20-Year Forest Health Strategic Plan: Eastern Washington Treatment Tracking Progress Memo – May 2024

The Washington State Department of Natural Resources (DNR) led the creation of the 20-Year Forest Health Strategic Plan for Eastern Washington in 2017. Among the pillars of the plan is a bold, collaborative goal to conduct an initial 1.25 million acres of scientifically sound, landscape-scale, cross-boundary forest management and restoration treatments in priority landscapes to increase forest and watershed resilience by 2037. A 2020 joint study conducted by the University of Washington, DNR, and US Forest Service found that 3.07 million acres are in need of active forest restoration from mechanical treatments, prescribed fire, beneficial wildfire, or a combination of these.

The DNR Forest Resilience Division has designated 47 priority landscapes (also often referred to as priority planning areas) within the 20-Year Plan as of May 31, 2024. New areas are considered for addition to the plan every two years. RCW 76.06.200 directs the Department of Natural Resources (DNR) to establish a forest health assessment and to develop a proactive, systemic treatment framework for addressing to addressing the challenges our forests face. Ongoing forest health assessments (also known as landscape evaluations) aim to identify this restoration and maintenance need within and across priority landscapes in this dynamic landscape. The 20-Year Plan and goal of 1.25 million acres is an ambitious, transformative roadmap for progress, but it alone will not end the forest health crisis in Washington.

A treatment is defined as "an action taken in a forest ecosystem aimed to improve forest health and resilience." Treatments may include activities where improving forest health is one of multiple objectives. Treatments are voluntarily reported by land managers responsible for their implementation; interpretation of projects that meet this definition is the responsibility of the individual or organization submitting information. For treatment tracking, DNR compiles and summarizes forest health treatments from multiple data sources into common categories. DNR strives to work with each reporting entity to classify activities correctly and revises our methods as necessary. More detail and definitions on the current categories can be found here.

DNR reports treatment data (publicly available on <u>Forest Resilience Division's DataViewer</u>, <u>DNR's Open GIS webpage</u>, and <u>Forest Health Tracker</u>) in two ways:

- **Total treatment acres** track every forest health treatment conducted, including those that occurred in sequence on the same acre over time. For example, a commercial thinning may have been conducted on an acre prior to a prescribed burn and both treatments would be reflected. Total acres track individual actions invested in and implemented at a point in time.
- **Footprint acres** are calculated through spatial analysis to ensure one acre that experienced one or more treatments is only counted once. Footprint acres track the spatial scale of management impact over time.

As of May 31, 2024, landowners have reported 790,790 acres of forest health treatments completed across eastern Washington since 2017 when the 20-Year Forest Health Strategic Plan was adopted; impacting a total of 381,523 footprint acres.

The following updates provide context and intend to explain differences from previous memo versions:

- DNR Service Forestry numbers in Tables 1 and 4 have been adjusted to reflect total treatment acres instead of footprint acres, thereby increasing reported totals for 2017-2023 documented in past memos. This adjustment is to maintain consistency with how other DNR programs and external partner data is presented.
- The number of total treatment acres and footprint acres reported in this and past treatment tracking memos, while an accurate representation of progress made on the 20-Year Plan, do not necessarily include all acres treated by entities as of May 31 or October 31 of a given year. This is due to the differences in data entry and reporting timelines between implementing agencies and partner organizations. The numbers cited above are likely a small undercount.
- Going forward, columns for satellite-based change detection and low to moderate severity wildfire in Table 2 will be updated in each *fall* memo when new satellite data is available after the spring and summer growing season. Change detection captures additional active management acres that are not reported to DNR in our treatment tracking. Spring memos will reflect the previous fall's acreage amounts for reader's reference.
- The total acres in Table 4 in this memo do not include NRCS treatments due to the level detail of data submitted.

As provided by participating partners, additional activity details are available via the spatial data DNR maintains available on <u>DNR's GIS Open Data Portal</u> and <u>Forest Health Tracker</u>. Treatment tracking is one component of <u>DNR's 20-Year Forest Health Strategic Plan Monitoring Framework.</u> DNR will annually analyze treatment tracking data alongside other available monitoring data, and <u>our first report was released in February 2024</u>.

Table 1. Total **forest health treatment acres in eastern Washington** as reported to DNR by **Calendar Year** (January 2017 – end of May 2024), organized by lead implementer and forest health treatment type (commercial vegetation, non-commercial vegetation, and prescribed fire).

J	2017	2018	2019	2020	2021	2022	2023	2024	Grand Total
■ DNR State Trust Lands	16,907	25,464	15,203	25,088	22,309	21,387	28,281	9,710	164,349
Commercial Vegetation	6,833	7,004	5,652	6,096	5,434	9,570	7,654	732	48 <i>,</i> 975
Non-Commercial Vegetation	9,232	16,091	7,009	16,747	14,173	11,027	13,311	8,438	96,026
Prescribed Fire	842	2,370	2,542	2,245	2,703	789	7,316	540	19,347
■ State Parks	71	252	1,461	446	169	595	906		3,900
Commercial Vegetation	62	97				415	625		1,198
Non-Commercial Vegetation	9	155	1,461	369	169	161	68		2,393
Prescribed Fire			·	77		20	213		309
■ WA Dept of Fish and Wildlife	5,170	4,331	4,857	1,424	1,128	1,979	1,029	486	20,404
Commercial Vegetation	1,931	1,538	521	394	143	1,426			5,954
Non-Commercial Vegetation	466	408	3,617	1,001	430	548	864	83	7,416
Prescribed Fire	2,773	2,385	718	29	555	5	164	404	7,034
US Forest Service	38,384	55,814	50,142	46,977	41,902	46,636	82,930	2,848	365,633
Commercial Vegetation	6,285	6,100	6,773	7,739	5,216	2,366	5,417	618	40,514
Non-Commercial Vegetation	15,142	18,390	19,690	28,485	19,625	35,115	46,698	378	183,522
Prescribed Fire	16,957	31,324	23,679	10,753	17,061	9,156	30,815	1,852	141,597
■ US Fish and Wildlife Service	549	779	1,041	2,344	1,336	1,590	2,122	1,073	10,835
Commercial Vegetation			493	572	,	/	, , , , , , , , , , , , , , , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,065
Non-Commercial Vegetation		26	105	1,090	730	720	508	852	4,031
Prescribed Fire	549	753	444	682	606	870	1,614	221	5,739
Natural Resource Conservation							,-		2, 22
□ Service	4,285	5,491	5,671	6,372	2,827	11,522			36,168
Non-Commercial Vegetation	4,285	5,491	5,671	6,372	2,827	11,522			36,168
■ Kalispel Tribe of Indians	82	97	103	116	166	396	539		1,497
Commercial Vegetation	82	97	103	116	119	70			586
Non-Commercial Vegetation					47	265	161		472
Prescribed Fire						61	378		439
Colville Confederated Tribes	7,191	8,231	7,030	4,113	9,881	4,976			41,422
Commercial Vegetation	178	1,089	790	177	1,622				3,855
Non-Commercial Vegetation	7,013	7,143	6,240	3,935	8,259	4,976			37 <i>,</i> 567
■ DNR Service Forestry	10,948	12,608	17,099	23,651	20,335	20,316	25,111	9,032	139,099
Non-Commercial Vegetation	10,531	11,828	15,861	22,437	19,005	19,217	24,569	8,831	132,279
Prescribed Fire	417	780	1,238	1,215	1,330	1,099	542	200	6,821
□ BLM					223	585	2,804		3,612
Commercial Vegetation					223	369			592
Non-Commercial Vegetation						216	2,804		3,020
■ NGOs	79	305	123	471	431	592	879	137	3,016
Commercial Vegetation		252					236		488
Non-Commercial Vegetation	79		123	471	336	430	472	137	2,049
Prescribed Fire		53			95	162	170		479
■ Umatilla Indian Reservation			41	29	266	207	12		555
Commercial Vegetation			41		237		12		290
Non-Commercial Vegetation				29		191			219
Prescribed Fire					29	17			45
■ WA Conservation Commission	115	21	72	3	14		12		236
Non-Commercial Vegetation	115	21	72	3	14		12		236
□ Private							51	13	64
Prescribed Fire							51	13	64
Grand Total	83,780	113,394	102,845	111,032	100,986	110,781	144,673	23,299	790,790

^{*}Discrepancies between current and previous annual acreage reporting for DNR Service Forestry due to corrections of "footprint" to "total" acres.

^{*}NRCS only provides tabular data to DNR, spatial data is not available due to privacy restrictions.

^{*}Variation in prescribed fire numbers due to how organizations track the acreage associated with pile burning treatments. Some organizations count the # of piles and acreage of soil impacted from the burn, while others count the contributing acres of the unit where pile material was sourced.

^{*}Acres are rounded to whole numbers in each data field; minor acre discrepancies between tables due to rounding and query process.

^{*}NGO category represents data submitted by multiple non-profit organizations, where they were the lead implementation partner and/or landowner.

Table 2. Acres of **assessed forest health treatment need** alongside reported **completed treatments** (January 2017 – May 31, 2024) by 20-Year Forest Health Strategic Plan **priority landscape**. Also shown are additive acres from <u>treatments captured by satellite-based change detection</u>, as well as low-mixed severity wildfire (2017 – 2022). These additive acres are calculated once a year and updated in the fall memo.

	Completed Forest He Treatments Report			Additional acres of remotely-detected landscape condition change (2017-2022)			
Priority Landscape	Total Acres	Forested Acres	Assessed Treatment Need (Footprint acres)	Footprint Acres	Completed Total Treatment Acres	Footprint Acres	Acres of low- mixed severity wildfire (2017-2022)
Ahtanum	120,477	89,217	19,000-29,000	3,852	4,355	1,291	1
Asotin	149,152	93,329	Analysis in 2024	8,374	16,123	1,166	36,887
Chelan	98,051	31,342	7,500 - 12,500	194	665	14	266
Chewelah	195,408	158,352	59,000 - 80,000	7,125	17,664	5,727	64
Chewuch	94,250	83,846	Analysis in 2024	224	446	21	17,915
Chumstick to LP	115,333	84,216	36,500 - 53,000	3,709	9,325	2,202	270
Cle Elum	109,396	80,300	22,000 - 35,500	5,650	13,300	931	1,659
Deer Park	181,171	90,497	36,000 - 49,000	4,341	13,752	4,980	1,548
Dollar	61,238	50,767	18,600 - 27,700	308	576	340	1,346
Gifford	71,962	39,016	Analysis in 2024				460
	,		23,500 - 32,000	816	2,010	2,448	468
Glenwood	104,501	83,758		4,316	5,766	4,691	47
HWY 97	60,398	37,415	11,000 - 16,500	243	721	6,398	0
Inchelium	146,263	121,779	Analysis in 2024	1,902	2,271	3,426	20,989
lone	44,248	41,784	16,500 - 21,000	1,242	1,553	488	0
Klickitat	149,649	103,274	43,000 - 55,000	1,161	2,416	7,891	76
Little Naches	95,433	92,914	25,500 - 43,000	4,463	13,600	1,381	4,945
Little Pend Oreille	92,994	81,148	30,250 - 43,500	7,167	12,833	3,005	58
Little White	95,750	84,705	17,750 - 27,500	864	950	1,352	166
Long Lake	103,291	41,253	14,000 - 20,000	4,468	11,719	1,969	1,865
Loomis	198,991	149,802	Analysis in 2024	10,475	19,853	420	4,342
Mad Roaring Mills	65,008	33,325	13,500 - 20,000	4,283	6,102	83	4,244
Manastash Taneum	104,072	65,833	16,500 - 29,500	5,831	10,971	285	78
Meadow	60,235	59,050	Analyze in 2024	2,150	2,809	797	0
Methow Valley	338,246	182,937	49,500 - 75,000	18,714	31,468	808	31,161
Mica	72,608	39,178	Analysis in 2024	1,420	5,193	1,748	1
Mill Creek	186,306	162,060	57,000 - 80,000	14,140	37,487	13,976	212
Mission	49,121	32,743	10,406	3,067	11,351	1,054	125
Mt Hull	105,431	34,809	12,000 - 18,500	2,734	6,233	1,931	1
Mt Spokane	121,767	95,814	29,000 - 42,000	5,334	12,483	6,068	o
Naches-Wenas	180,858	121,981	Analysis in 2024	9,587	14,569	189	12,355
Nason Creek	31,679	29,243	6,750 - 11,500	493	1,487	433	О
Republic	180,553	144,350	46,500 - 64,000	9,025	18,186	3,796	27
Slate	35,948	34,905	Analysis in 2024	424	637	130	387
Stemilt	38,961	22,613	9,200 - 13,600	2,398	4,030	172	o
Stranger	89,904	72,061	30,000 - 38,000	3,389	10,097	7,946	1
Teanaway	132,120	111,696	38,500 - 60,000	3,878	5,835	299	18,975
Tieton	148,634	117,781	38,000 - 60,500	1,409	1,702	19	440
Tillicum	14,326	11,241	7,614	5,415	20,757	234	52
Toroda-Tonata	153,611	117,345	51,000 - 66,000	2,661	4,621	2,232	76
Touchet-Mill	203,750	110,794	22,000 - 27,500	1,466	4,101	874	13
Trail	105,242	94,948	35,200 - 44,000	4,098	6,704	2,539	8
Trout Lake	117,153	105,015	18,500 - 33,000	5,337	6,721	1,775	1
Tucannon	98,616	80,099	Analysis in 2024	1,403	2,125	398	29,481
Twisp River	111,918	82,349	26,000 - 36,500	1,745	2,123	165	19,489
Upper Swauk	39,175	35,450	14,000 - 22,000	1,743	3,623	295	38
Upper Wenatchee	74,777	66,277	15,500 - 27,000	1,649	3,750	331	1,366
White Salmon	126,688	104,022	38,000 - 54,000	2,727	6,286	7,779	304

Table 3. Acres of reported forest health treatments completed by **Calendar Year** (January 2017 – May 31, 2024) organized by **Treatment Type**.

EASTERN WASHINGTON TREATMENT ACRES									
	2017	2018	2019	2020	2021	2022	2023	2024	Grand Total
Commercial Vegetation	15,369	16,176	14,373	15,095	12,995	14,215	13,944	1,350	103,517
Non-Commercial Vegetation	46,872	59,553	59,849	80,937	65,613	84,388	89,468	18,719	505,399
Prescribed Fire	21,538	37,666	28,622	15,000	22,379	12,178	41,262	3,230	181,875
Grand Total	83,780	113,394	102,845	111,032	100,986	110,781	144,673	23,299	790,790

Table 4. Completed forest health treatment acres by **Detailed Treatment Activity Category** within broader **Treatment Type** by **Lead Implementing Organization** by **Calendar Year** (January 2017 – May 31, 2024). A terminology crosswalk and glossary is available in <u>DNR's box folder</u>.

	2017	2018	2019	2020	2021	2022	2023	2024	Grand Total
Bureau of Land									
Management	0	0	0	0	223	585	2,804	0	3,612
Commercial Thin					223	369			592
Fuels re-arrangement						182	2,718		2,900
Non-commercial thin						34	87		120
Colville Confederated Tribes	7,300	8,546	7,298	4,200	9,881	4,976	0	0	42,201
Commercial Thin	1,962	2,152	1,519	462	1,622	715			8,432
Non-commercial thin						1,335			1,335
Other - Unknown	285	377	262	84	8,259				9,267
Regeneration Treatment	5,053	6,017	5,517	3,654		2,926			23,168
DNR Service Forestry	10,948	12,608	17,099	24,063	20,335	21,044	25,450	9,032	140,579
Other - Unknown	10,948	12,608	17,099	24,063	20,335	21,044	25,450	9,032	140,579
DNR State Lands	16,907	25,464	15,203	25,088	22,309	21,387	28,281	9,710	164,349
Commercial Thin	1,567	2,858	1,652	1,401	1,120	2,339	1,239	377	12,554
Fuels re-arrangement	13	35	213	128	224	903	89		1,604
Herbaceous Veg Control	2,504	2,003	3,336	4,339	3,201	2,469	4,997	469	23,317
Non-commercial thin	1,857	6,891	1,553	5,218	4,676	4,484	4,300		28,978
Other - Unknown	498		21	121		90	279		1,009
Regeneration Treatment	5,265	4,146	4,000	4,695	4,314	6,818	6,415	355	36,008
Rx Fire - Broadcast Burn					7	166	430	540	1,144
Rx Fire - Pile burning	842	2,370	2,542	2,245	2,696	623	6,885		18,203
Tree establishment	4,360	7,161	1,887	6,941	6,072	3,494	3,647	7,969	41,531
Kalispel Tribe	82	97	103	116	166	396	539	0	1,497
Commercial Thin	82	97	103	116	119	70			586
Fuels re-arrangement						57	161		218
Other - Unknown					47	208			254
Rx Fire - Broadcast Burn						61	378		439
NGOs	79	305	123	471	431	592	879	137	2,657
Commercial Thin		252					236		488
Fuels re-arrangement	79		123	239	258	430	382	137	1,482
Non-commercial thin				232	78		90		400
Rx Fire - Broadcast Burn		53			95	162	170		287

	2017	2018	2019	2020	2021	2022	2023	2024	Grand Total
Private							51	13	64
Rx Fire - Broadcast Burn							51	13	64
State Parks	71	252	1,461	446	169	595	906	13	3,900
Commercial Thin		35	_,				60		95
Fuels re-arrangement		135	205	60	13	48			461
Non-commercial thin	9	20	14	310	156	113	68		690
Other - Unknown	62	61	1,242	310	130	415	565		2,345
Rx Fire - Broadcast Burn	OZ.	01	1,272	77		713	213		290
Rx Fire - Pile burning				,,		20	213		20
Chelan County	374					20			374
Commercial Thin	23								23
Fuels re-arrangement	72								72
Non-commercial thin	221								221
Other - Unknown	57								57
Confederated Tribes of the	57								57
Umatilla			41	29	224	167	95		555
Commercial Thin			41	29	195	10/	95		195
			41	29	195	155	78		303
Fuels re-arrangement			41	29			76		
Non-commercial thin						12	17		12
Rx Fire - Broadcast Burn					20		17		17
Rx Fire - Pile burning	20.004	== 04.4	50 4 40	46.077	29	46.696	00.000	2.040	29
US Forest Service	38,384	55,814	50,142	46,977	41,902	46,636	82,930	2,848	365,633
Commercial Thin	5,325	4,843	5,935	7,343	4,954	2,121	5,021	618	36,160
Fuels re-arrangement	5,797	7,466	8,249	19,579	10,719	25,501	33,308	29	110,649
Herbaceous Veg Control	58		50				75		183
Non-commercial thin	3,587	5,923	5,961	7,229	5,046	7,581	10,231	349	45,907
Other - Unknown	109	37	173	159	2	422	75		977
Regeneration Treatment	960	1,246	838	395	551	482	917		5,388
Rx Fire - Broadcast Burn	5,164	3,872	6,492	167	4,022	1,582	4,910	1,852	28,061
Rx Fire - Pile burning	11,793	14,665	17,178	10,586	13,039	7,574	25,904		100,739
Rx Fire - Planned but burned									
in Wildfire		12,788	9						12,797
Tree establishment	5,591	4,975	5,257	1,518	3,570	1,374	2,487		24,772
US Fish and Wildlife Service	549	829	1,953	1,433	1,336	1,532	2,122	1,073	10,827
Fuels re-arrangement							251	426	677
Herbaceous Veg Control						15			15
Non-commercial thin							257	425	682
Other - Unknown		56	1,171	1,089	730	687			3,733
Rx Fire - Broadcast Burn	549	774	781	344	606	831	583	221	4,689
Rx Fire - Pile burning							1,031		1,031
WA Dept of Fish and			•						
Wildlife	5,168	4,330	4,856	1,424	984	1,979	1,029	486	20,257
Commercial Thin	1,931	1,539	521	462	143	1,426	864		6,886
Fuels re-arrangement	85		33						118
Non-commercial thin	381	408	3,584	888	287	239			5,787
Other - Unknown				25					25
Rx Fire - Broadcast Burn	927	1,235	131	37	553		164	404	3,451
Rx Fire - Pile burning	1,846	1,149	587	12		5			3,599
Tree establishment						309		83	392
Grand Total	79,861	108,245	98,280	104,247	97,960	99,889	145,084	23,299	756,863

This summary is a product of DNR Forest Resilience Division and provides data as pulled on May 31, 2024. Methodology for this treatment tracking is available in DNR's box folder, and is revised as our methods and/or data sources are updated. Data will be updated again in fall 2024.