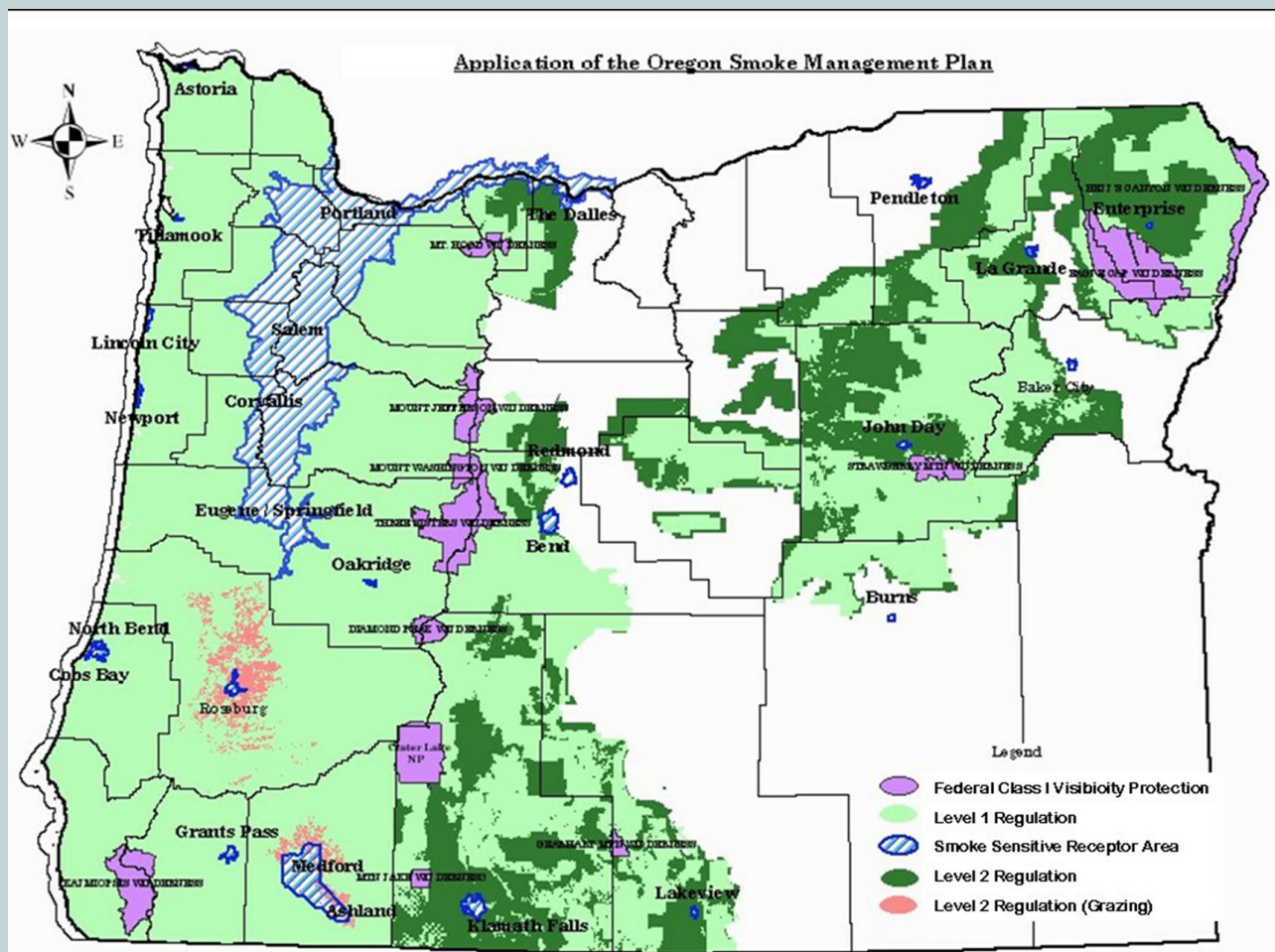


ANNUAL REPORT 2023



OREGON SMOKE MANAGEMENT

**OREGON DEPARTMENT OF FORESTRY/PROTECTION DIVISION/POLICY & MITIGATION UNIT
2600 STATE STREET, SALEM, OREGON 97310**



EXECUTIVE SUMMARY

ACRES BURNED – 154,817 Statewide acres were ignited. There has been a concentrated effort by federal land managers to increase pace and scale of prescribed fire to mitigate some of the hazards of wildfire which has increased acres this year. The 10-year average is 187,551 acres. Though the 10-year average has decreased, the 2023 acres burned have increased from the 2022 yearly acres.

INTRUSIONS – There was only 1 smoke intrusions into Smoke Sensitive Receptor Areas (SSRAs) based on the new 2019 definition (see below) of a smoke intrusion. This represents a lower number of intrusions recorded. The 10-year average is 8 intrusions.

SMOKE IMPACTS – There were 19 smoke incidents recorded with highest impacts in Bend at 899.8 microns per cubic meter.

EMISSIONS - Emissions were 10,984 tons of PM 2.5. This is close to the 10-year average of 10,978 tons.

PROGRAM OVERVIEW

The Oregon Smoke Management Plan was developed as a voluntary program in 1969 and adopted as a regulatory program by the State Forester and the Environmental Quality Commission (EQC) in 1972. The plan has gone through several major revisions since then. The last revision to the plan was completed in early 2019. Implementation started March 1 of that year. Key elements changed in the plan include: *

1. The definition of a smoke intrusion to include a threshold for a short-term (hourly) smoke impact and a threshold for a 24-hour average impact.
2. Development of a communication framework and community response plans. Approved community response plans will allow for an exemption to the one-hour threshold of a smoke intrusion.
3. Increasing the amount of polyethylene sheeting allowed to cover burn piles to keep them dry to reduce smoke emissions.

*See OAR 629-048 for the details of these changes.

PROGRAM OVERVIEW CONTINUED

The plan's overall purposes are:

1. To improve the management of prescribed burning as a forest management and protection practice.
2. To minimize emissions from prescribed burning consistent with the air quality objectives of the federal Clean Air Act.

The plan applies to all lands classified as forestland and all federally managed forestland, whether classified or not, within a forest protection district.

In general, all federal forestland and Class I forestland in western Oregon is regulated at a higher level but all forestland owners and managers must comply with most or all aspects of the program.

The Oregon Smoke Management Plan contains six principal objectives. These objectives are to:

1. Minimize smoke emissions resulting from prescribed burning.
2. Provide maximum opportunity for essential forestland burning.
3. Protect public health by avoiding intrusions.
4. Coordinate with other state smoke management programs.
5. Comply with state and federal air quality and visibility requirements; and
6. Promote the further development of alternatives to burning and emission reduction techniques.



Monitoring & Smoke Audits:



The Oregon Smoke Management Plan's goal is an annual audit of approximately one percent of the prescribed burns conducted in the Regulated Area. Approximately half of the audits are conducted on the day of the burn and half are conducted prior to ignition. The purpose of these audits is to maintain consistent data reporting and monitor the effectiveness of the Oregon Smoke Management program.

The Smoke Management Field Coordinator devotes significant time to overseeing the audit program and improving the compliance for conducting audits. This year 34 audits were completed, for a total of 13,292 audited tons. The audit breakout was 23 pre-burn audits and 11 burn-day audits. Forest Service, BLM, state, and private units were audited. At least one of these audits was mutually agreed upon and performed on a non-regulated neighboring agency in a successful relationship building and information-sharing visit.

Trends this year showed better pre-burn reported tons within acceptable ranges due to close coordination on the West Bend Pilot Burn project. Burn day trends showed equal above and below tonnage reporting. This may be an anomaly year due to the concentrated efforts on West Bend.

The Smoke Management Field Coordinator continues to teach both agency and non-agency personnel the proper way to estimate fuel loading through on-the-job training during site visits, burn boss refresher training courses, the regional Rx-301/341, and Rx-410 Smoke Management Techniques course, and fuel-load estimation briefing papers.

An entire series of video tutorials on how to do a fuels transect, estimate tonnage, and use tools to help burners have also been advertised and published to the field. In addition, the SIMPLE fuel-loading calculator (a web-based program that utilizes a modified Browns transect for estimating fuel-loading) has been accepted by Forest Service and BLM researchers. Research and testing are ongoing as the field continues to use the new fuel-loading tool. Our federal partners have adopted its use and ODF's fuel-loading estimation methodology as their standard operating procedures. A white paper on the technique and where to get more information was developed by the Smoke Management Field Coordinator in consultation with the Forest Service's Regional Air Quality Program Manager. It's anticipated this outreach and education effort will lead to more precise fuel-load estimates.

DIRECTIVE PERFORMANCE MEASURES

The Audit program touches all performance measures. The principal goals of the Smoke Management Plan are identified in **OAR 629-048-0010(4)**.

Meteorology Performance Measures

ODF Forecasters and staff continue to **comply with state and federal air quality and visibility requirements by minimizing smoke emissions, resulting from prescribed burning** by asking if and encouraging the use of polyethylene on piles to reduce emissions. This **provides maximum opportunity for essential forestland burning** by incentivizing the use of ERTs (Emission Reduction Techniques) through offering a 50% increase in tonnage for burn units using ERTs vs. those burns not using ERTs. Continued follow-up with review and analysis of any intrusions also facilitates the **protection of public health through intrusion avoidance. Increased cross-agency collaboration and coordination with other state smoke management programs** keeps ODF up-to-date on best practices and improves the **increase in smoke management communication at the local level and across stakeholders.**

METEOROLOGY

Oregon Department of Forestry meteorologists provide written daily Smoke Management forecasts and burning instructions statewide from October – June, as well as year-round phone consultation for prescribed burning operations.

Through a cooperative agreement with DEQ they are compiling the open burning forecast for the Willamette Valley north of Lane County throughout the year. In addition, ODF provides the Department of Agriculture field burning forecasts for the north Willamette Valley, Jefferson County, and Union County during the summer field burning season (July 5- October 15).

Other weather forecast services include 3-month outlooks (issued monthly) & support for significant weather events that may or may not increase the chances for wildfire starts/spread (i.e., heavy rain/snow/ice, wind, lightning, etc.) other that may or may not.

METEOROLOGY SERVICES



ALTERNATIVES TO BURNING

As part of a recommendation from the 2013 review of the Smoke Management Plan, the program is tracking acres of treated forestland where alternatives to burning were employed instead of using prescribed fire. In addition, emission reduction techniques of prescribed burn units are also tracked.

Total statewide acres using emission reduction techniques including landing, grapple, hand-piled, and right-of-way piles according to ODF Smoke Management Database: 133,935.

Alternative to burning techniques include biomass removal, scattering material, chipping, crushing, firewood removal, non-treatment, or other techniques for reducing fire hazards and/ or creating planting spots

without using prescribed fire.

Emission reduction techniques including piling clean piles instead of broadcast or underburning, use of rapid ignition techniques, covering piles with polyethylene sheeting to keep the piles dry, and other techniques used to reduce particulate and gaseous emissions while burning.

The goal is to show the program is not exclusively focused on prescribed burning but all treatment methods that most effectively reduce fire hazard, maintain productive and resilient forests, and keep or improve air quality.

PERFORMANCE MEASURES GOALS/METRICS

Goal : 1 Minimize smoke emissions, resulting from prescribed burning.

ODF has documented where alternatives to burning or emission reduction techniques have occurred. This has led to an increase in tonnage burned due to piles being covered and creating cleaner consumption of volatile organic compounds. Total statewide acres using emission reduction techniques including landing, grapple, hand-piled, and right-of-way piles according to ODF Smoke Management Database: 133,935.

Training in ERT's are taught on site at every Rx burn that the Smoke Management Field Coordinator or Prescribed Fire Specialist attend. There were over 34 smoke audits where training occurred, and approximately 5 other trainings via federal prescribed fire and smoke management trainings or various presentations to EPA conferences and Prescribed Fire Councils where there were hundreds of attendees trained.

Goal: 2 Provide maximum opportunity for essential forestland burning.

Ignitions: 3,477, acres accomplished: 154,406. Increase of tons burned is not quantifiable with current programming capabilities.

Zero NAAQS exceedances, no AAR was needed.

Smoke Mgt. Field Coord. is promoting the use of polyethylene for increased tonnage allowance and forecasters are allowing a 50% increase in tonnage for burn units using ERTs vs. those burn units not using ERTs.

Goal: 3 Protect public health by avoiding intrusions and building smoke resilient communities.

DEQ has enhanced the quality of Oregon's air quality monitoring network by the addition of 30 new lower cost SensORs across Oregon. There are currently 8 CRPs in Oregon. DEQ has not been made aware of any new CRPs being developed since those developed using grant funding provided by SB 762, which resulted in the completion of 4 CRPs in 2022/2023. Locations for 20 additional SensORs have been identified but these monitors have not been deployed due to staffing constraints associated

with deployment, maintenance, and data management for the monitors. Continuing work to promote collaboration between local and tribal public health authorities, vulnerable populations, vegetation/fuel managers, and prescribed burners by assisting in the development of at least one new CRP annually.

Goal: 4 Strengthen cross agency collaboration and coordination with other state smoke management programs.

ODF staff have attended several culture burns to strengthen tribal smoke programs. Our staff has also presented and attended the national EPA smoke seminar meeting. We continue to meet with EPA, DEQ, FS, OHA, and others to promote and collaborate between local and public health authorities, vulnerable populations, vegetation/fuel managers, and prescribed burners for burns like the West Bend Pilot program.

In 2023, DEQ assisted four communities with the completion of their CRPs and provided support to eight Tribes on projects to address smoke preparedness and response. DEQ presented at EPA's Smoke Management in the Northwest Conference and provided ad hoc technical assistance related to prescribed fire smoke to communities and partner agencies. DEQ also coordinated on planning for the West Bend Prescribed Burn Pilot through the fall of 2023, with burns planned for the spring 2024 burn window. In 2023 OHA provided technical assistance and staffing to the OHA-funded Regional Climate and Health Coordinator for Deschutes, Crook and Jefferson Counties to prepare at-risk communities for possible smoke impacts from the West Bend Prescribed Burn Pilot, served on the Incident Management Team planning the pilot, and engaged in the development of the federal/state Joint Statement of Intent to Cooperate on Prescribed Fire and Smoke Management. OHA also conducted annual pre-season Interagency Smoke Management call and Summer Hazards Kickoff meeting for county and tribal public health partners. Finally, the 2023 legislature renewed funding OHA passes through to public health system partners (Oregon's Nine Federally Recognized Tribes, local county public health authorities, and 57 community based organizations) to build climate resilience to wildfire and smoke through development of climate and health plans and strategies.

PERFORMANCE MEASURES GOALS/METRICS

Goal: 5 Comply with state and federal air quality and visibility requirements.

Forecasters and Smoke Mgt. Coordinator monitors air sensors to ensure requirements are being met. Documentation of smoke impacts and intrusions are done for every Rx burn exceeding thresholds adopted by ODF and DEQ.

Goal: 6 Continuously increasing social license and the development of positive public perception of prescribed fire.

ODF continues to maintain smoke communications efforts, by updating and distributing the Statewide Communication Framework (SCF) to stakeholders annually. We continue to promote collaboration by assisting in regional engagement related to SM/RX burning in Oregon. The 23 communication strategy document was sent out January 2nd 2024. The Smoke Mgt. Field Coord, and the Prescribed Fire Specialist also work diligently with burners on the ground to educate the public on the benefits of prescribed fire and how to protect yourself from smoke should it occur in your area. Continued efforts are given to public meetings with Dept. of Transportation to ensure road safety and visibility. The Smoke Mgt. Field Coord. also serves nationally as an Air Resource Advisor to assist communities in finding informations on what wild-fire and prescribed fire smoke will be doing each day ignitions are occuring.





COMMUNITY WILDFIRE DEFENSE PROGRAM

Spring of 2023 brought 10 Community Wildfire Defense Grant (CWDG) awards to Oregon totaling \$23.5M in funding for communities across the state to help fund CWPP updates, mitigation education projects and fuel mitigation projects.

Oregon entities received the 2nd highest dollar amount compared to other states. This includes creating defensible space around homes and other structures, roadside fuel reductions,

implementing a community brush dump program, creating Firewise Communities and more.

The CWDG Program Coordinator continues to provide support and technical assistance for organizations (ODF, local government agencies, tribes, non-profits) interested in the program year-round.

COMMUNITY WILDFIRE PROTECTION PLANS

The Community Wildfire Protection Planning (CWPP) process is the collaboration between communities and agencies interested in reducing wildfire risk. Oregon Department of Forestry field staff participates in the development of CWPP's at the local level, working with state and local agencies, community members, and federal partners to prioritize hazardous fuel reduction projects on federal and private lands in the wildland urban interface. Numerous counties and communities are working to update CWPP's across the state. In 2023 Rocky Point Community (Klamath County), Benton, Douglas, Harney, and Multnomah counties completed updates.

NATIONAL FIRE PLAN

Oregon was awarded \$2,013,243 for mitigation of hazardous fuels in high-risk communities through the 2023 Western State Fire Managers' (WSFM) Wildland Urban Interface (WUI) grant program. This funding is made possible by the USDA Forest Service National Fire Plan State Fire Assistance in partnership with the Council of Western State Foresters. These funds will reduce wildfire risks for property owners across Oregon in communities such as Florence, along the coast, and Pine Valley in northeast Oregon.

Additionally, three projects were selected through the Community Assistance grant program funded by US Forest Service Region 6. These projects were chosen based on reduced wildfire hazard in Communities at Risk in Oregon and benefit to federal lands through mitigation and prevention activities. More than a million dollars was provided to fund these projects and support the Oregon Prescribed Fire Council's mission to promote and conserve the fire adapted natural ecosystems in Oregon and expand the responsible use of prescribed fire. In 2023, WSFM-WUI and Community Assistance projects from prior year awards treated 2,021 acres within the WUI, implemented prevention activities within communities and promoted the Firewise USA ® recognition program. An additional 296 acres were treated through Joint Chiefs' Landscape Restoration Partnership and Watershed Restoration and Enhancement Act (Wyden Amendment) agreements.

FIREWISE USA ®

In 2023 residents across Oregon continued to show interest in improving their community's resilience to wildfire and understanding the work they can do to protect their home during a wildfire. Thirty-nine new Firewise USA ® sites were recognized in Oregon in 2023, including the first sites in Tillamook, Hood River, and Yamhill counties. Oregon ended the year with 290 sites in "good standing", ranking second for all states across the nation. Nationally, Jackson County ranked 4th and Deschutes County was 5th for the number of sites in a county.

Oregon Department of Forestry works with homeowners, partner agencies and local fire districts to provide community risk assessments and three-year action plans for the sites. Residents in Firewise USA ® sites invested 216,355 hours of time reducing wildfire risk to their home and property through home hardening actions, clearing flammable materials from around the home, reducing vegetation within the home ignition zone (0-200'), and learning wildfire prevention and mitigation strategies. In addition to the residents' investment of time, \$6,263,985 was paid to contractors for activities related to wildfire risk reduction. This includes \$166,400, on 15 projects funded by Oregon Department of Forestry's Small Forestland Grant Program funded by SB 762.

National Fire Protection Association's Firewise USA ® is a voluntary recognition program administered in Oregon by Oregon Department of Forestry. The program is co-sponsored by the USDA Forest Service and National Association of State Foresters. Firewise USA ® provides an organizational framework to support neighbors working together to reduce wildfire risks within their neighborhood and community.



TABLE 1
2014-2023 ACCOMPLISHMENT SUMMARY

The following tables and figures provide detailed information about the Smoke Management program. The data details accomplishments for 2023 and compares them with previous years.

YEAR	# UNITS REGIS- TERED	# UNITS BURNED	ACRES BURNED	TONS BURNED	INCI- DENTS	INTRU- SIONS	INTRU- SIONS/ IG- NITIONS %
2014	4,095	3,492	208,593	1,405,349		13	.31^
2015	3,601	3,101	179,613	1,371,114		9	.24^
2016	3,484	2,928	181,800	1,228,107		11	.30^
2017	3,597	2,868	159,624	1,004,108		10	.29^
2018	4,307	3,388	185,702	1,270,725		18	.42^
2019*	3,726	3,726	200,629	1,245,128	39	6	.14^
2020	3,146	2,287	130,997	863,875	1	0	.00^
2021	3,253	2,476	143,653	996,496	43	2	.06^
2022	3,014	2,148	107,463	874,117	13	1	.01^
2023	3,289	1,580	154,817	1,057,900	19	1	.05^
AVERAGE	3,351	2,799	165,289	1,131,692		7	0.18

*Based on new smoke incident and intrusion definitions implemented in the 2019 rule change.

^Values were all recalculated from 2012 to intrusions per ignition.

Note: Due to updated information from units being registered, accomplished, or database updates after December 31, numbers may vary slightly.

Note: Due to updated coding, numbers from 2023 may vary slightly.

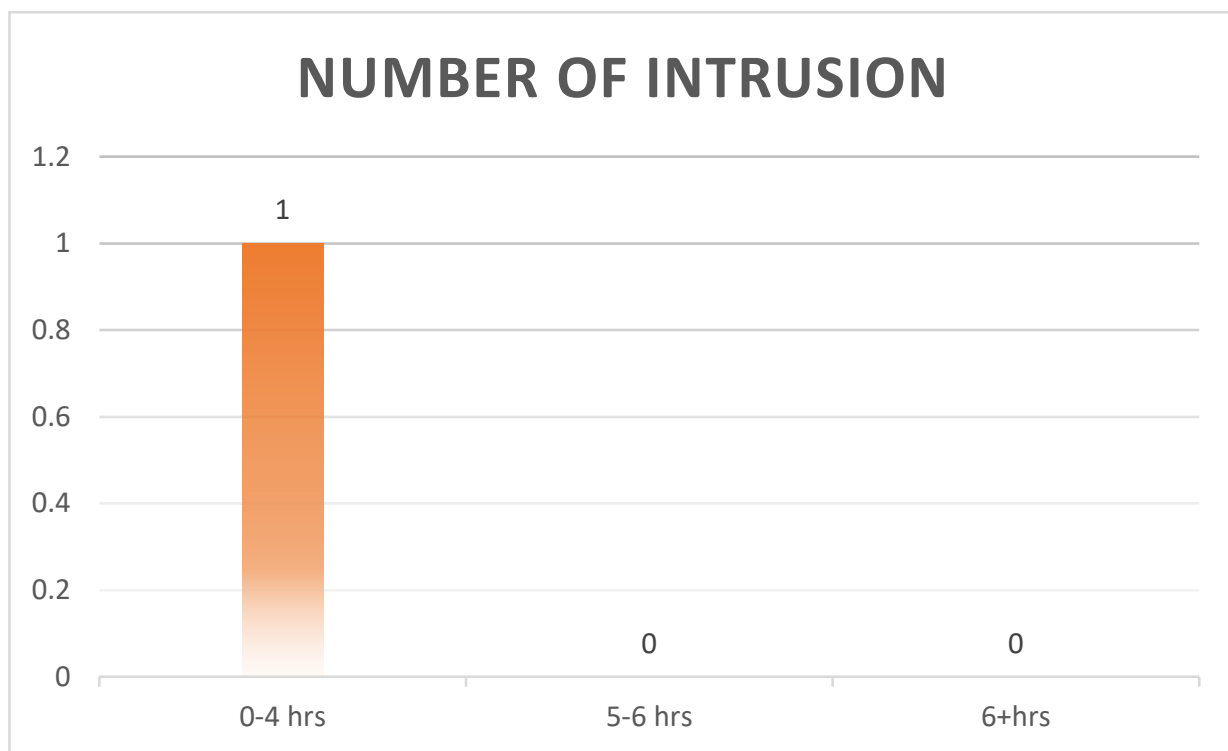
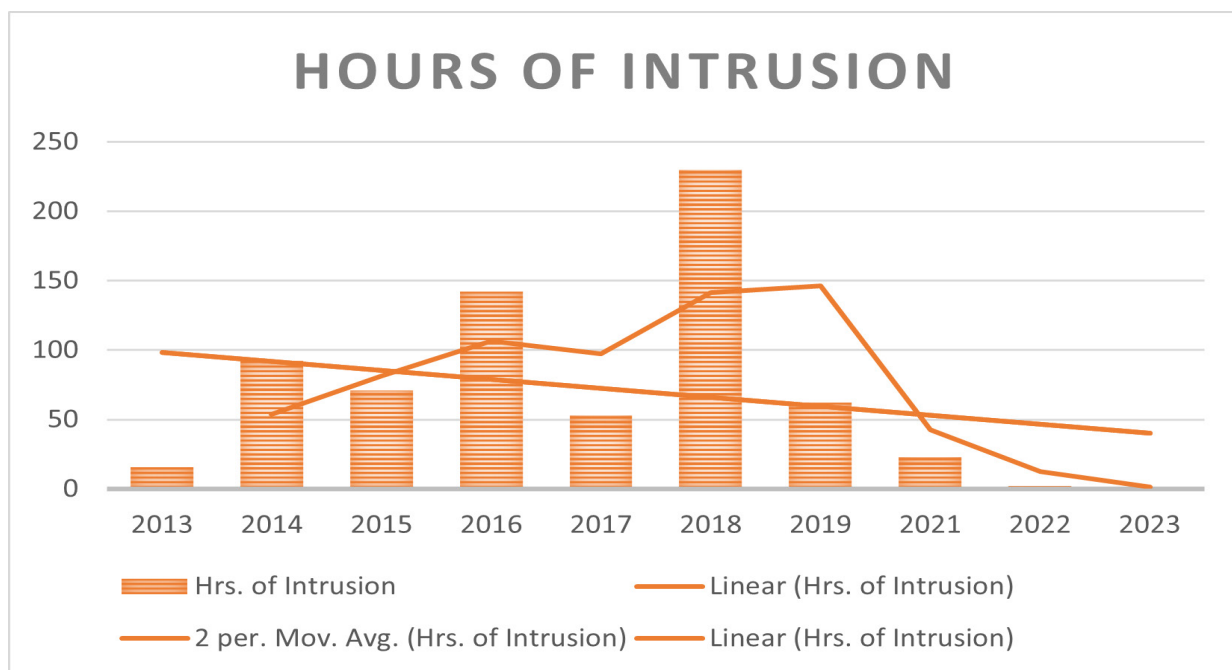
Figure 2a**Number of Intrusions 2023****Figure 2b****Accumulated Hours of Intrusions 2023**

Figure 3

Intrusion Summary, 2023

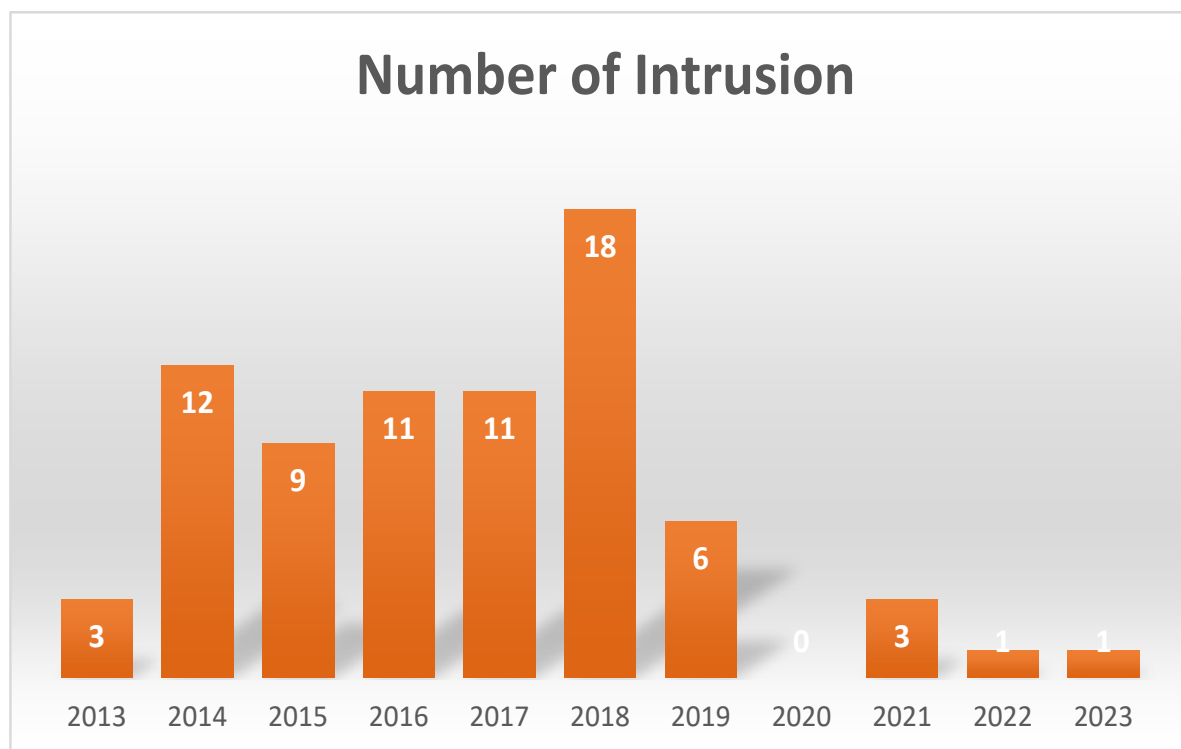


Table 2

Smoke Intrusion Summary 2023

DATE	DISTRICT /FOREST	PRIMARY AREA AF-FECTED	UNIT NO.	OWNER CLASS	MAX HOURLY/ MAX 24 HR.	LENGTH
5/18/23	DE-SCHUTES NF	RED-MOND	20S, 10E, SEC 22	USFS	70.3/13.4	1*

* 24 HOUR INTRUSION

Figure 4A

PREScribed BURNING EMISSIONS ESTIMATE

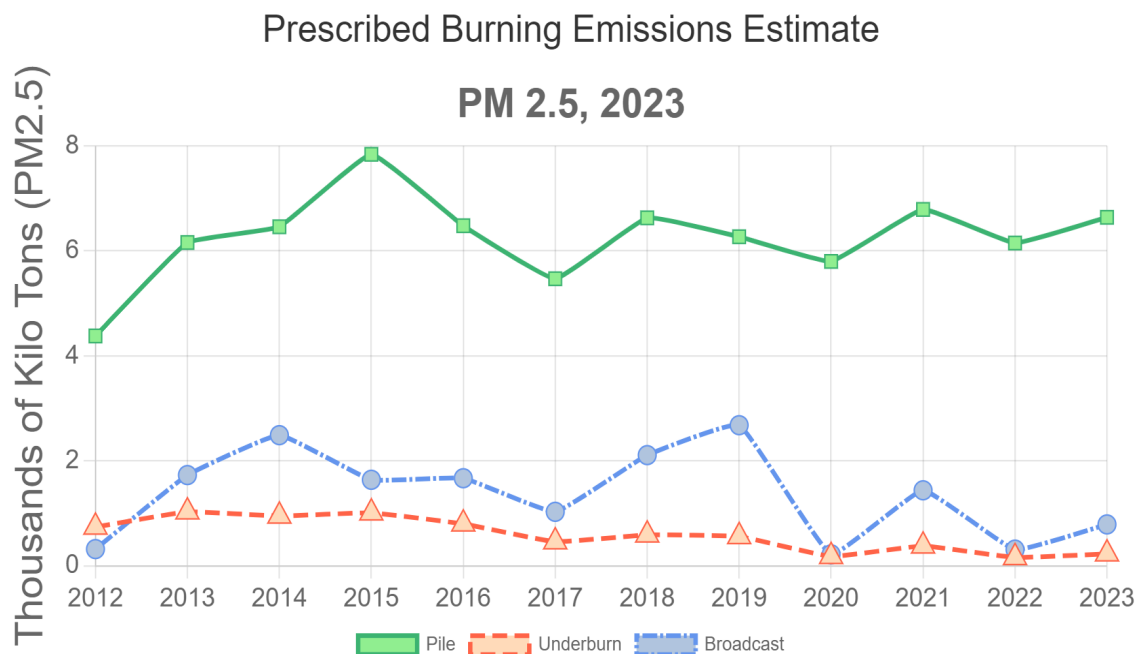


Figure 4B

WILDFIRE EMISSIONS 2023

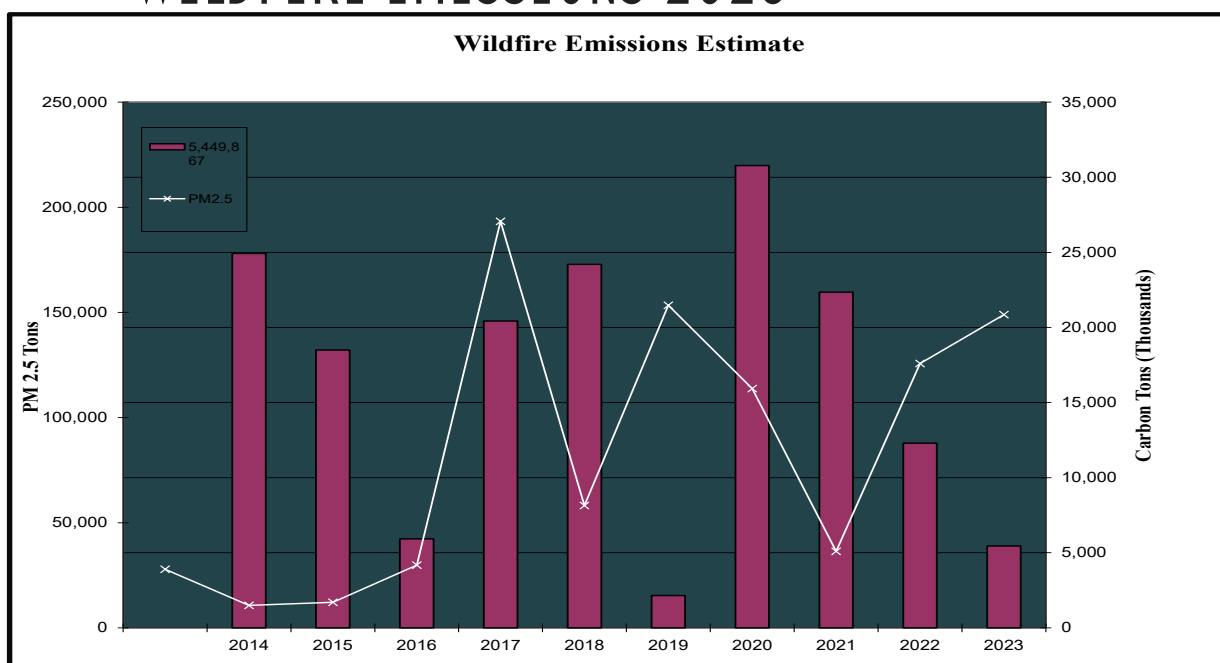


Figure 5

Total Forestland Burning Emissions, PM2.5

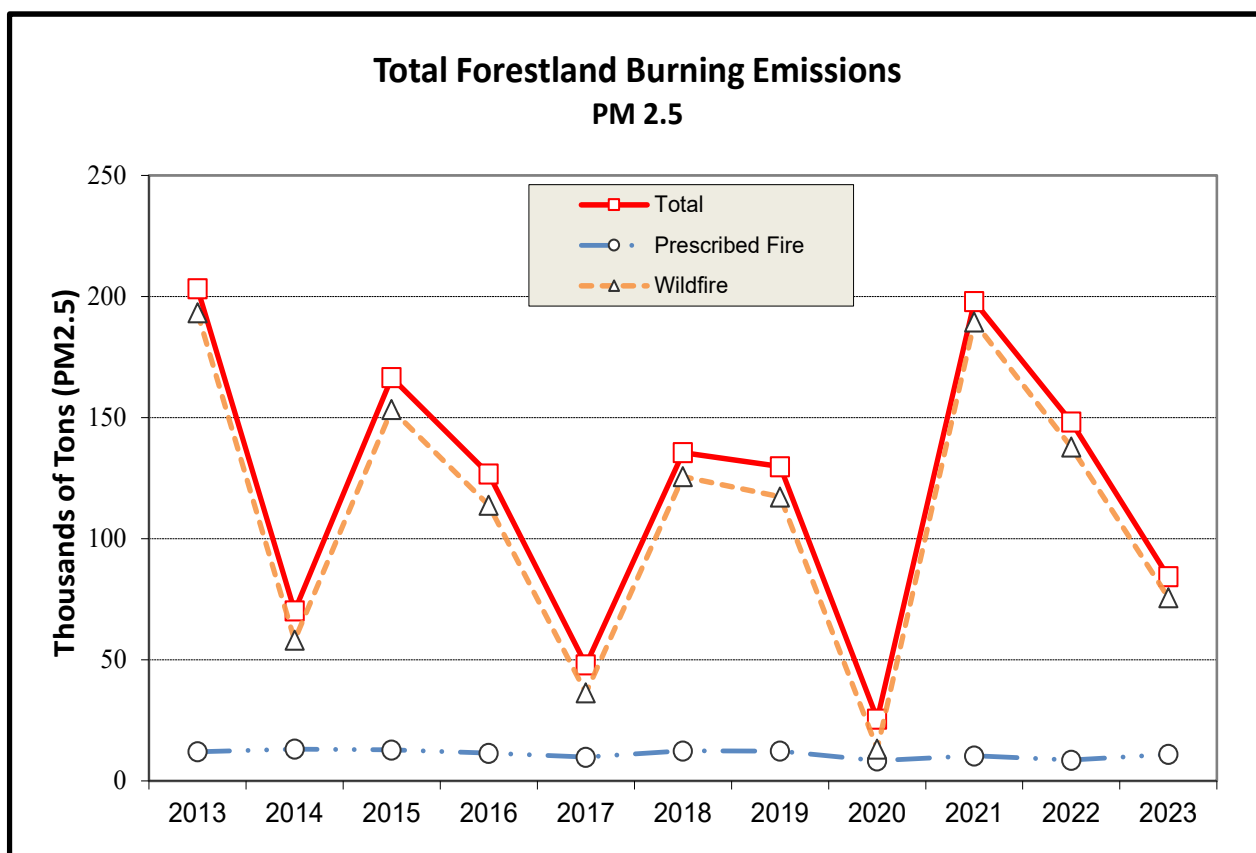


Table 3a

PM 2.5 Emissions (Tons) Broadcast

District Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Astoria	0	0	0	4	0	0	0	0	0	0	0	0
BLM Central Oregon	0	0	0	0	0	0	0	0	0	1	0	0
BLM Klamath Falls Lakeview	0	0	0	0	0	0	0	0	32	0	0	0
Central Oregon	0	3	13	17	8	0	0	0	18	0	0	0
Coos	0	0	0	0	0	0	0	0	0	0	2	3
Coos FPA	233	497	375	431	86	131	191	115	40	32	57	43
Deschutes NF	0	4	0	12	13	0	0	59	0	41	9	19
Douglas FPA	10	86	53	237	75	27	20	19	60	0	5	0
Forest Grove	5	17	0	6	9	0	0	15	6	0	0	0
Fremont NF	0	0	0	0	133	59	75	179	0	0	0	0
Malheur NF	357	0	424	0	1	0	0	0	29	39	0	31
Northeast	69	0	0	0	68	24	0	0	0	0	0	0
Ochoco NF	3	17	8	0	8	0	0	2	2	163	0	0
Rogue-Siskiyou NF	3	65	14	22	0	11	0	0	0	0	0	9
Siuslaw NF	0	0	0	0	0	0	0	0	0	0	0	0
South Cascade	1	0	0	0	1	0	0	0	3	8	0	4
Southwest	0	2	3	8	3	9	0	0	3	9	1	3
Tillamook	0	6	4	3	7	0	22	0	0	0	2	64
Umatilla NF	0	0	44	53	85	0	0	0	0	0	3	0
Umpqua NF	12	0	0	17	0	8	0	0	0	4	0	26
Wallowa-Whitman NF	19	236	89	82	308	40	92	18	38	14	0	12
West Oregon	59	101	29	76	17	49	50	12	2	8	25	6
Western Lane	49	136	34	98	56	129	156	208	62	123	69	20
Willamette NF	2	13	9	98	0	1	10	0	0	0	0	0
Winema NF	15	30	0	0	1	0	0	0	0	0	0	0
Total	837	1,212	1,097	1,163	881	489	616	626	294	441	174	241

Table 3B

PM 2.5 Emissions (tons) piles

District Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Astoria	478	456	326	377	446	559	654	524	623	436	234	231
BLM Burns, Baker	0	0	0	0	0	0	0	0	55	5	17	89
BLM Central Oregon	0	0	0	0	0	0	0	14	0	31	9	91
BLM Klamath Falls Lakeview	0	0	0	0	0	0	0	0	0	0	21	81
Central Oregon	163	128	305	247	276	48	72	103	197	76	37	25
Columbia Gorge	0	0	0	0	0	0	0	0	0	0	0	0
Coos	0	2	1	3	4	1	5	0	0	7	9	5
Coos FPA	861	1,076	1,266	1,253	1,128	1,122	1,289	1,323	1,191	1,636	1,943	1,699
Crater Lake N.P.	0	1	0	3	2	0	0	1	0	4	1	17
Deschutes NF	144	159	208	306	159	249	383	348	58	155	60	217
Douglas FPA	488	817	1,234	1,180	946	1,067	1,281	728	674	887	903	954
Forest Grove	304	517	351	307	196	311	318	458	567	433	450	107
Fremont NF	11	45	73	83	117	3	2	195	118	104	104	203
Klamath NF	2	6	10	10	13	5	1	0	0	0	0	8
Klamath-Lake	42	75	410	871	338	59	93	52	77	16	24	24
Malheur NF	97	239	309	408	603	324	89	153	480	198	168	145
Mt. Hood NF	21	37	74	51	25	49	18	48	23	21	25	46
North Cascade	278	421	314	408	331	196	687	487	170	952	577	615
Northeast	300	1,231	829	438	953	823	815	477	402	574	336	355
Ochoco NF	105	78	0	21	12	3	0	0	37	95	151	61
Oregon Caves NM	0	0	0	0	0	0	1	0	0	0	0	0
Rogue-Siskiyou NF	251	216	349	521	241	87	225	298	94	134	20	205
Siuslaw NF	23	20	33	22	23	4	2	26	0	0	0	9
South Cascade	720	802	778	881	678	594	780	648	659	650	546	725
Southwest	506	386	681	576	521	484	508	754	668	625	526	648
Tillamook	129	286	237	236	144	211	168	184	171	184	191	90
Umatilla NF	19	15	30	151	75	58	165	107	97	278	30	301
Umpqua NF	168	108	84	133	77	32	23	50	77	5	5	63
Walker Range	0	0	1	0	27	0	0	0	0	0	0	0
Wallowa-Whitman NF	340	306	244	165	389	266	227	396	419	581	546	623
West Oregon	865	925	1,231	1,250	918	1,012	1,184	904	1,046	801	1,038	624
Western Lane	115	317	196	208	110	474	561	393	307	202	449	341
Willamette NF	122	140	108	282	253	127	113	307	6	1	0	52
Winema NF	38	45	91	116	71	59	76	3	6	54	0	646
Total	6,589	8,851	9,771	10,509	9,076	8,228	9,739	8,979	8,222	9,147	8,421	9,300

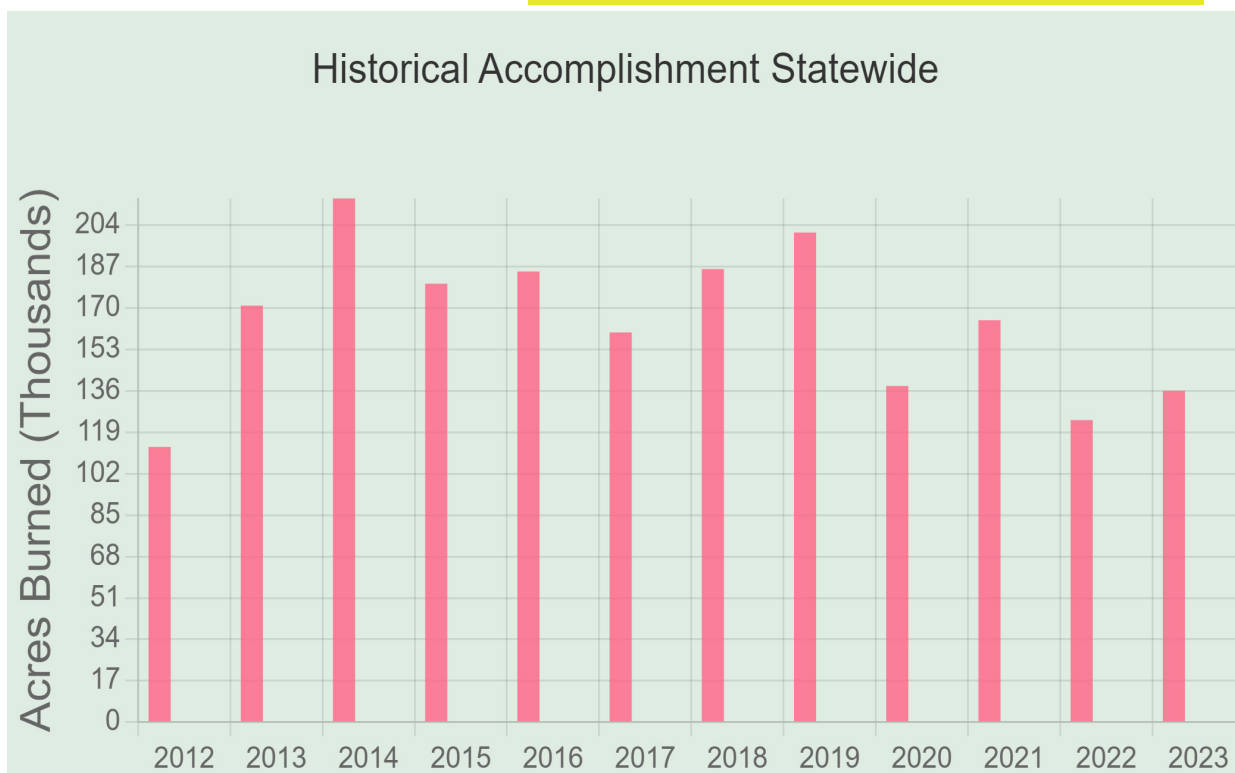
Table 3c

PM 2.5 Emissions (tons) underburn

District Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Central Oregon	2	1	10	0	0	0	0	0	0	0	0	0
Coos FPA	0	0	0	0	0	1	0	0	0	0	0	0
Deschutes NF	24	105	292	204	129	225	307	496	23	485	248	297
Fremont NF	3	147	209	680	312	233	389	193	7	374	70	106
Klamath-Lake	0	0	0	0	35	19	50	15	0	6	0	0
Malheur NF	32	607	533	11	481	270	549	182	92	131	0	15
Mt. Hood NF	14	43	8	1	20	0	0	0	0	7	0	23
Ochoco NF	0	78	79	103	67	99	123	160	82	81	0	21
Rogue-Siskiyou NF	5	12	50	61	88	48	23	83	5	58	0	46
Siuslaw NF	0	0	0	0	0	0	0	0	0	0	0	0
Southwest	21	29	6	22	21	2	11	23	0	17	3	14
Umatilla NF	11	351	411	297	1	0	108	179	0	0	0	23
Umpqua NF	8	58	140	10	72	28	57	2	0	32	0	3
Wallowa-Whitman NF	207	267	495	162	475	67	306	193	36	166	0	73
Willamette NF	32	28	164	81	92	97	108	20	0	81	0	35
Winema NF	1	31	178	62	34	78	179	1,259	0	60	0	240
Total	360	1,757	2,575	1,694	1,826	1,167	2,210	2,806	246	1,498	322	896

Figure 6

Historical Accomplishment Statewide

**Figure 7**

Historical Accomplishment Statewide



Figure 8

Monthly Prescribed Burn Acres Burned

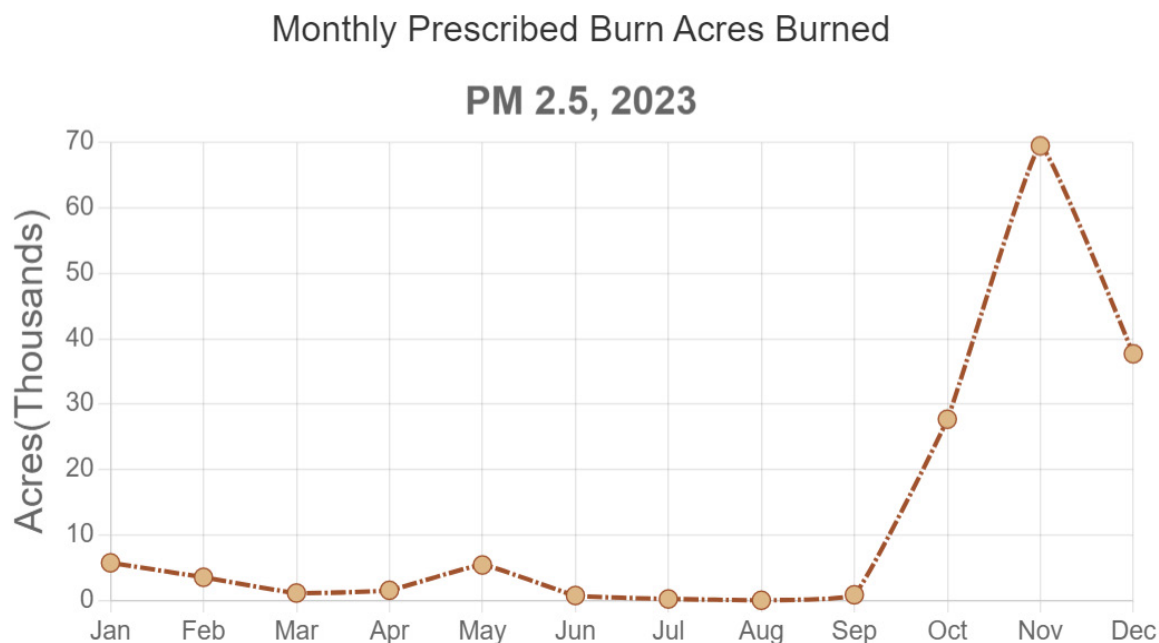


Figure 9

Piled vs Broadcast vs Underburn Acres Burned

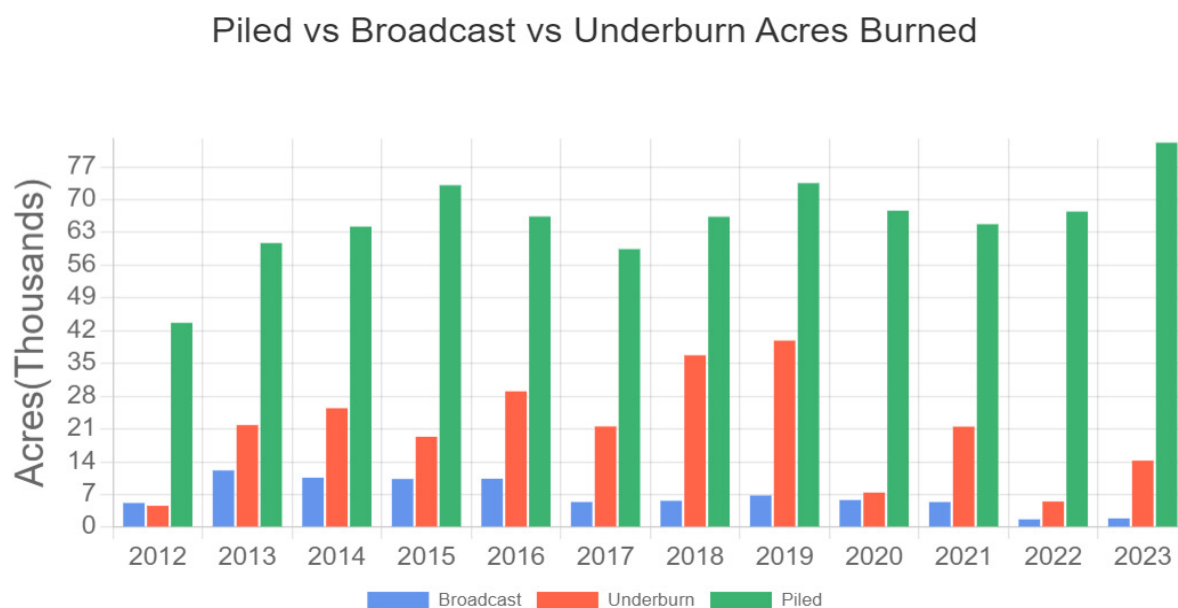


Table 4

Accomplished by District Summary

District Name	Tons Burned	Acres Burned	Units Burned
Astoria	20305	2207	32
BLM Burns, Baker	9544	1093	3
BLM Central Oregon	8172	1323	1
BLM Klamath Falls Lakeview	9260	2009	1
Central Oregon	4412	753	14
Columbia Gorge	0	0	0
Coos	1095	624	7
Coos FPA	177954	12793	79
Crater Lake N.P.	2033	191	0
Deschutes NF	42783	18232	94
Douglas FPA	98903	14851	40
Forest Grove	10023	1395	21
Fremont NF	33724	4140	5
Klamath NF	809	182	1
Klamath-Lake	2820	564	1
Malheur NF	21642	3639	6
Mt. Hood NF	6829	1056	32
North Cascade	55036	11750	115
Northeast	41551	4409	56
Ochoco NF	8712	4846	0
Oregon Caves NM	0	0	0
Rogue-Siskiyou NF	28692	6755	129
Siuslaw NF	1077	2213	9
South Cascade	64064	11585	233
Southwest	73659	13357	206
Tillamook	15134	2442	38
Umatilla NF	40419	3890	32
Umpqua NF	9584	1683	64
Walker Range	0	0	0
Wallowa-Whitman NF	73479	4824	130
West Oregon	57653	6964	128
Western Lane	35096	5464	67
Willamette NF	8488	1895	27
Winema NF	94948	7688	9
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All Districts Total	1057900	154817	1580

Table 5

Tons Burned by Month by District

District Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Astoria	0	1410	0	0	0	0	0	0	0	1760	17135	0	20305
BLM Burns, Baker	0	0	0	0	0	0	0	0	0	0	1070	8474	9544
BLM Central Oregon	2940	0	0	0	0	0	0	0	0	3620	1612	0	8172
BLM Klamath Falls Lakeview	0	0	0	0	600	0	0	0	0	0	160	8500	9260
Central Oregon	144	0	0	0	0	0	0	0	0	0	4268	0	4412
Coos	0	0	0	0	0	0	500	0	0	0	569	26	1095
Coos FPA	2552	4308	0	75	1656	0	0	0	0	16351	124445	28567	177954
Crater Lake N.P.	0	0	0	0	267	0	0	0	14	147	1605	0	2033
Deschutes NF	268	0	0	1737	9372	2610	0	0	0	9530	11448	7818	42783
Douglas FPA	3524	854	0	0	0	0	0	0	0	1706	55873	36946	98903
Forest Grove	902	617	83	15	0	0	0	0	0	3949	3561	896	10023
Fremont NF	0	1421	0	251	0	0	0	0	0	10733	5897	15422	33724
Klamath NF	400	0	0	0	0	0	0	0	0	0	409	0	809
Klamath-Lake	0	0	0	0	0	0	0	0	0	0	2820	0	2820
Malheur NF	0	0	0	0	0	8	0	0	0	6431	14422	781	21642
Mt. Hood NF	180	30	0	0	200	840	0	0	6	1701	3455	417	6829
North Cascade	4098	3728	175	1452	0	0	0	0	0	11631	27001	6951	55036
Northeast	0	0	0	0	0	0	0	0	0	4779	36495	277	41551
Ochoco NF	0	0	0	0	0	0	0	0	0	8112	600	0	8712
Rogue-Siskiyou NF	0	2489	0	1722	3908	0	0	0	0	2970	13422	4181	28692
Siuslaw NF	0	0	0	0	18	0	0	0	0	1059	0	0	1077
South Cascade	4485	308	216	9	372	0	0	0	0	6963	31423	20288	64064
Southwest	10901	4357	1495	680	1318	0	0	0	0	1060	26526	27327	73664
Tillamook	0	0	0	0	0	0	0	0	250	9598	5286	0	15134
Umatilla NF	222	0	0	0	0	0	0	0	2436	8781	28980	0	40419
Umpqua NF	130	26	43	1288	2394	0	0	0	260	663	1559	3221	9584
Wallowa-Whitman NF	0	0	0	0	2964	0	0	0	3256	38719	22120	6420	73479
West Oregon	476	460	100	20	0	0	0	0	0	16062	34582	5953	57653
Western Lane	1659	100	64	30	0	0	0	0	0	1783	26661	4839	35136
Willamette NF	0	0	12	0	3217	0	0	0	0	3170	2089	0	8488
Winema NF	0	3	0	0	3701	0	0	0	0	18485	11036	61723	94948

Total Tons Burned	32881	20111	2188	7279	29987	3458	500	0	6222	189763	516529	249027	1057945

Table 6

Acres Burned by Month by District

District Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Astoria	0	128	0	0	0	0	0	0	0	657	1422	0	2207
BLM Burns, Baker	0	0	0	0	0	0	0	0	0	0	107	986	1093
BLM Central Oregon	420	0	0	0	0	0	0	0	0	500	403	0	1323
BLM Klamath Falls Lakeview	0	0	0	0	259	0	0	0	0	0	50	1700	2009
Central Oregon	41	0	0	0	0	0	0	0	0	0	712	0	753
Coos	0	0	0	0	0	0	200	0	0	0	384	40	624
Coos FPA	180	322	0	15	72	0	0	0	0	1357	7968	2879	12793
Crater Lake N.P.	0	0	0	0	33	0	0	0	2	21	135	0	191
Deschutes NF	370	0	0	737	2607	589	0	0	0	2811	4488	6630	18232
Douglas FPA	581	100	0	0	0	0	0	0	0	212	8759	5199	14851
Forest Grove	133	145	3	1	0	0	0	0	0	434	508	171	1395
Fremont NF	0	203	0	175	0	0	0	0	0	1032	1114	1616	4140
Klamath NF	27	0	0	0	0	0	0	0	0	0	155	0	182
Klamath-Lake	0	0	0	0	0	0	0	0	0	0	564	0	564
Malheur NF	0	0	0	0	0	1	0	0	0	1156	2134	348	3639
Mt. Hood NF	28	10	0	0	40	140	0	0	1	250	465	122	1056
North Cascade	699	344	13	40	0	0	0	0	0	727	8892	1035	11750
Northeast	0	0	0	0	0	0	0	0	0	437	3787	185	4409
Ochoco NF	0	0	0	0	0	0	0	0	0	3503	1343	0	4846
Rogue-Siskiyou NF	0	473	0	249	818	0	0	0	0	663	3504	1048	6755
Siuslaw NF	0	0	0	0	3	0	0	0	0	2210	0	0	2213
South Cascade	766	63	24	2	9	0	0	0	0	1328	5382	4011	11585
Southwest	1611	1637	1032	229	347	0	0	0	0	176	3784	4542	13358
Tillamook	0	0	0	0	0	0	0	0	43	1209	1190	0	2442
Umatilla NF	17	0	0	0	0	0	0	0	406	1405	2062	0	3890
Umpqua NF	2	23	8	72	57	0	0	0	48	193	671	609	1683
Wallowa-Whitman NF	0	0	0	0	348	0	0	0	337	2989	722	428	4824
West Oregon	82	48	20	3	0	0	0	0	0	1207	4177	1427	6964
Western Lane	774	10	8	6	0	0	0	0	0	111	3813	746	5468
Willamette NF	0	0	1	0	215	0	0	0	0	1083	596	0	1895
Winema NF	0	15	0	0	593	0	0	0	0	2030	1251	3799	7688
Total Acres Burned	5731	3521	1109	1529	5401	730	200	0	837	27701	70542	37521	154822

Table 7

Burn Data by Owner Type

District Name	Private			State, County, Municipal			Federal(Except USFS)			USFS		
	Total Tons Burned	Acres Burned	Units Burned	Total Tons Burned	Acres Burned	Units Burned	Total Tons Burned	Acres Burned	Units Burned	Total Tons Burned	Acres Burned	Units Burned
Astoria	15612	1191	15	4693	1016	17	0	0	0	0	0	0
BLM Burns, Baker	0	0	0	0	0	0	9544	1093	3	0	0	0
BLM Central Oregon	0	0	0	0	0	0	1612	403	1	0	0	0
BLM Klamath Falls Lakeview	0	0	0	0	0	0	9260	2009	1	0	0	0
Coos	0	0	0	0	0	0	1095	624	7	0	0	0
Coos FPA	177874	12789	79	0	0	0	0	0	0	0	0	0
Crater Lake N.P.	0	0	0	0	0	0	2033	191	0	0	0	0
Deschutes NF	0	0	0	0	0	0	0	0	0	42783	18232	94
Douglas FPA	89623	13636	16	860	44	0	8420	1171	24	0	0	0
Forest Grove	9009	1077	18	452	77	0	109	204	1	0	0	0
Fremont NF	0	0	0	0	0	0	0	0	0	33724	4140	5
Klamath NF	809	182	1	0	0	0	0	0	0	0	0	0
Klamath-Lake	0	0	0	0	0	0	2820	564	1	0	0	0
Malheur NF	0	0	0	0	0	0	0	0	0	21642	3639	6
Mt. Hood NF	0	0	0	0	0	0	0	0	0	6829	1056	32
North Cascade	51800	10475	101	2827	897	11	409	378	3	0	0	0
Ochoco NF	0	0	0	0	0	0	0	0	0	8712	4846	0
Rogue-Siskiyou NF	0	0	0	0	0	0	0	0	0	28692	6755	129
Siuslaw NF	0	0	0	0	0	0	0	0	0	1077	2213	9
South Cascade	57269	10660	228	0	0	0	6781	920	4	0	0	0
Southwest	55194	8472	139	3996	1457	6	14474	3429	61	0	0	0
Tillamook	13835	1811	29	1299	631	9	0	0	0	0	0	0
Umatilla NF	0	0	0	0	0	0	0	0	0	40419	3890	32
Umpqua NF	0	0	0	0	0	0	0	0	0	9584	1683	64
Wallowa-Whitman NF	0	0	0	0	0	0	0	0	0	72669	4743	129
West Oregon	56462	6453	123	534	200	2	432	277	1	0	0	0
Western Lane	30664	3919	57	2588	182	3	1884	1367	7	0	0	0
Willamette NF	0	0	0	0	0	0	0	0	0	8488	1895	27
Winema NF	713	66	0	0	0	0	0	0	0	94235	7622	9
Total	558864	70731	806	17249	4504	48	58873	12630	114	368854	60714	536