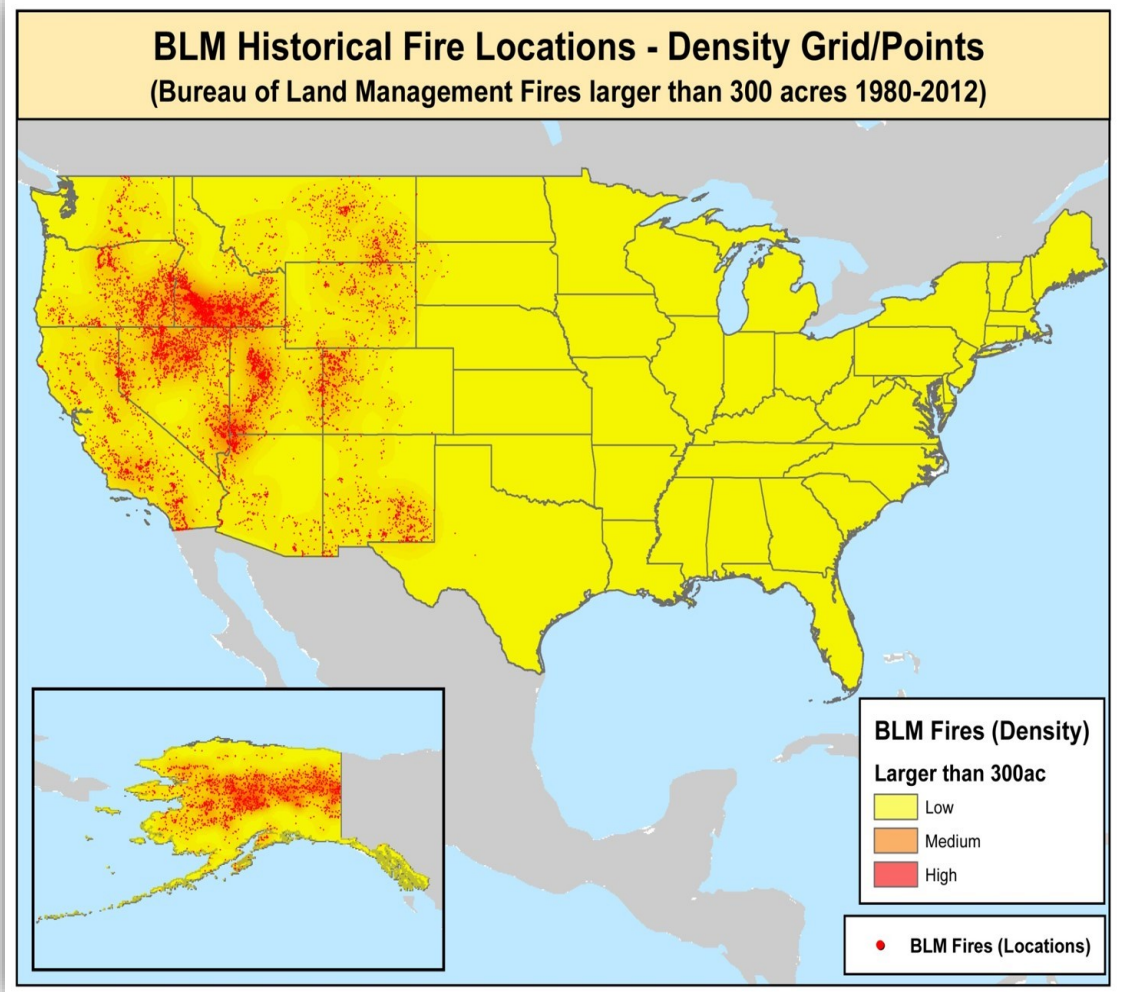




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Boise District I-84 Corridor Fire History and Fuel Break Effectiveness Report

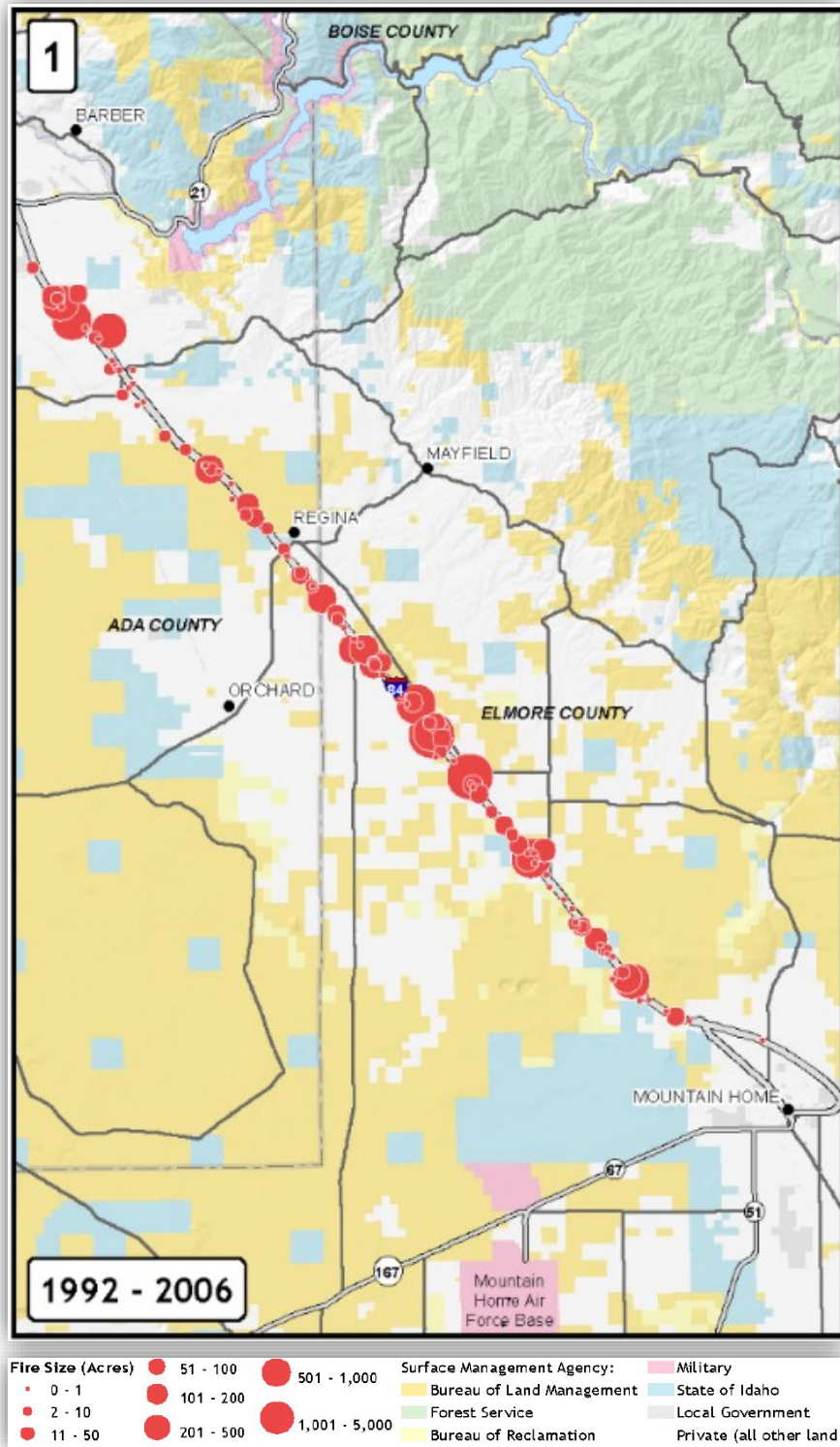
9/3/2020



During the late 1900s and early 2000s, the Boise District Bureau of Land Management (BLM) witnessed a steady increase in wildfires along the Interstate 84 (I-84) corridor connecting Boise and Mountain Home, Idaho. Fires along this portion were often large and difficult to suppress, eventually becoming one of the largest wildfire hotspots in the country. These fires posed significant and repeated threats to the public, firefighters and rangeland resource values.

Boise District BLM responded by working with cooperators to develop an overarching fuels management strategy along the I-84 corridor. This strategy employed a combination of mowing, fuel break construction, improvements to the adjacent roadway aprons, and establishment of perennial grasses to reduce invasive annuals. Implementation required years of adaptive management and hard work, but the effort is producing results: average fire size for the last seven years has been reduced 95% even while traffic flow increased over 30% (see Appendix A).

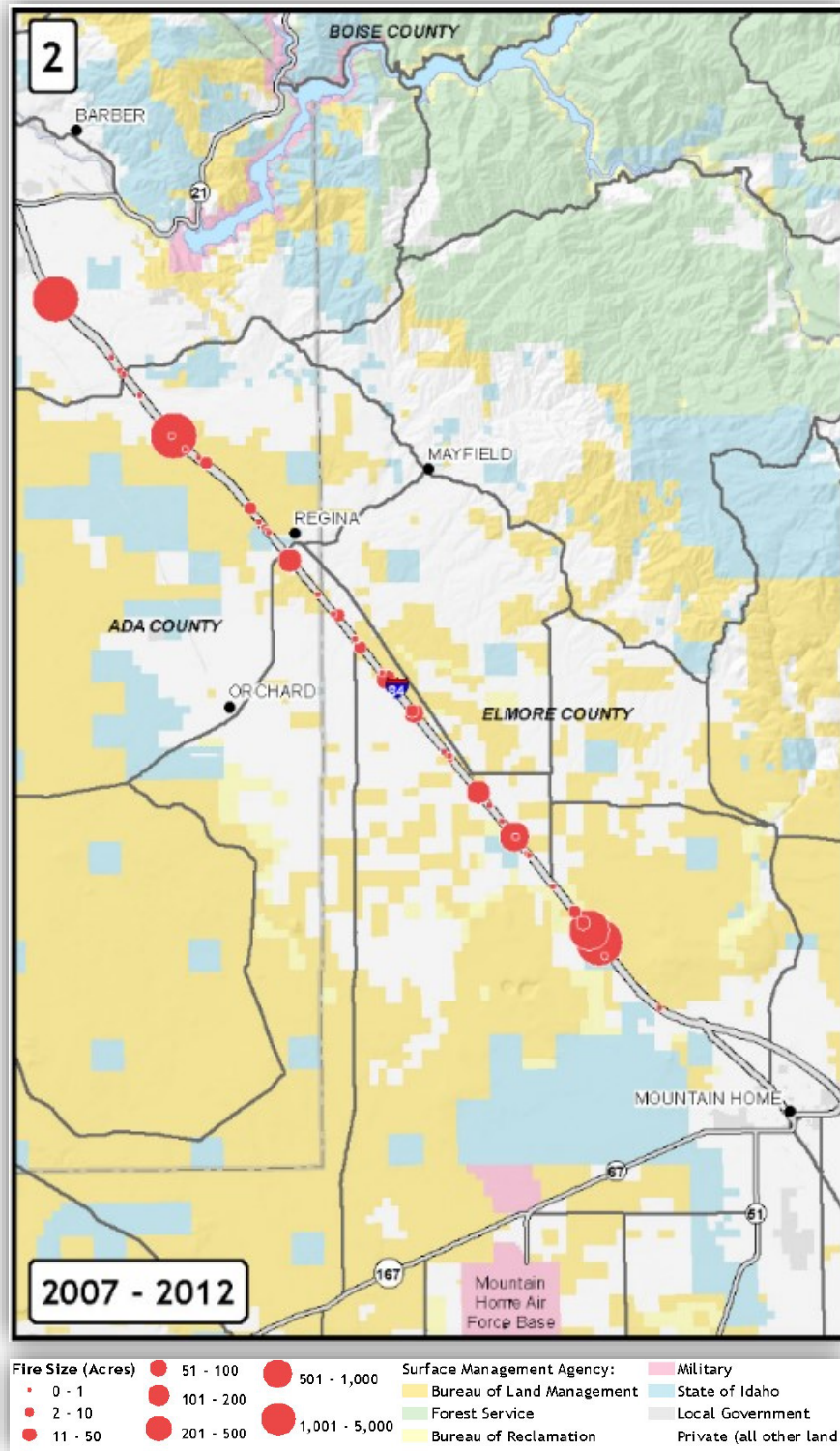
Human Caused Fires - Ignitions Along Interstate 84 Between Boise & Mountain Home



Box 1: 1992 to 2006

Time period prior to entering into agreement with Idaho Transportation Department (ITD). Agreement provided additional funding for ITD to increase maintenance and fuels reduction adjacent to the interstate.

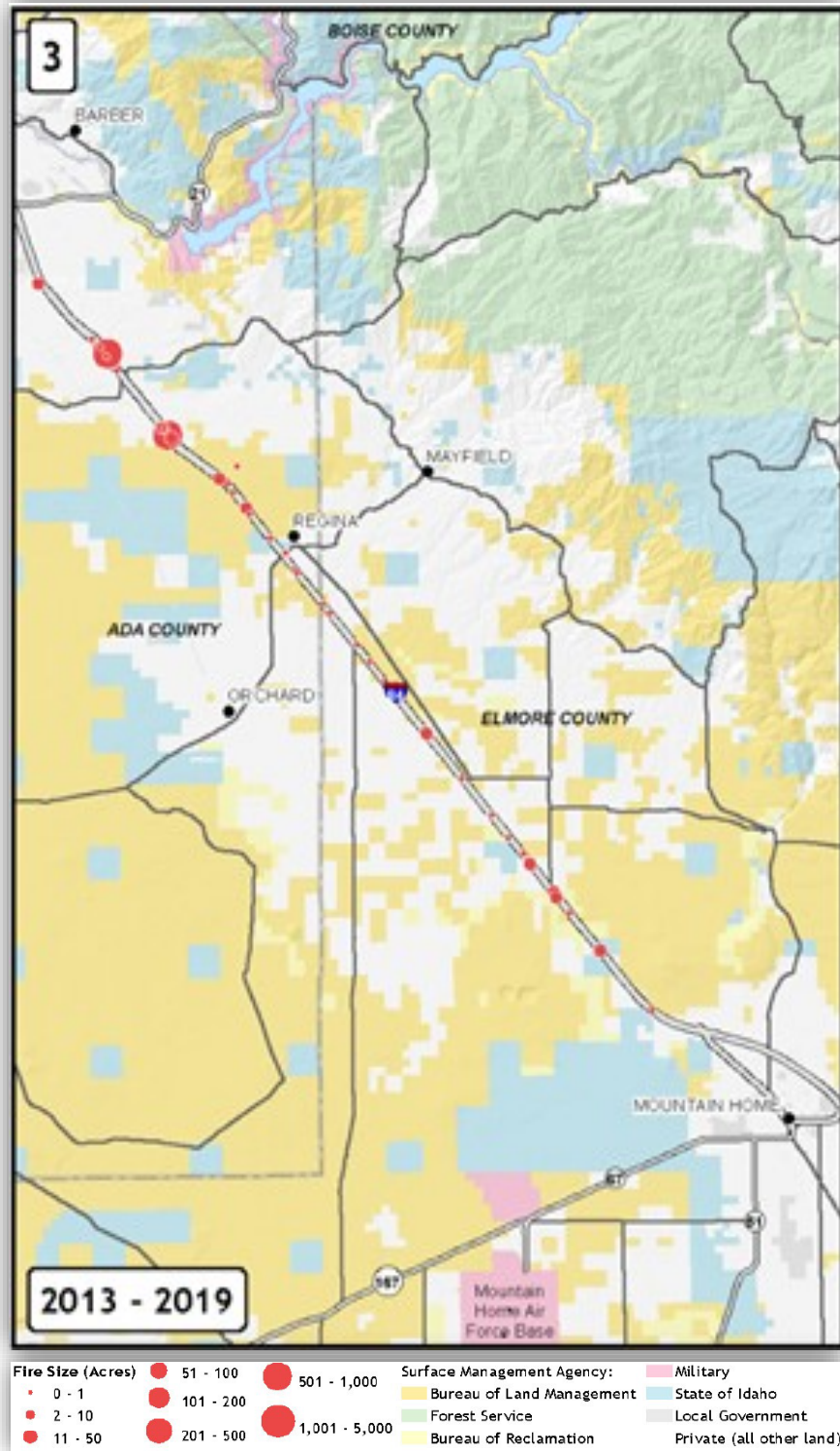
Human Caused Fires - Ignitions Along Interstate 84 Between Boise & Mountain Home



Box 2 : 2007 to 2012

Time period illustrating the first efforts to establish a fuel break along I-84 corridor. Perennial bunch grasses such as crested wheat was planted in the right of way adjacent to the interstate, where ITD also began periodic mowing. This began to reduce the number of ignitions and fire size.

Human Caused Fires - Ignitions Along Interstate 84 Between Boise & Mountain Home



Box 3: 2013 to 2019

Time period representing full implementation of fuel break strategy in cooperation with ITD. Starting in 2013 the treatment strategy shifted from establishment of perennial vegetation along the interstate to vegetation reduction. Treatments included mowing brush and grass in the interstate right of way and re-establishment of the gravel apron along edge of the pavement surface to a minimum of 12 feet.

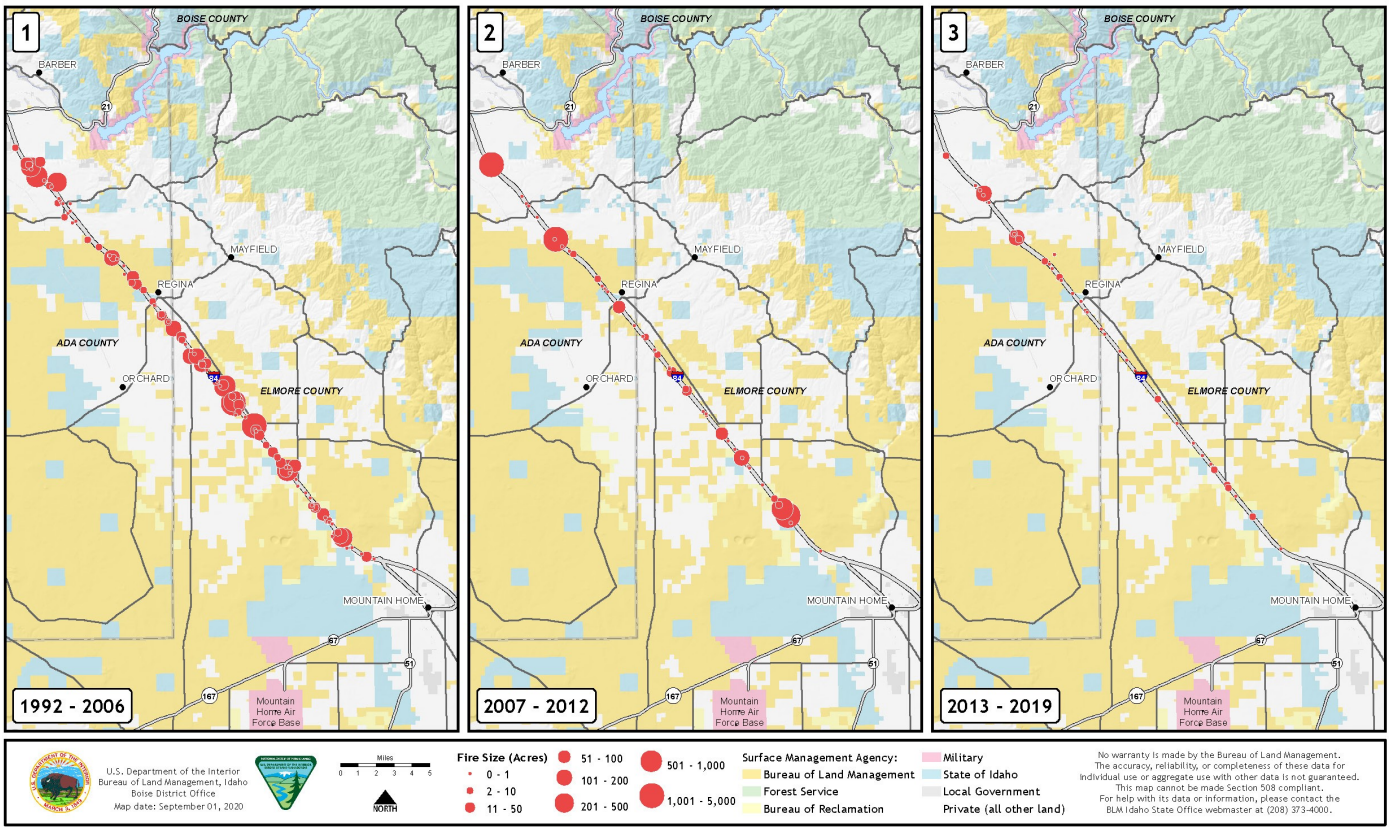


Example of a typical fire started on the roadside in an untreated area (MM 66 Fire in 2012).



Area along Interstate 84 (MM 95) with enlarged gravel apron to decrease roadside fire potential. Gravel apron improvements have significantly contributed to reducing the number of fire starts.

Human Caused Fires - Ignitions Along Interstate 84 Between Boise & Mountain Home From 1992 to 2019



Conclusion

Observed fire history patterns along I-84 from 1992 to 2019 suggest fuel treatments have significant potential to reduce the frequency and size of wildfires particularly along travel corridors. Recent fire ignitions along I-84 have remained largely confined to the roadside in treated areas or grown in size slowly enough to allow for an effective fire suppression response.

As the Boise District fuels program refines fuel break construction techniques, lessons learned will be applied to similar projects. Several areas across the District with significant values at risk to loss or damage from wildfires are adjacent to or compartmentalized by existing road systems. Existing roads present opportunities to establish effective fuel breaks to protect these resources with minimal additional disturbance to the larger landscape.

Appendix A

Idaho Transportation Department Daily Average Traffic History for the Blacks Creek Exit 1996-2020

#087 - Blacks Creek - ATR		Average Daily Traffic		Published Reports									
Automatic Counter Volumes													
Report Types													
Year	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	24-Hour Annual Avg.
1996		14881	16286	17081	18873	19854		21123		17652	17824	15858	
1997	14690	15248	17858		19788	20769	21190	21863	19418	18771	17704	16409	
1998	14663	16365	18312	19428		22292	21679	22475	20437	19703	18172	16604	
1999	15894	16241	19319	19404	19993	22917	22938	23706	21318	20221	18521	17047	19793
2000	15491	17694	19812	19956	21114	22876	23610	25022	21291	20548	19047	16734	20266
2001	15796	17533	20202	20134	20781	23011	23272	23848	21392	20495	19373	16706	20212
2002	15959	18571	20225	20226	21971	23628	23646	24251	20416	20784	20230	17725	20636
2003	16858	17871	19635	19612	21200	23479	23674	24302	21073	20917	19124	17666	20451
2004	15803	17484	20771	20571	21450			22345	20978	20345	19222	18425	
2005	16199	18320	20574	20420	20909	23135	23698	23232	21151	20368	19361	17700	20422
2006	16721												
2007						24674	25684	22601	22230	21266	18268		
2008	16152	17134	21070	19766	20931	21731	21834	22537	19965	19648	18788	16084	
2009	15580	17460	19490	19996	21317	22240	23170	22852	21051	20097	19194	16880	19944
2010	15936	17662	19865	20200	21055	22590	23627	23602	21653	20765	18360	16928	20187
2011	16206	17475	19369	19412	20689	22298	23031	22838	21251	20340	18472	18094	19956
2012	15977	17776	19495	19825	21156	22917	23610	24263	22004	21555	20265	17599	20537
2013		18383	21075	20769	22418	24427	24413					18194	
2014	17502	18292	21644	21832	23126	24777	25192	25435	23153	22737	20158	19692	21962
2015	18540	20646	23180	22592		26091	26839	26261	24775	23820	21956	19800	
2016	18720	21096	24039	24261	25846	27877		28191	26253	25466	24229	19880	
2017	16794	20656	25057	25584	26982	29007	29408	29097	26993	26748	24869	22101	25275
2018	20832	22174	26080	26373	27198	36671	30572	30072	27951	27225	25260		26903
2019	22066		27788	27187	28325	30532	31112	30750	28731	28162	25450	23652	27258
2020	20833	22989	21585	16040	23714	27437	28886						

*The I-84 Blacks Creek Exit is located within the treatment area between Mountain Home and Boise, Idaho.

Boise District BLM Fire Statistics (1992—2016) for the I-84 Corridor between Mountain Home and Boise, Idaho

	Avg Acres / Year	Avg Ignitions / Year	Avg Fire Size
1992-2006 Average (No BLM/ITD projects)	874.07	8.87	91.75
2007 - 2012 Average (seeding and chemical treatments only)	1026.23	8.50	98.08
2013-2019 Average (bare ground and mowing treatments)	42.29	6.43	4.85

For More Information Contact:

Russ Babiak –Boise District BLM Fire Management Officer

rbabiak@blm.gov (208) 384-3401

Lance Okeson-Boise District BLM Fuels Supervisory Fire Management Specialist

lokeson@blm.gov (208) 384-3486