

Forest Management Program Update Winter 2020



Washington Department of
FISH and WILDLIFE

Richard Tveten
Forest Management Team Lead, Lands Division
Wildlife Program

Mission: Preserve, protect and perpetuate forests as fish and wildlife habitat, while providing sustainable fish and wildlife recreational and commercial opportunities.

Goals

- Maintain or improve ecological integrity.
- Restore priority species habitat.
- Reduce risk (wildfire, insects, and disease).

Approaches

- Thinning
 - Non-commercial
 - Commercial
- Prescribed fire
- Fuels breaks
- Planting



Largest Issue: Counteracting the Effects of Prolonged Fire Suppression



Currently 3% - should be 40-70%

The Dry Forest Fire Deficit

- Pre-modern era: Wildfires burned 11%/year on average
 - Most fires mild and maintained patchy, resilient matrices.
- 2014-present: Wildfires burned 2%/year on average
 - Most in two uncharacteristically intense megafires.
 - Some restorative, but often not
- 2019
 - Wildfires - <1%
 - Thinning - 3%
 - Prescribed fire – about 1% (in thinned areas)

Forest Health is about balance

Having 5% (historic average) of this is “healthy”
on a landscape scale for ponderosa pine



35% (current average) is not and puts
everything else at risk



Ponderosa Pine Woodland and Savanna



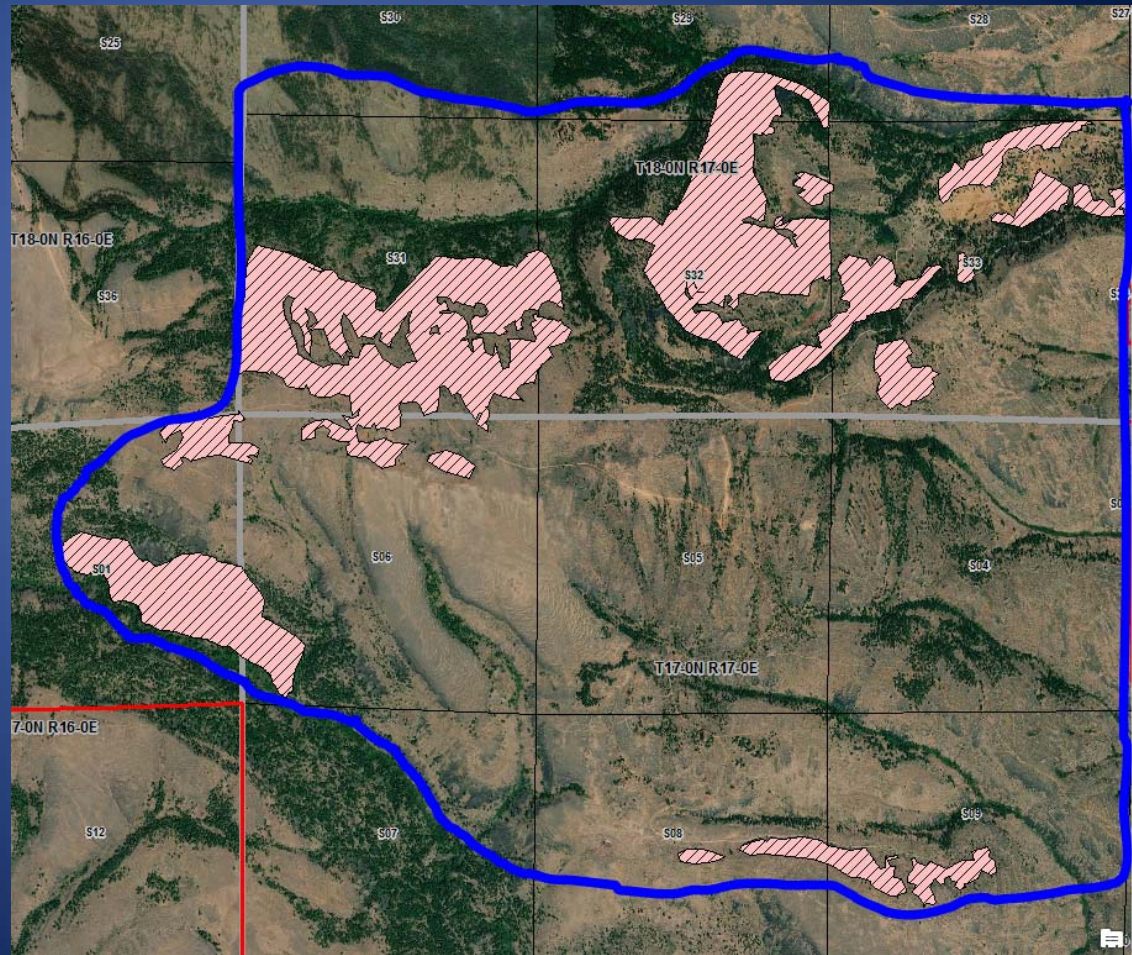
Current vs desired future
Conditions

Early seral	15% - 10%
Mid open	19% - 25-35%
Mid closed	35% - 5%
Late open	16% - 40-45%
Late Closed	15% - 5%

Forest Restoration = Creating Diverse, Resilient Mosaics

This 820 acre project restored a more healthy balance across 2,700 acres.

In order to manage for a wide variety of priority species, we need to maintain diverse, resilient mosaics rather than let altered fire regimes or insect pandemics dictate future conditions.



Secondary Issue: Fixing Plantations



We have a Great Team of Foresters

- Ellensburg: Rod Pfeifle and Brian Mize
- Clarkston: Sara Ashiglar
- Oak Creek: Benjamin Hartmann

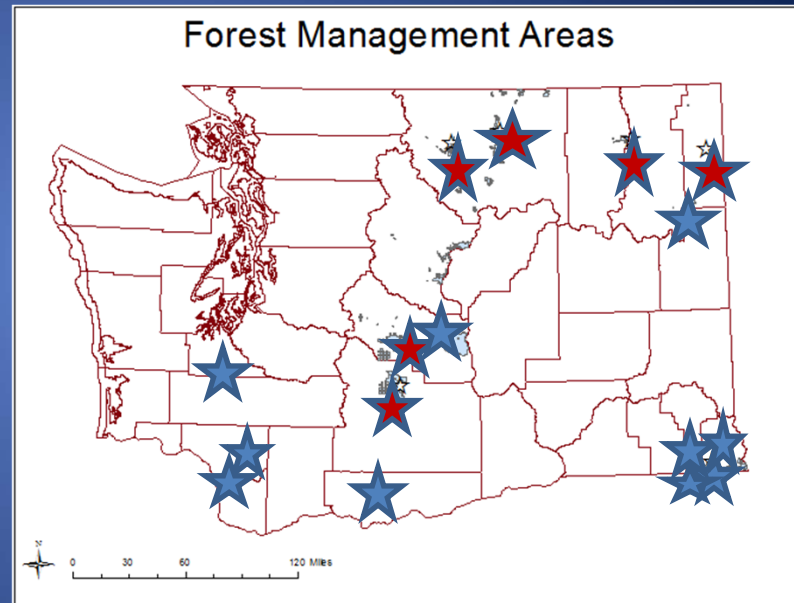
Thinning Accomplishments Since June, 2014

Thinned 12,120 acres on
16 Wildlife Area Units

- 52% pre-commercial
- 48% commercial

Fuel Reduction (166,000 tons)

- Average 13 tons/acre
- 86% hauled away to make
lumber or paper
- 12% burned in prescribed fires
- 2% burned in piles



Visualizing Big Numbers

- 12,120 Acres = A football field extending from Seattle to Sacramento.
- Commercial thinning (5,779 acres) wood volume
 - 25.6 million board feet
 - 5,300 log truck loads
 - 0.9 truck loads per acre (Comparison clear cut = 6-10/acres)
 - 70 mile line of log trucks bumper to bumper (Seattle to Easton)

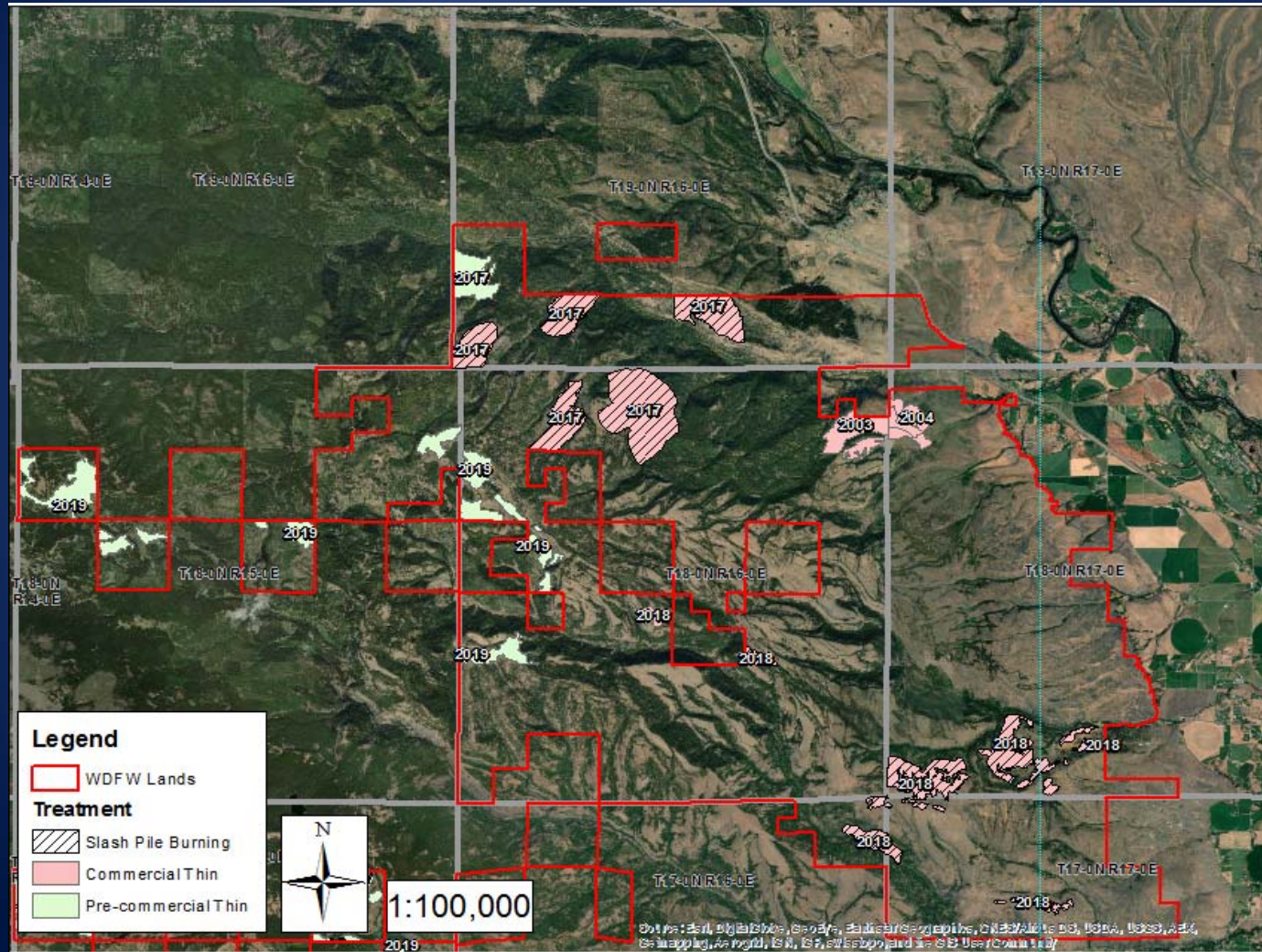
Context for Accomplishments

- WDFW has thinned 8% of its dry forests in 5 1/2 years
- Nearly 11% of WDFW forests burned in the same time period.
- The pace of treatments has tripled to about 5,100 acres in 2019.
 - The increase is partially due to funding for non-commercial thinning
 - The rate of treatment may drop back to about 3,000 acres/year when we run out of areas that can be non-commercially thinned.
- Landscape-scale evaluations: WDFW still needs to treat 25,000-40,000 acres.
- At 3,000 acres/year we can transition to maintenance mode in 8-14 years
- Confounding factors
 - More trees always keep growing
 - Acquisitions usually include degraded forests
 - Wildfires can change everything

Visual tour of everything completed since June 2014

LT Murray Wildlife Area (Kittitas County)

Thinned - 3,777 acres, Rx fire - 237 acres



November 2019: A 600-acre non-commercial thinning project on the LT Murray Wildlife Area near Ellensburg.

Untreated



Treated



September 2019: A 956-acre non-commercial thinning project on the LT Murray Wildlife Area near Ellensburg.

Untreated



Treated



Desired future condition



October 2018: An 820-acre commercial thinning project on the LT Murray Wildlife Area near Ellensburg.

Untreated



Treated



Desired future condition



October 2017: A 439-acre commercial thinning project on the LT Murray Wildlife Area near Ellensburg.

Untreated



Treated



Desired future condition



October 2017: An 805-acre commercial thinning project on the LT Murray Wildlife Area near Ellensburg.

Untreated



Treated



Desired future condition



June 2017: A 188-acre commercial thinning project on the LT Murray Wildlife Area Unit near Ellensburg.

Untreated



Treated

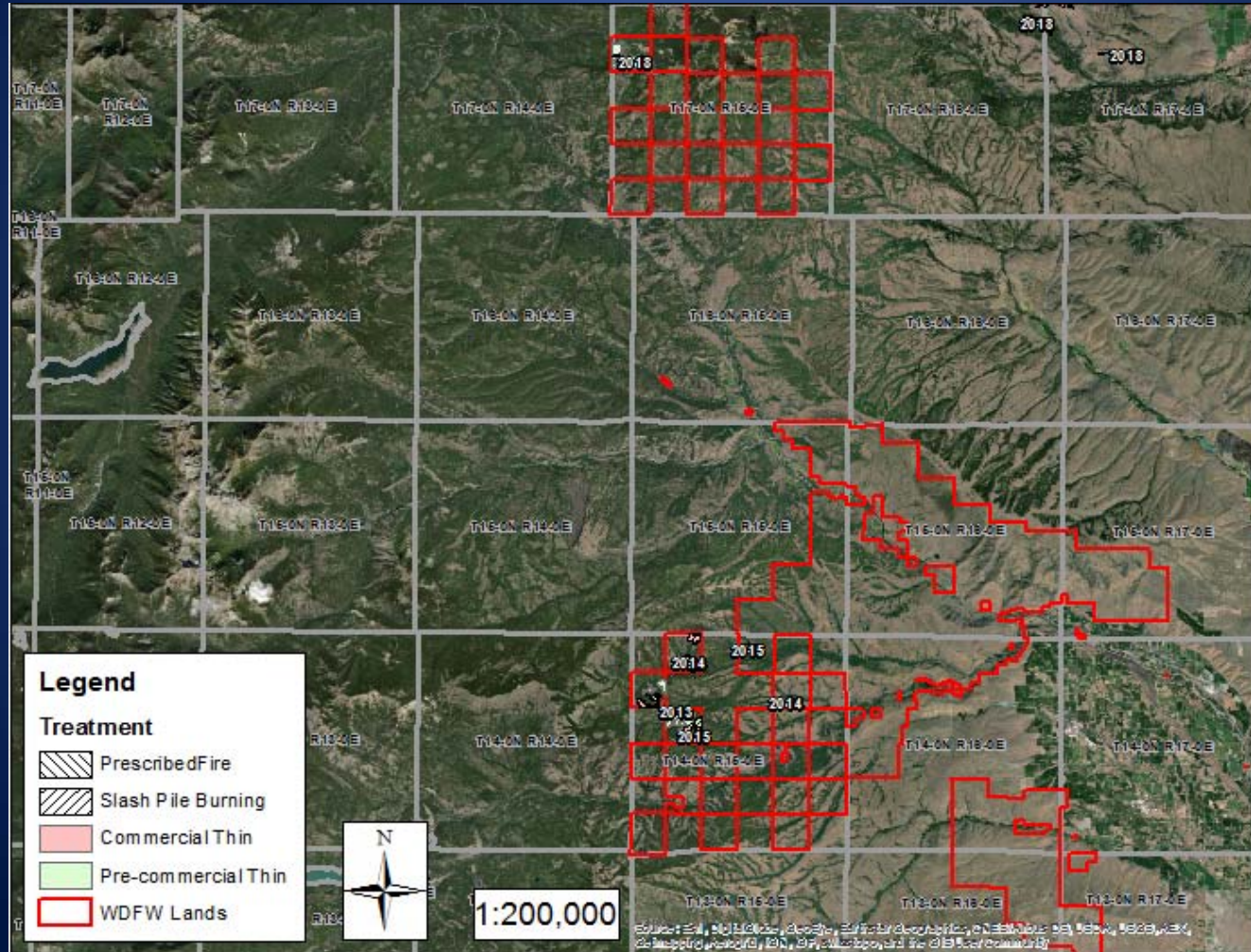


Desired future condition



Oak Creek (Kittitas County)

Thinned - 3,129 acres, Rx fire – 270 acres



June 2019: Two non-commercial thinning projects (903 acres) the Oak Creek Wildlife Area near Naches.

Untreated



Treated



Desired future condition



November 2015: A 447-acre commercial thinning project on the Oak Creek Wildlife Area near Naches.

Untreated



Treated



Desired future condition



2014: A 1,200-acre pre-commercial thinning project on the Oak Creek Wildlife Area near Naches.

Untreated

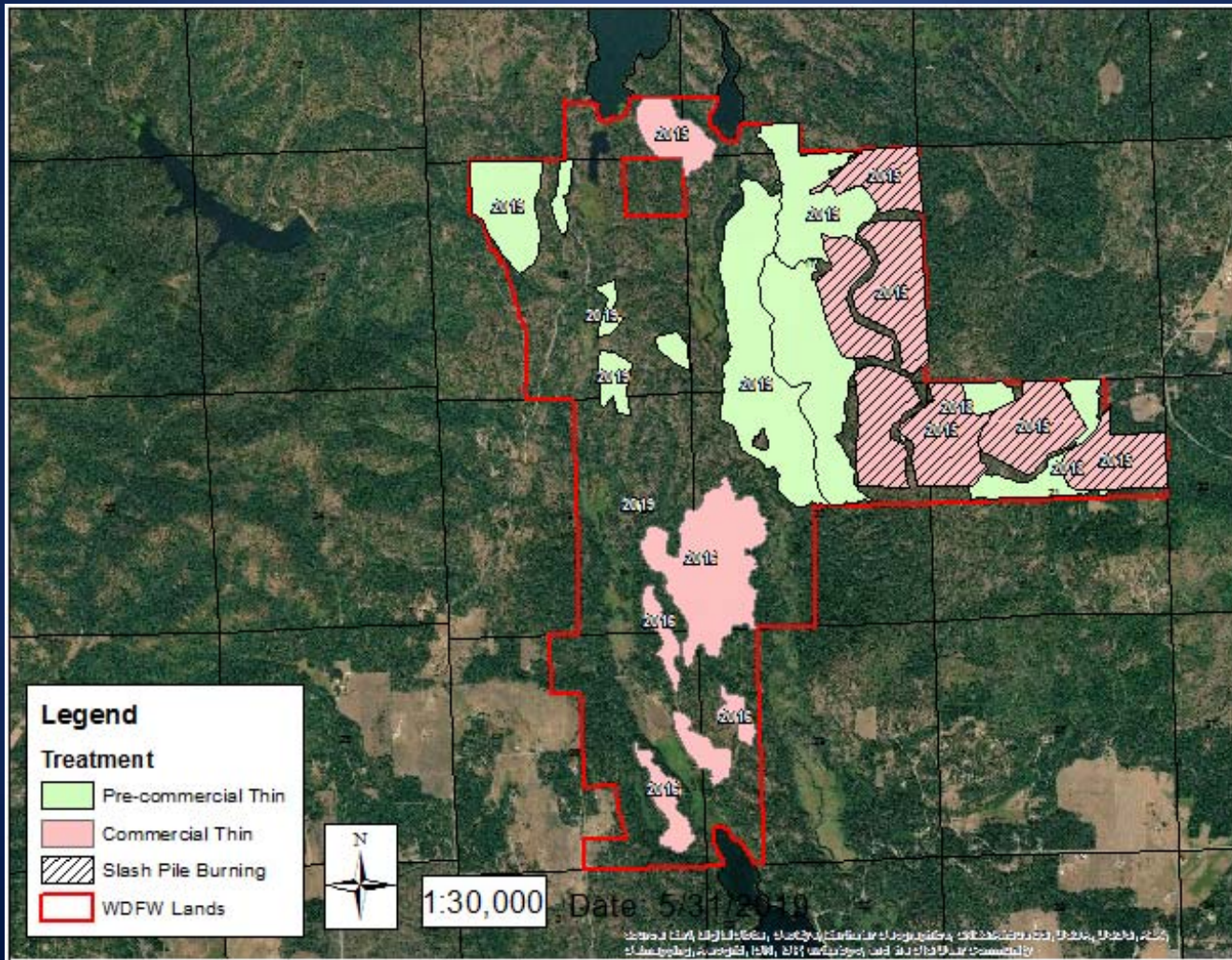


Treated



Rustlers Gulch (Pend Oreille County)

Thinned - 1,505 acres



June 2019: A 710-acre non-commercial thinning project on the Rustler's Gulch Unit near Deer Park.

Untreated



Treated



Desired future condition



April 2016: A 500-acre commercial thinning project on the Rustler's Gulch Unit near Deer Park.

Untreated



Treated



Desired future condition



November 2017: A 268-acre commercial thinning project on the Rustler's Gulch Unit near Deer Park.

Untreated



Treated



Desired future condition



June 2016: DNR Completed 35-acres of shaded fuel break on the Rustlers Gulch Unit near Deer Park.

Untreated

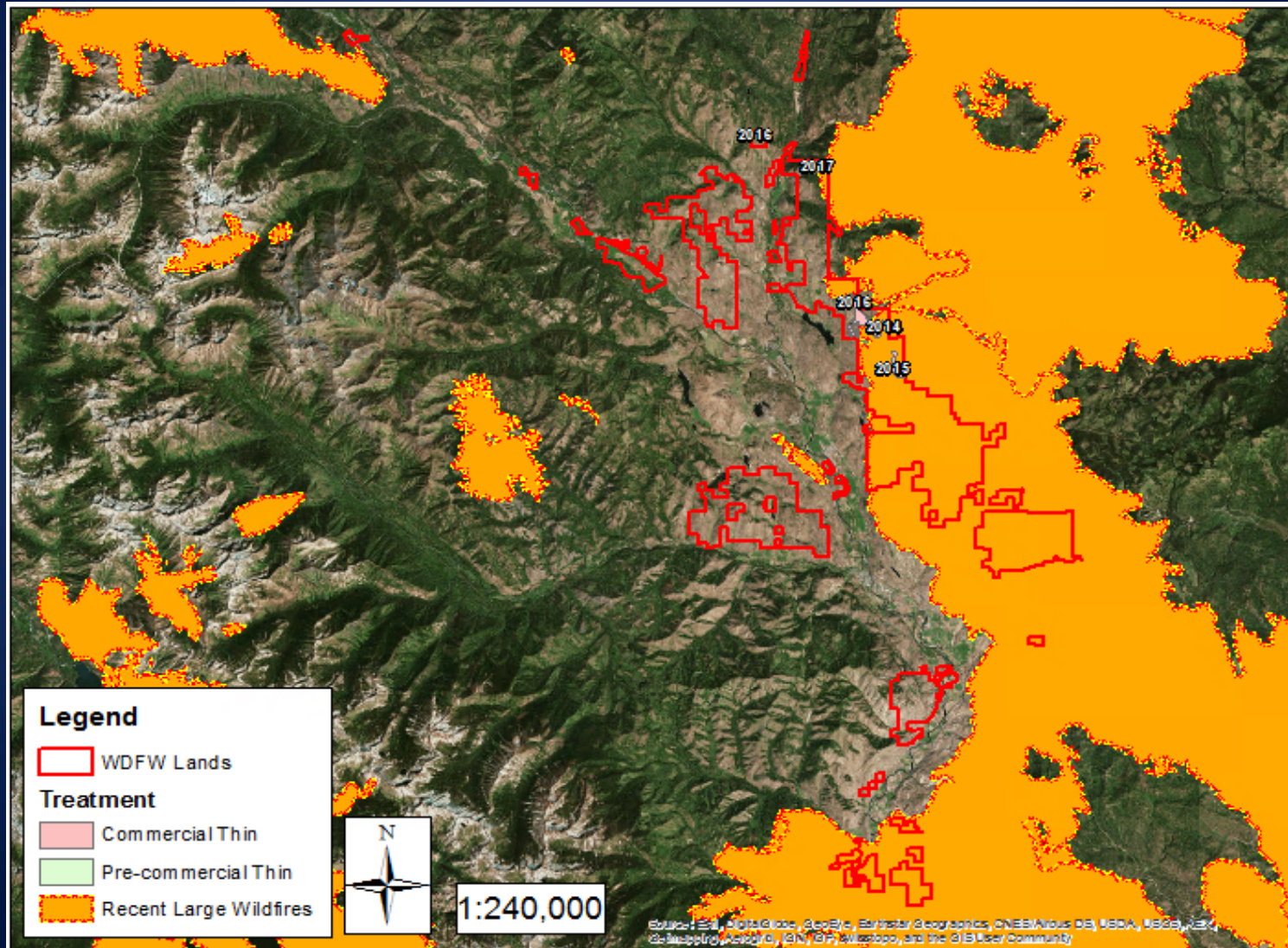
Property line

Treated



Methow Wildlife Area (Okanogan County)

Thinned - 828 acres, Rx fire around 200 acres



June 2019: A 280-acre commercial thinning project on the Methow Wildlife Area near Winthrop.

Untreated



Treated



Desired future condition



July 2017: A 211-acre commercial thinning project on the Methow Wildlife Area Unit near Winthrop.

Untreated



Treated



Desired future condition

March 2017: A 270-acre commercial thinning project on the Methow Wildlife Area Unit near Winthrop.

Untreated



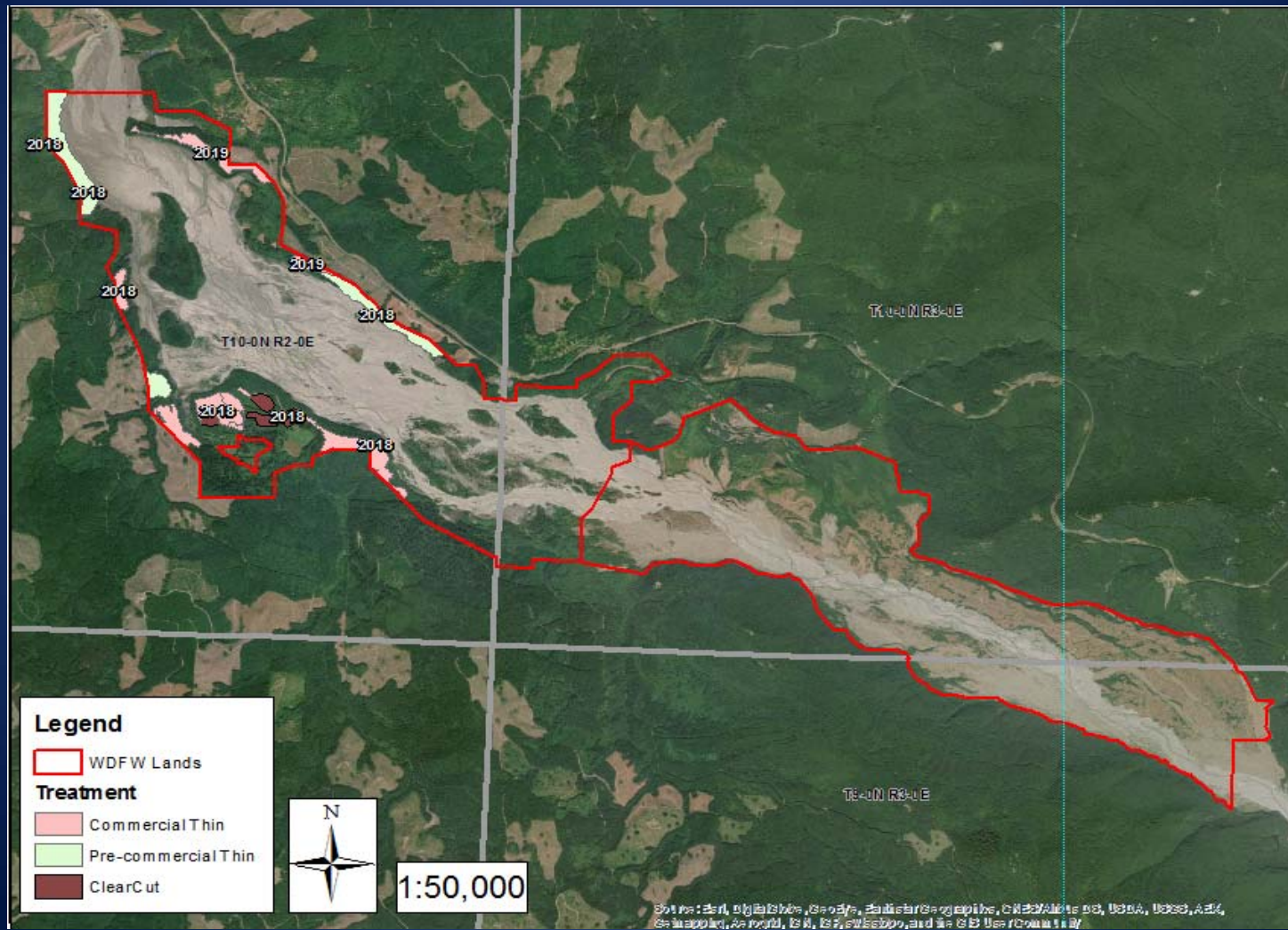
Treated



Desired future condition

Mount Saint Helens (Cowlitz County)

Thinned - 447 acres



2018-2019: Mount Saint Helens Wildlife Area.

- 257-acre commercial thinning project
- 156-acre non-commercial thinning project

Untreated



Treated



Desired future condition



June 2019: A 400-acre non-commercial thinning project on the Merrill Lake Unit near Cougar.

Untreated (Couple years older)



Treated

Desired future condition



Avoided future condition



Wooten Wildlife Area near Pomeroy. June 2019: A 345-acre non-commercial thinning project

Untreated



Treated



Desired future condition



We hope to avoid a repeat of the School Fire that killed most trees on the wildlife area in 2005.



December 2018: A 315-acre commercial thinning project on the Mt. View Wildlife in Asotin County.

Untreated



Treated

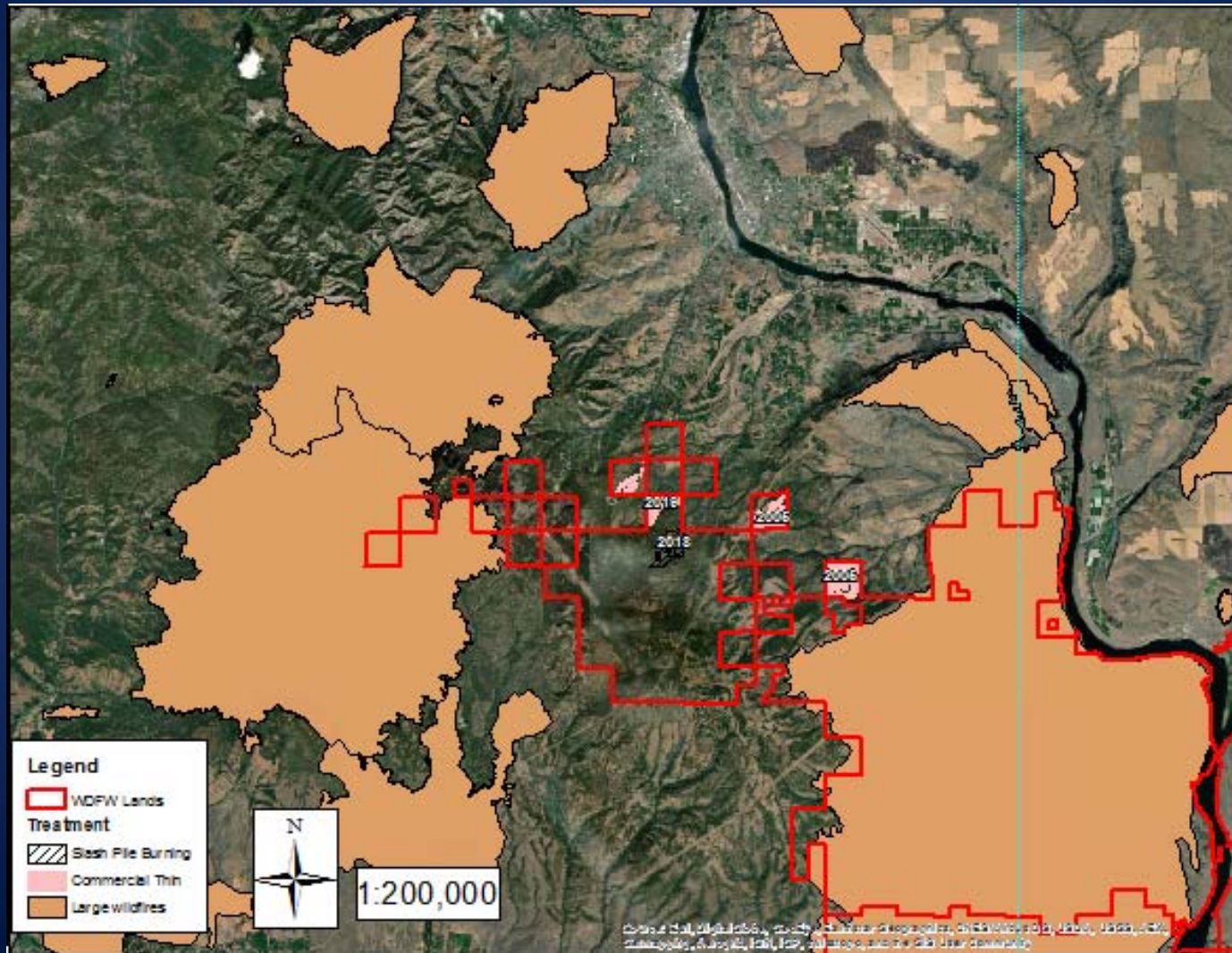


Desired future condition



Colockum Wildlife Area (Kittitas and Chelan Counties)

Thinned - 280 acres



October 2019: A 270-acre commercial thinning project on the Colockum Wildlife Area near Wenatchee.

Note: 20 acres were also treated on Chelan County Property.

Before



After

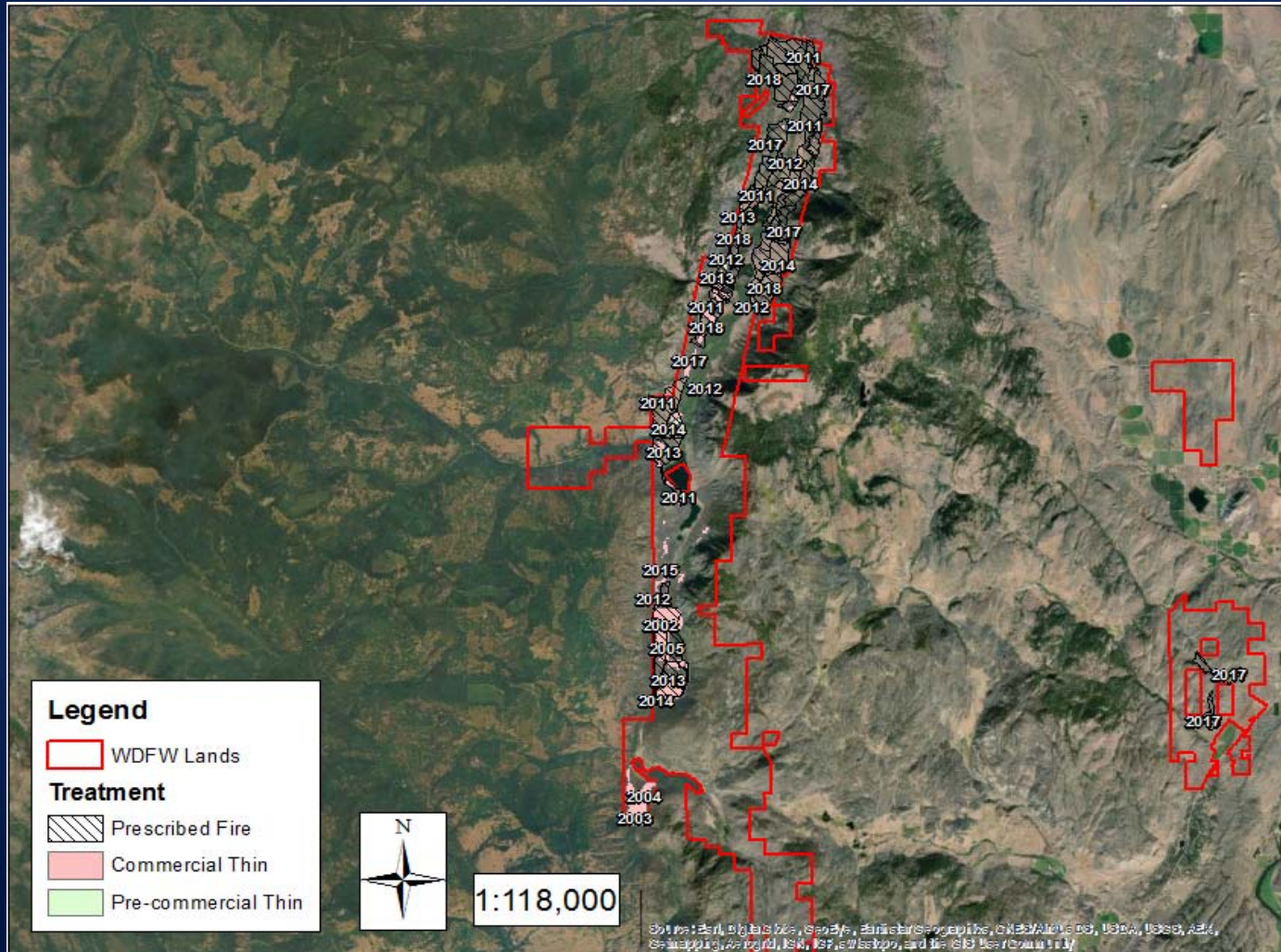


Desired future condition



Sinlahekin Wildlife Area (Okanogan County)

Thinned - 224 acres (Most thinned before 2014), Rx fire 3,663



June 2017: A 104-acre commercial thinning project on the Sinlahekin Wildlife Area Unit near Loomis.

Untreated



Thinned



Desired condition



February 2015: A 100-acre commercial thinning project on the Sinlahekin Wildlife Area near Loomis.

Untreated



Thinned



Desired condition



Sinlahekin Treatments helped control the 2015 Okanogan complex wildfire

2011 - Untreated



2011- thinned



2013 Thinned + Rx fire



2015 restored savanna



The Okanogan complex wildfire stopped at the edge of a treatment unit

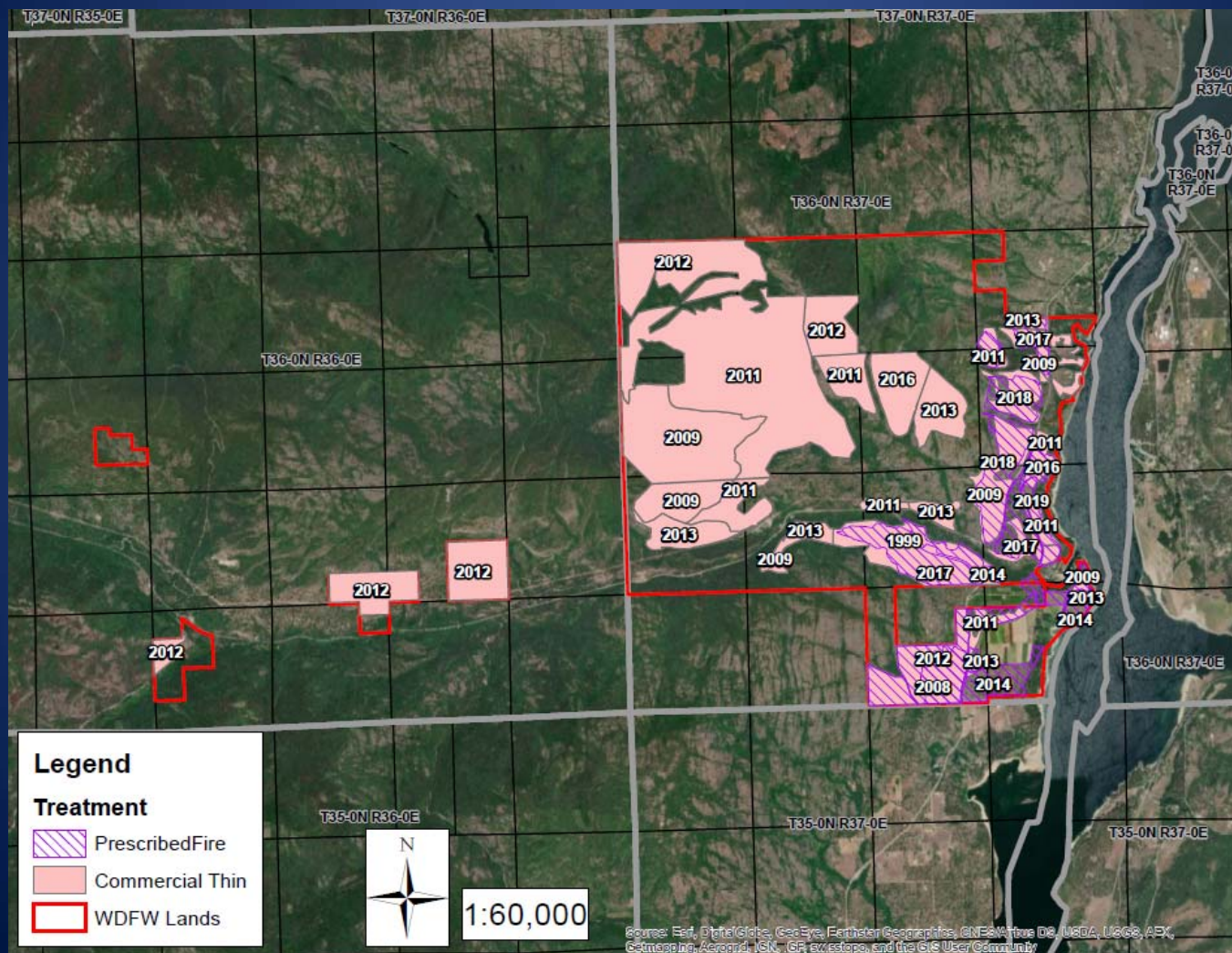


Left side
Rx Burned
Spring
2014

Right side
Okanogan
Wildfire
Sept 2015

Sherman Creek (Ferry County)

Thinned - 214 acres (3,900 thinned before 2014), Rx fire 1,744 acres



Sherman Creek – Largely Transitioned to Prescribed Fire



June 2016: A 120-acre commercial thinning project on the Sherman Creek Wildlife near Kettle Falls.

Untreated



Treated



Desired future condition



Boyd's Fire – August 2018

Untreated



After restoration (Thin + Rx burn)



Boyd's Fire - 2018



Treated Areas Indirectly Protected Other Area That We Don't Want to Disturb

Fire behavior specialist, Don Strand in public meeting: “Restoration thinning and burning conducted on Sherman Creek Wildlife Area prevented an uncontrollable spread of the Boyd’s Fire to the south and west”.

Dense forests to the south and west are mapped as northern goshawk, Canada lynx and golden eagle habitat.

Red line = Boyd’s fire perimeter



Boyd's Fire Takeaways

- Treatments change the nature of fires
 - Safer and easier to control
 - Impacts reduced – fire often beneficial
 - Thinning plus prescribed fire is most effective
- Don't overpromise – treatments don't "fireproof" forests
- Forest health/wildlife habitat restoration usually not at odds when you think at the landscape scale.
 - We don't need or want to treat everything
 - Treatment can indirectly protect dense forests
- Fires don't care if you're prepared or not

The Boyd's fire almost burned down the headquarters office two months before we thinned.



October 2018: A 24-acre commercial thinning project to protect the headquarters office from wildfire

Untreated



Treated



November 2018: A 158-acre oak/pine restoration project on the Klickitat Wildlife area near Goldendale.

Untreated



Treated



June 2019: Roadside shaded fuel breaks totaling 35 acres on the Klickitat Wildlife Area near Goldendale.

Untreated

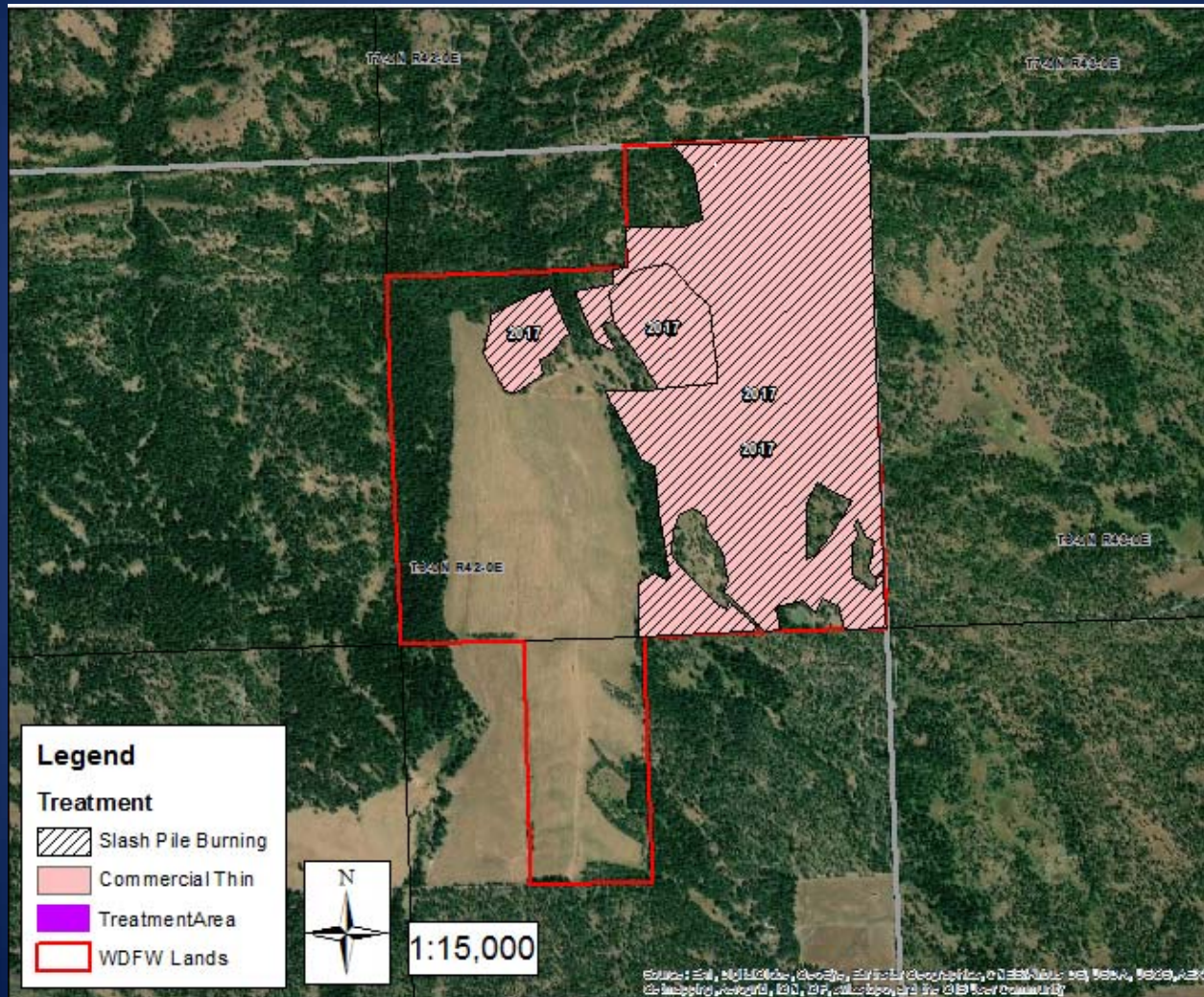


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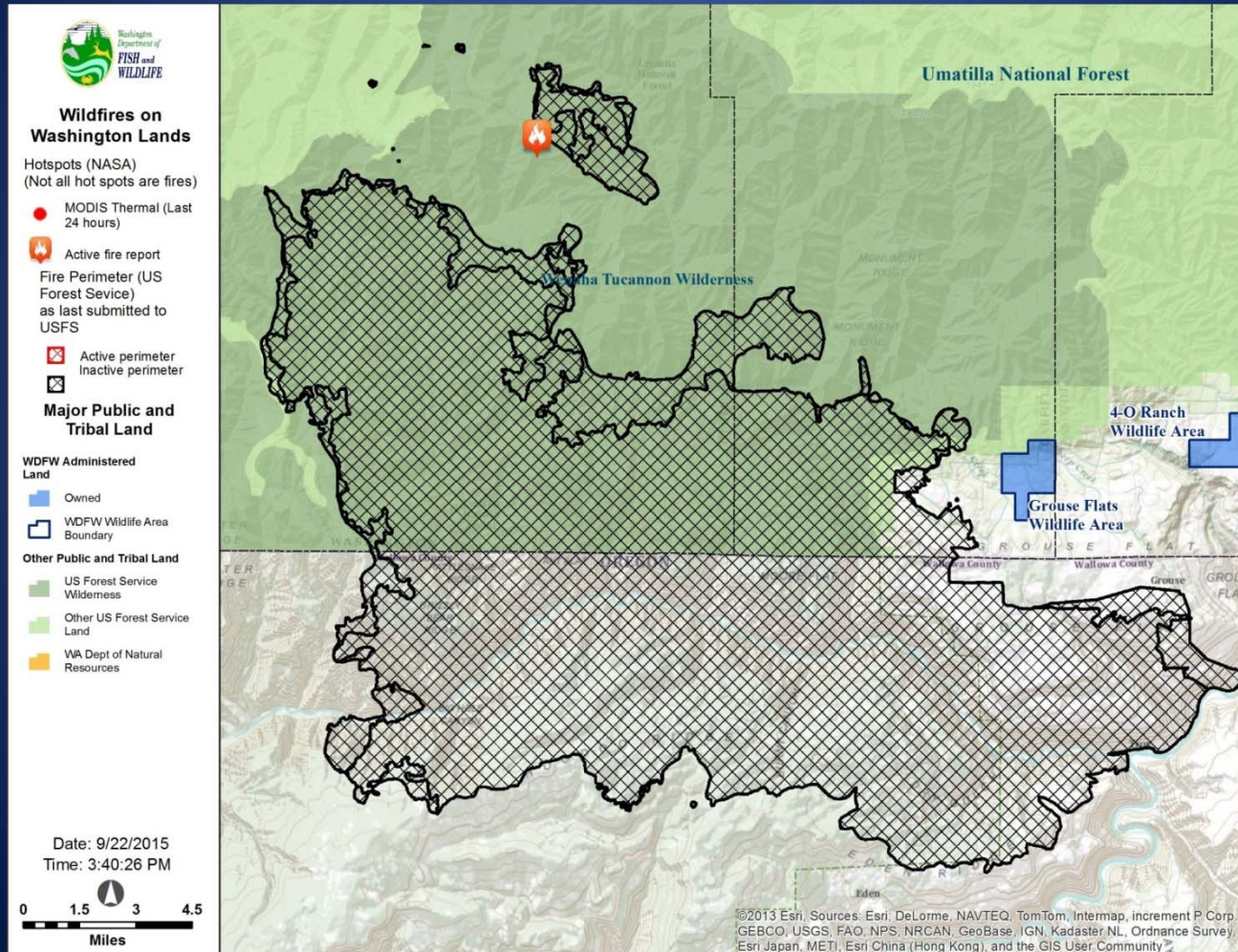


Grouse Flats (Garfield County)

Thinned - 285 acres



Almost Burned in a 77,000 Acre Wildfire Shortly Before Treatment



September 2017: A 285-acre commercial thinning project on the Grouse Flats Unit in Asotin County.

Untreated



Treated

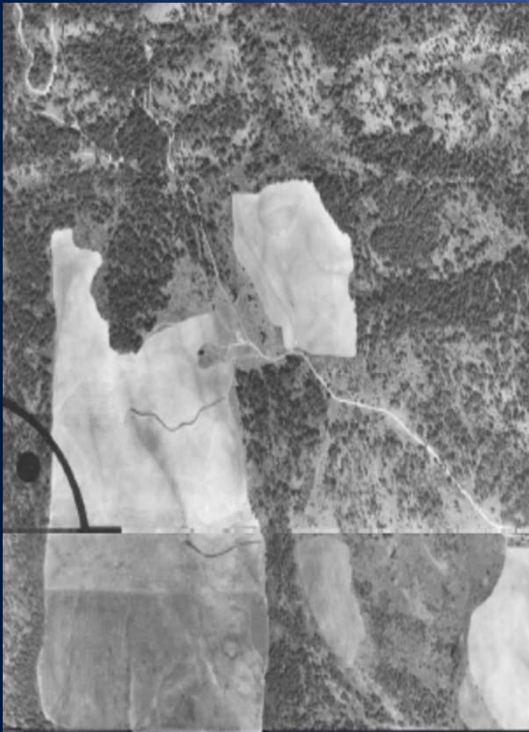


Desired future condition



Grouse Flats Bird's Eye View

1971 - Patchy



2016 - Homogenized

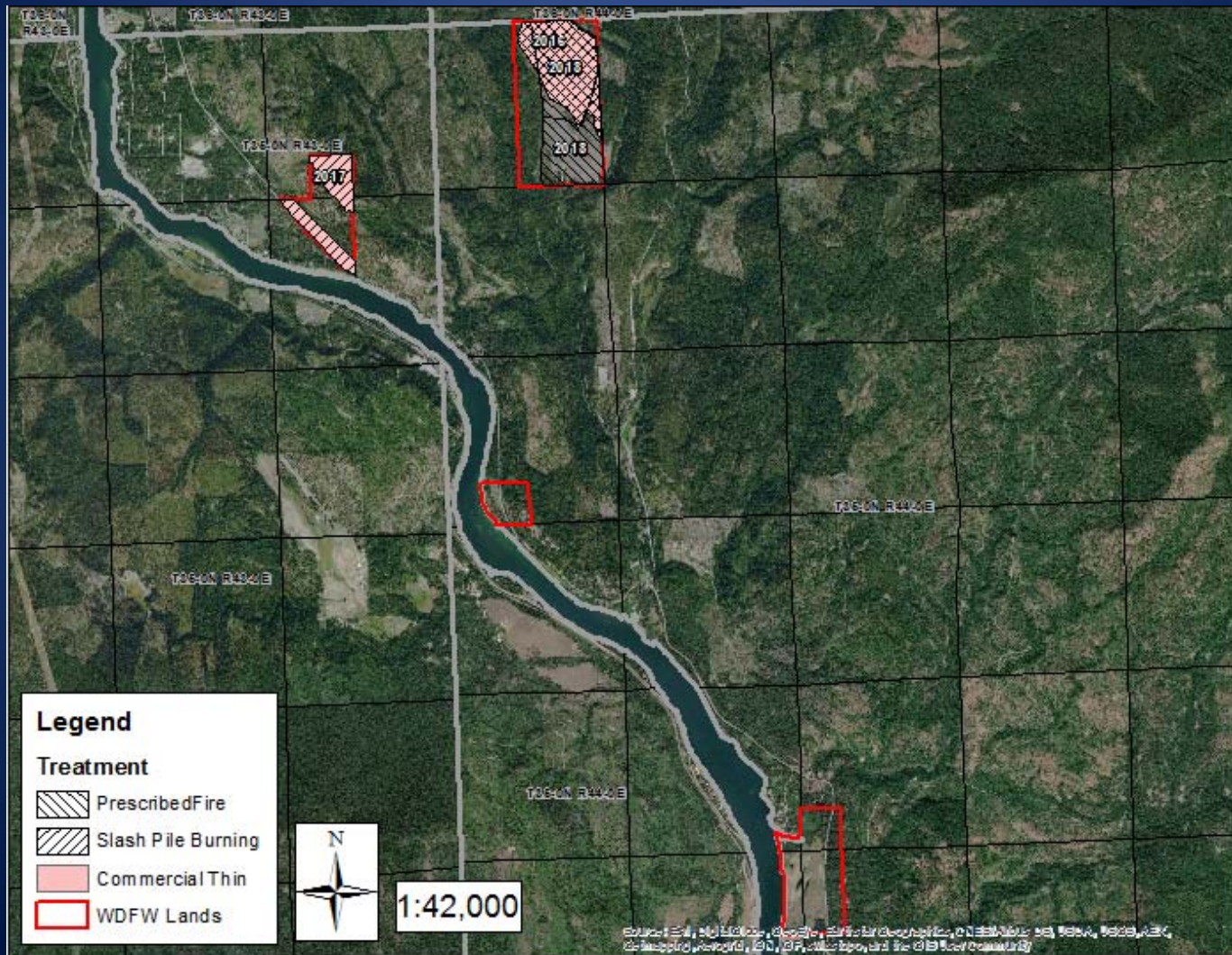


2018 – Rx fire ready



LeClerc (Pend Oreille County)

Thinned - 169 acres, RX fire – 120- acres



July 2017: A 169-acre commercial thinning project on the LeClerc Wildlife Area Unit near Cusick.

Untreated



Thinned

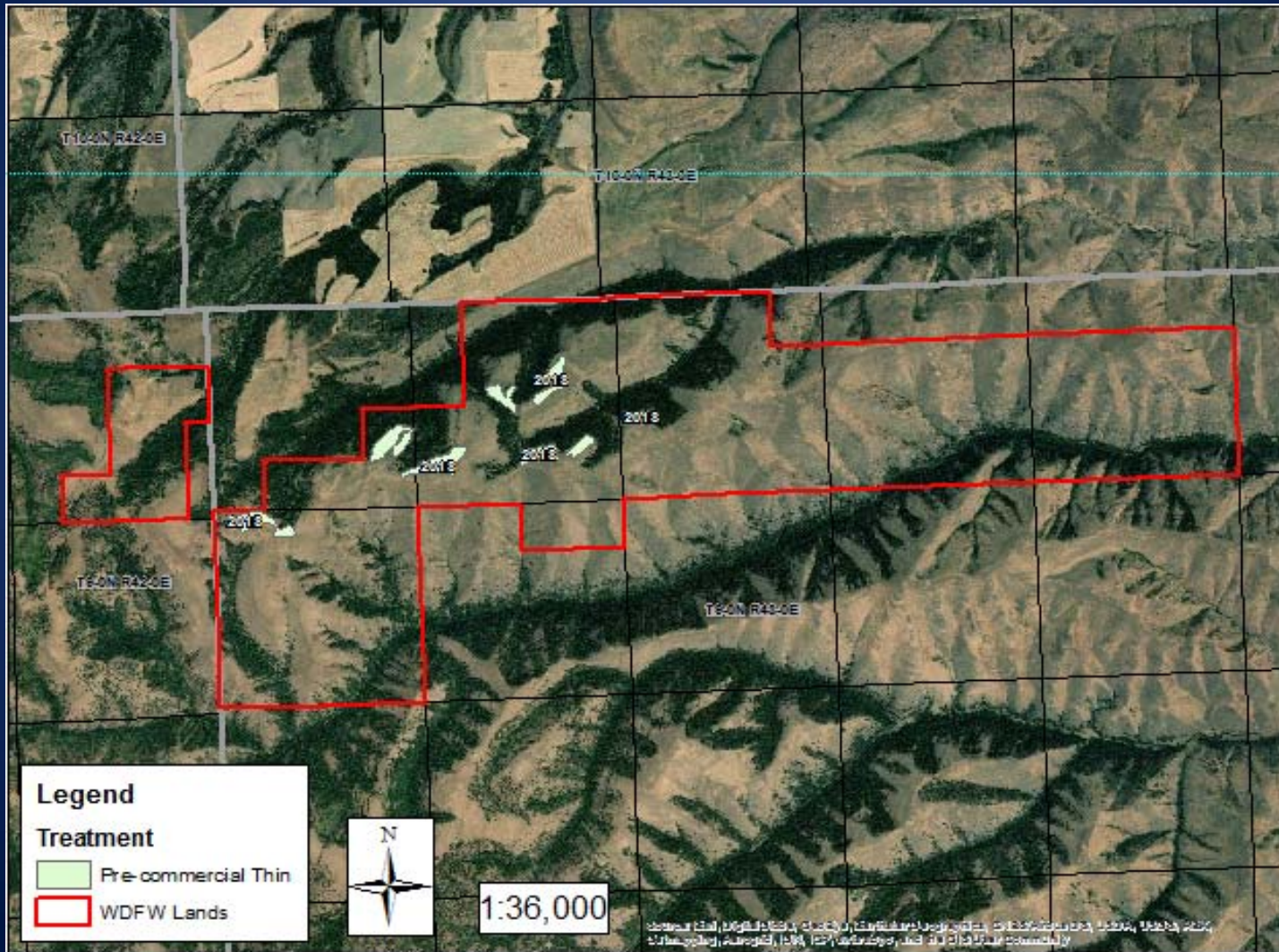


Desired future condition



Weatherly (Asotin County)

Thinned - 54 acres



June 2018: A 57-acre non-commercial thinning project on the Weatherly Wildlife Area near Asotin

Untreated



Treated

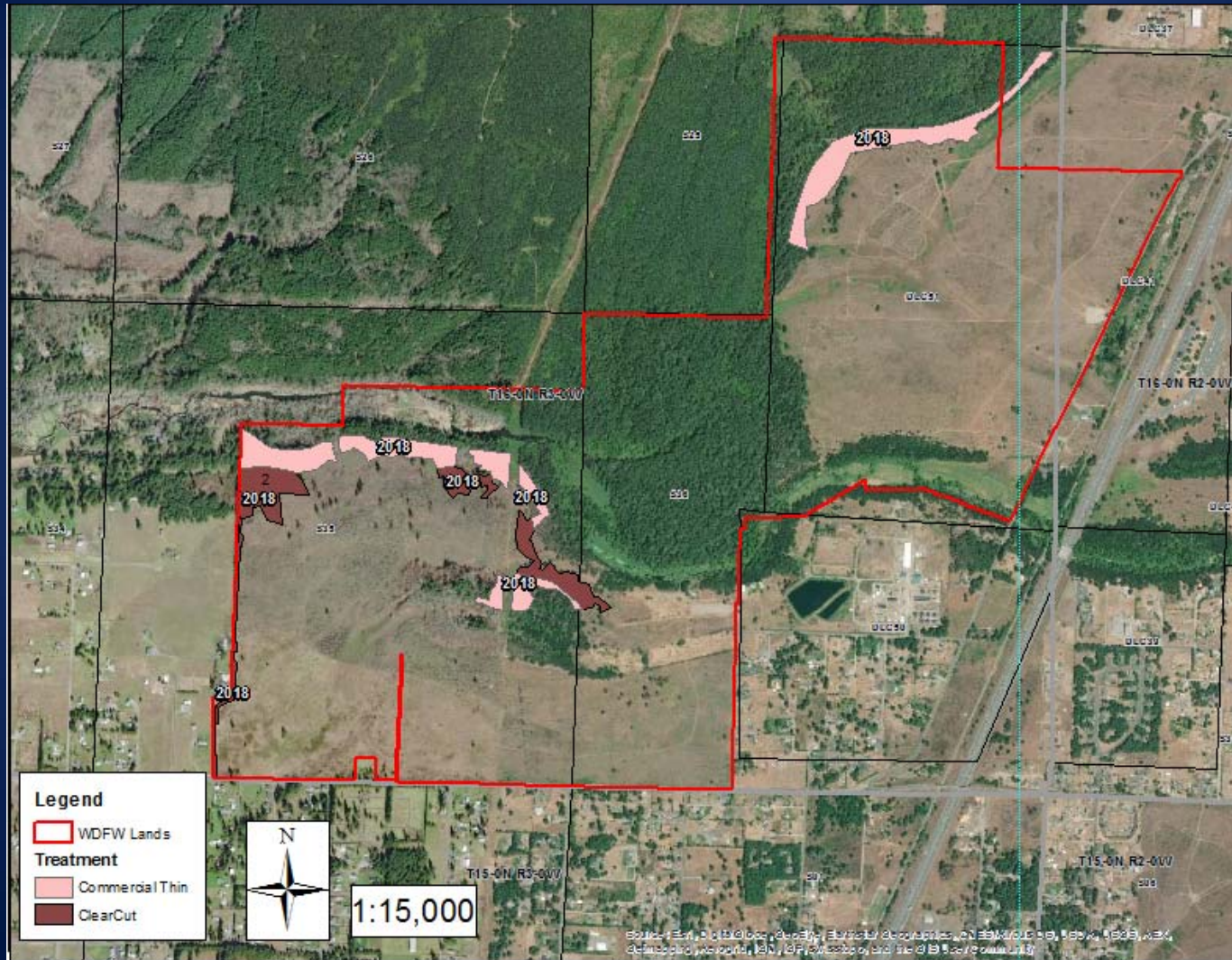


Desired future condition



Scatter Creek (Thurston County)

Thinned - 27 acres, Clear cut – 25 acres



November 2018: 25-acre prairie restoration project on the Scatter Creek Wildlife Area near Rochester.

Untreated



Treated



Desired Future Condition



November 2018: A 27-acre oak restoration project on the Scatter Creek Wildlife Area near Rochester.

Untreated



Treated



The Scatter Creek Project Also Included Property Line Fuel Management

Before



After

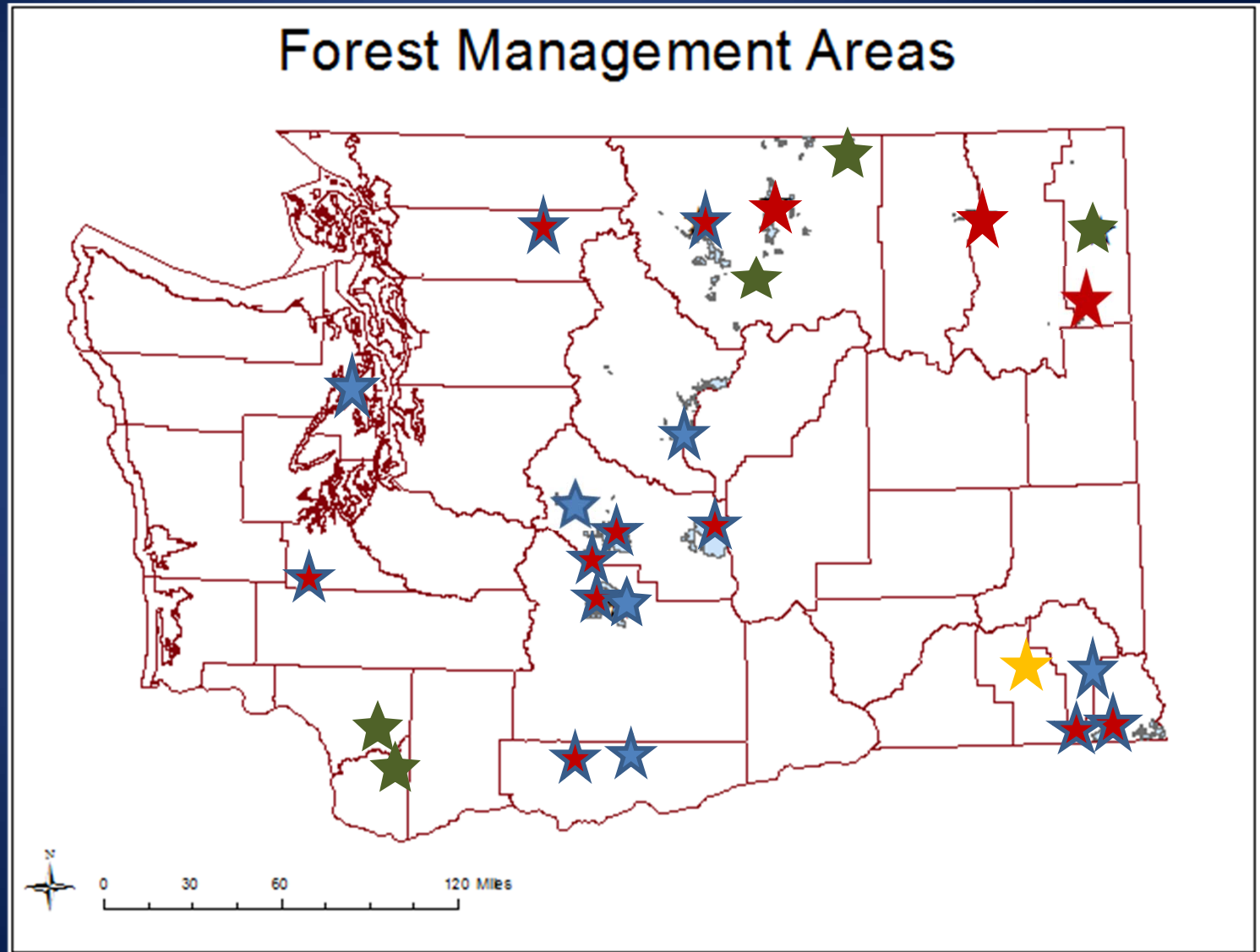


Future Plans

- Rely on the prescribed fire teams to maintain thinned forests (to the degree feasible) where we are largely done thinning:
- Continue thinning on the LT Murray, Oak Creek, Colockum, Klickitat, Blue Mountains and Scatter Creek Wildlife areas
- Start treatments on the Swakane, Entiat and Simcoe
- Concentrate on DNR-prioritized watersheds (65% of our forests)
- Maximize non-commercial thinning while funds are available.
- Partner with other agencies where feasible

Planned Work Areas for the 19-21 Biennium

- ★ Thin only
- ★ Thin and Rx fire
- ★ Rx fire only
- ★ Plant
- ★ Completed for foreseeable future



Commission Approval Requests

- Blue Mountains – Weatherly
 - 1.8 million board feet
 - 300 acres
 - About 1 truck load per acre
 - Leave 20-40 of the best trees per acre
- Oak Creek – Windy Point
 - Up to 1.6 million board feet
 - 800 acres
 - About $\frac{3}{4}$ truck load per acre
 - Leave 25-35 of the best trees per acre

Weatherly

Current Condition



Expected post treatment



Desired future condition



Windy Point

Current Condition



Expected post treatment



Desired future condition



Questions?

