



Monitoring implementation of restoration treatments across the Malheur National Forest

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Desired Future Condition
Resilient and resistant dry forests that provide a full suite of ecosystem functions for nature and people.

Initial underlying collaborative forest restoration strategies suggested NEPA inefficiencies were a result of lack of pace and scale.

Adaptive Management

Planning

Monitoring

Implementation

Commercial Thinning

Non-commercial Thinning

Prescribed Fire

Mechanical Fuels

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Planning

Additional investments on some forests suggests though that planning inefficiencies can be overcome by money.

Commercial Thinning

Non-commercial Thinning

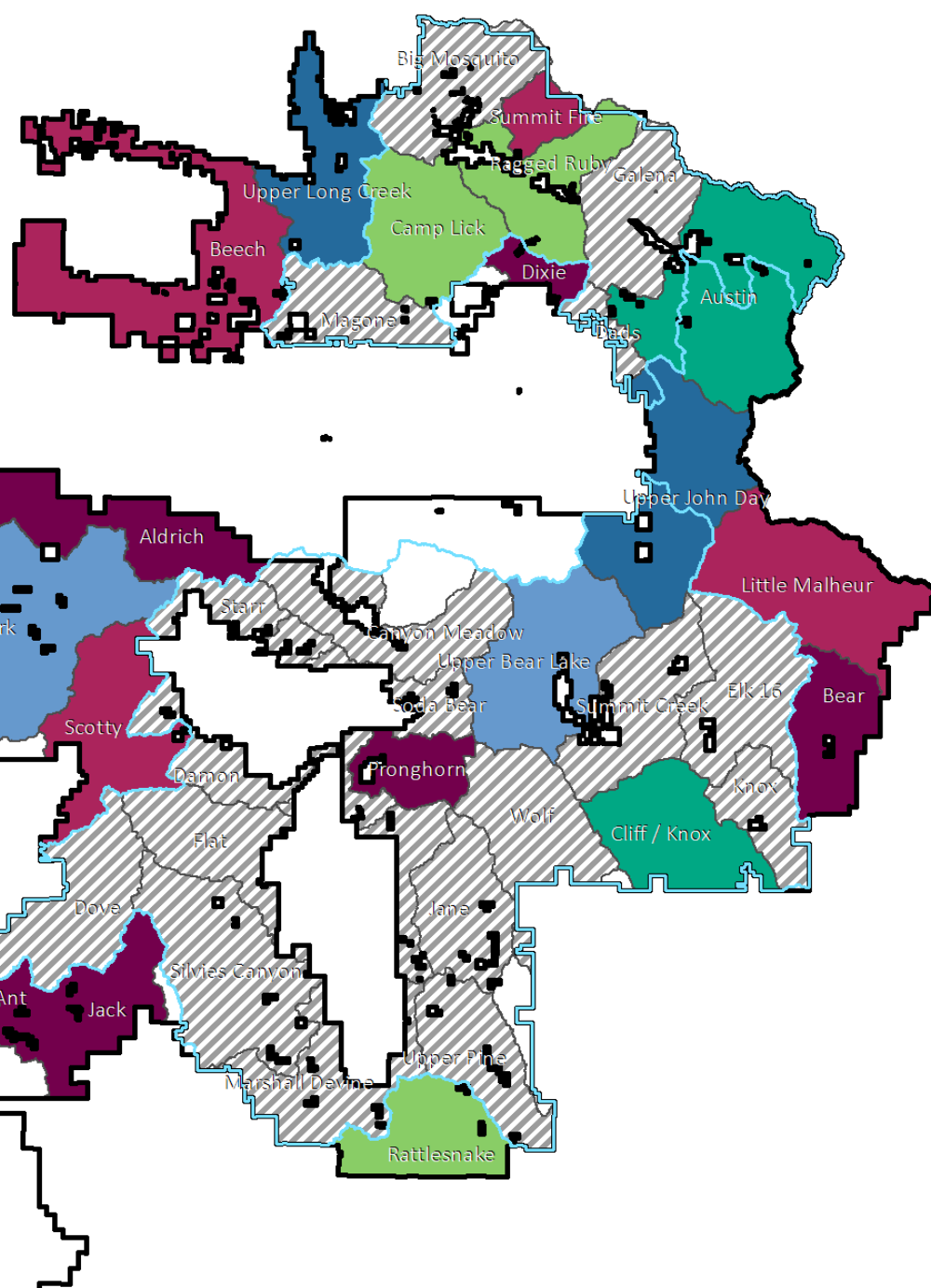
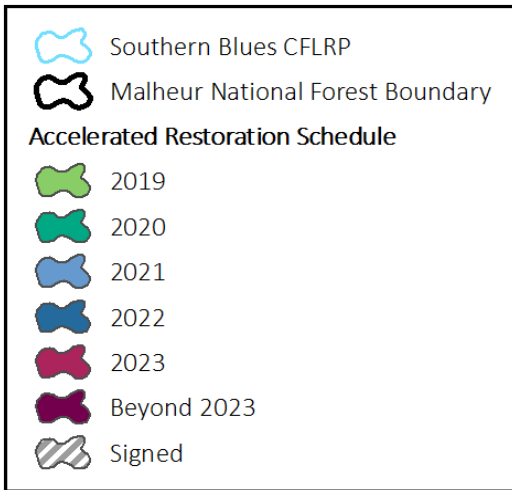
Implementation

Mechanical Fuels

Prescribed Fire

Adaptive Management

Monitoring



20 landscape restoration projects signed; 19 since 2008

638,707 acres under signed NEPA decision

37% of forest under current signed NEPA decision

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Adaptive Management

Planning

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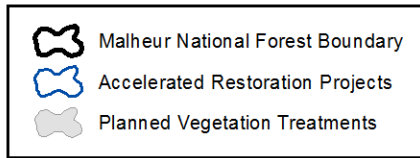
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Monitoring

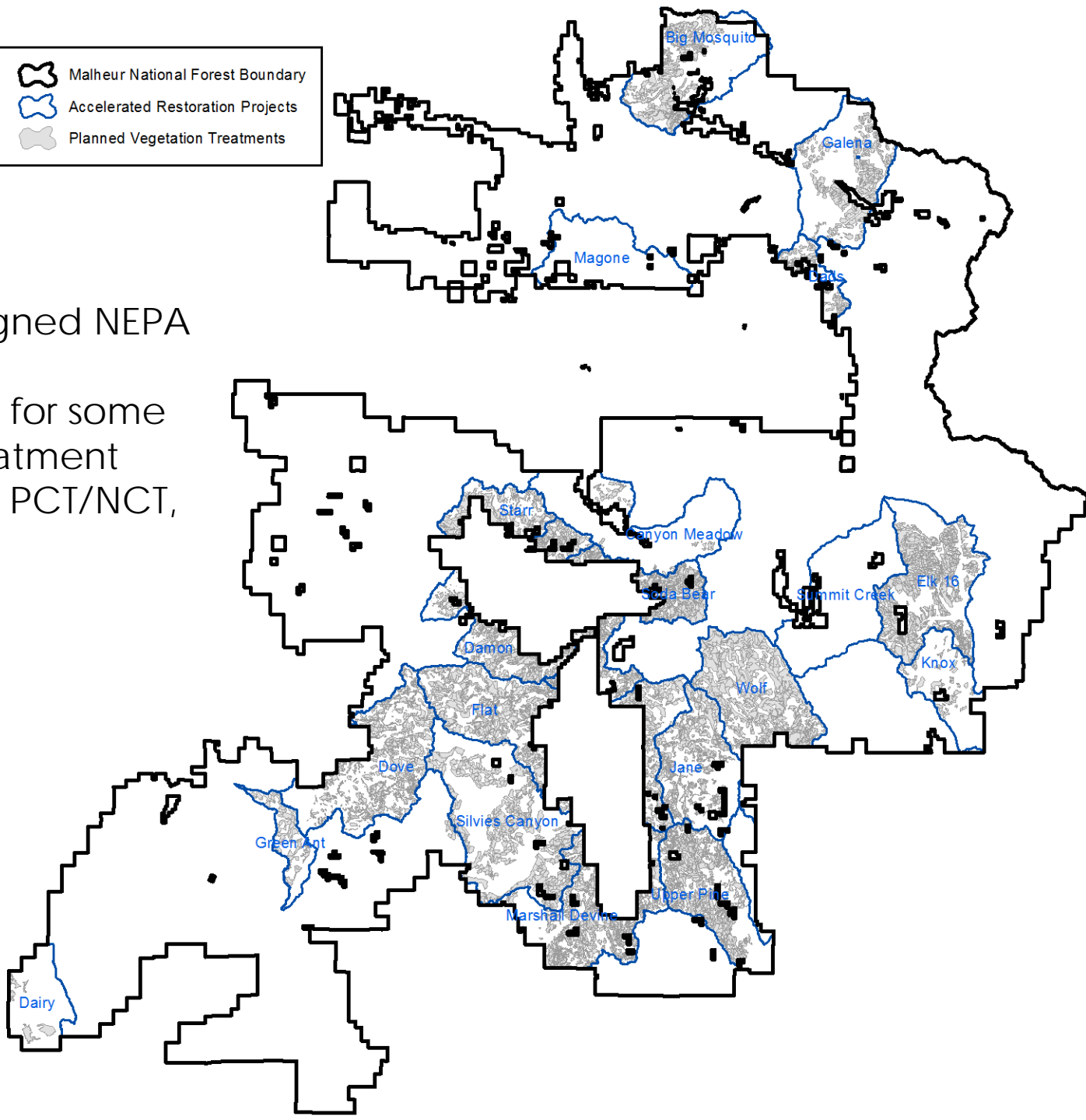
Implementation

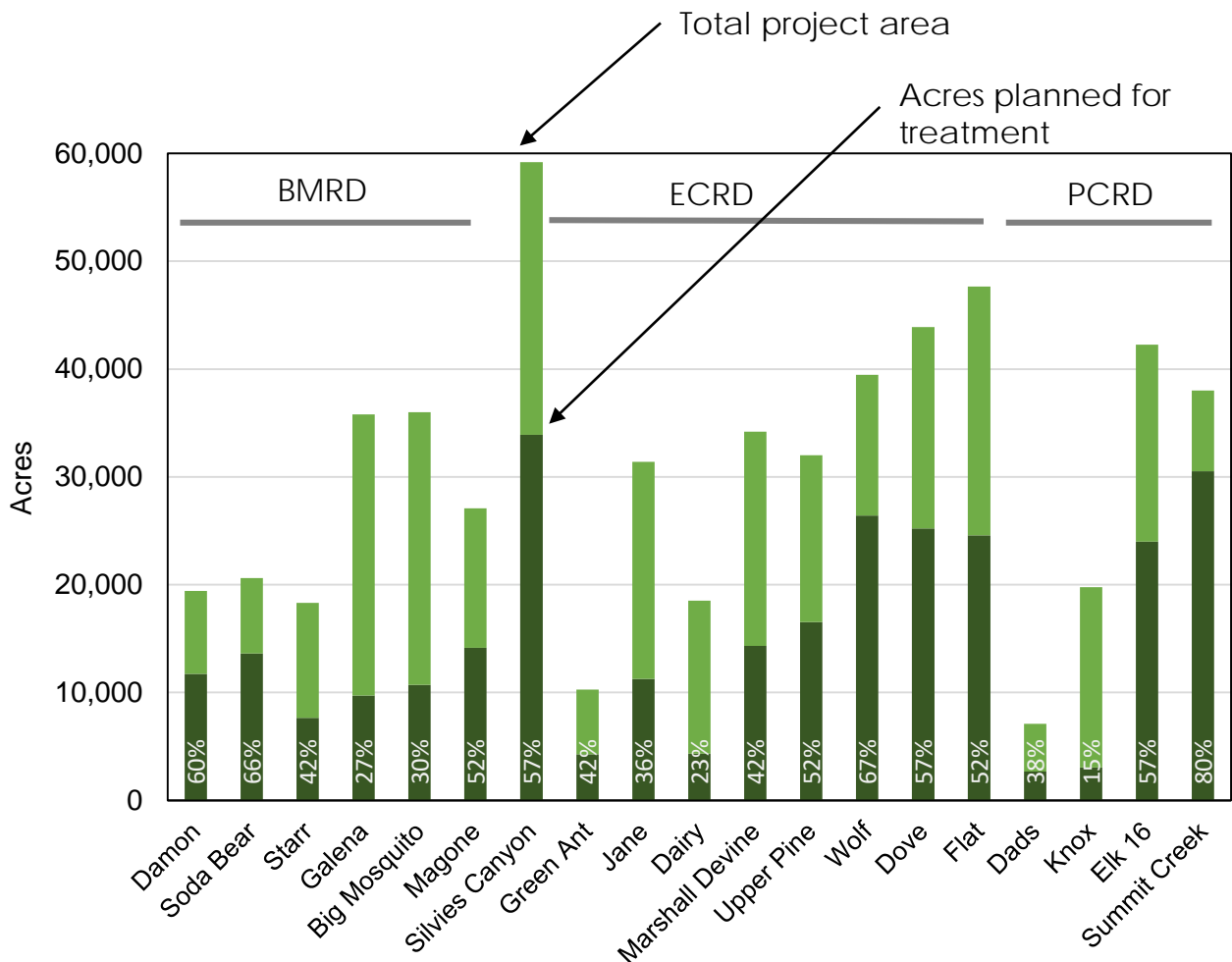
Need to understand how NEPA-approved backlog is implemented to understand impact on achieving dry forest restoration goals.



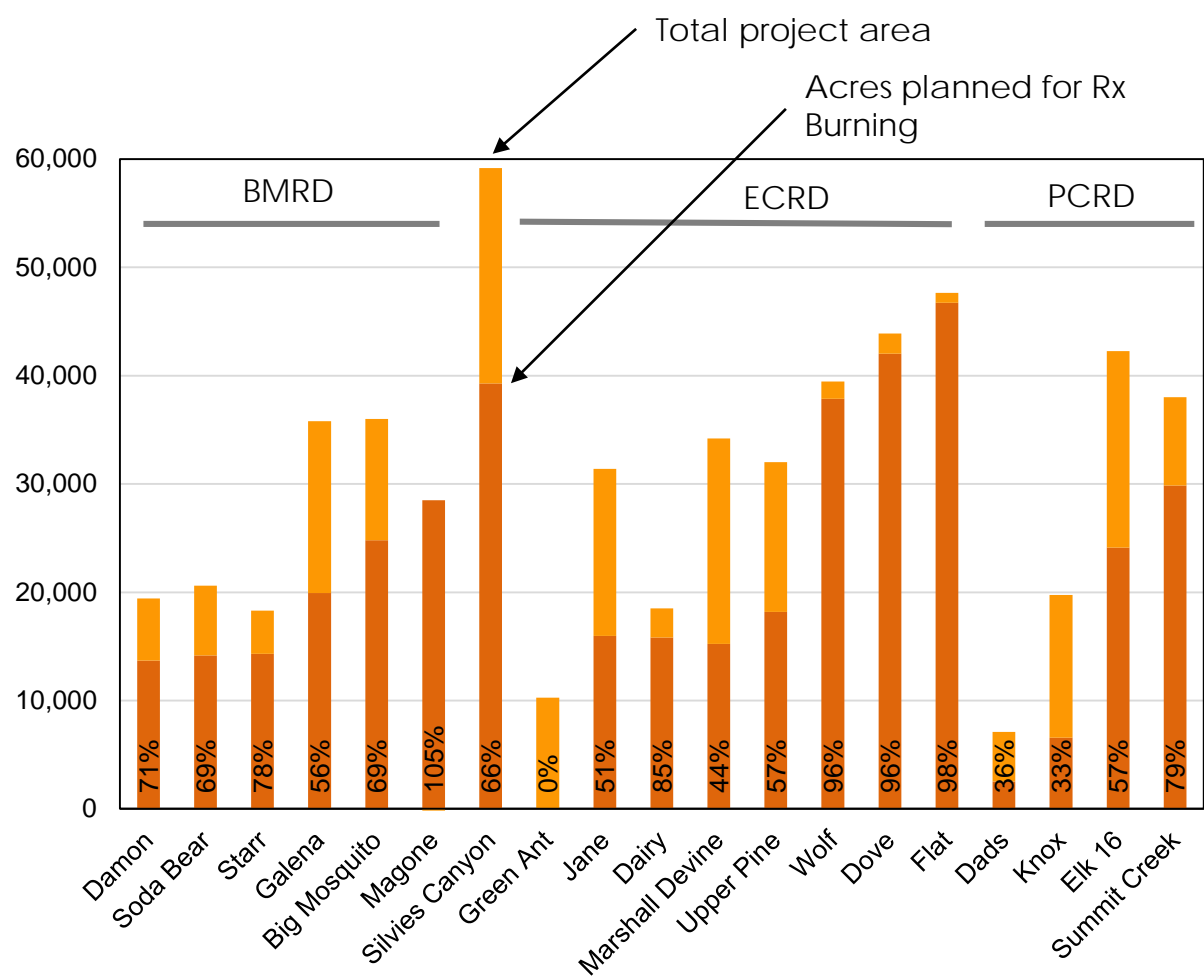


638,707 acres under signed NEPA decision
289,685 acres planned for some type of vegetation treatment (e.g., commercial thin, PCT/NCT, piling, pile burning)



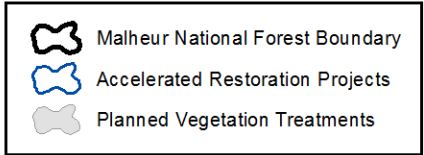


Planned Vegetation Treatments
 15 – 80% of project area planned for vegetation treatments

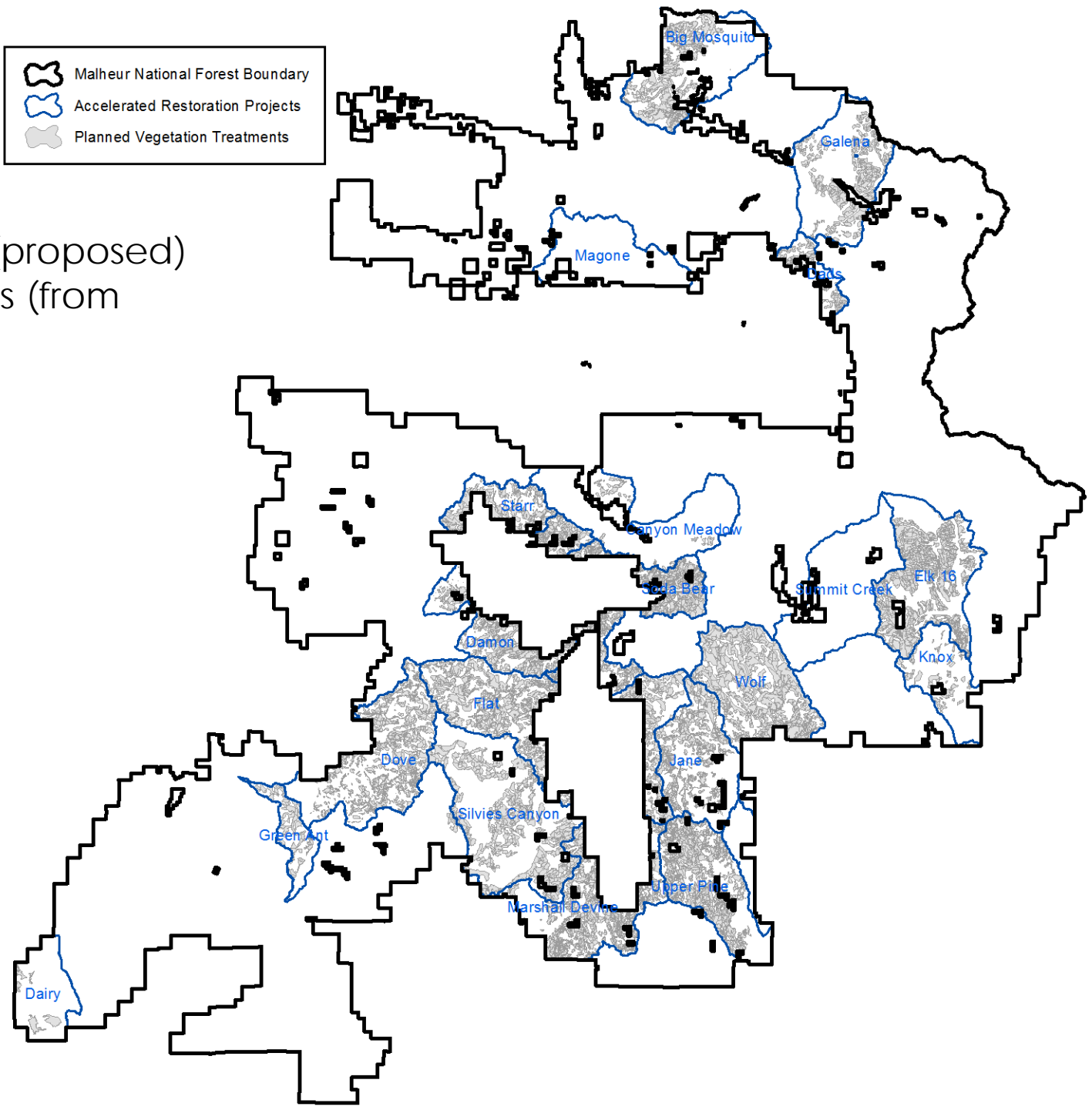


Planned Prescribed Burning
 0 – 100% of project area planned for prescribed burning

Trend towards larger project areas and more acres planned for vegetation treatment and/or prescribed fire through time



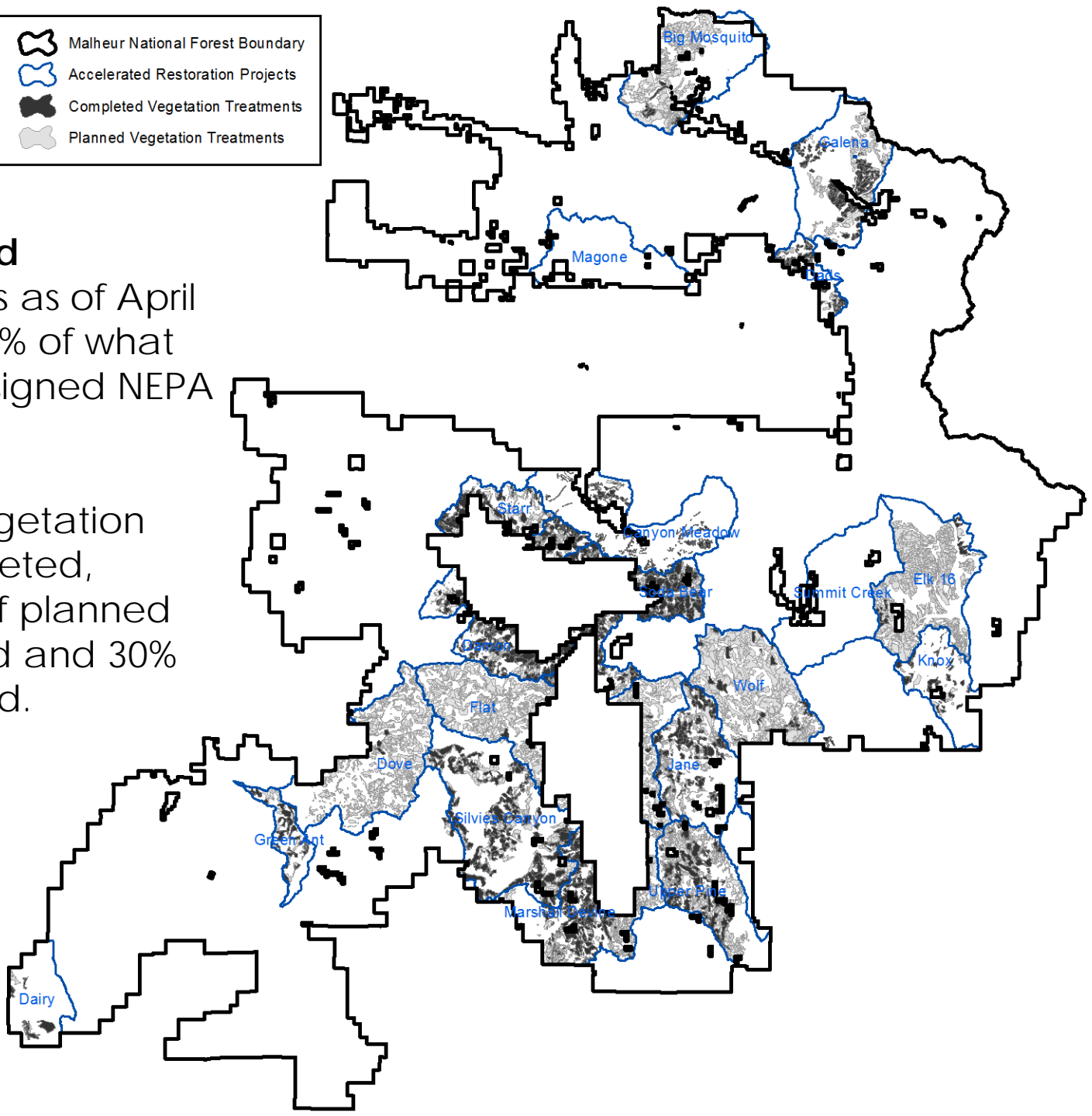
Footprint of **planned** (proposed) vegetation treatments (from NEPA)

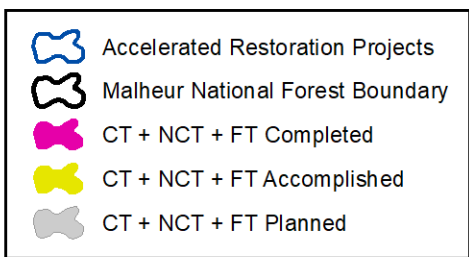




Footprint of **completed** vegetation treatments as of April 2019: **76,507 acres** (26% of what was planned, 12% of signed NEPA landscape)

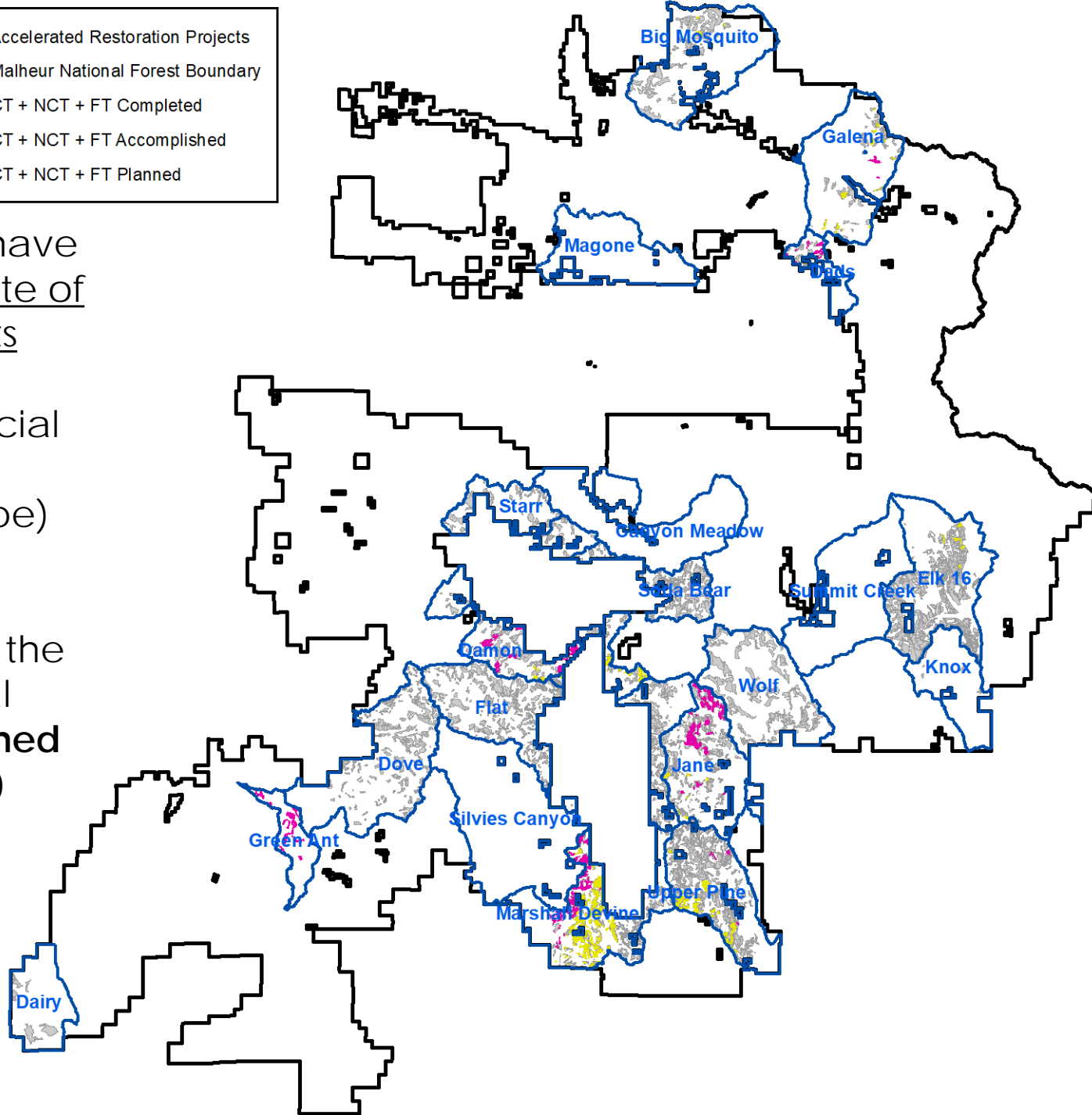
For projects where vegetation treatments are completed, average about 70% of planned treatments completed and 30% of project area treated.





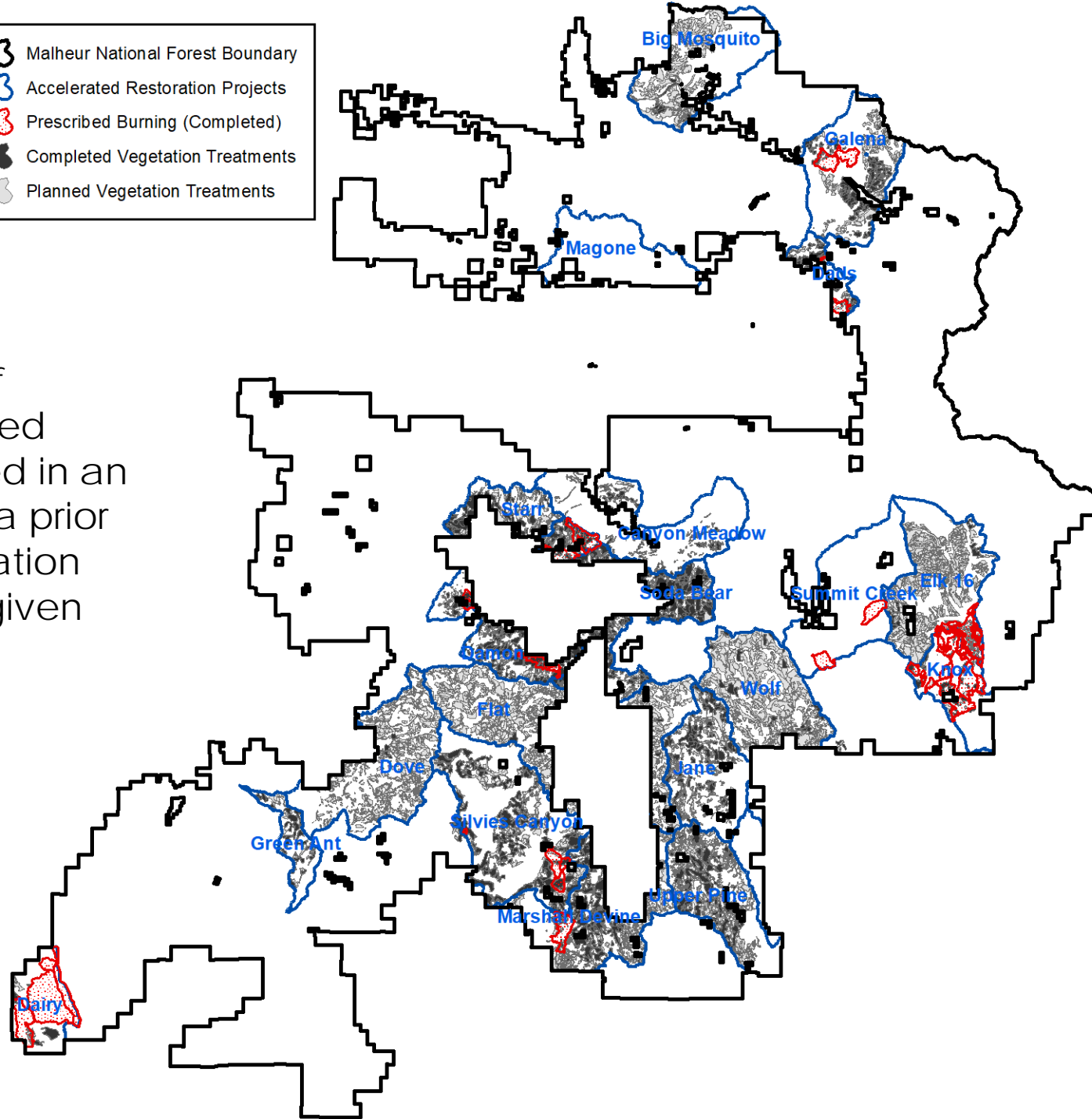
89,272 acres of forest have been **planned** for a suite of mechanical treatments including commercial thinning, non-commercial thinning, and fuels treatment (of some type)

Of those acres: **17,253 acres (19%)** have had the full suite of mechanical treatments **accomplished** and **8,496 acres (9.5%)** have had the full suite **completed**

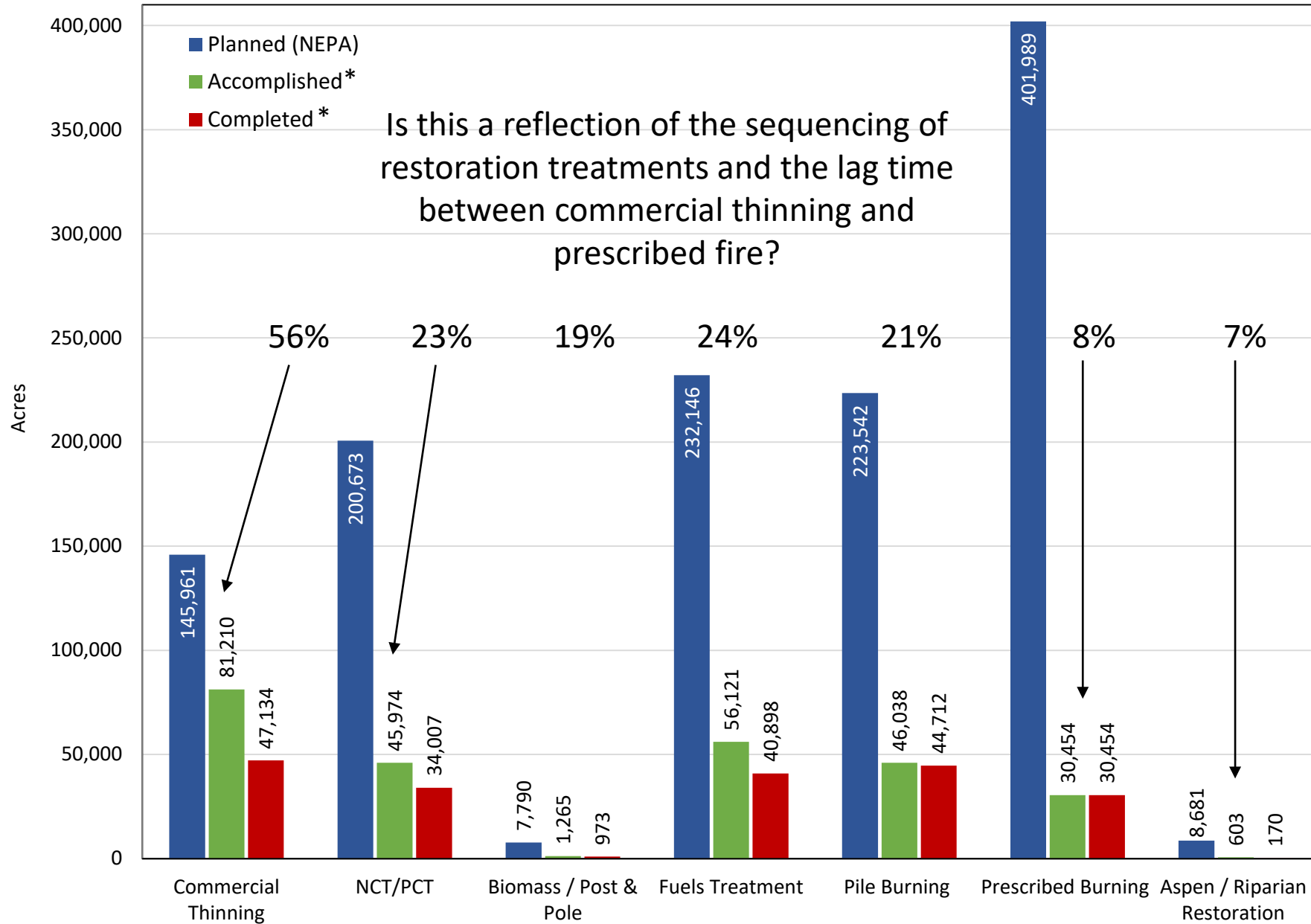




6,389 acres (21%) of completed prescribed burning has occurred in an area that received a prior (completed) vegetation treatment within a given project



Activities from 2008-2019 on the Malheur National Forest



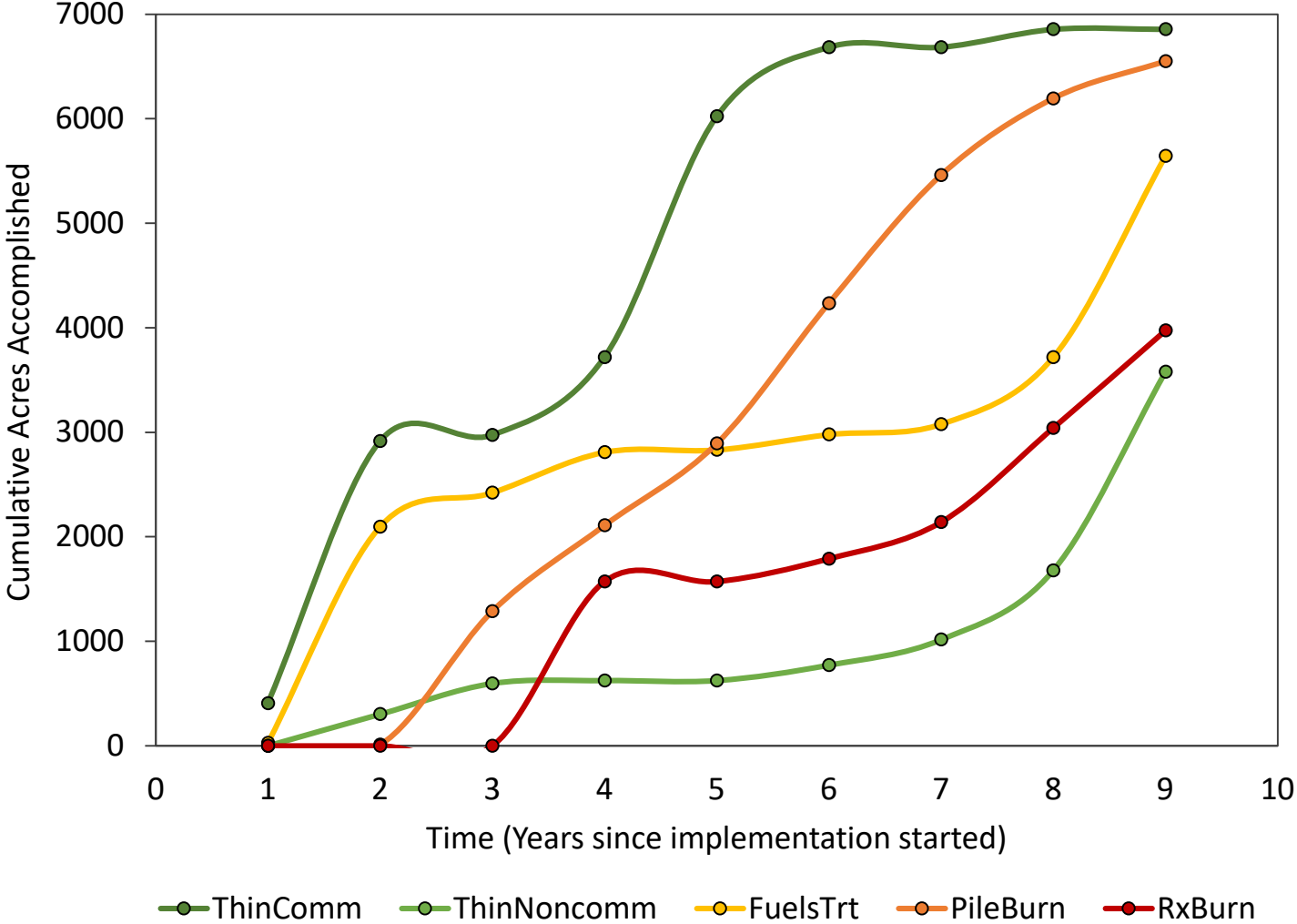
*Note:

Accomplished indicates that acres are either under contract or funding has been obligated.

Completed indicates that work is done on the ground.

Is this a reflection of the sequencing of restoration treatments and the lag time between commercial thinning and prescribed fire?

Cumulative accomplishments by treatment type
Damon project (signed 2010)



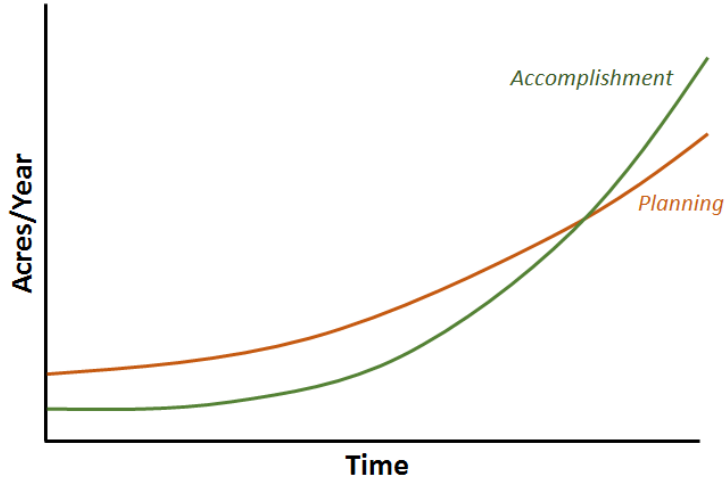
Which path are we on?

Catching up?

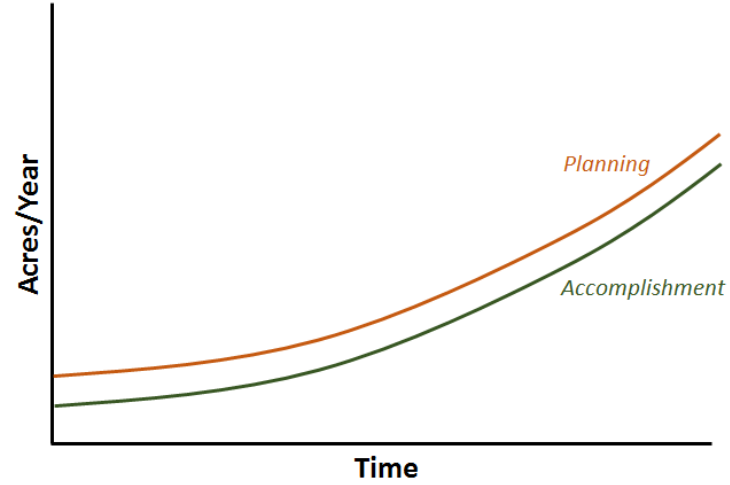
Keeping pace?

Falling behind?

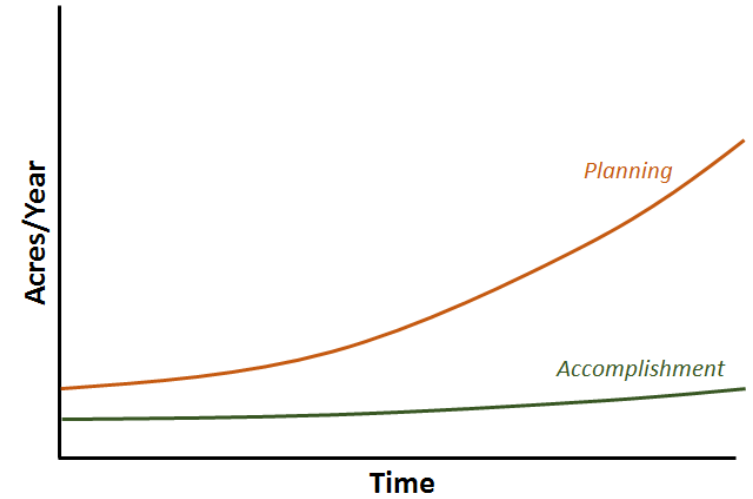
Scenario 1: *Catching-up*



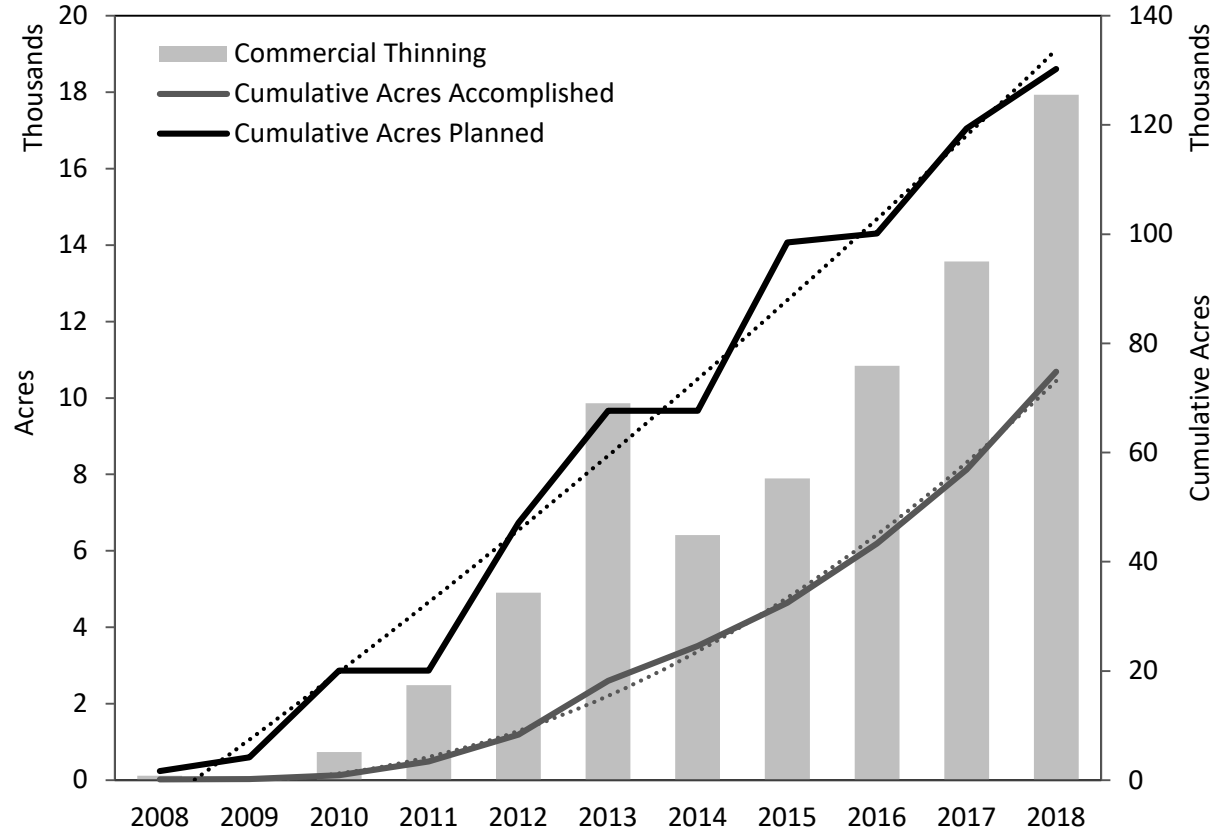
Scenario 2: *Keeping Pace*



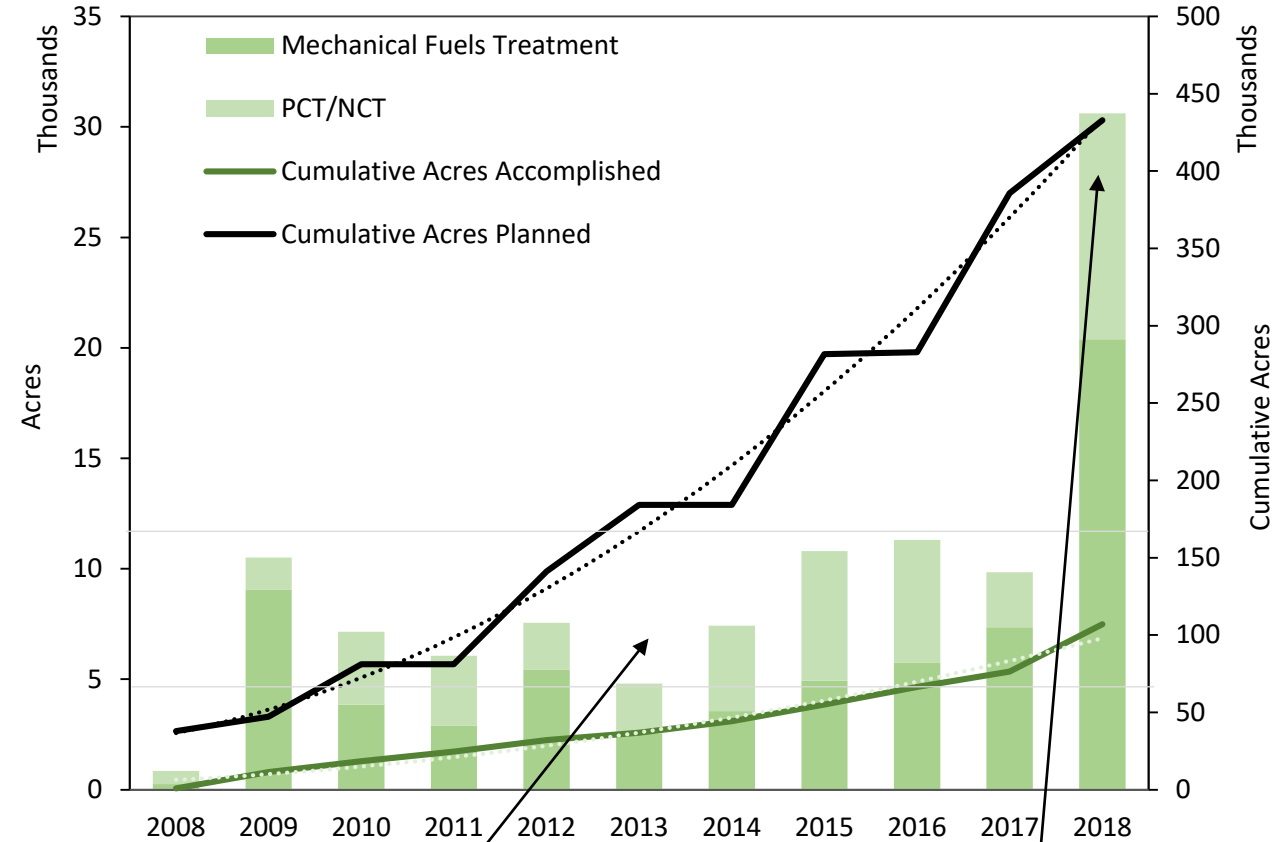
Scenario 3: *Falling Behind*



Acres of commercial thinning accomplished by year



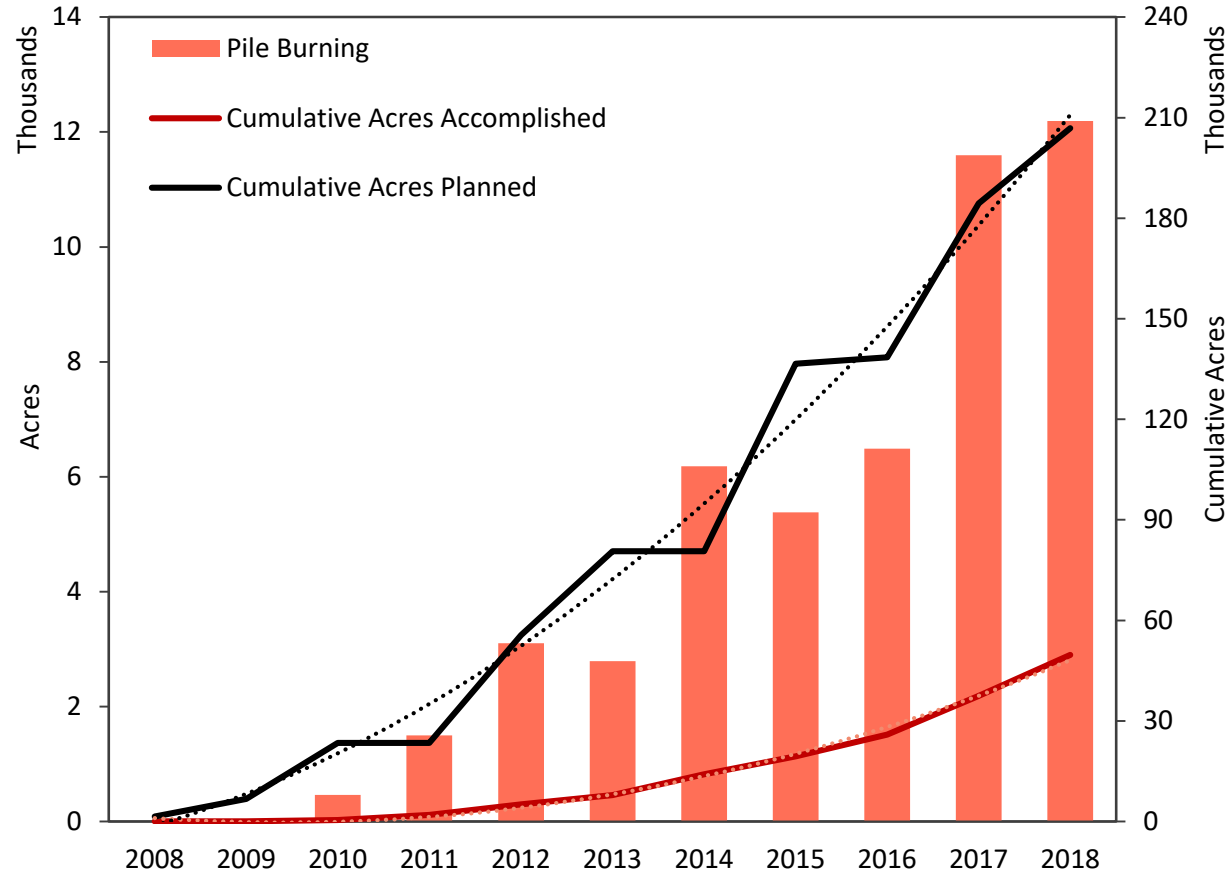
Acres of non-commercial and mechanical fuels treatments accomplished by year



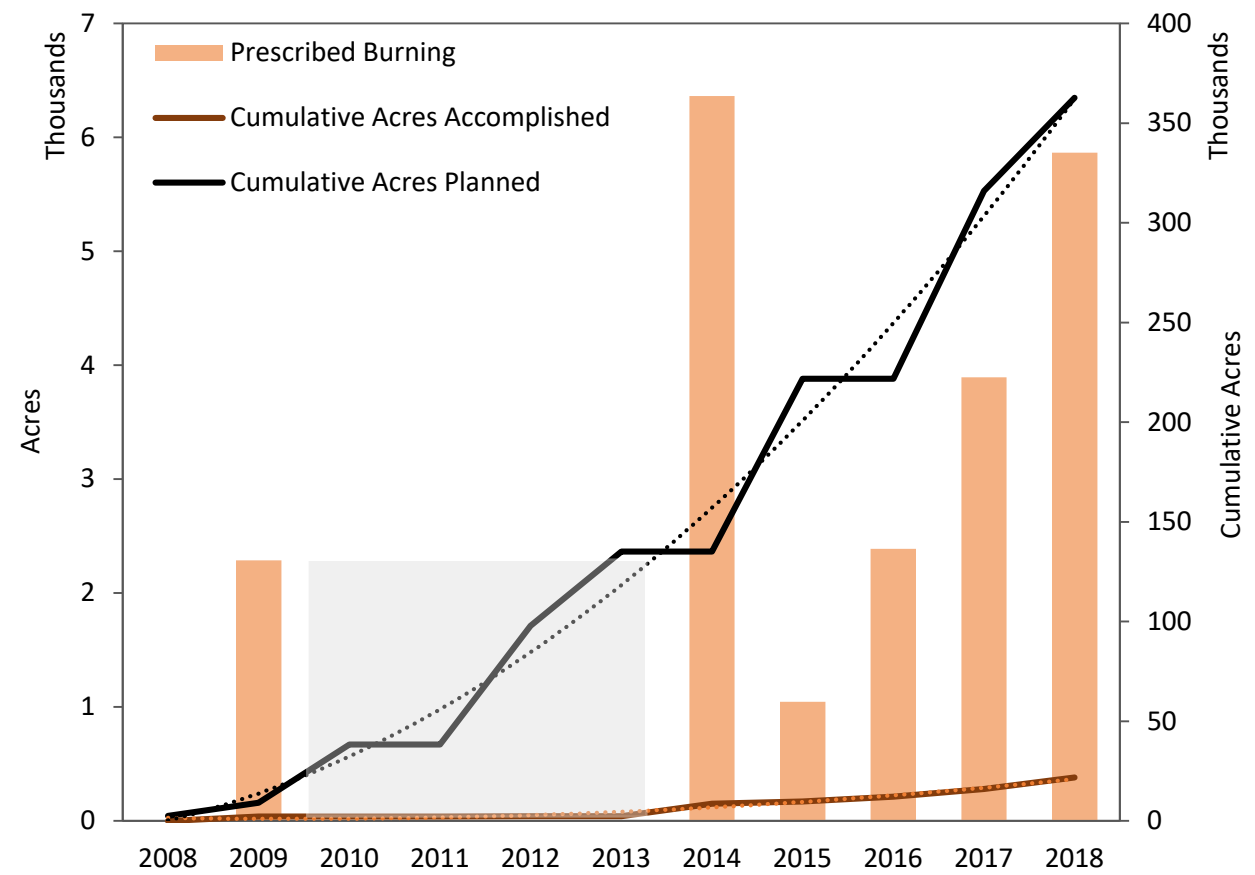
Between 2009 – 2017, forest is accomplishing between 4,000 – 12,000 acres of non-commercial mechanical treatments

Jumps to over 30,000 acres in 2018. What enabled this to happen?

Acres of pile burning accomplished by year



Acres of prescribed burning accomplished by year



Does not indicate no RxFire in these years, just no RxFire within accelerated restoration priority projects

Summary

- Trend towards larger project areas and more acres planned for vegetation treatment and/or prescribed fire through time
- Approximately 30% of planned treatments have had some sort treatment completed in them, but only 9% of units with multiple mechanical treatments have had the full suite of treatments completed (independent of time)
- Accomplished over 50% of planned commercial thinning, ~20% of non-commercial mechanical treatments, and <10% of prescribed burning or aspen/riparian restoration
- Keeping pace with commercial treatments, backlog exceeding implementation for other treatment types

Phase	Commercial Thinning	NCT/PCT	Biomass / Post & Pole	Fuels Treatment	Pile Burning	Prescribed Burning	Aspen Fencing	Aspen / Riparian Restoration
Planned (NEPA)	145,961	200,673	7,790	232,146	223,542	401,989	1,204	8,681
Planned (FACTS)	92,884	72,261	1,636	89,050	77,353	189,773	207	2,325
Accomplished	81,210	45,974	1,265	56,121	46,038	30,454	8	603
Completed	47,134	34,007	973	40,898	44,712	30,454	8	170
% Accomplished	56%	23%	16%	24%	21%	8%	1%	7%