



FOUR FOREST RESTORATION INITIATIVE

June 2023 MONTHLY REPORT

June

Fiscal Year 2023

Published On

July 21, 2023

The Four Forest Restoration Initiative (4FRI) is a landscape-level effort to restore 2.4 million acres of ponderosa pine and mixed conifer forests on portions of the Apache-Sitgreaves, Coconino, Kaibab, and Tonto National Forests in northern Arizona. The 4FRI vision is to restore forest ecosystems, reduce threats of destructive wildfire to forest communities, support sustainable forest industries that strengthen local economies, protect critical watersheds, conserve natural resources, maintain aesthetic values, and ensure the long-term success of this project and industry. These watersheds supply water uses including municipal, domestic, irrigation and industrial uses for millions of people in the Phoenix metropolitan area.

The 4FRI Stakeholder Group serves a critical role in collaboratively working together to accomplish the program objectives. The stakeholders have been tracking progress since 2010 and are committed to getting work done on the ground by contributing knowledge, resources, and support.

The objective of this report is to broadly share the successes related to planned and accomplished work across the 4FRI area for commercial thinning, hazardous fuels reduction, and prescribed fire. This report highlights collaborative efforts with partners and industry and showcases ongoing monitoring and innovations.

4FRI Recent Updates

- Acres treated since last report:
 - 2,051 acres of commercial thinning awarded
 - 1,178 acres of commercial thinning implemented
 - 171 acres of non-commercial hazardous fuels reduction implemented
 - 1,851 acres of prescribed fire implemented
- 4FRI is one of 21 National Priority Landscapes under the Wildfire Crisis Strategy, <https://www.fs.usda.gov/managing-land/wildfire-crisis>. The Forest Service is stepping up the pace and scale of our fuels and forest health treatments to match the actual scale of wildfire risk.
- FY23 planned treatments across 4FRI:
 - Plan to award around 50,000 acres of commercial thinning contracts
 - Around 24,000 acres non-commercial hazardous fuel reduction
 - over 100,000 acres prescribed burning

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4FRI Vicinity Overview

The 4FRI program covers portions of four National Forests in northern Arizona – the Apache-Sitgreaves, Coconino, Kaibab, and Tonto National Forests. The overall 4FRI footprint encompasses roughly 6 million acres (Figure 1). Within this area 4FRI focuses on restoring ponderosa pine forests, which cover around 2.4 million acres within this initiative area footprint (Figure 1). In addition, some woodland and brush treatments to reduce hazardous fuels are included.

The United States Forest Service (hereafter Forest Service) uses a variety of treatment methods to restore ponderosa pine and woodland forests. Commercial thinning operations are used to restore forest structure where ground conditions are suitable for using heavy equipment, non-commercial hazardous fuels treatments are also used to restore forest structure in areas where heavy equipment is not suitable, and prescribed fire is used to reduce forest fuels, restore forest structure, and restore natural processes. To accomplish restoration objectives, these treatment methods may overlap over time and space.

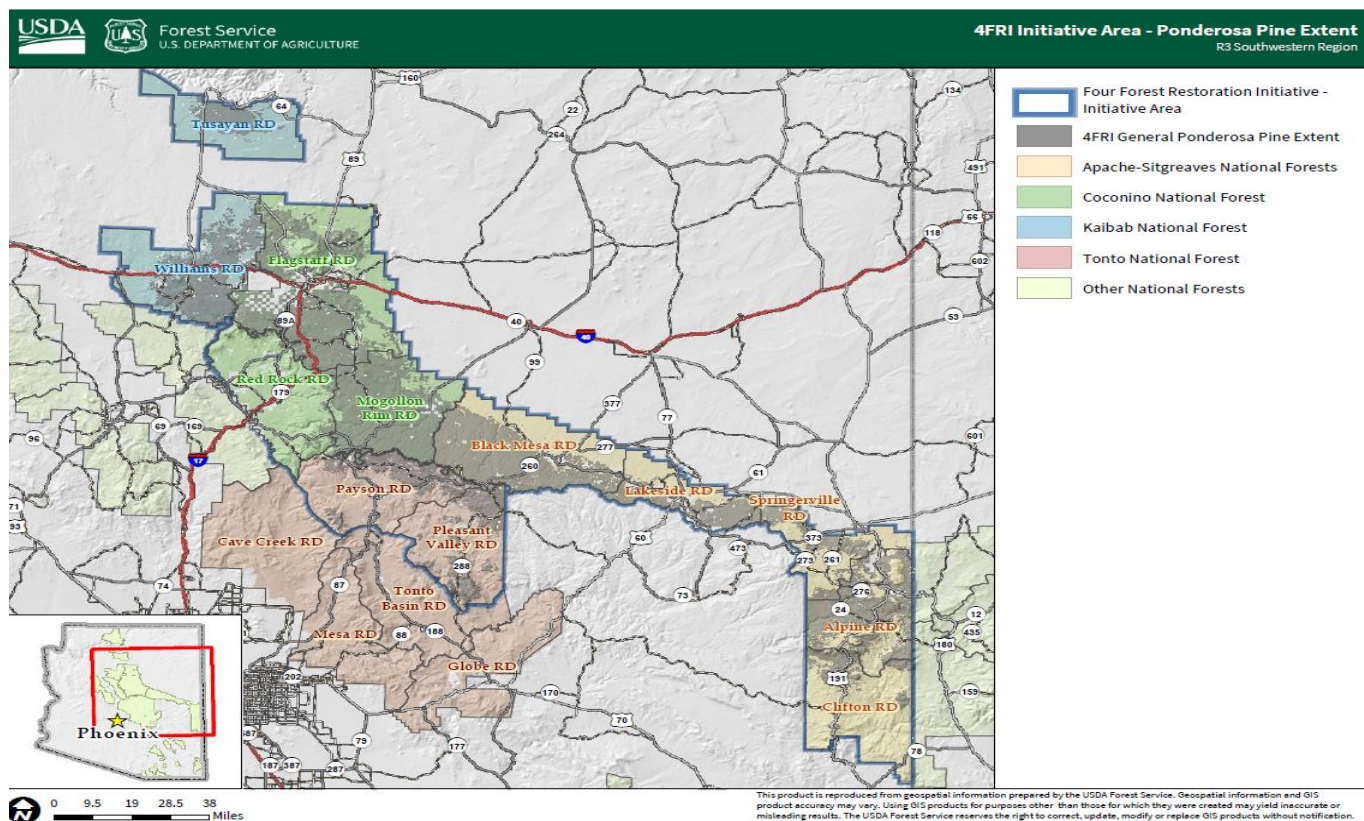


Figure 1. Vicinity Map showing the 4FRI footprint (Initiative Area, blue outline) and extent of ponderosa pine forest (gray area) within the footprint.

Awarded and Completed Commercial Thinning, Non-Commercial Hazardous Fuels Reduction, and Prescribed Fire Treatments– 2010-2022

Forest restoration is a long-term commitment that may require multiple entries, using different restoration methods, to accomplish objectives. Any number of commercial and non-commercial mechanical treatments, pile burning, and broadcast burning could be used on the same piece of ground to restore forest structure and processes. Table 1 provides a summary of all restoration treatments that have occurred annually since 2010 in the 4FRI footprint. This includes acres that were *awarded* in commercial thinning contracts, as well as acres *implemented* on commercial thinning contracts, non-commercial hazardous fuels reduction treatments, broadcast burning, and pile burning. Some of these treatments overlap on the same piece of ground.

Table 1. Summary of Acres Awarded and Completed by Fiscal Year (Oct 1 – Sept 30) since 2010.

Summary by Fiscal Year	Commercial Thinning Acres Awarded	Commercial Thinning Acres Completed	Non-Commercial Thinning Completed	Broadcast Burn Acres Completed	Pile Burn Acres Completed
Fiscal Year 2010	10,882	13,198	30,977	35,628	11,761
Fiscal Year 2011	17,638	16,277	23,507	34,019	17,741
Fiscal Year 2012	10,063	8,865	29,817	28,160	6,582
Fiscal Year 2013	12,979	11,739	19,061	24,128	8,584
Fiscal Year 2014	10,730	11,278	19,495	24,717	10,057
Fiscal Year 2015	21,263	16,302	25,573	33,648	10,381
Fiscal Year 2016	40,099	11,742	22,709	53,292	8,085
Fiscal Year 2017	32,514	15,118	23,008	44,155	2,399
Fiscal Year 2018	21,983	9,611	27,789	66,218	6,704
Fiscal Year 2019	31,028	12,243	20,578	52,566	6,095
Fiscal Year 2020	16,430	12,446	20,656	53,379	4,831
Fiscal Year 2021	6,616	18,119	20,021	11,638	3,323
Fiscal Year 2022	24,886	25,510	36,858	56,716	5,286
	257,111	182,448	320,051	518,263	101,830

In addition to reporting the total acres of treatments conducted, it's also useful to understand the actual footprint of land where restoration treatments have occurred. As noted earlier, multiple treatments could occur on the same piece of ground, so the actual acres restored would be less than the treatment acres conducted. For example, Table 1 could show one acre of commercial thinning and one acre of pile burning, even though those two activities occurred on the same piece of ground. Table 2 on the other hand dissolves treatment types spatially to provide the number of acres that have received one or more restoration treatments since 2010. In addition, Table 2 also provides the number of acres that have had a commercial thinning treatment and a broadcast burn. This information is useful for understanding the overall restoration treatment and potential maintenance needs for post-harvest regeneration.

Table 2. Summary of the actual footprint of land that has had one or more treatments completed between 2010-2022

Forest	Acres with One or More Treatment	Acres of Commercial Thinning	Total Acres with Commercial Thinning and Broadcast Burn Treatments
Apache-Sitgreaves	291,402	117,373	23,499
Coconino	189,956	30,632	5,536
Kaibab	142,136	26,810	7,695
Tonto	96,372	7,632	1,477
TOTAL ACRES	719,866	182,448	38,207

* These numbers could differ from previous reports. The Forest Service has revised its methods for collecting and sharing data. Current reporting is based on information stored in the Forest Activity Tracking System (FACTS), the official database of record for the Forest Service.

Fiscal Year 2023 Awarded, Ongoing, and Completed Projects

This section of the report summarizes current fiscal year (October 1 – September 30) accomplishments and is updated monthly. Commercial thinning contracts include traditional timber sales, stewardship contracts, and agreements that are part of the Forest Service’s regular program or work and our high-priority partnerships. These two categories (program of work and partnerships) are further split out later in this report. It’s important to note that awarded acres and completed acres in a given fiscal year are often not the same acres. Rather, acres completed in FY23 were often awarded in previous years and acres awarded in FY23 will often be completed in future years, since most contracts take multiple years to complete.

Table 3. Acres awarded and completed in FY23. Many of the acres that are completed in FY23 are from sales that were awarded in previous years. Likewise, many acres that are awarded in FY23 will be completed in out-years.

FY23 Activity Acres Awarded and Completed	Total Acres	Acres Since Last Report
Commercial Thinning Contracts Awarded	16,316	2,051
Commercial Thinning Acres Completed	10,720	1,178
Non-Commercial Hazardous Fuels Contracts Awarded	3,551	0
Non-Commercial Hazardous Fuels Acres Completed	5,847	171
Pile Burning Acres Completed	6,874	0
Broadcast Burning Acres Completed	46,301	1,851

Table 4. Currently awarded commercial contracts with ongoing operations. This table is updated monthly and contains a summary of the progress of each commercial contract within 4FRI.

Forest	Fiscal Year Awarded	Contract Termination Date	Sale Name	Contractor	Total Sale Acres	Total Acres Completed	Acres Remaining	Acres Harvested FY23	Acres Treated Since Previous Month
A-S	FY16	9/8/2023	Larson Sandstone	Tri Star Logging	2,883	1,983	900	0	0
A-S	FY17	10/15/2023	URA-Gobbler	Forest Energy	1,318	1,318	0	445	312
A-S	FY18	9/30/2023	URA-Billy Mountain	WW Cattleguards	3,354	3,038	316	68	15
A-S	FY18	12/31/2023	Larson-Slim Re-Offer	Tri Star Logging	1,990	1,525	465	0	0
A-S	FY18	12/31/2023	Luna Tank (West Escudilla)	Tri Star Logging	1,316	665	651	515	200
A-S	FY18	12/31/2024	Larson-Ryan	Tri Star Logging	1,885	220	1,665	220	0
A-S	FY18	7/31/2025	Burnt Mill Stew.	Tri Star Logging	931	753	178	0	0
A-S	FY19	6/30/2026	GP-Greens Peak	Tri Star Logging	1,140	282	858	0	0
A-S	FY19	12/31/2025	RL-Palomino	Tri Star Logging	1,682	0	1,682	0	0
A-S	FY19	9/30/2025	WE- ELC	R&J ECO-CHALLENGE WEST, Inc. dba Holliday Timber	2,565	1,789	776	300	50
A-S	FY20	6/30/2027	Larson-Springs Reoffer	Canyon Ck Logging Inc.	1,042	0	1,042	0	0
A-S	FY20	9/30/2023	WE-Reagan PJ	Chippin-in, LLC	2,486	225	2,261	100	100
A-S	FY20	6/30/2023	Windmill PJ	Chippin-in, LLC	1,062	1,062	0	660	165
A-S	FY20	7/01/2023	Nappa (Carr Lake 2)	Tri Star Logging	1,412	1,232	180	0	0
A-S	FY21	12/31/2025	URA – Draw Stewardship	Canyon CK Logging Inc.	1,591	621	970	621	91
A-S	FY21	6/30/2026	Larson – Smith	Tri Star Logging	2,209	250	1,959	250	150
A-S	FY22	9/30/2026	Larson – Potato Re-Offer	Tri Star Logging	2,659	230	2,429	0	0
A-S	FY22	12/31/2025	Morgan North	Chippin-in, LLC	209	0	209	0	0
A-S	FY22	6/30/2027	Mare Stewardship	Canyon CK Logging Inc.	1,596	595	1,000	595	0
A-S	FY22	9/30/2027	Promontory	Tri Star Logging	2,344	0	2,300	0	0
A-S	FY23	03/31/2025	Okpy	Tri Star Logging	1,887	460	1,427	460	0
A-S	FY23	12/31/2027	URA - Chipmunk	Canyon Creek Logging	1,770	0	1,770	0	0
A-S	FY23	12/31/2027	N1 Stewardship	Canyon Creek Logging	1,168	0	1,168	0	0
A-S	FY23		RL – OW	Canyon Creek Logging	2,051	0	2,051	0	0
Apache-Sitgreaves Totals:					42,505	16,248	26,257	5,984*	1,083

Forest	Fiscal Year Awarded	Contract Termination Date	Sale Name	Contractor	Total Sale Acres	Total Acres Completed	Acres Remaining	Acres Harvested FY23	Acres Treated Since Previous Month
Coconino	FY15	5/15/2023	Munds Park	James Perkins	650	423	227	0	0
Coconino	FY17	10/15/2023	Two Joes	Tri Star Logging	1,528	1,152	376	0	0
Coconino	FY19	12/31/2023	A-1 South Multiproduct Sale	Joe Dirt Excavating Inc	2,470	1,612	858	255	0
Coconino	FY19	12/3/2028	General Springs SPA	National Wild Turkey Federation	3,519	472	3,047	472	0
Coconino	FY20	12/31/2024	Horse Park	Dakota Logging	2,747	2,491	256	431	0
Coconino	FY20	12/31/2024	Shultz Tank (6T)	Bob Lee and Sons	447	271	176	21	0
Coconino	FY21	12/31/2026	Willard	Dakota Logging	2,316	1,339	997	355	0
Coconino	FY21	12/31/2026	Mormon Mountain	Suarez Forestry	640	45	595	0	0
Coconino	FY22	2/28/2024	Little Springs GNA	AZ DFFM	383	141	242	51	0
Coconino	FY22	3/01/2023	Baker	AZ Dept Fire & Forestry	1,010	435	575	95	0
Coconino	FY22	7/15/2023	Elk Clark	New Life Forest Products	1,738	335	1,403	465	0
Coconino	FY22	9/30/2027	Southside Airport	Bob Lee & Sons	2,023	0	2,023	0	0
Coconino	FY22	9/25/2023	Gifford GNA	Bob Lee & Sons	2,756	0	2,756	0	0
Coconino	FY22	9/26/2023	McCarty GNA	New Life Forest Products	1,474	0	1,474	0	0
Coconino	FY22	9/25/2023	Roosevelt GNA	Suarez Forestry	2,284	99	2,185	99	0
Coconino	FY22	7/30/2024	Walker Hill Demo	TNC – Suarez Logging	410	410	0	410	0
Coconino	FY23	12/31/2027	Frog Tank	Restoration Forestry	2,701	0	2,701	0	0
Coconino	FY23	12/31/2027	Walker Hill Timber	Restoration Forestry	1,865	82	1,783	82	0
Coconino Totals:					31,164	9,327	21,837	3,419*	0
Kaibab	FY17	7/15/2023	Cougar Park	Bob Lee and Sons	1,342	1,336	6	311	0
Kaibab	FY20	12/31/2025	Beacon Box Car	Perkins Timber Harvesting	1,800	1,279	521	0	0
Kaibab	FY21	12/31/2024	Junction	Bob Lee and Sons	353	293	60	0	0
Kaibab	FY22	12/31/2026	Fourtyniner West	Perkins Timber Harvesting	1,433	450	983	150	0
Kaibab	FY22	8/31/2025	Holden	Perkins Timber Harvesting	1,365	856	509	856	95
Kaibab	FY23	12/31/2025	Government Prairie	New Life Forest Products	1,366	0	1,366	0	0
Kaibab	FY23	12/31/2026	Klostermeyer	Dakota Logging	1,187	0	1,187	0	0
Kaibab Totals:					8,846	4,214	4,632	1,317*	95
Tonto	FY18	4/30/2024	Diamond Nickel IRTC	Tri Star Logging	693	383	310	0	0
Tonto	FY23	12/31/2026	Pringle Tater Chip	Canyon Creek Logging	1,873	0	1,873	0	0
Tonto Totals:					2,666	383	2,183	0*	0

Forest	Fiscal Year Awarded	Contract Termination Date	Sale Name	Contractor	Total Sale Acres	Total Acres Completed	Acres Remaining	Acres Harvested FY23	Acres Treated Since Previous Month
4FRI Totals:					85,081	30,172	54,909	10,720*	1,178

* Acres include sales that have been completed this fiscal year and are no longer shown in this table.

High Priority Partner Projects

The 4FRI Restoration Strategy identified nine projects across 4FRI that have a high potential to significantly reduce the risk of catastrophic wildfire by addressing immediate, pressing safety needs that are most threatening to communities today. These critical projects are being implemented through partnerships, using the Good Neighbor Authority (GNA) and Master Stewardship Agreements (MSA). High priority partner projects on the Coconino National Forest will include product removal. High-priority partner projects on the Kaibab National Forest will not include product removal and will instead focus on non-commercial hazardous fuel reduction. High-priority partner projects on the Tonto National Forest will have limited commercial timber product removal and will primarily be composed of mechanical mastication of hazardous fuels and non-commercial thinning work.

Table 5. List of High Priority Partner Projects, including FY23 planned and awarded agreements

Priority Project	Primary Partner	Total Project Acres	Fiscal Year/Individual Project Name	Treatment Method	Individual Project Acres	Total Acres Awarded To-Date	Acres Remaining for Award
Flagstaff Watershed Protection Project	COF, CC, AZDFFM	2,500	FY22 FWPP Deck Sale	Non-Commercial	0	0	2,342
			FY23 Weimer TSI	Non-Commercial	158	158	
REPI	DOD	6,297	Bonita, Mayflower	Commercial	993	993	5,304
			FY23 Johnny's	Commercial	2,670	0	
			FY23 Weimer	Commercial	363	0	
			FY23 Marshall	Commercial	2,271	0	
Innovations	TNC	5,000	FY22 Walker Hill Demo	Commercial	410	410	4,590
Cragin	AZDFFM	35,360	FY19 General Springs	Commercial	3,519	3,519	24,317
			FY22 Baker	Commercial	1,010	1,010	
			FY22 McCarty	Commercial	1,474	1,474	
			FY22 Roosevelt	Commercial	2,284	2,284	
			FY22 Gifford	Commercial	2,756	2,756	
			FY23 Johnson	Commercial	650	0	
			FY23 Kehl	Commercial	1,722	0	
Bill Williams	NFF, CC	2,773	FY23 Kinder	Commercial	3,491	0	2,012
			SS1 300 Acres, SS2 176	Non-Commercial	476	476	
			FY22 Steep Slope Phase 3	Non-Commercial	285	285	
Dude Fire Restoration Project	AZDFFM	7,600	FY23 Steep Slope Phase 4	Non-Commercial	400	0	6,445
			FY22 Dude Fire Restoration Phase 1	Mastication	1,450	1,450	
Woodland DFFM	AZDFFM	62,000	FY23 Dude Fire Restoration Phase 2	Mastication	1,155	0	60,891
			FY22 Roberts	Mastication	588	588	
			FY22 Keger	Mastication	209	209	
			FY22 Pringle Tater Chip	Mastication	312	312	
Woodland Flying V&H, Dead Man Mesa	NFF	5,684	FY23 South Payson	Mastication	2,314	0	4,223
			FY22 Flying V&H	Mastication	1,045	1,045	
			FY23 Deadman Mesa	Mastication	3,178	0	
Pine Canyon	NFF	500	FY23 Canyon Ground Based	Commercial	350	0	500

Priority Project	Primary Partner	Total Project Acres	Fiscal Year/Individual Project Name	Treatment Method	Individual Project Acres	Total Acres Awarded To-Date	Acres Remaining for Award
Tonto Northzone Timber GNA	DFFM	2,975	FY23 Poco Pino	Commercial	700	0	2,975
TOTALS	-----	135,089	-----		36,363	16,969	117,704

* AZDFFM = Arizona Department of Forestry and Fire Management. CC = Coconino County. COF = City of Flagstaff. DOD = Department of Defense. NFF = National Forest Foundation. TNC = The Nature Conservancy.

Commercial Timber Program of Work

This section includes a summary of planned commercial thinning projects in FY23. These planned acres are separate from the treatments planned in the High-Priority Partner projects. These projects use commercial timber sales or stewardship contracts that contain product removal. There is significant prep work required to prepare a timber sale for bid. The prep work includes surveys for numerous resources including archaeology and special status wildlife species. The projects must follow the design criteria (sometimes called design features, conservation or mitigation measures, or best management practices) identified in the associated National Environmental Policy Act (NEPA) document. The timber units must be cruised and marked in preparation for the contract. It takes multiple years to conduct surveys and prepare the timber units for sale. The projects and acres contained in this table are current estimates and are subject to change to enable the program manager to respond to a variety of external and internal factors. Entities outside the Forest Service should not rely on this information when making decisions that affect their business or organization. For a more concrete list of contract offerings expected within the next six months, please check with individual Forest's timber program managers.

Table 6. List of commercial thin contracts planned by forest in FY23, not including those under a partnership agreement.

Forest	District	NEPA Document Title	Sale Name	Acres Planned	Acres Awarded
Apache-Sitgreaves	Black Mesa	Park Day CE	Exchange Tank	448	448
Apache-Sitgreaves	Alpine	Nutrioso WUI EA	Noble Mountain	300	0
Apache-Sitgreaves	Alpine	Black River EA	BR – Beaverhead	2,588	0
Apache-Sitgreaves	Springerville	Black River EA	BR – Big Lake	1,179	0
Apache-Sitgreaves	Lakeside	Rim Country EIS	RC - Stringer	2,083	0
Apache-Sitgreaves	Black Mesa	Rim Lakes EA	RL – OW	2,051	2,051
Apache-Sitgreaves	Black Mesa	Rim Country EIS	RC – Beaver	964	0
Apache-Sitgreaves	Black Mesa	Heber EA	Halter Biomass	972	0
Apache-Sitgreaves	Black Mesa	Rim Country EIS	RC – Long Draw	2,125	0
Apache-Sitgreaves	Black Mesa	Rim Country EIS	RC – N1	1,231	1,168
Apache-Sitgreaves	Lakeside	Upper Rocky Arroyo EA	URA – Chipmunk	1,779	1,770
Apache-Sitgreaves	Black Mesa		Oký (shelf stock)	0	1,887
Apache-Sitgreaves Total FY23 Acres				15,720	7,324
Coconino	Flagstaff	4FRI 1 st EIS	Frog Tank	2,701	2,701
Coconino	Flagstaff	4FRI 1 st EIS	Walker Hill Timber	1,865	1,865
Coconino	Flagstaff	Hart Prairie	Hoch	2,053	0
Coconino	Flagstaff	Wing Mountain	Wing East	2,603	0
Coconino	Flagstaff	4FRI 1 st EIS	Newman Park	3,338	0
Coconino Total FY23 Acres				12,560	4,566
Kaibab	Williams	4FRI 1 st EIS	Government Prairie	1,366	1,366
Kaibab	Williams	4FRI 1 st EIS	Klostermyer	1,187	1,187
Kaibab	Williams	4FRI 1 st EIS	Fourtyner East	1,131	0
Kaibab	Williams	4FRI 1 st EIS	Spitz Hill	1,843	0
Kaibab Total FY23 Acres				5,527	2,553
Tonto	Pleasant Valley	Rim Country EIS	Pringle Tater Chip	1,961	1,873
Tonto Total FY23 Acres				1,961	1,873
4FRI Total FY23 Acres Planned and Awarded				35,768	16,316

Non-Commercial Hazardous Fuel Reduction and Prescribed Fire

This section includes a summary of planned treatments for non-commercial hazardous fuel reduction and prescribed fire for FY23. These planned acres are separate and in addition to the treatments planned in the High-Priority Partner project areas. Hazardous fuels reduction, shown in Table 7, includes non-commercial treatments that don't result in product removal and include treatment methods including mastication and thinning with chainsaws. Prescribed fire, shown in Table 8, includes broadcast burning and pile burning. Forests do not anticipate having the ability to implement all broadcast burns listed in this table, but rely on having a large pool of projects ready to implement to provide fire managers with the ability to move operations to areas where burn windows are favorable. Actual prescribed fire target acres for each forest are approximately 35,000 acres per year for the Apache-Sitgreaves (~46,000 acres shown), 20,000 acres per year for the Coconino (~60,000 acres shown), 20,000 acres per year for the Kaibab (~28,000 acres shown), and 14,000 acres per year for the Tonto (~23,000 acres shown).

Table 7. List of non-commercial hazardous fuels reduction projects planned by forest in FY23, not including those under a partnership agreement.

Forest	District	NEPA Document Title	Project Name	Treatment Type	FY23 Acres Hazardous Fuels Planned	FY23 Acres Hazardous Fuels Awarded	FY23 Acres Hazardous Fuels Implemented
Apache-Sitgreaves	Black Mesa	RCRX	Ross Draw	Mastication	1,500	0	0
Apache-Sitgreaves	Black Mesa	RCRX	FY22 Ross Draw	Mastication	0	0	299
Apache-Sitgreaves	Springerville	TBD	West Escudilla PJ	Hand Thinning	1,000	0	0
FY23 Apache-Sitgreaves Non-Commercial Hazardous Fuel Reduction Totals:					2,500	0	299
Coconino	Flagstaff	4FRI 1st EIS	FY21 Dairy Springs Recreation Residence Thinning	Hand Thinning	0	0	20
Coconino	Flagstaff	4FRI 1st EIS	Dairy Springs Recreation Residence Thinning	Hand Thinning	64	0	0
Coconino	Flagstaff	4FRI 1st EIS	FR 556 Phase 2	Hand Thinning	100	0	0
Coconino	Flagstaff	4FRI 1st EIS	Pumphouse Wash	Hand Thinning	200	0	0
Coconino	Flagstaff	4FRI 1st EIS	Chapel	Hand Thinning	12	0	0
Coconino	Flagstaff	Flagstaff Watershed Protection Project	FWPP - Weimer Springs	Hand Thinning	158	0	0
Coconino	Flagstaff	Jack Smith Schultz	89 Mesa Phase 1	Hand Thinning	92	0	0
Coconino	Flagstaff	Wing Mountain	Snowbowl Rd Phase 2	Hand Thinning	90	75	0
Coconino	Flagstaff	4FRI 1st EIS	Woody '04 Phase 2	Mastication	750	0	0
Coconino	Flagstaff	4FRI 1st EIS	A1 South Phase 1	Mastication	500	0	0
Coconino	Mogollon Rim	Rim Country	Mogollon Fuel Break	Hand Thinning	360	0	0

Forest	District	NEPA Document Title	Project Name	Treatment Type	FY23 Acres Hazardous Fuels Planned	FY23 Acres Hazardous Fuels Awarded	FY23 Acres Hazardous Fuels Implemented
Coconino	Mogollon Rim	Clints Well	Lodge Fuel Break	Hand Thinning	90	0	0
Coconino	Mogollon Rim	MRRD Oystershell Scale Mitigation Trials	OSS Mitigation Trials	Hand Thinning	21	0	0
Coconino	Mogollon Rim	CC Cragin	Cragin Mastication	Mastication	167	0	0
FY23 Coconino Non-Commercial Hazardous Fuels Reduction Totals:					2,604	75	20
Kaibab	Tusayan	4FRI 1st EIS	Reed TSI	Hand Thinning	635	0	0
Kaibab	Tusayan	4FRI 1st EIS	Halfway TSI	Hand Thinning	1,421	0	0
Kaibab	Williams	4FRI 1 st EIS	Sanderson South Hand Thin/Pile (*Workforce)	Hand Thinning/Piling	45	0	0
Kaibab	Williams	4FRI 1st EIS	Hardy DZR Thinning (*Workforce)	Hand Thinning	133	0	0
Kaibab	Williams	South Zone Grassland	Irishman Dam DZR Thinning (*Workforce)	Hand Thinning	310	0	0
Kaibab	Tusayan	South Zone Grassland	Curley Wallace Mastication	Mastication	1,156	825	0
Kaibab	Tusayan	South Zone Grassland	New Automobile Snipping (*Workforce)	Hand Thinning	1,299	0	0
Kaibab	Tusayan	South Zone Grassland	Boggy Tank Thinning – (*Workforce)	Mechanical Thinning	104	0	66
FY23 Kaibab Non-Commercial Hazardous Fuels Reduction Totals:					5,103	825	66
Tonto	Payson	Myrtle EA	FY22 Payson Fuel Break Maintenance	Hand Thinning	0	0	2,914
Tonto	Payson	Rim Country EIS	FY22 Dude Fire Restoration	Mastication	0	0	21
Tonto	Payson	Christopher Hunter	Christopher Creek C.G Piles	Pile Burning	156	0	0
Tonto	Payson	Lion WUI EA	Lion Mastication Maintenance	Mastication	901	0	0
Tonto	Payson	Myrtle WUI EA	Meads Ranch Piles/Ellison Creek Piles	Pile Burning	400	0	0
Tonto	Payson	Payson WUI EA	FY22 Payson Fuel Break Maintenance chainsaw	Hand Thinning	0	0	2,302
Tonto	Payson	Payson WUI EA	FY23 Payson Fuel Break Maintenance chainsaw	Hand Thinning	2,109	2,109	0
Tonto	Pleasant Valley	Chamberlain EA	Chamberlain	Mastication	0	75	75
Tonto	Payson	Myrtle EA	Myrtle	Mastication	0	502	150
Tonto	Pleasant Valley	Rim Country	Cherry Frio Mastication Maintenance	Mastication	1,979	0	0

Forest	District	NEPA Document Title	Project Name	Treatment Type	FY23 Acres Hazardous Fuels Planned	FY23 Acres Hazardous Fuels Awarded	FY23 Acres Hazardous Fuels Implemented
Tonto	Pleasant Valley	Rim Country	Vosberg Mastication Maintenance	Mastication	536	0	0
Tonto	Pleasant Valley	Rim Country	Buzzard Roost Mastication Maintenance	Mastication	1,231	0	0
FY23 Tonto Non-Commercial Hazardous Fuels Reduction Totals:					7,312	2,611	5,462
FY23 4FRI Hazardous Fuels Reduction Totals:					17,519	3,511	5,847

* Workforce refers to projects that will be completed with Forest Service crews, so there will be no contract awarded to a 3rd party.

Table 8. List of prescribed burn projects planned by forest in FY23.

Forest	District	NEPA Document Title	Project Name	Treatment Type	Acres Rx Fire Planned	Acres Implemented
Apache- Sitgreaves	Alpine	Wallow West	Wallow West Unit 9	Broadcast Burning	7,739	0
Apache- Sitgreaves	Alpine	Nutriosio WUI EA	Nutriosio 2	Broadcast Burning	0	2,493
Apache- Sitgreaves	Black Mesa	Rim Lakes EA	Sinkhole	Broadcast Burning	1,007	0
Apache- Sitgreaves	Black Mesa	Rim Lakes EA	Carr Lake/Alder	Broadcast Burning	2,218	0
Apache- Sitgreaves	Black Mesa	Rim Lakes EA	Bear	Broadcast Burning	2,065	0
Apache- Sitgreaves	Black Mesa	Rim Lakes EA	Fulton	Broadcast Burning	2,103	0
Apache- Sitgreaves	Black Mesa	Rim Lakes EA	Rim Top	Broadcast Burning	1,655	0
Apache- Sitgreaves	Clifton	East Eagle/Mud Springs	EEMS Phase 1 Block C	Broadcast Burning	12,008	0
Apache- Sitgreaves	Clifton	Mesa	Mesa	Broadcast Burning	0	10,281
Apache-Sitgreaves	Lakeside	Los Burros	Antelope	Broadcast Burning	0	1,008
Apache- Sitgreaves	Lakeside	RCRX	260	Broadcast Burning	696	0
Apache- Sitgreaves	Lakeside	Timber Mesa/Vernon WUI	Dipping Vat	Broadcast Burning	1,209	0
Apache- Sitgreaves	Lakeside	Country Club	Country Club	Broadcast Burning	935	0
Apache- Sitgreaves	Lakeside	Show Low South	Show Low West	Broadcast Burning	2,403	0
Apache- Sitgreaves	Lakeside	Timber Mesa/Vernon WUI	Mud Springs	Broadcast Burning	1,829	0
Apache- Sitgreaves	Lakeside	Los Burros	Doyle	Broadcast Burning	0	294
Apache- Sitgreaves	Lakeside	Los Burros	Ecks	Broadcast Burning	0	1,557
Apache- Sitgreaves	Springerville	Greer WUI	Pole Knoll	Broadcast Burning	2,020	0
Apache- Sitgreaves	Springerville	Wallow West	Wallow West Unit 6A	Broadcast Burning	7,837	0
Apache-Sitgreaves	Springerville	Wallow West	Wallow West Unit 3B	Broadcast Burning	0	4,688

Forest	District	NEPA Document Title	Project Name	Treatment Type	Acres Rx Fire Planned	Acres Implemented
Apache- Sitgreaves	Springerville	Mineral	Whiting - Cross 1	Broadcast Burning	0	0
Apache- Sitgreaves	Springerville	Mineral	Whiting - Cross 2	Broadcast Burning	0	0
Apache- Sitgreaves	Springerville	Mineral	Whiting - Bred	Broadcast Burning	0	0
Apache- Sitgreaves	Springerville	Mineral	Whiting - Tank	Broadcast Burning	0	0
FY23 Apache-Sitgreaves Prescribed Fire Treatment Totals:					45,724	20,321
Coconino	Flagstaff	4FRI 1st EIS	BAR-M, Mint West, 1	Broadcast Burning	963	0
Coconino	Flagstaff	4FRI 1st EIS	BAR-M, Mint West, 2	Broadcast Burning	965	0
Coconino	Flagstaff	4FRI 1st EIS	BAR-M, Mint West, 3	Broadcast Burning	1,315	0
Coconino	Flagstaff	4FRI 1st EIS	BAR-M, Mint West, 4	Broadcast Burning	754	0
Coconino	Flagstaff	4FRI 1st EIS	BAR-M, Mint West, 8	Broadcast Burning	651	0
Coconino	Flagstaff	Mormon Lake Basin	BAR-M, Molake Basin	Broadcast Burning	5,111	0
Coconino	Flagstaff	4FRI 1st EIS	FUI, 89A, 24	Broadcast Burning	314	0
Coconino	Flagstaff	Woody Ridge	FUI, Arboretum, 1	Broadcast Burning	637	0
Coconino	Flagstaff	Woody Ridge	FUI, Arboretum, 3	Broadcast Burning	613	0
Coconino	Flagstaff	Woody Ridge	FUI, Arboretum, 4	Broadcast Burning	480	0
Coconino	Flagstaff	4FRI 1st EIS	FUI, Camp Colton	Broadcast Burning	1,180	0
Coconino	Flagstaff	Eastside	FUI, Campbell Mesa, 6	Broadcast Burning	533	0
Coconino	Flagstaff	Marshall	FUI, Cherry, 2	Broadcast Burning	235	0
Coconino	Flagstaff	4FRI 1st EIS	FUI, Chimney Springs	Broadcast Burning	5,517	0
Coconino	Flagstaff	4FRI 1st EIS	FUI, Elden Base, 1	Broadcast Burning	243	0
Coconino	Flagstaff	4FRI 1st EIS	FUI, Elden Base, 2	Broadcast Burning	179	0
Coconino	Flagstaff	4FRI 1st EIS	FUI, Elden Base, 3	Broadcast Burning	107	0
Coconino	Flagstaff	4FRI 1st EIS	FUI, Elden Base, 4	Broadcast Burning	282	0
Coconino	Flagstaff	4FRI 1st EIS	FUI, Elden Base, 5	Broadcast Burning	400	0
Coconino	Flagstaff	4FRI 1st EIS	FUI, Elden Base, 6	Broadcast Burning	234	0
Coconino	Flagstaff	4FRI 1st EIS	FUI, Elden Base, 7	Broadcast Burning	294	0
Coconino	Flagstaff	4FRI 1st EIS	FUI, Elden Base, 8	Broadcast Burning	250	0
Coconino	Flagstaff	4FRI 1st EIS	FUI, Elden Base, 11	Broadcast Burning	97	0
Coconino	Flagstaff	Mountainair	FUI, Mountainair	Broadcast Burning	3,019	0
Coconino	Flagstaff	Woody Ridge	FUI, Woody Bobs	Broadcast Burning	2,525	0
Coconino	Flagstaff	4FRI 1st EIS	Horseshoe, Peaks, 10	Broadcast Burning	487	0

Forest	District	NEPA Document Title	Project Name	Treatment Type	Acres Rx Fire Planned	Acres Implemented
Coconino	Flagstaff	4FRI 1st EIS	Horseshoe, Peaks, 8	Broadcast Burning	335	0
Coconino	Flagstaff	4FRI 1st EIS	Horseshoe, Peaks, 9	Broadcast Burning	296	0
Coconino	Flagstaff	4FRI 1st EIS	Horseshoe, Peaks, 7	Broadcast Burning	0	1,089
Coconino	Flagstaff	4FRI 1st EIS	Horseshoe, Slate, 2	Broadcast Burning	1,016	1,016
Coconino	Flagstaff	4FRI 1st EIS	Horseshoe, Slate, 3	Broadcast Burning	1,027	0
Coconino	Flagstaff	4FRI 1st EIS	Horseshoe, Wild Bill North, 5	Broadcast Burning	1,911	0
Coconino	Flagstaff	4FRI 1st EIS	Horseshoe, Wild Bill South	Broadcast Burning	1,496	0
Coconino	Flagstaff	4FRI 1st EIS	Horseshoe, Wild Bill South, 1	Broadcast Burning	1,372	0
Coconino	Flagstaff	4FRI 1st EIS	Newman, Upper Mary Lake, 3	Broadcast Burning	1,028	0
Coconino	Flagstaff	4FRI 1st EIS	Newman, Upper Mary Lake, 4	Broadcast Burning	109	0
Coconino	Flagstaff	Eastside	Timberline, Weatherford, 1	Broadcast Burning	618	0
Coconino	Flagstaff	Eastside	Timberline, Weatherford, 2	Broadcast Burning	584	0
Coconino	Flagstaff	Eastside	Timberline, Weatherford, 3	Broadcast Burning	396	0
Coconino	Flagstaff	Eastside	Timberline, Weatherford, 4	Broadcast Burning	714	0
Coconino	Flagstaff	Eastside	Timberline, Weatherford, 5	Broadcast Burning	793	0
Coconino	Flagstaff	4FRI 1st EIS	West Fork, Crater Sinks, 4	Broadcast Burning	139	0
Coconino	Flagstaff	4FRI 1st EIS	West Fork, Crater Sinks, 6	Broadcast Burning	381	0
Coconino	Flagstaff	4FRI 1st EIS	West Fork, Crater Sinks, 7	Broadcast Burning	413	0
Coconino	Flagstaff	4FRI 1st EIS	West Fork, Crater Sinks, 8	Broadcast Burning	647	0
Coconino	Mogollon Rim	CC Cragin	CC Cragin	Broadcast Burning	528	0
Coconino	Mogollon Rim	4FRI 1st EIS	Sawmill	Broadcast Burning	6,906	2,882
Coconino	Mogollon Rim	Upper Beaver Creek	Upper Beaver Creek	Broadcast Burning	8,711	0
Coconino	Mogollon Rim	Rim Country	Blue Ridge Urban Interface	Broadcast Burning	1,373	0
FY23 Coconino Prescribed Fire Treatment Totals:					58,178	4,987
Kaibab	Tusayan	4FRI 1st EIS	Three Two Seven	Broadcast Burning	327	0
Kaibab	Tusayan	4FRI 1st EIS	Trick	Broadcast Burning	155	0
Kaibab	Tusayan	4FRI 1 st EIS	Upper Ten X	Broadcast Burning	1,357	1,357
Kaibab	Tusayan	South Zone Grasslands	Skousen	Broadcast Burning	1,700	1,700
Kaibab	Tusayan	4FRI 1st EIS	Russell	Broadcast Burning	509	509
Kaibab	Tusayan	4FRI 1st EIS	Horse Paradise	Broadcast Burning	3,885	3,885
Kaibab	Williams	South Zone Grasslands	Backward	Broadcast Burning	1,028	1,028
Kaibab	Williams	4FRI 1st EIS	Mortiz	Broadcast Burning	1,529	1,529

Forest	District	NEPA Document Title	Project Name	Treatment Type	Acres Rx Fire Planned	Acres Implemented
Kaibab	Williams	4FRI 1st EIS	Gwynn	Broadcast Burning	528	528
Kaibab	Williams	4FRI 1st EIS	Community	Broadcast Burning	1,995	1,995
Kaibab	Williams	4FRI 1st EIS	Corner	Broadcast Burning	1,305	1,305
Kaibab	Williams	4FRI 1st EIS	Renfro	Broadcast Burning	545	545
Kaibab	Williams	4FRI 1 st EIS	Atchisen	Broadcast Burning	320	320
Kaibab	Williams	4FRI 1st EIS	Sisters	Broadcast Burning	1,188	1,188
Kaibab	Williams	4FRI 1st EIS	Coxcombs	Broadcast Burning	1,998	1,998
Kaibab	Williams	4FRI 1st EIS	Ivy	Broadcast Burning	1,657	1,657
Kaibab	Williams	4FRI 1st EIS	Pup	Pile Burning	297	297
Kaibab	Williams	Bill Williams EIS	Black Mesa Tank	Pile Burning	14	14
Kaibab	Williams	Bill Williams EIS	Bill Williams	Pile Burning	244	244
Kaibab	Williams	4FRI 1st EIS	Clover	Pile Burning	752	752
Kaibab	Williams	City EA	Clover	Pine Burning	93	93
Kaibab	Williams	4FRI 1st EIS	Hardy Hill	Pile Burning	161	-----
Kaibab	Williams	4FRI 1st EIS	Saddle	Pile Burning	893	893
Kaibab	Williams	4FRI 1st EIS	Parks West	Pile Burning	3,097	3,097
Kaibab	Williams	4FRI 1st EIS	Aspen Piles	Pile Burning	1	0
Kaibab	Williams	4FRI 1st EIS	APS	Pile Burning	2	0
Kaibab	Williams	Frenchy	Isham Springs	Pile Burning	646	274
Kaibab	Williams	Bill Williams	Devils Nest	Pile Burning	614	614
Kaibab	Williams	South Zone Grassland	Little ASO	Pile Burning	45	0
Kaibab	Williams	South Zone Grassland	Rods	Pile Burning	515	0
Kaibab	Williams	South Zone Grassland	Irishman	Pile Burning	16	0
Kaibab	Tusayan	4FRI 1 st EIS	Boggy Tank	Pile Burning	596	596
KaibabFY23 Kaibab Prescribed Fire Treatment Totals:					28,012	26,418
Tonto	Payson	Pine Straw WUI EA	Hardscrabble and Bradshaw RX	Broadcast Burning	2,914	0
Tonto	Payson	Payson WUI EA	Knolls RX	Broadcast Burning	494	0
Tonto	Payson	Pine Straw WUI EA	Deadman Mastication BB	Broadcast Burning	1,163	0
Tonto	Pleasant Valley	Spring CE	Jerkey RX	Broadcast Burning	16,119	0
Tonto	Pleasant Valley	Spring CE	Hundred RD RX	Broadcast Burning	938	938
Tonto	Pleasant Valley	Spring CE	Gruwell RX	Broadcast Burning	551	511
Tonto	Pleasant Valley	Chamberlain EA	512 Piles	Pile Burning	60	0
Tonto	Pleasant Valley	Spring CE	Buckaroo Flat Piles	Pile Burning	170	0

Forest	District	NEPA Document Title	Project Name	Treatment Type	Acres Rx Fire Planned	Acres Implemented
Tonto	Pleasant Valley	Spring CE	Thorobread Piles	Pile Burning	100	0
FY23 Tonto Prescribed Fire Treatment Totals:					22,066	1,449
FY23 4FRI Prescribed Fire Treatment Totals:					153,980	53,175

Wildfire with Beneficial Effects

Depending on fuels, weather, and other factors, wildfires burn at different levels of severity. In the 4FRI landscape, fires that burn at a lower severity, and in certain geographic areas, can be managed like prescribed burns. The intention of managing these wildfires is to reduce forest fuels and reintroduce natural processes to forest ecosystems. Since the inception of 4FRI, many of these managed wildfires have occurred. Table 9 provides a list of wildfires that have been managed for resource benefits within the 4FRI landscape from 2010 to 2022. This table is updated annually.

Table 9. Total acres of managed wildfire by Forest from 2010 - 2022 within the 4FRI landscape.

Forest	Date
Apache-Sitgreaves	168,986
Coconino	266,145
Kaibab	119,937
Tonto	63,940
Total:	619,008

Roadwork Planned Under 4FRI Restoration Strategy

The 4FRI Restoration Strategy includes a key decision that requires the Forest Service to focus on resolving enabling conditions needed for industry success. These enabling conditions cover a variety of issues, one of which is maintaining roads and bridges used as haul routes to alleviate contractor costs associated with pre-haul maintenance. To address this condition, the Forest Service has committed \$10,000,000 per year for five years, to invest in improving and maintaining existing roads and bridges used over haul routes. Table 10 provides a list of approved road and bridge projects for FY22 and FY23.

Table 10. Planned roadwork associated with the 4FRI Restoration Strategy. This table will be updated as plans solidify for the FY23 program of work.

Forest	FY22	FY23
Coconino	Crush and Stockpile Cinch Hook Pit	Crush and Stockpile Curly Pit
Coconino	NFSR300/139 Resurfacing	Crush and Stockpile Snafu Pit
Coconino	NFSR 141 Resurfacing	NFSR 151 Resurfacing
Coconino	Crush and Stockpile Coyote Pit	-----
Coconino	NFSR 700/91 Resurfacing	-----
Kaibab	Crush and Stockpile Ruin Pit	-----
Kaibab	NFSR 105 Resurfacing	-----
Kaibab	NFSR 354 Resurfacing	-----
Tonto	NFSR 64 Paving	-----
Tonto	-----	Camp Geronimo Bridge
Apache - Sitgreaves	NFSR 25 Resurfacing	-----
Apache - Sitgreaves	NFSR 24 Resurfacing	-----
Apache - Sitgreaves	NFSR 169 Resurfacing	-----
Apache - Sitgreaves	NFSR 249 Resurfacing	-----
Apache - Sitgreaves	NFSR 100 Resurfacing	-----
Apache - Sitgreaves	NFSR 26 Resurfacing	-----
Apache - Sitgreaves	-----	NFSR 300 Repaving
Apache - Sitgreaves	-----	NFSR TBD Resurfacing
Apache - Sitgreaves	-----	Buffalo Crossing Bridge

Out-year Planning

The 4FRI program manages a 5-year plan for commercial thinning, non-commercial hazardous fuel reduction, and prescribed burning projects across the four forests. The 5-Year Plan allows program managers to schedule required surveys and compliance work before implementation. In addition, the 5-Year Plan helps prioritize areas for treatments and ensures consistent accomplishments. However, due to a host of factors, 5-Year Plans are subject to change and typically do change regularly. Entities outside the Forest Service should not rely on the 5-Year Plan when making a decision that affects their business or organization. In sharing the 5-Year Plan, the Forest Service makes no commitment, expressed or implied, to executing any portion of these plans in part or in whole. For details about specific projects, SHG members are encouraged to contact timber and fuels program managers on individual forests.

Below is a summary of the acres currently planned over the next four years (2024-2027). Year 1 (2023) is already described in previous sections so not included here. This table includes all acres planned for high-priority partner projects and Forests' regular programs of work (POWs). Detailed information about individual projects is provided in Appendix B.

Table 11. Summary of acres planned for commercial thinning over the next 4 years (2024-2027)

Forest	FY2024	FY2025	FY2026	FY2027
Apache - Sitgreaves	12,025	16,767	13,193	14,584
Coconino	16,974	14,420	17,596	15,863
Kaibab	5,003	13,459	4,023	11,443
Tonto	3,801	1,800	700	1,000
4FRI Total:	37,803	46,446	35,512	42,890

NEPA Projects in Progress Across 4FRI

Table 122. NEPA Projects in Progress Across 4FRI

Forest (s)	Project Name	Purpose	Current NEPA Status	Expected Decision Date	Expected Implementation
A-S, Coconino, Tonto	Four Forest Restoration Initiative Rim Country Environmental Impact Statement EIS	Forest Restoration	ROD Signed September 19, 2022	ROD Signed September 19, 2022	Post-decision
A-S	Heber Allotment Analysis	Grazing and Grassland Restoration (woodland treatments)	Currently in effects analysis/specialist reports	est. FY22	Post-decision
A-S	Apache-Sitgreaves National Forest TMR	Road Management and Recreation Management	Currently in proposal development/bringing supplemental alternatives into compliance	est. FY21	Post-decision

Forest (s)	Project Name	Purpose	Current NEPA Status	Expected Decision Date	Expected Implementation
A-S	Black River Restoration	Forest Restoration	Currently in proposal development/timeline/PIL	est. FY22	Post-Decision
A-S	Oaky Flat HFRA CE	Fuels Reduction/Insect & Disease	under analysis	est. FY19Q4	Post-Decision
A-S	Alpine WUI - Section 18	Fuels Management	WUI treatment	TBD	Post-Decision
A-S	Nutriosio WUI - Section 18	Fuels Management	WUI treatment	TBD	Post-Decision
A-S	Pierce Wash Allotment- Section 18 Analysis of Vegetation Treatments	Grassland Restoration	Review of effects analysis and previous NEPA	TBD	Post-Decision
A-S	Buckaloo RX (Alpine RD)	RX treatment	on hold until Black River decision	TBD	Post-Decision
A-S	PJ Restoration (BM, LKS & SPR RDs)	Forest Restoration	on hold until FY21	TBD	Post-Decision
Coconino	Mogollon Rim Oystershell Scale Mitigation Trial	Aspen Restoration	Currently undergoing analysis	2023	2024
Coconino	Forest Grassland Restoration Project	Grassland Restoration	Developing project, identifying staffing needs, identifying existing vs desired conditions	2024	2024
Coconino	Leroux Fuels Management Project	Wildfire Risk Reduction	Developing project, scoping expected in August 2023	2024	2024

APPENDIX A - Completed Commercial Thinning Contracts

This table report commercial thinning contracts that have been completed since the first of these monthly updates was published in August of 2014. The table does not display what has been completed since the start of the Initiative in 2010. Cut complete and closed are sales that have had all the work completed on the ground, as well as a final contract review. Cut complete are sales that have been cut out and have not had the final acceptance on some portion of the contract. Sales that have defaulted are also included in the table. Partially cut Task Orders that were part of the Phase 1 Contract have not been included in the table at this time.

Table 13. Completed Commercial Thinning Contracts and Acres since August 2014.

Awarded Sale Name	Forest	Acres	Status	Awarded To
Nutri 1B Blowdown Salvage	A-S	30	Cut completed & closed	Reidhead Bros Lumber mill
Mineral C Whiting	A-S	1,244	Cut completed & closed	Novo Power
Mineral C Thompson	A-S	4,450	Cut completed & closed	Novo Power
San Juan Road hazards salvage	A-S	291	Cut completed & closed	Reidhead Bros Lumber mill
Chitty Blowdown Salvage	A-S	183	Cut completed & closed	Reidhead Bros Lumber mill
Wallow West Unit 27	A-S	431	Cut completed & closed	Forest Energy Corp.
Show Low South	A-S	3,454	Cut completed & closed	Tri Star Logging
Woolhouse (phase 1)	A-S	2,500	Cut complete & closed	Tri Star Logging
Sinkhole	A-S	825	Cut complete & closed	Tri Star Logging
Dipping Vat	A-S	1,691	Cut completed & closed	WW Cattleguards
Mud Springs	A-S	1,018	Cut completed & closed	Tri Star Logging
Burro Stewardship Agreement	A-S	845	Cut completed & closed	Navajo Co –Eastern Arizona Co— awarded to Forest Energy
Phoenix Park Re-Offer	A-S	1,517	Cut complete & closed	Novo Power
Crook	A-S	1,997	Cut completed & closed	Tri Star Logging
Zrama	A-S	1,346	Cut completed & closed	Tri Star Logging
Bear	A-S	1,548	Cut completed & closed	Tri Star Logging
First Knoll A	A-S	1,420	Cut completed & closed	Tri Star Logging
Hulsey Bench	A-S	748	Cut completed & closed	Reidhead Brothers
Rim Top	A-S	1,191	Cut complete & closed	Tri Star Logging
WE-Little TS	A-S	1,392	Cut Complete & closed	Timber Tramp Logging
Carr Lake	A-S	1,605	Cut complete & closed	Tri Star Logging
Longhollow	A-S	623	Cut complete & closed	Tri Star Logging
Jack Rabbitt	A-S	461	Cut complete & closed	Tri Star Logging
Point	A-S	2,811	Cut completed & closed	Tri Star Logging

Awarded Sale Name	Forest	Acres	Status	Awarded To
Benny Stewardship	A-S	245	Cut completed & closed	Vaagan Brothers
Timber Knoll	A-S	150	Cut complete & closed	WW Cattleguards
Park Day – Scott	A-S	422	Cut complete & closed	Novo Biopower
WE – Tenny Pond	A-S	679	Cut completed & closed	Simpson Logging
Dry	A-S	266	Cut Complete & closed	Tri Star Logging
Fulton	A-S	1,818	Cut Complete & closed	Forest Energy
Pace Creek (West Escudilla)	A-S	2,074	Cut Complete & closed	Timber Tramp Logging
URA – Mortimer	A-S	2,137	Cut Complete & closed	Tri Star Logging
URA – Turkey	A-S	2,060	Cut Complete & closed	Simpson Contract Cutting
URA – Cabin	A-S	1,191	Cut Complete & closed	Gibson and Son Road Building
URA 1 – Telephone	A-S	1,526	Cut Complete	Tri Star Logging
Apprentice	A-S	2,010	Cut Complete & closed	Tri Star Logging
URA – Flemming	A-S	1,549	Cut Complete & closed	Canyon Creek Logging Inc.
WE - Loco	A-S	1,847	Cut Complete & closed	Timber Tramp Logging
Mesa	A-S	2,551	Cut Complete & closed	Tri Star Logging
Los Burros Two	A-S	966	Cut Complete & closed	Simpson Logging
SW Bagnal PJ	A-S	634	Cut Complete & closed	Gibson and Son Road Building
Phase 1 – Ranch	A-S	932	Cut Complete & Closed	New Life Forest Products
Phase 1 – West Fork	A-S	1,482	Cut Complete & Closed	New Life Forest Products
Hidden	A-S	2,605	Cut Complete	Tri Star Logging
Larson – St. Joe	A-S	2,190	Cut Complete	Canyon Creek Logging Inc.
Park PJ	A-S	686	Cut Complete	Canyon Creek Logging Inc.
Larson – Woods	A-S	2,065	Cut Complete	Tri Star Logging
Milligan Valley	A-S	754	Cut Complete	Tri Star Logging
Oil Well	A-S	1,028	Cut Complete	Gibson and Son Road Building
Exchange Tank	A-S	448	Cut Complete	Tall Timber Logging, LLC
URA Gobbler	A-S	1,318	Cut Complete	Forest Energy
Windmill PJ	A-S	1,062	Cut Complete	Chippin-in, LLC
Woody 05	Coconino	3,309	Cut completed & closed	Southwest Forest Products
Mr Jones	Coconino	611	Cut complete & closed	Jay Beecroft
FH-3 Right-of-Way	Coconino	576	Cut completed & closed	ADOT
Howard	Coconino	2,208	Cut completed & closed	Southwest Forest Products

Awarded Sale Name	Forest	Acres	Status	Awarded To
Elden Base	Coconino	500	20 acres cut and contract has defaulted	Terry Hatmaker
Saginaw 2	Coconino	1,102	809 acres cut completed & closed, 293 acres defaulted	Southwest Forest products
Tule 3	Coconino	954	Cut completed & closed	Southwest Forest Products
Elden Base Re-offer	Coconino	620	Cut completed & closed	Dakota Logging
Railroad	Coconino	204	Cut completed & closed	White Mountain Timber
Windmill	Coconino	1,339	Cut complete & closed	Dakota Logging
Chimney Springs	Coconino	1,409	Cut completed & closed	The Nature Conservancy
Saginaw 3 Reoffer	Coconino	324	Cut completed & closed	Dakota Logging
Phase 1 - Weatherford	Coconino	944	Cut completed & closed	New Life Forest Products
Phase 1 - Schoolhouse	Coconino	2,567	Cut completed & closed	New Life Forest Products
Dry Lake Hills	Coconino	391	Cut Complete	Markit! Forestry
Mayflower	Coconino	275	Cut Complete	National Forest Foundation
Bonita	Coconino	718	Cut Complete	National Forest Foundation
Walker Hill Demo	Coconino	410	Cut Complete	TNC – Suarez Logging
Moose Stewardship	Kaibab	1,200	Cut completed & closed	James Perkins
Wright Hill TS	Kaibab	760	Cut completed & closed	High Desert Investment
Shiner	Kaibab	1,108	Cut completed & closed	Newpac Fibre
Round Mountain East	Kaibab	839	177 acres cut and 662 acres defaulted on	New Pac Fibre
Perro	Kaibab	204	Cut completed & closed	Bob Lee and Sons
Saddle	Kaibab	1,106	Cut Complete & closed	Bob Lee and Sons
Parks West SPA	Kaibab	4,270	Cut Complete	The Nature Conservancy
Clover	Kaibab	2,496	Cut Complete	The Nature Conservancy
Phase 1 – KA	Kaibab	1,046	Cut completed & closed	New Life Forest Products
Phase 1 – Pomeroy	Kaibab	1,646	Cut completed & closed	New Life Forest Products
Phase 1 – Community Tank	Kaibab	1,039	Cut completed & closed	New Life Forest Products
Pup	Kaibab	916	Cut completed & closed	Bob Lee & Sons
Isham Springs	Kaibab	594	Cut completed & closed	Bob Lee & Sons
Shoofly Juniper Thinning	Tonto	300	Cut completed & closed	Tri Star Logging
Cave	Tonto	505	Cut completed & closed	Tri Star Logging

Awarded Sale Name	Forest	Acres	Status	Awarded To
Laramie	Tonto	463	Cut completed & closed	Tri Star Logging
Leo Grove	Tonto	621	Cut completed & closed	Tri Star Logging
Sheep Springs	Tonto	1,147	Cut completed & closed	Tri Star Logging
Angel Rim	Tonto	462	Cut complete & closed	Tri Star Logging
Michellison	Tonto	444	Cut complete & closed	Tri Star Logging
Total		95,837		

APPENDIX B – Out Year Projects

Appendix B provides detailed information on 4FRI's 5-Year Program of work for our High Priority Partner and Commercial Thinning projects. High Priority Partner Projects are summarized in Table 14, which includes expected offerings and acres by fiscal year from 2024 through 2027. Commercial thinning projects are summarized in Table 15, which does include High Priority Partnership Projects with commercial timber removal, to provide a complete picture of all commercial projects by Forest and fiscal year. As mentioned earlier, due to a host of factors, 5-Year Plans are subject to change and typically do change regularly. Entities outside the Forest Service should not rely on the 5-Year Plan when making a decision that affects their business or organization. In sharing the 5-Year Plan, the Forest Service makes no commitment, expressed or implied, to executing any portion of these plans in part or in whole. For details about specific projects, SHG members are encouraged to contact timber and fuels program managers on individual forests.

Below is a summary of the acres currently planned over the next four years (2024-2027). Year 1 (2023) is already described in previous sections so not included here. This table includes all acres planned for high-priority partner projects and Forests' regular programs of work (POWs).

Table 14. Outyear Projects (FY24-FY27), acres, and estimated volume (CCF) for High Priority Partner Projects

Fiscal Year	FOREST	DISTRICT	Project or Sale Name	High Priority Partner Project	Treatment Method	Approximate Acres	Approximate Volume (CCF)
2024	Coconino	Mogollon Rim	CWPP - Clover	CC Cragin Watershed Protection Project	Commercial Thin	3,524	21,000
	Coconino Total					3,524	21,000
	Kaibab	Williams	Coyote Stewardship	Bill Williams Restoration Project	Commercial Thin	627	5,959
	Kaibab	William	Twin Springs Fuelbreak Buffer Extension	Bill Williams Restoration Project	Non-Commercial Hazardous Fuels	311	0
	Kaibab Total					938	5,959
	Tonto	Payson	Greater Payson Phase 2 mastication	Greater Payson DFFM	Mastication	5,322	0
	Tonto	Payson	Dude Fire Restoration Project Phase 3	Dude Fire Restoration	Mastication	2,338	0
	Tonto	Payson	Pine Canyon Helicopter	Pine Canyon	Commercial Thin	100	1,250
	Tonto	Payson	Colcord Stallion	Woodland DFFM	Commercial Thin	2,181	5,000
	Tonto Total					9,941	6,250

2024 Total						14,403	33,209
2025	Coconino	Flagstaff	Leroux	Flagstaff Watershed Protection Project	Commercial Thin	2,000	14,000
	Coconino	Mogollon Rim	CWPP - Cold Water	CC Cragin Watershed Protection Project	Commercial Thin	2,400	19,800
	Coconino Total					4,400	33,800
	Kaibab	Williams	Steep Slope 5 (SS5)	Bill Williams Restoration Project	Non-Commercial Hazardous Fuels	400	
	Kaibab Total					400	
	Tonto	Payson	Greater Payson Phase 3	Greater Payson DFFM	Mastication	3,477	0
	Tonto	Payson	Dude Fire Restoration Project Phase 4	Dude Fire Restoration	Mastication	2,637	0
	Tonto	Pleasant Valley	Haigler Creek Mastication	Woodland DFFM	Mastication	4,056	
	Tonto Total					10,170	0
2025 Total						14,970	33,800
2026	Coconino	Mogollon Rim	CWPP - Windfall	CC Cragin Watershed Protection Project	Commercial Thin	2,400	14,400
	Coconino Total					2,400	14,400
	Kaibab	Williams	Devil IRSC	Bill Williams Restoration Project	Commercial Thin	391	2,693
	Kaibab Total					391	2,693
	Tonto	Payson	Greater Payson Phase 4 mastication	Greater Payson DFFM	Mastication	2,768	
	Tonto Total					2,768	
2026 Total						5,559	17,093

2027	Coconino	Mogollon Rim	CWPP - Milk Ranch	CC Cragin Watershed Protection Project	Commercial Thin	3,500	21,000
	Coconino Total					3,500	21,000
	Tonto	Payson	Greater Payson Phase 5 Mastication	Greater Payson DFFM	Mastication	1,260	
	Tonto Total					1,260	
2027 Total						4,760	21,000
Grand Total						39,692	105,102

Table 15. Outyear Projects (FY24-FY27) for all commercial thinning projects by Forest and fiscal year.

Award/Accomplish Year	FOREST	DISTRICT	Activity Name	High Priority Partner Project	Acres	Volume CCF
2024	Apache-Sitgreaves	Alpine	BR-Horton		1,393	14,000
	Apache-Sitgreaves	Alpine	BR-Johns Canyon		2,729	22,000
	Apache-Sitgreaves	Black Mesa	RC-County Line		1,019	5,646
	Apache-Sitgreaves	Black Mesa	RC-Whiskey		1,200	6,600
	Apache-Sitgreaves	Black Mesa	RC-Work Center		1,100	6,000
	Apache-Sitgreaves	Black Mesa	RL-Sheep		1,684	3,031
	Apache-Sitgreaves	Lakeside	URA-Blue		1,100	6,500
	Apache-Sitgreaves	Lakeside	URA-Ridge		1,800	9,000
	Apache-Sitgreaves Total				12,025	72,777
	Coconino	Flagstaff	A-1 North (Re-offer)		1,047	12,419
	Coconino	Flagstaff	Bootleg-Antelope (Re-offer)		1,452	9,954
	Coconino	Flagstaff	Derffer		2,586	20,000
	Coconino	Flagstaff	Wing West		4,865	39,000
	Coconino	Mogollon Rim	Brie		1,500	9,000
	Coconino	Mogollon Rim	CWPP - Clover	CC Cragin Watershed Protection Project	3,524	21,000
	Coconino	Mogollon Rim	Sawmill		2,000	12,000
	Coconino Total				16,974	123,373
	Kaibab	Williams	Chalendar		1,038	15,995
	Kaibab	Williams	Coyote Stewardship	Bill Williams Restoration Project	627	5,959
	Kaibab	Williams	Dude		1,396	13,247
	Kaibab	Williams	Sitgreaves West		1,942	13,594
	Kaibab Total				5,003	48,795
	Tonto	Payson	Colcord Stallion		2,181	5,000
	Tonto	Payson	Keger		1,400	9,500
	Tonto	Payson	Little Nolan CG		120	1,000

	Tonto	Payson	Pine Canyon Helicopter		100	1,250
	Tonto Total				3,801	16,750
2024 Total					37,803	261,695
2025	Apache-Sitgreaves	Alpine	BR-Bardman		3,610	26,000
	Apache-Sitgreaves	Alpine	BR-Taylor Sink		3,388	23,000
	Apache-Sitgreaves	Black Mesa	Flat Draw Biomass		1,500	4,500
	Apache-Sitgreaves	Black Mesa	RC-Baca		1,800	7,200
	Apache-Sitgreaves	Black Mesa	RC-Hess		2,000	6,500
	Apache-Sitgreaves	Black Mesa	RC-Wildcat		1,369	6,756
	Apache-Sitgreaves	Lakeside	RC-Morgan		1,100	6,500
	Apache-Sitgreaves	Lakeside	URA-Tuff		2,000	12,000
	Apache-Sitgreaves Total				16,767	92,456
	Coconino	Flagstaff	Coulter Park		1,021	7,500
	Coconino	Flagstaff	Double Springs		699	7,654
	Coconino	Flagstaff	Kachina		2,500	22,500
	Coconino	Flagstaff	Leroux	Flagstaff Watershed Protection Project	2,000	14,000
	Coconino	Flagstaff	LO Pocket - Mooney Mtn (Re-offer)		1,800	32,521
	Coconino	Flagstaff	Southside East		500	2,750
	Coconino	Mogollon Rim	CWPP - Cold Water	CC Cragin Watershed Protection Project	2,400	19,800
	Coconino	Mogollon Rim	Little Bee		1,500	9,000
	Coconino	Mogollon Rim	Strawberry		2,000	12,000
	Coconino Total				14,420	127,725
	Kaibab	Tusayan	East X		1,171	1,950
	Kaibab	Williams	Antelope Hills		1,500	10,500
	Kaibab	Williams	Crackle		3,200	
	Kaibab	Williams	Dog		1,638	10,757
	Kaibab	Williams	Ham		1,550	13,349
	Kaibab	Williams	Sawmill Springs		1,773	13,910

	Kaibab	Williams	South Parks		771	6,767
	Kaibab	Williams	Zero		1,856	
	Kaibab Total				13,459	57,233
	Tonto	Pleasant Valley	Honey		1,800	10,000
	Tonto Total				1,800	10,000
2025 Total					46,446	287,414
2026	Apache-Sitgreaves	Alpine	BR-Heifer		3,012	23,000
	Apache-Sitgreaves	Alpine	BR-Horse Creek		3,196	22,000
	Apache-Sitgreaves	Black Mesa	Dutch Biomass		885	2,655
	Apache-Sitgreaves	Black Mesa	RC-Bonito		1,800	9,900
	Apache-Sitgreaves	Black Mesa	RC-Sand Point		1,400	7,781
	Apache-Sitgreaves	Black Mesa	RC-West Chev		1,800	10,000
	Apache-Sitgreaves	Lakeside	RC-McCleve		1,100	6,050
	Apache-Sitgreaves Total				13,193	81,386
	Coconino	Flagstaff	Dutton Hill - Sliker		1,730	19,686
	Coconino	Flagstaff	Harding Point		1,084	11,250
	Coconino	Flagstaff	Howard Pocket		2,436	19,250
	Coconino	Flagstaff	LO Pocket - Grey Spring		1,327	9,734
	Coconino	Flagstaff	Telephone Tank		2,791	16,878
	Coconino	Flagstaff	West Fork		2,128	23,408
	Coconino	Mogollon Rim	Cow Hill		2,200	13,200
	Coconino	Mogollon Rim	CWPP - Windfall	CC Cragin Watershed Protection Project	2,400	14,400
	Coconino	Mogollon Rim	Rocky		1,500	9,000
	Coconino Total				17,596	136,806
	Kaibab	Williams	Devil IRSC	Bill Williams Restoration Project	391	2,693
	Kaibab	Williams	Hardy Hill		1,188	7,000
	Kaibab	Williams	Mortiz Ridge		1,444	11,445
	Kaibab	Williams	Newman Hill		1,000	7,000

	Kaibab Total				4,023	28,138
	Tonto	Pleasant Valley	Salty Henn		700	8,644
	Tonto Total				700	8,644
2026 Total					35,512	254,974
2027	Apache-Sitgreaves	Alpine	BR-PS Knoll		2,970	22,000
	Apache-Sitgreaves	Alpine	BR-West Fork		2,834	21,000
	Apache-Sitgreaves	Black Mesa	Jays Biomass		680	2,040
	Apache-Sitgreaves	Black Mesa	Mud Biomass		1,500	4,500
	Apache-Sitgreaves	Black Mesa	RC-Bigler		2,000	10,000
	Apache-Sitgreaves	Black Mesa	RC-Deer Lake		1,200	4,800
	Apache-Sitgreaves	Black Mesa	RC-Knoll		1,700	9,350
	Apache-Sitgreaves	Lakeside	RC-Yellow Jacket		1,700	9,350
	Apache-Sitgreaves Total				14,584	83,040
	Coconino	Flagstaff	Bellemont		2,500	21,250
	Coconino	Flagstaff	Casner Park		2,000	12,000
	Coconino	Flagstaff	Dutton Hill - Everett		1,066	9,001
	Coconino	Flagstaff	Dutton Hill - Trap		1,475	12,353
	Coconino	Flagstaff	Hidden Hollow		2,250	16,875
	Coconino	Flagstaff	Orion		572	4,500
	Coconino	Flagstaff	Smith Butte		2,500	26,250
	Coconino	Mogollon Rim	CWPP - Milk Ranch	CC Cragin Watershed Protection Project	3,500	21,000
	Coconino Total				15,863	123,229
	Kaibab	Williams	Beale Beowolf		1,700	11,900
	Kaibab	Williams	Beale Central		1,600	11,200
	Kaibab	Williams	Beale Obsidian		1,600	11,200
	Kaibab	Williams	Sitgreaves Chip		1,543	1,543
	Kaibab	Williams	Sunflower 1		5,000	
	Kaibab Total				11,443	35,843
	Tonto	Payson	Verde East		1,000	5,000
	Tonto Total				1,000	5,000

2027 Total					42,890	247,112
Grand Total					162,651	1,051,195

APPENDIX C - Definitions

4FRI Restoration Strategy – A document that was approved on November 9th, 2021, that outlines strategic goals, accomplishments, and expected outcomes for the 4FRI program.

4FRI Stakeholder Group – Informal organization open to public membership focused on landscape-scale restoration in northern Arizona. [4FRI Home Page - 4FRI Home](#)

5-Year Plan – A tool used by timber and fuels program managers to track outyear planned projects, typically for a minimum of 5 years. The tool helps track prep and survey work that is required prior to contract development and ensures a sustainable flow of acres and volume offered to industry on an annual basis.

Acres Awarded – The number of acres that are awarded under a commercial thinning or non-commercial hazardous fuels contract. Contract types and treatment methods vary depending on site conditions and project objectives.

Acres Prepped – The number of acres that have had all the preparation work completed prior to placing in a commercial thinning or non-commercial hazardous fuels reduction contract. Preparation work typically includes survey work for wildlife, aquatics, heritage resources, botany, or other sensitive resources, flagging, painting, and surveying unit boundaries, conducting cadastral surveys, collecting and processing cruise samples to determine sale volume and tree size classes, writing silvicultural prescriptions and marking guides, and all other associated work needed prior to contract award.

Acres Completed – The acres of awarded contracts that have had all commercial thinning or non-commercial hazardous fuels reduction completed. The term “completed” typically refers to the thinning requirements of a contract, but can also include all closeout work, such as slash treatment, ripping and seeding of compacted areas, and closure of roads that may be required prior to closing out a contract. In some instances, completed work is conducted with Forest Service crews so is not tied to a contract.

Commercial Thinning – Thinning and removal of merchantable sized trees (typically ≥ 5 " DBH) typically using conventional ground-based machinery to meet resource objectives. Conventional ground-based equipment usually includes fellers, skidders, de-limbers, and log trucks, but may also include forwarders, fellers with processing heads, grinders, chip vans, or a variety of other equipment. Commercial thinning could also be completed using cable or helicopter systems, but this isn't common in the southwest. Commercial thinning is accomplished using commercial timber sales, stewardship contracts, or agreements.

Non – Commercial Hazardous Fuel Reduction – Thinning or mastication of non-merchantable sized trees (typically < 5 " DBH) or shrubs. For thinning prescriptions, material is typically treated on-site using slash piles, or lopping and scattering material, which is later treated with broadcast burning. This work is often completed with chainsaw crews or with masticators. Non-commercial hazardous fuels reduction is typically accomplished with service contracts or with Forest Service crews.

High Priority Partner Project – A category of projects described in the 4FRI Restoration Strategy that are designed to significantly reduce the risk of catastrophic wildfire through partnerships with external agencies, groups, or organizations.

Prescribed Fire – A wildland fire originating from a planned ignition to meet specific objectives identified in a written and approved prescribed fire plan for which NEPA requirements (where applicable) have been met prior to ignition.

Timber Contract – Contracts used for the sale of timber products. The Forest Service sells timber and special forest products on a variety of contract and permit forms based on the complexity and/or value of the sale.

Wildfire – An unplanned ignition of a wildland fire, such as a fire caused by lightning, unauthorized or accidental human-caused fires, or an escaped prescribed fire.

APPENDIX D - Methods

Table 1

Numbers are based on spatial polygons for FACTS activities completed (or awarded) in the categories defined by the header. The spatial polygons in each category were dissolved to represent the footprint acres accomplished for each fiscal year. Acres accomplished across different categories and across fiscal years may overlap as activities in multiple treatment categories may be accomplished on the same acre through time.

Table 2

The sum of commercial thinning acres treated since 2010 represents a straight summation of acres treated by fiscal year. This does not represent footprint acres as overlap exists where two separate commercial thinning entries have been completed since 2010. The remaining columns represent the footprint acres treated in one or more of the categories shown in table 1. Acres treated in more than one treatment category and/or more than one fiscal year are counted only once. The final column represents the number of acres that have been treated with both a commercial thinning activity and a broadcast burning activity since 2010.

Table 9 Managed Wildfires – Acres are based on reported accomplishments in FACTS using activity codes 1117 (Wildfire Natural Ignitions) and 1119 (Planned Treatment Burned in Wildfire) attributed with a key point of 6. Based on the hazardous fuels business rules document on the FACTS website, these activities with a key point of 6 represent wildfires with effects that align with land management plans and/or NEPA objectives.

Geoprocessing model (derived from the model used for the 4FRI rapid assessment)

A geoprocessing model was created to replicate these numbers as new activities are accomplished and completed across 4FRI. The tool references the R3 FACTS ACTV160 and wildfire perimeter feature classes. Activities are queried from the feature classes into several treatment categories: commercial thinning, non-commercial thinning, broadcast burning, pile burning. (See treatment category queries below). Wildfires are pulled from the wildfire perimeter feature classes to represent the areas where wildfires have occurred since 2010. For each treatment category, spatial polygons for all activities are dissolved by fiscal year to acres for each fiscal year accomplished for that category. Additionally, footprint acres for all treatment categories are created and spatially joined to attribute polygons with the number of times each polygon was treated (or not) with each treatment category, the years each polygon was treated, and the latest year of treatment.

The model creates outputs designed to summarize tabular and spatial data entered into FACTS. Discrepancies can exist between reported accomplished acres and the spatial representation of those activities. In most cases, discrepancies are small and the tendency for error between reported and GIS calculated acres is outweighed by the ability to remove multiple activities representing a single treatment and the ability to identify where treatments overlap in time and space.

A series of feature classes and spreadsheets derived from those feature classes are output from the model. The outputs fall within several types described in the bullets below.

- FACTS accomplishment feature classes (by treatment category) with activity details
- Accomplishments dissolved by fiscal year (for each treatment category)
 - Used to quantify the accomplishment acres shown in table 1 for each category by year
- Footprint of accomplishments (for each treatment category)
- Footprint of accomplishments (across all treatment categories)

- Each polygon is attributed with whether a treatment has occurred in each treatment category, the fiscal years when the treatments occurred in each treatment category, and the latest fiscal year when the treatment occurred in each treatment category
- This dataset allows for the quantification of the total footprint treated in any category and where treatments overlap between categories.

Treatment Category Queries

Completed commercial thinning:

```
ACTIVITY_CODE IN(4101,
4102,4111,4113,4115,4117,4121,4122,4131,4132,4141,4142,4143,4145,4146,4148,4151,4152,4162,4175,4177,4183,41
92,4193,4194,4196,4210,4211,4220,4231,4232,4241,4242) AND FISCAL_YEAR_COMPLETED >= 2010 AND
FISCAL_YEAR_COMPLETED <=2022 AND ORG IN( '031204' , '031205', '030701', '030704', '030402', '030406', '030407',
'030408', '030101', '030102','030103', '030106', '030107' )
```

Ongoing commercial thinning:

```
ACTIVITY_CODE IN(4101,
4102,4111,4113,4115,4117,4121,4122,4131,4132,4141,4142,4143,4145,4146,4148,4151,4152,4162,4175,4177,4183,41
92,4193,4194,4196,4210,4211,4220,4231,4232,4241,4242) AND FISCAL_YEAR_ACCOMPLISHED >= 2000 AND
FISCAL_YEAR_COMPLETED IS NULL AND ORG IN( '031204' , '031205', '030701', '030704', '030402', '030406', '030407',
'030408', '030101', '030102','030103', '030106', '030107' )
```

Completed non-commercial thinning:

```
(ACTIVITY_CODE IN(1136,1150,1152,1154,1160,1180,3370,4521,4522,4530,6103,6104,6105,6107,6133) OR
(ACTIVITY_CODE = '4270' AND ACTIVITY_SUB_UNIT_NAME = 'MOUNTAINEER MEADOW 07') OR (ACTIVITY_CODE IN (
4511,2340,2341,2360,2400) AND NOT METHOD_CODE IN ('000', '101', '102', '300','700','116' )) OR (ACTIVITY_CODE IN
(4511,2340,2341,2360,2400) AND METHOD_CODE = '000' AND (NOT WORKFORCE_CODE = 'FA' OR WORKFORCE_CODE
IS NULL))) AND FISCAL_YEAR_COMPLETED >= 2010 AND FISCAL_YEAR_COMPLETED <=2022 AND ORG IN( '031204' ,
'031205', '030701', '030704', '030402', '030406', '030407', '030408', '030101', '030102','030103', '030106', '030107' )
AND NOT FACTS_ID = '2013NKRDBS'
```

Completed broadcast burning:

```
ACTIVITY_CODE IN (1111,1112,1113,4491,4492,4541,6101) AND FISCAL_YEAR_COMPLETED >= 2010 AND
FISCAL_YEAR_COMPLETED <=2022 AND ORG IN( '031204' , '031205', '030701', '030704', '030402', '030406', '030407',
'030408', '030101', '030102','030103', '030106', '030107' )
```

Completed pile burning:

```
ACTIVITY_CODE IN (1130) AND FISCAL_YEAR_COMPLETED >= 2010 AND FISCAL_YEAR_COMPLETED <=2022 AND ORG IN(
'031204' , '031205', '030701', '030704', '030402', '030406', '030407', '030408', '030101', '030102','030103', '030106',
'030107' )
```

Wildfires:

```
FIREYEAR >= 2010
```

(Note: Wildfire perimeters used in this model are designed to show where wildfires have occurred since 2010 and do not represent the acres accomplished and reported as wildfires with beneficial effects. A tabular query of activities falling

under the “wildfire - natural ignition” or “planned treatments burned in wildfire” AND a key point of 6 would better represent the reported acres of wildfire with beneficial effects since the spatial polygon for those activities are generally tied to the entire wildfire perimeter even if the number of acres reported represent only a portion of the total wildfire acres.)