

Managing Fire-prone Forests at the Landscape Scale: Challenges and Opportunities for Large Landowners in the FPF Study Area



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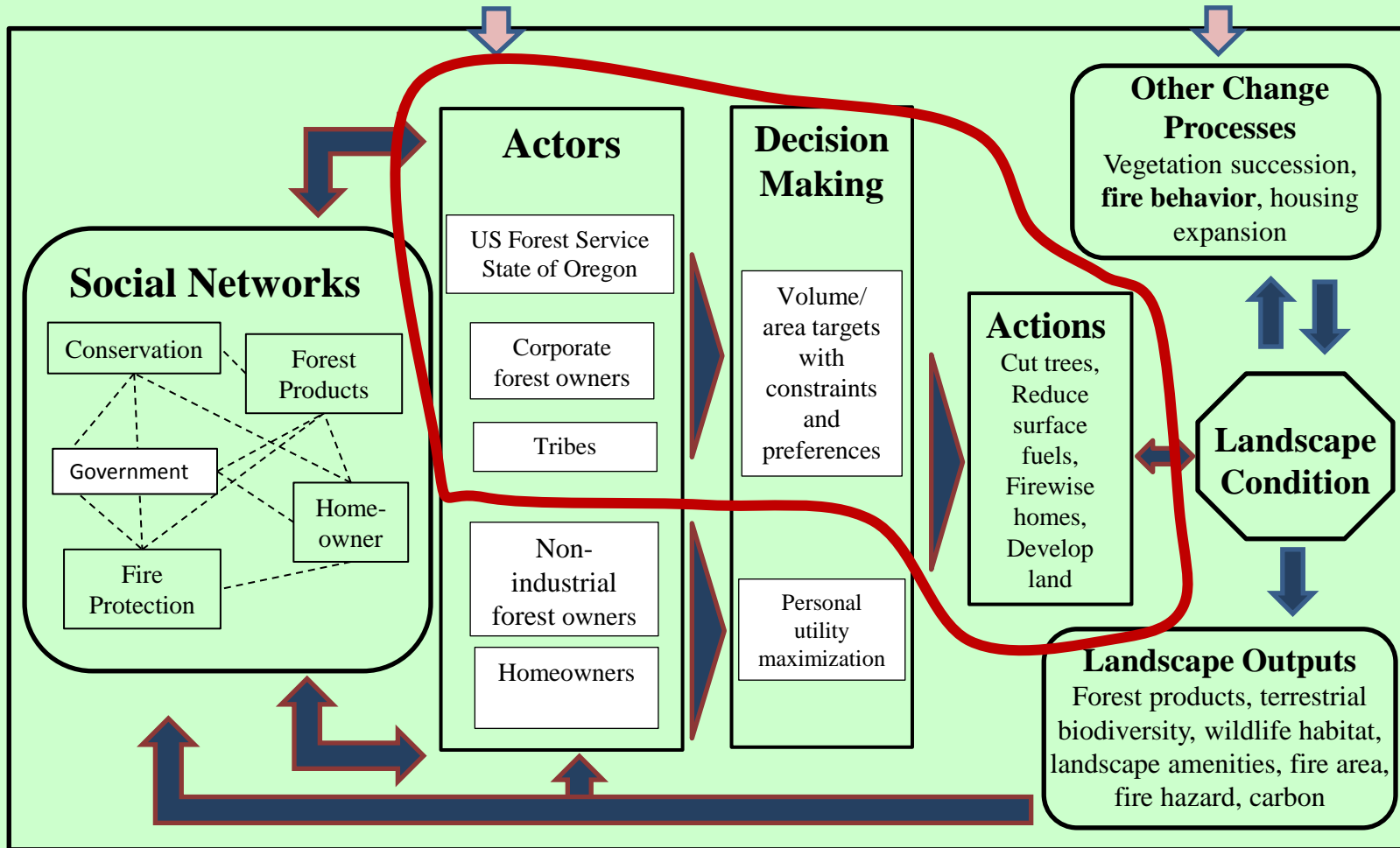
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External Drivers
Forest policies, markets

External Drivers
Climate change, population growth



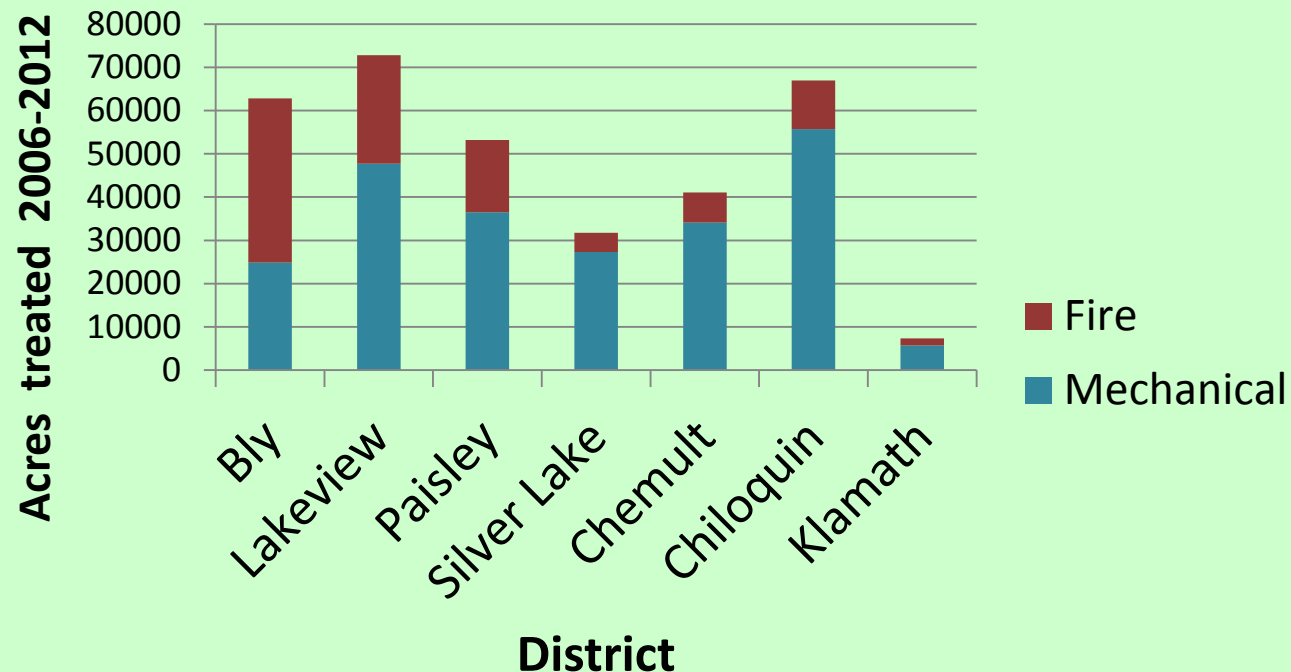
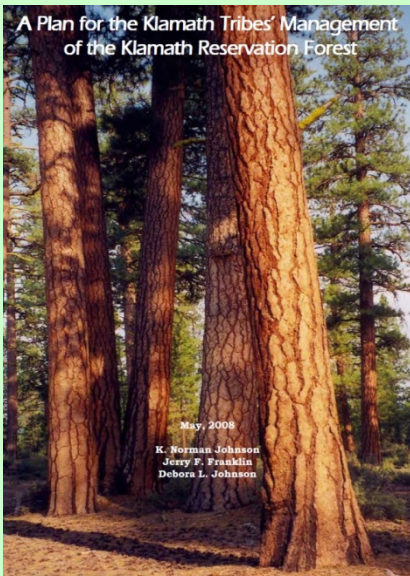
Research questions

- 1) What are the forest and fire management practices of large actors?
- 2) What drives their management decisions?
- 3) What are the challenges & opportunities for increasing forest resilience to fire at the landscape scale on large ownerships?

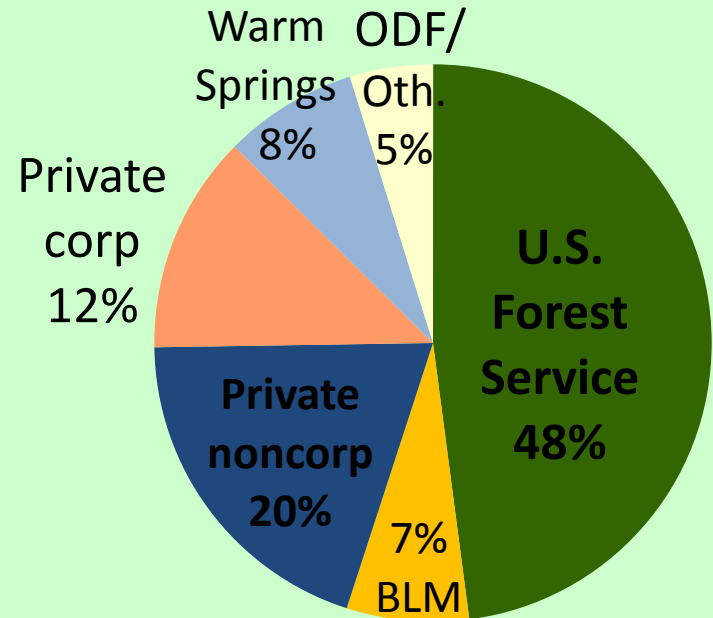
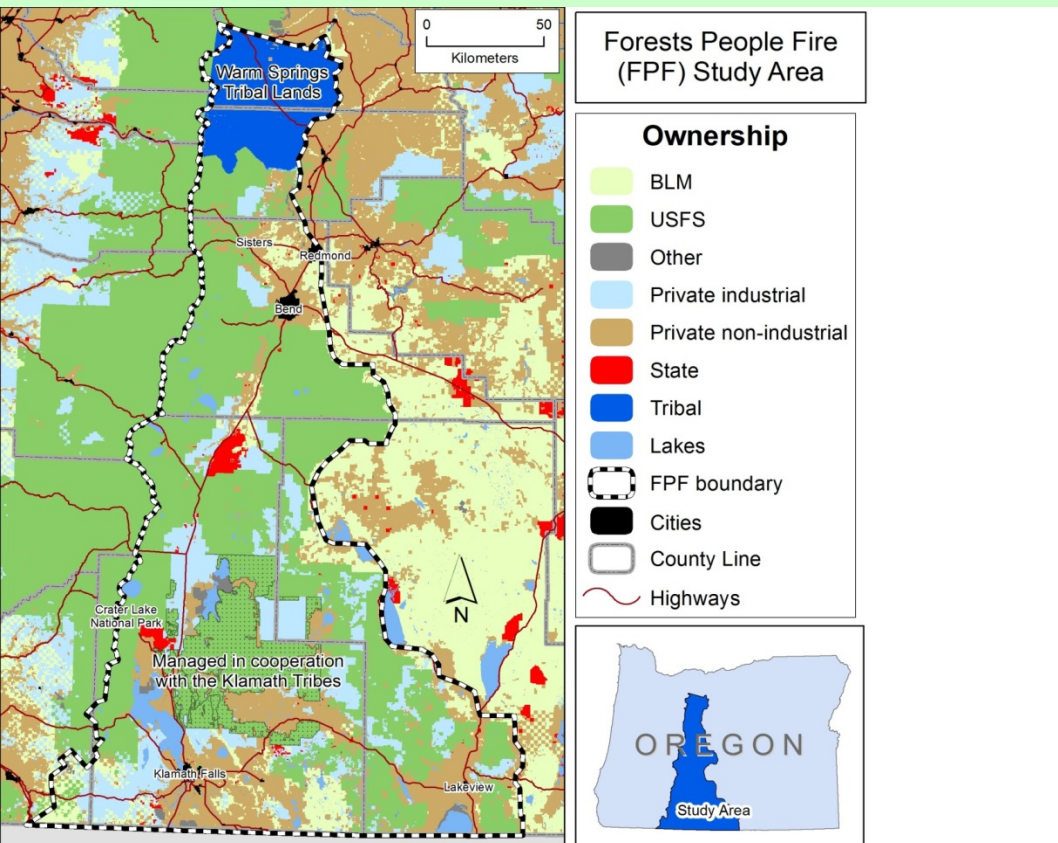


Data sources

- In-person interviews (n=116)
- Federal & state agency databases
- Document review



Heterogeneous social landscape



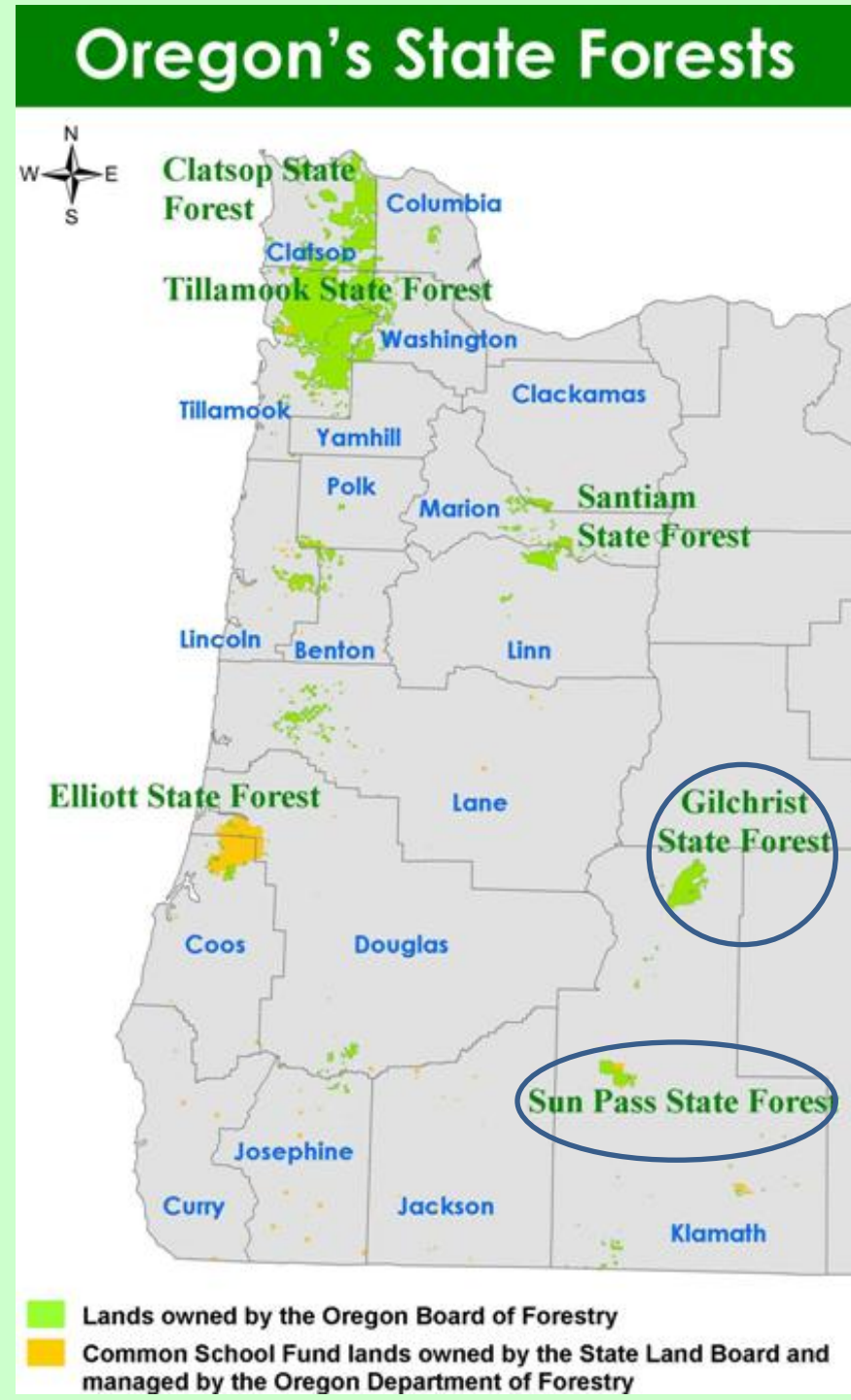
U.S. Forest Service

- Deschutes National Forest
 - 3 Ranger Districts, 1.6 million acres
- Fremont-Winema National Forest
 - 7 Ranger Districts, 2.3 million acres



Oregon Dept. of Forestry

- Sun Pass State Forest
 - 20,804 acres
- Gilchrist State Forest
 - 43,000 acres
 - 25,000 adjacent acres managed by ODF



Private Corporate Forest Owners having > 25,000 acres

- JWTR
 - 600,000 acres (since 2006)
- Cascade Timberlands (Fidelity)
 - 196,000 acres (since 2005)
- Collins Pine
 - 63,000 acres (since 1930s)
- Resource Land Holdings
 - 60,000 acres (since 2011)
- J Spear Ranch Co.
 - 36,000 acres (since the early 1950s)



Tribes

- Warm Springs Reservation
 - 640,000 acres
 - 256,000 acres commercial timberland
 - Estimated 1,100 residences (as of 2002)
- Former Klamath Tribes' reservation forest (part of Fremont-Winema NF)



THE KLAMATH TRIBES
KLAMATH - MODOC - YAHOO SKIN

1) What are the forest and fire management practices of large actors?





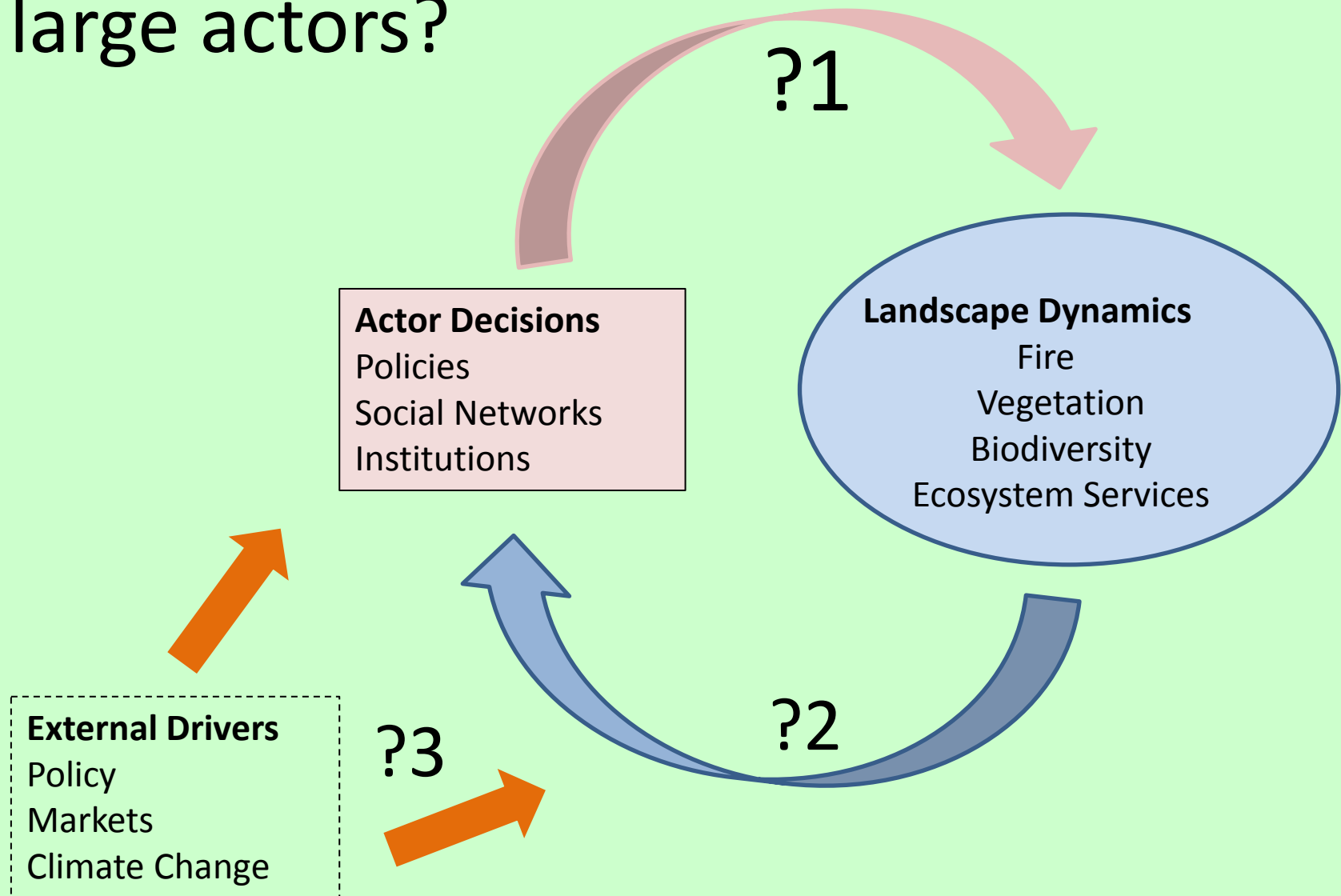
Timber Management

	FWNF	DNF	PC	ODF	WS
Thin from below	H	H	H	-	M
Overstory removal	-	-	H	L	L
Selective cut – single & group	-	-	H	H	L
Clearcut (shelterwood, seed tree)	-	L	L	L	H
Stand improvement	-	-	H	H	M/H
Salvage	L	M	H	L	M

Fire & fuels management

	FWNF	DNF	PC	ODF	WS
Full fire suppression	X	X	X	X	X
WUI priority	X	X	-	X	X
Pres. Fire	M	L	-	-	H
Burn slash/ piles	L	L	H	L	H
Mech. removal	H	H	H	H	M
By-product of timber man.	-	-	H	H	-
Fuel breaks	-	-	H	M	-

2) What drives decision-making by large actors?



Landscape dynamics

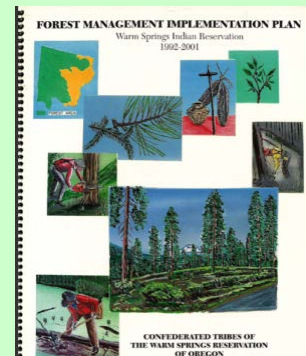
- Legacies of past management
 - Old plantations
 - Heavy harvesting of medium & big trees
- Perceived fire risk on neighboring lands
 - USFS & NPS perceived as threat by neighbors
- Fire history
 - Salvage
 - Low priority for fuels treatments



Policy drivers



- East side screens
 - No trees >21" dbh can be harvested without a forest plan amendment
- Northwest Forest Plan
- WS Integrated Resources Management Plan Process
 - Tribal Council approval-Natural Resources specialist proposal to ensure balanced management approach





Markets



- Disappearing markets causing one PC owner to liquidate timber
- Prices affect harvest levels and types by PC owners who must generate a fixed revenue
- Lack of biomass markets limits removal of non-merch and sub-merch material

3) What are the challenges & opportunities for increasing forest resilience to fire at the landscape scale on large ownerships?

- Need a **landscape** perspective—not easy





Challenges

- Different forest management objectives & practices
- Different approaches to fire risk reduction
- Potential loss of processing infrastructure
- Uncertain & insufficient chip & biomass markets



Challenges

- Different decision-making frameworks
- Limited experience w/cross-boundary treatments & ALM
- In-migration of new publics
- Public perception of fuels management/ social legacies of historic forest harvest

Commonalities



- Recognize the problem
- Desire to reduce fire risk
- Desire to protect forest assets
- Desire to maintain and build markets and infrastructure to make treatments economical
- Willingness to collaborate

Creating incentives and building capacity for collective action is a key strategy for reducing fire risk at the landscape scale



Make good science available

- Provides information needed to strategically plan effective forest restoration treatments at the landscape scale

FORESTS, PEOPLE, FIRE

INTERACTIONS, DYNAMICS AND ADAPTATION IN FIRE-PRONE LANDSCAPES OF THE EASTERN CASCADES OF OREGON

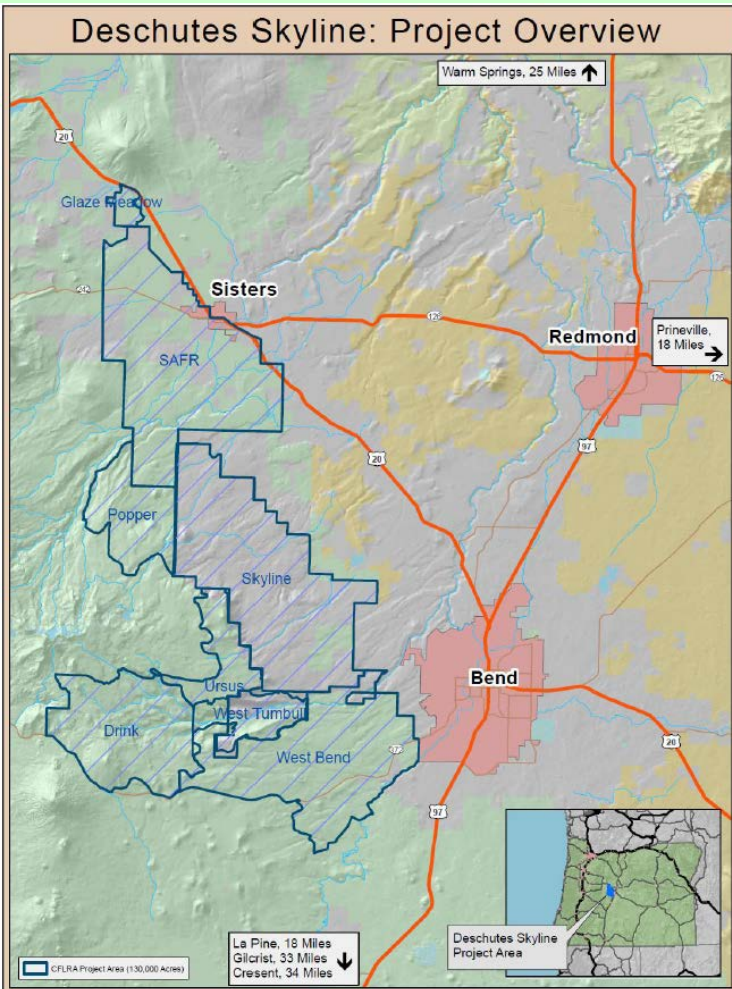


Build social networks & strengthen information flows

- Sharing information, ideas, advice
- Working partnerships
- Trust building



Support local institutions that emerge for collaborative landscape-scale restoration



- Collaborative Forest Landscape Restoration Program
- Prescribed Fire Councils
- Fire Learning Networks
- Informal

Support creative problem solving: Adapting to markets and funding through multi- stage hazardous fuels reduction projects

1) Mechanical Thin



2) Commercial logs and pulp



Address market barriers

- Develop diverse local markets for biomass, chips, logs
- Maintain and expand local wood processing infrastructure



Policies, education & outreach to address barriers to independent & collective action

- Federal
 - Internal bureaucratic processes
 - Public concerns about smoke
 - Insufficient resources
- Private corporate
 - Financial liability for escaped fire
 - Lack of financial assistance
 - Lack of personnel to monitor prescribed fire
- Tribal
 - Limited & decreasing funding
 - Public perceptions of fuels reduction projects



Thank you!

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