



BLM Western Oregon Protection Study 2006 - 2015

BLM Financial Impacts to
Oregon Forest Land Protection
Fund (OFLPF) in Western Oregon,
2006-2015

February 2017



Prepared by the Oregon
Department of Forestry

BLM Western Oregon Protection Study – Abstract

The BLM Western Oregon Protection Study was initiated through a recommendation of the 2015-2016 ODF Fire Program Review Committee to focus on the financial impacts and stability of the Oregon Forest Land Protection Fund (OFLPF). Information displayed in this report uses “BLM” to identify revenue, costs and acres exclusive to BLM ownership within the study area. The Fire Program Review recommendations included:

“Recommend ODF, EFCC and BLM initiate a study examining the equity of BLM contributions to large fire funding compared to large fire costs expended on BLM lands and present alternatives for reconciling any identified issues to agency leaders.”

Oregon’s unique and successful wildfire protection system is rooted in its collaborative funding mechanisms to provide for base fire protection, severity resources and large fire suppression costs. This protection system is intended to be responsive and equitable to public and private landowners, and protective of the inherent public values which are impacted by wildfires (clean air and water, fish and wildlife habitat and recreational opportunities.) Funding sources to Oregon Forest Land Protection Fund include assessments and surcharges from those public (including BLM) and private lands protected by ODF. They include acreage assessments, forest products harvest tax, assessments on minimum and improved lots and earned interest from the fund balance. BLM’s participation is connected to OFLPF by virtue of ODF Protection through a service contract.

A complete and coordinated fire suppression system in Oregon is the foundational principle for the most efficient delivery of fire protection services and to limit resource loss, environmental damage and suppression costs across Oregon’s complex landscape of shared boundaries. This is especially applicable in the matrix lands of western Oregon where BLM and private lands are intermixed in a checkerboard ownership pattern. The goal of this study is to inform decision makers on the funding of Oregon’s wildfire protection system to make it as equitable and robust as possible. The data developed by the BLM Protection Study presents its findings as those of “BLM” or combined all “Other” ownerships receiving ODF protection and large fire funding within the Study Area (Appendix 1, Map 1).

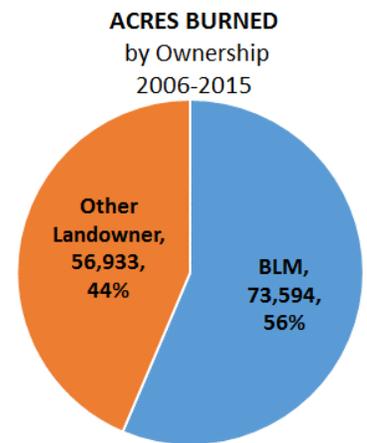
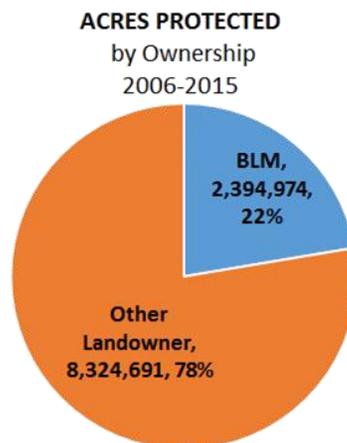
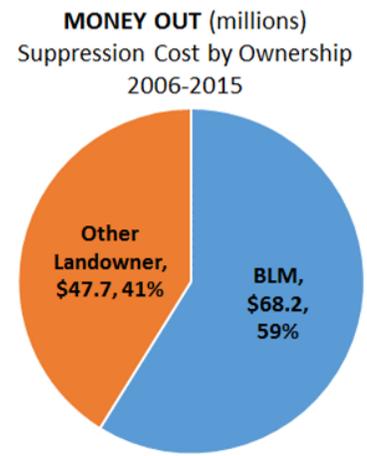
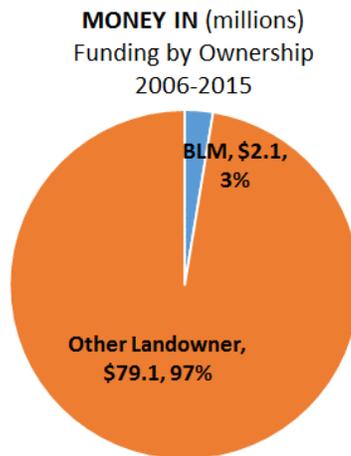
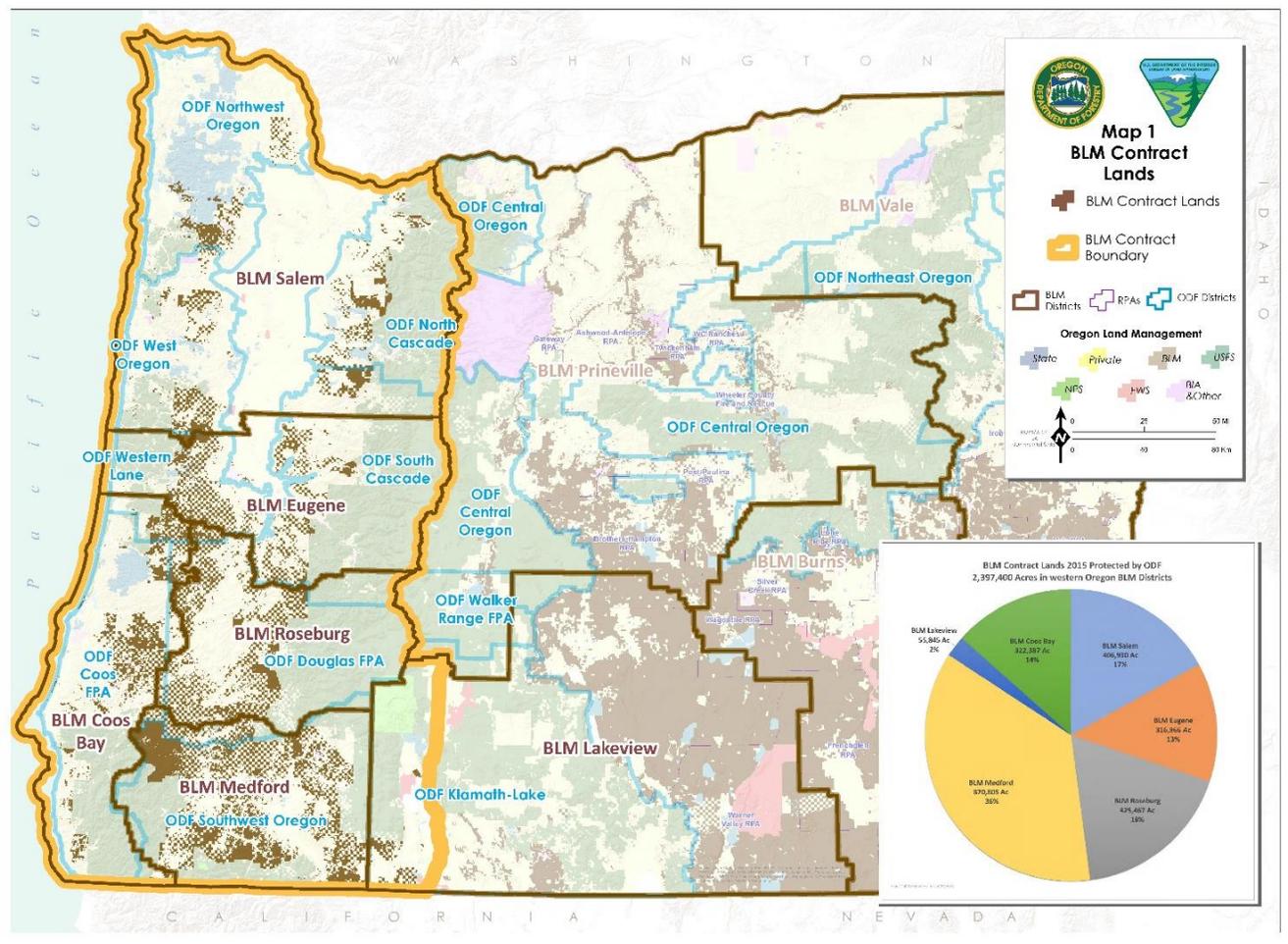




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BLM Western Oregon Protection Study – Area Map (Appendix 1, Map 1)



Within the study area, current total ownership acres include (Minor changes in number of acres each year accounted for in Study):

- BLM 2,394,974 acres – 22% of area
- All Other 8,324,691 acres – 78% of area

Introduction

The BLM Western Oregon Protection Study was initiated through a recommendation of the 2015-2016 ODF Fire Program Review Committee (Appendix 3) to focus on the impacts and stability of the Oregon Forest Land Protection Fund (OFLPF) in regard to BLM participation. The Sustainable Wildfire Funding Recommendation #3 is: ***“Recommend ODF, EFCC and BLM initiate a study examining the equity of BLM contributions to large fire funding compared to large fire costs expended on BLM lands and present alternatives for reconciling any identified issues to agency leaders.”***

This study was based on the requirements of this recommendation and was initiated by the Emergency Fire Cost Committee (EFCC) on June 7, 2016. Appendix 4 details the Project Charter, dated 9/6/2016 and includes a complete list of members of the steering committee who contributed to this report.

It is difficult to quantify all the contributions that support this successful and cooperative system. This study acknowledges, but does not include additional contributions such as preparedness, suppression response and severity support from landowners, Oregon Department of Forestry (ODF) and Bureau of Land Management (BLM) because they are not accounted for through OFLPF which is the focus of this study.

While the report focuses on BLM participation, this report also recognizes that nearly 71% of OFLPF annual income source is from minimum and improved lot surcharges which are almost exclusively collected from rural residential private ownerships. This becomes a significant contribution when comparing any individual ownership category. Although with a focus of specific BLM impacts, all non-BLM ownership participants have been incorporated as “Other” for the comparison in this report.

While Oregon’s complicated financial wildfire funding system may be difficult to explain, we must not lose sight that it continues to work and be effective because of everyone’s dedication and contributions, operationally and financially. It has continued to be successful due to the participants’ commitment to continuous improvement and continual review.

The analysis is reviewed from this perspective as opposed to specific limitations and components of the relationship and contract stipulations of the ODF – BLM Western Oregon Fire Protection Services 5-Year Contract (readiness and initial attack response). While there is connection between readiness-initial attack responsibilities and large fire funding, there is only a slim connection (overlap) within the contract payment which is designated specifically to OFLPF for large fire suppression cost. This component is the amount paid under the specific annual “Per Acre Assessment” (\$0.05/acre – western Oregon timber, \$0.075/acre eastern Oregon timber and statewide grazing). While not included in the contract agreement, there is an additional OFLPF contribution made through Oregon’s Forest Product Harvest Tax (FPHT, ORS 321.015(2)). This amount is \$0.625/mbf of merchantable timber harvested statewide, on all ownerships. Both contributions dedicated to OFLPF have been accounted for in the analysis although the Acreage Assessment is the only actual connection to the protection services contract.

Oregon’s Large Wildfire Funding System (Appendix 6)

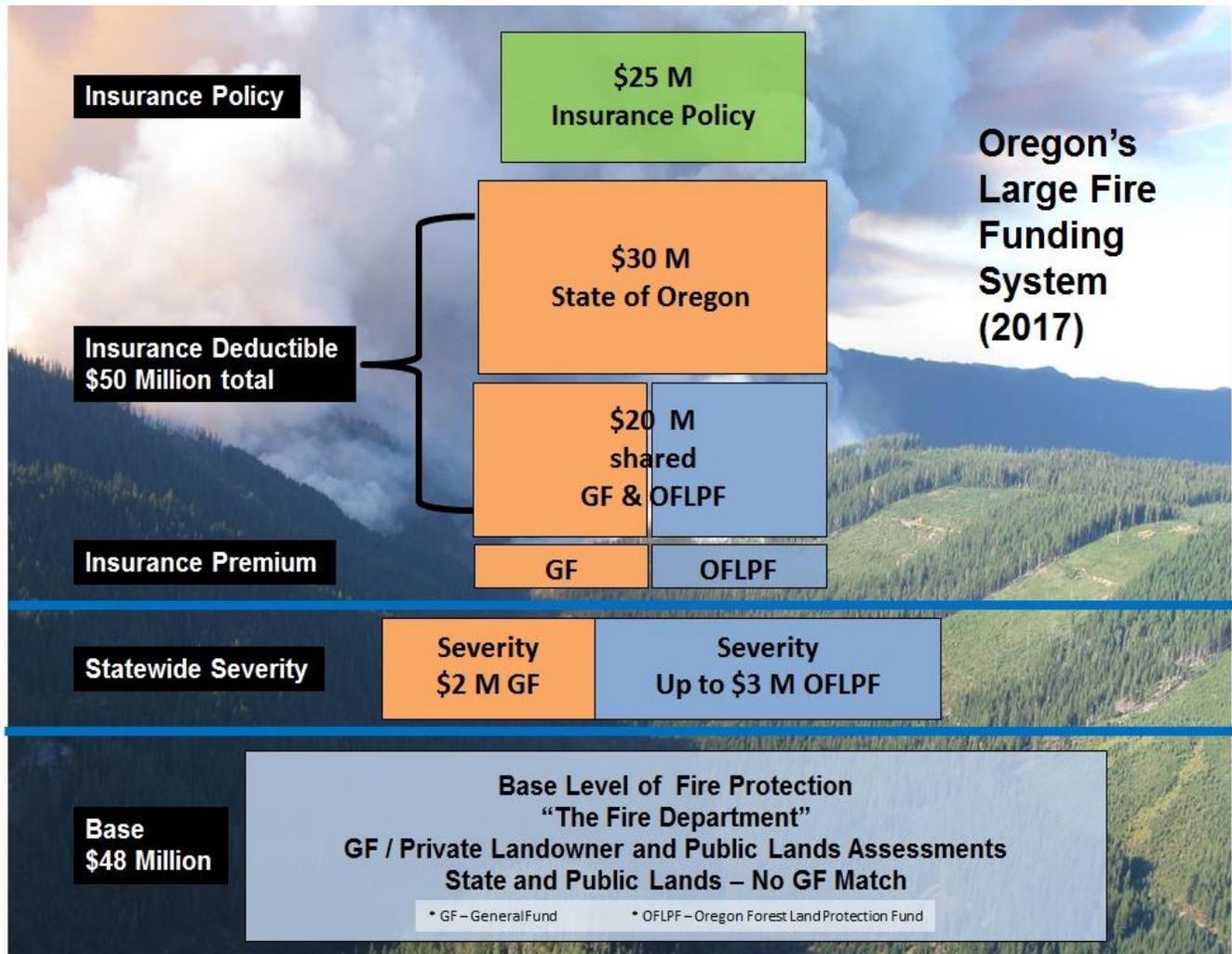
Oregon’s unique and successful wildfire protection system is rooted in its collaborative efforts including Oregon’s large funding system intended to be responsive and equitable to public and private landowners and protective of the inherent public values that are also impacted by wildfires (clean air and water, fish and wildlife habitat and recreational opportunities). The system is sourced with a combination of public contributions through State of Oregon as appropriated General Funds (GF), assessments and surcharges from public and private lands, cost recoveries from responsible parties, Federal Emergency Management Agency (FEMA) funds when incidents are eligible for assistance, and insurance coverage of up to \$25 million above a shared deductible of \$50 million (equally shared \$20 million GF and OFLPF, with the final \$30 million determined by the State of Oregon.)

The funding system has three key components: the base level of fire protection at the local district level includes costs for readiness, prevention, initial and extended attack on fires. The second is state-wide severity, which provided for resources during peak fire conditions. The third is focused on large fire suppression funding. Each component has administrative costs in addition to operational expenses. The elements of all three components are illustrated in Figure 1 below.

The focus of this study is on the operational and administrative costs to Oregon’s large fire funding system, with emphasis on OFLPF. The purpose of this fund is set in Oregon Statute (ORS 477.755 (2)(a)) “for the purpose of: equalizing emergency fire suppression costs for safeguarding forest land in any forest protection district.” Maintaining the stability of the OFLFP and the effective utilization of resources to reduce suppression cost and resource loss is the foundation and responsibility of the Emergency Fire Cost Committee (EFCC).

The “Gateway” in accessing the full suite of collaborative suppression funds is through ODF protection and fires determined to be “OFLPF eligible” after meeting established criteria. Data from these OFLPF eligible incidents are the only considerations used in this analysis.

Figure 1. Oregon’s Large Fire Funding System Diagram (Appendix 6)



While the diagram depicts statewide funding components, the BLM Western Oregon Protection Study provides data specific to public and private ownerships in the area under ODF fire protection within the study area (Appendix 1, Map 1). The area includes BLM acres in all western Oregon ODF/association districts (Northwest Oregon and Southern Oregon Area) and BLM lands in the Klamath-Lake ODF District, west of Highway 97 and south of Township 33 South.

BLM Western Oregon Protection Study Analysis (Review Period 2006-2015)

Information displayed here uses “BLM” to mean revenue, costs and acres exclusive to BLM within the study area only. The term “Other” depicts all other public and private ownership revenue, costs and acres combined within the same study area.

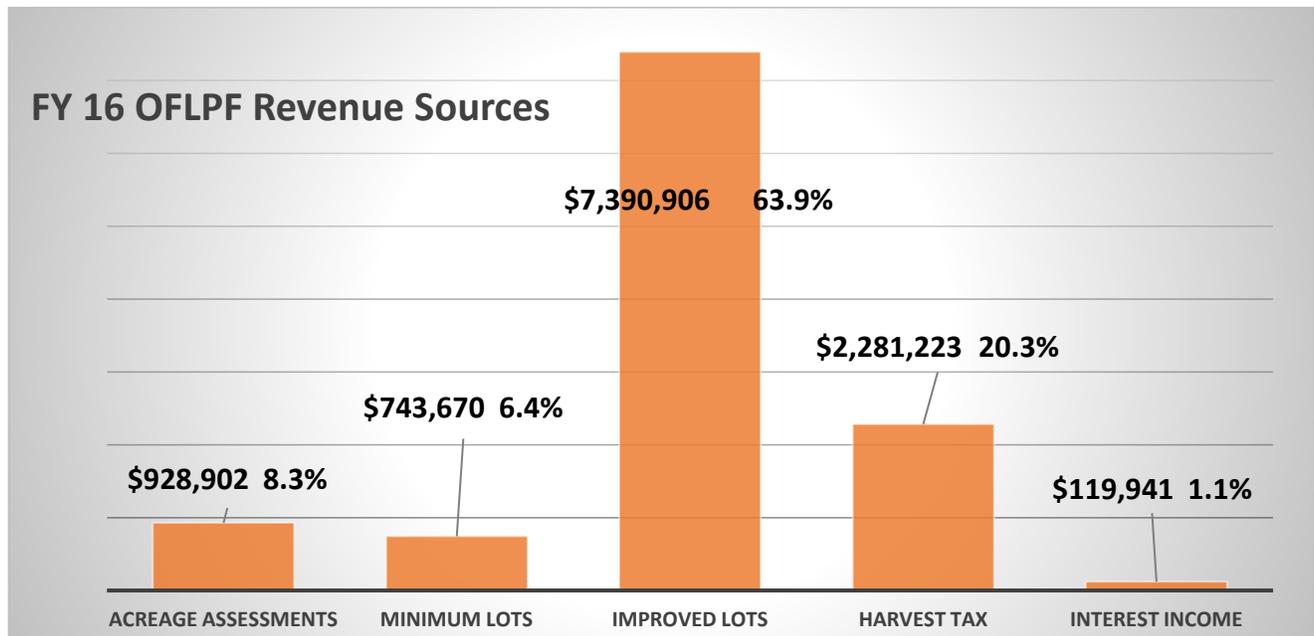
OFLPF Revenue Sources – Collected from all ODF Protection Participants

Current Annual OFLPF revenue sources /rates include (Rate changes during study period reflected);

- **Acres Assessments** – (\$.05/ac western Oregon timber, \$0.075/ac eastern Oregon timber and statewide grazing)
- **Minimum Lots** – (\$18.75/ lot, (\$15.00 remains at the local District, \$3.75 goes to OFLPF))
- **Improved Lots** – (\$47.50/ lot, total amount goes to OFLPF)
- **Harvest Tax** – (\$0.625/mbf, on all merchantable timber (public or private), all goes to OFLPF)
- **Interest Income** – From OFLPF funds deposited with the Oregon State Treasurer

NOTE: The greatest amount of OFLPF revenue comes from improved lots (63.9%). There are no improved lots assessed on BLM lands. Annual revenue to OFLPF in FY 2016 was \$11,220,604.

Figure 2. FY 16 OFLPF Revenue Sources (From Appendix 2 – Tables 1, 1B, 1C and 1D)



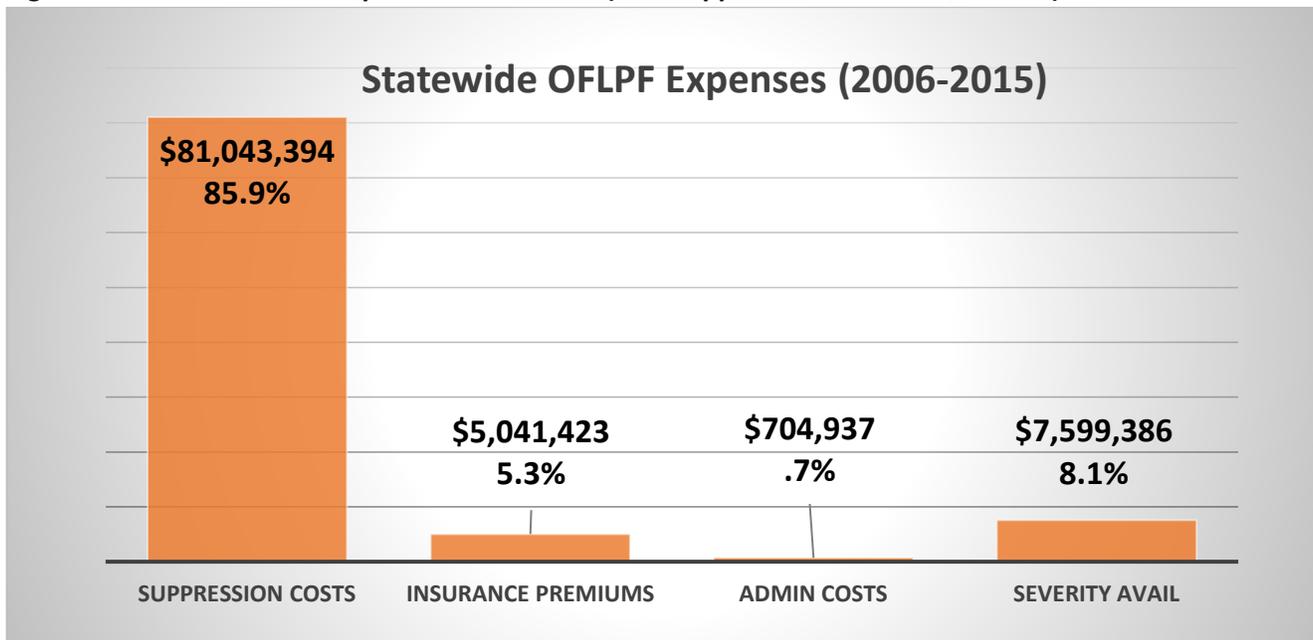
OFLPF Expenditures

Expenditure limits to OFLPF are set in Oregon Law, Oregon Revised Statute (ORS) 477.755(3). The cap for total expenses is \$13.5 million annually. OFLPF Statewide Expenses (2006-2015) are shown in Figure 3 below (Appendix 2, Tables 2, 3 and 4).

OFLPF Expenditures, statutory requirements (ORS 477.755 (3)) effective July 1, 2017, “may not exceed the lesser of:

- (a) \$13.5 million; or (b) The sum of:
 - **(A) Suppression Costs** – “The lesser of \$10 million or 50 percent of the eligible annual fire suppression costs determined by the committee (EFCC);”
 - **(B) Administrative Costs** – “Necessary administrative expenses as determined by the committee and authorized under the limit described in subsection (2)(b)of this section;”
 - Payroll and Operating Expenses – Administrator and Finance Coordinator
 - **(C) Insurance Premiums** – “Contributions to the payment of emergency fire suppression costs insurance premiums, subject to the payment limitation established in ORS 477.775 (4);”
 - **(D) Severity Availability** – “The lesser of \$3 million or three-fifths of the actual cost of activities described in ORS 477.777 (1)(b) and (c)
 - Actual usage costs are included in individual fire suppression costs once assigned to incident
 - **Strategic Investments - ORS 477.755 (2)(e)** -- “Paying for nonroutine purchases of supplemental fire prevention, detection, or suppression resources that will enhance the ability of the forester to perform fire protection responsibilities within a forest protection district.”

Figure 3. Statewide OFLPF Expenses 2006 – 2015 (From Appendix 2 – Tables 2, 3 and 4)



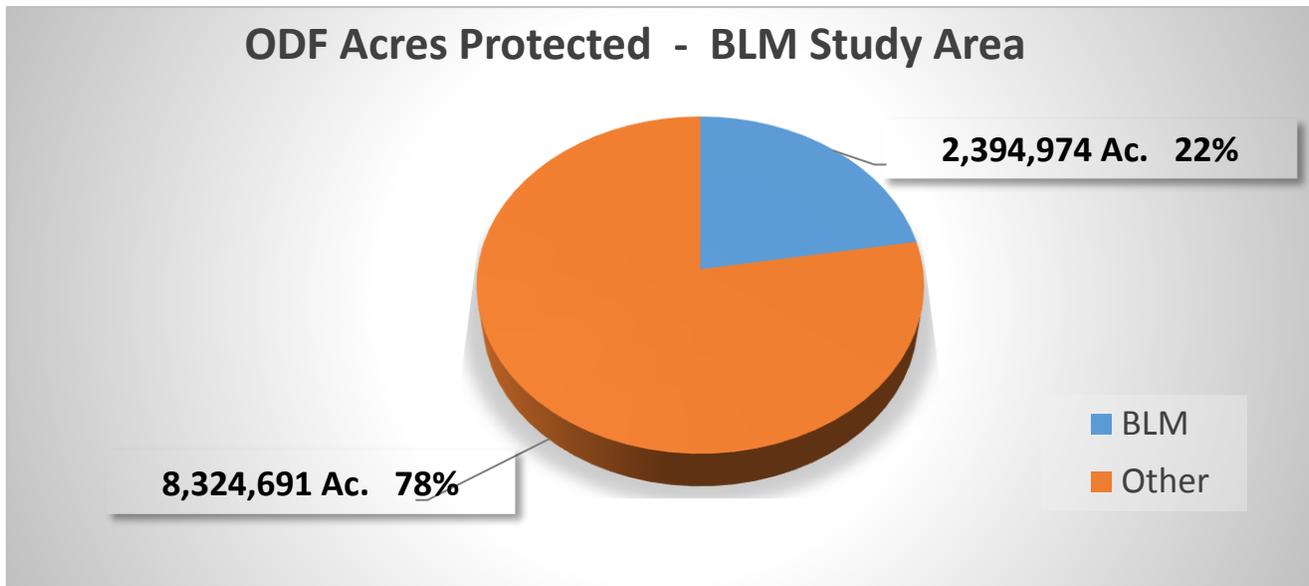
Note: Figure 3 illustrates Statewide OFLPF expenses during the study period. It shows a Suppression Cost amount just over \$81 million. This report will discuss suppression costs on BLM and Other ownerships during the same study period, within the study area only, which were in excess of \$115 million. The chart above reflects amounts with consideration of the expenditure cap for the OFLPF for suppression actions statewide. The difference in amounts paid for suppression come from the additional Oregon large fire funding system participants; public General Funds, insurance, collections from responsible parties, Federal Emergency Management Agency (FEMA) and other agency reimbursements. Only OFLPF obligation is shown above.

OFLPF expenditures that are not for specific suppression costs on individual fires are made annually on a statewide basis and are critical to large fire suppression funding system. These non-suppression costs include: 3/5 share of severity availability funding (\$3 million), 50% of the annual insurance premium (the premium is now about \$4 million after the two years of using the entire policy) and the administrative expenses of the fund (about \$0.1 million.) Statewide, BLM acres are 14.8% of the total ODF protected acres. A proportional share of these costs would be about \$750,000 for BLM and about \$4.3 million for Others annually.

ODF Acres Protected within Study Area

BLM lands within protection area include those properties in Northwest and Southern Oregon Area ODF districts, Douglas and Coos Forest Protective Associations, and lands west of Highway 97 and south of Township 33 South in ODF Klamath-Lake District. (Study Area Map, Page 3)

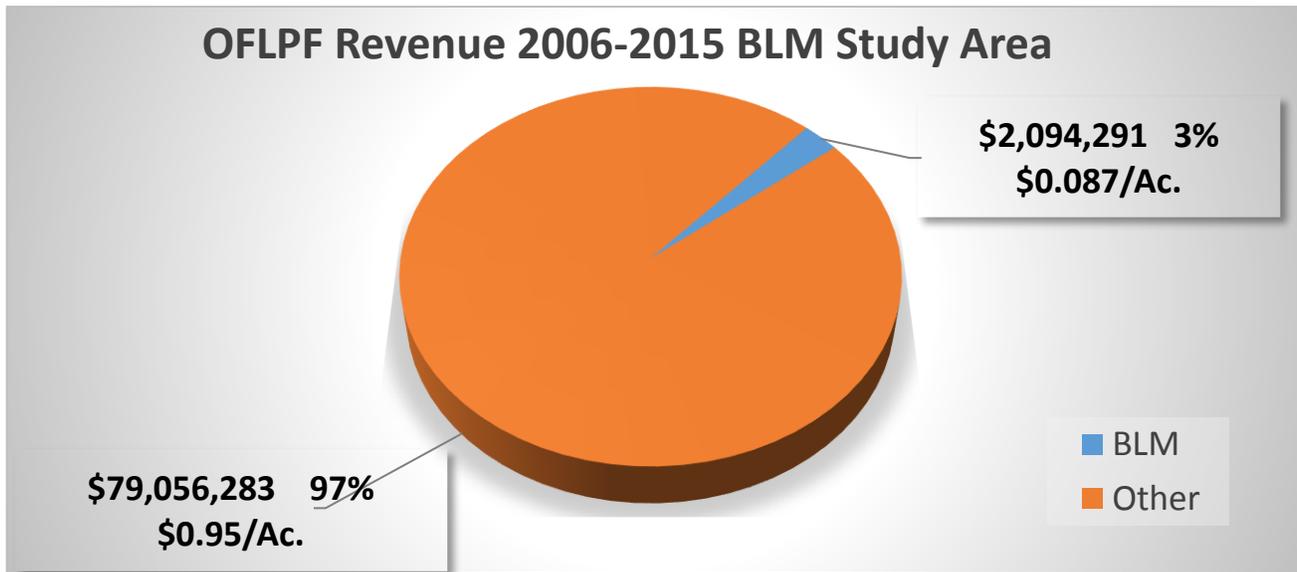
Figure 4. ODF Acres Protected – BLM Study Area



Revenue Comparison 2006-2015 – (Study Area Only - 10-year totals) (Appendix 1 – Tables 1, 1B, 1C, 1D)

<u>BLM</u>	Total Harvest Tax	\$ 894,147	\$0.0373/acre	
	Total Acreage Assessment	\$1,200,144	\$0.0501/acre	
	Total	\$2,094,291	\$0.0874/acre	3% of Total
<u>Other</u>	Total Harvest Tax	\$18,340,732	\$0.2203/acre	
	Total Acreage Assessment	\$ 5,256,985	\$0.0631/acre	
	Minimum & Improved Lots	\$55,458,566	\$0.6662/acre	
	Total	\$79,056,283	\$0.9497/acre	97% of Total

Figure 5. OFLPF Revenue 2006-2015 BLM Study Area – 10 year total
(From Appendix 1 – Tables 1, 1B, 1C and 1D)



Suppression Expenditures – Study Area

Evaluating suppression expenditures for the study period began by developing a database (Appendix 2, Table 6) including data from ODF FIRES Database and matching with financial records from OFLPF. All fires within the Study Area in excess of 10 acres (Class C through Class G) that received funding from OFLPF were included (103 fires). Fires that were above 10 acres, but received no reimbursement from OFLPF (prior to meeting OFLPF district deductible) were excluded. Fires smaller than 10 acres, but included within a grouping of fires (a “Complex”) were included in analysis (153 fires). A total of 256 fires were reviewed and utilized in this analysis. Where fires were on both BLM and Other owners, costs were allocated in proportion to number of burned acres. Note: all costs utilized were net of all cost recovery.

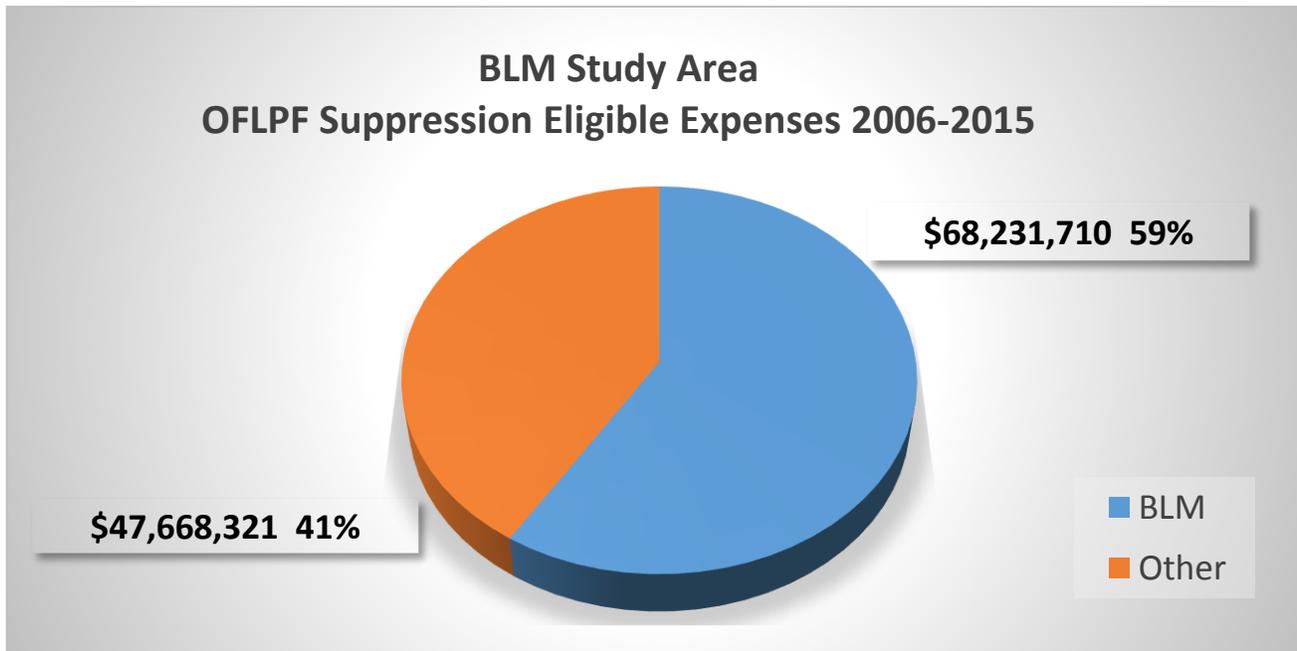
Fire information for numbers, cost and size were arranged by the following criteria:

- Year (2006-2015)
- Size Class (in acres):
 - C-10.01-100.00, D-100.01-300.00, E-300.01-1000.00, F-1000.01-5000.00, G->=5000.01
- Ownership (Exclusive BLM Ownership, Mixed Ownerships, Exclusive Other Ownership)
 - Data for BLM and Other in Mixed Ownership fires were accounted for independently.
- Acres Burned
- Number of Fires

<u>BLM</u>			<u>Other</u>		
Acres	Ownership	Cost	Acres	Ownership	Cost
27,986	BLM Exclusive	\$33,556,745	2,808	Exclusive Other	\$6,518,349
45,608	BLM Mixed	\$34,674,965	54,125	Other Mixed	\$41,149,972
73,594	BLM Total	\$68,231,710	56,933	Non-BLM Total	\$47,668,321
56%		59%	44%		41%

A Map of 10 Acre + Larger Fire Locations is available – Appendix 1, Map 2.

Figure 6. OFLPF Suppression Eligible Expenses 2006-2015 – 10 year total (From Appendix 2 – Table 3)



Summary – 10-Year Period

There is a stark difference between conditions and outcomes across the 10-year period reviewed. Figures 7 and 8 below derived from Tables in Appendix 2, depict the combined more “normal” conditions for the 7-year period (2006-2012) and “severe” conditions for the 3-year period (2013-2015). Significant program cost increases are a direct result of the severe 2013-2015 fire season expenses. Costs for insurance premium increased from just under \$1 million to over \$4 million annually and annual insurance deductible increased from \$20 million to \$50 million with a new State of Oregon deductible exposure of \$30 million. Summary for the 10-year period, specific to the study area includes:

- OFLPF Revenue and Expense:
 - **BLM total Revenue into OFLPF was \$2,094,291 (3% of all Revenue) with total suppression expenses of \$68,231,710 (59% of all suppression costs) and 22% of acres protected.**
 - **All Other Revenue into OFLPF was \$79,056,283 (97% of all Revenue) with total suppression expenses of \$47,668,321 (41% of all suppression costs) and 78% of the acres protected.**
 - Note: As mentioned previously the total suppression costs shown above include the collected OFLPF Revenue and suppression expenditures governed by statutory limits plus a mix of funds including: insurance funds and General Funds depending on year. Suppression costs paid by the General Fund occurred in years 2013, 2014 and 2015. Insurance paid suppression costs only in 2014 and 2015.
- Acres burned (value of resource and habitat loss were significant but not part of this study):
 - BLM acres burned - 73,594 acres represents 3.1% of total BLM acres protected.
 - Other acres burned – 56,933 acres represents 0.7% of total Other acres protected.

Data in Figures 7 and 8 is provided to describe the following;

“BLM Exclusive” - limited to fires involving BLM lands only,

“Exclusive Other” - limited to fires involving only Other lands,

“BLM Mixed” - exclusive to BLM on fires involving both (“mixed”) BLM and Other ownerships,

“Other Mixed” - exclusive to Other on fires involving both (“mixed”) BLM and Other ownerships.

Figure 7. Total Fire Expenditures (From Appendix 2 – Expenditure Tables)

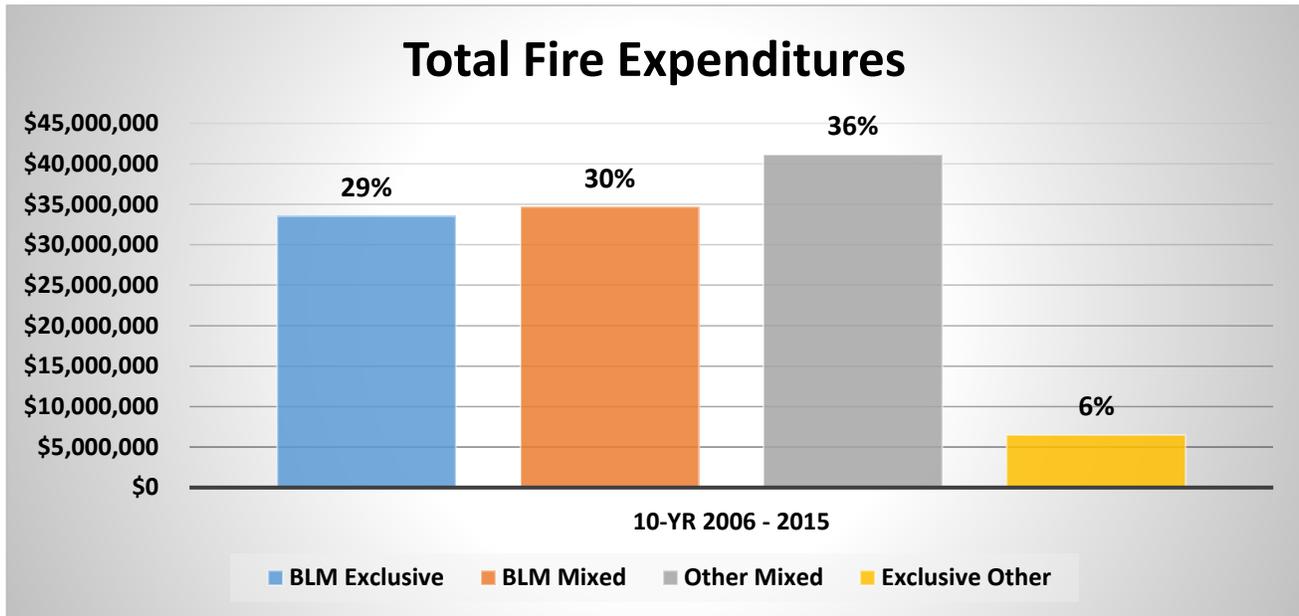
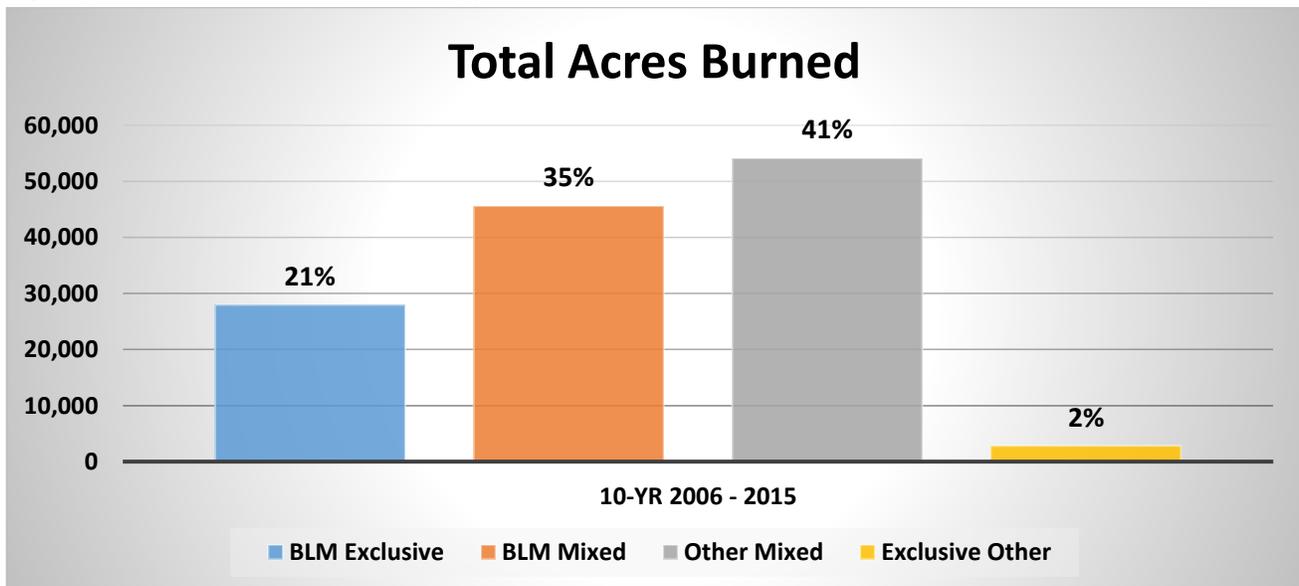


Figure 8. Total Acres Burned (From Appendix 2 – Tables 4 and 5)



Conclusion

This financially focused study utilizes data from responsible agencies and entities relating to exclusively eligible revenue and expenses for the Oregon Forest Land Protection Fund. This report does isolate BLM financials in comparison to the combination of all other ownerships within the study area. Oregon's unique and successful wildfire protection system is rooted in its collaborative funding mechanisms to provide for base fire protection, severity resources and large fire suppression costs. The steering committee does caution reactive interpretation of this report or consideration to make system changes based on this data solely, without the full operational perspective of maintaining a complete and coordinated fire protection system for Oregon. However, given the charge of this study, the steering committee was required to provide consideration to alternative financial structures to this system and provide a starting point for a range of considerations for decision makers including, but not limited to:

- Maintain the status quo including the current BLM and ODF relationship through contract, assessments & surcharges and policies for large fire funding.
- Maintain the current BLM and ODF relationship through contract, but exclude specific lands from ODF protection responsibility and Oregon's large fire funding system eligibility:
 - One example could be to exclude large contiguous blocks such as the Galice Block, which is greater than 10,000 acres. This block borders the USDA Forest Service on two sides, contains difficult topography and has limited access.
 - Evaluate and assess lands based upon various Land Use Allocation risks and protection limitations. (BLM Land Use Allocation Map – Appendix 1, Map 3)
- Limit BLM eligibility into Oregon's large fire funding system commensurate with this study's findings.
 - One example could be to limit large fire suppression costs on BLM lands only through the first 24 hours or by some other pre-determined financial limit.
- Exclude BLM large fire cost eligibility from Oregon's large fire funding system.

Members of Emergency Fire Cost Committee, Oregon Department of Forestry, Bureau of Land Management and project staff have appreciated the opportunity to collaboratively work on this study and thanks to all who participated in this project to conclusion.

Appendix List

- **Maps of Study Area – Appendix 1**
 - BLM Protection Contract Lands - Map 1
 - 10 acre + Larger Fire Locations - Map 2
 - BLM Land Use Allocations – Map 3
- **Data Tables –Appendix 2**
 - OFLPF Revenue (Tables #1, 1B, 1C, 1D)
 - Statewide OFLPF, General Fund and Insurance Payout Expenses (Table #2)
 - Statewide ODF Large Fire Costs, Fire Seasons 2006-2015 (Table #3)
 - Annual Suppression Cost Summaries – Study Area Only (Tables #4 and 5)
 - Study Period and Area Fires Database (Table #6)
- **2015-2016 ODF Fire Program Review Report – Appendix 3**
- **Project Charter - BLM Western Oregon Protection Study - Appendix 4**
 - Participants Contact List
- **High Level Summaries – Appendix 5**
 - Various Tables developed in conjunction with Fires Database
- **ODF Large Fire Funding System (2017) Diagram – Appendix 6**