

A woman with blonde hair in a ponytail, wearing a dark blue t-shirt and patterned shorts, stands in a lush green meadow. She is looking towards a dense forest of tall, dark evergreen trees under a clear blue sky. The scene is bright and sunny.

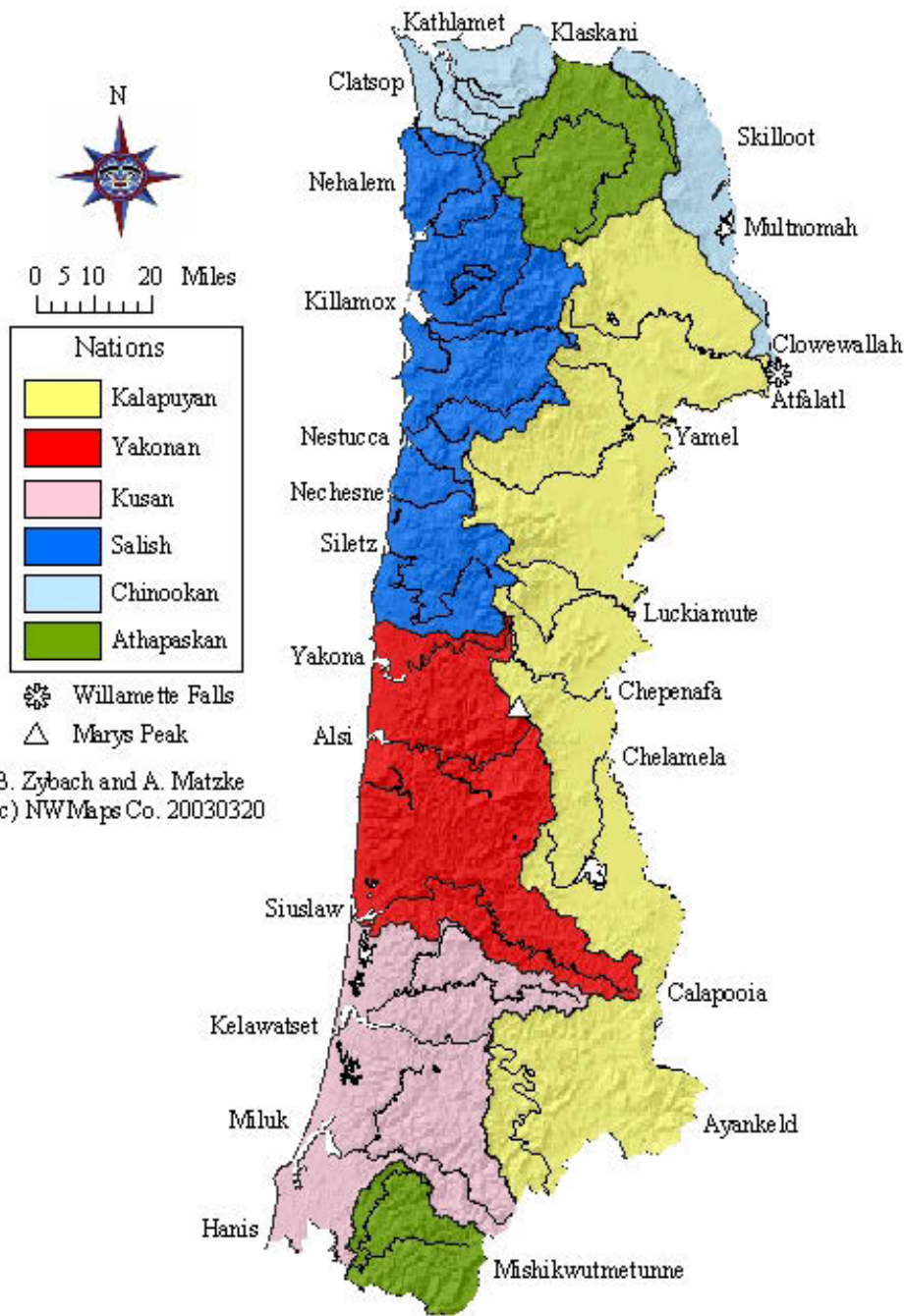
**The South Umpqua Headwaters Project:  
Opportunities for Traditional Teaching and Learning**

**Presented by Dr. Bob Zybach**

[www.ORWW.org](http://www.ORWW.org)

**May 22, 2011**

**Native American Ecological Education Symposium \* Southern Oregon University \* Ashland, Oregon**



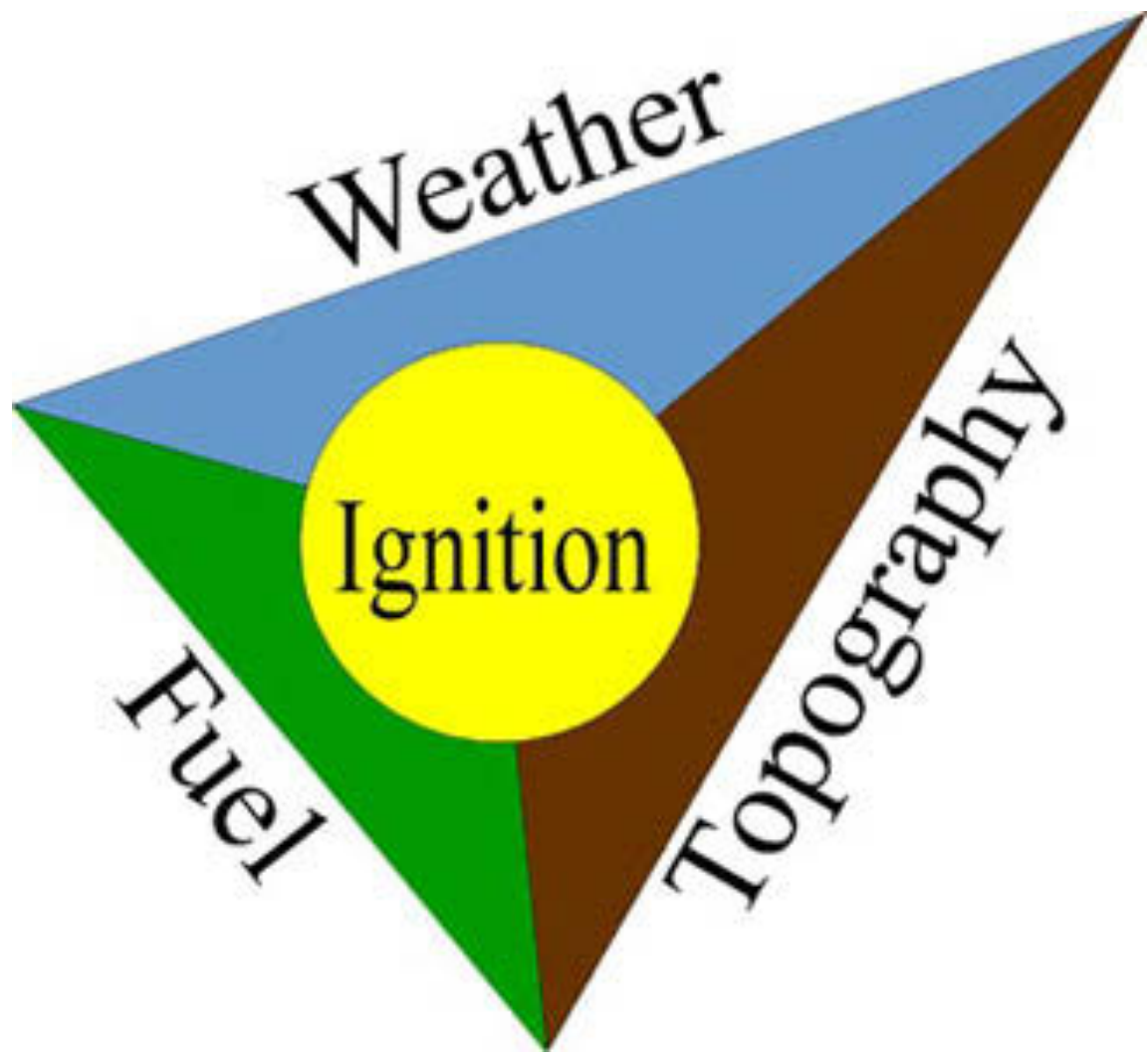
B. Zybach and A. Matzke  
 (c) NWMaps Co. 20030320

Tribe	Language	River
<b>Northern</b>		
<u>Clowewallah</u>	Chinookan	Willamette
<u>Multnomah</u>	Chinookan	Willamette
<u>Kathlamet</u>	Chinookan	Columbia
<u>Clatsop</u>	Chinookan	<u>Youngs</u>
<u>Klaskan</u>	Athapaskan	Clatskanie
<u>Nehalem</u>	Salish	Nehalem
<b>Eastern</b>		
<u>Atfalatl</u>	Kalapuyan	Tualatin
<u>Yamel</u>	Kalapuyan	Yamhill
<u>Luckiamute</u>	Kalapuyan	Luckiamute
<u>Chepenafa</u>	Kalapuyan	Marys
<u>Chelamela</u>	Kalapuyan	Long Tom
<u>Calapooia</u>	Kalapuyan	Willamette
<b>Western</b>		
<u>Killamox</u>	Salish	Tillamook
<u>Nestucca</u>	Salish	Nestucca
<u>Nechesne</u>	Salish	Salmon
<u>Siletz</u>	Salish	Siletz
<u>Yakona</u>	Yakonan	Yaquina
<u>Als</u>	Yakonan	Alsea
<u>Siuslaw</u>	Yakonan	Siuslaw
<b>Southern</b>		
<u>Ayankeld</u>	Kalapuyan	Umpqua
<u>Kelawatset</u>	Kusan	Umpqua
<u>Hanis</u>	Kusan	Coos
<u>Miluk</u>	Kusan	Coquille
<u>Mishikwutmetunne</u>	Athapaskan	Coquille



YAQUIA BAY—INDIANS' FULL DRESS.

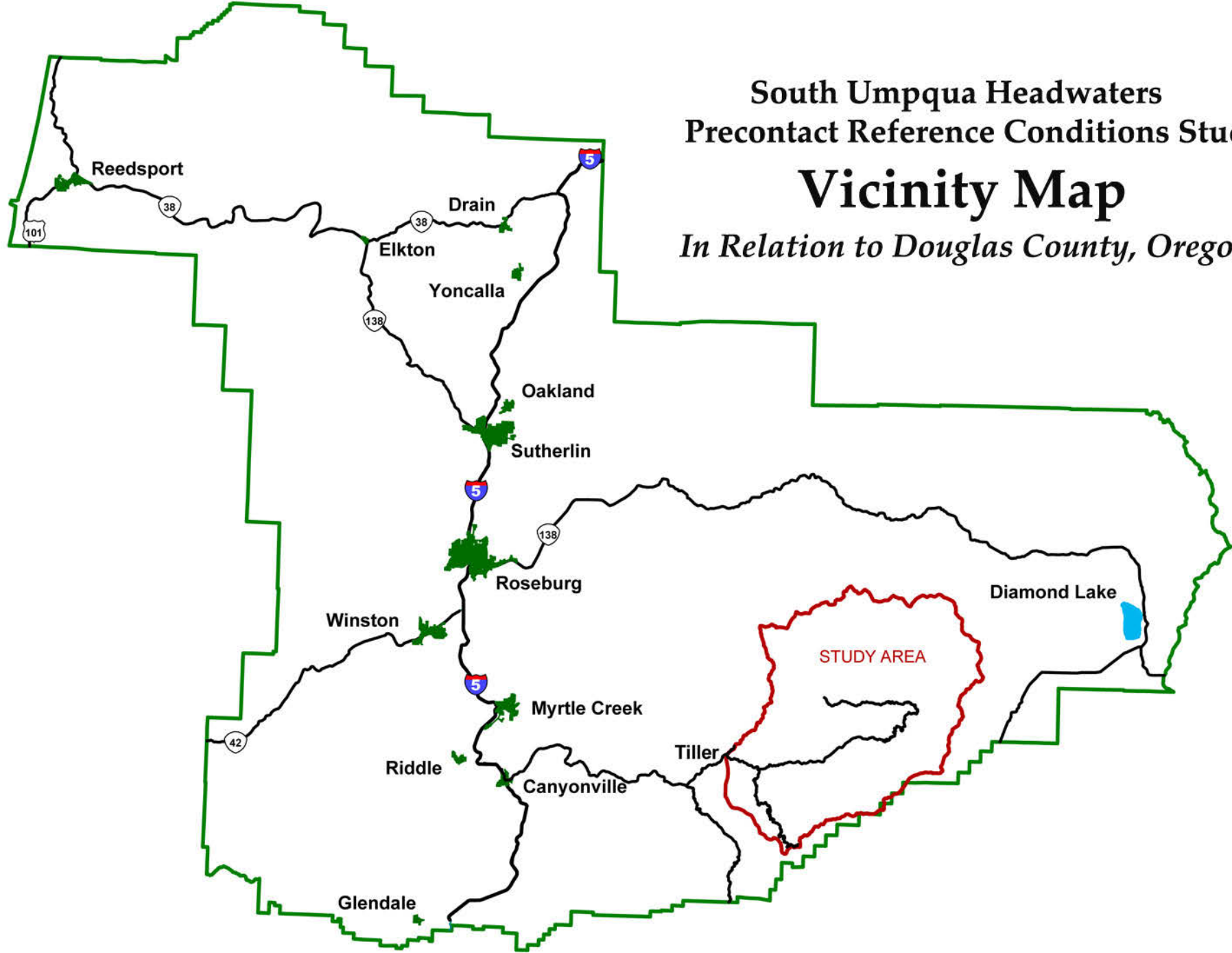




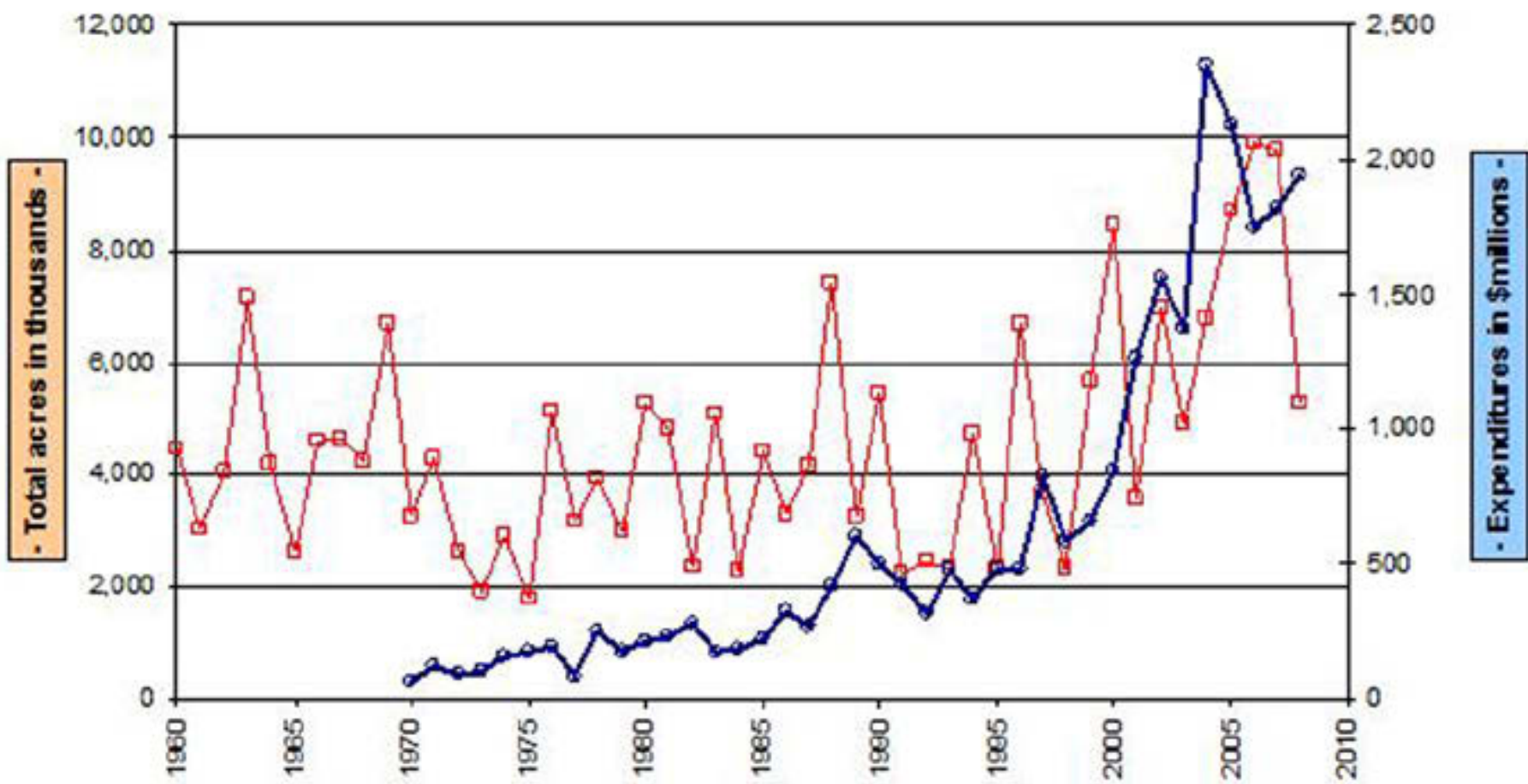
South Umpqua Headwaters  
Precontact Reference Conditions Study

# Vicinity Map

*In Relation to Douglas County, Oregon*



Total US Wildfire Acres 1961-2008, and USFS Fire Expenditures 1970-2008



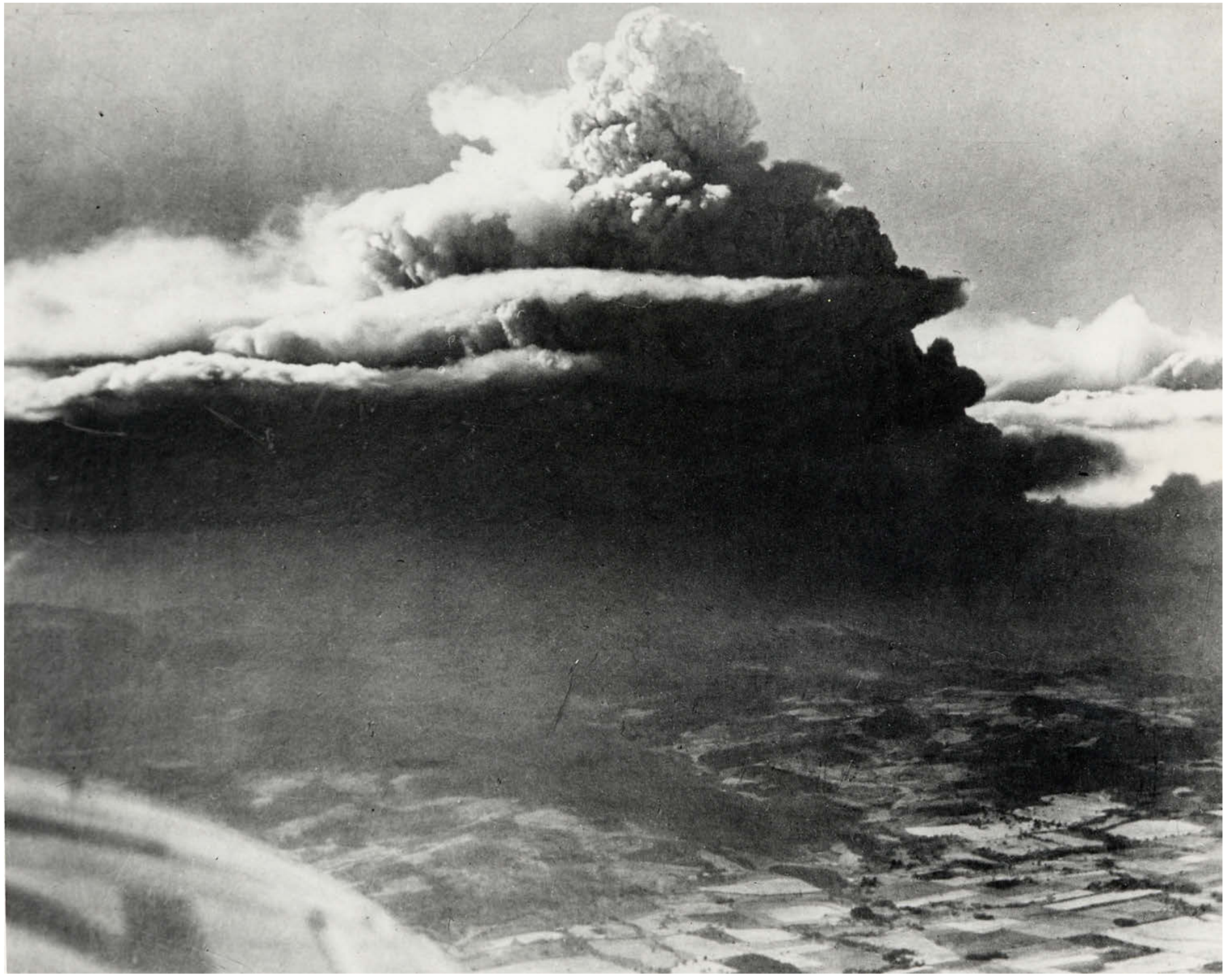


Dead Wood



Wildfire





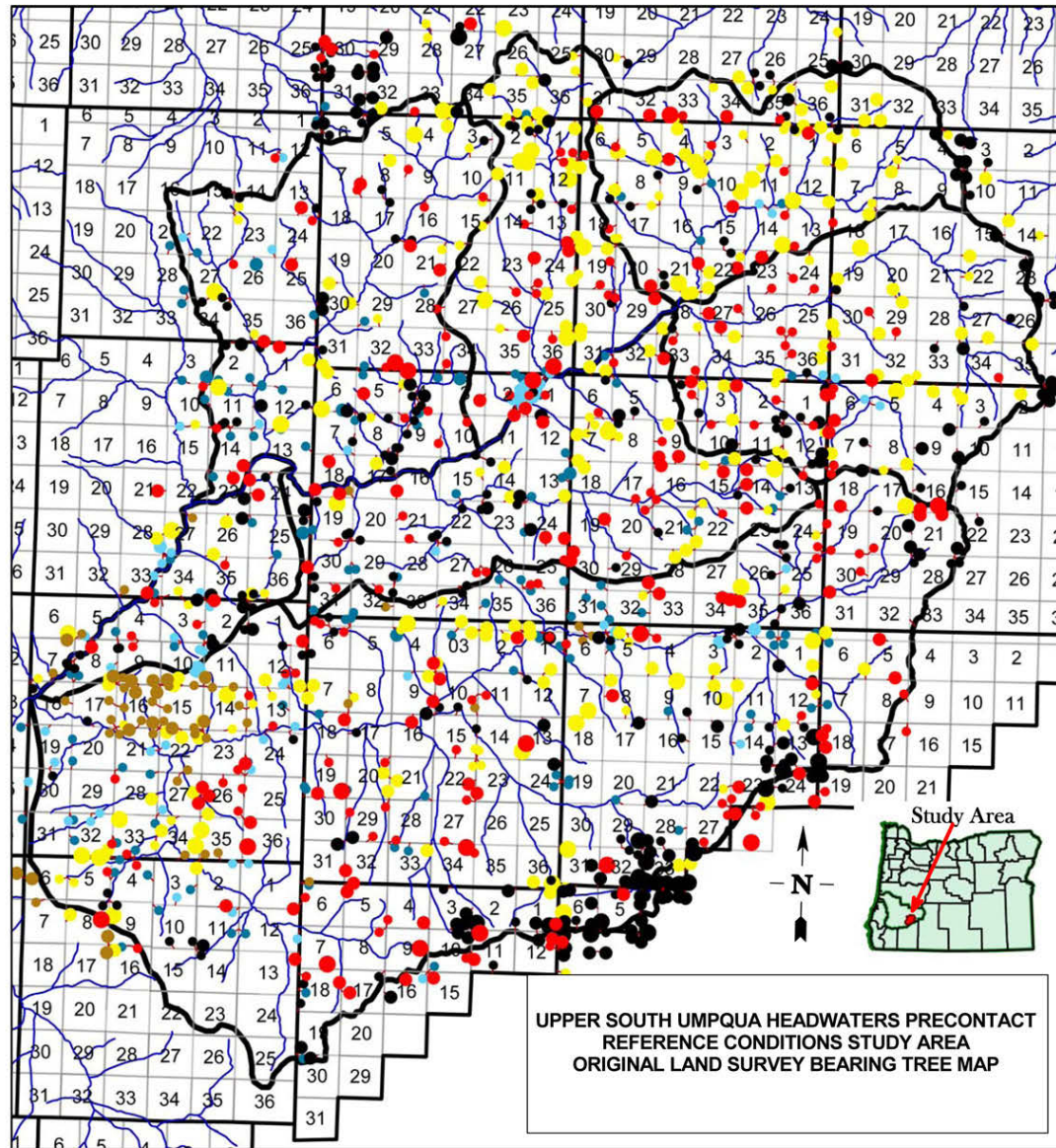




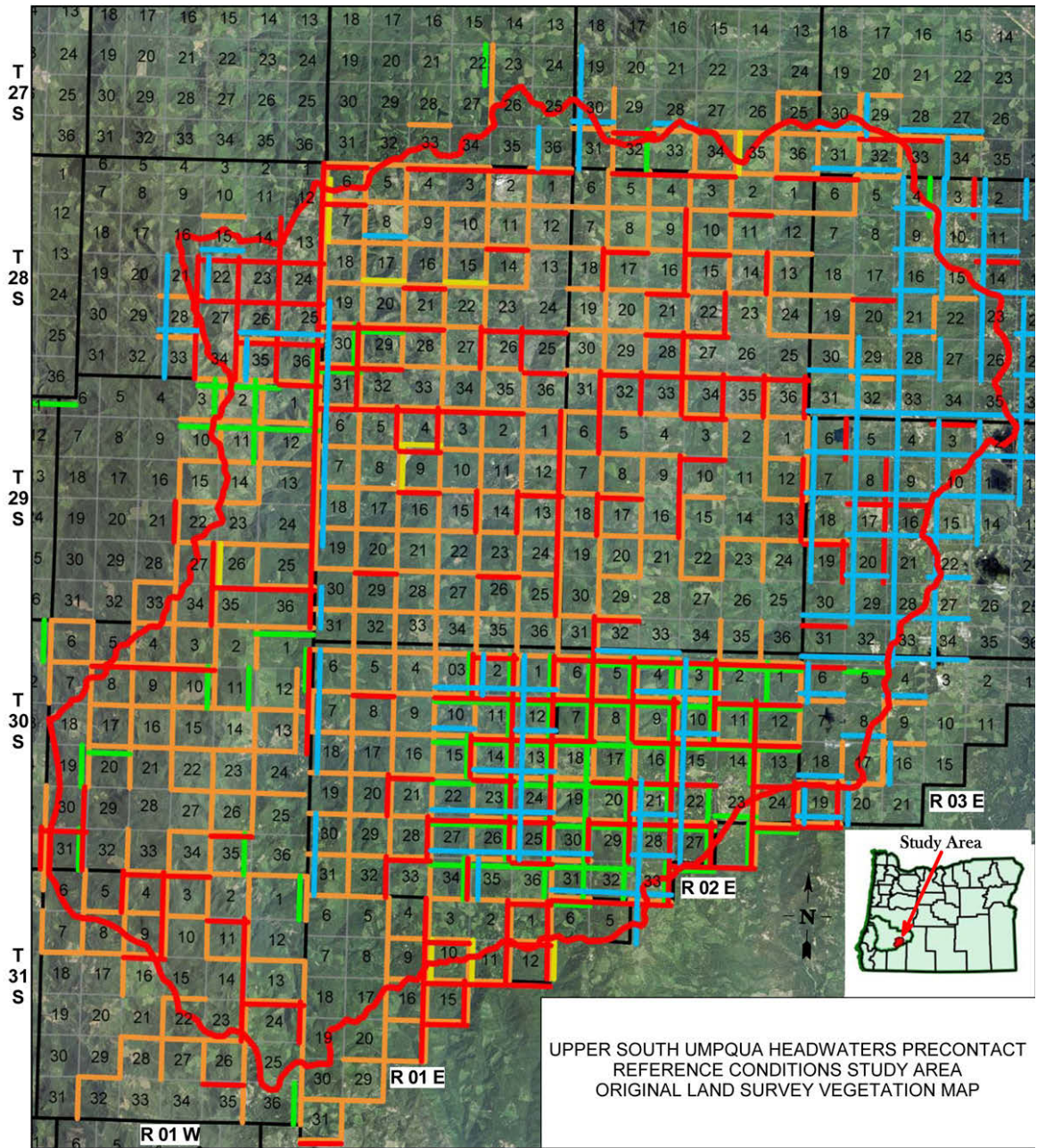


# *INDIAN BURNING*










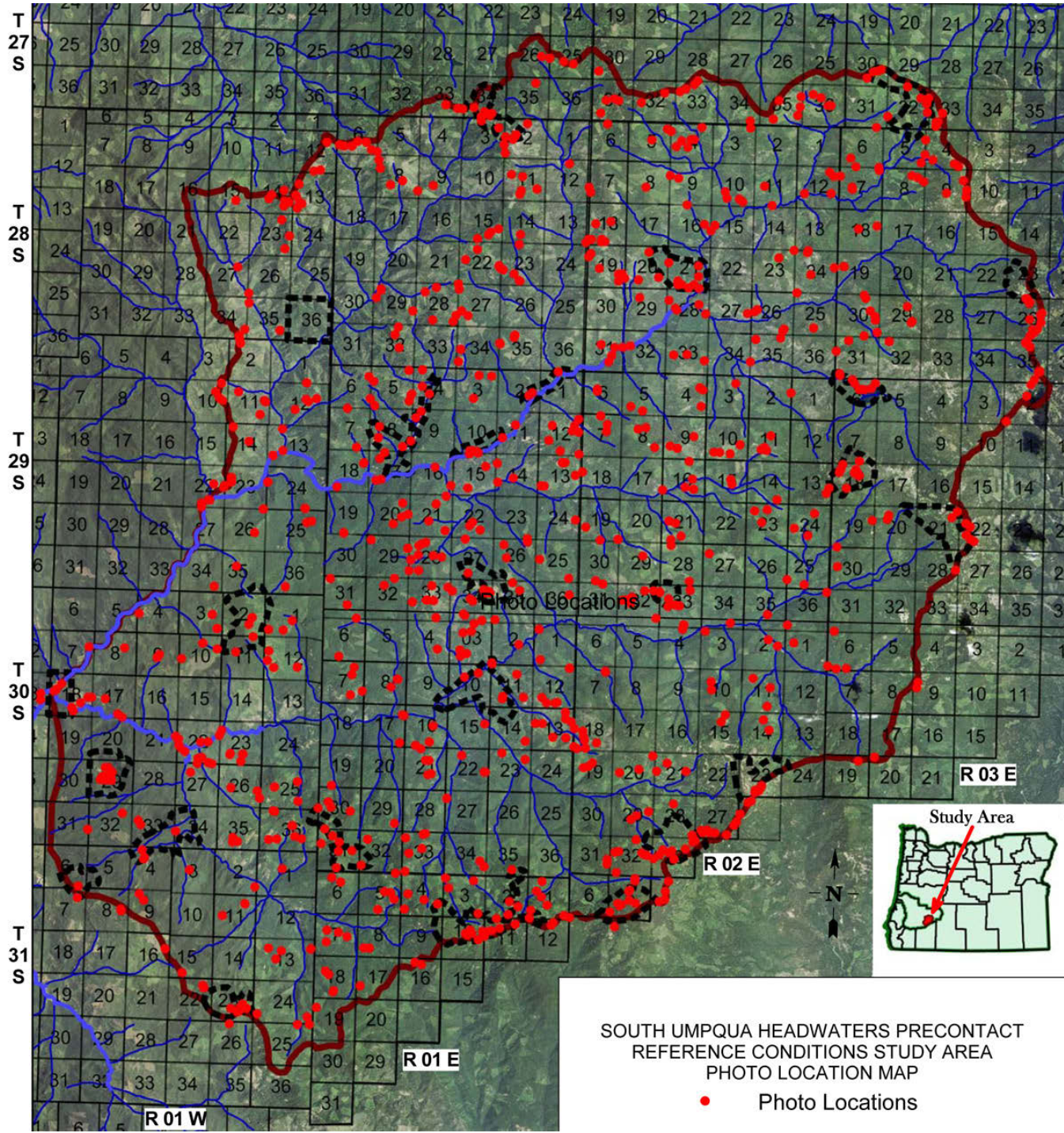


- |                    |                   |                              |                             |
|--------------------|-------------------|------------------------------|-----------------------------|
| ● Cedar Under 18   | ● Hem-Fir Over 36 | ● Pine 18 to 36              | ● Upland Hardwoods Under 18 |
| ● Cedar 18 to 36   | ● Oak Under 18    | ● Pine Over 36               | ● Upland Hardwoods 18 to 36 |
| ● Cedar Over 36    | ● Oak 18 to 36    | ● Riparian Hardwood Under 18 | ● Upland Hardwoods Over 36  |
| ● Hem-Fir Under 18 | ● Oak Over 36     | ● Riparian Hardwood 18 to 36 | ▭ Subbasins                 |
| ● Hem-Fir 18 to 36 | ● Pine Under 18   | ● Riparian Hardwood over 36  |                             |
- 1 = Boulder Subbasin**    **3 = Black Rock Subbasin**    **5 = Buckeye Subbasin**    **7 = Jackson Subbasin**  
**2 = Quartz Subbasin**    **4 = Zinc Subbasin**    **6 = Castle Rock Subbasin**

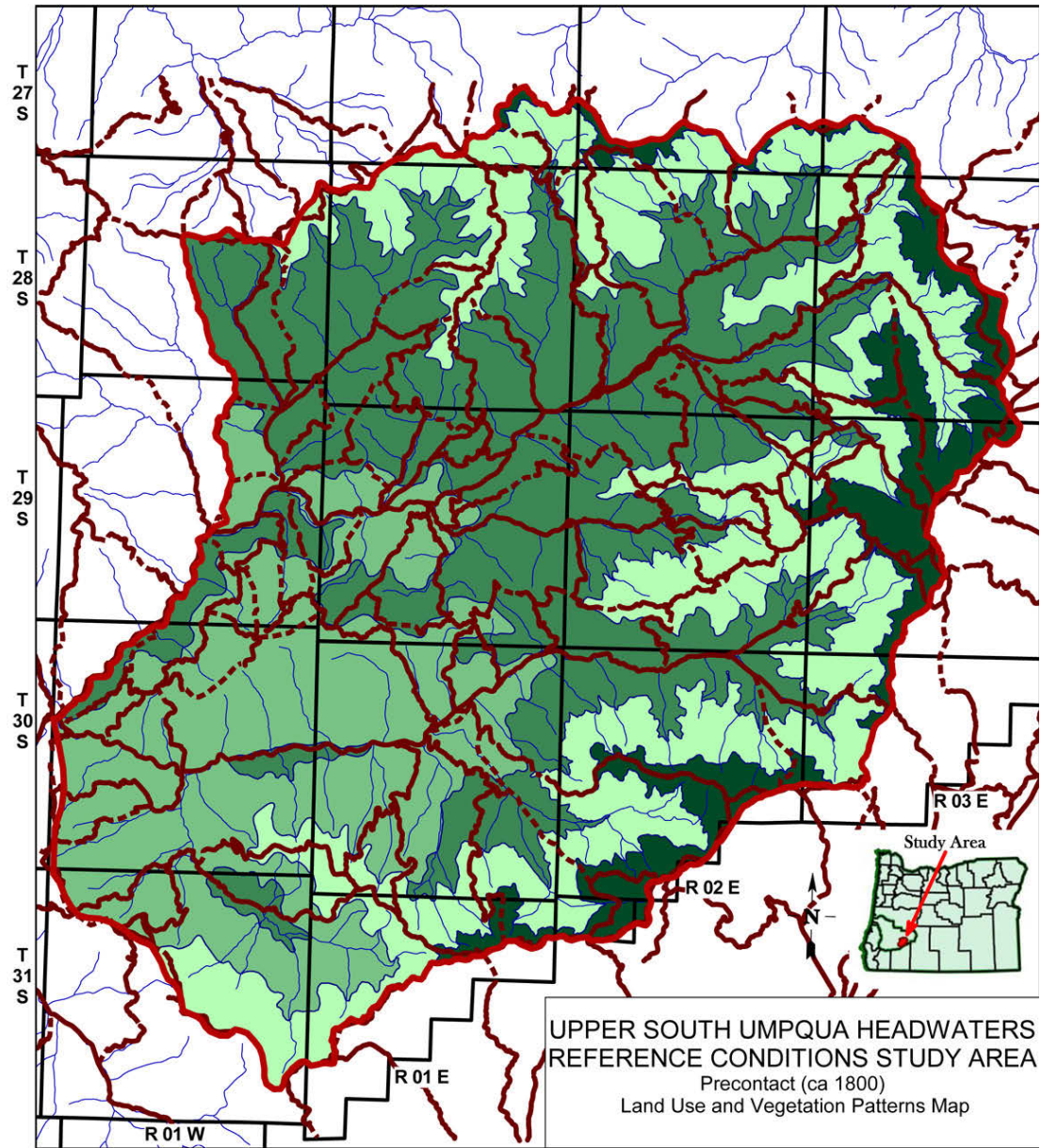


UPPER SOUTH UMPQUA HEADWATERS PRECONTACT  
 REFERENCE CONDITIONS STUDY AREA  
 ORIGINAL LAND SURVEY VEGETATION MAP

- |                                                                                     |                                                                                     |                                                                                     |                       |                                                                                       |                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------|---------------------|
|  | Understory Huckleberry                                                              |  | Understory Salal      |  | Study Area Boundary |
|  | Understory Evergreen                                                                |  | Understory Hardwoods  |  | Section Lines       |
|                                                                                     |  |                                                                                     | Understory Nut-Shrubs |                                                                                       | 2009 Aerial Flight  |







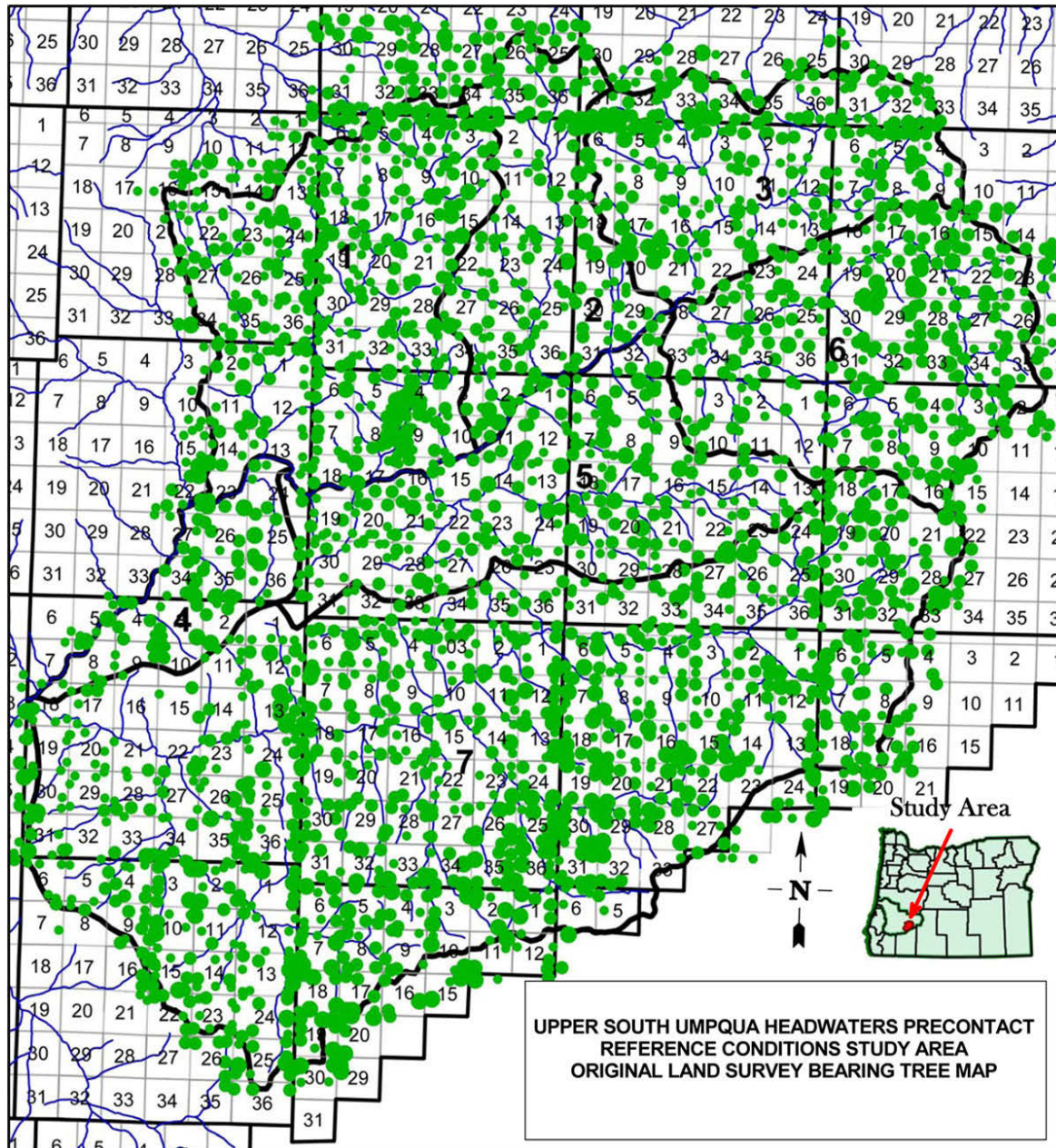
# FRCC-1

## **FRCC (Fire Regime Condition Class)**

**A measure of departure from reference (pre- settlement or natural or historical) ecological conditions that typically result in alterations of native ecosystem components. These ecosystem components include attributes such as species composition, structural stage, stand age, canopy closure, and fuel loadings.**

### **FRCC 3 is defined as:**

**Greater than 66 percent departure: Fire regimes have been substantially altered. Risk of losing key ecosystem components is high. Fire frequencies may have departed by multiple return intervals. This may result in dramatic changes in fire size, fire intensity and severity, and landscape patterns. Vegetation attributes have been substantially altered.**



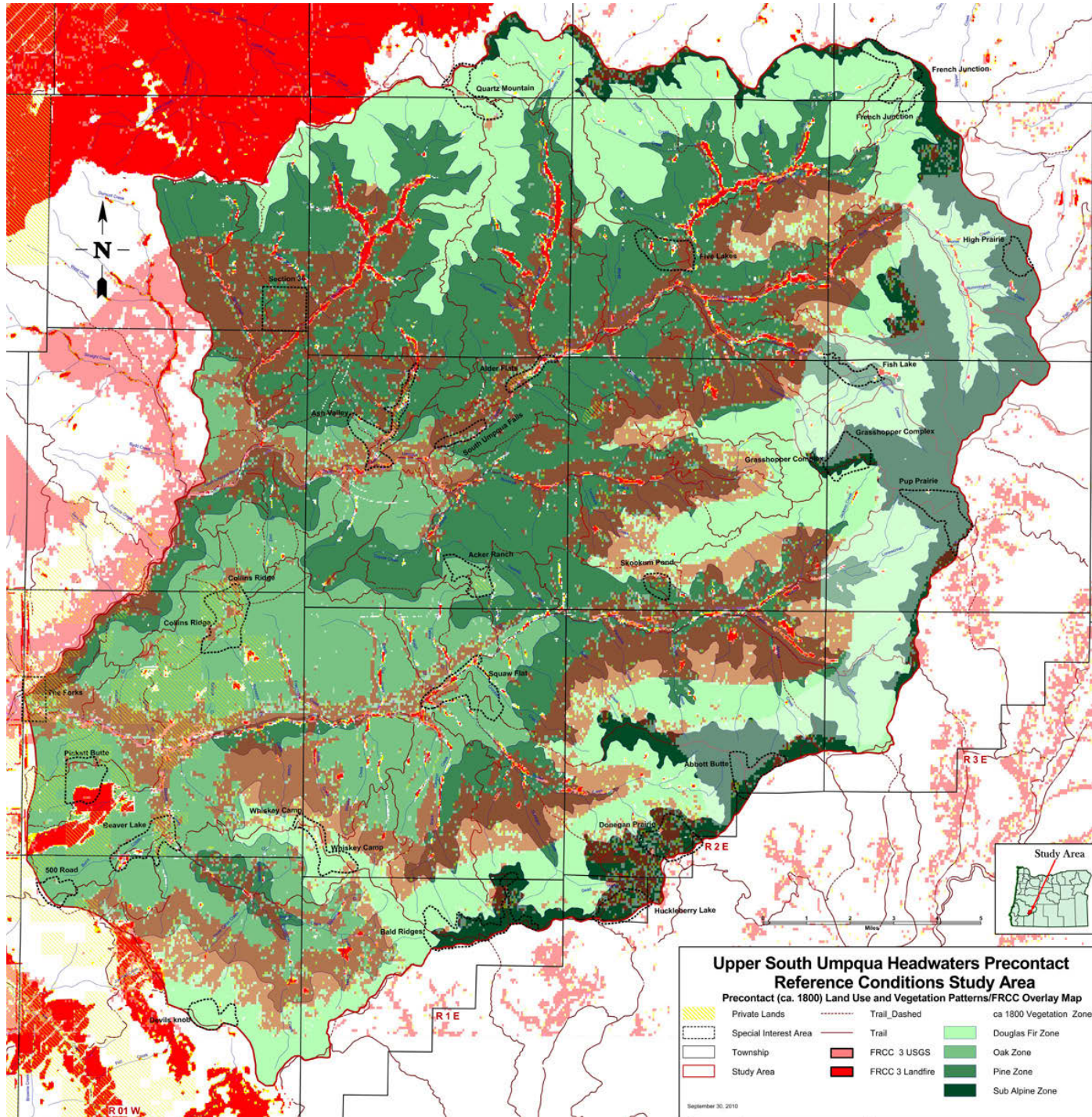
- Doug-Fir Under 18    
  Subbasins   
 3 = Black Rock Subbasin   
 6 = Castle Rock Subbasin
- Doug-Fir 18 to 36    
 1 = Boulder Subbasin   
 4 = Zinc Subbasin           
 7 = Jackson Subbasin
- Doug-Fir over 36    
 2 = Quartz Subbasin   
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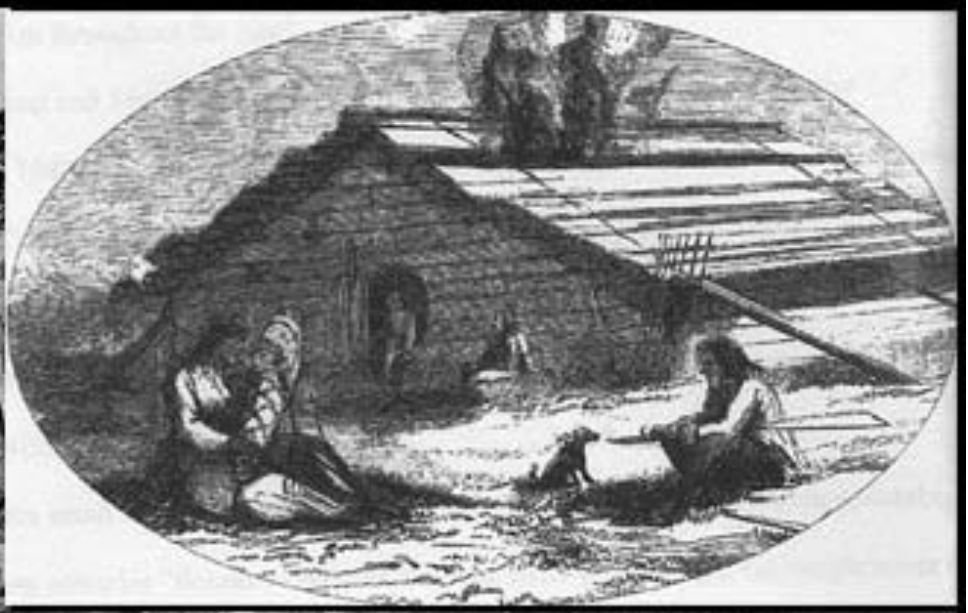
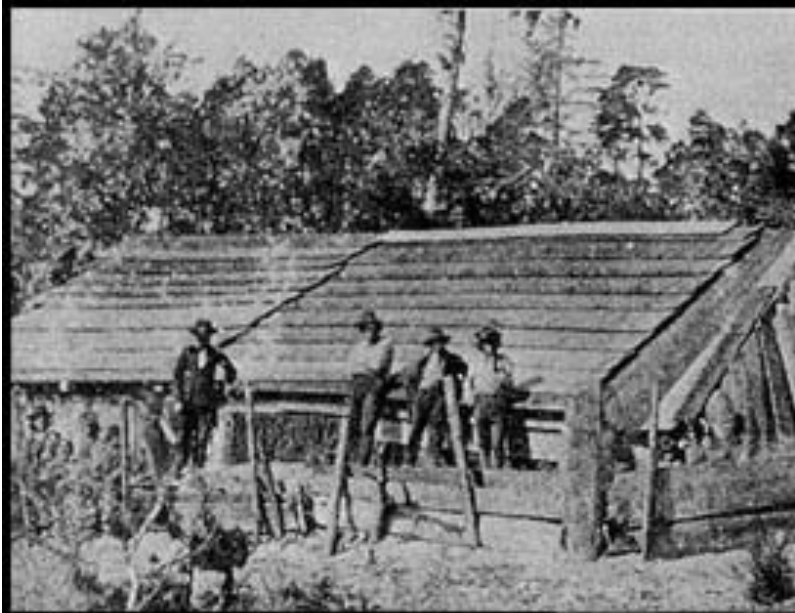
















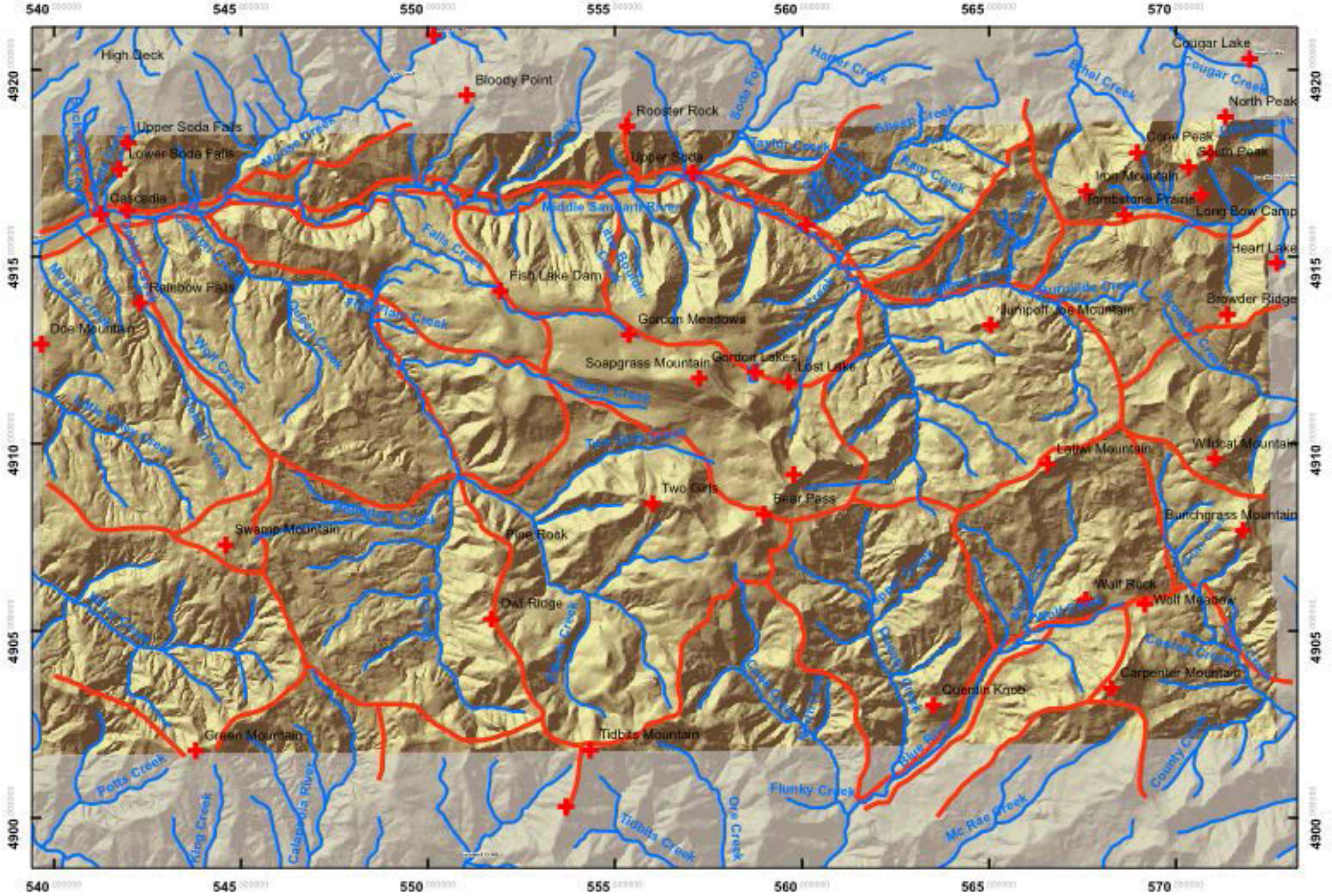


# Sacred Landmarks



Gordon Meadows

# Santiam Molalla Primary Trail System, 1750-1850: South Santiam River and Blue River, Oregon Headwaters



































Vision for the Future





Traditional Practices



...complete ... cattle

Blazers  
sign Roy,  
All: 1

no walks in his 31<sup>st</sup> career complete game.  
The Angels won their season-best fifth straight, while the

this season," Colon said through a translator. "I've got a sense of responsibility."  
Colon was 21:8 with a 3.48 ERA

ing up in the ninth.  
"He was still fresh," Scioscia said.  
The Angels scored all their runs



with a 7-2 record on a road trip.  
The 33-year-old forward is seventh in the league with 10 goals since he was drafted right out of high school in 1997.



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Aldridge and guard Brandon Roy. Terms of the contracts were not disclosed.

Portland picked out Chicago Bulls guard Viktor Khryapa as a draft right out of high school. Thomas, the fourth pick

edge, at 6-foot-11, averaged 14.3 points and 8.2 rebounds as a sophomore.

red Roy, who was acquired in a deal with Boston. Roy, at 6-foot-6, played four seasons at Washington State, averaging 14.3 points, 10.2 rebounds and 1.8 assists per game.

Named Pac-10 Player of the Year his senior year, Roy is the Huskies' 10th all-time leading scorer.

"These two represent a strong part of the change in culture we are striving to achieve in Portland and we are looking forward to the

of them being part of the Blazers uniform. "These two represent a strong part of the change in culture we are striving to achieve in Portland and we are looking forward to the

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Traditional Foods







## Conclusions

1. Catastrophic-scale wildfires are deadly, costly, and destructive.
2. Regular landscape-scale prescribed fires, as exemplified by historical Indian burning practices, can greatly reduce the likelihood and severity of modern wildfire risks.
3. A diet of traditional foods and participation in historical land management practices can have beneficial effects toward treating modern health problems, including Indian health problems, such as obesity and diabetes.
4. Traditional forms of teaching and learning including showing, touching, tasting, story-telling, listening, discussing, smelling, and watching. In these ways we can learn from our ancestors and from their teachers of long ago.
5. “Landscape restoration” means restoring people to the landscape, including (maybe especially) children.

# Future Generations



# Oregon Websites and Watersheds Project, Inc.



[www.ORWW.org](http://www.ORWW.org)