

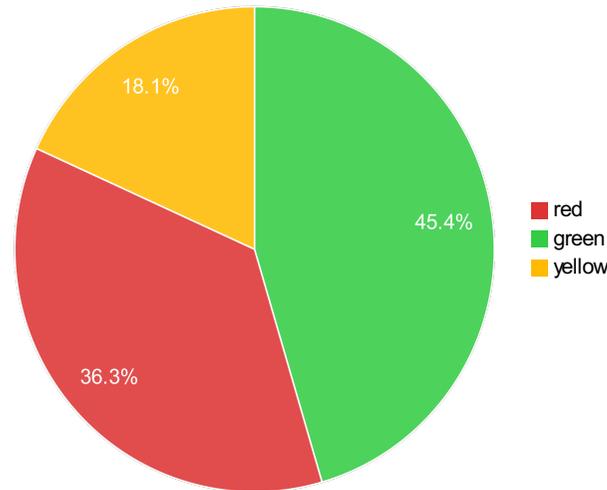
Forestry, Department of

Annual Performance Progress Report

Reporting Year 2019

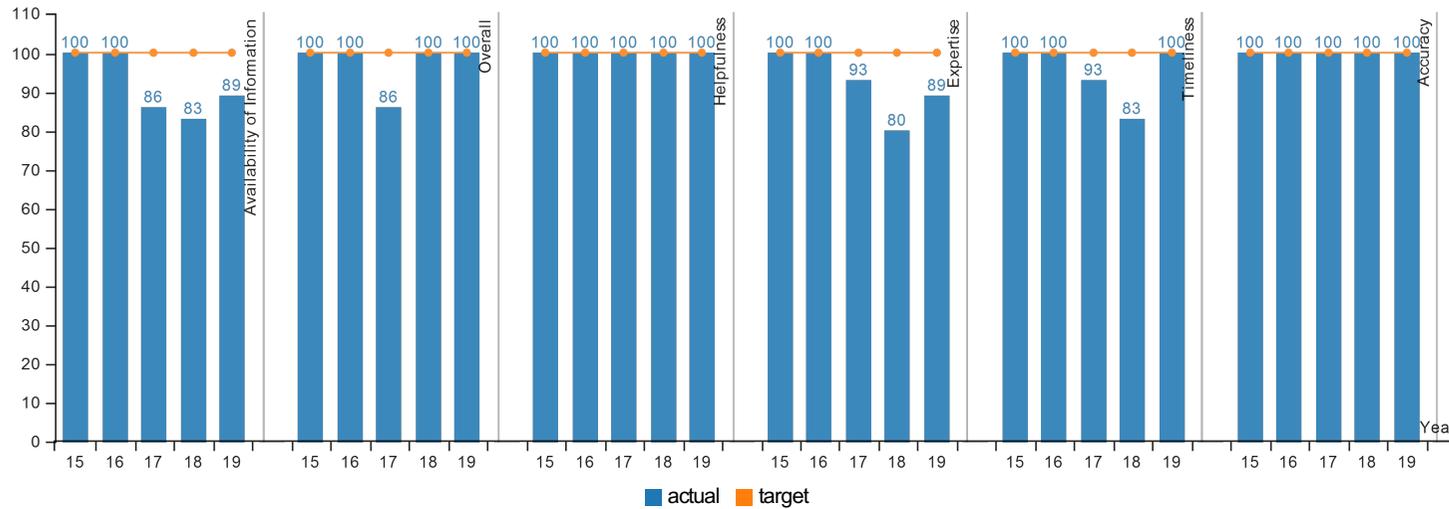
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KPM #	Approved Key Performance Measures (KPMs)
1	CUSTOMER SERVICE TO COUNTY 'GOVERNMENTS AND FOREST LANDOWNERS - Percent of Oregon's forested counties and forest protective associations rating that ODF programs collectively provide "good" or "excellent" customer service: overall, timeliness, accuracy, helpfulness, expertise, availability of information.
2	BOARD OF FORESTRY PERFORMANCE - Percent of total best practices met by the Board of Forestry.
3	FOREST PRACTICES ACT COMPLIANCE - Percent of forest operations that are in compliance with the Forest Practices Act
4	URBAN AND COMMUNITY FOREST MANAGEMENT - Percent of Oregon cities actively managing their urban and community forest resources.
5	STATE FORESTS TOTAL REVENUE - Percent increase in total revenue produced by State Forests
6	AIR QUALITY PROTECTION - Total number of smoke intrusions into designated areas per total number of units burned.
7	PERCENTAGE OF PRIVATE FORESTLAND MANAGED AT OR ABOVE FOREST PRACTICES ACT STANDARDS. - Percentage of industrial private forestlands managed under an approved certification system, stewardship agreement, or other approved management plan including wildlife habitat conservation and management plans
8	FOREST STREAM WATER QUALITY - Percent of monitored stream sites associated predominately with forestland with significantly increasing trends in water quality.
9	VOLUNTARY PUBLIC AND PRIVATE INVESTMENTS MADE TO CREATE HEALTHY FORESTS - Cumulative public and private forest landowner investments made in voluntary projects for the Oregon Plan for Salmon and Watersheds or for the Oregon Conservation Strategy.
10	STATE FORESTS NORTH COAST HABITAT - Complex forest structure as a percent of the State Forests landscape.
11	FIRE SUPPRESSION EFFECTIVENESS - Percent of wildland forest fires under ODF jurisdiction controlled at 10 acres or less.
12	PREVENTION OF HUMAN-CAUSED WILDLAND FOREST FIRES - Number of Oregon residents per human-caused wildland forest fires. (population expressed in thousands of residents) This metric measures the ability to maintain or reduce the number of human-caused wildfires as the population of Oregon increases. An upward trend indicates a positive result.
13	DAMAGE TO OREGON FORESTS FROM INSECTS, DISEASES, AND OTHER AGENTS - Percent of forest lands without significant damage mortality as assessed by aerial surveys.



Performance Summary	Green	Yellow	Red
	= Target to -5%	= Target -5% to -15%	= Target > -15%
Summary Stats:	45.45%	18.18%	36.36%

KPM #1	CUSTOMER SERVICE TO COUNTY 'GOVERNMENTS AND FOREST LANDOWNERS - Percent of Oregon's forested counties and forest protective associations rating that ODF programs collectively provide "good" or "excellent" customer service: overall, timeliness, accuracy, helpfulness, expertise, availability of information.
	Data Collection Period: Jan 01 - Dec 31



Report Year	2015	2016	2017	2018	2019
Availability of Information					
Actual	100%	100%	86%	83%	89%
Target	100%	100%	100%	100%	100%
Overall					
Actual	100%	100%	86%	100%	100%
Target	100%	100%	100%	100%	100%
Helpfulness					
Actual	100%	100%	100%	100%	100%
Target	100%	100%	100%	100%	100%
Expertise					
Actual	100%	100%	93%	80%	89%
Target	100%	100%	100%	100%	100%
Timeliness					
Actual	100%	100%	93%	83%	100%
Target	100%	100%	100%	100%	100%
Accuracy					
Actual	100%	100%	100%	100%	100%
Target	100%	100%	100%	100%	100%

How Are We Doing

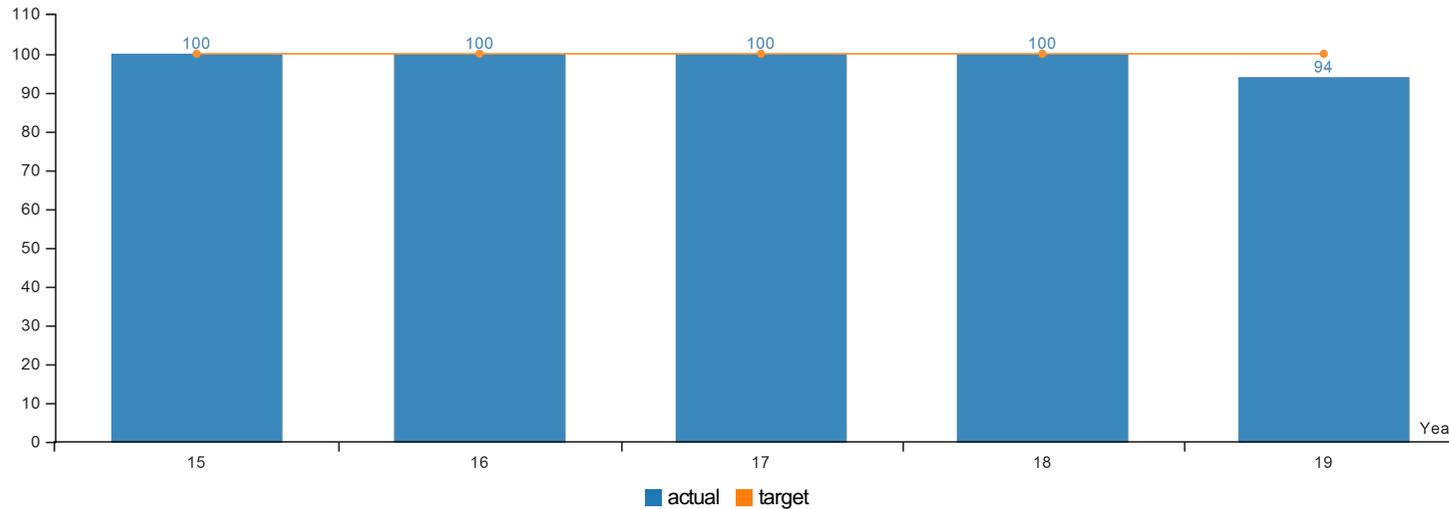
The Department of Forestry strives to exceed expectations in service to Oregon's forested counties and forest protective associations. Results from this year's survey indicate we are continuing to be known for excellence in our overall level of service and showing positive improvements in areas of expertise and availability of information.

Factors Affecting Results

Department of Forestry staff support our mission to serve the people of Oregon and it's directly reflected in our success of this performance measure. Our employees work hard to provide a high level of customer service, be responsive and timely in our efforts, and ensure clarity and accuracy in those services provided. The positive results of this performance measure directly correlates to the investments made between Department staff and county commissioners, county officials, forest protective associations and forest landowners to build effective working relationships across all jurisdictions and forestry programs. As state government strives to keep pace with an evolving workforce, needed investments in technology, and capacity to support growth and innovation in business practices, we see these factors continuing to challenge the Department in areas of staff expertise and availability of information.

KPM #2	BOARD OF FORESTRY PERFORMANCE - Percent of total best practices met by the Board of Forestry.
	Data Collection Period: Jul 01 - Jun 30

* Upward Trend = positive result



Report Year	2015	2016	2017	2018	2019
Oregon Board of Forestry Governance					
Actual	100%	100%	100%	100%	94%
Target	100%	100%	100%	100%	100%

How Are We Doing

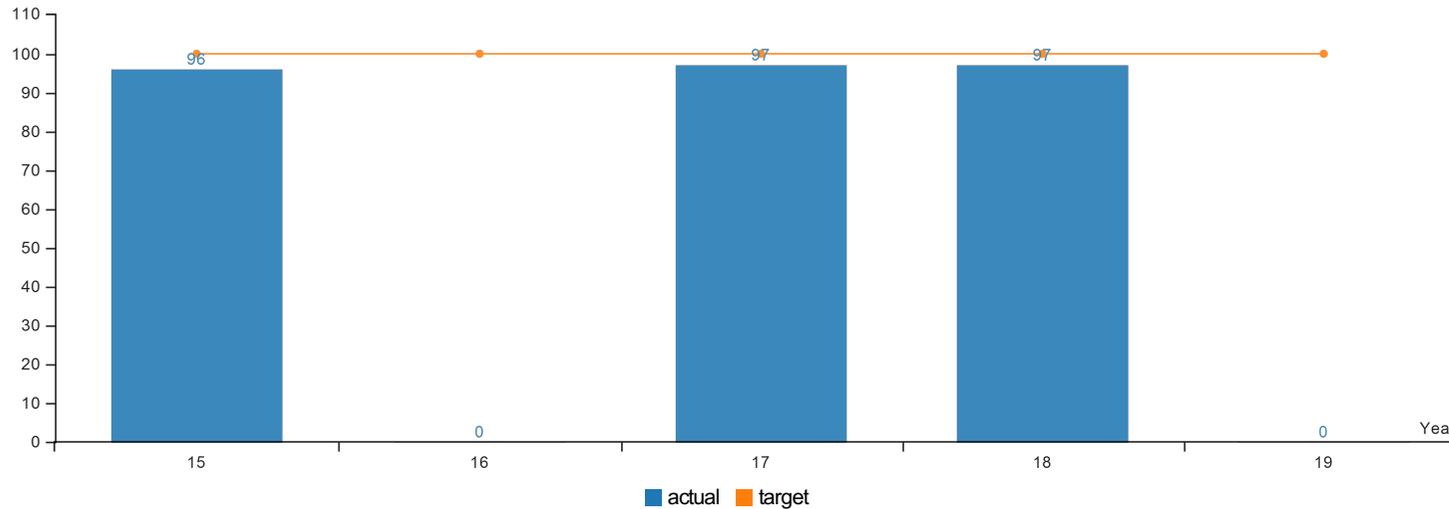
The Board of Forestry concluded the annual board governance performance evaluation with common agreement in meeting 94 percent of the standard best-practices criteria, with minor levels of disagreement limiting the Board in reaching their 100 percent target.

Factors Affecting Results

Six of the seven Board members completed the evaluation. Areas of concern within the best practices criteria included currency and applicability of the agency’s mission and high-level goals, review of the agency’s key communications, the Board’s appropriate accounting of resources, and coordination with others where responsibilities and interests overlap. Overall, the Board is currently working to build new relationships and cohesive group dynamics following transition in membership. These transitions have occurred midway of substantive policy issues before the Board, challenging members to develop a common understanding on the history and depth of specific issues, while deliberating to gain alignment in priorities and policy direction, given limitations of time in public meeting forums and pressures to continue moving forward on critical policy issues.

KPM #3	FOREST PRACTICES ACT COMPLIANCE - Percent of forest operations that are in compliance with the Forest Practices Act
	Data Collection Period: Jan 01 - Dec 31

* Upward Trend = positive result



Report Year	2015	2016	2017	2018	2019
Percent of Operations in Compliance with Oregon's Forest Practices Act					
Actual	96%	No Data	97%	97%	No Data
Target	100%	100%	100%	100%	100%

How Are We Doing

Standards of practice for forest management operations on non-federal and non-tribal lands in Oregon are outlined in the Statutes (ORS 527.610 to 527.770, 527.990-(1) and 527.992) and Administrative Rules that comprise the Oregon Forest Practices Act (FPA). In 2011, by way of a Budget Note for the Oregon Department of Forestry's biennial budget, the Legislature requested the Department conduct an audit of Forest Practices Act compliance, and use a private contractor in the process.

During 2012, the Department of Forestry (ODF) developed sampling protocols, identified a sample set of study sites and selected a contractor to gather field data. In 2013, ODF began annual monitoring of compliance rates for a subset of the rules in the FPA. The focus of the study was primarily on rules concerning road construction, road maintenance, timber harvesting, and protection measures for waters of the state. Reports on the results of individual years have been published by ODF. Please note the reported results are one year apart from when the field data was collected (e.g., no field data was collected in 2015 thus there was no reported compliance rate in 2016.)

Data indicated the following overall rates of compliance:

2014 – 97%,

2015 – 96%,

2016 – No Data,

2017 – 97%, and

2018 – 97%

ODF did not conduct a compliance audit in 2018. Our efforts are focused on initiating a new compliance audit in late 2019 focusing on a subset of reforestation rules in the FPA.

Factors Affecting Results

The forestlands subject to the FPA are managed according to a broad range of strategies by a variety of different types of landowners. A number of ownerships enroll in a voluntary set of measures to demonstrate responsible stewardship of the land, such as certification systems. The Sustainable Forestry Initiative and the American Tree Farm System are such systems. Enrollees agree to meet and/or exceed state standards for environmental protection.

Other owners have less formally articulated plans for their lands. Some lands subject to the study, such as state forests lands, are subject to very studied and deliberate management plans.

Landowner preferences bear strongly on how land is managed and the standards that are met during forest management activities.

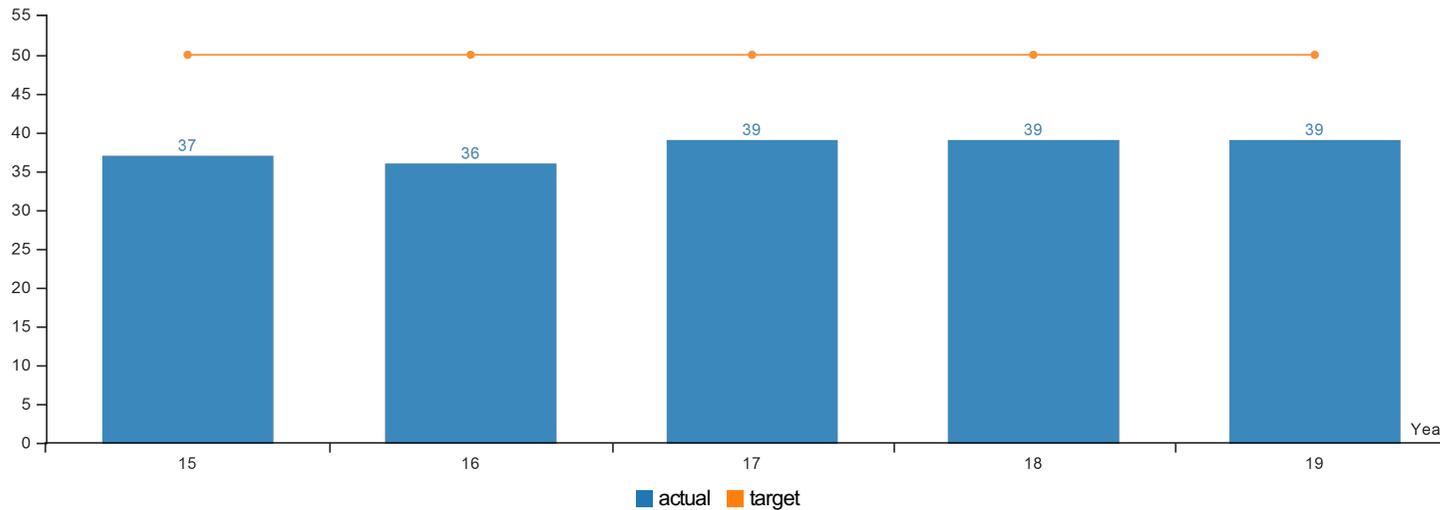
The Department of Forestry (ODF) strives to help keep Oregon's non-federal, non-tribal timberlands healthy and productive through a variety of means, typified by the notion of the "Three E's": education, engineering, and enforcement. The field representatives (stewardship foresters) routinely work with landowners in an effort to support informed, effective, and appropriate management of forestlands.

Results from the compliance audit inform training strategies for ODF as well as industry groups who support the FPA in their work. Numerous training sessions statewide have focused on the rules for which compliance rates are lower.

ODF engages an external advisory committee to periodically review the project, the protocols, and results. That group also helps deliver the message regarding findings of the audit and how they can be used to support better forest practices.

KPM #4	URBAN AND COMMUNITY FOREST MANAGEMENT - Percent of Oregon cities actively managing their urban and community forest resources.
	Data Collection Period: Jan 01 - Dec 31

* Upward Trend = positive result



Report Year	2015	2016	2017	2018	2019
Percent of Oregon cities actively managing their urban and community forest resources					
Actual	37%	36%	39%	39%	39%
Target	50%	50%	50%	50%	50%

How Are We Doing

Once again, close to 40 percent of the 240 Oregon cities are actively managing their urban forests. Although this is less than half of the total number of Oregon cities, more than 74% Oregon’s population (2010 census) lives in these urban forest-managing cities. (With more up-to-date population figures and development trend information, the actual population percentage is very likely greater than reported here.)

In 2018, the Urban and Community Forestry (UCF) Assistance program concentrated effort in “truthing” the long-held data it has on each Oregon city’s urban forestry program development. It has not been effective to simply survey all of our cities for this information. With our limited staff, this is a time-consuming task -- requiring telephoning or visiting 20-30 percent of our cities annually to find out if they (1) employ trained urban and community forestry staff, (2) have a tree ordinance, (3) a tree advisory committee, and/or (4) an inventory-based management plan. From these preliminary efforts, we were disheartened to learn that a few small communities had lost their urban forestry enthusiasm. However, we were also gladdened to see that other cities had embraced urban and community forestry and are moving ahead in their efforts. These positive changes were also reflected in the number of Oregon Tree Cities USAs growing to 66 in 2018, up from 63 in 2017.

Factors Affecting Results

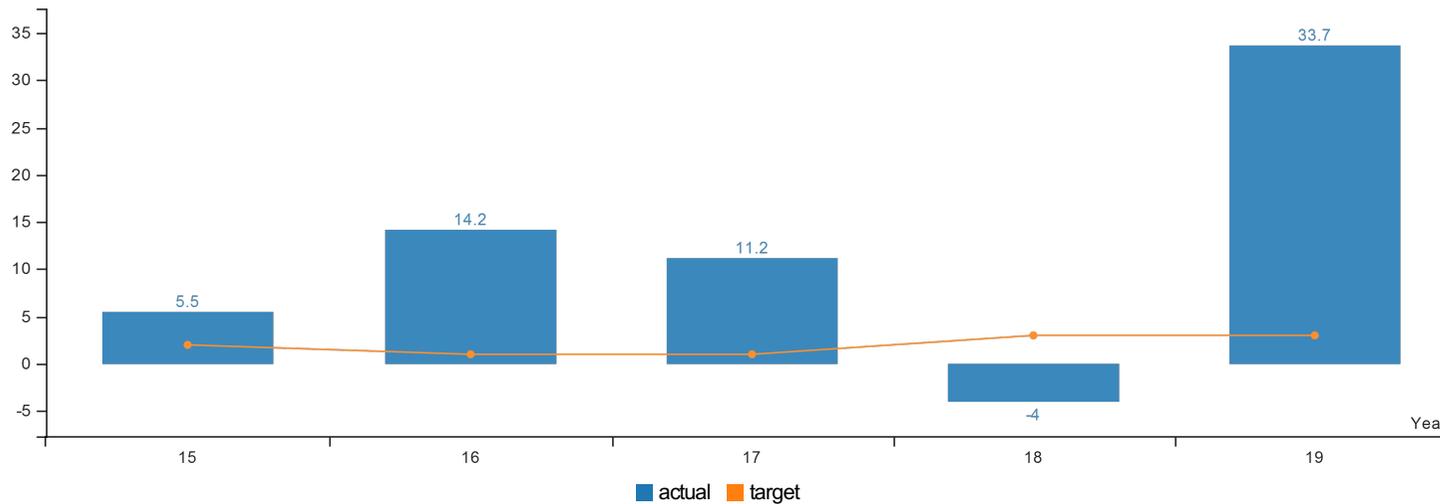
The Department receives no state funds for its UCF Assistance Program and thus relies solely on federal funds to achieve this KPM. Based on the availability and uses of federal sources, the Department has a very limited staff to serve the entire state. A statewide survey conducted in 2014 clearly shows that if cities receive assistance from the Department of Forestry, they were more likely to have components of an actively managed urban forest program.

On the positive side, UCF staff is making better use of technology to help communities build their urban forestry programs -- such as using video conferencing and holding webinars to extend our technical outreach. Along with our state U&CF advisory council, we are holding well-attended technical conferences, producing a regular and popular newsletter, and extending our outreach to all Oregon cities. Nationwide and in Oregon, urban and community forestry professionals are expanding their interests in using urban-grown lumber, grappling with fire-preparedness in cities and suburbs, improving the use of trees in stormwater mitigation, and increasing the awareness of the role trees play in urban resident health. The UCF Assistance program is a recognized hub that provides, guides, and manages information on these UCF trends in Oregon.

However, the UCF program also faces challenges: we have noticed that many cities have new, young municipal employees who are not familiar with urban forestry management concepts or the mission of our program. They need more focused attention than UCF program staff is able to provide. Unless they are quick to get up to speed in UCF management, their city's trees will suffer. Also, across the nation, there is a growing need for well-trained arborists and urban foresters which, in part, explains the drop-off in many cities from having trained UCF staff. As described above, current program resources do not allow us to train the next generation of urban foresters to the extent that they might need.

KPM #5	STATE FORESTS TOTAL REVENUE - Percent increase in total revenue produced by State Forests
	Data Collection Period: Jul 01 - Jun 30

* Upward Trend = positive result



Report Year	2015	2016	2017	2018	2019
Percent increase in revenue produced by State Forests compared to the previous year					
Actual	5.50%	14.20%	11.20%	-4%	33.70%
Target	2%	1%	1%	3%	3%

How Are We Doing

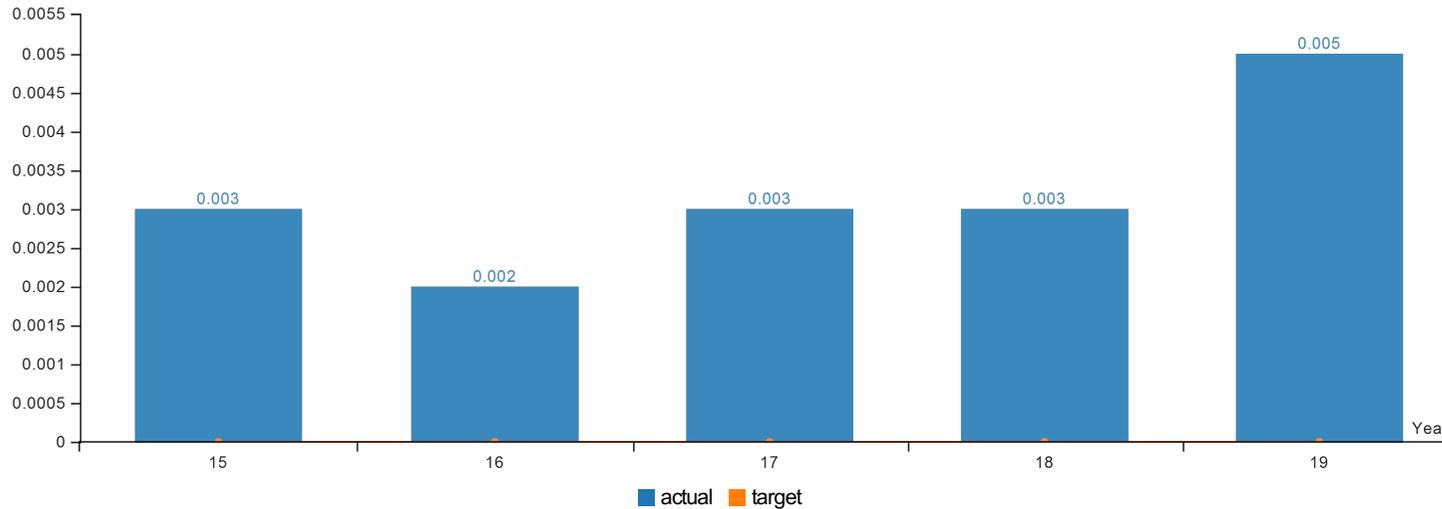
The FY 2018 data show a 33.7 percent increase in total revenues from the previous year, up to \$130,067,337. The amount of revenue distributed to counties increased 37.1 percent from the previous year, \$58,991,928 up to \$80,891,196. This KPM focuses on the percent change in total revenue produced from the sale of timber from State Forests. The Oregon Department of Forestry is committed to sustainable management of these lands. Harvest levels that contribute to the revenue flow for this measure are set annually by the Division at the direction of the State Forester. The KPM targets establish an objective for management activities to predictably generate revenue for the State. The Division is implementing business improvements to increase revenue while continuing to provide a balanced range of social and environmental values.

Factors Affecting Results

The major factors affecting FY 2018 timber sale revenue were a strong timber market and purchasers harvesting at an accelerated rate.

KPM #6	AIR QUALITY PROTECTION - Total number of smoke intrusions into designated areas per total number of units burned.
	Data Collection Period: Jan 01 - Dec 31

* Upward Trend = negative result



Report Year	2015	2016	2017	2018	2019
Total number of smoke intrusions into designated areas per total number of units burned					
Actual	0.003	0.002	0.003	0.003	0.005
Target	0	0	0	0	0

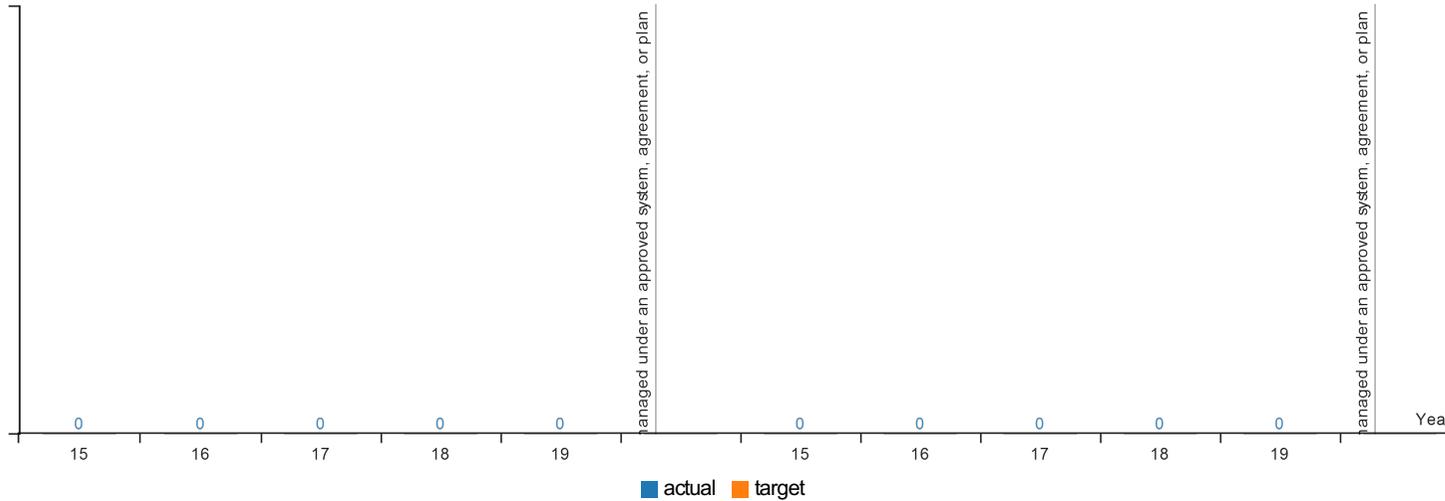
How Are We Doing

The Smoke Management Program is doing a good job of protecting Oregon's air quality while, at the same time, allowing forest landowners to dispose of unwanted accumulations of forest fuel. The inclusion of the entire state into the measurement target beginning in 2008 precludes any comparison with previous year's data. 18 intrusions occurred from 3,382 units burned. Intrusions have increased in recent years due to an increase in forest restoration burning near Smoke Sensitive Receptor Areas east of the Cascades.

Factors Affecting Results

In addition to restoration burning, weather variations and economic market conditions can also influence the outcome, by substantially increasing or decreasing the number of units available for burning.

KPM #7	PERCENTAGE OF PRIVATE FORESTLAND MANAGED AT OR ABOVE FOREST PRACTICES ACT STANDARDS. - Percentage of industrial private forestlands managed under an approved certification system, stewardship agreement, or other approved management plan including wildlife habitat conservation and management plans
	Data Collection Period: Jul 01 - Jun 30



Report Year	2015	2016	2017	2018	2019
a. Percentage of total industrial private forestlands managed under an approved system, agreement, or plan					
Actual	No Data				
Target	TBD	TBD	TBD	TBD	TBD
b. Percentage of non-industrial private forestlands managed under an approved system, agreement, or plan					
Actual	No Data				
Target	TBD	TBD	TBD	TBD	TBD

How Are We Doing

Key Performance Measure #7 was modified during the 2019 Legislative Session to report as a percentage of forestland compared to previously reporting on acreage. With previously set legislative targets reporting by acres, prior year acreage data has been omitted from this report table. Results for the 2019 reporting year are reflected in the following narrative. The legislatively approved target for this measure in 2020 is 90 percent of industrial private forestlands and 25 percent of non-industrial private forestlands managed under an approved system, agreement, or plan.

a. Three certification systems operate in Oregon. The American Tree Farm System provides certification endorsed by the Program for the Endorsement of Forest Certification schemes (PEFC). The PEFC is an international, independent, non-profit, non-governmental organization, founded in 1999, which promotes sustainably managed forests through independent third-party certification. Forest Stewardship Council U.S. provides certification verified by Accreditation Services International, an independent accreditation body offering international, third-party accreditation for voluntary certification schemes. The Sustainable Forestry Initiative provides certification endorsed by the PEFC.

The Department of Forestry (ODF) approves and monitors management plans, under the USDA-Forest Service's State and Private Forestry Program, and enters into Stewardship Agreements (ORS 541.423) with forestland owners, who agree to manage beyond FPA standards. The Oregon Department of Fish and Wildlife approves forest management plans under their Wildlife Habitat Conservation and Management Program (ORS 308A-400).

ODF requested information on acres of industrial private forestland certified or approved under each system, and 69 percent (4.5 of the 6.6 million acres) of industrial private forestlands are managed under an approved certification system, as summarized below:

Sustainable Forestry Initiative, Inc.	3,873,497 acres
American Tree Farm System	486,503 acres
Forest Stewardship Council U.S.	166,237 acres

Total 4,526,237 acres

b. ODF requested information on acres of non-industrial private forestland certified or approved under each system and 11 percent (0.4 of the 3.6 million acres) of non-industrial private forestlands are managed under an approved certification system, as summarized below:

ODF; USDA-FS Forest Stewardship Plan	116,593 acres
ODF Stewardship Agreements	3,484 acres
American Tree Farm System	258,947 acres
Forest Stewardship Council U.S.	32,850 acres

Total 411,874 acres

Factors Affecting Results

a. Along with forestry-related agencies and organizations, the market place encourages forest certification. Forestland owners wanting to sell timber increasingly find that milling facilities are requiring their log supply come from certified forests. This market access requirement is motivating landowners to obtain certification from recognized third-party systems. Industrial forestland owners generally have the capacity to develop procedures to maintain certification.

Domestically and internationally, voluntary forest certification systems are used as a mechanism to recognize forest products originating from lands meeting specific management and harvesting requirements. Certification involves observation of management and harvesting requirements and is validated through third-party review. Costs are incurred by landowners to certify lands. In turn, certified forest products are able to access certain markets, which are otherwise closed and/or be differentiated from uncertified competing goods. Regardless of certification status, all of Oregon's private and state forestlands are subject to the requirements of the Oregon Forest Practices Act and comprehensive land use plans and as such, are held to standards that in many respects are similar to those of certification systems.

In 2018, Oregon achieved certification with the American Society for Testing and Materials (ASTM) standard on forest certification systems D7612-10 for wood grown and harvested under the Oregon Forest Practices Act and compliance of subject wood to the 2012 and 2015 International Code Council (ICC) International Green Construction Code (IgCC). The recognition from ASTM will provide opportunities for private and state forestlands to access additional markets for their forest products.

In 2019, the KPM was modified to reflect the percentage of industrial and non-industrial acres whose land is under an approved certification or management system. The percentage is based upon the total acres of forestland in either the industrial or non-industrial classification. This revised reporting measure may improve understanding of the overall importance of this measure.

b. Along with forestry-related agencies and organizations, the market place encourages forest certification. Forestland owners wanting to sell timber increasingly find that milling facilities are requiring that their log supply come from certified forests. This market access requirement is motivating landowners to develop management plans, since forest certification systems require forest management planning.

Non-industrial forestland owners often need assistance in developing inventory data and management documentation needed for certification. The cost of certification may represent a barrier for smaller ownerships. Approximately 81 thousand owners hold forestland between 1 and 9 acres in size, accounting for 369,000 acres of forests. Another 50 thousand owners have forestland holdings between 10 and 49 acres in size, accounting for 1,024,000 acres of family forests. The large number of owners with smallholdings creates a significant challenge to achieving certification on all non-industrial forestlands.

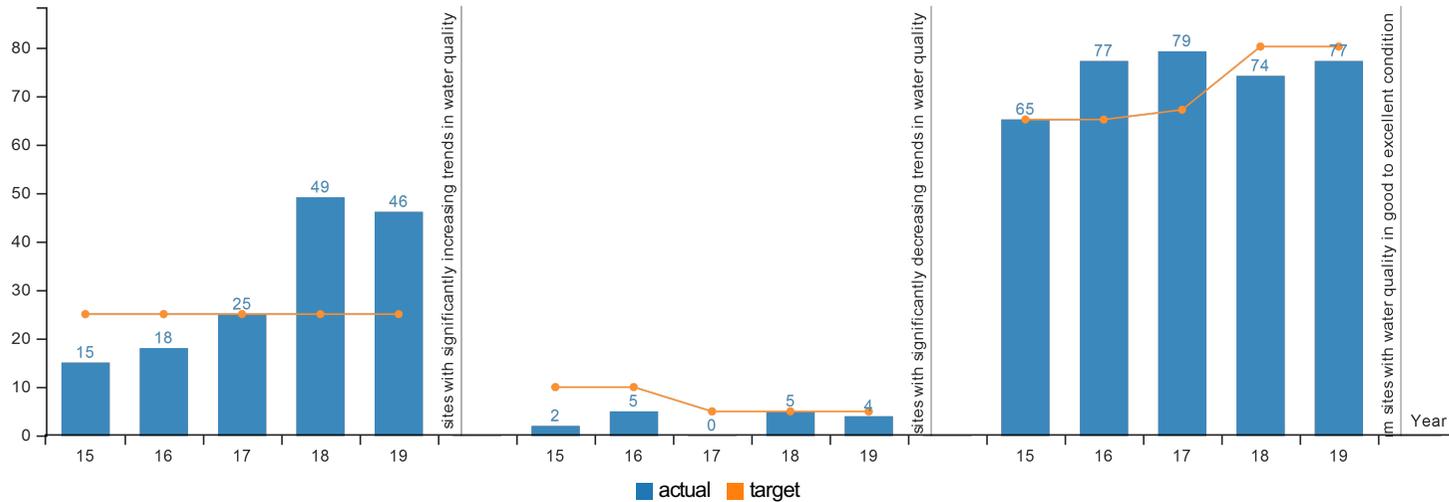
To increase certification on non-industrial forestlands, ODF needs to provide additional technical and financial assistance to landowners for development of management plans and procedures. ODF does not receive any state support for this effort, and relies solely on federal funding to conduct this work. ODF works with multiple organizations to promote the development of forest management plans and the mutual recognition of approved plans.

In 2019, the KPM was modified to reflect the percentage of industrial and non-industrial acres whose land is under an approved certification or management system. The percentage is based upon the total acres of forestland in either the industrial or non-industrial classification. This revised reporting measure may improve understanding of the overall importance of this measure.

NOTE: Collection dates varied for KPM 7 as follows:

- SFI and America Tree Farm data collected - July 1, 2018-June 30, 2019
- FSC data collected - July 1, 2018-June 30, 2019
- ODF; USDA-FS Forest Stewardship Plan data is from July 1, 2018 through June 30, 2019

KPM #8	FOREST STREAM WATER QUALITY - Percent of monitored stream sites associated predominately with forestland with significantly increasing trends in water quality.
	Data Collection Period: Oct 01 - Sep 30



Report Year	2015	2016	2017	2018	2019
a. Percent of monitored forested stream sites with significantly increasing trends in water quality					
Actual	15%	18%	25%	49%	46%
Target	25%	25%	25%	25%	25%
b. Percent of monitored forested stream sites with significantly decreasing trends in water quality					
Actual	2%	5%	0%	5%	4%
Target	10%	10%	5%	5%	5%
c. Percent of monitored forested stream sites with water quality in good to excellent condition					
Actual	65%	77%	79%	74%	77%
Target	65%	65%	67%	80%	80%

How Are We Doing

a. In 2018, 46 percent of monitored forest stream sites showed increasing trends in water quality. While the percent of forested streams with increasing trends in water quality has increased over the past five years, and the target continues to be met, it may be unrealistic to expect continued trends in increasing water quality on stream sites where water quality is already in good or excellent condition. No increasing or decreasing trend was observed on 51 percent of monitored forest stream sites.

The performance is based on the Oregon Water Quality Index (OWQI). The OWQI describes general stream water quality status and trends. The OWQI also shows the general effectiveness of water quality management activities. No industry standards exist. However, 2018 data for agricultural lands in Oregon indicate 10 percent of monitored agricultural stream sites with increasing trends in water quality. Statewide data for 2018 for all land uses, including agricultural and forest lands indicate 28 percent of monitored stream sites with increasing trends in water quality.

b. In 2018, two monitored sample points (4 percent) showed significantly decreasing trends in water quality. Compared to last year, when three monitored sampled points (5 percent) indicated significantly decreasing trends in water quality. This change represents a slight increase in overall water quality. The target continues to be met and has been met for the past five years. It is important to note that about half of the ambient sites statewide, and a higher percentage of forest sites (77 percent), continue to have "good" or "excellent" water quality and that has remained consistent over the last ten years. No increasing or decreasing trend was observed on about 51 percent of the monitored forest streams.

The performance is based on the Oregon Water Quality Index (OWQI). The OWQI describes general stream water quality status and trends. The OWQI also shows the general effectiveness of water quality management activities. No industry standards exist. However, 2018 data for mixed land use in Oregon indicate zero monitored stream sites with decreasing trends in water quality. Statewide, data for 2018 for all land uses, including agricultural and forest lands indicate 14 monitored stream sites (9 percent) with decreasing trends in water quality.

c. In 2018, 77 percent of monitored forest stream sites showed "good" to "excellent" water quality, which is just below the target of 80 percent. Except for 2018 & 2019, monitored sites on forestland have met or exceeded the target every year since 2009 when this measure was established. About half of the ambient sites statewide continue to have "good" to "excellent" water quality and that has remained consistent over the last ten years.

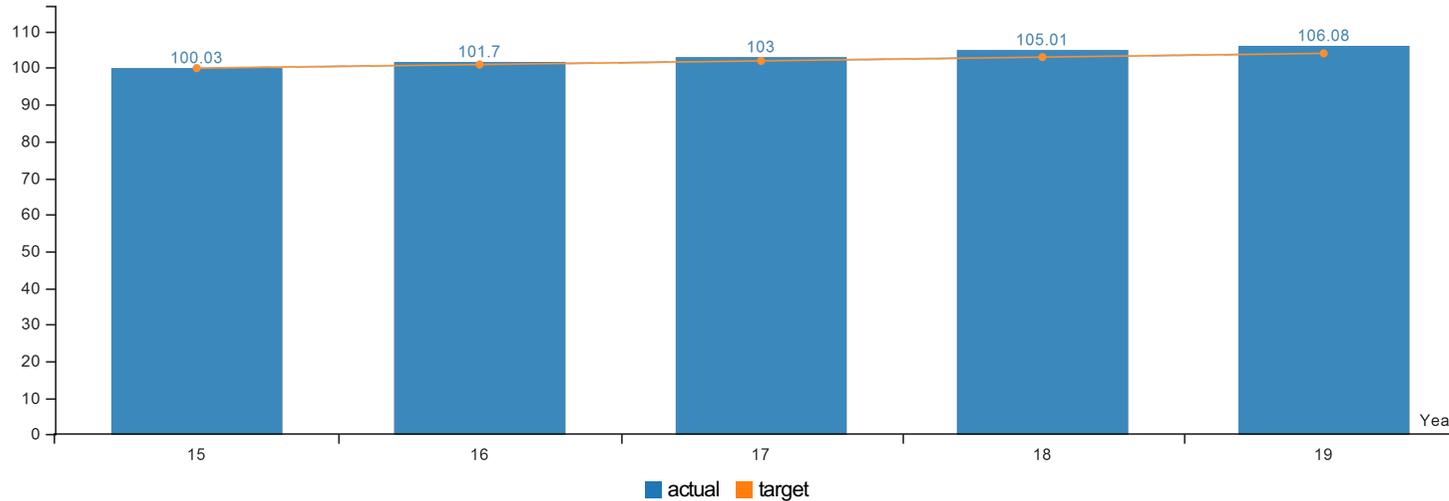
The performance is based on the Oregon Water Quality Index (OWQI). The OWQI describes general stream water quality status and trends. The OWQI also shows the general effectiveness of water quality management activities. No industry standards exist. However, 2018 data for agricultural lands in Oregon indicate about 31 percent of monitored agricultural stream sites with water quality in good to excellent condition. Statewide data for 2018 for all land uses, including agricultural and forest lands indicate about 51 percent of monitored stream sites with water quality in good to excellent condition. These comparisons demonstrate that maintaining forestlands in forest use is an effective and efficient way to maintain water quality.

Factors Affecting Results

Statewide targets were revised in 2018. Where sites show significant improvement not affected by point source discharges, such improvements may be attributed to reduced levels of non-point source activity, increased education about water quality impacts, and watershed restoration efforts. Underlying all of these factors is stream flow. As Oregon transitions between drought and wet years, changes in stream flows and, indirectly, water quality are typically observed. A variety of activities occurring on forestlands, including forest management (timber harvesting and road construction and use), fire suppression, recreation, and livestock grazing, can affect soil and water resources. Disturbances that trigger large erosion events can produce important changes in aquatic conditions. These episodic changes are critical in maintaining aquatic habitat over time, even though they may temporarily decrease water quality. Another factor is the reassignment of sample points between land use classes (e.g., forest to urban or vice versa). These reassignments have taken place and will continue to be refined over time, which may affect water quality results.

KPM #9	VOLUNTARY PUBLIC AND PRIVATE INVESTMENTS MADE TO CREATE HEALTHY FORESTS - Cumulative public and private forest landowner investments made in voluntary projects for the Oregon Plan for Salmon and Watersheds or for the Oregon Conservation Strategy.
	Data Collection Period: Jan 01 - Dec 31

* Upward Trend = positive result



Report Year	2015	2016	2017	2018	2019
Private forestland owner investment in Oregon Plan habitat restoration projects - \$ in millions					
Actual	\$100.03	\$101.70	\$103.00	\$105.01	\$106.08
Target	\$100.00	\$101.00	\$102.00	\$103.03	\$104.06

How Are We Doing

Private forestland owners have made significant investments in improving water quality and fish habitat. Reported cumulative investments for 2019 were \$106 million compared to a target of \$104 million. The 2019 accomplishment level represents the fifth consecutive year that cumulative private investments in Oregon Plan met or exceeded the target. In 2019, private forestland owners invested \$1.07 million. The Department had expected the rate of expenditures to decline over time as more projects were completed and opportunities for restoration decreased. The great recession caused a steep drop in investment corresponding to a steep decline in timber harvest. However, during 2012-2019, restoration activities showed a slight increase and are approximately \$1.7 million average investment per year. At this time, data is not available for investments under the Conservation Strategy.

Private forestland owners are the major contributor to Oregon Plan for Salmon and Watersheds (Oregon Plan) accomplishments, providing over 70 percent of reported private land accomplishments. Oregon is unique among western states in its focus on voluntary measures; voluntary measures work in concert with regulatory approaches to achieve additional habitat protection and restoration.

Factors Affecting Results

The Oregon Plan has been successful because of the strong forestland owner community who work with watershed councils and the Department to achieve restoration and protection goals for natural resources. There continues to be broad support for voluntary measures versus regulatory mandates. ODF Stewardship Foresters provide education and technical assistance to landowners in support of restoration activities. The economic downturn significantly affected the housing market and corresponding demand for wood products. Timber harvests, the primary forest operation during which restoration activities occur, dropped by one billion board feet from 2007 to 2009. In addition, 2009-11 departmental budget reduction eliminated Oregon Plan funding and about 40

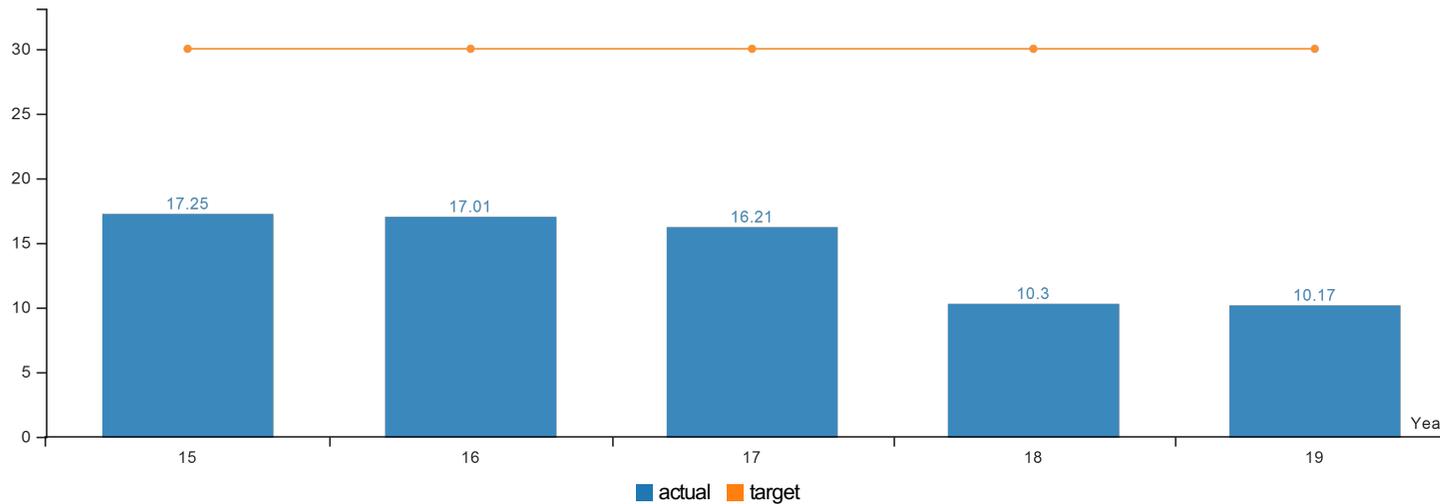
percent of stewardship foresters (from 60 to 30 field foresters) who encourage and provide technical assistance for these types of projects including encouraging reporting. After building back some capacity for this work, the department took a 40% reduction for the 2017-19 biennium for Oregon Plan funding. The funding level continues to remain at this reduced level for the 2019-21 biennium. Oregon Plan funding supports coordination with watershed councils and other groups that encourage restoration.

Voluntary restoration activities by landowners, combined with continued regulatory compliance, provide a foundation for the success of the Oregon Plan in protecting and restoring water quality and fish habitat on forestland. The Oregon Conservation Strategy provides an analogous voluntary framework for restoration of all habitat types. The Conservation Strategy emphasizes proactively conserving declining species and habitats to reduce the possibility of future federal or state listings. The strategy presents issues and opportunities, and recommends voluntary actions that will improve the efficiency and effectiveness of conservation in Oregon. The Department revised its stewardship agreement program to improve efficacy at encouraging forestland owners to self-regulate to meet and exceed applicable regulatory requirements and achieve conservation, restoration and improvement of fish and wildlife habitat and water quality. The Department developed a programmatic Safe Harbor Agreement for Northern Spotted Owls to provide regulatory certainty and encourage voluntary enhancement of owl habitat.

In 2016, the Department completed a project, along with the Oregon Watershed Enhancement Board and the Oregon Forest Resources Institute, to evaluate and better understand what has been accomplished by private forestland owners under the Oregon Plan and identify any potential barriers to implementing and reporting voluntary restoration activities. This work included a survey of forestland owners in the coast range to identify any perceived or real barriers to implementing and reporting voluntary measures. The final report was received in July 2016 and the results were presented to the Oregon Board of Forestry and the Oregon Watershed Enhancement Board. ODF, agency partners, and private landowners are currently evaluating next steps.

KPM #10	STATE FORESTS NORTH COAST HABITAT - Complex forest structure as a percent of the State Forests landscape.
	Data Collection Period: Jul 01 - Jun 30

* Upward Trend = positive result



Report Year	2015	2016	2017	2018	2019
Complex structure as a percent of the State Forests landscape					
Actual	17.25%	17.01%	16.21%	10.30%	10.17%
Target	30%	30%	30%	30%	30%

How Are We Doing

The FY 2018 data show that 15.2% of Astoria district, 9.2% of Forest Grove district, and 7.9% of Tillamook district are in complex forest structure.

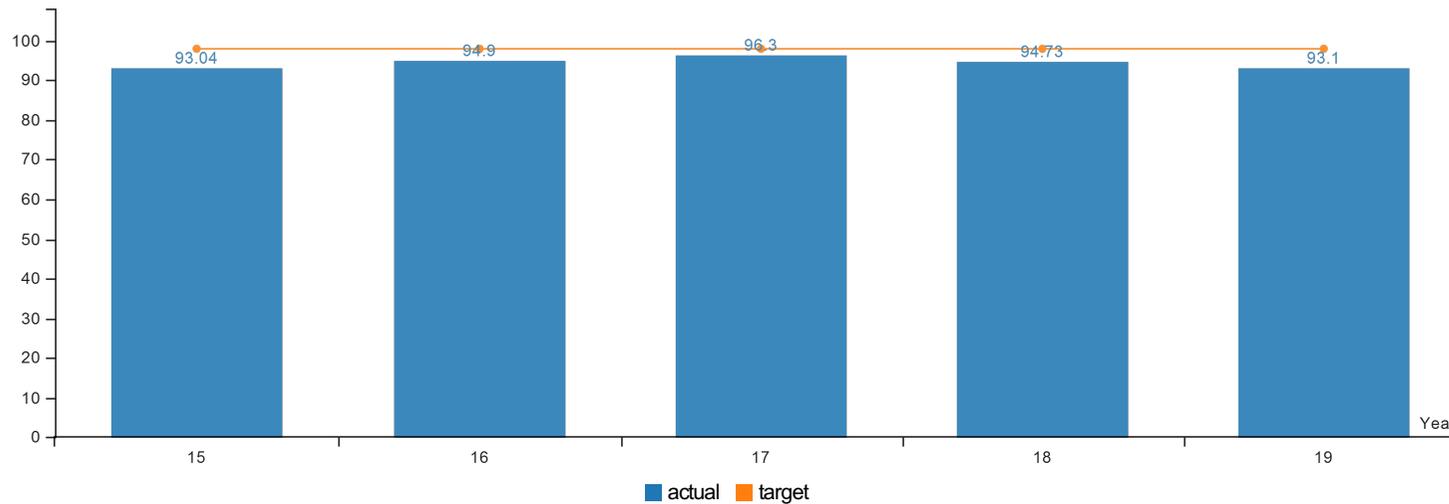
Factors Affecting Results

Complex forest structure develops very slowly and it is anticipated to take decades to achieve the range of 30 to 50% complex structure now described in the forest management plans. ODF's Stand Level Inventory (SLI) system is not designed to report on year-to-year difference but rather indicate longer term trends.

The year-to-year changes in complex structure are the result of updates to SLI data as well as active management designed to enhance the development of complex forest structure over time. Following an external expert review, ODF adopted a new growth model in 2018 to improve consistency of inventory estimates. The new growth model provides improved estimates of stand growth and development; however, further refinements are needed to accurately estimate complex forest structure. As a result the estimates may change as the refinements are implemented and new information becomes available.

KPM #11	FIRE SUPPRESSION EFFECTIVENESS - Percent of wildland forest fires under ODF jurisdiction controlled at 10 acres or less.
	Data Collection Period: Jan 01 - Dec 31

* Upward Trend = positive result



Report Year	2015	2016	2017	2018	2019
Percent of wildland forest fires controlled at 10 acres or less					
Actual	93.04%	94.90%	96.30%	94.73%	93.10%
Target	98%	98%	98%	98%	98%

How Are We Doing

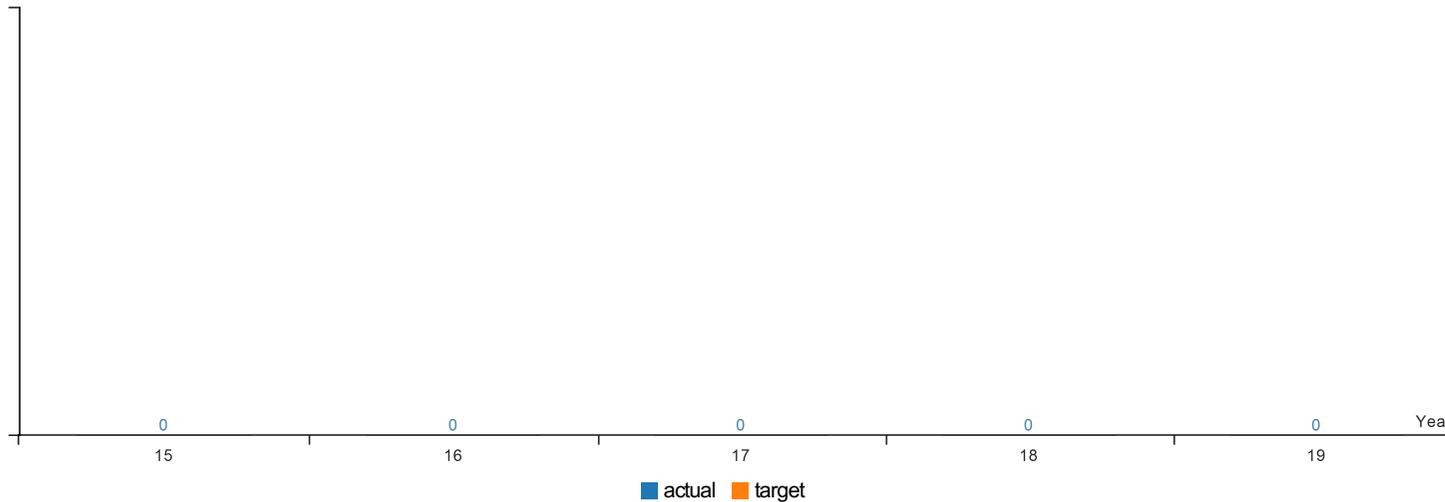
The Department was not able to meet the target of suppressing 98 percent of all wildfires at ten acres or less in size for the 2018 fire season. We were 5% under target at 93.1%.

Factors Affecting Results

Influencing factors: 2018 was another historic fire season year with sustained, intensive wildfire activity, an increase in human-caused fires, and severe conditions including multiple thunderstorm/dry lightning fire ignition events. Fire environment conditions that contribute to large fire growth intensified very quickly to sustained record levels in many areas across the state. Multiple simultaneous large and severe fires on neighboring jurisdictions also threatened ODF-protected lands, stretching all firefighting resources thin. Comparing 2018 with our 10-year average, there were 17% more fires and 127% more acres burned. There were 32% more human-caused fires and 272% more protected acres burned from human-caused fires than the average.

KPM #12	PREVENTION OF HUMAN-CAUSED WILDLAND FOREST FIRES - Number of Oregon residents per human-caused wildland forest fires. (population expressed in thousands of residents) This metric measures the ability to maintain or reduce the number of human-caused wildfires as the population of Oregon increases. An upward trend indicates a positive result.
	Data Collection Period: Jan 01 - Dec 31

* Upward Trend = positive result



Report Year	2015	2016	2017	2018	2019
Number of Oregon residents per human-caused wildland fire					
Actual	No Data				
Target	TBD	TBD	TBD	TBD	TBD

How Are We Doing

Key Performance Measure #12 was modified during the 2019 Legislative Session to report as a number of Oregon residents per human-caused wildland forest fire compared to previously reporting the number of human-caused wildland forest fires per 100,000 Oregon residents. With previously set legislative targets reporting on the number of fires, prior year data has been omitted from the report table. Results for the 2019 reporting year are reflected in the following narrative. The legislatively approved target for this measure in 2020 is 5.2 thousand Oregon residents per human-caused wildland forest fire (population expressed in thousands of residents).

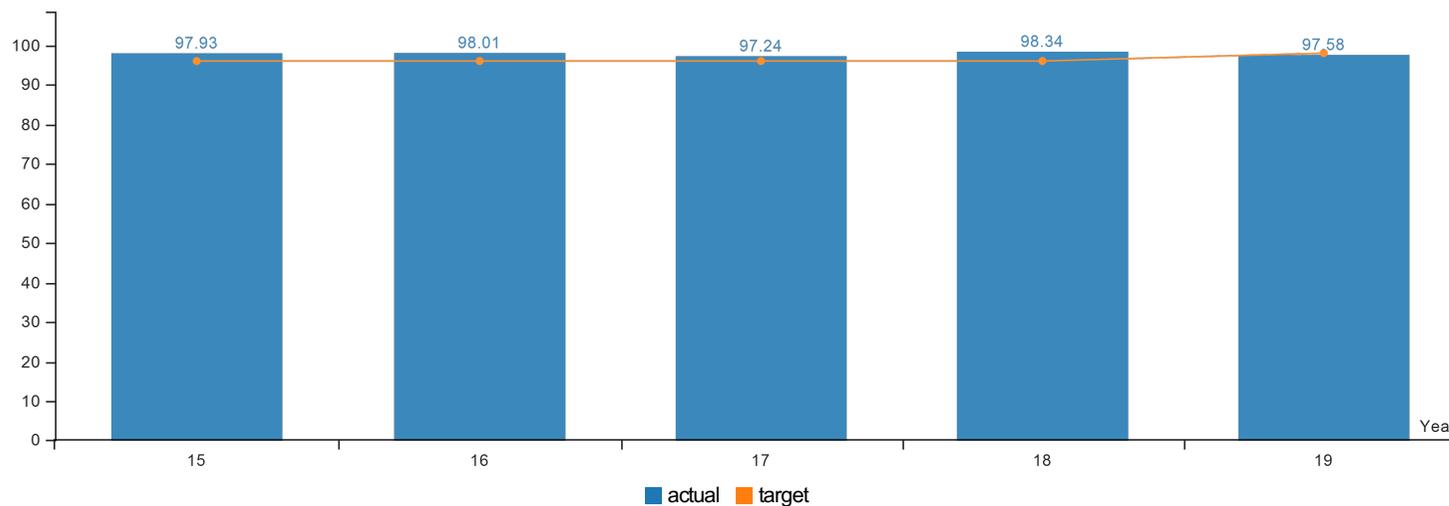
The fire prevention program continues to examine new and effective approaches to prevent human-caused wildland fires. There were 892 human-caused wildland fires in 2018. With Oregon's population increasing to 4,195,300, the resulting fire prevention rate was 4.7 thousand Oregon residents per human-caused wildland forest fire. This compares to 5.2 thousand Oregon residents per human-caused wildland fire in 2017 and 5.4 thousand Oregon residents per human-caused wildland fire in 2016. The 10-year average of human-caused wildland fires is 675 fires annually.

Factors Affecting Results

Steady increase in Oregon's population and the use of forestland for recreation as well as increasing rural residential home sites affected these results. Heavily populated areas of the state, where weather and fuel conditions are aided by public activities, such as debris burning, equipment use, and forest recreation, drive the data.

KPM #13	DAMAGE TO OREGON FORESTS FROM INSECTS, DISEASES, AND OTHER AGENTS - Percent of forest lands without significant damage mortality as assessed by aerial surveys.
	Data Collection Period: May 01 - Oct 31

* Upward Trend = positive result



Report Year	2015	2016	2017	2018	2019
Percent of Oregon forestlands without significant damage from insects, diseases and other agents					
Actual	97.93%	98.01%	97.24%	98.34%	97.58%
Target	96%	96%	96%	96%	98%

How Are We Doing

The percent of Oregon forestlands without significant damage from insects, diseases and other agents consistently align with the KPM targets. The majority of tree mortality detected during statewide aerial surveys over the last decade has been due to bark beetles, many of which are attacking trees stressed by other primary factors such as drought, fire damage, disease and overstocked stands. Some pest agents are on the rise such as the non-native, sap-sucking insect balsam woolly adelgid which attacks true firs and remains an ongoing and untreated problem primarily on U.S. Forest Service ownerships. Management is often not feasible in these remote areas and the number of fir trees continues to diminish. What is not measured via aerial survey are many pathogens that cannot be identified aerially such as root diseases. Young conifer mortality which is captured via aerial survey is a combination of vertebrate animal damage and root disease, and is estimated by researchers to be about 80% attributable to root disease. Cooperative trapping surveys and monitoring for high-priority, non-native insects continued in 2018 and resulted in the detection of 35 European gypsy moths (all west of the Cascades) but no Asian gypsy moths. In 2019, the Oregon Department of Agriculture led a ground-treatment for gypsy moths in Benton County at the site where 27 gypsy moths were collected. 2018 marked the third and last year of the exotic, woodboring insect monitoring project along the Columbia River. This trapping effort produced four non-native species that are new to the Pacific Northwest.

Factors Affecting Results

Over the last decade, an average of over 1 million acres of forest lands have been designated as having been significantly affected by insects, diseases, and other damaging agents during aerial surveys. Thousands more acres are unhealthy and under-producing due to being overstocked, planted off-site, exposed to environmental stresses such as drought, and stagnating from the suppression of natural fire cycles. These acres are becoming increasingly susceptible to damage by environmental stressors, insects and diseases. While the statewide aerial survey data provides valuable information about key forest damaging agents, aerial surveys are just an estimate and are not able to evaluate the impact of many forest diseases, nor indicate the current or future risk of forests to damage by environmental stressors, insects and diseases. In Oregon, thousands of acres of forests need active management to reduce the risk of insect outbreaks and catastrophic

wildfires to produce resilient and sustainable forests. A century of fire suppression and inconsistent forest management has resulted in thousands of acres of Oregon's forests becoming overstocked and unhealthy. In addition, changing climatic conditions that contribute to drought directly cause damage or increase susceptibility to insects and disease. Thinning stands to reduce competition, promote tree health and vigor, and increase age and species diversity, have been shown to reduce the risk associated with many damaging insects and diseases. Federal bark beetle mitigation grants, administered by the Department's stewardship foresters, provide cost share funds to landowners to implement activities to improve forest health and increase stand resistance to bark beetles. Federal National Fire Plan funds also provide cost-share to landowners to improve forest health and prevent damage within the wildland-urban interface. However, as limited funds are available each year, the total acres of private forest lands treated annually is relatively limited and is unlikely to affect overall statewide trends.