TIETON FOREST COLLABORATIVE – USING CONSERVATION ACTION PLANNING FOR COLLABORATIVE FIRE AND RESTORATION PLANNING

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INTRODUCTION

A large block of private commercial timber land held in checkerboard pattern within the Naches Ranger District of the Okanogan and Wenatchee National Forest was put up for sale. The Nature Conservancy (TNC), working with agency, tribal and other non-profit partners, optioned the 10,400-acre property and raised enough public funds to transfer it to the Washington State Department of Fish and Wildlife (WDFW). This solved the imminent threat of private development, but the challenge of multiple agency ownership and cross boundary management remained. There was an agreed upon need to collaborate to build a multi-organizational landscape scale framework to manage fire and other key natural processes, to allow them to resume their functional roles. TNC offered the CAP framework to help partners develop and realize shared objectives across the Tieton landscape.

Agencies, tribal and private groups working in Washington State's Tieton River landscape are successfully using Conservation Action Planning (CAP) as a framework to facilitate collaborative conservation, ecosystem restoration, and fire planning. CAP is an integrated process created by The Nature Conservancy (TNC) to help land managers identify, develop and prioritize conservation strategies, evaluate alternative actions, and measure the impact of their work (Low 2003, Parrish et al. 2003).

METHODS

A series of six one-day facilitated workshops were conducted during which the newly formed Tieton Forest Collaborative (TFC) progressed through the CAP process over nine months.

Collaborating organizations included: Washington Department of Fish and Wildlife (WDFW), Okanogan-Wenatchee National Forest and Naches Ranger District, Washington Department of Natural Resources (DNR), Yakima Nation, and The Nature Conservancy. Team members expertise ranged from fire and fuels, ecology, wildlife biology, forestry, and a CAP facilitator, all of whom where familiar with the biophysical and cultural landscape.



Figure 1. CAP participants.

The TFC first identified what it was they wanted to conserve, restore and manage. In CAP this is done by selecting a limited number of conservation focal targets. Focal targets range from disturbance regimes, ecological communities, and individual species to other significant natural, cultural or social resources. This is not meant to be a full laundry list of components of the

landscape that are valued, but a selection of key systems such that strategies directed towards their conservation will conserve coarse as well as fine filter components of a landscape. For each focal target, viability, or ecological health, was ranked by identifying key ecological attributes and indicators across categories of landscape context, condition, and size (Braun 2005). The intent is to evaluate if the system is "healthy", within an expected range of variation. The next step identified and ranked stresses and the sources of stress for each of the focal targets. Sources of stress reduce the viability of focal targets. As an example, many dry forests have an altered fire regime. The altered fire regime is identified as a stress to dry forests, while one source of stress is fire exclusion. Based on the ranking of these variables the team developed objectives and strategic actions to abate the sources of stress and improve the health of focal targets.

RESULTS AND DISCUSSION

The TFC agreed on five focal targets for the Tieton landscape: dry forests (ponderosa pine and Douglas-fir/grand-fir plant associations), headwater stream and riparian systems, cliff and talus, shrub-steppe ecotone and oak woodlands. Viability of each target was ranked based on key attributes and indicators resulting in a range from Fair to Good out of a range of Poor to Very Good. Key attributes for the Dry Forest target that are used to assess ecological health included fire return interval, stand structure distribution, minimum dynamic area and understory composition. A summary of sources of stresses across focal targets indicates Very High threat status for the Dry Forest target, High for Riparian and Shrub-steppe (Table 1). Based on these results, strategic objectives and actions were developed to alleviate sources of stresses on focal

Sources of Stresses Across Systems (Threats)	Dry forest	Headwater Stream and Riparian	Cliffs/Talus	Shrub- steppe Ecotone	Oak woodlands	Overall Threat Rank
Project-specific threats	1	2	3	4	5	
Ecologically Incompatible Resource Harvesting	Very High	High	-	-	-	High
Fire Exclusion	Very High	-	-	-	High	High
Recreational Home Development	Very High	-	-	-	-	High
Roads and Infrastructure	High	High	-	-	-	High
Human Caused Ignitions	Medium	-	-	High	-	Medium
Non-native Invasive Species	Medium	Medium	-	High	Medium	Medium
Over Grazing and/or Over Browsing	Medium	Medium	-	High	Medium	Medium
Recreational Activities	Medium	High	-	-	-	Medium
Fire Suppression Activities/tactics**	Medium	Low	-	-	-	Low
Threat Status for Targets and Site	Very High	High	Low	High	Medium	Very High *

Table 1 Summary of sources of stress across focal targets/systems and overall rank of threat.

*The Majority Override Rule is in effect. **Note not all lower ranked sources of stress are shown in this table.

targets. Altered fire regime was identified as a stress to the Dry Forest target, and fire exclusion was ranked as a Very High source of stress (Table 1). The TFC developed measurable strategic objectives and specific short and long term actions that they could agree on. Given that fire exclusion is a stress that can not eliminated, but can be manipulated, the TFC developed acceptable actions to reducing the effects of fire exclusion on Dry Forest viability (Table 2).

Table 2 Sample of objectives and action strategies developed to reduce source of stress on the Dry Forest focal target, with goal of increasing target viability.

#	Objectives and Strategic Actions (Excerpt)		
Objective	Within 10 years there is a measurable movement toward condition class 1 from condition		
	class 2 and 3 in dry forest in the core.		
Strategic action	Implement & expand existing prescribed fire & thinning projects across ownerships (WDFW,		
	WDNR, FS, and TNC) boundaries where it increases efficiency & meets ecological criteria.		
Action step #1	Reese Lolley & Jim Bailey work to expand Elderberry prescribed burns across FS and TNC		
	ownership. Document lessons learned in planning & implementing across ownerships.		
Strategic action	Coordinate within the TFC landscape context to allow stand-level treatments and restoration		
	projects to additively achieve landscape-level forest viability goals.		
Action step #1	Core team agrees upon data/variables, prioritization process and outcomes.		
Action step #2	Identify available data that can be used by partners to prioritize future dry forest restoration.		

SUMMARY AND CONCLUSIONS

As an outcome of collaboratively developing the Tieton CAP, participants recognize that they share common goals across the landscape and, by working together, can achieve more significant and durable outcomes than by working individually. Specific advantages recognized include:

- Shared understanding and objectives are based on common ecological analysis using the CAP approach,
- greater leverage to sufficiently support management actions,
- basis developed for cooperative agreements to carry out shared objectives,
- recreational, cultural and political needs required of each organization are better supported,
- greater effectiveness of managing fire based on ecological boundaries rather than ownership boundaries,
- basis for managing across administrative jurisdictions and ecological boundaries defined by strategic actions developed in the Tieton CAP to achieve specific desired future conditions formed in the CAP process.

While all collaborating partners recognize that missions and mandates of their respective organization differ, the CAP process provided a framework within which each of the partners was able to identify and agree on shared objectives for managing across the checkerboard landscape of the Tieton. The members of the collaborative signed a memorandum of understanding (MOU) which provides formal statement of mutual goals and partnership roles. This MOU, the foundation built through the CAP process, and the ability to revise components of the CAP as additional knowledge is gained will facilitate cross-boundary work and help make the group's collective vision a reality.

LITERATURE CITED

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