

RANGELAND CONSERVATION ACTIONS IN OREGON

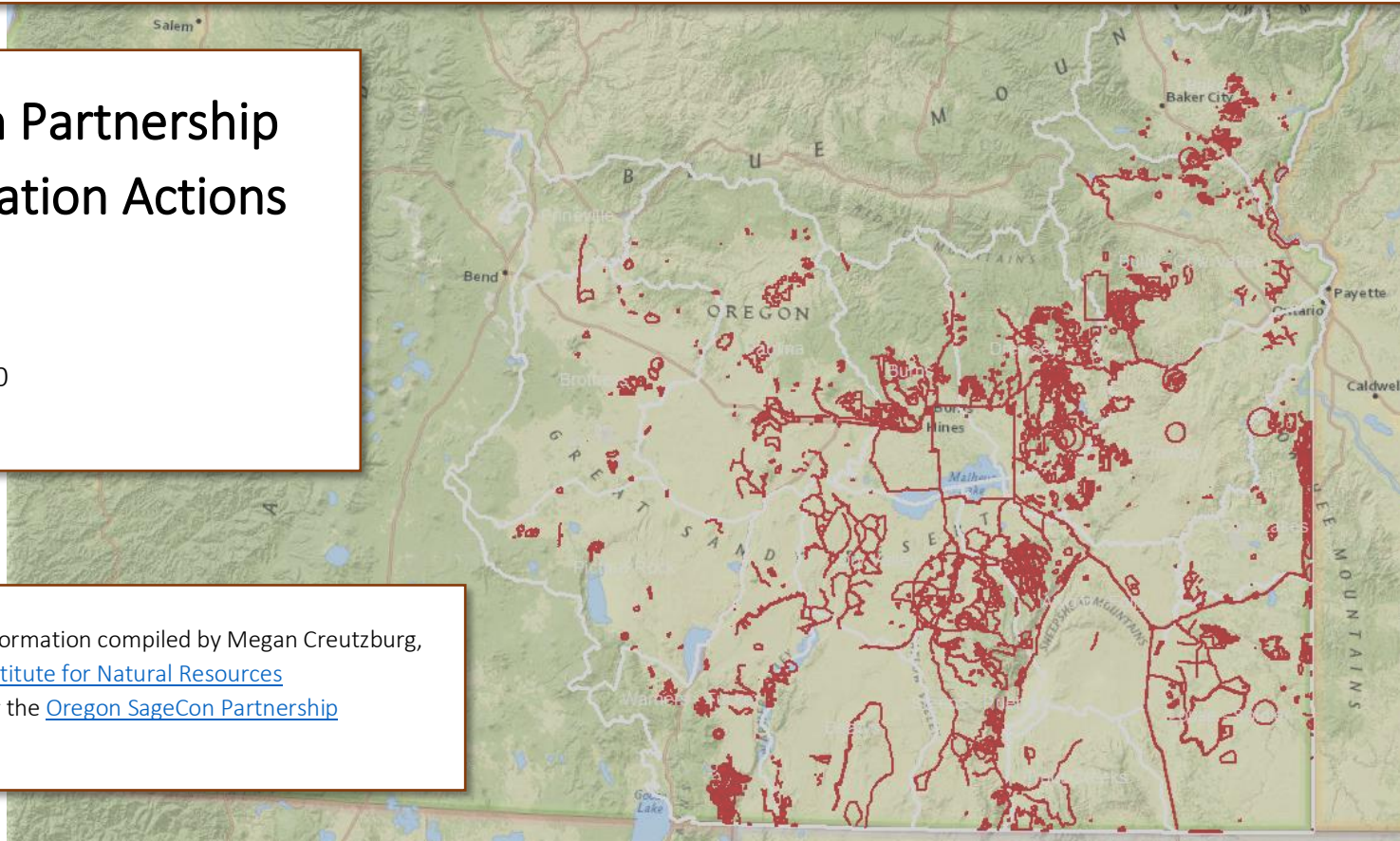


SageCon Partnership Conservation Actions Report

December 2020



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CONSERVATION ACTIONS IN OREGON

Sagebrush rangelands in Oregon cover about one-third of the state and provide habitat for many species, livelihoods for ranchers and rural communities, and recreational opportunities for the public. Over the past several decades, rangeland condition has declined due primarily to invasive annual grasses, wildfire, and juniper expansion; for more information about the distribution of these threats in Oregon, see the [SageCon Rangeland Condition Report](#). The degradation of sagebrush rangeland condition has in turn led to declines in populations of the [Greater sage-grouse](#), a sagebrush-obligate bird, which was considered for listing under the [Endangered Species Act](#) (ESA) in 2010 and 2015.

The [Oregon Sage-Grouse Action Plan](#) (hereafter, Plan) lays out a vision for collaborative conservation of sage-grouse and sagebrush rangelands in the state, and was instrumental in averting an ESA listing of sage-grouse in 2015. The Plan includes significant investment in conservation actions to

address these threats – and since 2015, partners in Oregon have spent more than \$78 million to complete on-the-ground conservation actions. These investments in habitat improvement will require ongoing management and long time-frames to bolster sage-grouse populations, but monitoring the distribution of these actions relative to the threats present across the state is critical to measuring success and determining how to continually improve implementation of the Plan.

PRIMARY CONSERVATION ACTIONS INDICATORS 2015-2018

1.1 million acres treated to address invasive plants

251,000 acres treated to address juniper encroachment

207,000 acres treated to address other threats

As part of the [Oregon Sage-Grouse Action Plan](#) and the [SageCon Dashboard](#), this report summarizes information on conservation actions taken across public and private rangelands in southeastern Oregon. It compiles information from the [Conservation Efforts Database](#) (CED), an effort led by the US Fish & Wildlife Service (USFWS) to document conservation actions in the sagebrush biome across 11 western states. The CED was used in the 2015 ESA listing determination for sage-grouse, and was subsequently redesigned to include a more complete list of actions, streamline data entry and interpretation, and obscure personally-identifiable information and specific location information for actions completed on private lands. This report includes the primary conservation actions to address invasive annual grasses and noxious weeds, fire risk and fuels, conifer (juniper) encroachment, and riparian or mesic habitat improvement taken between 2010 and 2018 in Oregon.



CONSERVATION ACTIONS REPORTING

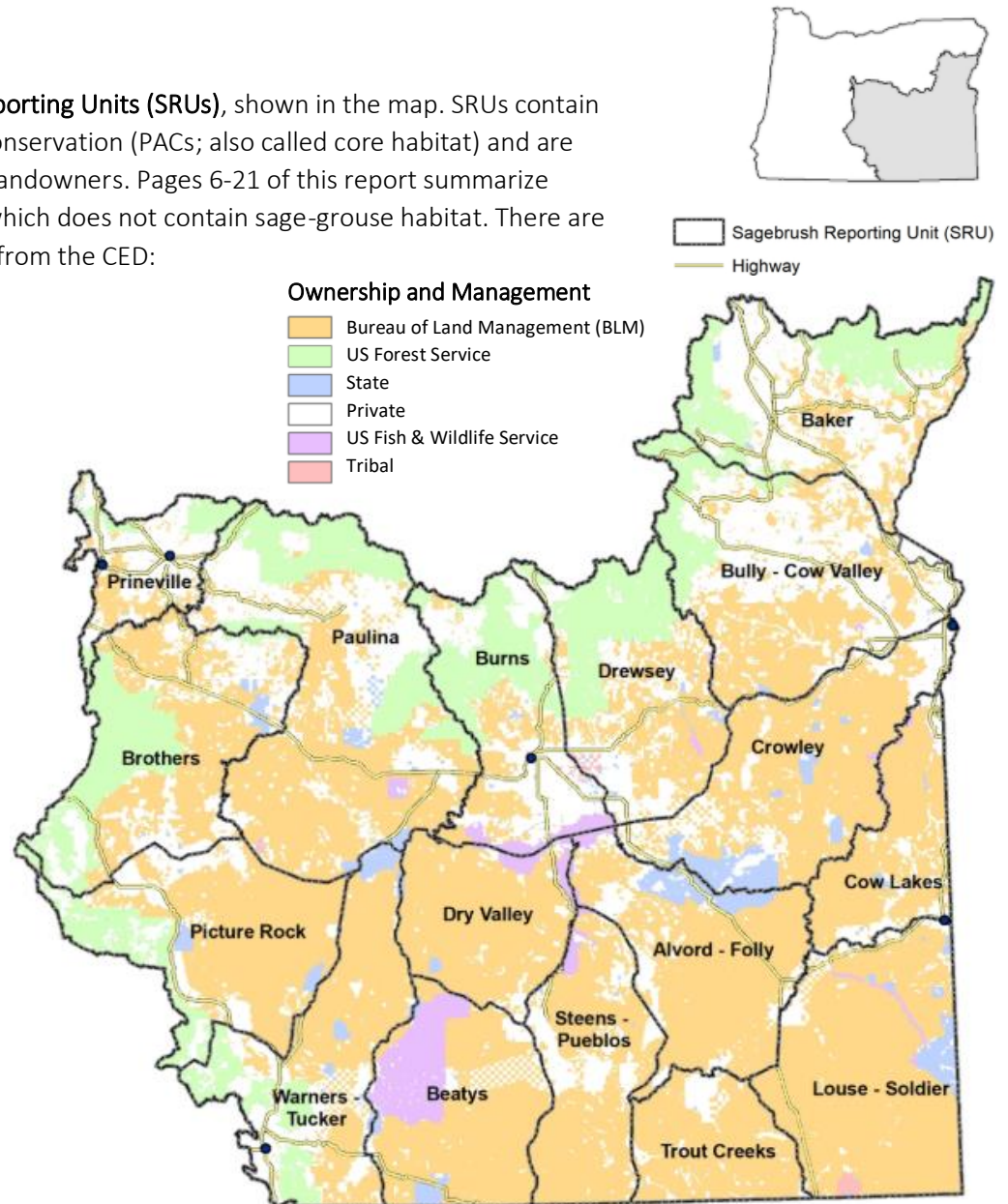
Conservation actions are summarized across 17 **Sagebrush Reporting Units (SRUs)**, shown in the map. SRUs contain large areas within and around sage-grouse priority areas for conservation (PACs; also called core habitat) and are large enough to obscure information about individual private landowners. Pages 6-21 of this report summarize actions for each SRU in Oregon, excluding the Prineville SRU, which does not contain sage-grouse habitat. There are several important guidelines to follow when interpreting data from the CED:

❖ Actions are summarized by threat, and **summing actions across all activity types can result in an inaccurate total**. For instance, a project may include conifer removal, removal of slash (fuels management), herbicide application (annual grass treatment) and seeding (vegetation management). These actions are each reported separately because they address different threats, even though there is significant overlap in the area treated for each threat. In this example, summing all reported acres across threats has the potential to inflate the treatment footprint up to fourfold.

❖ Similarly, certain management actions are repeated across multiple years, particularly activities to control invasive species and maintain fuel breaks. Therefore, **totals summed across years should be interpreted with caution**.

❖ The CED records actions implemented, which **does not necessarily reflect habitat restored**. Ideally, each conservation action reduces one or more threats to rangeland health, but some treatments have high failure rates. Therefore, habitat value or change cannot be measured based on implemented actions alone.

❖ The CED data does not necessarily reflect the official record of conservation actions for each agency and **contains both known and unknown errors and omissions**. Known issues are discussed in subsequent pages.

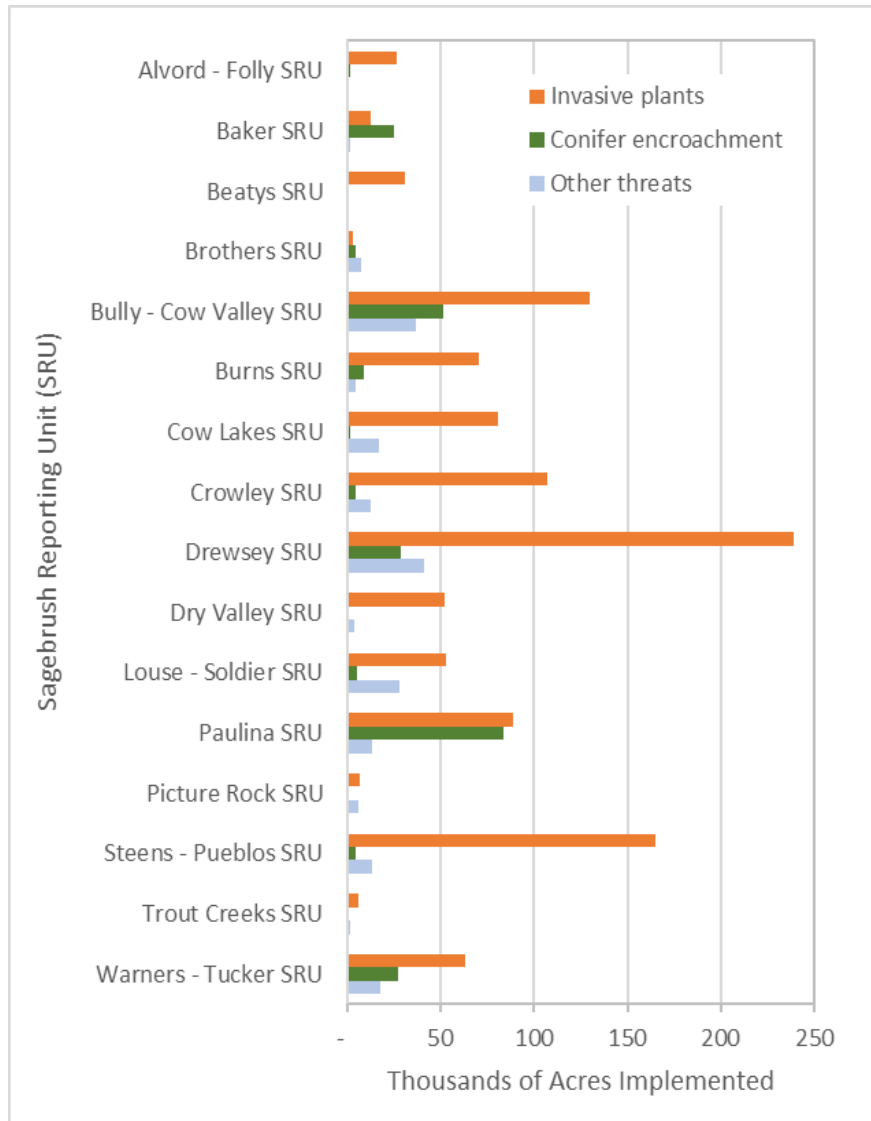


CONSERVATION ACTIONS TYPES IN OREGON

The types of conservation actions included in this report are listed below. Other actions reported in Oregon include area closures, fence marking, fence removal, improved grazing practices, structure removal, powerline burial, wild equid gather, and wild equid population control. These actions are not included here because they are either not summarized by SRU, contain very generalized spatial data, or are rare in Oregon.

- ❖ **Annual grass treatments:** Treatment of invasive annual grasses (primarily cheatgrass, medusahead, and Ventenata) through chemical, biological, or other means. Note, some projects address both annual grass and noxious weed species, and there is likely some overlap between annual grass and noxious weed treatment categories.
- ❖ **Noxious weed treatments:** Treatment of noxious weed species other than invasive annual grasses (e.g., white top, spotted knapweed, scotch thistle, leafy spurge, and others) through chemical, biological, or mechanical treatment. Note, some annual grasses are also considered noxious weeds, so some projects targeting medusahead or Ventenata may be included here. In some cases, large noxious weed treatments were reported as the area surveyed for weeds (often post-fire) with an unspecified acreage of spot treatments within that perimeter. Use caution interpreting very large acreages reported for noxious weeds.
- ❖ **Vegetation management & habitat enhancement:** Projects to improve existing rangeland habitat such as seeding, planting, thinning, and others. The most common types of treatment in this category are seeding and planting, but this category includes all other treatments that do not fit elsewhere, so may contain some miscellaneous actions as well. Seeding and planting often occur in the same areas as herbicide application, but herbicide treatments are captured separately under annual grass or noxious weed treatments.
- ❖ **Conifer removal:** Removal of conifer trees (primarily western juniper) encroaching into areas that historically supported sagebrush steppe vegetation to restore rangeland condition and improve sage-grouse habitat. Conifer removal is often accompanied by activities to address other threats (e.g., spraying of invasive species, removal of slash for fuels management), which are reported in other categories.
- ❖ **Fuels management:** Projects that are designed to change vegetation composition and/or structure to modify fire behavior, including removal of dense vegetation and removal of slash (downed trees) following conifer removal. Conifer removal itself is not considered fuels management, even when removing woody fuels is an objective, and is instead recorded under the conifer removal category.
- ❖ **Fuel breaks:** Removal of flammable vegetation to prevent fire spread, usually in a linear pattern alongside roads. Fuel breaks prior to 2015 were reported in miles, but acreage was calculated based on the spatial data provided (on public lands) for all fuel breaks reported from 2010-2018.
- ❖ **Riparian, wet meadow or spring restoration:** Actions to restore mesic areas, including riparian areas, meadows and springs. These actions include projects designed to improve hydrologic function, restore playas, restore riparian vegetation, or enhance springs. This category does not include actions that solely focus on the stream channel or water quality, which are out of the scope of the CED.

SUMMARY OF CONSERVATION ACTIONS BY SAGEBRUSH REPORTING UNIT (SRU)



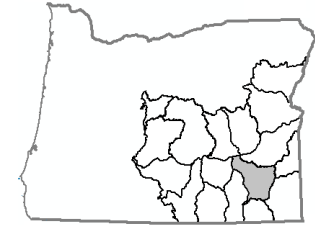
This chart shows the total acreage of conservation actions implemented in each SRU from 2015-2018 for three treatment groups: invasive species, conifer encroachment, and other threats. Treatments for this summary are grouped as follows:

- **Acres treated for invasive plants** includes annual grass and noxious weed treatments.
- **Acres treated for conifer encroachment** includes conifer (juniper) removal. Note that this category does not capture removal of slash following conifer removal (considered fuels management, captured under other threats).
- **Acres treated for other threats** combines fuels management, fuel breaks, vegetation management & habitat enhancement, and riparian restoration.

On the following pages, conservation actions are reported for each SRU across southeastern Oregon, except for the Prineville SRU, which does not contain sage-grouse habitat. For each SRU, **actions implemented from 2015-2018** are summarized in a table by land ownership (public and private). Records entered between 2015 and 2018 are generally the most reliable and complete, and actions completed after 2018 have not yet been compiled across all partners. Conservation actions are also shown as **yearly summaries of actions from 2010-2018**. The reporting from 2010-2014 is known to contain some errors and omissions, particularly for post-fire actions. Where applicable, notes are provided to identify any known caveats in each SRU, such as known omissions or other noteworthy information (e.g., in some cases, very large individual projects comprise most of the total acres reported for a year). See the [SageCon Rangeland Condition Report](#) for complementary information about the distribution of habitat threats across each SRU.

ALVORD – FOLLY FARM SAGEBRUSH REPORTING UNIT

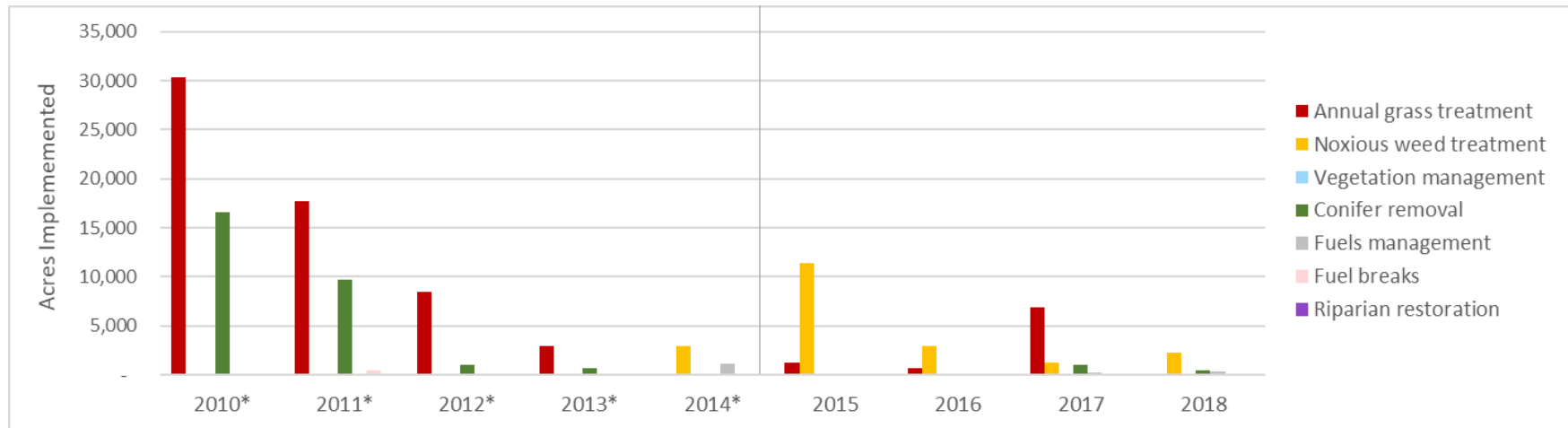
The Alvord – Folly Farm SRU contains 1.2 million acres of rangelands east of Steens mountain, including the Folly Farm – Saddle Butte sage-grouse PAC. Land ownership is 77% federally managed, 8% state managed, and 15% private. Conservation actions in this SRU consisted primarily of annual grass and noxious weed treatments, with substantial areas of conifer removal taking place mostly prior to 2012.



The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately. Annual grass and weed treatments took place primarily on public land, and more recent conifer removals took place on private lands.

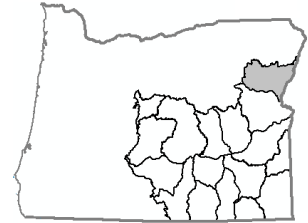
Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	8,978	8,898	80
Noxious weed treatment	17,865	17,865	
Vegetation management	48	48	
Conifer removal	1,647		1,647
Fuels management	572		572
Fuel breaks			
Riparian restoration			

The chart below depicts actions implemented over time from 2010-2018. *Records of actions prior to 2015 may be less complete and/or accurate. The large acreages reported in 2010 and 2011 are from a few very large project units entered in the database. It is likely that the acreage treated within these large units is substantially lower than the reported acreage; therefore, the apparent downward trend in acres treated over time may not reflect actions implemented on the ground.



BAKER SAGEBRUSH REPORTING UNIT

The Baker SRU encompasses nearly 1.6 million acres and 835,000 acres of rangelands, including the Baker PAC. Land ownership is 48% federally managed (much of that area in the forests surrounding the PAC) and 52% private. Conservation actions in this SRU included a mix of annual grass and weed treatments, conifer removal and other activities across both public and private land.

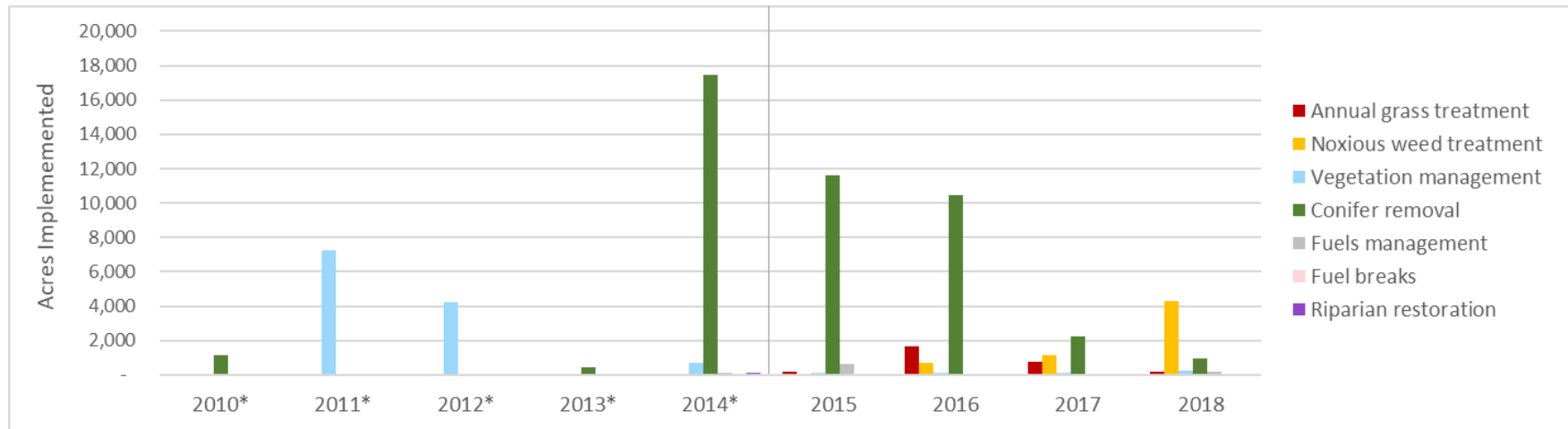


The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately.

Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	2,801	2,074	727
Noxious weed treatment	6,160	5,998	162
Vegetation management	630	125	505
Conifer removal	25,299	18,687	6,612
Fuels management	811	811	
Fuel breaks			
Riparian restoration	11		11

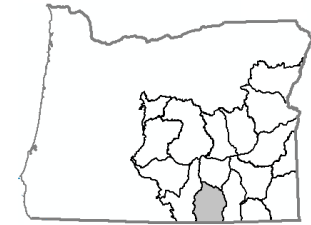
The chart below depicts conservation actions implemented over time from 2010-2018. *Records of actions prior to 2015 may be less complete and/or accurate. In the Baker

SRU, several conifer removal projects started in 2014 appear in the database with high spatial overlap. Despite some cleanup to remove duplicate records, the total still likely overestimates the area treated in 2014.



BEATYS SAGEBRUSH REPORTING UNIT

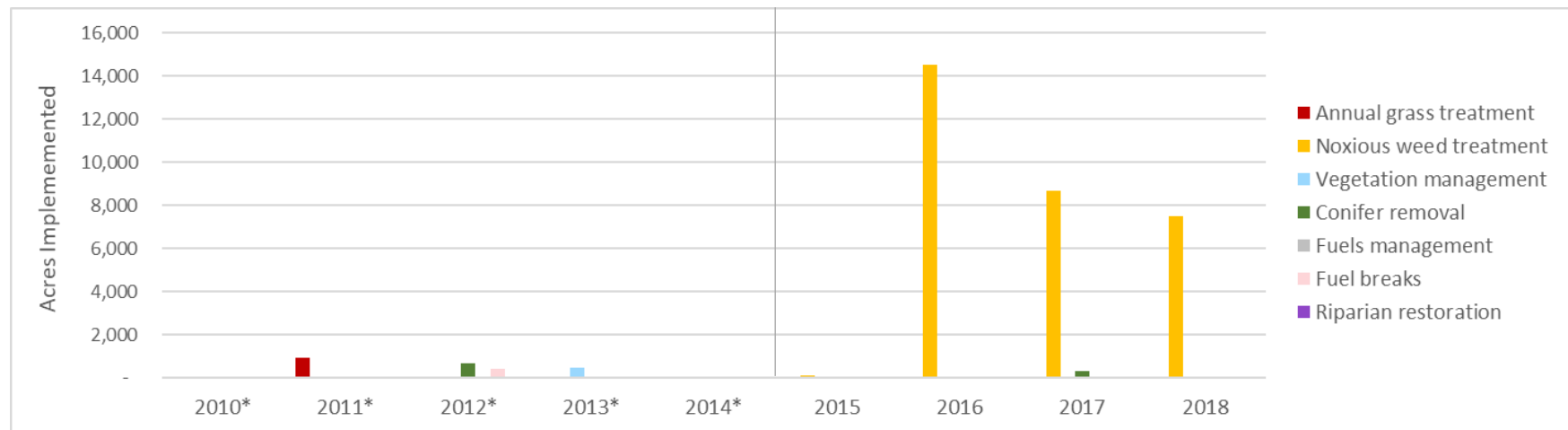
The Beatys SRU includes 1.1 million acres of rangelands across Lake and Harney Counties. Most of the SRU contains sage-grouse habitat, including the Beatys Butte PAC (841,000 acres, the largest sage-grouse PAC in the state), and 319,500 acres of low-density habitat. Land ownership is 86% federally managed (including the Hart Mountain National Antelope Refuge managed by US Fish & Wildlife Service), 3% state managed, and 10% private. Conservation actions in this SRU consisted primarily of noxious weed treatments on public lands.



The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately.

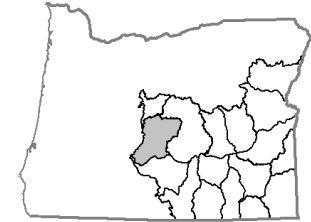
Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment			
Noxious weed treatment	30,848	30,848	
Vegetation management			
Conifer removal	323	323	
Fuels management			
Fuel breaks			
Riparian restoration			

The chart below depicts conservation actions implemented over time from 2010-2018. *Records of actions prior to 2015 may be less complete and/or accurate. Overall, rangeland condition in the Beatys Butte area is generally high compared to the rest of the state, so the need for habitat improvement treatments is relatively low.



BROTHERS SAGEBRUSH REPORTING UNIT

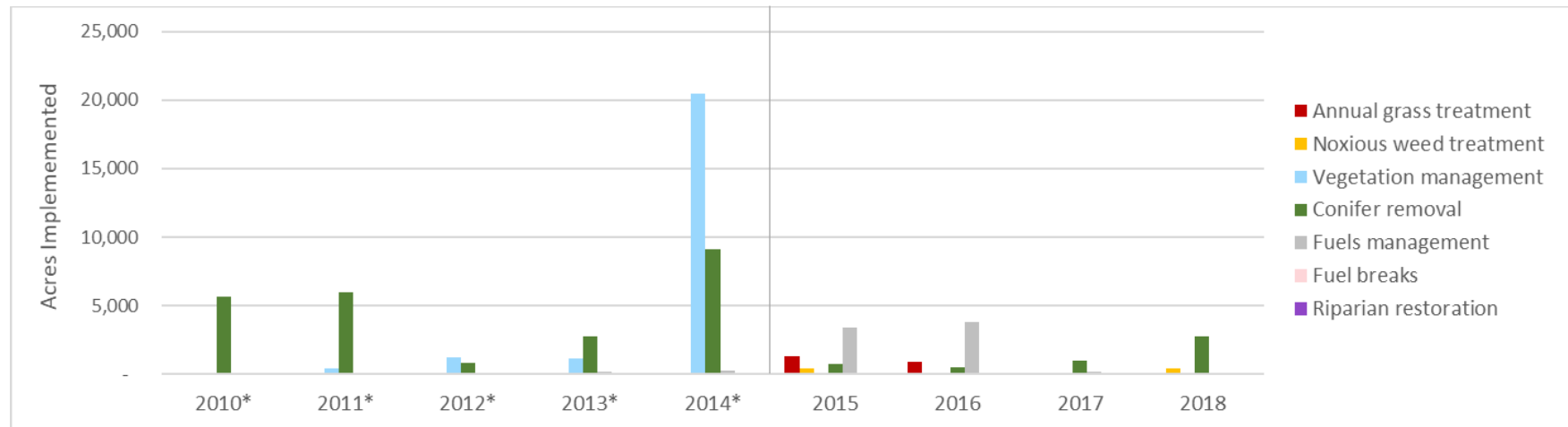
The Brothers SRU covers 1.1 million acres of sagebrush steppe on the western edge of the rangelands in Oregon. It contains the Brothers - North Wagontire PAC, which covers 293,814 acres across the Brothers and Paulina SRUs and 328,600 acres of low-density sage-grouse habitat. Land ownership is 72% federally managed and 26% private. Conservation actions in this SRU consisted primarily of conifer removal with some vegetation management, fuels management and annual grass treatments.



The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately. Conifer removals occurred on public and private land prior to 2015 and mostly on private land in more recent years.

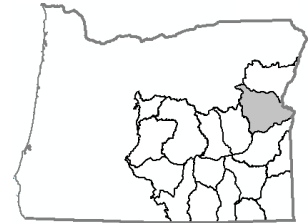
Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	2,118	2,118	
Noxious weed treatment	983	983	
Vegetation management	130	90	40
Conifer removal	4,914	9	4,905
Fuels management	7,381	7,215	166
Fuel breaks			
Riparian restoration			

The chart below depicts conservation actions implemented over time from 2010-2018. *Records of actions prior to 2015 may be less complete and/or accurate. The large area of vegetation management reported in 2014 was shrub thinning treatments to reduce sagebrush cover in areas with high shrub and low herbaceous cover.



BULLY - COW VALLEY SAGEBRUSH REPORTING UNIT

The Bully – Cow Valley SRU contains 1.4 million acres of sagebrush rangelands, including important sage-grouse habitat in the Bully Creek PAC (279,664 acres) and the Cow Valley PAC (368,349 acres). Land ownership is 50% federally managed and 50% private. This SRU has seen a heavy investment in conservation actions on both public and private lands consisting primarily of conifer removal on private lands and a mix of annual grass, weed treatments and conifer removal on public lands. The conifer removals in this SRU are among the largest acreages treated in southeastern Oregon, especially on private lands.

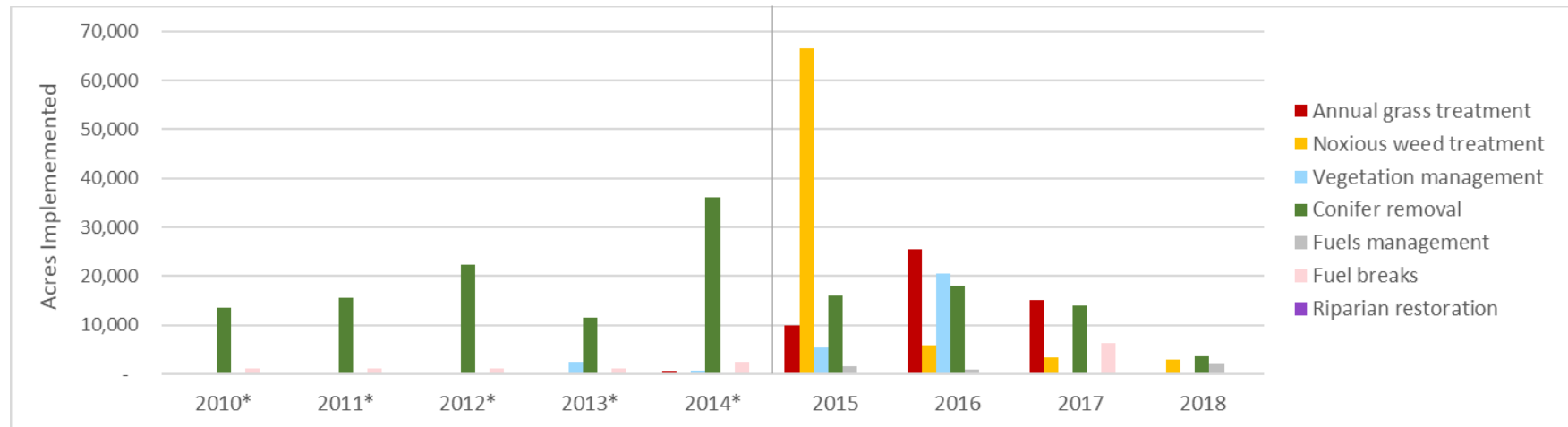


The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately.

Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	50,815	47,181	3,634
Noxious weed treatment	66,198	58,769	7,429
Vegetation management	25,980	25,265	715
Conifer removal	51,718	18,380	33,338
Fuels management	4,484	3,053	1,431
Fuel breaks	6,331	6,331	
Riparian restoration			

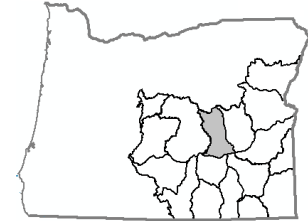
The chart below depicts conservation actions implemented over time from 2010-2018 (note the scale of the y-axis compared to other SRUs).

*Records of actions prior to 2015 may be less complete and/or accurate. The large spike in noxious weed treatments reflects a single project that probably outlines the area surveyed. Annual grass and seeding (vegetation management) treatments increased following the Bendire fire in 2015.



BURNS SAGEBRUSH REPORTING UNIT

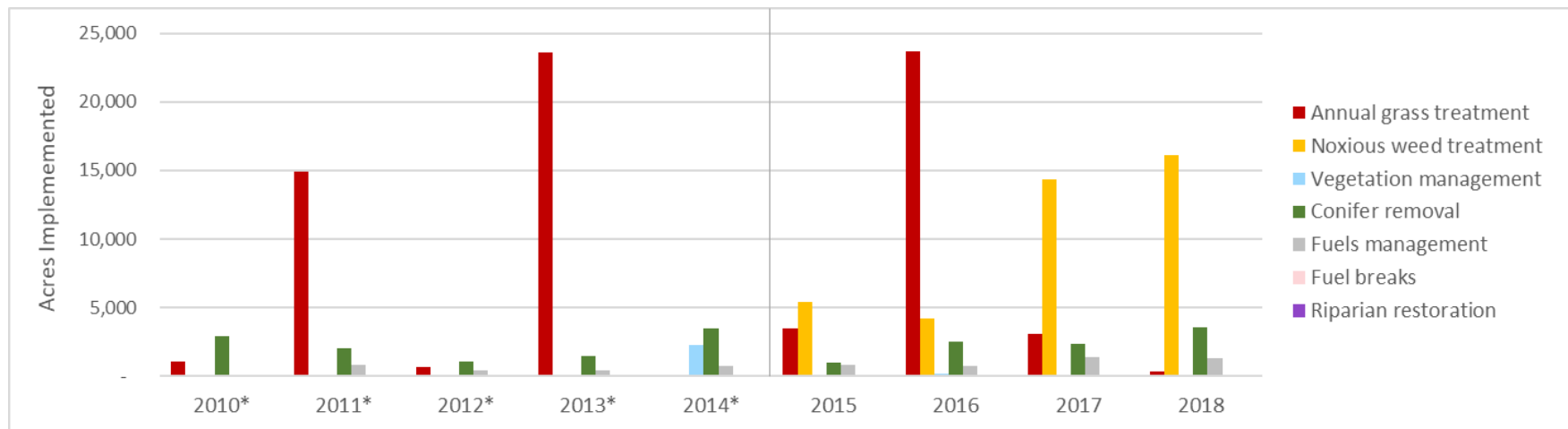
The Burns SRU contains 632,000 acres of sagebrush rangeland. It contains the Burns PAC (36,000 acres, the second smallest PAC in the state) and 111,000 acres of low-density sage-grouse habitat. Land ownership is 57% federally managed (much of the federally managed area is in the forested areas north of the rangelands), 40% private and 1% tribal. Conservation actions in this SRU included annual grass and noxious weed treatments over large areas of public land and conifer removals primarily on private land. The amount of conservation investment in this SRU is relatively high given its proximity to the population center of Burns.



The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately.

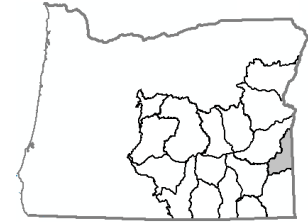
Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	30,551	30,531	20
Noxious weed treatment	40,110	38,573	1,537
Vegetation management	325	305	20
Conifer removal	9,313	1,987	7,326
Fuels management	4,215	377	3,838
Fuel breaks			
Riparian restoration	35		35

The chart below depicts conservation actions implemented over time from 2010-2018. *Records of actions prior to 2015 may be less complete and/or accurate. Spikes in annual grass treatments reflect a small number of records with very large acreages; these projects likely overestimate the number of acres treated on the ground. There are also several areas that were re-treated for noxious weeds in multiple consecutive years.



COW LAKES SAGEBRUSH REPORTING UNIT

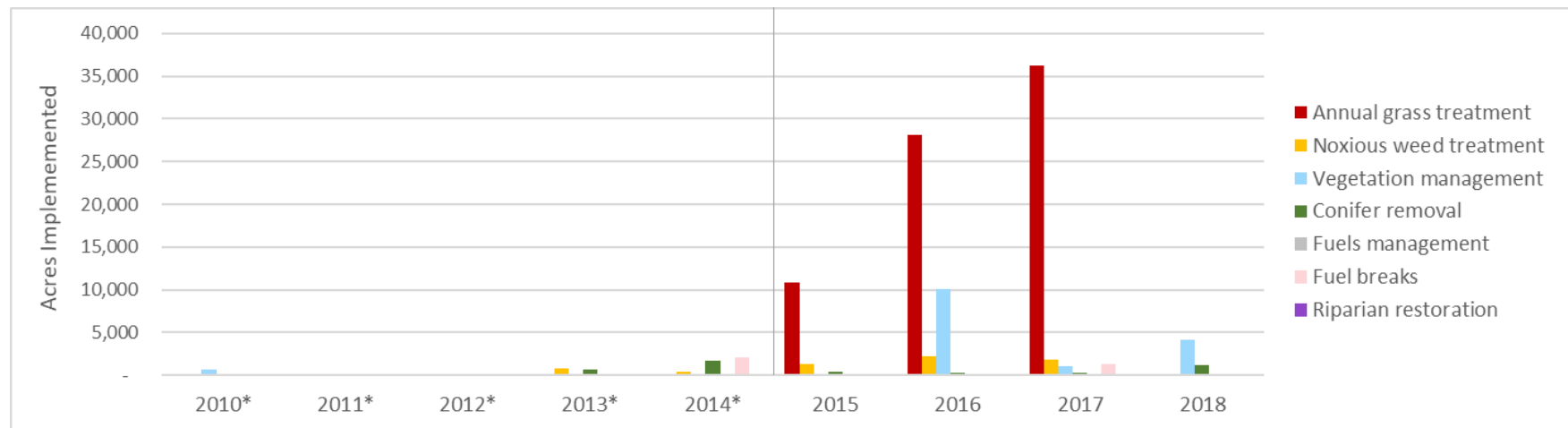
The Cow Lakes SRU covers 738,000 acres of rangelands in the eastern-central part of the state. It contains the Cow Lakes PAC (249,000 acres) and 186,500 acres of low-density sage-grouse habitat. Land ownership is 78% federally managed, 2% state managed, and 20% private. Conservation actions in this SRU consisted primarily of annual grass and vegetation management (seeding) on public lands following wildfires in the area.



The table to the right summarizing actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately.

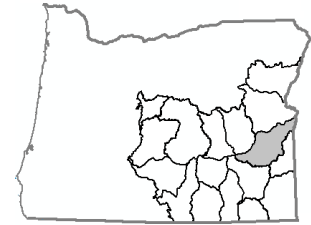
Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	75,191	74,873	318
Noxious weed treatment	5,374	495	4,879
Vegetation management	15,292	15,292	
Conifer removal	2,072		2,072
Fuels management	173	173	
Fuel breaks	1,319	1,319	
Riparian restoration			

The chart below depicts conservation actions implemented over time from 2010-2018. *Records of actions prior to 2015 may be less complete and/or accurate. Annual grass treatments increased following the Soda and Cherry Road fires of 2015 and 2016.



CROWLEY SAGEBRUSH REPORTING UNIT

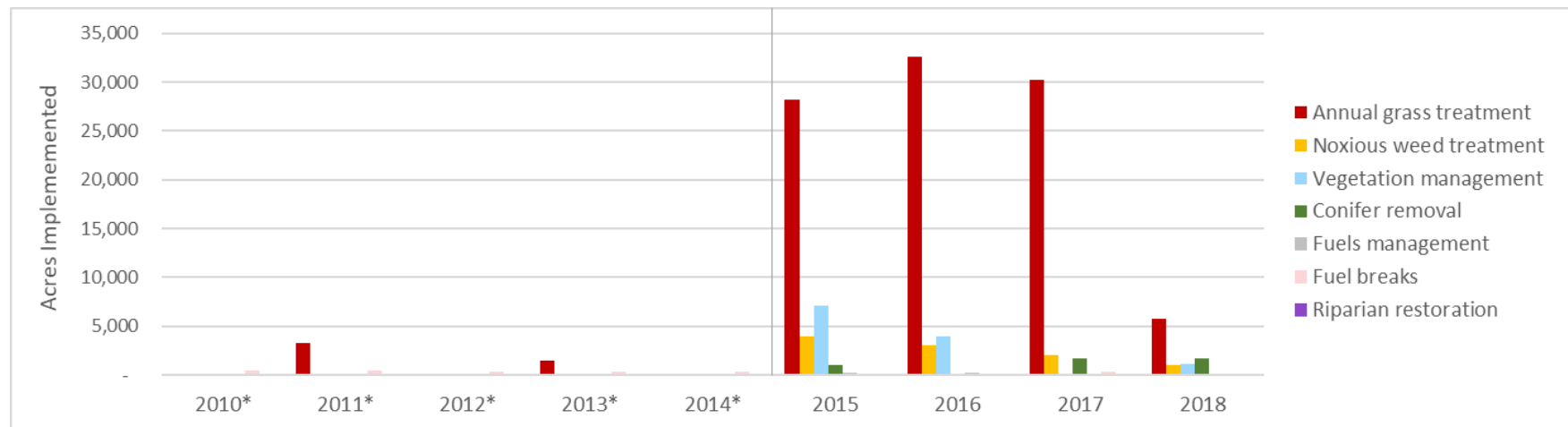
The Crowley SRU encompasses 1.5 million acres of rangelands. It contains the Crowley PAC (490,715 acres) and nearly 480,000 acres of low-density sage-grouse habitat. Land ownership is 66% federally managed, 10% state managed, and 24% private. Conservation actions in this SRU consisted primarily of large annual grass treatments following large wildfires in 2014, with smaller acreages of other treatments occurring mostly between 2015-2018.



The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately. Most actions in the Crowley area were taken on public lands, but some conifer removals on private lands occurred between 2015-2018.

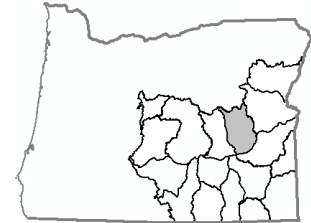
Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	96,939	96,919	20
Noxious weed treatment	10,160	10,130	30
Vegetation management	12,214	7,816	4,398
Conifer removal	4,359		4,359
Fuels management	442	442	
Fuel breaks	373	373	
Riparian restoration			

The chart below depicts conservation actions implemented over time from 2010-2018. *Records of actions prior to 2015 may be less complete and/or accurate. Most of the treatments in this SRU followed the large Buzzard Complex fires in 2014, but some smaller fires occurred in the area between 2013-2016.



DREWSEY SAGEBRUSH REPORTING UNIT

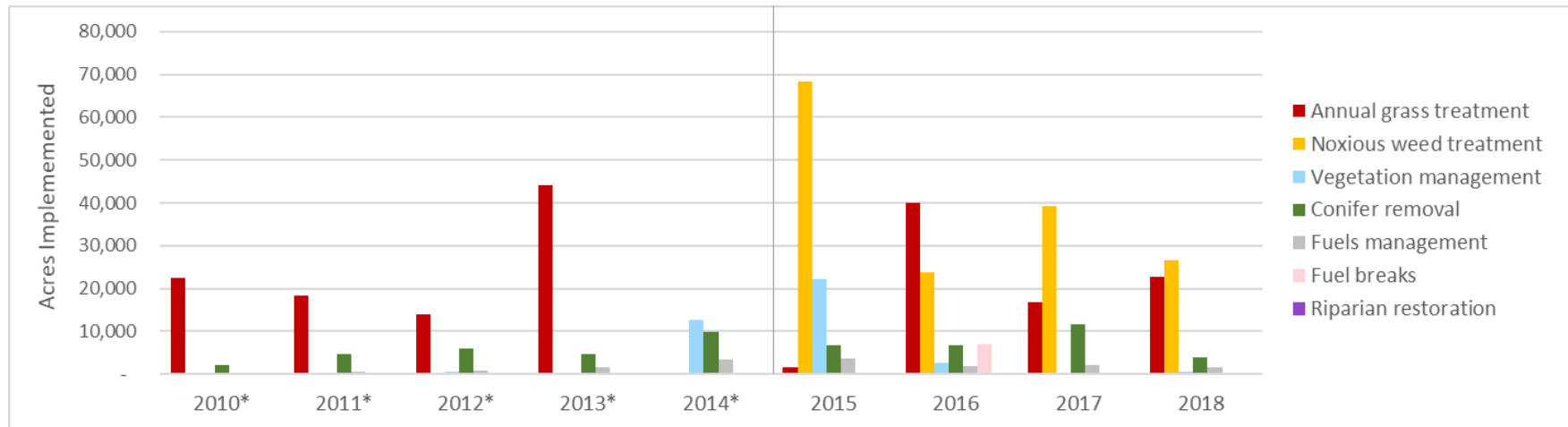
The Drewsey SRU covers 863,000 acres of rangelands, including the Drewsey PAC (368,000 acres) and 210,000 acres of low-density sage-grouse habitat. Land ownership is 67% federally managed, 1% state managed, and 31% private, and 1% tribal lands. Conservation actions in this SRU were widespread, summing the highest totals of all SRUs in the state, and included a wide variety of management practices.



The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately. Conservation actions occurred on both public and private land, with annual and noxious weed treatments primarily on public land and conifer removal on private land. A network of fuel breaks was installed on the western side of the SRU in 2016.

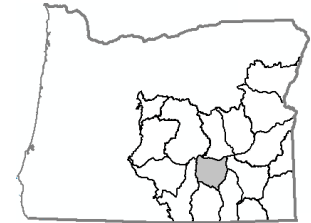
Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	81,087	64,639	16,448
Noxious weed treatment	157,850	157,404	446
Vegetation management	25,357	25,092	265
Conifer removal	29,062	5,363	23,699
Fuels management	9,216	2,052	7,164
Fuel breaks	7,015	7,015	
Riparian restoration			

The chart below depicts conservation actions implemented over time from 2010-2018 (note the scale of the y-axis relative to other SRUs). *Records of actions prior to 2015 may be less complete and/or accurate. A large number of annual grass and noxious weed treatments occurred across this SRU. Notably, there were a few projects that covered very large areas and account for high yearly totals, so treatment acres may be overestimated.



DRY VALLEY SAGEBRUSH REPORTING UNIT

The Dry Valley SRU covers 925,000 acres of rangelands, including the Dry Valley-Jack Mountain PAC (449,000 acres) and 306,000 acres of low-density sage-grouse habitat. Land ownership is 92% federally managed, 1% state managed, and 7% private. Conservation actions in this SRU consisted mostly of annual grass and noxious weed treatments.

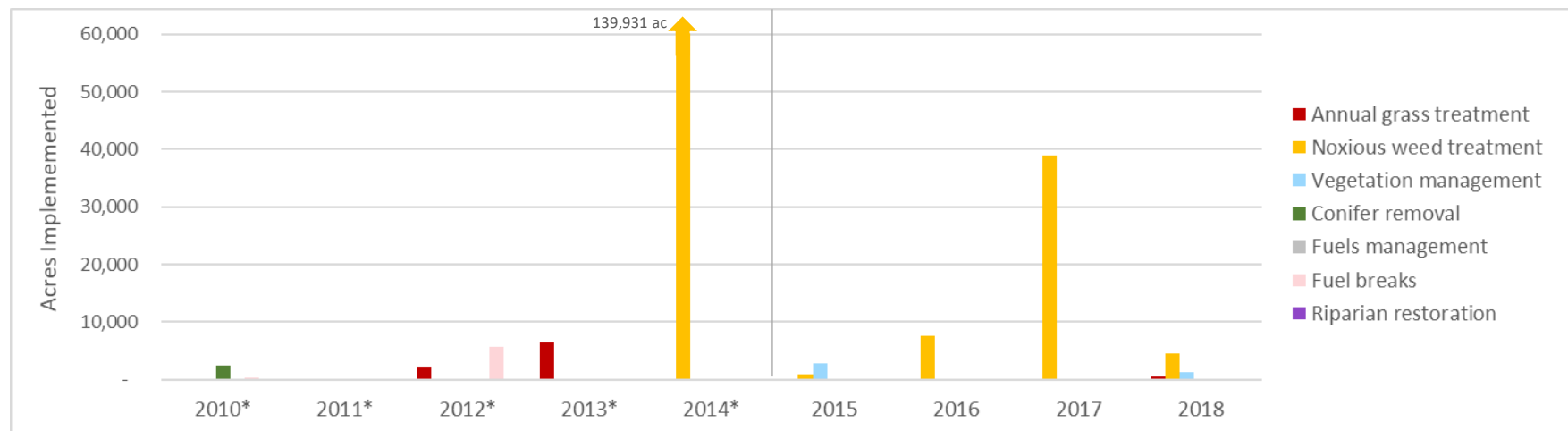


The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately.

Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	602	602	
Noxious weed treatment	51,839	51,839	
Vegetation management	4,246	4,246	
Conifer removal			
Fuels management			
Fuel breaks			
Riparian restoration			

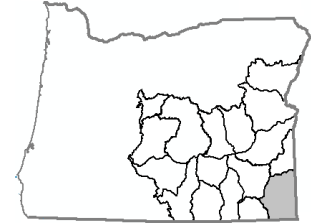
The chart below depicts conservation actions implemented over time from 2010-2018. *Records of actions prior to 2015 may be less complete and/or accurate. Most of the conservation actions relate to the Miller Homestead fire of 2012, but a network of fuel breaks was installed in 2010-2012 throughout the western part of the SRU (not captured in the table since they were implemented prior to 2015).

A very large noxious weed treatment in 2014 likely included the entire area surveyed for weeds within the fire perimeter instead of the treated acreage. Note, the axis has been compressed to more easily view the data across multiple years.



LOUSE – SOLDIER SAGEBRUSH REPORTING UNIT

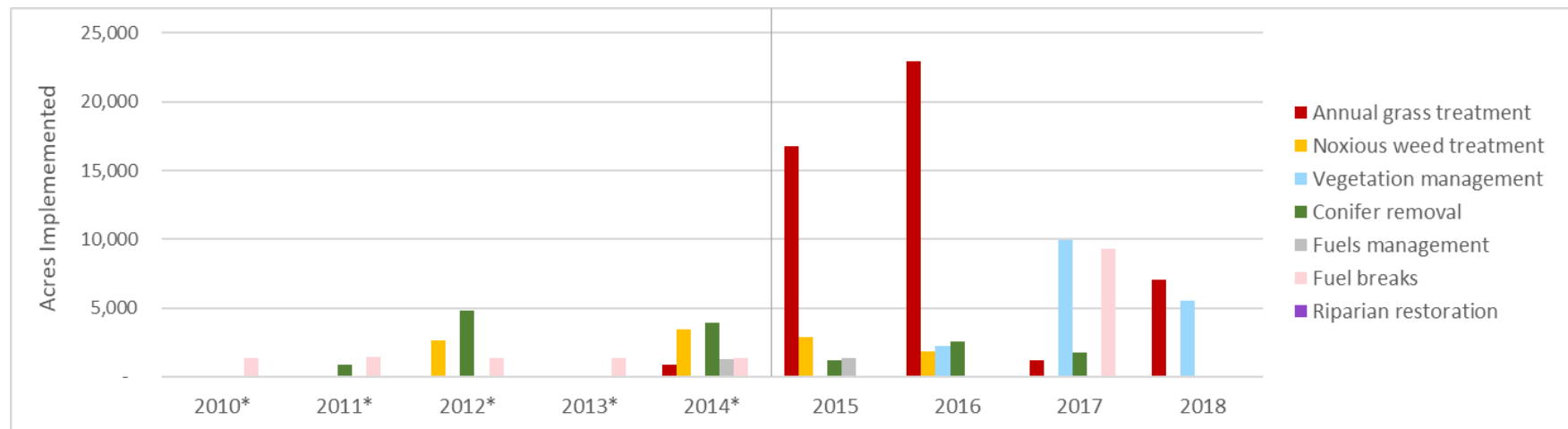
The Louse – Soldier SRU covers 1.7 million acres in the far southeast corner of the state. It contains the Louse Canyon PAC (671,000 acres; second largest PAC in the state) and Soldier Creek PAC (295,000 acres). Much of the area surrounding the PACs provides low-density sage-grouse habitat (442,000 acres). Land ownership is 86% federally managed, 5% state managed, 7% private, and 1% tribal. Conservation actions in this SRU consisted primarily of annual grass, vegetation management (seeding) and fuel breaks on public land, with some conifer removal on private lands.



The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately.

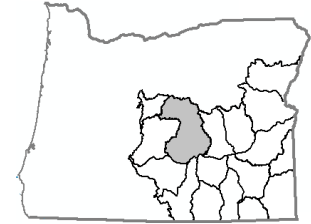
Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	47,970	47,608	362
Noxious weed treatment	4,799	4,799	
Vegetation management	17,695	17,695	
Conifer removal	5,505	1,166	4,339
Fuels management	1,375	1,375	
Fuel breaks	9,269	9,269	
Riparian restoration			

The chart below depicts conservation actions implemented over time from 2010-2018. *Records of actions prior to 2015 may be less complete and/or accurate. For instance, the Long Draw fire burned over one-third of this SRU, but post-fire treatments are not included in the database, which is likely an omission. Many of the noxious weed, annual grass, and fuel breaks are linear treatments along roads, and some are re-treatment of the same area in multiple years.



PAULINA SAGEBRUSH REPORTING UNIT

The Paulina SRU covers 1.9 million acres of rangelands, containing the Paulina-12 mile-Misery Flat PAC (442,000 acres) and 637,700 acres of low-density sage-grouse habitat. Land ownership is 68% federally managed, 2% state managed, and 30% private. The Paulina SRU had high federal and state conservation investment since 2010, primarily addressing conifer encroachment on public and private lands, but also including annual grass, weed treatments, and other actions to address rangeland condition. The highest acreages of conifer removal in southeastern Oregon occurred in this SRU, with sustained effort to address this threat over the period of 2010-2018.

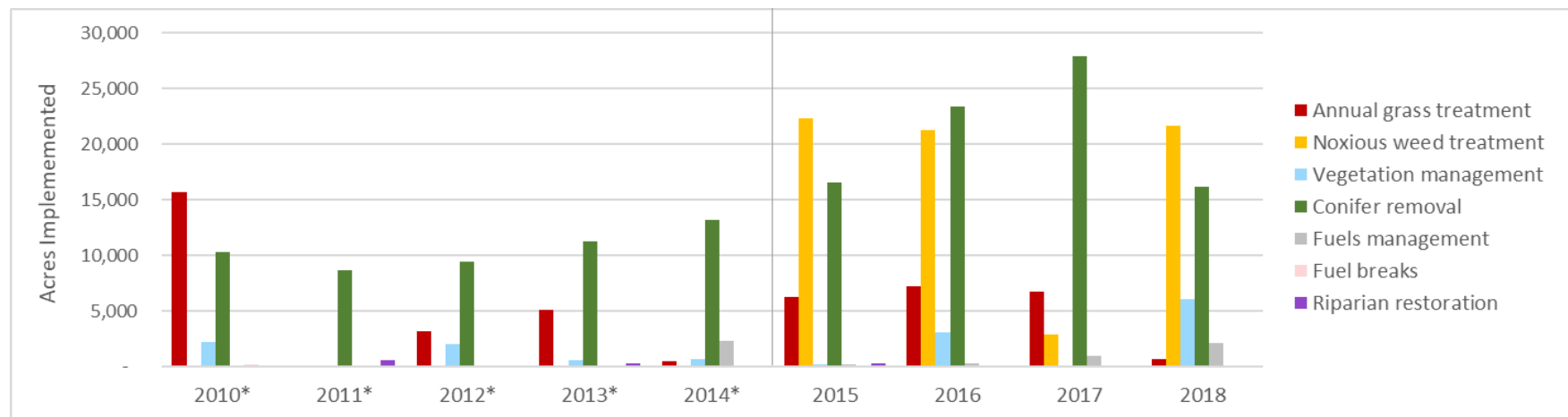


The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately.

Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	20,896	2,582	18,314
Noxious weed treatment	68,142	68,142	
Vegetation management	9,436	9,411	25
Conifer removal	84,052	40,398	43,654
Fuels management	3,616	223	3,393
Riparian restoration	285		285
Fuel breaks			

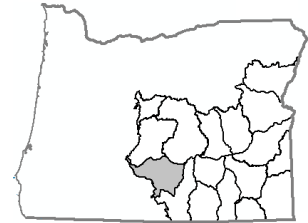
The chart below depicts conservation actions implemented over time from 2010-2018. *Records of actions prior to 2015 may be less complete and/or accurate.

The large acreage of noxious weed treatment represents multiple re-treatments of the same area from 2015-2018, so the totals overrepresent the footprint of the area treated. There are also some duplicative conifer treatments entered on public land between 2015-2018; although some corrections were made, there is still likely some level of over-reporting of conifer removal treatments.



PICTURE ROCK SAGEBRUSH REPORTING UNIT

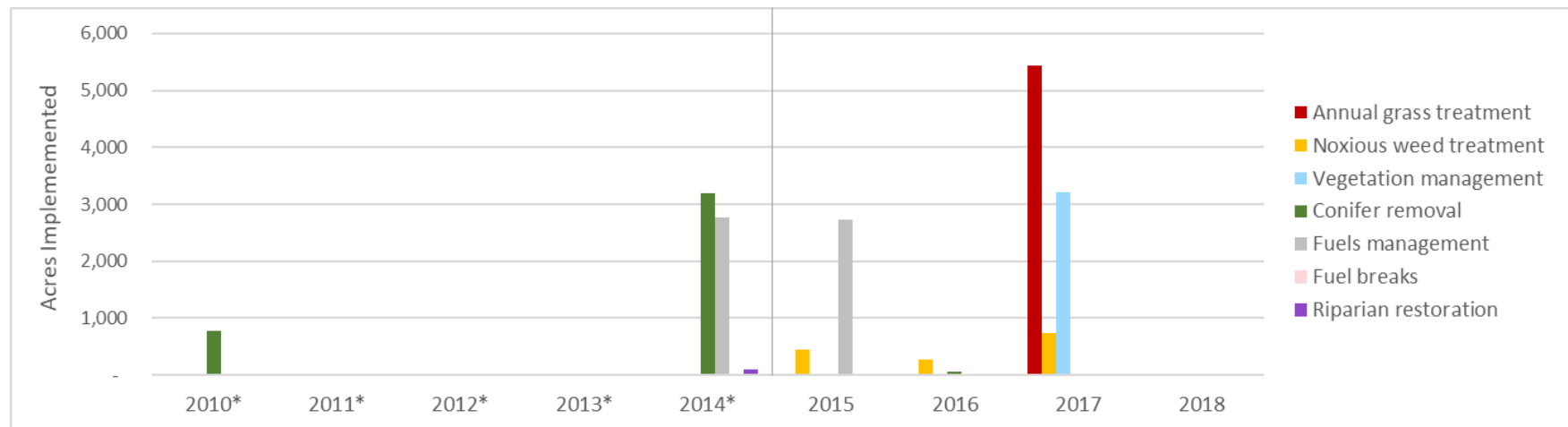
The Picture Rock SRU covers 911,000 acres of rangelands, containing the small Picture Rock PAC (42,656 acres) and 157,700 acres of low-density sage-grouse habitat. Land ownership is 76% federally managed, 2% state managed, and 20% private. This area is very remote and contains relatively little sage-grouse habitat, and therefore has not seen the conservation investments shown in other parts of the state. Conservation actions in this SRU consisted primarily of smaller annual grass treatments and vegetation management (seeding), mostly conducted post-fire.



The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately.

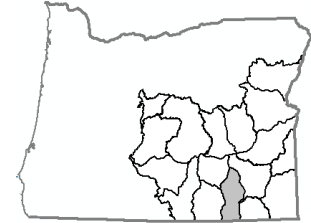
Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	5,431	5,431	
Noxious weed treatment	1,432	1,112	320
Vegetation management	3,213	3,213	
Conifer removal	65		65
Fuels management	2,719	2,719	
Riparian restoration	30		30
Fuel breaks			

The chart below depicts conservation actions implemented over time from 2010-2018. *Records of actions prior to 2015 may be less complete and/or accurate. The spike in annual grass treatments in 2017 was in response to two fires in 2016-2017.



STEENS – PUEBLOS SAGEBRUSH REPORTING UNIT

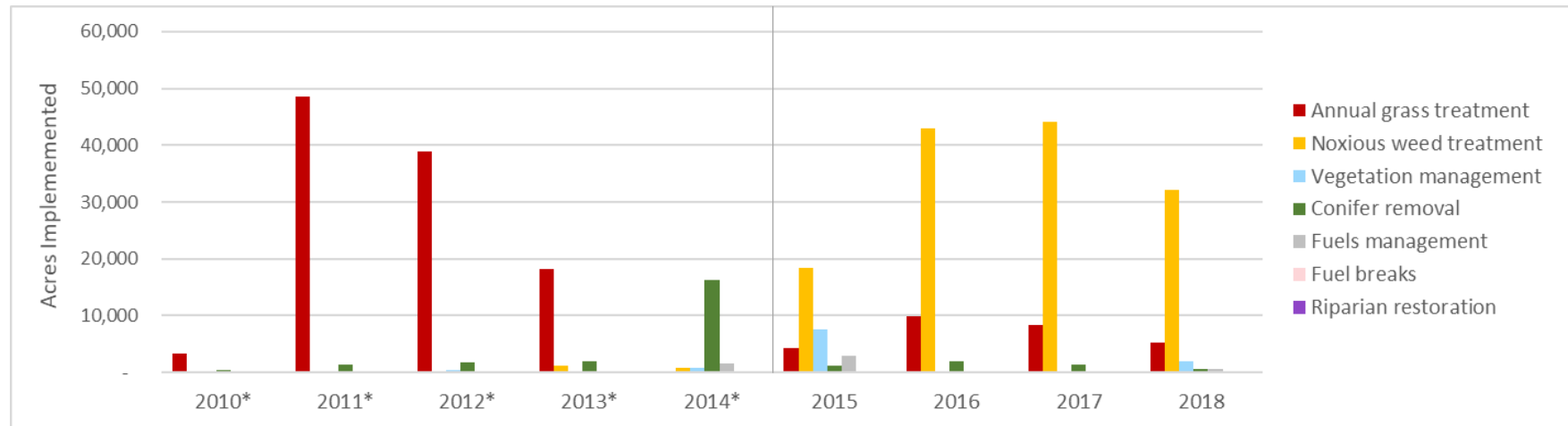
The Steens – Pueblos SRU covers slightly over 1 million acres of rangelands and contains the Steens PAC (185,000 acres) and Pueblos – South Steens PAC (209,000 acres). Most of the remaining area is low-density sage-grouse habitat (440,000 acres). Land ownership is 72% federally managed and 28% private. In this SRU, large areas were treated for annual grasses and noxious weeds on federal land throughout the last decade, with some conifer removals and other vegetation management activities.



The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately. There were many repeated noxious weed treatments in this SRU across multiple years; therefore, the totals in the table are much higher than the footprint area treated.

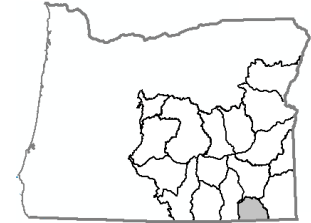
Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	27,695	27,695	
Noxious weed treatment	137,533	137,533	
Vegetation management	9,618	9,618	
Conifer removal	5,006	5,006	
Fuels management	3,733	2,748	985
Fuel breaks			
Riparian restoration			

The chart below depicts conservation actions implemented over time from 2010-2018 (note the scale of the y-axis relative to other SRUs). *Records of actions prior to 2015 may be less complete and/or accurate. Note, the apparent shift from annual grass to noxious weed treatments over time is likely a change in how the records are classified in the database, rather than any change in treatment types.



TROUT CREEKS SAGEBRUSH REPORTING UNIT

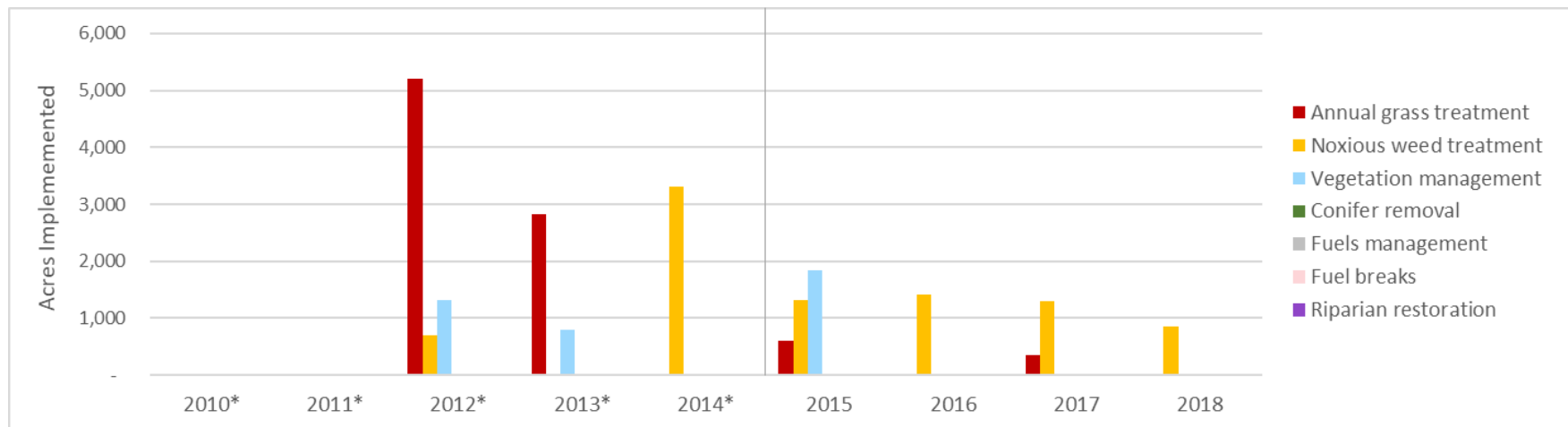
The Trout Creeks SRU covers 656,000 acres of sagebrush rangelands along the southern border of the state and contains most of the Trout Creeks PAC, which covers 393,000 acres. Almost all of the SRU is considered a PAC or low-density habitat (287,000 acres) for sage-grouse. Land ownership is 85% federally managed and 15% private. Conservation actions in this SRU included annual grass, noxious weed treatments, and vegetation management (seeding) on public lands.



The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately.

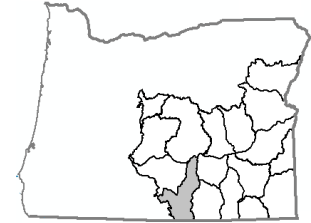
Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	938	938	
Noxious weed treatment	4,882	4,882	
Vegetation management	1,835	1,835	
Conifer removal			
Fuels management			
Fuel breaks			
Riparian restoration			

The chart below depicts conservation actions implemented over time from 2010-2018. Records of actions prior to 2015 are less complete and less accurate. In particular, the Holloway fire burned over 250,000 acres in this SRU in 2015 and relatively few treatments with small acreages relative to the large fire size are included in the database, suggesting there may be some omissions.



WARNERS – TUCKER SAGEBRUSH REPORTING UNIT

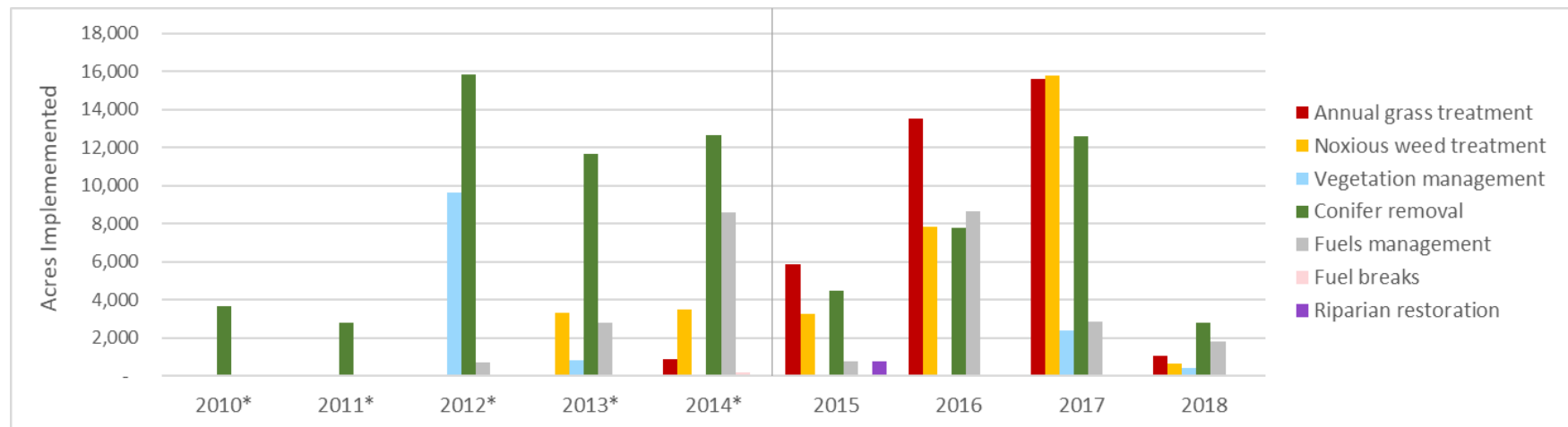
The Warners – Tucker SRU covers just over 1 million acres of rangelands and contains two PACs, the Warners PAC (330,300 acres) and the Tucker Hill PAC (31,500 acres), along with 153,000 acres of low-density sage-grouse habitat. Land ownership is 68% federally managed, 5% state managed, and 26% private. Conservation actions in this SRU included conifer removals, annual grass and noxious weed treatments, riparian restoration, and other treatments, which are widespread across both public and private lands.



The table to the right summarizes actions implemented from 2015-2018, when the most recent and reliable information is available. In some cases, multiple treatments may occur in the same place, either a re-treatment of the same action or multiple actions addressing different threats, which are each reported separately. In this SRU, some annual grass projects were conducted over multiple years in the same areas, as well as projects with multiple components (conifer removal, fuels management, annual grass treatment) occurring in the same acreage.

Conservation Action	Sum of Acres Implemented (2015-2018)		
	Total	Public Lands	Private Lands
Annual grass treatment	36,023	31,736	4,287
Noxious weed treatment	27,504	20,646	6,858
Vegetation management	2,798	2,788	10
Conifer removal	27,632	11,508	16,124
Fuels management	14,102	7,721	6,381
Fuel breaks			
Riparian restoration	804		804

The chart below depicts conservation actions implemented over time from 2010-2018. *Records of actions prior to 2015 may be less complete and/or accurate. Trends over time show a sustained investment in conservation across public and private lands in this area.



MORE DETAILS ABOUT CONSERVATION ACTIONS MONITORING

The diagram below describes the four types of information in the CED, including 1. Actions addressing major threats on public lands (upper left), 2. Actions addressing other threats on public lands (lower left), 3. Actions taken on private lands (upper right), and 4. Plans. This report only includes the most common actions in Oregon related to sagebrush protection, conifer removal and habitat enhancement on public and private lands. Information about voluntary conservation agreements and other efforts that are not captured in the CED can be found in the [SageCon Dashboard](#).



MORE DETAILS ABOUT CONSERVATION ACTIONS MONITORING

Information on conservation actions in Oregon rangelands was provided by the Bureau of Land Management (BLM), US Forest Service (USFS), US Fish & Wildlife Service (USFWS), Natural Resources Conservation Service (NRCS), Oregon Department of Fish & Wildlife (ODFW), Oregon Department of State Lands (DSL), Oregon Watershed Enhancements Board (OWEB), and Soil and Water Conservation Districts (SWCDs). Oregon Department of Agriculture (ODA) projects are also captured as OWEB records. In addition to the basic information on action type, year and acreage reported here, the CED also contains treatment objectives, methods, effectiveness rating (self-reported by the individual entering data), whether a treatment was implemented post-fire, and other information. This supplemental information may be used by Local Implementation Teams and other local groups, and may also be used to evaluate implementation and adaptive management of the [Oregon Sage-Grouse Action Plan](#).

KNOWN SHORTCOMINGS OF THE DATA AND RECOMMENDATIONS

The CED is an important resource to compile information on conservation actions taken across public and private rangelands in southeastern Oregon. In the process of compiling this information, we offer some recommendations and caveats for using the data, in addition to the general guidance on page 3.

- There are known issues in the CED dataset, including both omissions and duplications. Known omissions are noted above for each SRU, with most of the obvious omissions related to large fires in 2012 where post-fire treatments were not reported into the CED. However, there may be other omissions in the dataset that are not identified. Actions implemented by landowners or other groups without funding assistance from state or federal agencies are generally not captured. There are also some duplications, particularly among conifer removal projects on public lands. The best effort was made to correct these duplications to ensure each project is counted only once, but some duplication still exists. There are also unknown errors and omissions that may affect the conclusions drawn from this data.
- Coordination among data providers was an important step to provide the most accurate records practicable. In Oregon, projects were entered primarily by funding agencies, with some data gaps filled by implementers. Many projects in the state are collaboratively funded by multiple entities, and each funding agency has a different record keeping system. In some cases, records needed to be modified to ensure treatments were not counted multiple times, and it was easiest to identify any potential conflicts when each database clearly separated individual treatments and their specific funding sources. We also found it was also important to have actions reported to funding agencies frequently; in some cases, actions completed as part of longer-term projects were not reported until the end of the entire project, which could result in a reporting delay of several years and limit the ability to use the data to inform adaptive management of the Plan.
- As noted above, for some annual grass and noxious weed treatments (and occasionally other treatment types), the acres reported reflect a broader project boundary or area surveyed instead of the acres treated. This is especially common in older post-fire treatments where records of exact spray locations were not tracked carefully. In some cases, these projects are entered as buffered points appearing as circles instead of treatment perimeters. We intend to track acres treated with as much spatial precision as possible (on public lands), but some of the larger projects provide an upper estimate or an area surveyed instead of a precise treatment boundary. Data quality is expected to improve over time in future data calls.