.



© 2016 Google

Google earth

Imagery Date: 5/27/2016 41°49'52.60" N 123°04'02.03" W elev 3192 ft eye alt 45419 ft





Current Fire Suppression Policy:
Maximizing the Negative Impacts of Fire in the Klamath Mountains

- 98+ percent of all fire starts are suppressed.
- The few fires that escape suppression typically do so because they start at the hottest, driest times of year.
- > proportion of high intensity fire, > risk to firefighters and communities.

- Continued fire policy based primarily on fire suppression in the Western Klamath Mtns has become the primary threat to communities, cultural resources, forest products and wilderness areas.
- Wildfires are doing the “heavy lifting” when it comes to landscape level fuels reduction. But what are we left with?
- Nearly 500,000 acres burned, \$550 million dollars spent on fire suppression in the Klamath Mtns in past decade.



Orleans/Somes Bar Fire Safe Council

Formed April 2001



The purpose of the Orleans / Somes Bar FSC is to help plan, implement, and monitor the reinstatement of historic fire regimes primarily through the use of strategic fuels reduction in a manner that protects life and property, improves forest health, and enhances the resources valued by its stakeholders.



Fuels Reduction Program (2001-2016)



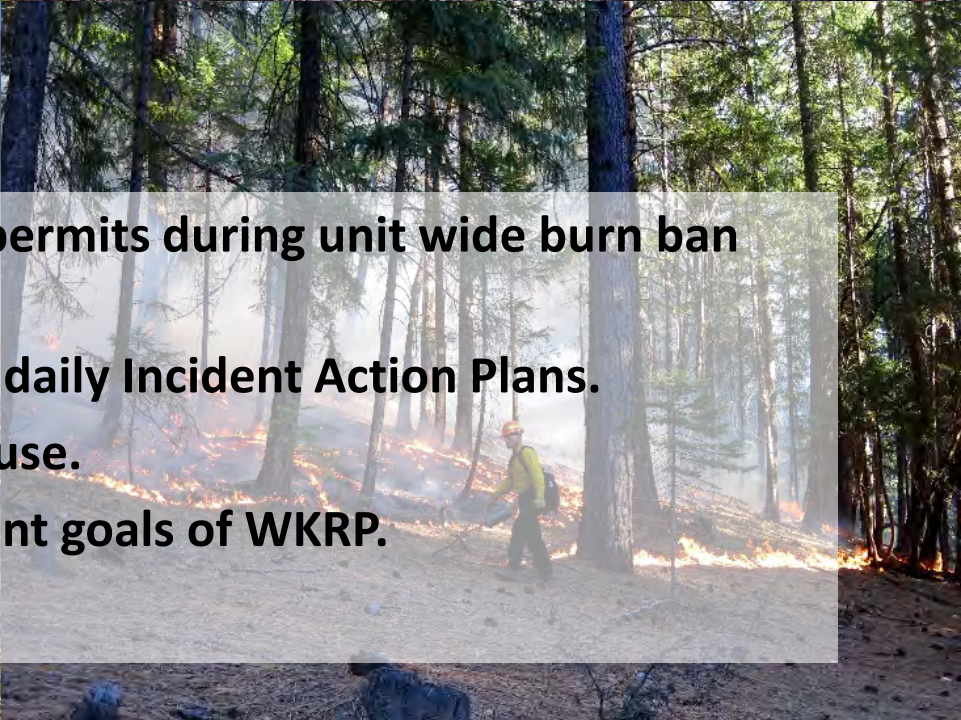
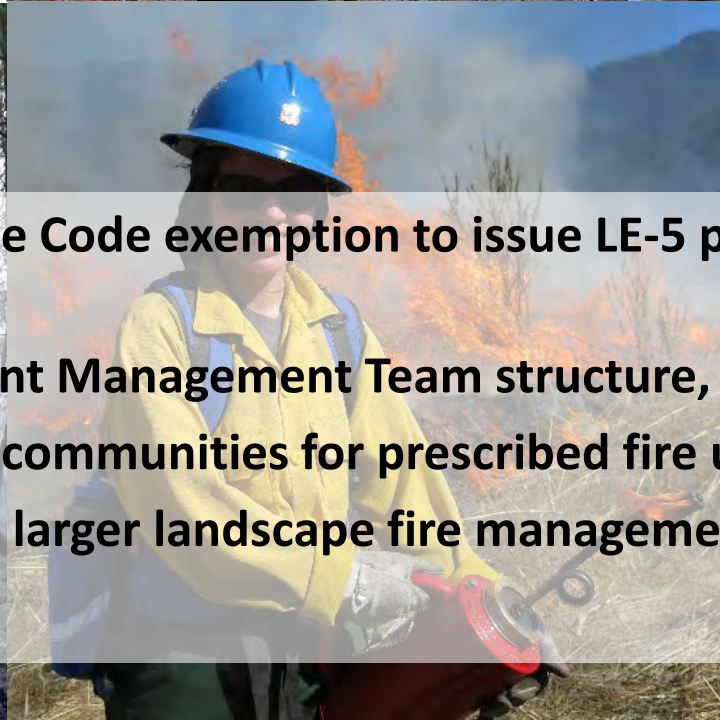
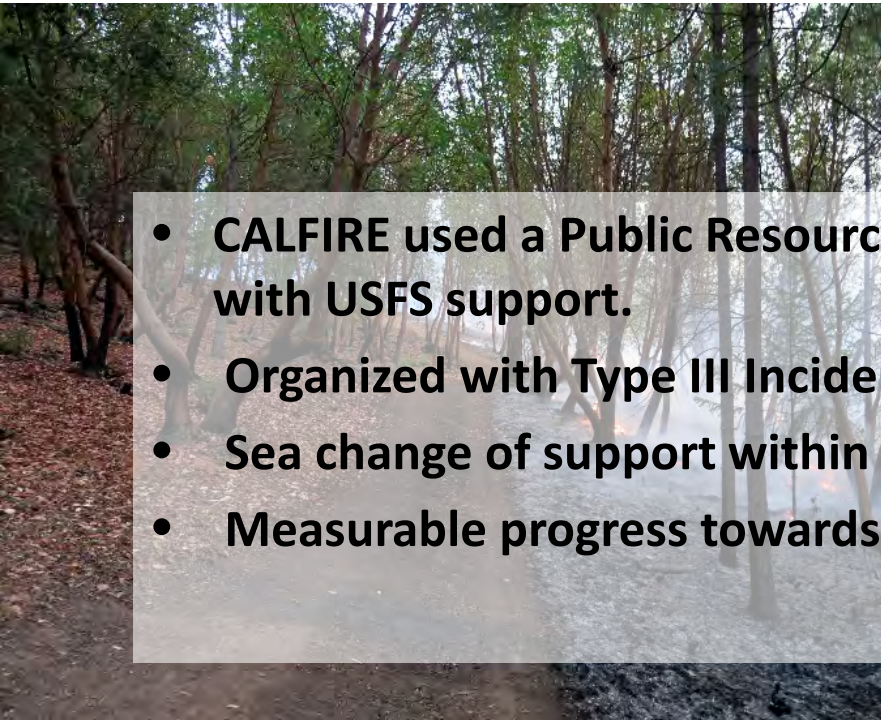
Prescribed Burn Program (2004-2017)

A firefighter wearing a red helmet and dark gear is walking through a forest during a prescribed burn. The ground is covered in a thick layer of dry leaves, and a line of fire is burning through them. The trees are tall and thin, and the background is a bright orange glow from the fire.

Overcame obstacles including:

- Liability/Insurance
- Air Quality
- Burn Permitting
- Trained Workforce
- Community Acceptance

Fall 2014 Klamath River Prescribed Fire Training Exchange (TREX)



- CALFIRE used a Public Resource Code exemption to issue LE-5 permits during unit wide burn ban with USFS support.
- Organized with Type III Incident Management Team structure, daily Incident Action Plans.
- Sea change of support within communities for prescribed fire use.
- Measurable progress towards larger landscape fire management goals of WKRP.

International



Tribal



NPS



Private



Tribal



Local



VFD/
NGO

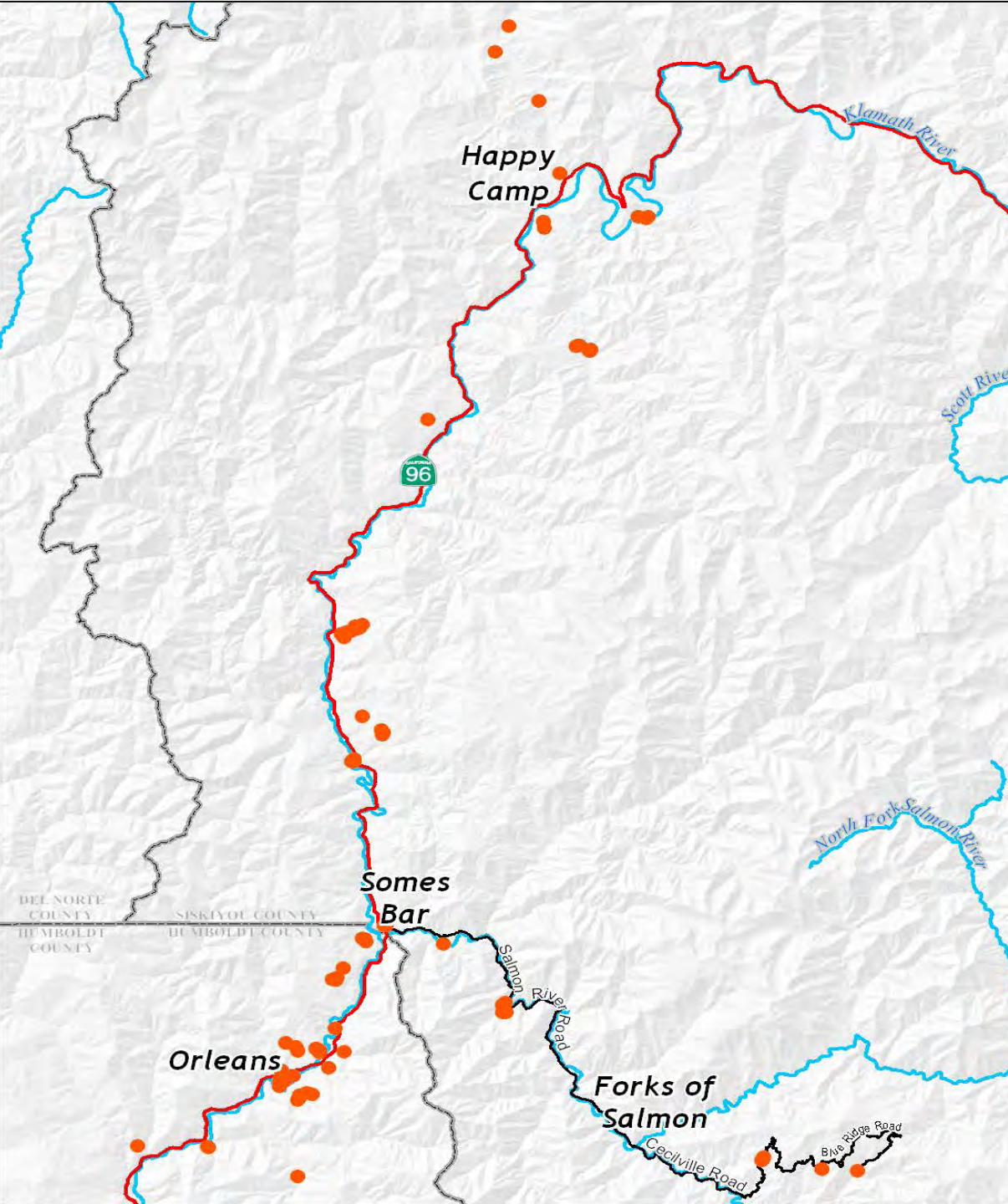


NGO



2015 Klamath River TREC

- 90+ participants divided into three camps (Happy Camp, Salmon River, Orleans)
- Developing trust between CAL FIRE, USFS, local VFD's, air quality and communities.
- Creating a co-ownership model for bringing good fire back to the wildland urban interface before the next wildfire comes.





2015 Klamath River Prescribed Fire Training Exchange (TREX) West Simms Burn



Getting Good Black Around Orleans

- Working off footprint of 2013 Orleans Fire
- Tying in to existing roads, ridges and defensible features
- Treating on public and private lands (2016 Red Cap Hazel Rx Burn)
- Preparing for managing wildfires for resource objectives
- Where is the line that we manage wildfires from and prescribed to the community?

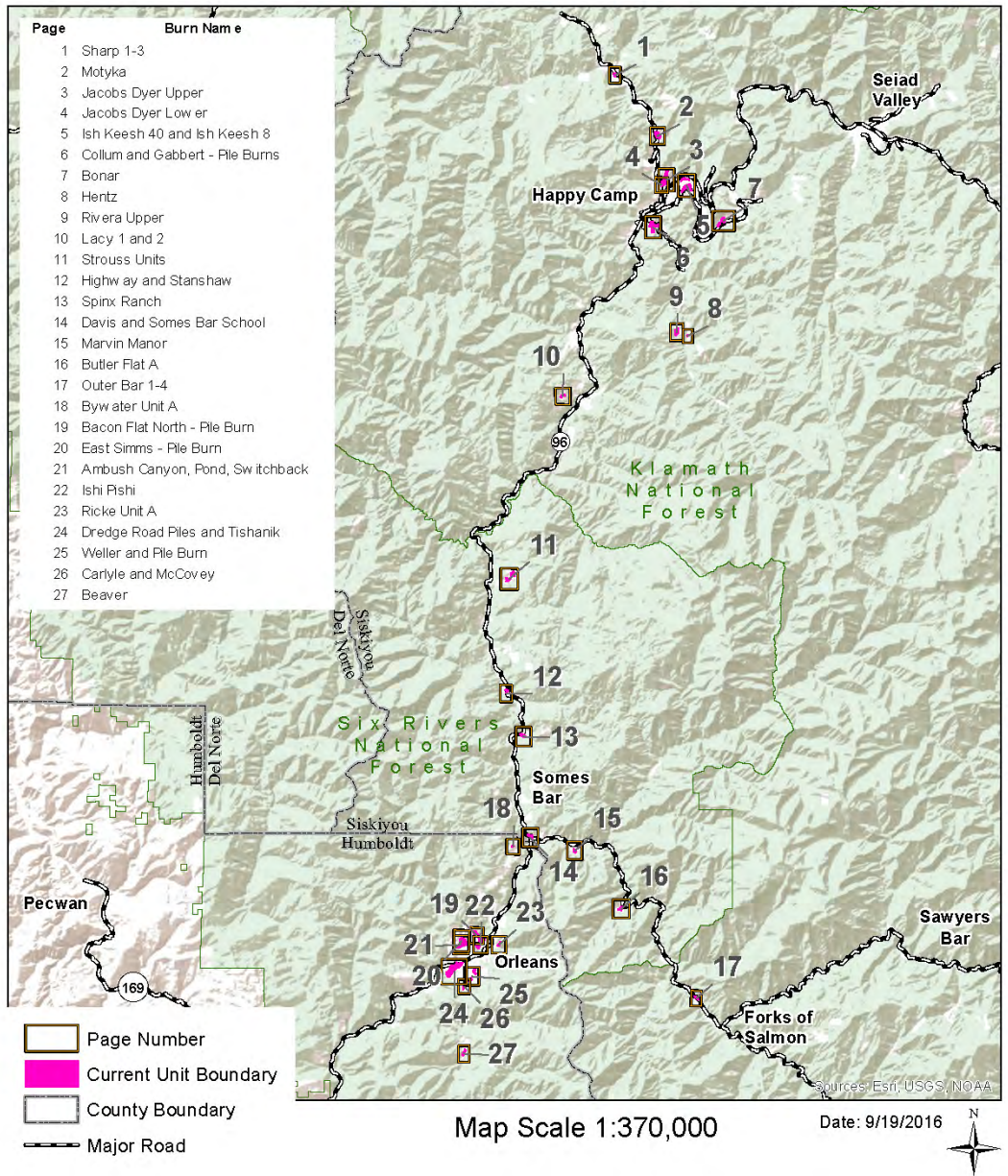


Wildfire and Prescribed Fire in the Orleans Valley
Date: 5/5/2017


TRES Units 2016		Orleans Fire 2013
TRES Units 2015		TRES Units 2013
TRES Units 2014		Ownership Private

0 0.25 0.5 0.75 1 Miles

2016 Klamath River TREX Possible Burn Units



2016 Klamath River TRES

- 
- 17 local, state, tribal, and federal organizations involved.
 - Intensive community engagement/outreach and attention to smoke sensitive residents in the community.
 - Burning on public and private lands w Six Rivers NF.
 - Using moisture gradients to allow for safer, large scale burns.

Klamath TRENCH Type III Incident Management Team

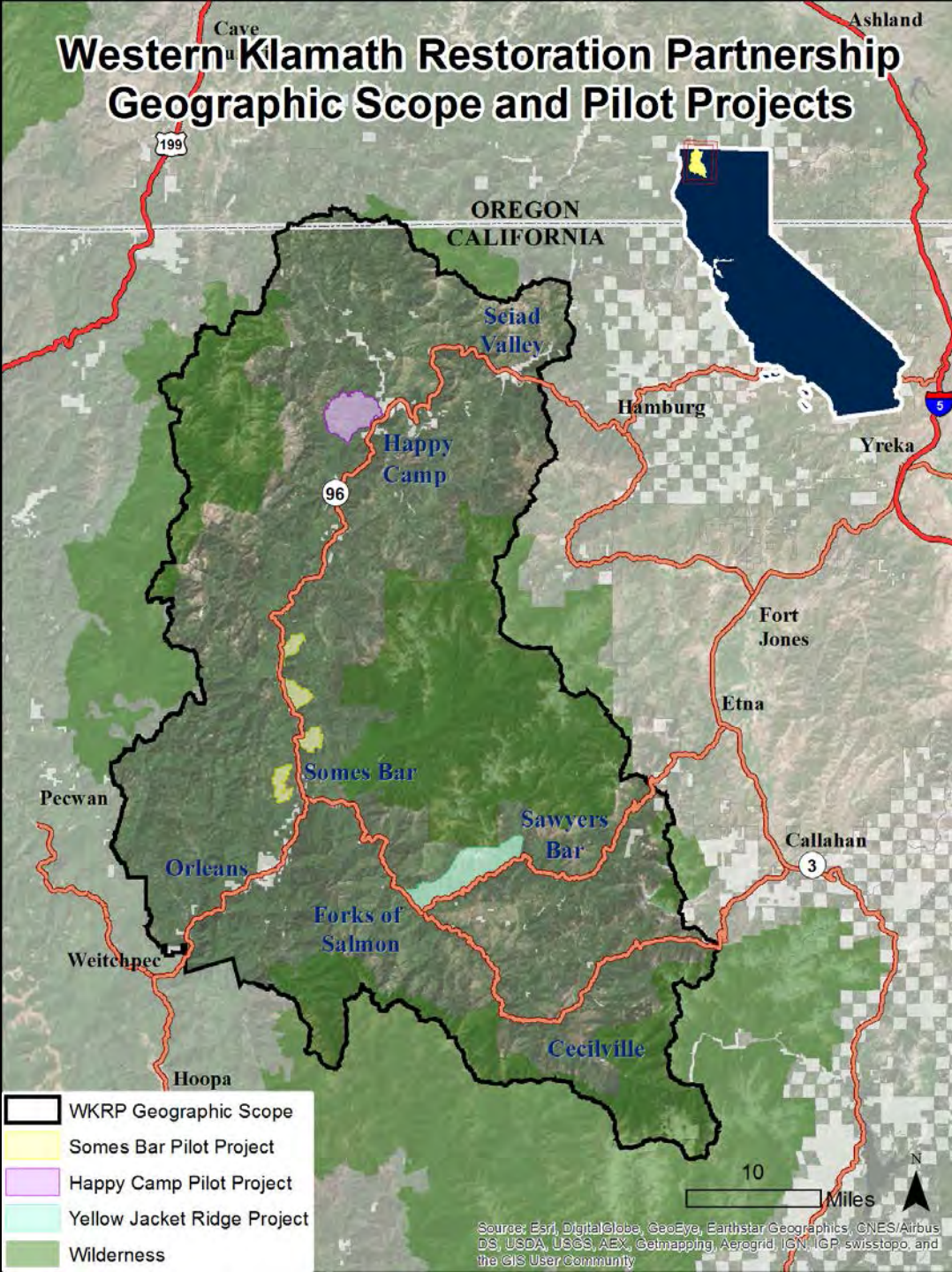
- TNC, Karuk Tribe, MKWC, SRRC, USFS, Municipal FD's, Contractual Resources (Firestorm, Deer Creek Resources, Prometheus Fire Consulting, Wildland Restoration International)
- Org Chart, Daily IAP's, AAR's
- Works closely with CAL FIRE, AQMDs, local VFDs
- Intensive public outreach (community meetings, blanket calling neighborhoods pre-burn to ID issues)
- Future resource for managed wildfires and fire suppression when needed?





- 1,187 acres burned in the WUI of seven communities
- 270+ participants from local, tribal, state, national and federal organizations
- No escaped fires
- Demonstrating shared liability between partners

Western Klamath Restoration Partnership Geographic Scope and Pilot Projects



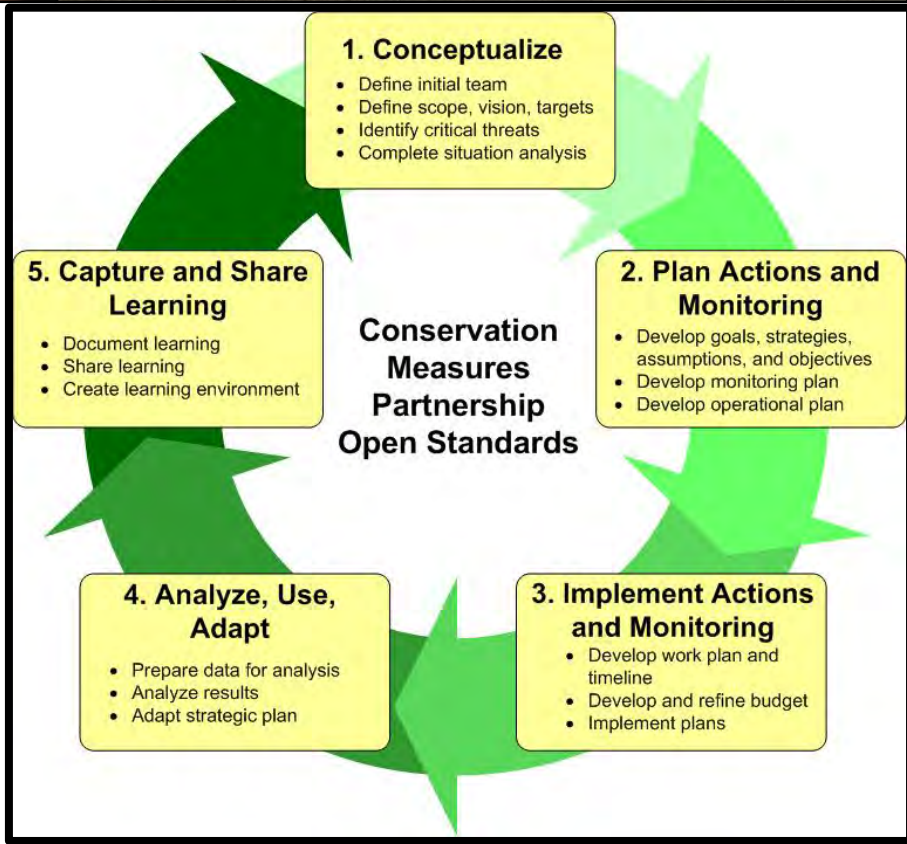
WESTERN KLAMATH RESTORATION PARTNERSHIP

- Initial meetings in 2007. Focused on instream issues.
- Began facilitated upslope restoration workshops w US FLN in Spring 2013.
- An open group comprised of Federal, Tribal, Non-governmental Organization (NGO) and local participants. FS not convener.
- Collaboratively identified planning area (1.2 million acres)
- Goal: Restore “historic” (natural w people) fire regimes in the Western Klamath Mtns.

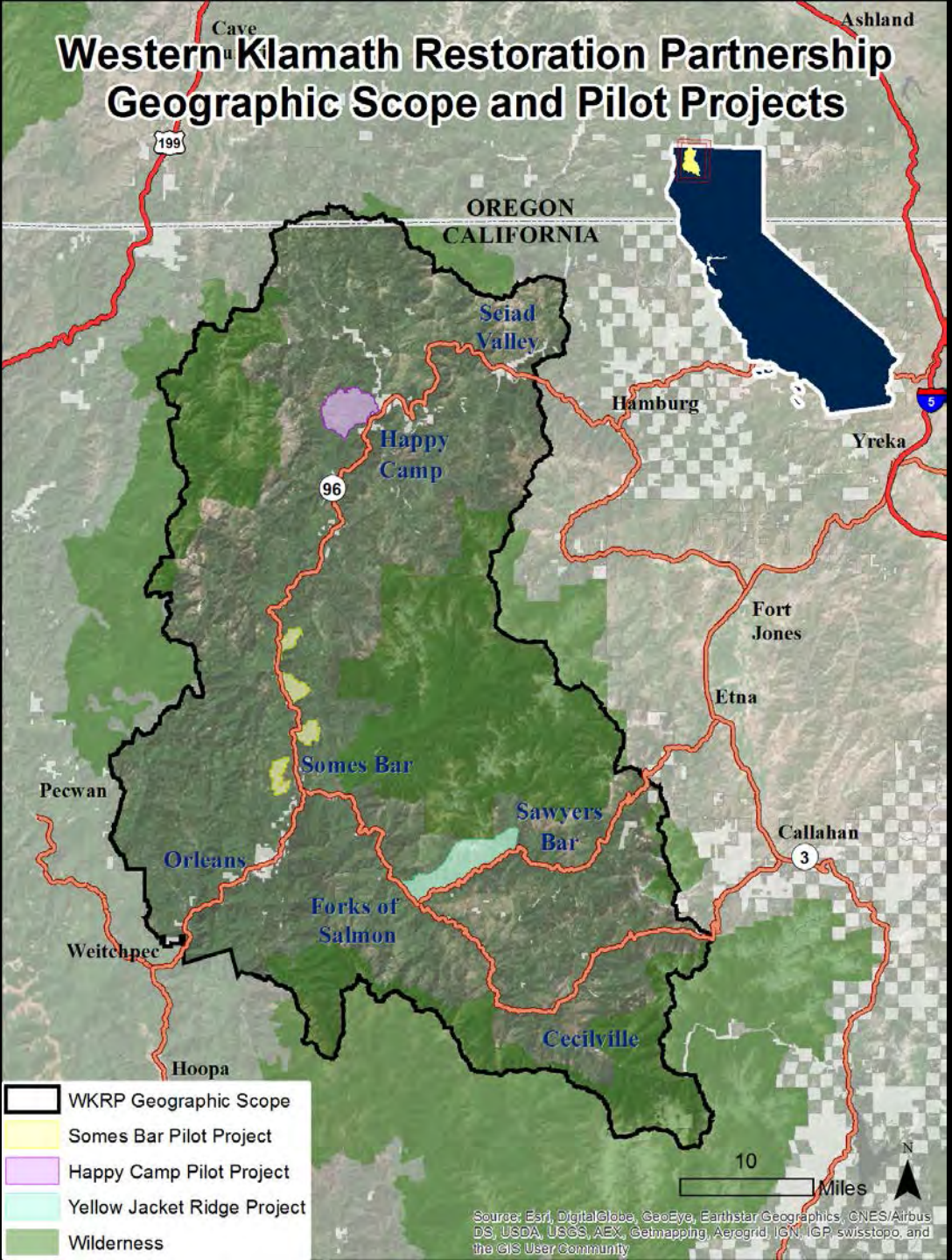


WESTERN KLAMATH RESTORATION PARTNERSHIP

- Building support at all levels for upslope restoration actions to expedite the creation of fire resilient communities and forests.
- Initiating large scale project planning through multi-agency Inter-disciplinary Teams.
- Implementing Prescribed Fire Training Exchanges (TRES).
- Workforce Development (Managing IQCS quals locally, scaling up capacity)



Western Klamath Restoration Partnership Geographic Scope and Pilot Projects



WESTERN KLAMATH
RESTORATION
PARTNERSHIP

Somes Bar Integrated Wildland Fire Management and Capacity Development Project

- Go from agreement in principal to agreement in practice
- Build multi-organizational capacities

Happy Camp Integrated Community Protection and Workforce Development Project

- Learn from the Somes Bar project
- Build/invest in local workforce (50,000+ acres NEPA ready projects)

Salmon River Integrated Large Fire Management Project

- Utilize recent fire footprints to implement large scale Rx fire safely
- Restore frequent fire regime across 22,000 acres in the WUI

Shared Values



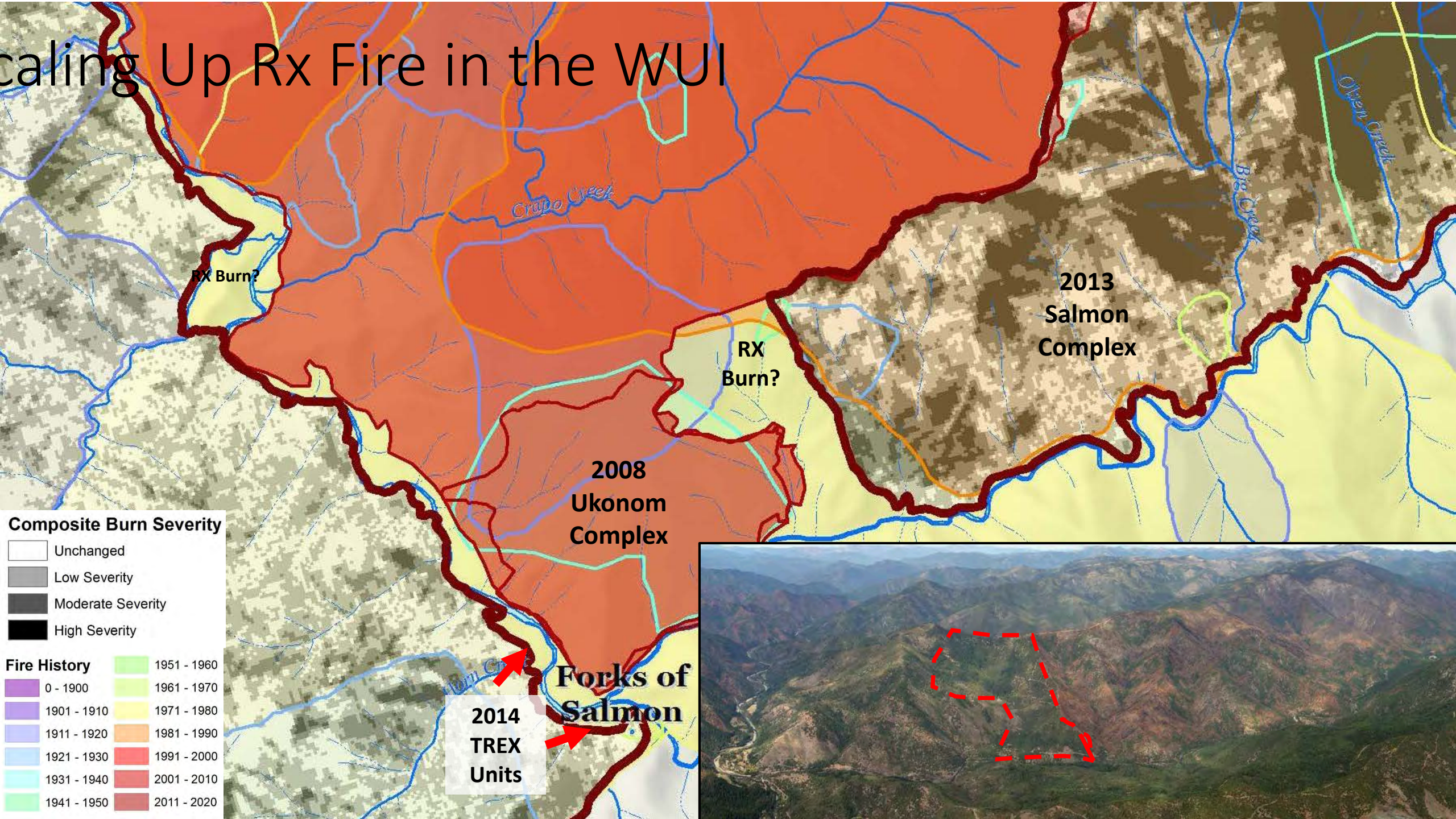
- Sustainable local economies
- Cultural and community vitality – includes food security and balanced human-fire relationship
- Fire-adapted communities
- Restored fire regimes
- Resilient, biodiverse forests, plants, animals, fish
- Healthy river system

Zones of Agreement



- Restoration of fire processes at the landscape scale is essential for social, cultural, ecological and economic resilience in the Western Klamath Mountains.
- Strategic, linear manual and mechanical treatments along existing roads and fuelbreaks in preparation for large scale prescribed burning.
- Pre-treatment on and around private properties to secure the social license for reintroduction of fire.

Scaling Up Rx Fire in the WUI



RX Burn?

RX Burn?

2013
Salmon
Complex

2008
Ukonom
Complex

Forks of
Salmon

2014
TREX
Units

Composite Burn Severity

- Unchanged
- Low Severity
- Moderate Severity
- High Severity

Fire History

- 1951 - 1960
- 1961 - 1970
- 1971 - 1980
- 1981 - 1990
- 1991 - 2000
- 2001 - 2010
- 2011 - 2020



WESTERN KLAMATH RESTORATION PARTNERSHIP



Challenges

- Going from Agreement in Principle to Agreement in Practice (prescriptions).
- Reaching agreement from all affected parties to implement treatments at larger scales.
- Lack of local capacity/housing to provide for workforce to implement projects at scale.

Opportunities

- Collaboratively plan and implement large scale projects that restore forest process and function, honor shared values and build trust.
- Implement prescribed burn treatments at larger scales with all partners engaged.
- Demonstrate mechanisms for shared liability to reduce risk aversion.

Shifting t

Forestland Steward

SPRING 2013

Fire making a comeback for forest management

ONLY YOU CAN
**PRESCRIBED
 BURNING
 TODAY**
 PREVENT
 FOREST FIRES



urning
 bon Action
 te Fire Plan
 ces Board
 Rx Burning
 CA
 ers NF
 n TREX