



# Manastash – Taneum Resilient Landscape Restoration Project & Coordinated Resilient Communities Project

2017 Tapash Stakeholders Meeting

Presented by: Reese Lolley, The Nature Conservancy,  
Director Forest Restoration and Fire  
[rlolley@tnc.org](mailto:rlolley@tnc.org)

Photo: Benj Drummond



1. “Ownership blind”  
Identify and resolve barriers, find common solutions.
2. Collectively identify values, threats, and actions to protect land manager and stakeholder values.
3. Increase pace & scale of whole landscape restoration and resiliency.

WHAT &  
WHY?





4. Integrate aquatic & terrestrial habitat restoration and management
5. Find efficiencies
6. Attract additional resources
7. Western Cohesive Wildland Fire Strategy
8. Be National Leaders

## WESTERN COHESIVE WILDLAND FIRE STRATEGY



Awbrey Butte Fire 2007, Bend, OR by Oregon Dept of Forestry

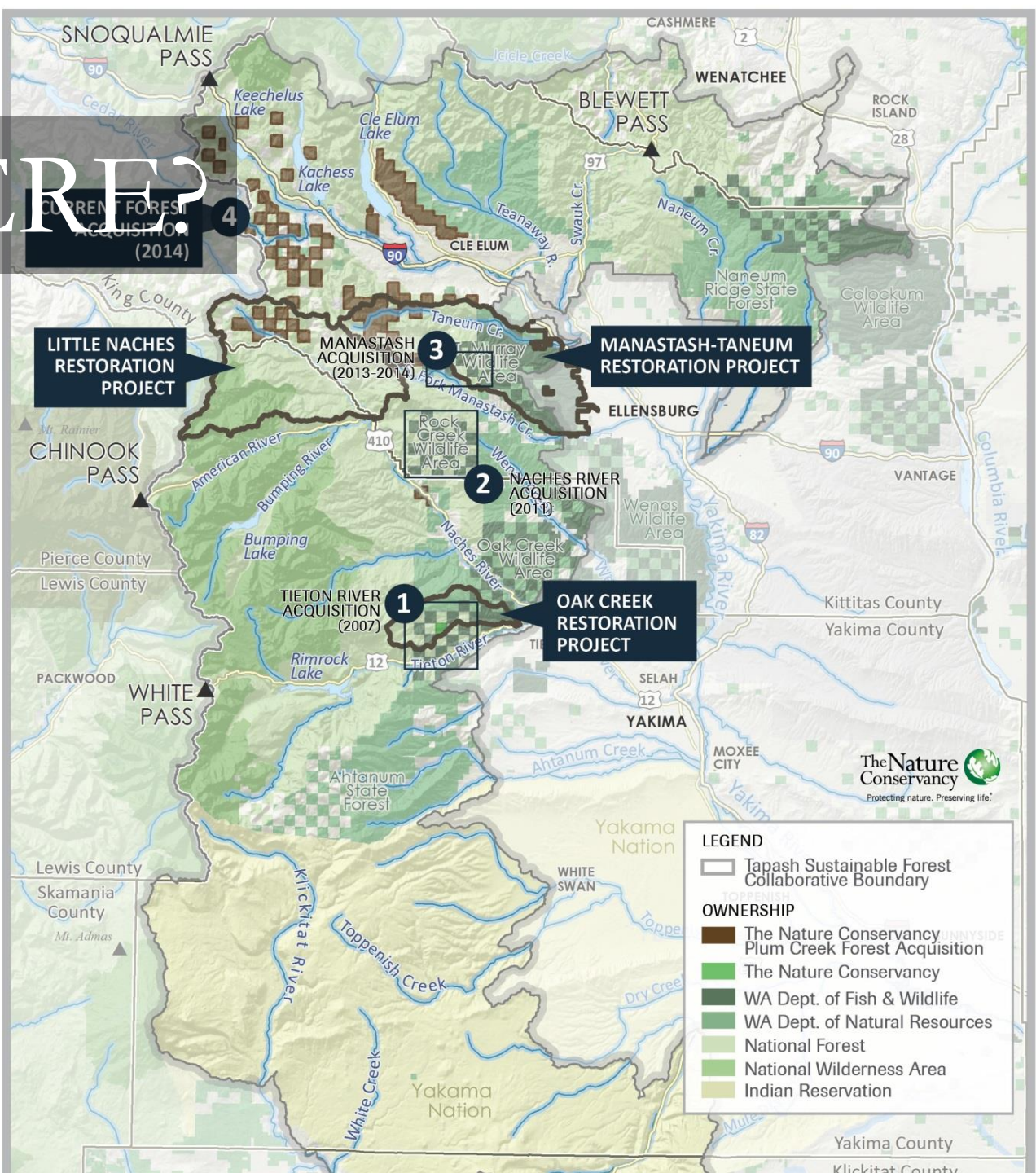
RESTORING RESILIENT LANDSCAPES

CREATING FIRE ADAPTED COMMUNITIES

IMPROVING WILDFIRE RESPONSE

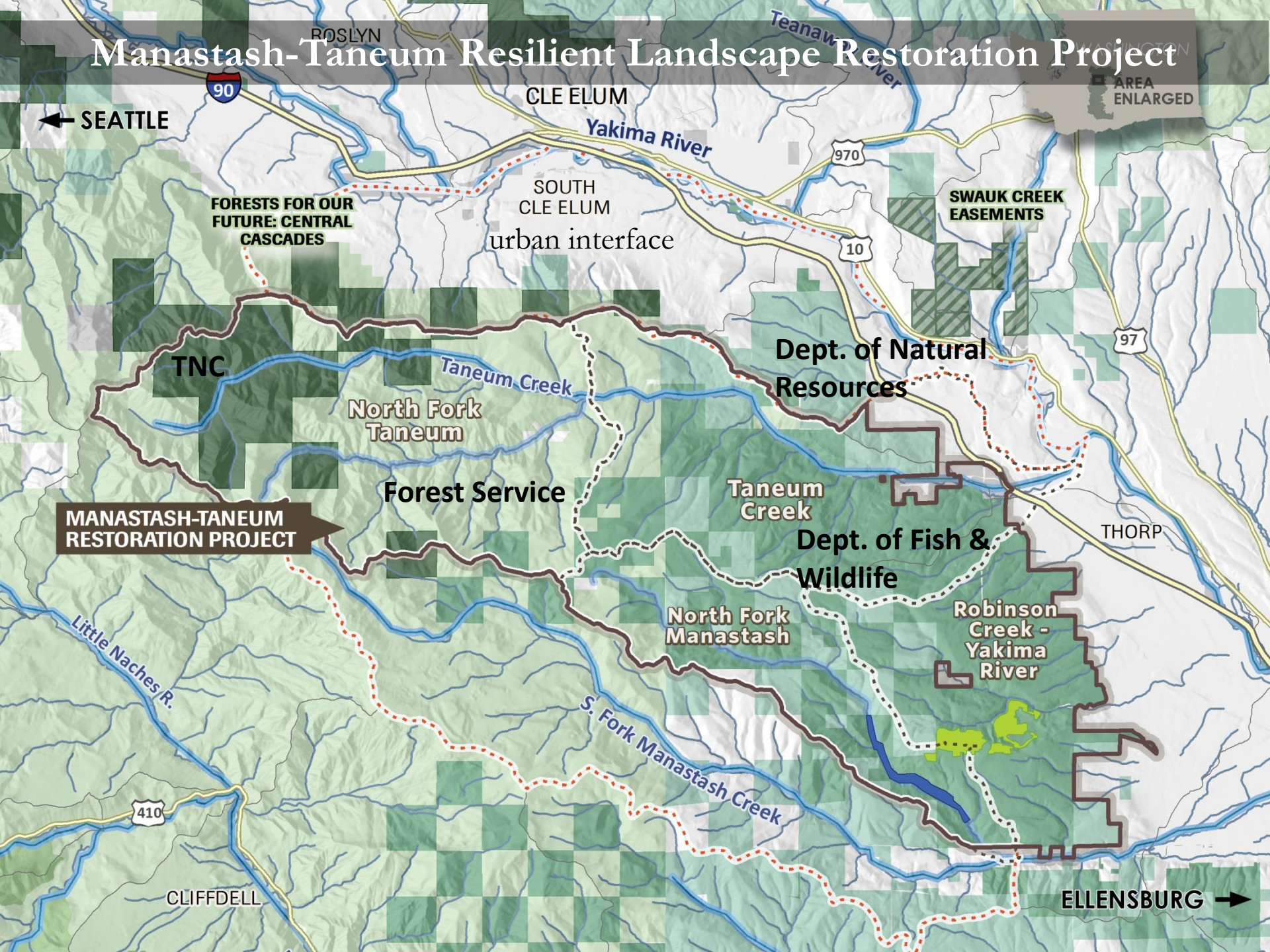


# WHERE?





# Manastash-Taneum Resilient Landscape Restoration Project





# WHO?

## Project Coordination Lead:

*Reese Lolley*

## Technical Team Leads ----->

*Ryan Hango & Bill Gaines*

## Land Management Team ----->

Non-landowner/non-regulatory partners and stakeholders:

- Mid-Columbia Fisheries Enhancement Group
- Conservation Northwest
- Yakima Basin Fish and Wildlife Recovery Board
- AFRC
- WA Resource & Conservation Development Council
- and others...

## Tapash Prioritized Project



Yakama Nation  
- Scott Nicolai  
- Steve Andringa



The Nature Conservancy



US Forest Service  
Okanagan-Wenatchee  
National Forest  
- Darren Goodding

USFWS  
Karl Halupka

NOAA  
Justin Yeager



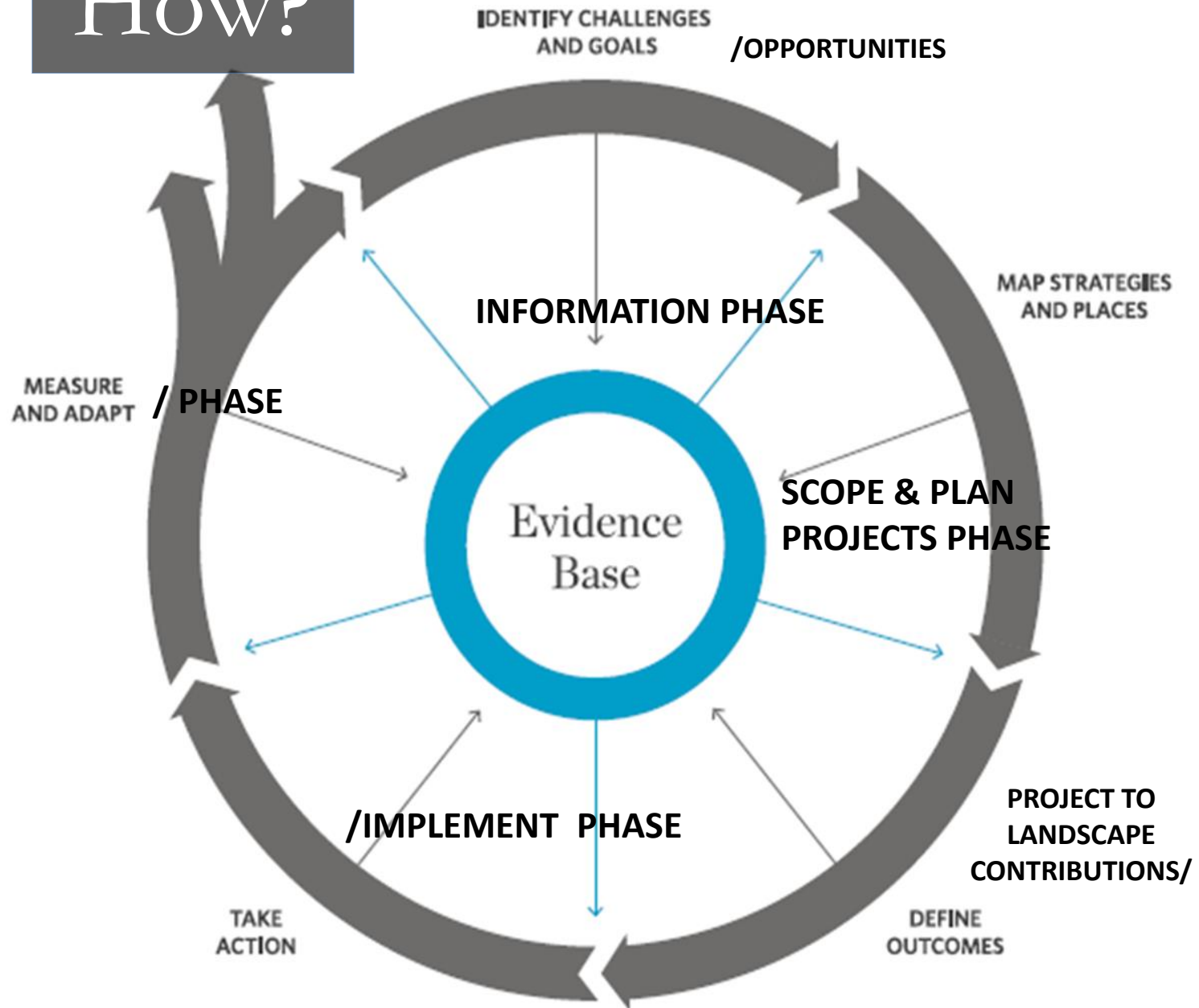
Washington Department  
of Fish and Wildlife  
- Melissa Babik  
- Rod Pfeifle



Washington State Department  
of Natural Resources  
- Larry Leach, Joe Smith



# How?





# INFORMATION/EVIDENCE BASE PHASE

Principles → Action

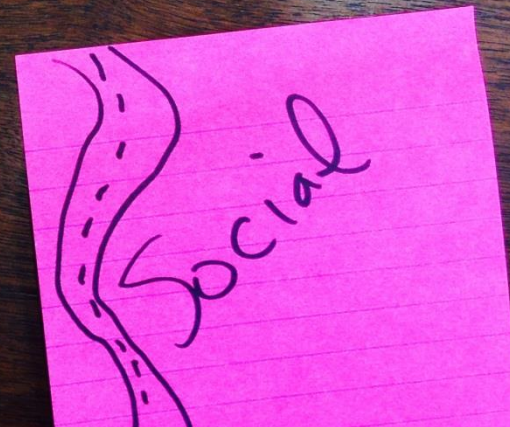
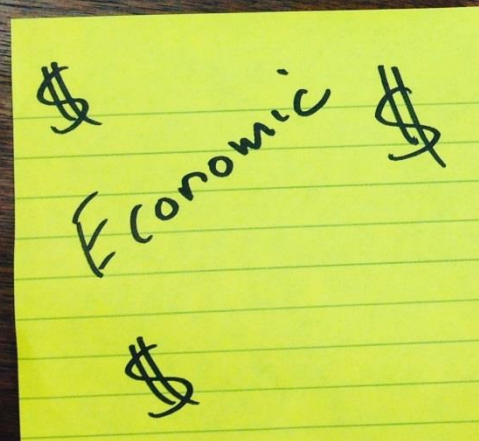
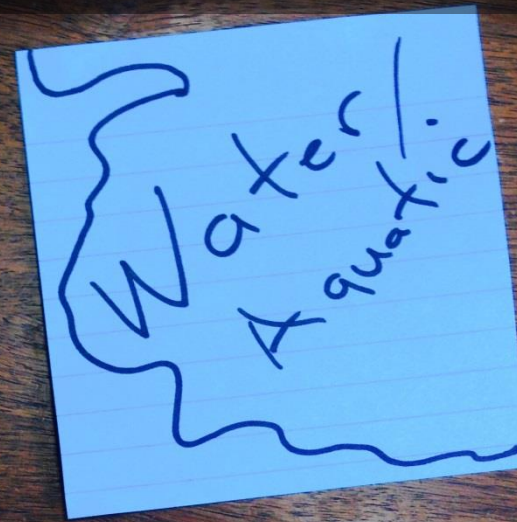


# Charter - Team structure and norms

Developing a shared vision across *landscape/watershed* by:

Sharing & understanding interests across ownerships

Developing forest and aquatic restoration evidence base





REVIEW ARTICLE

# Restoring fire-prone Inland Pacific landscapes: seven core principles

**Paul F. Hessburg · Derek J. Churchill · Andrew J. Larson · Ryan D. Haugo · Carol Miller · Thomas A. Spies · Malcolm P. North · Nicholas A. Povak · R. Travis Belote · Peter H. Singleton · William L. Gaines · Robert E. Keane · Gregory H. Aplet · Scott L. Stephens · Penelope Morgan · Peter A. Bisson · Bruce E. Rieman · R. Brion Salter · Gordon H. Reeves**

Bethel Ridge 1936





An aerial photograph of a vast mountain landscape. In the foreground, rolling hills and valleys are covered in dense green forests. The terrain is rugged, with numerous ridges and gullies. In the far distance, a prominent mountain peak is visible, its upper reaches covered in snow and partially shrouded in a light mist or haze. The sky is a clear, pale blue. The overall scene conveys a sense of scale and natural beauty.

1. Multiple-Scales

2. Topography as a guide

3. Disturbance process and vegetation patterns

4. Patch size distributions

5. Tree patterns within patches

6. Large/old trees and snags/logs

7. Work across ownership / management boundaries





Where, how much, what kinds of restoration  
and active management?



Terrestrial  
Landscape  
Evaluation

Aquatic  
Landscape  
Evaluation

Terr. Landscape  
Rx

Aquatic  
Landscape Rx

Integrated  
Project Pipeline



# Terrestrial Landscape Evaluation

- Vegetation
  - Structure, composition
- Wildlife Habitat
  - White headed woodpecker, goshawk, marten, northern spotted owl
- Disturbances
  - Fire and insect hazard



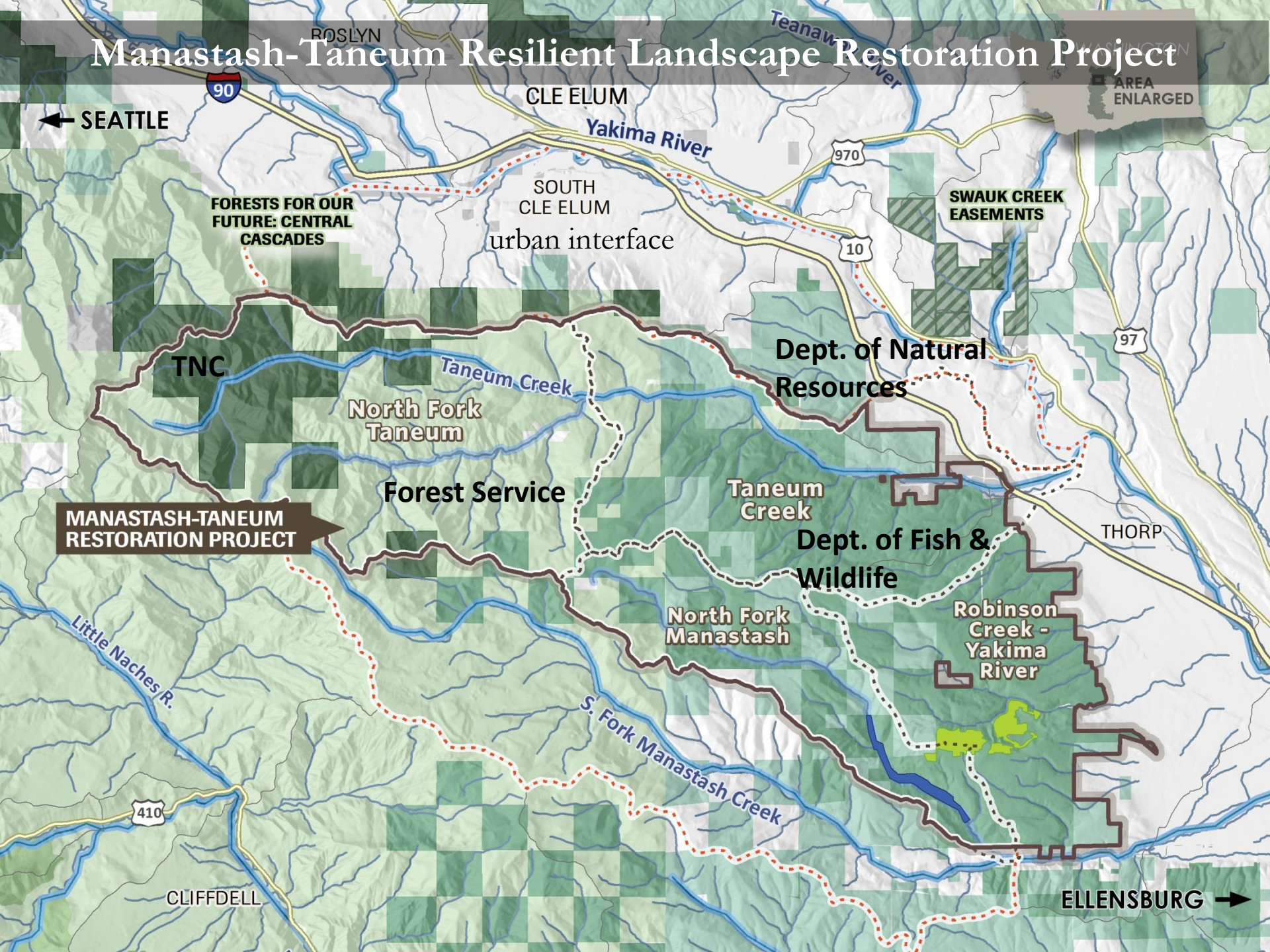


# Terrestrial Landscape Evaluation

Historic Range of Variation (HRV)  
&  
Future Range of Variation (FRV)



# Manastash-Taneum Resilient Landscape Restoration Project

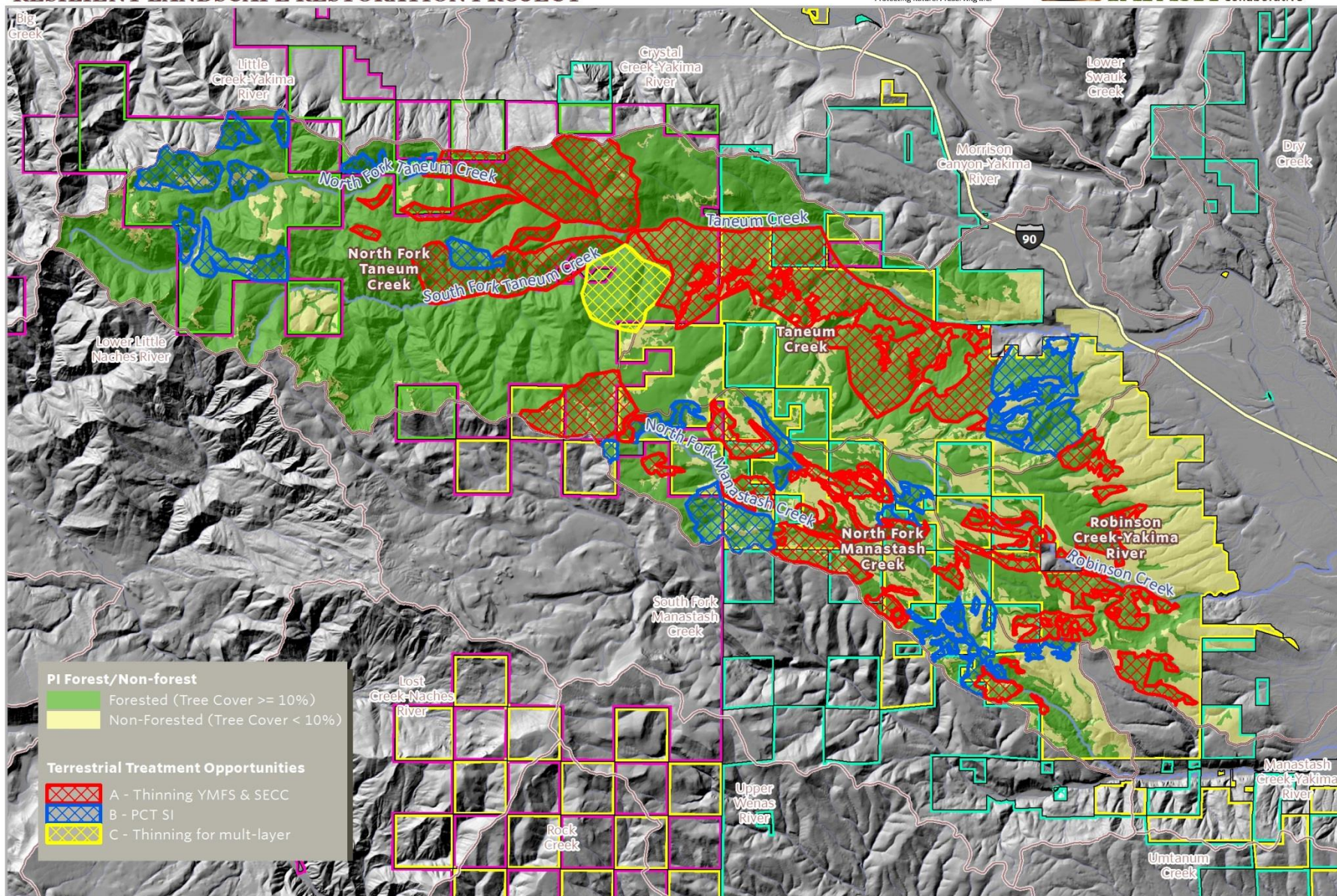




# MANASTASH-TANEUM RESILIENT LANDSCAPE RESTORATION PROJECT

The Nature Conservancy  
Protecting nature. Preserving life.

**TAPASH** Sustainable Forest Collaborative







Field Recon – Refine Landscape RX





# Landscape Rx – All Watersheds

Pre-Commercial Thinning: ~5,000 ac.

Variable Density Thinning: ~13,000 ac.

Aquatic Road Stream Interaction: Restoration  
Opportunities Identified

Yakama Nation – Identified floodplain restoration needs



## Manastash-Taneum Resilient Landscapes Project: Landscape Evaluations and Prescriptions




Ryan Haugo<sup>1</sup>, William Gaines<sup>2</sup>, James Begley<sup>2</sup>, James Robertson<sup>1</sup>,  
Derek Churchill<sup>3</sup>, James Dickinson<sup>4</sup>, Reese Lolley<sup>1</sup>, Paul Hessburg<sup>5</sup>,

March 2016



<sup>1</sup>The Nature Conservancy, Seattle, WA, <sup>2</sup>Washington Conservation Science Institute, Wenatchee, WA,  
<sup>3</sup>University of Washington, Seattle, WA, <sup>4</sup>US Forest Service Okanogan-Wenatchee National Forest,  
Wenatchee WA, <sup>5</sup>US Forest Service Pacific Northwest Research Station, Wenatchee, WA



A landscape photograph showing a mix of green and brown trees in a mountainous area, with a semi-transparent text box overlaid. The foreground is a cleared, rocky slope with some sparse vegetation and fallen logs. The middle ground is filled with a dense forest of tall, thin trees, some of which are brown and dead, while others are green. The background shows rolling hills and mountains under a clear blue sky.

Set evidence base for “whole landscape”  
restoration & coordinated treatment across  
ownerships.



What actions can each owner contribute to whole watershed / landscape restoration based Agency/ownership objectives? What coordination will accelerate shared goals and deliver outcomes?



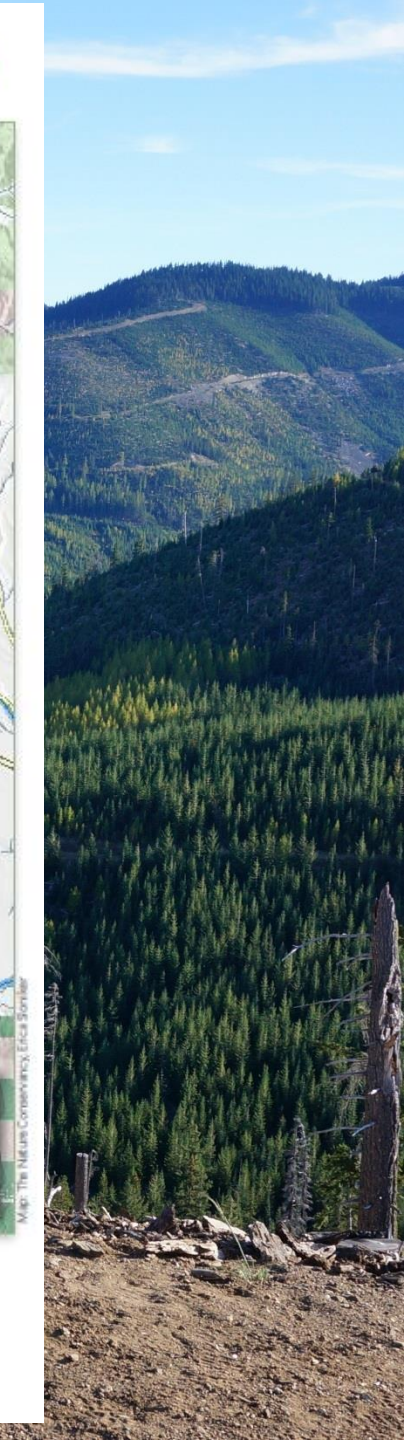
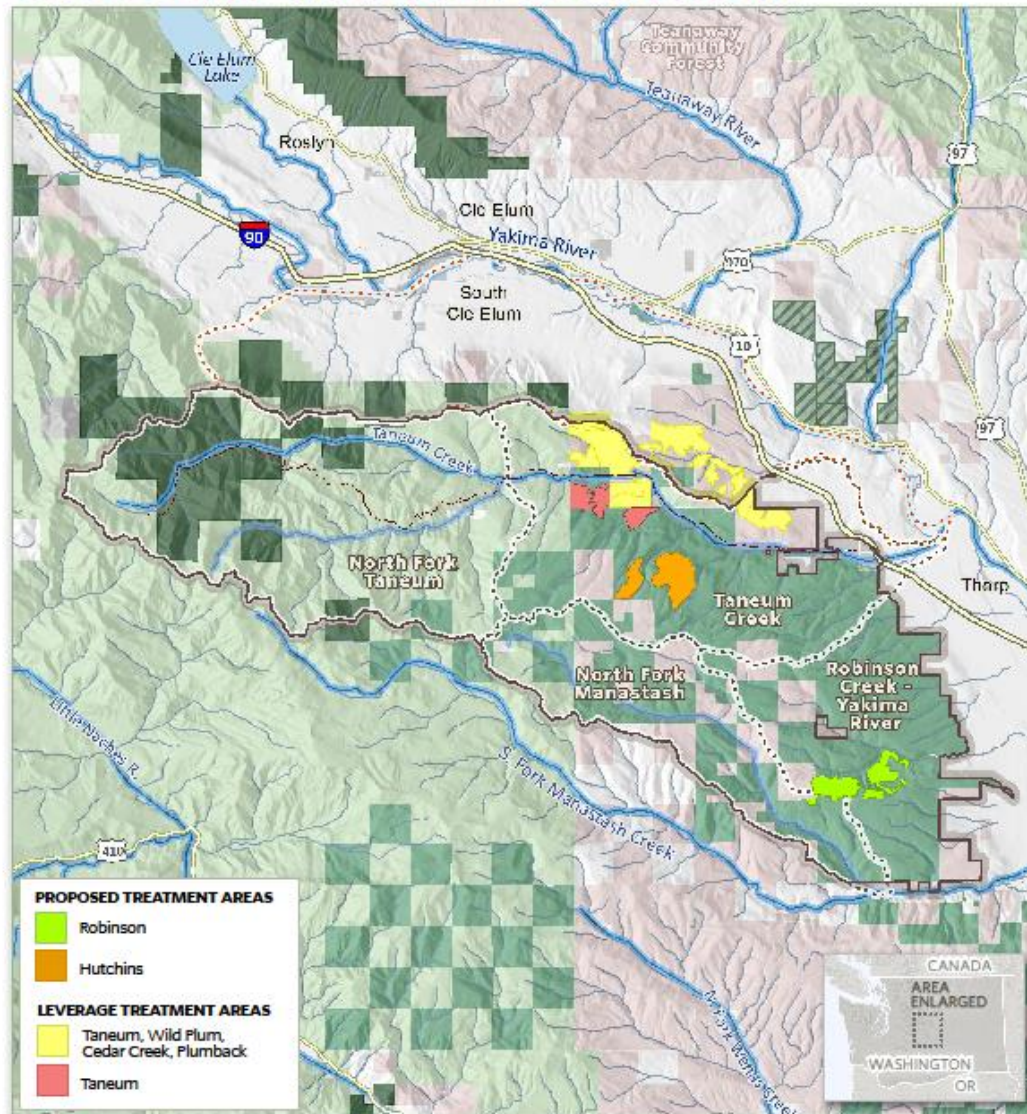


# SCOPE, PLAN, FUND PROJECTS PHASE

Title	Source	Admin.	Submitted	Funded
LT Murray Forest Habitat and Aquatics Enhancement #14-1355	RCO-WWRP (State)	DFW	2014	\$375,000
Manastash Taneum Resilient Landscape Restoration Project	DNR Landscape Scale Restoration, Western Competitive Grant (Fed)	TNC	2016	\$300,000
All Lands, All Hands: Building Resilient Landscapes and Fire Adapted Communities in Washington's East Cascades	Joint Chefs - NRCS/Forest Service (Fed.)	FS/NRCS	2016	FS \$1.468m; \$580,000 NRCS
All Lands, All Hands: Building Resilient Landscapes and Fire Adapted Communities in Washington's East Cascades	Joint Chefs - NRCS/Forest Service (Fed.)	FS/NRCS	2017	FS \$1.6m; \$665,000 NRCS; \$1.225m S&P
Forest and Aquatic Floodplain Restoration	BPA (Private)	Yakama	2017	\$500,000
DNR RFP Funding Request	State Legislative Request	DNR	2017	?\$600,000



# LANDSCAPE SCALE RESTORATION PROPOSAL - MANASTASH TANEUM







[WashingtonNature.org](http://WashingtonNature.org)

[Tapash.org](http://Tapash.org)

## PROJECT STATUS AND RECENT ACCOMPLISHMENTS

In fiscal year 2016, an array of treatments were completed by the Tapash Collaborative and partners in order to improve forest health and aquatic conditions, including:

- **5 acres floodplain improvement** for Taneum Creek Road 3300 realignment (USFS)
- **Fish passage improvements** including removal of fish blockages, fence removal, flood debris repositioning (DNR, Yakama and WDFW)
- **0.75 miles in-stream wood replenishment** completed (WDFW lands)
- **73,000 trees planted** on 550 post-burn acres (TNC)
- **15 acres non-commercial thinning** in uplands adjacent to streams (Yakama Nation/WDFW)
- **573 acres commercial timber harvest** (DNR)
- **1,243 acres of Commercial Harvest** Pre-Sale Layout (WDFW)
- **6 miles shaded fuel break**, contract awarded for work in 2017 (DNR)
- **17 acres of land purchased** along Taneum Creek floodplain (WDFW)
- **181 acres layout** for 2017 pre-commercial thin (WDFW)
- **Funding Awarded** by Washington Wildlife and Recreation Program for 950 acres of forest thinning, and helicopter placement of large wood for floodplain restoration, North Fork Manastash Creek (WDFW/TNC/Yakama Nation)
- **Adjacent greater Cle Elum Fire Adapted Communities kickoff meeting** of 8 local organizations to discuss workplan for reducing community wildland fire risk

## TAPASH PARTNERS:





# How?

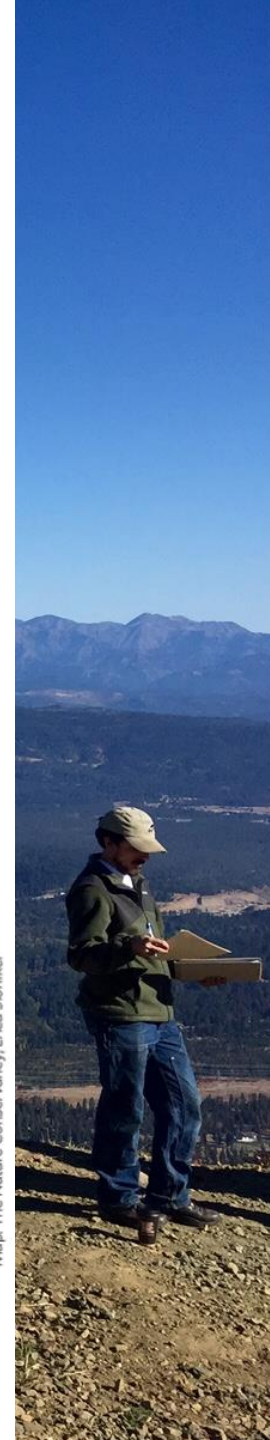
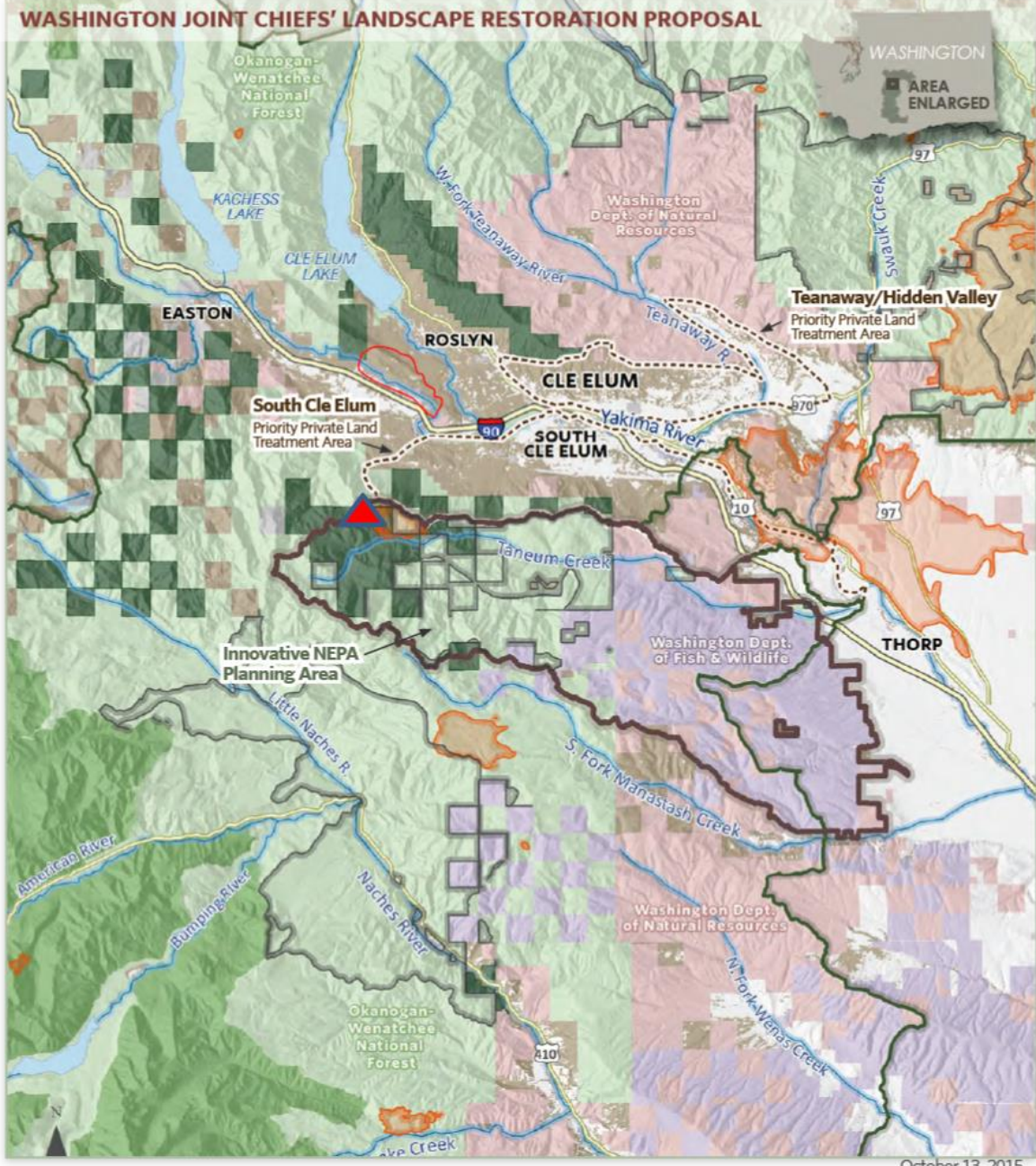




# Coordinated Resilient Communities Project

- Cle Elum Ranger District
- Kittitas County Conservation District
- Kittitas Fire District Seven
- Natural Resource Conservation Service
- Nature Conservancy
- Wa. Department of Natural Resources/  
Private Lands Assistance
- Wa. Dry Forest Fire Learning Network
- Wa. Fire Adapted Communities Learning  
Network
- Wa. Resource Conservation and Development  
Council



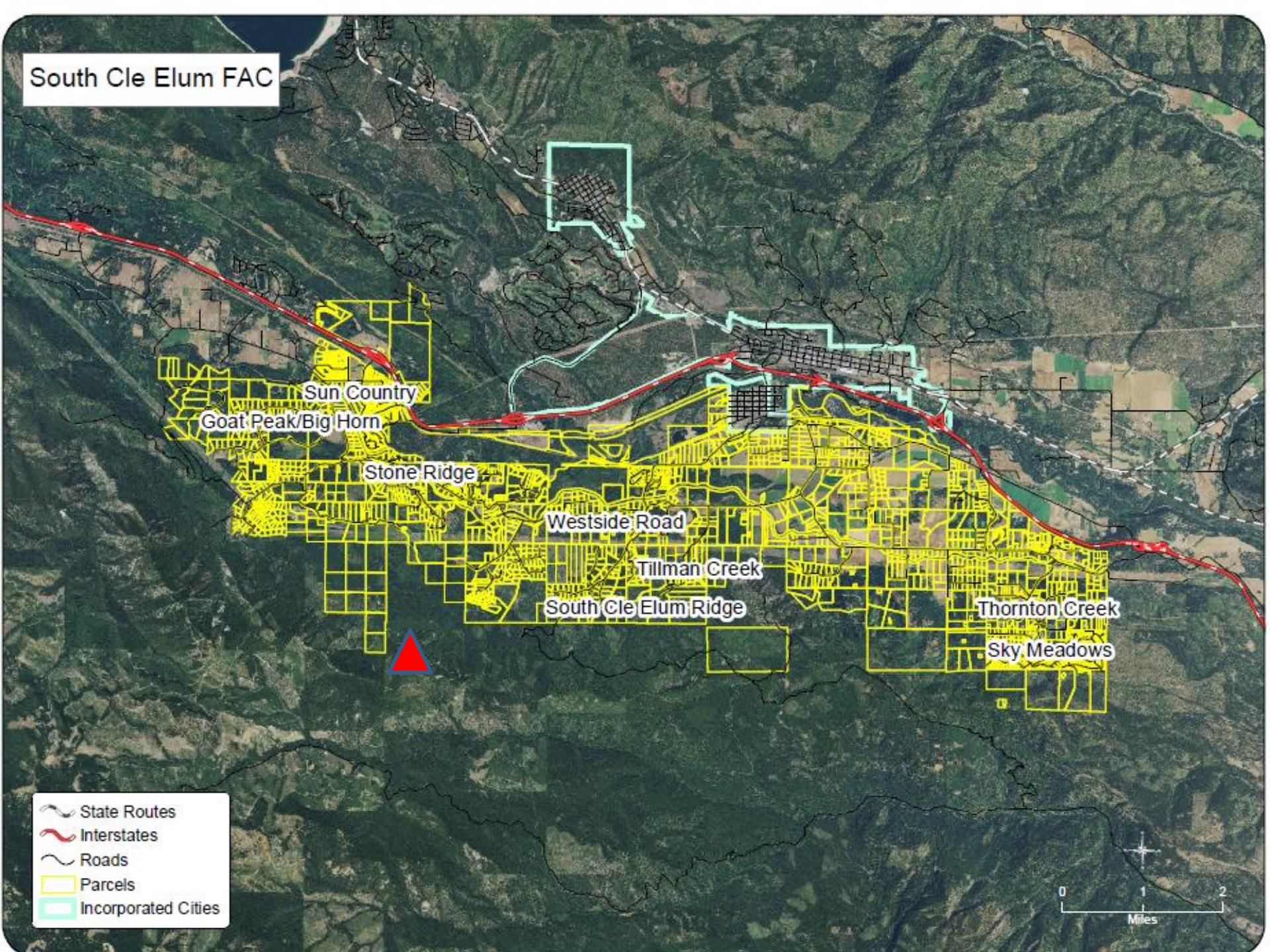








# South Cle Elum FAC



- State Routes
- Interstates
- Roads
- Parcels
- Incorporated Cities





South Cle Elum FAC

Goat P

reek  
ows

- State Routes
- Interstates
- Roads
- Parcels
- Incorporated Cities

# FIRE ADAPTED COMMUNITIES

*of Kittitas County*



PREPARE FOR WILDFIRE • PREPARE FOR WILDFIRE • PREPARE FOR WILDFIRE • PREPARE FOR WILDFIRE



## WHAT DOES IT MEAN TO BE FIRE ADAPTED?

A fire adapted community accepts fire as part of the natural landscape. The community understands its fire risk, and takes action **before** a wildfire to minimize harm to residents, homes, businesses, parks, utilities, and other community assets. These collective actions empower all residents to be safer in their environment. To help prepare your community, consider **your role** in making it fire adapted.

1 2  
Miles



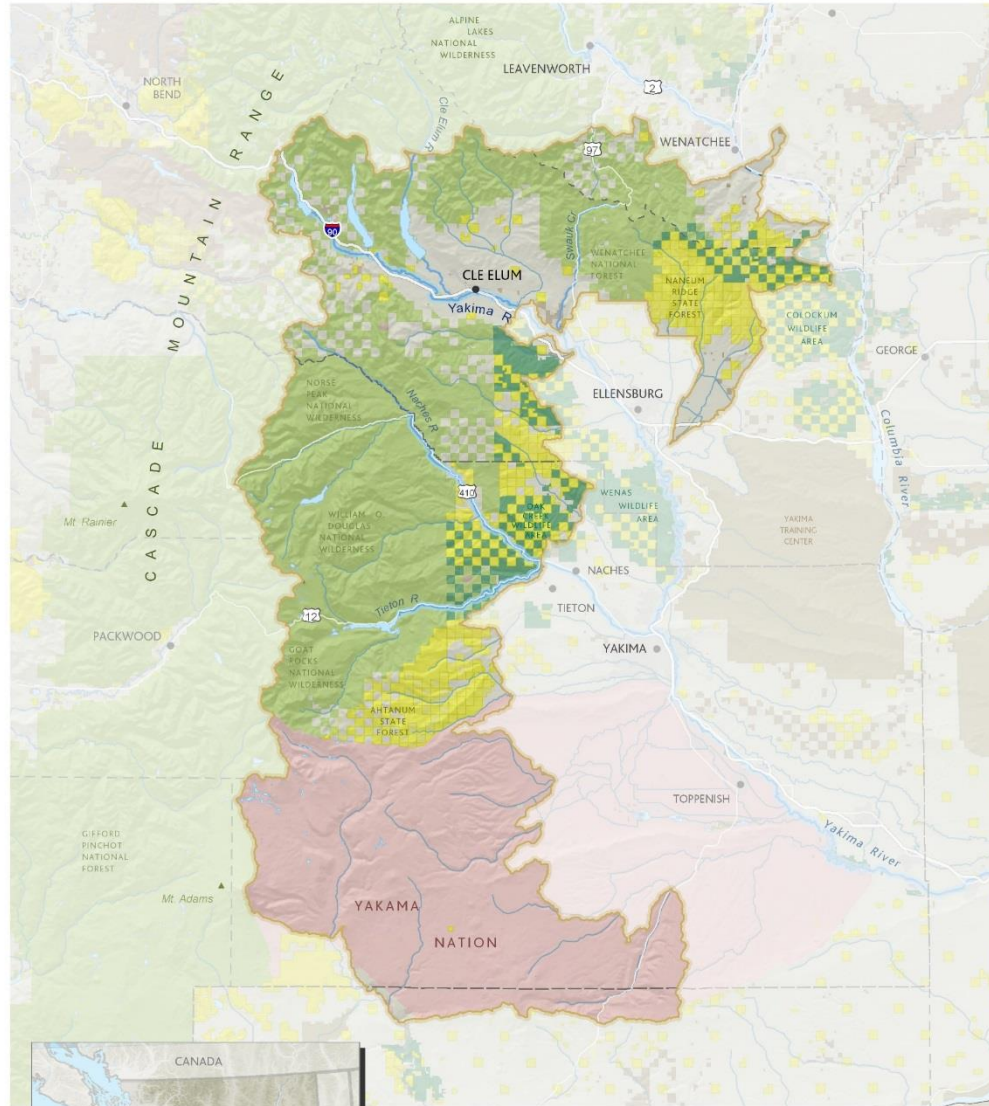


Discussion



# Tapash Sustainable Forest Collaborative

East Cascades, Eastern Washington



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December, 2010

Map by: Erica Simek  
The Nature Conservancy  
Washington Chapter  
1917 1st Avenue  
Seattle, WA 98101  
natam.org/washington

- Tapash Sustainable Forest Collaborative Boundary
- National Park, Forest, or Wilderness Area
- WA Department of Fish and Wildlife
- WA Department of Natural Resources
- Tribal Land
- Other Public or Protected Lands
- Other Private Land





Tapash ICO Workshop





# Stand Level Prescriptions

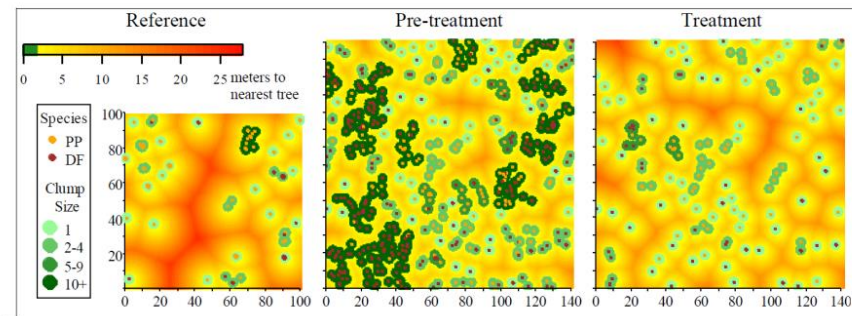




## The ICO Approach to Quantifying and Restoring Forest Spatial Pattern

### Implementation Guide

Version 2.0. November 2013





# Aquatic Landscape Evaluation

1. Road & Stream Data Rectification
2. Map Floodplains
3. Intrinsic potential habitat (steelhead)
4. Assess – Road Stream Interactions
5. Cold Water Refugia
6. Field Review
7. Restoration Opportunities





United States  
Department of  
Agriculture

Forest Service

Pacific  
Northwest  
Region



# The Okanogan-Wenatchee National Forest Restoration Strategy: adaptive ecosystem management to restore landscape resiliency

**2012 Version**

**Okanogan-Wenatchee National Forest**

**November 2012**





	Timeline	Winter/ Spring 14	Summer /Fall 14	2015	2016	2017
	Team Formation for Stages	xxxxxxxx	xxxxxxx			
	Funding Solicitation	xxxxxxxx	xxxxxxx xxx	xxxxxxx	xxxxxxx	xxxxxxx
	1. Information/Evidence Base Phase	xxxxxxxx				
	- Aerial Photo Interpretation - Attribute ID GIS layers	xxxx	xxxx			
	- Verification		xxxx	xxxx	xxxx	xxxx
	2. Scope, Fund, Plan Projects - Coordination		xxxxxxx x	xxxxxxx	xxxxxxx	xxxxxxx
	4. Implementation		xx	xxxxxxxxxxx	xxxxxx	xxxxxx
	5. Implementation Monitoring			xx	xxxxxxx	xxxxxxx