

# **BUDGET** The United States Department of the Interior **JUSTIFICATIONS**

# and Performance Information Fiscal Year 2013

# WILDLAND FIRE MANAGEMENT

NOTICE: These budget justifications are prepared for the Interior, Environment and Related Agencies Appropriations Subcommittees. Approval for release of the justifications prior to their printing in the public record of the Subcommittee hearings may be obtained through the Office of Budget of the Department of the Interior.

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## WILDLAND FIRE MANAGEMENT

# **Overview of the 2013 President's Budget**

Budget Authority	2011 Actual	2012 Enacted*	2013 President's Budget	Changes from the 2012 (+/-)
Discretionary	778,935	575,442	818,473	+243,031
Mandatory	0	0	0	0
Total	778,935	575,442	818,473	+243,031
FTE	4,030	3,922	3,710	-212

# **TOTAL 2013 BUDGET REQUEST** (dollars in thousands)

\*Note: The 2012 Enacted amount reflects a rescission of \$82.0 million in prior-year balances.

The FY 2013 President's budget for the discretionary Department-wide Wildland Fire Management program is \$818.5 million. This is an increase of \$243.0 million from the FY 2012 enacted level which included a rescission of \$82.0 million in prior-year balances. The FY 2012 Consolidated Appropriations Act also did not fully fund the requested 10-year suppression average, but instead directed Interior to use \$189.6 million of prior-year unobligated emergency supplemental balances to cover a significant share of expected firefighting costs in 2012.

The Department's Wildland Fire Management funds fire prevention, readiness, wildfire response, and rehabilitation activities performed by the land management agencies and the Bureau of Indian Affairs. The program strives to achieve both a cost-efficient and technically effective fire management program that meets resource and safety objectives, while minimizing both the cost of wildfire response and damage to resources. These activities align with the Department's goal to protect America's natural and cultural resources. The guiding principles and priorities of the federal wildland fire management program are to enhance collaboration, improve fire prevention and wildfire response, reduce hazardous fuels, create fire-resilient landscapes, restore fire-adapted ecosystems, and promote community assistance and development of fire-adapted communities.

The Budget utilizes a two tier system of (1) a regular suppression account, and (2) the FLAME Wildfire Suppression Reserve Fund account, to address the needs of wildland fire suppression. These two accounts require different levels of responsibility for authorizing the expenditure of funds and include the Secretary of the Interior in the chain of command for wildfire suppression. For example, regular suppression funds support initial response and predictable firefighting costs, while FLAME funds are used for the most severe, complex and threatening fires, and serve as a contingency reserve if the agencies exhaust their regular suppression resources due to an active fire season.

The 10-year wildland fire suppression average of \$368.5 million is split with \$276.5 million in the regular suppression program in the Wildland Fire Management appropriation and \$92.0 million in the FLAME Wildfire Suppression Reserve Fund.

Within this request, the 2013 Wildland Fire Management budget proposal also includes:

- Hazardous Fuels Reduction a program reduction of -\$39.0; and
- Fixed Costs Increases fixed cost increases of \$4.3 million.

The Wildland Fire Management Program will continue to support the Department-wide aggressive effort to curb non-essential administrative spending. The Wildland Fire bureaus will continue efforts to identify net savings associated with the Real Property Cost Savings and Innovation Plan. Specific contributions will be reported through the bureau responses to the savings targets whenever fire program facilities are contributing to savings goals. In FY 2013 the National Interagency Fire Center will continue to provide office space for fire program employees. Additionally, in FY 2013, the Department plans to implement, in partnership with the Forest Service, an integrated approach to information technology in wildland fire, with common strategies, investment decisions, and application management to address fire management business requirements in a cost effective manner.

#### Campaign to Cut Waste

Over the last two years, the Administration has implemented a series of management reforms to curb uncontrolled growth in contract spending, terminate poorly performing information technology projects, deploy state of the art fraud detection tools, focus agency leaders on achieving ambitious improvements in high priority areas, and open Government up to the public to increase accountability and accelerate innovation. In November 2011, President Obama issued an Executive Order reinforcing these performance and management reforms and the achievement of efficiencies and cost-cutting across the government. This Executive Order identifies specific savings as part of the Administration's Campaign to Cut Waste to achieve a 20 percent reduction in administrative spending from 2010 to 2013. Each agency is directed to establish a plan to reduce the combined costs associated with travel, employee information technology devices, printing, executive fleet efficiencies, and extraneous promotional items and other areas.

The Department of the Interior's goal is to reduce administrative spending by \$207 million from 2010 levels by the end of 2013. To meet this goal, the Department is leading efforts to reduce waste and create efficiencies by reviewing projected and actual administrative spending to allocate efficiency targets for bureaus and Departmental offices to achieve the 20 percent target. Additional details on the Campaign to Cut Waste can be found at: http://www.whitehouse.gov/the-press-office/2011/11/09/executive-order-promoting-efficient-spending

#### 2013 Performance Summary

In 2013, the Wildland Fire Management program's primary focus will continue to be to reduce risks to communities, protect the public and improvements, and to prevent damage to natural and cultural resources through the wildfire prevention and response to wildfires. Reduced emphasis is placed on maintaining or restoring fire adapted ecosystems and managing hazardous fuels for resource benefits in favor of treating lands in the Wildland-Urban Interface (please refer to the hazardous fuels reduction chapter for more information).

In accordance with the Government and Performance and Results Act of 1993 and with the Administration's policy and direction, the DOI Strategic Plan was updated for the five year period 2012 through 2016. This budget directly references the DOI Strategic Plan mission areas, and it continues to report on performance goals and accomplishments associated with the previous end outcome goals and related performance measures.

#### FY 2011-2016 Department of the Interior Strategic Plan

The FY 2011-2016 DOI Strategic Plan, in compliance with the principles of the GPRA Modernization Act of 2010, provides a collection of mission objectives goals, strategies, and corresponding metrics that provide an integrated and focused approach for tracking performance across a wide range of DOI programs. While the DOI Strategic Plan for FY 2011-FY 2016 is the foundational structure for the description of program performance measurement and planning for the FY 2013 President's Budget, further details for achieving the Strategic Plan's goals are presented in the DOI Annual Performance Plan and Report (APP&R). Bureau and program specific plans for FY 2011-2016 version of the DOI Strategic Plan and related implementation information in the APP&R.

### **GOAL PERFORMANCE TABLE**

#### Mission Area 1: Provide natural and cultural resource protection and experiences

Goal #4: Manage the Impa	act of V	Wildland F	ire							
Supporting Performance Measures	Туре	2008 Actual	2009 Actual	2010 Actual	2011 Plan	2011 Actual	2012 Plan	2013 Budget Request	Change from 2012 Plan to 2013	Long-Term Target 2016
Strategy #1: Establish fire-adap	ted ecos	ystems								
Percent of acres treated which are moved toward the desired condition class (SP &BUR)	A	83% (1,042,693/ 1,260,035)	85% (1,282,069/ 1,500,854)	75% (961,363/ 1,279,820)	80% (560,000/ 700,000)	71% (702,727/ 992,257)	80% (792,000/ 990,000)	80% (468,000/ 585,000)	0%	80% (480,000/ 600,000)
Percent of acres treated which are maintained in desired condition class (SP &BUR)	A	16% (197,047/ 1,260,035)	14% (207,369/ 1,500,854)	18% (236,465/ 1,279,820)	14% (100,000/ 700,000)	23% (229,362/ 992,257)	10% (99,000/ 990,000)	10% (58,500/ 585,000)	0%	10% (60,000/ 600,000)
Strategy #2: Adapt communities	to wildfi	res.								
Percent of acres treated which achieve fire management objectives as identified in applicable management plans.(SP&BUR)	A	98% (1,239,740/ 1,260,035)	99% (1,489,438/ 1,500,854)	94% (1,197,828/ 1,279,820)	94% (660,000/ 700,000)	99% (984,957/ 992,257)	90% (891,000/ 990,000)	95% (500,000/ 585,000)	+5%	100% (600,000/ 600,000)
Strategy #3: Respond to wildfires										
Percent of unplanned and unwanted wildland fires on Interior land controlled during initial attack (SP)	A	99% (5,693/ 5,778)	99% (6,145/ 6,225)	98% (5,673/ 5,786)	95% (8,327/ 8,765)	97% (6,519/ 6,696)	97% (6,519/ 6,696)	97% (6,519/ 6,696)	0%	95%
Other Significant Fire Program	Measure	'S								
Number of high-priority acres treated in the WUI	A	614,319	758,638	696,523	700,000	705,274	890,000	500,000	(390,000)	TBD
Number of acres in fire regimes 1, 2, or 3 moved to a better condition class (WUI & Non-WUI)	A	WUI 166,491 Non-WUI 231,968 Total 398,459	WUI 173,859 Non-WUI 194,861 Total 368,720	WUI 174,347 Non-WUI 141,606 Total 315,953	WUI 280,000 Non-WUI 0 Total 280,000	WUI 169,032 Non-WUI 65,582 Total 234,614	WUI 360,000 Non-WUI 25,000 Total 385,000	WUI 210,000 Non-WUI 14,500 Total 224,500	WUI (150,000) Non-WUI (10,500) Total (160,500)	TBD

DOI – Wildland Fire Management

2013 Budget Justification

Supporting Performance Measures	Туре	2008 Actual	2009 Actual	2010 Actual	2011 Plan	2011 Actual	2012 Plan	2013 Budget Request	Change from 2012 Plan to 2013	Long-Term Target 2016
Number of acres in fire regimes 1,2,3 moved to a better condition class per million dollars of gross investment (WUI& non-WUI)	A	WUI 1,122 Non-WUI 3,104 Total 1,785	WUI 1,245 Non-WUI 2,571 Total 1,711	WUI 174,347 Non-WUI 141,606 Total 315,953	WUI 1,728 Non- WUI 0 Total 1,728	WUI 922 Non-WUI 358, Total 1280	WUI 1,025 Non-WUI 1,366, Total 2,104	WUI 1,606, Non-WUI 998, Total 1,545	WUI 581, Non-WUI (368), Total (559)	TBD
Number of acres in fire regimes 1, 2, or 3 moved to a better condition class-as a percent of total acres treated (WUI &non-WUI) This is also a long-term measure.	А	WUI 27% Non-WUI 36% Total 32%	WUI 23% Non-WUI 26% Total 25%	WUI 1,324 Non-WUI 1,760 Total 1,489	WUI 40% Non-WUI 0% Total 40%	WUI 17% Non-WUI 7%, Total 24%	WUI 40% Non-WUI 24% Total 39%	WUI 40%, Non-WUI 25%, Total 38%	WUI (23%), Non-WUI 1%, Total (1%)	TBD
Percentage of all fires not contained in initial attack that exceed a stratified cost index(BUR)	А	9.9%	13%	18%	9%	TBD	9%	9%	0%	0
<b>Comments:</b> Current policies that allo escape initial attack less relevant. Tar										mber of fires that
Percent change from the 10-year average in the number of acres burned by unplanned and unwanted wildland fires on Interior lands(BUR)	A	0% (9,138/ 2,387,484)	-80% (2,081,290/ 2,593,080)	-41% (-884,429/ 2,178,975)	0.2% (3,600/ 2,400,000)	TBD	0.2% (3,600/ 2,400,000)	0.2% (3,600/ 2,400,000)	0%	0.5% (12,850/ 2,624,332)
Number of treated WUI acres that are identified in Community Wildfire Protection Plans or other applicable collaboratively developed plans(BUR)	A	438,756	525,058	594,370	675,000	660,673	750,000	450,000	(300,000)	576,000
Percent of treated WUI acres that are identified in Community Wildfire Protection Plans or other applicable collaboratively developed plans (BUR)	A	71% (438,756/ 614,319)	69% (525,058/ 758,638)	85% (594,370/ 696,523)	96% (675,000/ 700,000)	94% (660,673/ 705,274)	90% (800,000/ 891,000)	95% (475,000/ 500,000)	(-5%) (-325,000/ - 391,000)	96% (576,000/ 600,000)
Number of acres in WUI treated per million dollars gross investment(BUR)	A	<u>614,319</u> \$148.43M =4,139	<u>758,638</u> \$139.64M =5,433	<u>696,523</u> \$127M =5,479	<u>700,000</u> \$162.07M =4,319	<u>707,442</u> \$164.98M =4288	<u>891,000</u> \$164.72M =5409	<u>526,500</u> \$130.78M = 4026	<u>(-364,500)</u>	TBD
Number of treated burned acres that achieve the desired condition(BUR)	A	UNK	1,216,600	1,053,945	1,219,000	1.037,658	902,060	294,638	-607,422	TBD

Comments: Baseline data for this measure was first collected in FY 2009. Long-term targets are under development.

Supporting Performance Measures	Туре	2008 Actual	2009 Actual	2010 Actual	2011 Plan	2011 Actual	2012 Plan	2013 Budget Request	Change from 2012 Plan to 2013	Long-Term Target 2016
Percent of treated burned acres that have achieved the desired condition (BUR)	А	UNK	99.5% (1,216,600/ 1,222,375)	95% 1,053,945/ 1,110,844)	99.7% (1,219,000/ 1,223,000)	97.0% (1,037,658/ 1,067,892)	99% (902,060/ 911,172)	99% (294,638/ 297,614)	0%	<u>TBD</u>
	<b>Comments:</b> Baseline data for this measure was first collected in FY 2009. Long-term targets will be developed in future budgets. 2013 estimates do not include results of 2012 fire season; final accomplishments are anticipated to be larger than amount shown.									
Percent of DOI and USDA acres in good condition(defined as acres in condition class 1)	F	UNK	UNK	UNK	UNK	TBD	TBD	TBD	TBD	TBD

Department-Wide Wildland Fire Management 2013 Budgetary Changes at a Glance (Dollars in Thousands)							
Appropriation: Wildland Fire Management 14X1125	2011 Actual	2012 Enacted	Fixed Costs	Program Changes	2013 President's Budget		
Preparedness	290,452	276,522	2,986	-	279,508		
Fixed Costs			[2,986]				
Suppression Operations	398,951	80,904	-	195,604	276,508		
Rescission of PY Unobligated Balance	(200,000)	(82,000)					
Emergency Supplemental Appropriations PY appropriation		[189,577]					
Program Increase 2013 - 10 Year Suppression Average Adjustment				[195,604]			
Other Operations							
Hazardous Fuels Reduction	183,314	183,021	1,279	-38,985	145,315		
Program Decrease - 2013				[-38,985]			
Burned Area Rehabilitation	33,203	13,025	-	-	13,025		
Fire Facilities	6,137	6,127	-	-	6,127		
Joint Fire Science	6,000	5,990	-	-	5,990		
NET RESCISSIONS	(200,000)	(82,000)	-	-	-		
TOTAL, WILDLAND FIRE							
APPROPRIATION (Without Transfers)	718,057	483,589	4,265	156,619	726,473		
NET TRANSFERS	1,903	-	-	-	-		
TOTAL, WILDLAND FIRE APPROPRIATION (With Rescissions and Transfers)	719,960	483,589	4,265	156,619	726,473		
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Appropriation: FLAME Wildfire Suppression Reserve Fund 14X1127		2011 Actual	2012 Enacted	Fixed Costs	Program Changes	2013 President's Budget		
Sup	pression Operations	60,878	91,853	-	147	92,000		
	Program Increase 2013 - 10 Year Suppression Average Adjustment				[147]			
	AL, FLAME WILDFIRE PRESSION RESERVE FUND	60,878	91,853	-	147	92,000		
	AL, AII DEPARTMENT WIDE DLAND FIRE MANAGEMENT	780,838	575,442	4,265	156,766	818,473		

# **Summary of Requirements**

(dollars in thousands)

Activity/Sub-activit Wildland Fire Manage		2011 Actual	2012 Enacted	Fixed Costs & Related Changes (+/ -)	Program Changes(+ / -)	2013 President's Budget	Change from FY 2012 (+/-)
Preparedness	\$	290,452	276,522	+2,986	0	279,508	+2,986
	FTE	2,430	2,324	0	0	2,324	0
Suppression Operations	\$	398,951	80,904	0	+195,604	276,508	+195,604
	\$	(200,000)	(82,000)	0	0	0	0
(Rescissions)	\$	0	[189,577]	0	0	0	0
[PY Emergency Supp.]	FTE	395	395	0	0	395	0
Other Operations	\$	228,654	208,163	+1,279	-38,985	170,457	-37,706
	FTE	1,149	1,149	0	-212	937	-212
Hazardous Fuels	\$	183,314	183,021	+1,279	-38,985	145,315	-37,706
Reduction	FTE	1,096	1,096		-212	884	-212
Burned Area	\$	33,203	13,025	0	0	13,025	0
Rehabilitation	FTE	47	47			47	0
Fire Facilities	\$	6,137	6,127	0	0	6,127	0
	FTE	1	1	0	0	1	0
Joint Fire Science	\$	6,000	5,990	0	0	5,990	0
Some The Ocience	FTE	5	5	0	0	5	0
Net Rescissions	\$	(200,000)	(82,000)	0	0	0	+82,000
Total, without Transfers	\$	718,057	483,589	+4,265	+156,619	726,473	+160,884
Net Transfers	\$	1,903	0	0	0	0	0
Total Wildland Fire w/Rescissions &	\$	719,960	483,589	+4.265	+156,619	726,473	+242,884
Transfers	FTE	3,974	3,868	0	-212	3,656	-212
FLAME Wildland Fire	\$	60,878	91,853	0	+147	92,000	+147
Suppression Operations	FTE	0	0	0	0	0	0
Total, Wildland Fire	\$	780,838	575,442	+4,265	+156,766	818,473	+243,031
Management	FTE*	4,030	3,922	0	-212	3,710	-212

\*NOTE: FTE totals include Reimbursable FTE, (56 in FY 2011, 54 in FY 2012 and 54 in FY 2013)

DOI – Wildland Fire Management

#### Department-Wide Wildland Fire Management

Justification of Fixed Costs (Dollars in Thousands)

Pay Raise and Pay-Related Changes		2011	2012 Change	2013 Change		
Calendar Year 2010 Quarter 4		+0				
Calendar Year 2011 Quarters 1-3		+0				
Calendar Year 2011 Quarter 4			+0			
Calendar Year 2012 Quarters 1-3			+0			
Calendar Year 2012 Quarter 4						
Calendar Year 2013 Quarters 1-3				+1,249		
Non-Foreign Area COLA Adjustment to Locality Pay		-	+383			
Change in Number of Paid Days				+1,404		
Employer Share of Federal Health Benefit Plans		+1,557	+1,512	+1,573		
Other Fixed Cost Changes and Projections		2011	2012 Change	2013 Change		
Worker's Compensation Payments		-	+0	+0		
dependents of employees who suffer accidental deaths while on duty. Cos BY will reimburse the Department of I Federal Employees Compensation For pursuant to 5 U.S.C. 8147(b) as ame Public Law 94-273.Unemployment Compensation Payments-+0The adjustment is for projected change costs of unemployment compensation to be paid to the Department of Labor Employees Compensation Account, in Unemployment Trust Fund, pursuant Law 96-499.+3GSA Rental Payments+3+58						
	The adjustment is for changes in the costs payable to GSA and others resulting from changes in rates for office and non-office space as estimated by GSA, as well as the rental costs of other currently occupied space. These costs include building security; in the case of GSA space, these are paid to DHS. Costs of mandatory office relocations are also included.					

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#### DEPARTMENT-WIDE PROGRAMS

#### WILDLAND FIRE MANAGEMENT (INCLUDING TRANSFERS [AND RESCISSION OF FUNDS])

For necessary expenses for fire preparedness, suppression operations, fire science and research, emergency rehabilitation, hazardous fuels reduction, and rural fire assistance by the Department of the Interior, [\$566,495,000], \$726,473,000, to remain available until expended, of which not to exceed [\$6,137,000] \$6,127,000 shall be for the renovation or construction of fire facilities: Provided, That such funds are also available for repayment of advances to other appropriation accounts from which funds were previously transferred for such purposes: Provided further, That persons hired pursuant to 43 U.S.C. 1469 may be furnished subsistence and lodging without cost from funds available from this appropriation: Provided further, That notwithstanding 42 U.S.C. 1856d, sums received by a bureau or office of the Department of the Interior for fire protection rendered pursuant to 42 U.S.C. 1856 et seq., protection of United States property, may be credited to the appropriation from which funds were expended to provide that protection, and are available without fiscal year limitation: Provided further, That using the amounts designated under this title of this Act, the Secretary of the Interior may enter into procurement contracts, grants, or cooperative agreements, for hazardous fuels reduction activities, and for training and monitoring associated with such hazardous fuels reduction activities, on Federal land, or on adjacent non-Federal land for activities that benefit resources on Federal land: Provided further. That the costs of implementing any cooperative agreement between the Federal Government and any non-Federal entity may be shared, as mutually agreed on by the affected parties: *Provided further*, That notwithstanding requirements of the Competition in Contracting Act, the Secretary, for purposes of hazardous fuels reduction activities, may obtain maximum practicable competition among: (1) local private, nonprofit, or cooperative entities; (2) Youth Conservation Corps crews, Public Lands Corps (Public Law 109-154), or related partnerships with State, local, or nonprofit youth groups: (3) small or microbusinesses; or (4) other entities that will hire or train locally a significant percentage, defined as 50 percent or more, of the project workforce to complete such contracts: *Provided further*, That in implementing this section, the Secretary shall develop written guidance to field units to ensure accountability and consistent application of the authorities provided herein: Provided further, That funds appropriated under this heading may be used to reimburse the United States Fish and Wildlife Service and the National Marine Fisheries Service for the costs of carrying out their responsibilities under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) to consult and conference, as required by section 7 of such Act, in connection with wildland fire management activities: Provided further, That the Secretary of the Interior may use wildland fire appropriations to enter into [noncompetitive sole-source] leases of real property with local governments, at or below fair market value, to construct capitalized improvements for fire facilities on such leased properties, including but not limited to fire guard stations, retardant stations, and other initial attack and fire support facilities, and to make advance payments for any such lease or for construction activity associated with the lease: Provided further. That the Secretary of the Interior and the Secretary of Agriculture may authorize the transfer of funds appropriated for wildland fire management, in an aggregate amount not to exceed \$50,000,000, between the Departments when such transfers would facilitate and expedite jointly funded wildland fire management programs and projects: Provided further, That funds provided for wildfire suppression shall be available for support of Federal emergency response actions: Provided further. That funds appropriated under this heading shall be available for assistance to or through the Department of State in connection with forest and rangeland research, technical information, and assistance in foreign countries, and, with the concurrence of the Secretary of State, shall be available to support forestry, wildland fire management, and related natural

resource activities outside the United States and its territories and possessions, including technical assistance, education and training, and cooperation with United States and international organizations. [:*Provided further*, That before obligating any of the funds provided herein for wildland fire suppression, the Secretary of the Interior shall obligate all unobligated balances previously made available under this heading that, when appropriated, were designated by Congress as an emergency requirement pursuant to the Concurrent Resolution on the Budget or the Balanced Budget and Emergency Deficit Control Act of 1985 and notify the Committees on Appropriations of the House of Representatives and the Senate in writing of the imminent need to begin obligating funds provided herein for wildland fire suppression: *Provided further*, That of the funds made available under this heading for wildland fire suppression in fiscal year 2011, \$82,000,000 are rescinded]. *(Department of the Interior, Environment, and Related Agencies Appropriations Act, 2012)* 

#### **Explanation of Changes:**

#### ADDITIONS:

• Add "jointly funded" under 10th proviso for clarity.

#### DELETIONS:

- Delete FY 2012 Bill language directing the program to use unobligated emergency balances. This is a onetime provision. The funds will be depleted in FY 2012 as directed.
- Delete \$82,000,000 rescission language. This is a onetime provision. The program is complying with this requirement in FY 2012 as directed.
- Delete "non-competitive sole source" in the ninth proviso.

Activity: Preparedness									
Subactivity: Preparedness									
			2013						
\$000	2011 Actual	2012 Enacted	Fixed Costs & Related Changes (+/-)	Administrative Cost Savings (-)	Program Changes (+/-)	Budget	Change from 2011 CR (+/-)		
Preparedness	290,452	276,522	+2,986		0	279,508	+2,986		
FTE	2,430	2,324	0	0	0	2,324	0		

#### Justification of 2013 Program Changes

The 2013 budget for the Preparedness program is \$279.5 million and 2,324 FTE. No other program changes are proposed. The proposed level will sustain DOI's core firefighting capacity and ability to respond to wildfires.

#### Program Performance Change

No performance change is proposed.

#### **Program Overview**

The goal of the Wildland Fire Management Preparedness program is to provide the capability for the Department to respond to wildfires cost-efficiently and effectively while meeting protection, resource, and safety objectives. The Department strives to do this in a manner that minimizes suppression costs and damages to property, improvements, and natural and cultural resources.

Interior's mission includes protection of property and resources from the detrimental effects of wildland fires while providing for firefighter and public safety. The Department's bureaus carry out wildland fire management responsibilities in national parks, wildlife refuges and preserves, Indian reservations, and on public lands. These diverse lands include historic and cultural sites, commercial forests, rangelands, and valuable wildlife habitat, as well as some lands managed by other Federal and State agencies. Fire prevention, readiness, and suppression are provided by federal fire crews, through cooperative protection agreements and contracts with Federal and State agencies, and through self-governing tribes.

All Wildland Fire Management activities within the Department are guided by fire management plans that cover planned contributions for interagency-shared resources, training, prevention and detection, as well as guidance on the appropriate response to wildfires to meet land use plan objectives. Fire management plans provide the basis for wildland fire preparedness staffing and equipment and the bureaus deploy their prevention and preparedness resources accordingly. The Fire Program Analysis (FPA) will provide additional management decision support information to aid fire managers in identifying numbers, locations, and mixes of resources to provide efficient and effective response capabilities across the nation. FPA was used to support and inform the Department's 2013 budget formulation. The FPA was used to assess trade-offs between different potential preparedness and suppression scenarios. The current FPA outputs provide information suitable for national, strategic, wildland fire management planning. The Departments continue to analyze the potential applications of FPA to assist managers with budget allocation decisions.

The Department funds preparedness activities on more than 500 million acres of public lands. The bureaus enter into cooperative agreements with other Federal agencies as well as State, tribal, and local governments to leverage resources and gain efficiency. Under these arrangements, protection responsibilities are exchanged and resources are shared

The Department's wildland firefighting resources are mobile and may be moved locally, regionally, or national to respond to wildfires. Working with the National Multi-Agency Coordinating group (NMAC) and Geographic Multi-Agency Coordinating group (GMAC) wildfire management priorities are assessed and identified. If firefighting resources are limited or depleted in a particular geographic area, firefighting units may be mobilized from other parts of the country to assist and to meet those wildfire management needs. This mobility of wildland firefighting resources reduces costs and maximizes utilization of valuable firefighting assets.

Readiness resources are deployed in advance of fire emergencies based on analysis of historic needs and those predicted for the coming fire season to ensure that the Interior bureaus are ready to respond when wildfires occur. Program resources include unit-level assets, plus regional and national shared resources, such as hotshot crews that are available for fires on Federal and non-federal lands protected under exchange agreements or cooperative agreements. These resources are used to assist local communities and states when fires exceed the capabilities of those entities.

Economically efficient fire management requires that the bureaus pool their resources to provide these national-shared resources, which are collectively identified in the readiness process. Such resources include airtankers and retardant bases, lead planes, hotshot crews, smokejumpers, large transport planes, and fire weather technical support. In addition to the program's permanent, career seasonal and temporary firefighters/employees, program management resources include permanent and career seasonal professional and technical personnel who provide leadership, coordination, program planning, dispatching, warehouse, and other support functions along with technical and administrative support for fire and aviation management activities.

Interior, in cooperation with the Forest Service and the National Weather Service, hosts the National Interagency Fire Center (NIFC) in Boise, ID. NIFC provides logistical support by coordinating and mobilizing wildland fire resources when there is high demand, or when states and other countries request assistance. In addition to its logistical coordination role, NIFC is also the home for one of the 11 national fire caches for supplies and equipment and the national radio cache. It also serves as the lead technical support group for communications, remote sensing, and wildland fire information technology. Other activities include serving as the national development center for training courses in fire suppression, prescribed burning, prevention, and wildland fire management.

#### 2013 Program Performance

Effective and efficient initial response forces are critical to controlling wildfires when they are small and less costly to manage. At the same time, the Federal agencies continue emphasizing the practice of risk-informed fire protection. These practices allow the use of fire management strategies and tactics that manage risks, meets protection and resource objectives, and reduce cost.

	FY 2011	Actuals	FY2012	Enacted	FY2013 Budget		
Resource	Number <sup>1</sup>	Cost	Number <sup>1</sup>	Cost	Number <sup>1</sup>	Cost	
Personnel		2001		0001			
Firefighters	3529	\$90,249	3312	\$84,108	3308	\$85,300	
Smokejumpers	135	\$8,205		\$8,205	135	\$8,332	
Type 1 Crews	[17]	\$10,183	[17]	\$10,183	[17]	\$10,336	
Fire program & support staff	1302	\$88,367	1266	\$85,923	1268	\$87 <i>,</i> 391	
Total Personnel	4,966	\$197,004	4,713	\$188,419	4,711	\$191,359	
FTE	2,430		2,324		2,324		
Aviation							
Airtankers (large fixed-wing)	2	\$1,343	2	\$1,382	2	\$1,417	
Airtankers (single engine)	17	\$4,132	17	\$4,250	17	\$4,356	
Helicopters <sup>2</sup>	37	\$9,451	37	\$9,731	37	\$9,974	
Other aircraft	22	\$5,099	22	\$5,258	22	\$5,389	
Total Aviation	78	\$20,025	78	\$20,621	78	\$21,136	
Heavy Equipment							
Engines	745	\$11,940	745	\$12,293	745	\$12,600	
Other heavy equip. (dozers, tenders, etc.)	206	\$1,782	206	\$1,835	206	\$1,881	
Total Heavy Equipment	951	\$13,722	951	\$14,128	951	\$14,481	
Other Direct Program Costs							
Fire Caches (National)		\$2,444		\$2,200		\$2,068	
Non-fire Personnel Costs Travel		\$6,451		\$5,161		\$5,238	
	-	\$5,794		\$5,215		\$4,693	
IT Systems		\$3,619 \$1,240		\$3,257		\$3,257	
Ready Reserve Rent, Utilities, Misc. Procurement, Other		\$1,249 \$11,099		\$0 \$9,870		\$0 \$9,326	
Other Direct Program Costs		\$11,099 \$30,656		\$9,870 <b>\$25,702</b>		\$9,320 <b>\$24,582</b>	
		<b>#30,030</b>		φ <b>2</b> 0,702		ə24,302	
Indirect Costs (bureau overhead)		\$29,045		\$27,652		\$27,950	

<sup>1/</sup> This table is an estimate only. Actual numbers are dependent upon timing and implementation of specific budgetary actions.

<sup>2/</sup> The actual number of helicopters available for response to wildfires is 43. However, six helicopters are currently funded from sources other than Preparedness.

#### Program Performance

		SP = Strategic Plan Measure	UNK = Prior Data Not Available
	Target Codes:		BUR = Fire Program Specific Measure
			NA = Long-term targets are
		ARRA = Recovery Act measure	inappropriate to determine at this time
KEY TO CODES:			
	Type Codes:	C=Cumulative Measure	A = Annual Measure

Mission Area 1: Provide Natural a	Mission Area 1: Provide Natural & Cultural Resource Protection and Experiences											
GOAL #4: Manage the Impacts of Wildland Fire												
Supporting Performance Measures	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 President's Budget	Change from 2012 Plan to 2013	Long-term Target 2016				
Strategy #3 Adapt communities to wildfires.												
Percent of unplanned and unwanted wildland fires on Interior land controlled during initial attack (SP & BUR)	99% (5,693/ 5,778)	99% (6,145/ 6,225)	98% (5,673/ 5,786	97% (6,519/ 6,696)	97% (6,519/ 6,696)	97% (6,519/ 6,696)	0%	95%				
Contributing Programs	Wildland F	ire Manage	ment – Pre	paredness ar	nd Suppressio	n						
Long-term Measure												
Percentage of all fires not contained in initial attack that exceed a stratified cost index (BUR)	9.9%	13%	18%	TBD	9%	9%	0	9%				
Comments	2011 Actual will be determined after analysis completion of Stratified Cost Index in the spring of 2012.											
Contributing Programs	Wildland F	ire manage	ment – Pre	paredness ar	nd Suppressio	n						

	Activity: Suppression Operations												
Subactivity: Suppression													
				FY 2013									
\$000	2011	2012	Fixed Costs & Related	Fixed Costs & Program									
\$000	Enacted	Enacted	Changes	(+/-)	Budget	(+/-)							
Suppression	398,951	80,904	0	+195,604	276,508	+195,604							
FTE	395	395	0	0	395	0							

#### Summary of 2013 Program Changes for Suppression Operations

Request Component	(\$000)	FTE
Program Increase	+195,604	0
TOTAL Program Changes	+195,604	0

#### Justification of 2013 Program Changes

The 2013 budget for the Suppression Operations program within the Wildland Fire Management Appropriation is \$276.5 million, a program increase of +\$195.6 and 0 FTE from the 2012 Enacted level.

#### **Program Increase**

#### (+\$195,604,000 / 0 FTE)

The Budget fully funds the10-year, inflation-adjusted average of DOI's suppression obligations at \$368.5 million. The requested increase fully funds 75 percent of the 10-year suppression average (\$276.5 million); the remaining balance (\$92 million) is in the FLAME Fund. Fully funding the 10-year average provides sufficient suppression funds to minimize the need for transferring funds from non-fire accounts, and also emphasizes budget transparency by responsibly budgeting for suppression. Consistent with the FLAME Act, the Suppression Operations account will fund initial response and other predictable firefighting costs, while the FLAME Fund will be used for the most severe, complex, and threatening fires, and as a contingency reserve if the agencies exhaust their regular suppression funding due to an active fire season.

	SUPP		ATIONS 2002 - 2	2011										
	(Dollars in Thousands)           Net Nominal         GDP         Adjusted													
Year	Net Nominal Suppression Obligations	Rolling 10- Year Avg												
2002	395,040	0.9238	0.8091	488,219	242,311									
2003	303,638	0.9440	0.8268	367,228	270,782									
2004	281,244	0.9682	0.8480	331,643	280,806									
2005	294,054	1.0000	0.8759	335,721	299,001									
2006	424,058	1.0333	0.9051	468,544	324,825									
2007	470,491	1.0603	0.9287	506,611	361,413									
2008	392,783	1.0985	0.9622	408,230	387,617									
2009	218,418	1.1055	0.9683	225,570	389,891									
2010	231,214	1.1256	0.9859	234,521	370,394									
2011	318,788	1.1417	1.0000	318,788	368,508									

#### **Program Performance Change**

	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 President's Budget	Program Change Accruing in 2013	Program Change Accruing in Out- years
Percentage of all fires not contained in initial attack that exceed a stratified cost index (BUR)	13%	18%	TBD	9%	9%	0	0

#### Program Overview

The Wildland Fire Management, Suppression Operations activity funds the emergency and unpredictable aspects of the Department's Wildland Fire Management program. Suppression Operations include a range of actions taken to manage wildland fires in a safe, cost-effective manner, while protecting values at risk in a manner consistent with resource objectives and land management plans.

Wildfire response actions range from intensive suppression when wildfires on public lands threaten communities, high value resources, or critical ecosystems, to monitoring wildfires in areas where burning accomplishes resource benefits or where it is too dangerous to place firefighters. Emergency stabilization of stream banks and soils is undertaken during and immediately following a wildfire to reduce the risk of resource damage caused by floods, landslides, and erosion. Emergency stabilization occurs within one year of containment of a wildfire; these projects may be monitored for up to three years after containment.

Suppression program costs include expenses incurred by fireline, command, and support personnel above those costs covered by preparedness. The Suppression Operations activity also funds temporary emergency firefighters; aircraft flight operations and support; logistical services; supplies; equipment (including replacement of lost or damaged capital and expendable equipment); contracts for goods and services; administrative support directly associated with incidents; and immediate measures to repair damage as a result of wildfire response activities.

Severity funding, which provides extra preparedness resources in above-normal or extreme conditions, is included in Suppression Operations. Severity funding is used to improve initial response capabilities when abnormal, severe wildfire conditions occur. Abnormal wildfire conditions arise when wildfire seasons start earlier than normal, last longer than normal, or exceed average high fire danger ratings for prolonged periods. Severity funds are typically used to temporarily increase firefighting staff, pay for personnel and equipment, pre-position wildfire response units, conduct additional aerial reconnaissance, and acquire other supplemental contract services. Severity authorizations are subject to strict controls to better manage the expenditure of these funds.

#### 2013 Program Performance

Although DOI's annual suppression expenditures fluctuate from year to year, the inflation adjusted 10-year average of suppression obligations has slowly increased by about half (52 percent) since 2002. This trend is due to a number of factors:

- Climate variability has led to increased drought conditions, vegetation conversion (increased flammability and shorter fire return intervals), earlier mountain snow melt, extended burning seasons, increased number of ignitions, and greater wildfire severity.
- Persistent drought and accumulation of hazardous fuels has contributed to an increase in the number, size, and severity of large wildfires.
- According to the 2009 Interior and US Department of Agriculture Quadrennial Fire and Fuels Review, risk levels also increase as a result of population growth and home construction in the WUI and the Intermix<sup>1</sup>. This rapid growth into wildland areas complicates landscape protection needs and creates additional sources of ignition.

To address these factors and others, the Federal fire management agencies are pursuing, implementing and refining strategies and practices aimed at containing firefighting costs. Ongoing efforts at cost containment, the use of risk-based management strategies, including the management of wildfires for multiple objectives in appropriate areas, are contributing to cost efficiencies in wildfire response.

The Department continues to emphasize the use of a risk-based strategy to allow wildfires to be managed for multiple objectives: wildfires may be simultaneously suppressed and allowed to burn for resource benefit without contradicting policy. These operations balance the allocation of suppression funding with the risk a wildfire poses to the public or to natural or cultural resources. Tactics can range from aggressive suppression in the WUI to monitoring low-risk wildfires managed for multiple objectives. The Department is making a concerted effort to allow fire to return to the landscape when these fires will improve the health of the land and when risks to safety and communities make it appropriate to do so.

The Department is continuing to work closely with the Forest Service to further address the challenge of rising suppression costs. A number of positive steps have been taken, including emphasizing land management decisions that affect fuel loading and resource protection, increasing the skills of local firefighters, advancing integrated data management, providing clarification for master cost-sharing agreements, and developing metrics and accountability measures to evaluate managerial cost effectiveness.

For the Federal wildland fire management agencies the primary criterion for choosing wildfire response strategies is to minimize costs without compromising safety. Planned and actual suppression costs must be commensurate with the values to be protected. Rationale for suppression expenditures are included and displayed in the Wildland Fire Decision Support System (WFDSS), a web-based tool whose use is mandated for all federal fires that escape

<sup>&</sup>lt;sup>1</sup>Interface generally refers to areas with communities near wildlands, while Intermix has fewer houses and more vegetation.

initial response. WFDSS allows managers to make informed decisions about incident management considering safety, complexity, risk, and economics.

Interagency fire management policy stipulates that Incident Business Advisors must be assigned to any fire with costs of \$5 million or more. Interagency Large Fire Cost Reviews are conducted when incidents combined Federal expenditures exceed \$10 million. For the DOI agencies, state/regional directors and bureau directors must approve incident expenditures as they reach key thresholds.

DOI Ur	wanted Wildland	l Fires
Year	# Fires	# Acres
2002	9,579	2,033,423
2003	9,200	975,382
2004	9,223	3,063,658
2005	9,589	6,069,877
2006	11,823	2,554,304
2007	8,212	2,896,507
2008	5,778	2,387,484
2009	6,225	511,790
2010	5,786	1,294,546
2011	7,701	1,142,023
Total	83,116	22,928,994
10-Year Average	8,312	2,292,899

DOI – Wildland Fire Management

#### Use of Cost and Performance Information in the Suppression Program

- In 2009, Federal fire policy was clarified, broadening the range of responses available to Federal fire managers from full suppression to point protection to monitoring, based on fire and land use planning, conditions, threats and opportunities. Federal fire managers may focus resources, funding, and effort on those fires or portions of fires posing a threat to life, property, and infrastructure, while allowing fire to help achieve resource benefits where appropriate. Since this policy change, there has been a measurable increase in the number of Federal fires being managed under the new implementation guidelines.
- The Department's fire managers continue to prioritize the allocation of funding for initial response capability, a critical step in keeping new fire starts from becoming fires of significance.
- The Federal Land Assistance, Management and Enhancement Act of 2009 (the FLAME Act) was signed by the President in November 2009. The Act states, in part, "Not later than one year after the date of the enactment, the Secretary of the Interior and Secretary of Agriculture shall submit to Congress a report that contains a cohesive wildfire management strategy." *The Federal Land Assistance Management and Enhancement Act of 2009, Report to Congress was completed on March 25, 2011. A separate but companion document, A National Cohesive Wildland Fire Management Strategy, outlines a path toward development of a national cohesive wildland fire management strategy which will provide a foundation from which to build local and regional actions and direction. The Cohesive Strategy, developed in FY 2010, is a national collaborative effort between wildland fire organizations, land managers, and policy making officials representing Federal, State and local governments, tribal interests, and non-governmental organizations. The Cohesive Strategy seeks to address wildland fire issues in a holistic and integrated manner. Federal, State, local, tribal and nongovernmental partners completed Phase I in 2011, which outlines the national strategy to address wildland fire issues across the Nation.*

The goal is to change how wildland fire is managed, based on "Guiding Principles and Core Values," such as:

- o Sound risk management is the foundation for all management activities.
- Wildland fire, as an essential ecological process and natural change agent, may be incorporated into the planning process and wildfire response.
- Fire management decisions are based on the best available science, knowledge and experience, and used to evaluate risk versus gain.
- Where land and resource management objectives differ, prudent and safe actions must be taken through collaborative fire planning and suppression response to keep unwanted wildfires from spreading to adjacent jurisdictions.
- Fire management programs and activities are economically viable and commensurate with values to be protected, land and resource management objectives, and social and environmental quality considerations.

## Program Performance Overview

		T	arget Codes:		= Strategic Plar		-	K = Prior Data N		
KEY TO CODES:				HPC	G = High Perfor	mance Go		R = Fire Program		leasure
				40		A		= Long-term tai		
			Turne Cedee		RA = Recovery			propriate to det		his time
			Type Codes:		Cumulative Mea		A =	Annual Measur	e	
Mission Area 1: Pro	ovide na	atural and cu	Itural resourc	ce protection	and experienc	es				
Goal #4: Manage th	ne impa	ct of Wildlan	d Fire							
Supporting Performance Measures	Type A/C/F	2008 Actual	2009 Actual	2010 Actual	2011 Plan	2011 Actual	2012 Plan	2013 President's Budget	Change from 2012 Plan to 2013	Long- term Target (2016)
Other Significant F	ire Prog	gram Measur	es							
Percent change from the 10-year average in the number of acres burned by unplanned and unwanted wildland fires on Interior lands (BUR)	A	0.4% (9,138/ 2,387,484)	-80% (2,081,290/ 2,593,080)	-41% (-884,429/ 2,178,975)	0.2% (3,600/ 2,400,000)	TBD	0.2% (3,600/ 2,400,000)	0.2% (3,600/ 2,400,000)	0%	+0.5% (12,850/ 2,624,332)
<b>Comments:</b> Currer number of acres bur problematic and less	ned or t s meanii	he number of	fires that esca	pe initial attac	k less relevant.	Targeting				
Long-Term Measur	e									
Percentage of all fires not contained in initial attack that exceed a stratified cost index (BUR)	A	9.9%	13%	18%	9%	TBD	9%	9%	0%	9%

Activity: Of	Activity: Other Operations											
Subactivity: Hazardous Fuels Reduction												
				FY 2013								
\$000	2011 Enacted	2012 Enacted	Fixed Costs & Related Changes	Program Changes (+/-)	Budget	Change from 2012 (+/-)						
Hazardous Fuels Reduction	183,314	183,021	+1,279	-38,985	145,315	-37,706						
FTE	1,096	1,096	0	-212	884	-212						

#### Summary of 2013 Program Changes for Hazardous Fuels Reduction

Request Component	(\$000)	FTE
Program Reduction	-38,985	-212
TOTAL Program Changes	-38,985	-212

#### Justification of 2013 Program Changes

The 2013 budget request for the Hazardous Fuels Reduction (HFR) program is \$145.3 million and 884 FTE. This is a program change of -\$39.0 million and -212 FTE from the 2012 Enacted.

#### **Program Reduction**

#### (-\$38,985,000/ -212 FTE)

The budget proposes a program reduction to the HFR program of -\$39.0 million and 212 FTE. This program reduction will be accompanied by a shift in program focus to conduct hazardous fuels activities on mitigating hazards and enhancing the ability to control fires in the wildland urban interface (WUI).

In FY 2013, the HFR program will continue to implement fuels management activities to mitigate hazards and enhance the ability to control wildfires by focusing on the highest priority projects in the highest priority areas. The program will focus at least 90 percent of the funds on treatments in the WUI. Any acres treated outside the WUI must be in areas immediately adjacent to the WUI and identified through DOI's prioritization process. The management activities in the interface are designed to mitigate hazards and enhance the ability to control fires in the WUI, where suppression costs are highest. Priority for funding treatments will be given to communities that have implemented Firewise standards and have identified acres to be treated in Community Wildfire Protection Plans (CWPP's) or the equivalent and have made an investment in implementing local solutions to protect against wildfire.

#### **Program Overview**

The HFR program reduces the negative impacts of wildfires to ecosystems, people, communities, and natural and cultural resources. Heavy fuels accumulation, combined with sustained drought, contribute to increased wildfire intensity, spread, and resistance to control throughout many parts of the United States. The management of these fires is further compounded by the growth of communities adjacent to public lands, putting homes and other structures closer to areas where large wildland fires occur and increasing the risks.

The HFR program removes or modifies vegetation to restore and maintain healthy, diverse ecosystems, reduces wildfire risks to communities and their infrastructure, reduces the risk of

intense wildland fire behavior, lessens post-fire damage, and limits the spread and proliferation of invasive species, diseases or infestations (such as current pine bark beetle infestations). In addition, HFR funds are used to conduct fuels inventories and assessments, ensure regulatory compliance, prepare sites for treatment, and monitor and evaluate completed treatments. Working with communities, the program mitigates risk from wildland fire through community education and collaborative planning. Projects are accomplished using prescribed fire, mechanical thinning, chemical application, grazing, or combinations of these and other scientifically supported methods.

The HFR program emphasizes coordination, cooperation, and collaboration among Federal agencies, State, local and tribal governments, and other stakeholders.

Past policies sometimes resulted in a patchwork of hazardous fuels treatments with no measurable benefits. However, Forest Service research has shown that home ignitability usually is not effectively changed by vegetation modification in non-WUI areas. Therefore, beginning in 2011, DOI focused fuels management activities on mitigating hazards and enhancing the ability to control fires in the WUI.

The Department uses the Hazardous Fuels Prioritization and Allocation System (HFPAS) to prioritize treatments. This Departmental process results in recommending funding to the highest priority projects in the highest priority areas. The system 1) provides requisite programmatic funding; 2) identifies the highest priority projects; and 3) identifies the highest priority areas for HFR projects in the WUI.

#### 2013 Program Performance

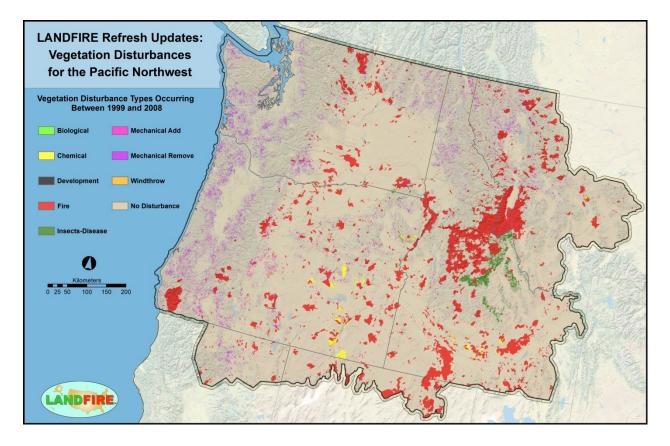
The 2013 budget request for hazardous fuels reduction program is \$145.3 million and 884 FTE. Emphasis will continue to be placed on treating the highest priority WUI areas, those that contribute to overall risk reduction to communities. The Department is responsible for managing our public lands, refuges, parks, and tribal trust lands, and has concentrated management activities near communities in recent years.

#### LANDFIRE

The Landscape Fire and Resource Management Planning Tools (LANDFIRE) completed and delivered data products for all lands in the United States in 2009 producing consistent data sets, layers, and models. Work in 2013 will continue to develop and expand toward more partnerships across program areas and organizations. The future strength of the program is dependent on capitalizing on program areas of excellence that can be used to improve the quality and utility of the data products. In 2013, the HFR budget continues to support updating the product suite as part of the national program to maintain the dataset.

The use of LANDFIRE is significant in the wildland fire community, and its use in natural and environmental resource management is growing. The data products are proving to be of significant importance for vegetation, wildlife habitat, carbon/climate assessments and management across administrative boundaries.

In calendar year 2011, LANDFIRE completed an update addressing vegetation changes from disturbances (Figure 1) bringing the data up to circa 2008 conditions and is in the production process of updating the data to circa 2010 conditions now. LANDFIRE continues to produce consistent data sets, layers, and models.



**Figure 1** – Map of LANDFIRE 2008 - "Refresh", which shows vegetation changes from various disturbance types (fire, mechanical, etc.) from 1999 to 2008, for the Pacific Northwest portion of the United States.

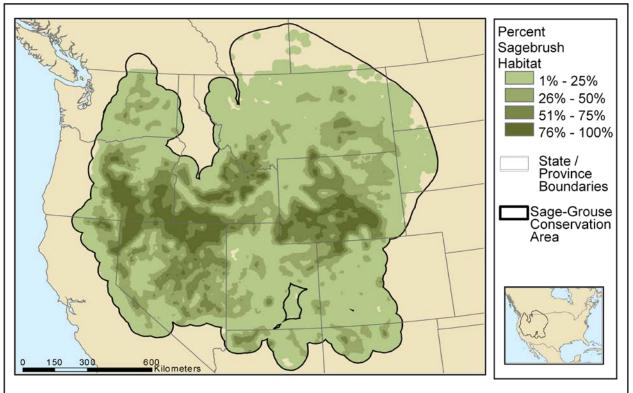
LANDFIRE is a keystone dataset for natural resources and fire management providing critical data for national- and regional-level strategic planning and analysis. Data products are supporting the HFPAS assessments and FPA for the prioritization and planning of hazardous fuel reduction and restoration. The WFDSS uses LANDFIRE data products in strategic and tactical planning of fire operations.

LANDFIRE is used in the wildland fire community; however, it is serving as an important data set for natural resources management dealing with issues across administrative boundaries. Below is an example of how LANDFIRE data products were used to support an analysis\* on Greater Sage-grouse (Figure 2) in the Western United States. LANDFIRE vegetation data products were collapsed (different sagebrush species and vegetation associations -- Figure 3) into a "sagebrush" map to show the distribution across the west. LANDFIRE vegetation coverage was used in this analysis because it was the only recent coverage available with consistent thematic categories and was developed using a consistent method across the entire sage-grouse range. More information on the use of LANDFIRE in this analysis can be found at: <a href="http://www.landfire.gov/documents/LF\_data\_applications\_Sagegrouse\_07-09.pdf">http://www.landfire.gov/documents/LF\_data\_applications\_Sagegrouse\_07-09.pdf</a>



Figure 2 - Great Sage Grouse

DOI – Wildland Fire Management



**Figure 3** - Distribution of sagebrush landcover within western North America. The map represents a general representation and percentage of the landscape dominated by sagebrush habitats and not site-specific values of ground cover.

\* "Greater Sage-Grouse: Ecology and Conservation of a Landscape Species and Its Habitats" by Steve Knick and John Connelly

A summary brochure of how LANDFIRE can be used as a tool for landscape planning and management is available at: <u>http://www.landfire.gov/documents/FINAL\_Landfire-Tools-Trifold-v7.pdf</u>

This brochure highlights on a map where the data set has been used across the country for land and conservation planning, natural resource assessments, wildlife habitat analyses, and wildland fire management.

#### Use of Cost and Performance Information in the Hazardous Fuels Reduction Program

In 2007, the DOI Bureaus adopted a common, systematic hazardous fuels allocation process (HFPAS). This systematic process helps ensure that bureaus apply allocation and project selection criteria consistently, and can help interested parties outside of the process understand the rationale for the funding and project selection decisions that are made.

HFPAS employs the use of two analytical tools. One, Ecosystem Management Decision Support (EMDS), helps to identify the high priority places in which to invest in HFR activities, namely those areas of the country that have higher risk of wildland fire. EMDS considers the following elements when analyzing DOI-managed and tribal lands:

- Wildfire potential the mathematically computed product of the probability that a
  patch of ground will burn and the conditional probability of the intensity at which it
  will burn, substantially weighted toward higher fire intensities to represent most
  destructive fires, and aggregated over DOI-managed and tribal lands.
- Consequences of Wildfire (expected consequences associated with moderate to severe wildfire)
  - o WUI Impacts
  - o Infrastructure Impacts
  - Ecosystem Vulnerability
  - Non-Native Species

More can be learned about EMDS by referencing the FY 2010 report found at

ftp://ftp.blm.gov/pub/gis/wildfire/EMDS\_Reports/EMDS\_FY2010Final10-28-10.pdf

The second tool is the Project Priority System (PPS). PPS is designed to identify the high priority projects in which to invest. PPS scores project proposals according to their planned purpose to help create fire-adapted communities; restore and maintain resilient landscapes; and enable an enhanced response to respond to wildfires.

When the results of these tools are combined, a preliminary program of work is created, from which managers can make final allocation decisions.

Hazar	rdous Fuels Reduction Spending and Performance	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
		Actual	Actual D/	Actual D/	Actual	Planned <u>E</u> /	Planned						
WUI	Funding (\$000s) <u>A</u> /	\$ 100,360	\$ 154,032	\$ 115,375	\$ 132,593	\$ 132,302	\$ 131,796	\$ 148,452	\$ 139,643	\$ 128,006	\$ 164,983	\$ 164,719	\$ 130,784
	Acres Treated	209,320	480,110	490,110	542,568	532,539	586,018	614,319	758,638	696,523	707,442	891,000	526,500
	Efficiency (Acres/\$M)	2,086	3,117	4,248	4,092	4,025	4,446	4,138	5,433	5,441	4,288	5,409	4,026
	Cost per Acre	\$ 479	\$ 321	\$ 235	\$ 244	\$ 248	\$ 225	\$ 242	\$ 184	\$ 184	\$ 233	\$ 185	\$ 248
	Acres Improved <u>B</u> /	UNK	UNK	UNK	UNK	UNK	212,132	166,491	173,859	174,347	169,032	360,000	210,000
	Acres Improved/\$M	UNK	UNK	UNK	UNK	UNK	1,610	1,122	1,245	1,362	1,025	2,186	1,606
	Acres Improved/Total WUI Acres	UNK	UNK	UNK	UNK	UNK	36%	27%	23%	25%	24%	40%	40%
	%WUI \$	56%	64%	59%	64%	64%	65%	67%	65%	61%	90%	90%	90%
	%WUI Acres	20%	38%	39%	43%	48%	44%	49%	51%	54%	71%	90%	90%
Non-	Funding (\$000s) <u>A</u> /	\$ 78,293	\$ 86,644	\$ 80,075	\$ 75,282	\$ 74,748	\$ 71,590	\$ 74,730	\$ 75,806	\$ 80,475	\$ 18,331	\$ 18,302	\$ 14,531
WUI	Acres Treated	849,644	778,727	770,797	726,835	573,569	747,404	645,716	742,216	583,297	290,334	99,000	58,500
	Efficiency (Acres/\$M)	10,852	8,988	9,626	9,655	7,673	10,440	8,641	9,791	7,248	15,838	5,409	4,026
	Cost per Acre	\$ 92	\$ 111	\$ 104	\$ 104	\$ 130	\$ 96	\$ 116	\$ 102	\$ 138	\$ 63	\$ 185	\$ 248
	Acres Improved <u>B</u> /	UNK	279,188	294,000	271,551	241,045	323,806	231,968	194,861	141,606	65,582	25,000	14,500
	Acres Improved/\$M	UNK	3,222	3,672	3,607	3,225	4,523	3,104	2,571	1,760	3,578	1,366	998
	Acres Improved/Total Non-WUI Acres	UNK	36%	38%	37%	42%	43%	36%	26%	24%	23%	25%	25%
All	Funding (\$000s)	\$ 178,653	\$ 240,676	\$ 195,450	\$ 207,875	\$ 207,050	\$ 203,386	\$ 223,182	\$ 215,449	\$ 208,481	\$ 183,314	\$ 183,021	\$ 145,315
Fuels	Acres Treated	1,058,964	1,258,837	1,260,907	1,269,403	1,106,108	1,333,422	1,260,035	1,500,854	1,279,820	997,776	990,000	585,000
<u>C</u> /	Efficiency (Acres/\$M)	5,927	5,230	6,451	6,107	5,342	6,556	5,646	6,966	6,139	5,443	5,409	4,026
	Cost per Acre	\$ 169	\$ 191	\$ 155	\$ 164	\$ 187	\$ 153	\$ 177	\$ 144	\$ 163	\$ 184	\$ 185	\$ 248
	Acres Improved <u>B</u> /	UNK	UNK	UNK	UNK	UNK	535,938	398,459	368,720	315,953	234,614	385,000	224,500
	Acres Improved/\$M	UNK	UNK	UNK	UNK	UNK	2,635	1,785	1,711	1,516	1,280	2,104	1,545
	Acres Improved/Total Acres	UNK	UNK	UNK	UNK	UNK	40%	32%	25%	25%	24%	39%	38%

A/ 2001-2010 figures are actual obligations; 2011 is enacted; and 2012 is requested.

2011 estimates are based on 90% WUI / 10% adjacent to WUI funding: actual funds allocated to priority projects may be more or less.

 $\underline{B}$ / Acres improved are those in fire regimes 1, 2 or 3 moved to a better condition class.

 $\underline{C}$ / Hazardous fuels funding only. Landscape restoration (non-National Fire Plan) accomplishments not included.

D/ Includes \$10 million supplemental Hazardous Fuels funding reprogrammed from Burned Area Rehabilitation (242,225 acres). Excludes all ARRA funds and performance.

E/In FY 2012 funds will be directed to the WUI (90%, or \$165million) and areas immediately adjacent to the WUI (10%, or \$18 million).

## Program Performance Overview

Goal Performance Table										
Goal #4: Manage the Impa	nct of V	Vildland F	ire							
Supporting Performance Measures	Туре	2008 Actual	2009 Actual	2010 Actual	2011 Plan	2011 Actual	2012 Plan	2013 Budget Request	Change from 2012 Plan to 2013	Long-Term Target 2016
Strategy #1: Establish fire-adapte	d ecosys	tems								
Percent of acres treated which are		83%	85%	75%	80%	71%	80%	80%	0%	80%
moved toward the desired condition class (SP &BUR)	A	(1,042,693/ 1,260,035)	(1,282,069/ 1,500,854)	(961,363/ 1,279,820)	(560,000/ 700,000)	(702,727/ 992,257)	(792,000/ 990,000)	(468,000/ 585,000)		(480,000/ 600,000)
Percent of acres treated which are maintained in desired condition class (SP &BUR)		16%	14%	18%	14%	23%	10%	10%	0%	10%
	Α	(197,047/ 1,260,035)	(207,369/ 1,500,854)	(236,465/ 1,279,820)	(100,000/ 700,000)	(229,362/ 992,257)	(99,000/ 990,000)	(58,500/ 585,000)		(60,000/ 600,000)
Strategy #2: Adapt communities t	o wildfir	es.								
		98%	99%	94%	94%	99%	90%	95%	+5%	100%
Percent of acres treated which achieve fire management objectives as identified in applicable	А	(1,239,740/ 1,260,035)	(1,489,438/ 1,500,854)	(1,197,828/ 1,279,820)	(660,000/ 700,000)	(984,957/ 992,257)	(891,000/ 990,000)	(500,000/ 585,000)		(600,000/ 600,000)
management plans.(SP&BUR)		(5,693/ 5,778)	(6,145/ 6,225)	(5,673/ 5,786)	(8,327/ 8,765)	(6,519/ 6,696)	(6,519/ 6,696)	(6,519/ 6,696)	0%	
Other Significant Fire Program M	<b>Ieasures</b>	1								
Number of high-priority acres treated in the WUI	Α	614,319	758,638	696,523	700,000	705,274	890,000	500,000	(390,000)	TBD
Number of acres in fire regimes 1, 2, or 3 moved to a better condition class (WUI & Non-WUI)	A	WUI 166,491 Non-WUI 231,968 Total 398,459	WUI 173,859 Non-WUI 194,861 Total 368,720	WUI 174,347 Non-WUI 141,606 Total 315,953	WUI 280,000 Non-WUI 0 Total 280,000	WUI 169,032 Non-WUI 65,582 Total 234,614	WUI 360,000 Non-WUI 25,000 Total 385,000	WUI 210,000 Non-WUI 14,500 Total 224,500	WUI (150,000) Non-WUI (10,500) Total (160,500)	TBD

Supporting Performance Measures	Туре	2008 Actual	2009 Actual	2010 Actual	2011 Plan	2011 Actual	2012 Plan	2013 Budget Request	Change from 2012 Plan to 2013	Long-Term Target 2016
Number of acres in fire regimes 1,2,3 moved to a better condition class per million dollars of gross investment (WUI& non-WUI)	А	WUI 1,122 Non-WUI 3,104 Total 1,785	WUI 1,245 Non-WUI 2,571 Total 1,711	WUI 174,347 Non-WUI 141,606 Total 315,953	WUI 1,728 Non- WUI 0 Total 1,728	WUI 922 Non-WUI 358, Total 1280	WUI 1,025 Non-WUI 1,366, Total 2,104	WUI 1,606, Non-WUI 998, Total 1,545	WUI 581, Non-WUI (368), Total (559)	TBD
Number of acres in fire regimes 1, 2, or 3 moved to a better condition class-as a percent of total acres treated (WUI &non-WUI) This is also a long-term measure.	A	WUI 27% Non-WUI 36% Total 32%	WUI 23% Non-WUI 26% Total 25%	WUI 1,324 Non-WUI 1,760 Total 1,489	WUI 40% Non-WUI 0% Total 40%	WUI 17% Non-WUI 7%, Total 24%	WUI 40% Non-WUI 24% Total 39%	WUI 40%, Non-WUI 25%, Total 38%	WUI (23%), Non-WUI 1%, Total (1%)	TBD
Number of treated WUI acres that are identified in Community Wildfire Protection Plans or other applicable collaboratively developed plans(BUR)	A	438,756	525,058	594,370	675,000	660,673	750,000	450,000	(300,000)	576,000
Percent of treated WUI acres that are identified in Community Wildfire Protection Plans or other applicable collaboratively developed plans (BUR)	A	71% (438,756/ 614,319)	69% (525,058/ 758,638)	85% (594,370/ 696,523)	96% (675,000/ 700,000)	94% (660,673/ 705,274)	90% (800,000/ 891,000)	95% (475,000/ 500,000)	(-5%) (-325,000/ - 391,000)	96% (576,000/ 600,000)
Number of acres in WUI treated per million dollars gross investment(BUR)	А	<u>614,319</u> \$148.43M =4,139	758,638 \$139.64M =5,433	<u>696,523</u> \$127M =5,479	<u>700,000</u> \$162.07M =4,319	<u>707,442</u> \$164.98M =4288	<u>891,000</u> \$164.72M =5409	<u>526,500</u> \$130.78M = 4026	<u>(-364,500)</u>	TBD

Activity: Other Operations											
Subactivity: Burned Area Rehabilitation											
			FY 2013								
\$000	2011 Enacted	2012 Enacted	Fixed Costs & Related Changes	Program Changes (+/-)	Budget	Change from 2012 (+/-)					
BAR	33,203	13,025	0	0	13,025	-0					
FTE	47	47	0	0	47	-47					
* Note: FTE within the Burned Area Rehabilitation program are not base funded and vary dramatically from year to year based on the number of projects, use of contractors versus agency crews and other variable factors.											

#### Justification of 2013 Program Changes

The 2013 budget request for the Burned Area Rehabilitation program is \$13.0 million and 47 FTE and represents no change from the 2012 Enacted level.

#### 2013 Program Overview

The Burned Area Rehabilitation program protects resources by maintaining proper function in watersheds and landscapes, and by beginning the recovery of fire-damaged lands. These objectives are achieved by such actions as reseeding to control invasive species, maintaining soil productivity, rehabilitating tribal trust resources, repairing wildlife habitat, and repairing minor facilities damaged by wildfire.

Landscapes that are threatened from post-fire floods, debris flows, or are susceptible to serious degradation are assessed and treated by the Emergency Stabilization program within the Suppression Operations account. The Burned Area Rehabilitation program initiates longer-term actions to repair damages caused by catastrophic wildfire. Rehabilitation treatments are designed to repair or improve lands unlikely to recover naturally from severe wildfire damage.

The budget for the Burned Area Rehabilitation program is allocated among the Bureau of Indian Affairs, Bureau of Land Management, U.S. Fish and Wildlife Service, and National Park Service through a rigorous, competitive, scoring process based on priorities set by the Department. The local administrative units of the various agencies develop and submit rehabilitation plans for lands damaged by wildfire. These plans are approved by the local agency administrator and then serve as funding requests to agencies and the Department. Recommended project plans are reviewed, scored, and ranked by an interagency team and funding recommendations for the highest priority projects are made by the team. Department and bureau officials subsequently approve projects before final funding allocations are made.

Rehabilitation treatments funded by this program may build upon emergency stabilization measures and may continue to be implemented up to three years from containment of the fire. After three years, the bureaus' resource management programs assume responsibility for further landscape restoration and monitoring in accordance with land use plans and mission goals.

#### 2013 Program Performance

The primary program goals will continue to be the rehabilitation of lands degraded by wildfire. Actual rehabilitation treatments conducted each year are dependent upon the severity of the previous fire season(s) as well as rehabilitation needs required by the damaged resources on the ground. Based on criteria set by the Department, projects are ranked by an interagency team, and then approved by each bureau administrator as well as DOI leadership. The DOI wildland fire bureaus will continue to work cooperatively with the U. S. Department of Agriculture, the U.S. Geological Survey and other scientific institutions to implement monitoring protocols and methods to more accurately assess the effectiveness of wildfire rehabilitation treatments.

The Department established a baseline in 2009 to begin measurement of the long-term goal of rehabilitating treated acres to their desired condition. The description of desired condition includes measurable objectives for physical, chemical, hydrologic, and biologic attributes. Specific measurable objectives may include examples such as managing for specific species canopy cover or vegetation height.

#### Program Performance Change

	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 Budget Request	Program Change Accruing in 2012	Program Change Accruing in Out- years	
Number of treated burned acres that achieve the desired condition (SP & BUR)*	1,216,600	1,053,945	1,037,658	902,060	294,638	-607,422	N/A	
Percent of treated burned acres that have achieved the desired condition (SP & BUR)	99.5% (1,216,600/1,222,375)	95% (1,053,945/ 1,110,844)	97% (1,037,658/ 1,067,892)	99.0% (902,060/ 911,172)	99.0% (294,638/ 297,614)	0%	N/A	
Comments:		Baseline data for this measure was first collect in FY 2009. Long-term targets are under development.						

**\*NOTE**: In FY 2011 and FY 2012, the number of treated burned acres that achieve the desired condition, includes Emergency Stabilization values. The FY 2013 target includes only Burned Area Rehabilitation. Emergency Stabilization information will be included in the FY 2103 target as it becomes available in early FY 2013.

#### Use of Cost and Performance Information in the Burned Area Rehabilitation Program

To ensure that the highest priority needs are being met first and that funds are used in a consistent manner across the Department. The DOI has been using a rigorous process to rank BAR project proposals and allocate funds since 2008. This process will continue in 2013.

This process evaluates the projects against established criteria addressing issues of significant degraded resources and performance. Scores are generated and projects ranked according to their scores.

The results of the scoring produce a ranked list of funded treatments or activities. Projects that have the same score after being evaluated against the criteria are subjected to further scrutiny. Results are further reviewed by managers to ensure funds are being allocated to the highest priority projects.

Target Codes:		SP = Str	rategic Plan	Measure	BUR = Fire Program Specific Measure					
		HPG =	High Perforr	nance Goal		<b>~</b>	<b>v</b>	s Inappropriate	to Determine	At This Time
						UNK = Prio	r Data Not Av	vailable		
Type Codes:		C=Cum	ulative Meas	ure	A = Annual	Measure		F = F	uture Measure	9
End Outcome Measure/In termediate or PART Measure/P ART Efficiency or Other Outcome Measure	Type A/C/F	2008 Actual	2009 Actual	2010 Actual	2011 Plan	2011 Actual	2012 Plan	2013 President's Budget	Change from 2012 Plan to 2013	Long-term Target (2016)
End Outcome	: In	prove He	alth of Water	sheds, Landsc	apes, and Ma	rine Resource	S		•	
Number of treated burned acres that achieve the desired condition (SP & BUR)	A	UNK	1,216,600	1,053,945	1,219,000	1,037,658	902,060	294,638	-607,422	NA
Percent of treated burned acres that have achieved the desired condition (SP & BUR)	A	UNK	99.5% (1,216,600 / 1,222,375)	95% (1,053,945/ 1,110,844)	99.7% (1,219,000/ 1,223,000)	97.0% (1,037,658/ 1,067,892)	99.0% (902,060/ 911,172)	99.0% (294,638/ 297,614)	0%	NA
Comments:			seline data for this measure was first collected in FY 2009. Long-term targets will be developed in future budgets. *2013 estimates do not lude results of 2012 fire season, final accomplishments will be larger than amount shown.							

#### **Program Performance Overview**

Activity: Other Operations Subactivity: Facilities Construction and Maintenance								
				2013				
	2011 Actual	2012 Enacted	Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request			
5 Year Deferred Maintenance and Capital Improvement Plan	6,137	6,127	0	0	6,127			
FTE	1	1	0	0	1			

### Justification of 2013 Program Changes

The 2013 budget for the Facilities Construction and Maintenance program is \$6.1 million and 1 FTE, no change from the FY 2012 Enacted level.

#### **Program Overview**

The Facilities Construction and Maintenance Program provides safe, functional, and energy efficient facilities that are essential to the Department's mission to protect lives, property and resources from wildland fire. Like other programs within the Department, the Wildland Fire Management program has developed a five-year deferred maintenance and capital improvement plan. The plan presents the projects of greatest need in priority order, focusing first on critical health and safety work, then critical resource protection, energy and building sustainability, critical mission, and code compliance. Each project is submitted according to Departmental guidance for deferred maintenance and capital improvement. To ensure an efficient allocation to the highest priority projects, an interagency team at the NIFC collaboratively reviews the submitted projects by Total Project Score, and the prioritized list is approved by the Interior Fire Program Leadership.

The emphasis areas for the Facilities Construction and Maintenance Program include:

- Correction of critical health and safety-related facility problems by ensuring facilities are compliant with Federal accessibility requirements and OSHA requirements.
- Installation of facilities that improve the suppression response capability required to keep fires small and reduce the threat to communities, structures, municipal watersheds, other infrastructure, and wildlife habitat.
- Sufficient fire facilities that allow the program to maintain readiness and provide full support for fire management activities.

Safe and properly maintained facilities are important for protecting firefighters and the equipment upon which they rely. Like other resource programs in the Department, the Wildland Fire Management program is repairing and updating facilities that are in deteriorating and unsafe condition to meet current health and safety standards. Work is accomplished through the

authorities of Public Law 93-638 contracts, Public Law 297-100 grant processes, or through commercial contracting.

Maintaining a Fire Facilities account separate from the bureaus' Construction and Deferred Maintenance accounts is critical to ensuring effective and efficient fire operations. The Wildland Fire Management program depends on its network of infrastructure, including bunk houses, fire stations, warehouses, and dispatch centers, to support fire crews. These facilities also assist in recruiting firefighters into communities with limited housing, supporting the Department's ability to recruit and retain qualified firefighters. Maintaining a separate Fire Facilities account allows the fire program to centrally evaluate projects submitted by all four fire bureaus, enhances coordination, and helps ensure the most cost-efficient allocation of funds to best advance the facility needs of the Department's multi-bureau integrated fire program. In addition, as facilities are replaced or upgraded, efficiencies in design translate to lower operating costs and energy use, reducing agencies' carbon footprint. The emphasis on energy conservation and sustainability is a major area of importance for all projects.

#### **2013 Program Performance**

In 2013, the planned accomplishments in the Facilities Construction and Deferred Maintenance Program include five projects in five states with the highest critical health, safety, and resource protection ratings for a total of \$6,127,000. The following table lists the construction projects that will be funded in 2013.

WILDLAND FIRE FIVE YEAR CONSTRUCTION/DEFERRED MAINTENANCE PLAN SUMMARY								
	<b>20</b> 1	3						
PROJECT DESCRIPTION	STATE	BUREAU	INTERIOR SCORE	COSTS	INTERIOR RANK			
2013 Projects								
Fort Howes Fire Station (Phase 2 of 2)	MT	BLM	905	2,809,000	1			
Lower Brule Fire Management Office and Engine Bays (Phase 1 of 2)	SD	BIA	900	1,000,000	2			
Red Lake Office and Garage (Phase 2 of 2)	MN	BIA	900	922,000	3			
McNary Office Restroom	WA	FWS	850	100,000	4			
Wawona Fire Station (Phase 1 of 2)	CA	NPS	825	611,000	5			
Architectural and Engineering Design		INTERIOR	100	685,000	6			
TOTAL 2013				6,127,000				

# WILDLAND FIRE FIVE VEAR CONSTRUCTION/DEFERRED MAINTENANCE DI AN

# **Program Performance Overview**

	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 President's Budget	Program Change Accruing in 2013	Program Change Accruing in Out- years
Fire facilities under construction, reconstruction, or maintenance $\frac{1}{2}$	6	9	9	7	5	-2	0

 $^{1/}$  The number of projects completed annually are subject to the prioritization process outlined by the Department each year.

# Use of Cost and Performance Information in the Facilities Construction and Maintenance Program

- Project design and construction are monitored by the Department and the bureaus to ensure that projects are completed within scope and budget.
- DOI bureaus jointly evaluate departmental project priorities on an annual basis. Out-year priorities are adjusted and updated based on objective criteria applied during the annual evaluation process.

Activity: Other Operations Subactivity: Joint Fire Science Program								
			-	2013				
\$000	2011 Actual	2012 Enacted	Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request			
Joint Fire Science Program	6,000	5,990	0	0	5,990			
FTE	5	5	0	0	5			

#### Justification of 2013 Program Changes

The 2013 budget request for the Joint Fire Science Program (JFSP) is \$5,990,000 and 5 FTE, no change from the 2012 Enacted level.

#### **Program Overview**

The JFSP was created by Congress in 1998 as an interagency research, development, and applications partnership between DOI and the Department of Agriculture. Funding priorities and policies are set by the JFSP Governing Board, composed of one representative each from the Bureau of Indian Affairs, Bureau of Land Management, U.S. Fish and Wildlife Service, National Park Service, and the U.S. Geological Survey, and five representatives from the Forest Service.

JFSP has a unique capability to tailor wildland fire research in response to emerging needs of policy makers and fire managers through an annual cycle of proposal solicitation, review and funding. Open, competitive proposal solicitations and rigorous peer review are hallmarks of JFSP. Results from JFSP projects are regularly used by land managers to plan and implement fuels treatments, support fire management decisions, restore lands affected by fire, and meet regulatory requirements.

#### Investment portfolio

The JFSP Governing Board has adopted an Investment Strategy that allocates program funding in a portfolio approach by balancing funding across different types of fire science and science delivery. Specific areas of emphasis, and funds to be dedicated to each, are determined by the Board in response to consultations with organized groups (e.g. National Wildfire Coordinating Group), structured interactions (e.g. roundtables), and ad hoc sensing.

<u>Lines of work</u> – Complex topics requiring a long-term science investment strategy to ensure results can be synchronized and integrated for application (35 percent of program funding):

- Fuels treatment effectiveness
- o Smoke management
- Model and data integration
- Fire behavior (new, currently in planning stage)

<u>Emerging management needs</u> - Short-term topics of high relevance to managers where significant progress can be made in three years or less (15 percent of program funding):

- o Threatened and endangered species and fire
- Non-forest fuels and fire
- Cultural resources and fire
- Effects of landscape change on fire regimes

<u>New science</u> – Topics where investment is needed in fundamental fire science in order to develop future tools for fire and fuels managers (10 percent of program funding):

- o New fire behavior models
- New social science initiative

<u>Re-measurement</u> – Opportunistic studies that take advantage of previous investments in field experiments to re-measure existing plots (5 percent of program funding):

- Prescribed fire and restoration
- o Effectiveness of post-fire management

<u>Science delivery</u> – Activities that deliver research results directly to fire and fuel managers through a variety of active and passive approaches (25 percent of program funding):

- Regional knowledge exchange consortia (major initiative)
- Research summaries (e.g. Fire Science Digests and Fire Science Briefs)
- Syntheses (e.g. fuel treatment guides, climate change and fire, extreme fire behavior)
- o Road shows (e.g. demonstration of effective fuel treatment practices)
- Website (<u>www.firescience.gov</u>)
- Social media (Twitter, Facebook, etc.)

The balance of funds (up to 10 percent) is spent on administration, and program and project evaluation. Funds not used for these efforts are directed to the lines of work.

# Collaboration

JFSP research projects complement and build on other Federal research programs including those in the Forest Service, United States Geological Survey (USGS), National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, and others. More than 90 colleges and universities have collaborated on JFSP-sponsored research projects. Collaboration also extends to private non-profit organizations and tribal, State, county, and local governments as well. In all, over 200 organizations have become partners in JFSP-sponsored research over the lifetime of the program.

# 2013 Program Performance

JFSP will continue to invest in wildland fire research and technology transfer. Implementation of the JFSP Smoke Science Plan, the Fuels Treatment Science Plan, and full development of the Regional Knowledge Exchange Consortia will proceed as described in the JFSP Investment Strategy. In addition, JFSP will initiate a fire behavior line-of-work in response to management needs for a modern fire behavior prediction system.

Completion of the Interagency Fuels Treatment Decision Support System (IFTDSS) and transition to a host agency will also be supported. IFTDSS is a model and data integration

platform for fuels treatment planning and assessment utilizing a service-oriented architecture. IFTDSS has been designed and developed by JFSP in coordination with the National Wildfire Coordinating Group (NWCG) and fuel treatment managers from multiple agencies. Funding in 2013 will allow completion of designed functionalities and transfer to a host agency for operations and maintenance.

Program implementation will continue in the areas of performance described above: lines of work, emerging management needs, new science, re-measurement and science delivery. These areas were better defined by the JFSP Governing Board in 2009 as a result of an independent program review. The program will continue to issue competitive announcements, as well as follow-up on results from prior studies. Results from activities to evaluate program effectiveness initiated in 2010 and 2011 will be available in 2012, including evaluation of regional consortia effectiveness, website usability analysis, and JFSP product evaluation. Recommendations from these analyses will be incorporated into the FY 2013 program of work. In addition, an independent program review is scheduled for 2013.

Measure	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 President's Budget	Program Change Accruing in 2013	Program Change Accruing in Out-years	
Research projects initiated	40	41	36	40	38	-2	N/A	
Research projects completed	73	59	26	26	25	-1	N/A	
Refereed publications completed	75	37	36	30	25	-5	N/A	
Science delivery projects completed	40	37	25	20	15	-5	N/A	
Comment:	ent: JFSP projects are typically completed and published 3-5 years after initiation							

#### **Program Performance Overview**

# Office of the Secretary -Office of Wildland Fire

### **Employee Count by Grade**

(Total Employment)

	2011 Actual	2012 Est.	2013 Est.
	, lotaal	200	200
Executive Level V	0	0	(
SES	1	1	1
Subtotal	1	1	1
SL - 00	0	0	(
ST - 00	0	0	(
Subtotal	0	0	(
GS/GM -15	4	4	2
GS/GM -14	12	13	13
GS/GM -13	4	5	ł
GS -12	0	0	
GS -11	0	0	(
GS -10	0	0	(
GS - 9	2	2	:
GS - 8	0	0	
GS - 7	0	0	
GS - 6	0	0	(
GS - 5	0	0	(
GS - 4	0	0	
GS - 3	0	0	
GS - 2	0	0	(
GS - 1	0	0	(
Subtotal	22	24	24
Other Pay Schedule Systems	0	0	
Total employment (actual & estimate)	23	25	2

Progr	am and Financing (Millions \$)			
Flogi	Identification code:			
	14-1125-0-1-302	FY 2011	FY 2012	FY 2013
	Obligations by program activity:			2010
	Preparedness (Readiness, Facilities, and Fire			
0001	Science)	312	287	290
0004	Fire suppression operations	318	363	369
0006	Hazardous fuels reduction	192	183	145
8000	Burned area rehabilitation	14	13	13
0799	Total Direct Obligations	836	846	817
0801	Fire reimbursable	17	17	17
0900	Total new obligations	853	863	834
	Budgetary Resources:			
1000	Unobligated balance brought forward, Oct 1	409	359	192
1010	Unobligated balance transferred to other accounts [14-1127]	-18	0	0
1011	Unobligated balance transferred from other accounts [14-1127]	55	85	0
1021	Recoveries of prior year unpaid obligations	18	18	18
1050	Unobligated balance (total)	464	462	210
	Budget authority:			
	Appropriations, discretionary:	920	566	726
1100	Appropriation			
1120	Appropriations transferred to other accounts [12- 1115]	-3		
1121	Transferred from other accounts [14-1127]		92	92
1121	Appropriations transferred from other accounts [12- 1115]	5		
1130	Appropriations permanently reduced	-2		
	Unobligated balance of appropriations permanently			
1131	reduced Appropriation, permanently reduced (Sec 436, HR	-200	-82	
1141	2055)		-1	
1160	Appropriation, discretionary - Computed Totals	720	575	818
	Spending Authority from Offsetting Collections, discretionary			
1700	Collected	29	18	18
1701	Change in uncollected payments, Federal sources	-2		
	Spending auth from offsetting collections, disc			

1900         Budget Authority         1,212         1,055         1,046           Memorandum (non-add) entries: Unexpired         1 <t< th=""><th></th><th>dget Schedules ram and Financing (Millions \$) continued Identification code:</th><th></th><th></th><th></th></t<>		dget Schedules ram and Financing (Millions \$) continued Identification code:			
Memorandum (non-add) entries: Unexpired unobligated balance, end of year         359         192         212           Change in obligated balance, end of year         359         192         212           Change in obligated balance, end of year         359         192         212           Change in obligated balance, storught forward, Oct 1 (gross)         228         231         454           Uncollected pymts, Fed sources, brought forward,         -12         -10         -10           3010         Oct 1         -12         10         -10           3020         Obligated balance, start of year (net)         216         221         444           3030         Obligations incurred, unexpired accounts         853         863         834           3040         Outays (gross)         -831         -622         -867           Change in uncollected pymts, Fed sources,         2         -867         -71         -718         -18           3050         unexpired         -19         -18         -18         -18         -18           3051         unexpired         -19         -18         -16         -10         -10         -10         -10         -10         -11         -10         -10         -11<		14-1125-0-1-302	FY 2011		FY2013
Change in obligated balance:           3000         Unpaid obligations, brought forward, Oct 1 (gross)         228         231         454           3010         Oct 1         -12         -10         -10           3020         Obligated balance, start of year (net)         216         221         444           3030         Obligations incurred, unexpired accounts         853         863         834           3040         Outlays (gross)         -831         -622         -867           Change in uncollected pymts, Fed sources,         -19         -18         -18           3050         unexpired         2         -19         -18         -18           Obligated balance, end of year (net):         -19         -18         -18         -18           Obligated balance, end of year (gross)         231         454         400           3090         Unpaid obligations, end of year (net)         221         -10         -10           3091         Uncollected pymts, Fed sources, end of year         -10         -10         -10           3010         Obligated balance, end of year (net)         221         -10         -10           3010         Obligated balance, end of year (net)         221         -10         -10		Memorandum (non-add) entries: Unexpired	1,212	1,055	1,046
3000         Unpaid obligations, brought forward, Oct 1 (gross)         228         231         454           3010         Oct 1         -12         -10         -10           3020         Obligated balance, start of year (net)         216         221         444           3030         Outlays (gross)         -831         -622         -867           Change in uncollected pymts, Fed sources, Recoveries of prior year unpaid obligations, unexpired         2         -19         -18         -18           3080         Unpaid obligations, end of year (net):         2         -19         -18         -18           3090         Unpaid obligations, end of year (gross)         231         454         400           3091         Uncollected pymts, Fed sources, end of year         -10         -10         -10           3090         Unpaid obligations, end of year (net):         221         -10         -10         -10           3091         Uncollected pymts, Fed sources, end of year         -10         -10         -10         -10           3091         Uncollected pymts, gross         747         593         836           0utlays, gross:         -11         -9         -2         361           010         Outlays, gross (total)	1941		359	192	212
3020         Obligated balance, start of year (net)         216         221         444           3030         Obligations incurred, unexpired accounts         853         863         834           3040         Outlays (gross)         -831         -622         -867           Change in uncollected pymts, Fed sources,         2         Recoveries of prior year unpaid obligations,         19         -18         -18           3080         unexpired         2         19         -18         -18           Obligated balance, end of year (net):         3090         Unpaid obligations, end of year (gross)         231         454         403           3091         Uncollected pymts, Fed sources, end of year         -10         -10         -10           3100         Obligated balance, end of year (net)         221             3091         Uncollected pymts, Fed sources, end of year         -10         -10         -10           3100         Obligated balance, end of year (net)         221             Budget authority and outlays, net:         Discretionary:              4000         Budget authority, gross         747         593         836           Outlays, gross (total) <td< td=""><td></td><td>Unpaid obligations, brought forward, Oct 1 (gross) Uncollected pymts, Fed sources, brought forward,</td><td></td><td></td><td>454</td></td<>		Unpaid obligations, brought forward, Oct 1 (gross) Uncollected pymts, Fed sources, brought forward,			454
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4180         Budget authority, net (total)         720         575         818		Change in uncollected pymts, Fed sources,			-9 0
	4190	Outlays, net (total)	802	604	849

# **Appropriations Language**

# FLAME Wildfire Suppression Reserve Fund

(INCLUDING TRANSFER OF FUNDS)

For necessary expenses for large fire suppression operations of the Department of the Interior and as a reserve fund for suppression and Federal emergency response activities, *\$92,000,000*, to remain available until expended: Provided, That such amounts are available only for transfer to the "Wildland Fire Management" account and only following a declaration by the Secretary that either (1) a wildland fire suppression event meets certain previously established risk-based written criteria for significant complexity, severity, or threat posed by the fire or (2) funds in the "Wildland Fire Management" account will be exhausted within 30 days. (Department of the Interior, Environment, and Related Agencies Appropriations Act, 2012)

# **Summary of Requirements**

(dollars in thousands)

Activity: FLAME Wildfire Suppression Reserve Fund							
Subactivity: Suppression							
				2013			
			Fixed Costs &	Program			
	2011	2012	Related	Changes	Budget		
	Actual	Enacted	Changes (+/-)	(+/-)	Request		
FLAME Wildland Fire							
Suppression Operations	60,878	91,853	0	+147	92,000		
Suppression Operations FTE	60,878 0	91,853 0	0	+147 0	<u>92,000</u> 0		

# Summary of 2013 Program Changes for Suppression Operations

Request Component	(\$000)	FTE
FLAME Wildfire Suppression Reserve Fund – Suppression Operations		
Program Increase (10-year suppression average adjustment)	+147	0
TOTAL Program Changes	+147	0

# Justification of 2013 Program Changes

The 2013 budget for the FLAME Wildfire Suppression Reserve Fund is \$92,000,000 and 0 FTE, a net program change of +\$147,000 and 0 FTE from the 2012 Enacted level.

#### Program Increase (10-year suppression average adjustment) (+\$147,000 / 0 FTE)

This account includes funding for the most severe, complex and threatening fires and serves as a contingency reserve if DOI exhausts its regular suppression resources. The increase brings the total to the portion of the 10-year inflation-adjusted average of suppression expenditures associated with such expenditures. FLAME Funds are available to the Secretary of the Interior for transfer into the Suppression Operations account when those funds are nearly exhausted, or when certain objective criteria are met as described in the FLAME Act.

The requested increases in the FLAME Fund and in the Wildland Fire Management Suppression Operations account fully fund the inflation-adjusted 10-year average annual expenditures for suppressing wildland fires at \$368,508,000.

#### **Program Overview**

The 2010 Interior Appropriations bill established FLAME Wildfire Suppression Reserve Fund accounts in the Departments of the Interior and Agriculture. These funds are available to be transferred into the regular suppression operations account when funds provided for wildfire suppression and Federal emergency response in the Wildland Fire Management appropriation accounts are exhausted, and/or when certain objective criteria are met.

Funds may be transferred from the FLAME Wildfire Suppression Reserve Fund upon a declaration by the Secretary of the Interior or the Secretary of Agriculture. Declarations must be based on specific protocols and criteria or when the suppression account is nearly exhausted.

As fires escape initial response, and as Type 1 or Type 2 Incident Management Teams (IMTs) are assigned to those escaped incidents, a risk assessment and a formal risk decision will be made, which will be part of the declaration for a request to the Secretary of Interior to move funds from the FLAME Act account into the Suppression account. A number of analytical tools such as WFDSS, Fire Spread Probability (FSPro), which models fire behavior, and Rapid Assessment of Values-at-Risk (RAVAR), which models values at risk from fire, will be used to provide real-time support to fire managers implementing risk-informed management. The Secretary may make a declaration in the event the suppression account is nearly exhausted.

# **Protocols and Objective Criteria**

The FLAME Act account functions as a transfer account to accommodate those large fires which historically have resulted in the greatest expenditure of Suppression funds. Specific protocols and objective criteria must be met in order to meet FLAME Act fund requirements. The protocols and criteria also include complexity of wildfire incidents, such as assignment of Type 1 or Type 2 IMTs, or when the regular Suppression account is nearly exhausted. Both of these instances require a declaration by the Secretary who would then request transfer of funds from the FLAME Act account into the Suppression account.

Interior is continuing to develop and implement improvements in risk management that will become components of the protocols and criteria, including:

- Performance metrics associated with resource applications and their effectiveness on large fires;
- Fiscal boundaries for suppression expenditures with active oversight and monitoring protocols;
- A resource allocation system/model for risk-informed resource allocation (dispatch) to make optimal resource allocation decisions during periods of likely and actual high fire activity;
- A national risk management framework for managing the inherent risks of wildland fires including air and ground operations that classify fires into risk categories and associates mitigation measures commensurate with each category;
- The development and implementation of risk management protocols for agency administrator decisions and incident command team operations includes specifications for integrating decision-making by policy officials in circumstances that vary from these protocols, particularly when risk to firefighters is increased or the applications of resources is likely to be ineffective.

This overall process requires and includes continuous engagement of agency executive level leadership, fire and aviation management leadership, and DOI policy officials. As the complexity and consequences of wildfire management and expenditure decisions escalates, so will the engagement of these entities resulting in shared leadership and risks.

# 2013 Program Performance

The FLAME fund helps address the challenge of budgeting for fire suppression and enables the agency to respond effectively during highly variable fire seasons.

In 2011, DOI conducted suppression operations on 61 wildland fires (20 on DOI lands and 41 on Forest Service lands) that met the criteria for FLAME funding due to their significant complexity, severity, or the threat they posed to public safety and property. These fires exceeded 300 acres in size and were sufficiently complex, as documented in complexity analyses, to warrant the assignment of a Type 1 or Type 2 IMT or National Incident Management Organization (NIMO). The Department will continue to use the FLAME Fund to ensure resources are available for suppression activities when Suppression Operations funds are exhausted and/or appropriate criteria are met.

The actual amounts transferred will depend on the severity, length, and geographic impact of the 2012 and 2013 fire seasons.

	2009 Actual	2010 Actual	2011 Actual	2012 Plan	2013 President's Budget	Program Change Accruing in 2013	Program Change Accruing in Out- years
Percentage of all fires not contained in initial attack that exceed a stratified cost index (BUR)	13%	18%	TBD	9%	9%	0	0

# Program Performance Change