

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

and Performance Information
Fiscal Year 2021

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.



Printed on
Recycled Paper

Table of Content

Executive Summary	2
<i>Introduction</i>	2
<i>Governance & Coordination</i>	3
<i>Budget Overview</i>	4
<i>FY 2021 Budget Request</i>	5
Strategic & Performance Overview.....	8
<i>DOI Strategic Framework</i>	8
<i>Alignment to the DOI Strategic Plan</i>	9
<i>Agency Priority Goal</i>	11
<i>FY 2021 Department Priorities</i>	12
Budget Summary Tables	15
<i>Budget at a Glance</i>	15
<i>Summary of Requirements</i>	16
Program Activities	17
<i>Preparedness</i>	19
<i>Suppression Operations</i>	30
<i>Fuels Management</i>	35
<i>Burned Area Rehabilitation</i>	43
<i>Joint Fire Science Program</i>	46
Other Exhibits	12
<i>WFM Appropriations Language</i>	12
<i>Justification of Fixed Costs</i>	18
<i>Employee Count By Grade</i>	19
<i>Section 403 Compliance</i>	20
Appendix A – List of Tables and Figures.....	22
Appendix B – References.....	23

Executive Summary

Introduction

Fire is generally a natural and essential component of a healthy ecosystem, but can be destructive and costly in unhealthy ecosystems. In order to manage an effective wildland fire program, it is critical to take a proactive, cooperative and cohesive approach that mitigates the negative effects of wildfires while actively managing the use of fire in order to achieve resource management goals.

In the United States, on average, over 64,000 wildfires burn 6.9 million acres¹ every year. During the 2019 fire year, wildfire activity in the contiguous United States was below average; however, wildfire activity in Alaska requiring active response was notably high. While Federal suppression spending in fiscal year (FY) 2019 was approximately 35% less than the 5-year average of costs from FY 2014 to FY 2018², DOI's FY 2019 suppression cost in Alaska was 159% higher than the average cost spent on wildfires in Alaska over the same period. Because wildfires are unpredictable events that often burn across multiple jurisdictions, collaboration is key to management efficiency and success.

The Department of the Interior (DOI) and the Department of Agriculture are integral parts of a larger wildland fire management (WFM) community that works collaboratively to implement a cohesive fire management framework to ensure wildland firefighter and public safety while mitigating loss from wildfire. The DOI's WFM program is composed of the Office of Wildland Fire (OWF) and four bureaus with wildland fire management responsibilities – the Bureau of Indian Affairs (BIA), the Bureau of Land Management (BLM), the Fish and Wildlife Service (FWS), and the National Park Service (NPS).



The wildland fire community includes two Cabinet-level agencies that manage wildland fire on behalf of the Federal government: the U.S. Department of Agriculture and the U.S. Department of the Interior.

¹ Statistics cited from the ten-year average of fires from 2009-2018:
<https://www.predictiveservices.nifc.gov/IMSR/2019/20191227IMSR.pdf>

² FY 2019 Federal suppression costs total \$1.58 billion, and the five-year average is \$2.45 billion.

In addition, other bureaus and agencies play an integral role in supporting the DOI’s WFM program. Collaboration with Federal, Tribal, State and local entities is essential to providing a unified and coordinated response to wildland fire management. The military and international partners provide additional wildfire suppression support, especially when existing resources are insufficient to meet the increased demands of a severe fire season.

Governance & Coordination

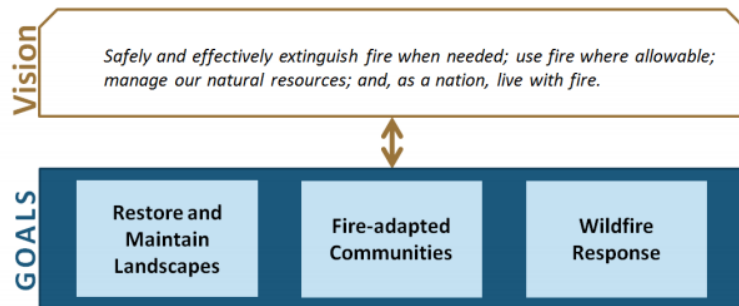
The Federal WFM program is closely coordinated and integrated with other Federal, Tribal, State and local programs using interoperable equipment, training, and standards. The program is guided by a common policy and approach, implemented through agency line organizations, and within the context of the statutory mission of each agency. A number of governance structures are used to develop and maintain this common, integrated approach – ranging from the national strategic level to regional and local coordination groups.



Originally formed by the Secretaries of the Interior and Agriculture, the Wildland Fire Leadership Council (WFLC) is an intergovernmental council comprised of Federal, Tribal, State and local officials. Established in 2002 in the aftermath of several severe fire seasons, WFLC provides strategic guidance in the application of wildland fire management policy across multiple jurisdictions, and is instrumental in the development and implementation of the National Cohesive Wildland Fire Management Strategy, which remains the foundation of Federal wildland fire

management policy.

The *National Cohesive Wildland Fire Management Strategy* establishes a national vision for wildland fire management. Developed in 2014, it represents a commitment to work collaboratively among all stakeholders and across all landscapes through shared stewardship to achieve the three national goals.









In DOI, OWF is the principal office responsible for developing Department-wide WFM policy, program accountability, and review, as well as oversight of the WFM budget. In carrying out these responsibilities, OWF ensures that implementation of the WFM program is consistent across DOI and adheres to the directives established by Congress, the Administration, DOI’s Strategic Plan, and other wildland fire policies and directives. Furthermore, OWF is responsible for the development and oversight of many of the Wildland Fire Information Technology (WFIT) systems that are used by the WFM community for tracking data, program planning and wildfire response.

Budget Overview

The DOI’s WFM program is committed to restoring and maintaining resilient landscapes, protecting lives and properties, creating fire-adapted communities, and ensuring safe and effective response to wildfires. It strives to achieve a cost-effective, technically sound, and scientifically-grounded wildland fire management program that safely meets WFM and resource management goals. In doing so, every effort is made to minimize the cost of wildfire response and damage to communities and natural and cultural resources in accordance with DOI’s strategic goals.

DOI’s **Wildland Fire Management Appropriation** currently funds the following program activities:

Program Activity	Description
 Preparedness	Provides an integrated and coordinated framework for wildfire response by funding core firefighting resources and managing the capacity of assets and operations to respond to fire activities across the United States.
 Suppression Operations	Comprises the range of actions taken to directly extinguish wildfires, prevent the movement and growth of unwanted fire, and manage fire for resource benefits.
 Fuels Management	Represents a strategic investment in actively managing vegetation to reduce the intensity, severity or negative effects of wildfire. Fuels management practices include prescribed fires, as well as mechanical, chemical, and biological treatments, among other methods.
Other Operations	
 Burned Area Rehabilitation (BAR)	Supports efforts to repair or improve burned landscapes unlikely to recover without human assistance.
 Facilities, Construction and Maintenance	Provides the infrastructure used to support firefighters, safeguard the public, and improve capability to protect values at risk from damage by wildfire.
 Joint Fire Science Program (JFSP)	Delivers dedicated wildland fire research and science to inform fire management policies and decisions at local, regional and national levels.

FY 2021 Budget Request

Significant challenges exist, from longer fire seasons that last nearly an entire year, to accumulated vegetation that is undermining the health of our Nation’s forests and rangelands. A new strategic approach to wildland fire management is needed – one that considers active vegetation management as a collaborative enterprise that is carried out year-round. Coupled with a strong 2021 budget, the Administration has proposed an interagency package of vegetation management reform legislation, providing for much needed categorical exclusions from NEPA review requirements, to kick start a solution to this serious risk.

In December 2018, the President issued Executive Order (EO) 13855, directing the DOI and the U.S. Department of Agriculture to promote active management of America’s forests and rangelands to reduce wildfire risk with specific targets for actions. Secretary Bernhardt issued Secretary’s Order (SO) 3372 following the President’s EO, establishing a meaningful and coordinated framework for ensuring the protection of people, communities and natural resources. Implementation of both Orders is a top priority in reducing the risks of deadly and destructive wildfires, and in 2019, DOI exceeded the active management targets required by EO 13855 and completed the action items directed in SO 3372.

Building on these accomplishments, the 2021 request continues to advance the Administration’s priority to more aggressively implement active fuels management to reduce the threat of wildfires.

The FY 2021 Request for the DOI’s WFM program is **\$1.0 billion**.

Budget Authority (dollars in thousands)	2019 Actual	2020 Enacted	2021 Request
Current	\$ 941,211	\$ 952,338	\$ 1,003,090
Net Other Transfers ^(a)	\$47,849	-	-
Total Current, including Transfer:	\$989,060	\$952,338	\$1,003,090
Cap Adjustment		[\$300,000]	[\$310,000]
Staffing			
FTEs ^(b)	3,634	3,744	4,344

Notes:

(a) Transfers reflect the amount of funding received from the U.S. Forest Service (USFS). In FY 2019, USFS transferred \$2.8 million for interagency projects and an additional \$45 million in Suppression funding to support DOI's response to the 2019 wildfire year.

(b) The FTE amounts in this table include reimbursable FTE, which explains the difference from the FTE displayed in the Summary of Requirements table.

DOI's Plan to Transform the Firefighting Workforce

The 2021 budget proposes \$50.0 million for DOI's Plan to Transform the Firefighting Workforce, which represents a strategic investment in a more robust wildland fire management program. Comprised of \$28.0 million in Preparedness and \$22.0 million in Fuels Management, the proposal increases the capacity of permanent firefighters for a year-round Federal workforce that is driven to sustain wildfire response during peak periods while addressing active vegetation management during times of low fire activity. Concurrently, the Department is investing in an integrated fuels management framework that is designed to collaboratively identify values-at-risk to better target high priority areas by leveraging capacity, resources and funding. Together, this forward-looking planning model – a permanent workforce, year-round response capability, and furthering mitigation through fuels management – will substantially reduce wildfire risk to communities, infrastructure, people and resources.

The Department continues to prioritize maintaining the program's initial attack success rate and meeting the highest priority resource management objectives. In addition, through increased investment in the Fuels Management program, DOI will strive to reduce the risk and negative impacts of wildfires on people, communities, and natural/cultural resources on DOI and Tribal lands, particularly those areas in and adjacent to the wildland urban interface (WUI).

Addressing the threat of catastrophic wildfire also depends on the support of the Department's resource management programs through active management and targeted timber or salvage harvests, as these strategies also help improve the health of DOI and Tribal lands. Decades of poor forest and vegetation management practices nationwide have contributed to deadly and destructive wildfires. Dense undergrowth has accumulated on Federal lands, providing fuel for catastrophic wildfires and worsening insect infestation, invasive species, and disease. These conditions place people, their homes, and their communities at risk, and make it more difficult and dangerous for wildland firefighters to fight fires.

Active management is a necessary and important tool to combat these threats, save lives, and protect property. This includes significantly increasing the use of fuels management practices, which includes prescribed fire, as well as mechanical, chemical, and biological treatments, and other methods to manage the availability of burnable vegetation such as trees, shrubs, and grasses that can act as fuel during a wildfire.

For a more detailed explanation of DOI's work to promote active vegetation management to reduce wildfire risk, please consult the Fuels Management section.

Management Reform

The budget request supports the President's Management Agenda Workforce Cross-Agency Priority Goal to support strategic recognition throughout the year, address workforce challenges, and recognize high performing employees and those employees with talent critical to mission achievement. The budget assumes agency pay for performance efforts increase of one percentage point for non-Senior Executive Service (SES)/Senior Leader (SL)/Scientific or Professional (ST) salary spending.

The FY 2021 President's Budget supports implementation of the new GrantSolutions enterprise system to better process and track grants and cooperative agreements. Funding supports the allocated share of operating costs for the GrantSolutions enterprise system to improve the processing and transparency of

grants and cooperative agreements across Interior. Cost allocations are based on an algorithm of use factors.

The 2021 budget supports needed reforms to strengthen the culture of ethics within Interior. Over the last two years, Interior has taken several steps to enhance the emphasis on ethics in the Department, including increasing the number of ethics officers and vigilance regarding the obligation of the Department's leaders and employees to hold themselves and their colleagues accountable for ethical conduct. Ethics is a top priority in all decision making and operations.

This past summer, Secretary Bernhardt advanced his commitment to transform Interior's ethics program by signing Secretarial Order 3375, which restructures the ethics program by unifying disparate bureau ethics programs into a centrally-managed office under the Solicitor. The Order streamlines the reporting structure for ethics personnel, establishes the Departmental Ethics Office, and clarifies roles and responsibilities for the Department's employees. The FY 2021 budget implements this reorganization to restructure the ethics program by transferring bureau and office ethics funding and FTEs to the Departmental Ethics Office in the Office of the Solicitor budget.

Good Government

Good Accounting Obligation in Government Act Report

The Good Accounting Obligation in Government Act (GAO-IG Act, P.L. 115-414) enacted January 3, 2019, requires that Agencies report the status of each open audit recommendation issued more than one year prior to the submission of the Agency's annual budget justification to Congress. The Act requires Agencies to include the current target completion date, implementation status, and any discrepancies on closure determinations.

The Department of the Interior leadership takes audit follow-up very seriously and considers our external auditors, to include the Government Accountability Office (GAO) and Office of the Inspector General, valued partners in not only improving the Department's management and compliance obligations but also enhancing its programmatic and administrative operations. As stewards of taxpayer resources, the Department applies cost-benefit analysis and enterprise risk management principles in recommendation implementation decisions. The Department's GAO-IG Act Report is available at the following link:

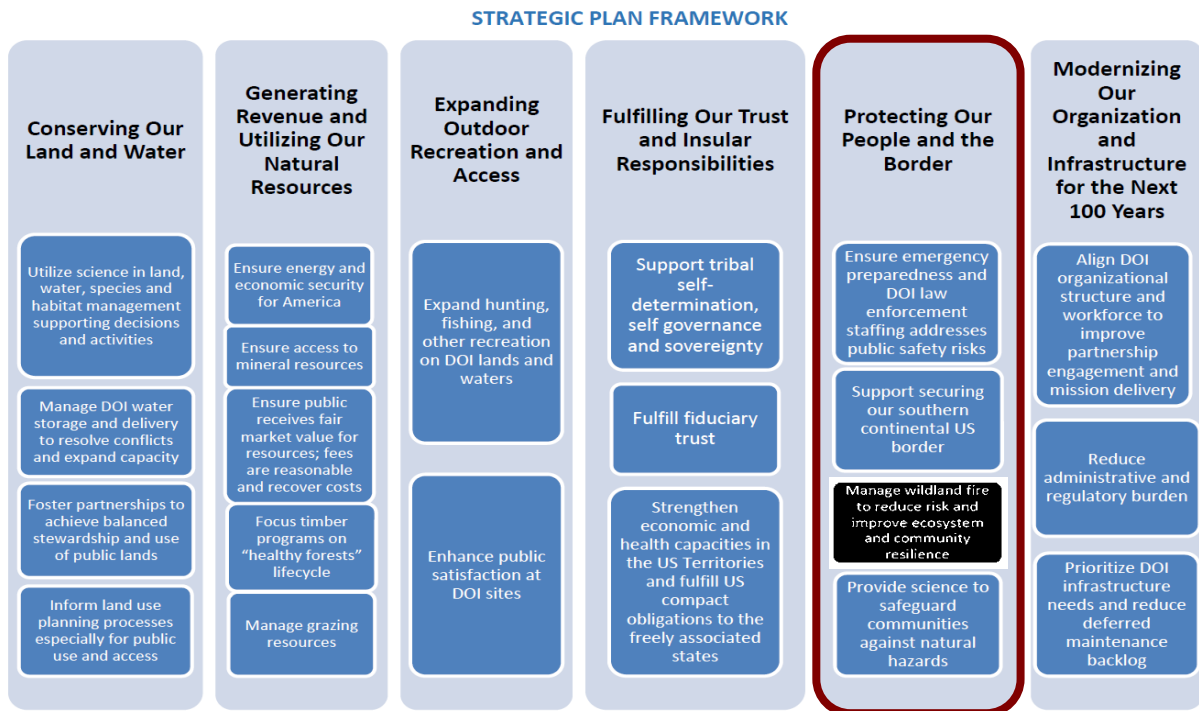
<https://www.doi.gov/cj>.

Strategic & Performance Overview

DOI Strategic Framework

The DOI’s Strategic Plan for FY 2018-2022 provides the framework for the programs and activities that are performed by 10 bureaus and multiple offices, in approximately 2,400 locations throughout the Nation. The Strategic Plan facilitates the integration of programs, the allocation and alignment of resources, and collaboration and coordination with stakeholders to achieve key goals. A set of six mission areas, 21 goals, 34 strategies, and 127 performance measures guide the DOI’s activities during this five year period. These mission areas reflect the Secretary of the Interior’s priorities, while the goals and strategies describe the means by which those priorities will be achieved.

The WFM program is located within Mission Area 5 of the DOI’s Strategic Plan: “Protecting our People and the Border,” but the crosscutting reach of the program supports multiple mission areas.



Alignment to the DOI Strategic Plan

The WFM program aligns its program activities and budgets to implement and achieve the goals of the DOI’s Strategic Plan elements.

DEPARTMENT OF THE INTERIOR

Strategic Plan Element

Protecting our People and the Border: Manage wildland fire to reduce risk and improve ecosystem and community resilience.

Additional elements supported:

- Conserving our land and water
- Generating revenue and utilizing our natural resources
- Fulfilling our trust and insular responsibilities
- Provide science to safeguard communities against natural hazards

Crosscutting principles:

- Effective and accountable leadership
- Engaging the Nation in cooperative stewardship

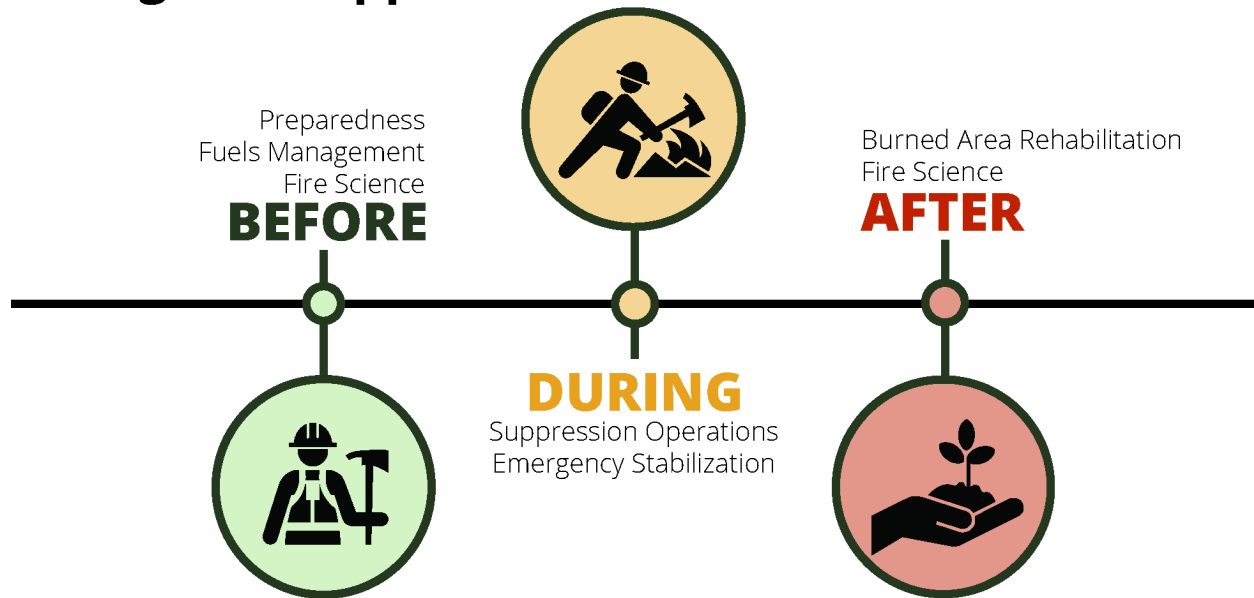
Strategic Plan



The FY 2021 request supports DOI’s Strategic Plan by fostering an integrated approach to the WFM program and ensuring that wildland fire management principles and concepts are a fundamental component of resource programs throughout DOI. An integrated wildland fire management approach includes activities that improve the integrity of landscapes and their resilience to wildfires; contribute to public and firefighter safety; improve community adaptation to fire; improve the ability to safely and appropriately respond to wildfire; address post-wildfire restoration needs; and provide opportunities for wildfires to be managed for resource objectives.

WILDLAND FIRE MANAGEMENT

Integrated Approach



The Strategic Plan identifies three key performance measures to demonstrate and evaluate the WFM program’s progress in achieving the goals of the Cohesive Strategy – to restore and maintain resilient landscapes, promote fire-adapted communities, and respond to wildfires. Additionally, other supporting indicators are tracked annually to enable the WFM program to monitor its performance across several functional areas.

The Strategic Plan also calls for development of new fuels program measures that better evaluate the Department’s progress towards reducing risk and that align with risk mitigation targets. In 2019, a team comprised of representatives from OWF, the four DOI wildland fire bureaus, and the Office of Policy Analysis made significant progress in this effort. Focusing on currently available data, the team completed the development of a new pilot measure that quantifies aggregate risk mitigation-related outcomes of active vegetation management and advanced work on a second pilot measure.

Work on the second pilot measure will continue in FY 2020. Refinement of both measures and coordination with the U.S. Forest Service is ongoing. DOI continues to engage with other Federal agencies, as well as State and local partners, to identify collaborative opportunities to evaluate, prioritize and implement wildfire risk mitigation efforts across ownership boundaries. Ultimately, such outcome-based performance measures critically depend upon related improvements in interagency systems and data, and major efforts to support this are ongoing.

Agency Priority Goal

Goal Statement: By September 30, 2021, the Department of the Interior will undertake at least 85% of all fuels management projects utilizing collaborative risk assessments that identify wildfire likelihood.

Bureau Contribution: OWF will coordinate closely with BIA, BLM, FWS, and NPS to achieve the Agency Priority Goal (APG) to undertake fuels management projects that help reduce threats to at-risk communities, infrastructure and natural/cultural resources through active vegetation management.

Implementation Strategy: DOI guidance requires that bureaus collaborate with stakeholders to identify and prioritize shared values at appropriate geographic scales in developing and implementing fuels management projects. All bureaus have risk assessment protocols in place to help rank and categorize projects.

DOI will also support the development and implementation of a pilot “Shared Wildfire Risk Mitigation” tool in FY 2020. This tool is anticipated to better assess wildfire risk utilizing a collaborative approach that identifies overlapping priority areas and establishes consistency in program implementation and methodology throughout DOI.

Performance Metrics: The performance measure related to this APG is the number of acres accomplished in the Fuels Management program. This is related to the existing fire supporting performance measure: “Number of high-priority acres treated in the WUI” (wildland-urban interface).

FY 2021 Department Priorities

The FY 2021 Request for the WFM program supports the following Departmental priorities:

Create a conservation stewardship legacy

- Management of wildland fire is a critical component of DOI's land stewardship responsibilities. By providing a technically sound and science-based wildland fire management program that is integrated with natural resource programs, WFM is committed to an integrated and cohesive approach that results in reducing wildfire risk, restoring or maintaining landscape resiliency, creating safer working conditions for firefighters, and helping communities live with wildland fire.
- WFM ensures the conservation of DOI and Tribal lands and waters through the active management of vegetation to mitigate the risk of wildfire and promote natural systems that are resilient to wildfire. Vegetation management efforts protect DOI and Tribal lands and waters by maintaining properly functioning watersheds and landscapes.
- Post-fire rehabilitation objectives are achieved by actions such as reseeding vegetation to control fire-prone invasive species, maintaining soil productivity, restoring wildlife habitat, repairing minor facilities damaged by wildfire, and monitoring efforts to ensure effectiveness.

Sustainably develop our energy and natural resources

- WFM program activities take place in national parks and monuments, national wildlife refuges and preserves, Tribal lands, and on other DOI-administered lands. The WFM program contributes to the protection of DOI lands and energy assets, increases opportunities for sporting and recreation, fosters job creation, and provides for the preservation and sustainability of important natural and cultural resources for the benefit of the public.
- WFM program activities restore, maintain, and enhance vegetation and landscape conditions that support proliferation of wildlife and their habitat; protect historic and cultural sites, grazing allotments, and recreation areas; and limit invasive species in order to increase opportunities that support additional use of DOI and Tribal lands.

Restore trust and be a good neighbor

- Collaboration with stakeholders is critical to achieve DOI's goals and significantly reduce wildfire risk to firefighters, communities, and landscapes. WFM works collaboratively with Federal, Tribal, State, and local entities to ensure a coordinated approach to wildland fire management that enables resources, assets, and response capabilities to be leveraged, in order to gain economic efficiency and reduce management duplication.

Ensure Tribal sovereignty means something

- DOI's Bureau of Indian Affairs primarily provides wildland fire management for Indian trust lands; however, all agencies work closely with Tribes and Tribal partners to fulfill DOI's trust responsibilities. DOI recognizes and promotes self-governance by supporting Tribes that opt to directly manage their wildland fire management program or specific program elements and activities.
- The Department's Burned Area Rehabilitation (BAR) program is an important source of funding for the long-term stabilization and repair of damaged Tribal lands caused by catastrophic wildfires, and this work helps uphold our Trust responsibilities.
- Dedicated funding of \$10.0 million for fuels treatment under the Reserved Treaty Right Lands (RTRL) program upholds our trust responsibilities by supporting Tribes' participation in

collaborative strategic fuels management projects on non-Tribal lands to protect priority Tribal natural resources that are at high risk from wildfire.

- The WFM program will continue to dedicate \$15.0 million of Preparedness base funding for Tribally-managed firefighting organizations and Tribal workforce development. These BIA-related increases were first requested and appropriated in 2015. Funding also provides for Tribal contract support costs and allows Tribes to pay for facilities, unemployment and worker's compensation, as required by the Indian Self-Determination and Education Assistance Act of 1975 (P.L. 93-638).

Increase revenues to support the Department and national interests

- A Secretarial Wildland Fire Directive was issued in 2017 to all Department of the Interior bureaus, superintendents, and land managers at all levels to adopt more aggressive practices, using the full authority of the Department, to prevent and combat the spread of catastrophic wildfires through integrated active management activities. This was further codified in Executive Order 13855 and Secretarial Order 3372. Integrated active management activities include timber harvesting, salvage, thinning, chemical and mechanical treatments, prescribed burning, and managing wildfires as a means of meeting multiple landscape management objectives. Integrated active management activities may increase revenues through potential timber sales or small biomass opportunities. When completed, these activities help DOI and Tribal lands and resources be resilient to and recover from wildfires.

Protect our people and the border

- Ensuring the protection of human life is the single overriding priority for WFM. WFM program activities protect human lives, property and other values and are guided by bureau planning efforts, including fire management plans.
- Fire risk mitigation, preventive measures, readiness, and wildfire response activities protect communities and natural and cultural resources from detrimental effects of wildfires, enhance resource objectives, and prioritize firefighter and public safety.
- Wildfire suppression response also includes emergency stabilization projects, which reduce the risks of flood, landslides, and erosion. This work contributes to the protection of the Nation's public and Tribal land and water resources.
- Fuels treatment efforts protect public safety and property by enhancing safe and effective wildfire responses, mitigating wildfire risk to protect values at risk, and improving the ability of communities to withstand wildfires. Active management through prescribed fire, chemical and mechanical treatments, and other approaches helps reduce wildfire risk, control invasive plants, enhance natural resources, and safeguard communities and infrastructure.
- DOI and the Department of Homeland Security Customs and Border Protection continue to implement the 2018 Southern Border Fuels Management Initiative that bolsters efforts to secure the southern border while taking measurable steps to address the threat of wildfires on Federal and Tribal lands.

Achieve our goals and lead our team forward

- The Wildland Fire Information Technology (WFIT) Investment Management Five Year Plan for the wildland fire community is a blueprint that identifies and communicates the desired outcomes of technical investments that will achieve WFM business goals and objectives. To support future investment decisions, the blueprint identifies the current state of investments and outlines the strategy used to establish and prioritize new opportunities. The blueprint carefully lays out actions to capitalize on those investments and identifies the IT investment portfolio for FY 2016 through 2021. Applications in the WFIT portfolio provide capability to plan, analyze, and monitor the landscape for variables that affect wildland fire management and support

incident management operations. This includes supporting cross-functional areas of incident management, fire environment, resource management and acquisitions.

- DOI supports the investment in a stable, professional and permanent Federal wildland fire workforce to meet the demands of longer, larger, costlier and more complex wildfires. The FY 2021 budget includes \$50.0 million in new designated funding for DOI's Plan to Transform the Firefighting Workforce to increase permanent firefighter staffing levels to better align with the challenges of today's wildfire activity and to support more aggressive implementation of Executive Order 13855 regarding vegetation management.

CONNECTIVITY ON THE MOVE



Firefighters test FirstNet enabled cell phones on the Vader Fire in Idaho. (DOI/Neal Herbert)

FirstNet is an independent authority authorized by Congress in 2012 to develop, build and operate a nationwide broadband network dedicated to public safety. In 2019, DOI funded a pilot to demonstrate and evaluate the potential of the FirstNet network to provide consistent and reliable service on wildfire incidents. Several Incident Management Teams tested FirstNet enabled cell phones and tablets on active fires, employing cellular connectivity provided by the FirstNet provider, AT&T. Information Technology Support teams followed up with training and gathered feedback about how the system and devices performed in some of the most remote areas across the country. This past summer, the team tested deploying FirstNet capabilities to active wildfires as a viable connectivity tool and will continue more deployments in 2020.

Budget Summary Tables

Budget at a Glance

Wildland Fire Management						
Table 1: 2021 Budget at a Glance						
(Dollars in Thousands)						
	2019 Actual	2020 Enacted	Fixed Costs (+/-)	Internal Transfers (+/-)	Program Changes (+/-)	2021 Request
Appropriation: Wildland Fire Management 14X1125						
Preparedness	322,179	332,784	+7,284		+28,000	368,068
Fixed Costs			[+7,284]			
Transfer Ethics Program to Solicitor					[-10]	
DOI's Plan to Transform the Firefighting Workforce/Preparedness Capacity					[+28,010]	
Suppression Operations	388,135	383,657			+0	383,657
Maintain 10-Year Suppression Average at FY 2015 Level						
Fuels Management	189,000	194,000	+2,961		+30,934	227,895
Fixed Costs			[+2,961]			
DOI's Plan to Transform the Firefighting Workforce					[+22,000]	
Fuels Management Capacity					[+8,934]	
Other Operations	41,897	41,897			-18,427	23,470
Burned Area Rehabilitation (BAR)	20,470	20,470			+0	20,470
Facilities Construction and Maintenance	18,427	18,427			-18,427	0
Joint Fire Science Program	3,000	3,000			+0	3,000
TOTAL, Wildland Fire Management Appropriation	941,211	952,338	+10,245	0	+40,507	1,003,090
Net Other Transfers*	47,849					
TOTAL, Wildland Fire Management Appropriation (With Transfers)	989,060	952,338	+10,245	0	+40,507	1,003,090
Appropriation: Wildfire Suppression Operations Reserve Fund 14X0130						
Suppression Operations	0	300,000			+10,000	310,000
TOTAL, Wildfire Suppression Operations Reserve Fund	0	300,000	0	0	+10,000	310,000

*Transfers reflect the amount of funding received from the U.S. Forest Service (USFS). In FY 2019, USFS transferred \$2.8 million for interagency projects and an additional \$45 million in Suppression funding to support DOI's response to the 2019 wildfire year.

Summary of Requirements

Wildland Fire Management											
Table 2: Summary of Requirements											
<i>(Dollars in Thousands)</i>											
	2019 Actual	2020 Enacted		Fixed Costs & Related (+/-)	Internal Transfers (+/-)	Program Changes (+/-)		2021 Request		Change from 2020 (+/-)	
	Amount	Total FTE	Amount			FTE	Amount	FTE	Amount	FTE	Amount
Wildland Fire Management											
Preparedness	322,179	2,277	332,784	+7,284	0	+342	+28,000	2,619	368,068	+342	+35,284
Total, Preparedness	322,179	2,277	332,784	+7,284	0	+342	+28,000	2,619	368,068	+342	+35,284
Suppression Operations	388,135	265	383,657	+0	0	+0	+0	265	383,657	+0	+0
Total, Suppression Operations	388,135	265	383,657	+0	0	+0	+0	265	383,657	+0	+0
Fuels Management	189,000	912	194,000	+2,961	0	+259	+30,934	1,171	227,895	+259	+33,895
Total, Fuels Management	189,000	912	194,000	+2,961	0	+259	+30,934	1,171	227,895	+259	+33,895
Other Operations											
Burned Area Rehabilitation (BAR)	20,470	51	20,470	+0	0	+0	+0	51	20,470	+0	+0
Facilities Construction and Maintenance	18,427	1	18,427	+0	0	-1	-18,427	0	0	-1	-18,427
Joint Fire Science Program	3,000	3	3,000	+0	0	+0	+0	3	3,000	+0	+0
Total, Other Operations	41,897	55	41,897	+0	0	-1	-18,427	54	23,470	-1	-18,427
Total, Wildland Fire Management	941,211	3,509	952,338	+10,245	0	+600	+40,507	4,109	1,003,090	+600	+50,752
Net Other Transfers*	47,849										
Total, Wildland Fire Management (With Transfers)	989,060	3,509	952,338	+10,245	0	+600	+40,507	4,109	1,003,090	+600	+50,752
Wildland Suppression Operations Reserve Fund											
Suppression Operations			300,000	+0	0	+0	+10,000	0	310,000	+0	+10,000
Total, Wildland Suppression Operations Reserve Fund			300,000	+0	0	+0	+10,000	0	310,000	+0	+10,000

*Transfers reflect the amount of funding received from the U.S. Forest Service (USFS). In FY 2019, USFS transferred \$2.8 million for interagency projects and an additional \$45 million in Suppression funding to support DOI's response to the 2019 wildfire year.

Note: The FTE amounts in this table do not include reimbursable FTE, which explains the difference from the FTE displayed in the Budget Summary table on page 4. Additionally, this table does not reflect the number of Tribal FTEs, which are included in the Preparedness and Fuels Management sections.

Program Activities

The FY 2021 budget request for the DOI's WFM program is \$ 1,003,090 and 4,109 FTE, a program change of +\$40,507 and +600 FTE from the FY 2020 enacted level. This includes:

Preparedness (\$368,068,000; 2,619 FTE)

The Department's Preparedness activities continue to support an interoperable approach to wildland fire management that promotes efficiencies, supports partnerships, and sustains core capabilities.

Additionally, the request reflects a \$28.0 million program increase in Preparedness funding towards DOI's Plan to Transform the Firefighting Workforce (see below) to increase current levels of fire readiness and preparedness activities.

Suppression Operations (\$383,657,000; 265 FTE)

This request fully funds Suppression Operations at the 10-year average of suppression obligations as reported in the FY 2015 President's budget, in accordance with PL 115-141.

Fuels Management (\$227,895,000/1,171 FTE)

The Department will target resources to high priority projects on approximately 1,400,000 acres of DOI-administered and Tribal lands while supporting active management to reduce the spread, intensity, and/or severity of wildfire. The request reflects a total program increase of \$30.9 million in Fuels Management, including a \$22.0 million increase towards DOI's Plan to Transform the Firefighting Workforce (see below) to conduct additional vegetation management to reduce wildfire risk.

Burned Area Rehabilitation (\$20,470,000/51 FTE)

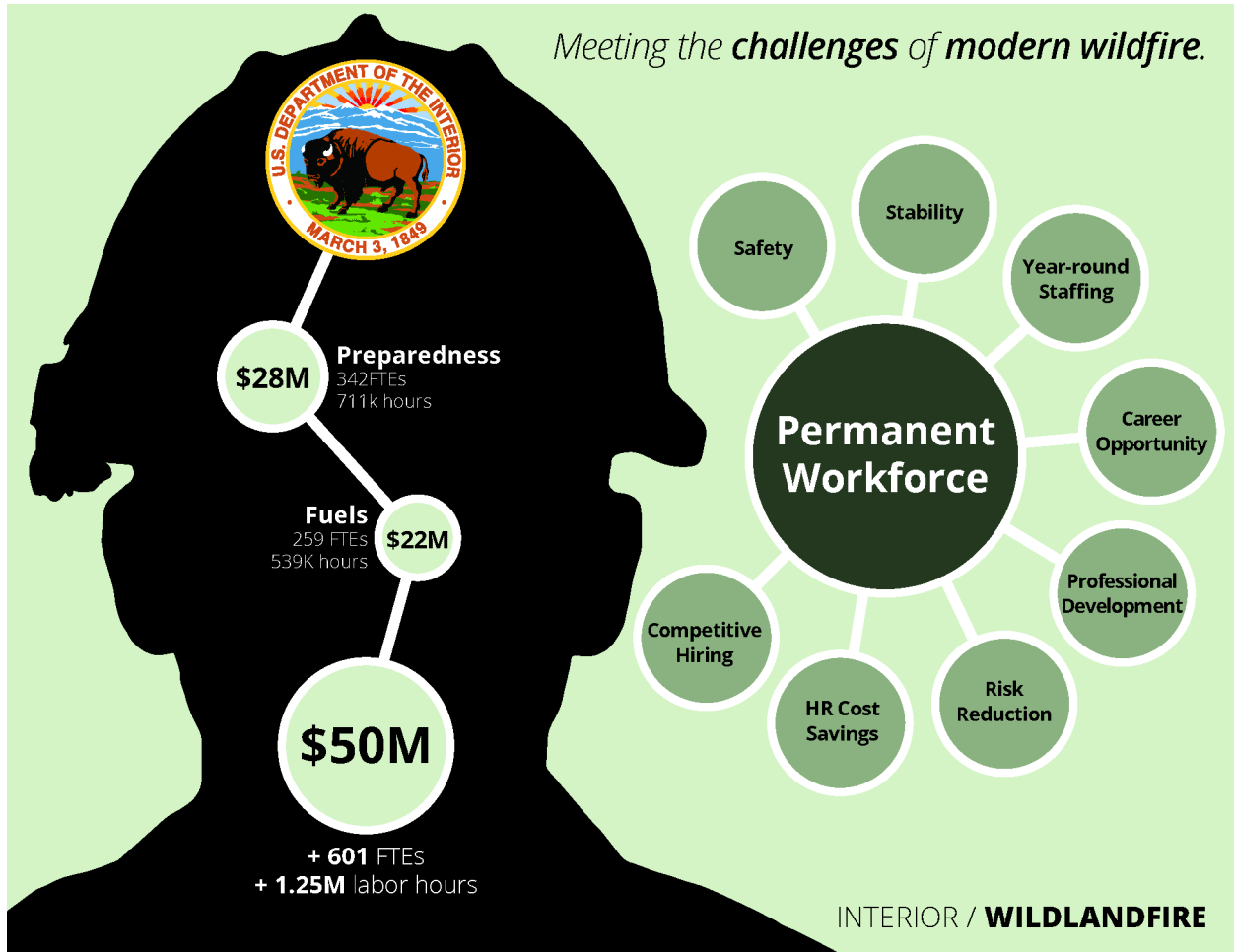
The Department will focus treatments on the most vulnerable and highest priority burned landscapes. Funding would provide for treatment of approximately 700,000 acres.

Joint Fire Science Program (\$3,000,000/3 FTE)

The Department will continue its emphasis on science delivery and knowledge exchange through its 15-regional member Fire Science Exchange Network (FSEN), workforce development, research targeted to meet the Department's most pressing science priorities, and leadership and coordination of national wildland fire science assessment, synthesis, and research activities.

DOI's Plan to Transform the Firefighting Workforce

The request includes DOI's proposal to develop a Federal wildland fire workforce that is better aligned to address the challenges associated with today's wildfire activity and to support more aggressive implementation of Executive Order 13855 to reduce wildfire risk. This includes investments in workforce to increase suppression capacity and additional vegetation management to reduce wildfire risk during periods of low wildfire activity. The total investment is \$50.0 million, with \$28.0 million funded in Preparedness and \$22.0 million funded in Fuels Management. This funding will enable DOI to continue developing a professional, year-round workforce by adding permanent Federal wildland fire personnel to advance active vegetation management while also meeting the demands of longer, larger, costlier and more complex wildfires.



DOI's FY 2021 budget request calls for \$50.0 million to support the development of a stable, professional and permanent Federal wildland fire workforce in DOI's Plan to Transform the Firefighting Workforce.

PREPAREDNESS



The Preparedness program provides an integrated and coordinated framework for wildfire response by funding core firefighting resources and managing the capacity of assets and operations to respond to fire activities across the United States.

Activity: Preparedness							
Subactivity: Preparedness							
	2019 Actual	2020 Enacted	FY 2021 Request				
			Fixed Costs (+/-)	Internal Transfers (+/-)	Program Changes (+/-)	2021 Request	Change from 2020 (+/-)
Dollars (in thousands)	322,179	332,784	+7,284	-	+28,000	\$368,068	+35,284
<i>FTE</i>	2,189	2,277	-	-	+342	2,619	+342
<i>Tribal FTE</i>	281	278	-	-	+37	315	+37

Summary of FY 2021 Program Changes for Preparedness			
Request Component		(\$000)	FTE
<u>Program Changes:</u>			
DOI's Plan to Transform the Firefighting Workforce/ Preparedness Capacity		+28,010	+342
Transfer Ethics Program to Solicitor		-10	+0
TOTAL Program Changes		+28,000	+342

Program Changes

The FY 2021 budget request for Preparedness is \$368,068,000 and 2,619 FTE, which includes:

DOI's Plan to Transform the Firefighting Workforce/Preparedness Capacity
 (+\$28,010,000/+342 FTE)

The request reflects the Preparedness funded component of DOI's proposal to increase Federal staffing levels and develop a wildland fire workforce that is better aligned to address the challenges associated with today's wildfire activity and to support more aggressive implementation of Executive Order 13855

to reduce wildfire risk. The total investment is \$50.0 million, with \$28.0 million funded in Preparedness and \$22.0 million funded in Fuels Management. This funding enables DOI to continue investing in developing a professional, year-round wildland fire workforce to meet the demands of longer, larger, costlier and more complex wildfires.

Across the Nation, the period of actively burning wildfires has increased by 60 days, from five to seven months. Regionally, these active periods occur at different times. There is no extended off-season and there is a consequential need for firefighting resources year-round. The requested funding would support an increase of 342 FTEs funded by the Preparedness program to strengthen DOI’s ability to maintain its initial attack success rate and provide effective wildfire response throughout the fire year. DOI will increase the number of permanent full-time positions through a combination of converting existing career seasonal and temporary term employees and hiring new personnel.

Altering the nature and composition of DOI’s wildland fire workforce enhances the capability and sustainability of the DOI wildland fire management program. This translates to an increase in capacity of over 700,000 additional labor hours to perform critical wildland fire preparedness and wildfire response activities.

Transfer Ethics Program to Solicitor (-\$10,000/0 FTE)

The request assumes the transfer of \$10,000 to support the consolidation of the Department’s Ethics Program. Secretarial Order 3375, dated August 14, 2019, realigned the reporting structure for DOI ethics personnel into the Departmental Ethics Office (DEO) within the Office of the Solicitor. The proposed change reflects OWF’s contribution to the consolidated program.

Program Overview

The Preparedness program provides for the firefighting resources and assets to protect the public, communities, watersheds, and natural and cultural resources from the detrimental effects of wildfires.

The WFM program manages a fire response framework for efficient wildfire response regionally and nationally. As conditions change during a fire season, or as wildfire activity increases in specific locations, firefighting resources including equipment and people, are strategically moved to locations where the risks are highest and additional resources are needed.

Preparedness funds firefighting assets, such as aviation resources, engines, and equipment, along with firefighters

Nationally Shared Fire Resources

- Retardant-delivering air tankers
- Retardant bases
- Lead planes
- Helicopters
- Interagency hotshot crews
- Smokejumpers
- Large transport planes
- Predictive services/staff
- Meteorological services/staff
- Dispatch service (National/Geographic)
- Cache/warehouse service (Geographic)
- Professional staff

Local Level Assets

- Engines (light and heavy)
- Dozers
- Tractors/plows
- Water Tenders and other water handling equipment
- Hand crews
- Fire modules
- Dispatch service
- Cache/warehouse service
- Fire Specialists
- Professional staff

and services that provide the capacity to safely and effectively fight wildfires. The DOI shares fire resources at all levels across the country. Through national interagency coordination and collaboration, assets are available at the national, regional or local level depending on current need. Maximizing mobility of wildland firefighting resources increases efficiency by lowering costs and duplication of valuable firefighting assets.

Preparedness activities bring value to wildland fire management by increasing efficiencies and partnerships while ensuring core capabilities are maintained. Through combined positions and reduced contract costs, the Preparedness program helps eliminate redundancy. Cooperative protection agreements with other Federal and State agencies, self-governing Tribes, local cooperators, and contracts with private firms provide protection, shared resources, and streamlined work. These agreements promote safe and quick response, help minimize overall protection costs for all parties, and foster relationships essential to the development of a cohesive and coordinated response to manage wildfires. This is especially important as fires burn across land ownerships and administrative boundaries.

SPOTLIGHT ON COLLABORATION**National Interagency Fire Center**

The BLM, in cooperation with the other DOI wildland fire bureaus, the USFS, and the National Weather Service, hosts the **National Interagency Fire Center (NIFC)** in Boise, Idaho. The cooperating agencies at NIFC work together to share operating costs, exchange support, and jointly coordinate support operations for managing wildland fire throughout the United States.

NIFC is not an organization but a physical location at which a number of coordinated WFM services and activities take place. This includes:



The National Incident Coordination Center (NICC) - serves as a focal point for coordinating the national mobilization of firefighting resources. NICC also provides long and short-term fire outlook assessments and tracks and reports daily wildland fire activity.

The Great Basin Cache - serves as one of 11 national fire warehouses for supplies and equipment and has capability to equip 8,000 – 10,000 firefighters.

The National Multi-Agency Coordinating group (NMAC) – coordinates the movement of wildland firefighting resources and other activities supporting wildfire response.

The National Incident Radio Cache – provides emergency communication services to support wildland fire incidents. The cache is one of the largest in the world and has equipment to support about 32,000 firefighters or 53 major disasters at one time.

National Predictive Services – evaluates indicators of burn probability, fire potential, long-term drought, and weather trends to forecast areas that may be subject to increased or severe wildfire activity.

2021 Program Activities

DOI's FY 2021 budget proposal continues to support an interoperable approach to wildland fire management that increases efficiencies, supports partnerships, and maintains core capabilities. Preparedness efforts help reduce the risk of large fire potential and lower the cost of more intensive fire response.

The FY 2021 Request for Preparedness supports:

- 2,619 FTEs that make up DOI's core firefighting capacity. Designated funding of \$28.0 million in DOI's Plan to Transform the Firefighting Workforce will be used to improve core firefighting capabilities by investing in and expanding the permanent Federal wildland fire workforce, including an enhanced mix of permanent, career seasonal and temporary firefighting positions that are deployed to support fire incident response.



Primed for action: students from the BLM's Dozer Academy practice creating dozer lines while constructing 30 miles of fuels breaks at Utah's Dugway Proving Grounds. Dozer lines remove brush and debris that might fuel the spread of fire. (BLM/Mike Hislop)

This increased capacity enables DOI to have more firefighting resources mobilized and available year-round to respond quickly whenever and wherever wildfires strike. In addition, increased capacity of permanent firefighters will address long-term challenges in recruitment, retention, and succession planning to build the next generation of wildland fire management professionals for the Nation. The proposed workforce structure will help establish DOI's wildland fire management program as more competitive with other wildland fire agencies and organizations.

For example, the average time of service for a temporary appointment is two years. The average time of service for a career appointment is 14 years. The requested funding allows DOI to shift the current workforce towards more career appointments, which would increase retention of more experienced and knowledgeable firefighters, having substantial long-lasting effects that support effective fire management, decision-making and safety for both firefighters and the public. Additionally, DOI will see long-term benefits by reducing the cost, time, and effort to recruit and train a temporary seasonal workforce.

- Core firefighting resources and operations necessary to respond to fire activity across the United States, including but not limited to:
 - The National Interagency Fire Center in Boise, Idaho
 - The National Interagency Coordination Center
 - Predictive Services
 - Resources as depicted in Tables 3A, 3B and 3C which follow.
- Tribally-managed firefighting organizations and Tribal workforce development through dedicated funding of \$15 million

WILDLAND FIRE FIRST AID PROGRAM

BIA Wilderness First Responders learn how to perform extended patient transports during a wilderness first responder class. (BIA/Michelle Moore)

In 2011, BIA began providing wilderness first aid training to wildland firefighters. Since then, over a thousand students from more than 50 Indian Country crews have participated in the BIA Wildland Fire First Aid Program. The curriculum is specially designed for wildland firefighters who are non-medical professionals. Courses teach firefighters how to address complex logistical medical transports, prolonged patient care and how to mitigate extreme environmental conditions. It also teaches firefighters how to identify and use improvised outdoor equipment and interface with local EMS responders.

In 2019, the program implemented the first-ever wildland fire first aid program that trains, distributes, and successfully uses the lifesaving epinephrine auto injector. The after-action review for the Turkey Creek RX incident documented an instance where a medical incident technician used the program-issued auto injector on another BIA employee who was experiencing severe, life-threatening anaphylaxis symptoms in a remote area with extended transport times. The availability of the epinephrine, along with the successful application of BIA's first aid training, saved a life during this medical incident.

Program Performance

Effective mobilization of wildfire response resources is critical to meet objectives for protection and natural and cultural resource management. Federal wildfire management agencies emphasize risk-informed wildfire response. This approach means agencies take intensive suppression actions when required to protect life, property, and other assets at risk; however, a different approach may be utilized in areas where wildfire risks are low or where fire may achieve ecological benefits.

Managing wildfires for multiple objectives allows implementation of fire management strategies and tactics to better manage risk, meet protection and resource objectives, and reduce overall cost. Effective response to wildfire requires the proper resources to analyze risks, evaluate potential actions, provide program management and oversight, and provide operational resources to manage wildfires.

Additionally, DOI recognizes the importance of developing and adopting advanced or emergent technologies in support of wildfire incidents.

SPOTLIGHT ON INNOVATION**Location Based Services**

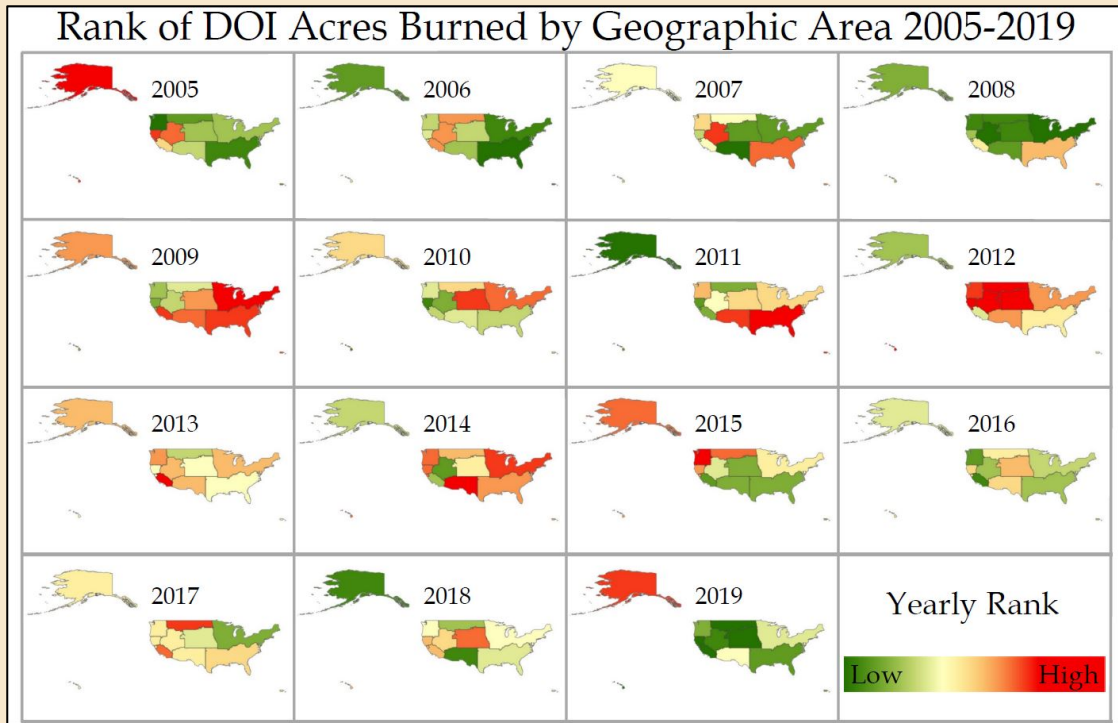
Wildland fire engines on a prescribed fire in southern Idaho. (DOI/Neal Herbert)

To improve firefighter safety and increase operational efficiency, the BLM installed 240 Location Based Service (LBS) devices, leveraging global positioning system (GPS) technology, with a plan of 705 installations to be completed by the end of fiscal year 2020. This will ensure the tracking of BLM fire suppression resources and will meet fire suppression resource tracking provisions in the John D. Dingell, Jr. Conservation, Management and Recreation Act of 2019.

LBS devices provide agency administrators, fire managers, duty officers, dispatch centers and fireline supervisors near real-time fire vehicle position and utilization data. The satellite terminals provide real-time position and use information for engines, hotshot/veteran superintendent trucks and crew hauls, helitack superintendent trucks and support vehicles, dozers, tractors (semi), and water tenders.

Vehicle position and utilization data is visually displayed via a web-based portal or mobile device application. LBS combines current GPS technologies with BLM Fire and Aviation preparedness, dispatch, and suppression programs to enhance situational awareness, safety, and operational efficiency.

MANAGING UNCERTAINTY



One of the main challenges of managing wildfires on DOI and Tribal lands is the uncertainty of where wildfires will occur from year to year. Because wildfires are unplanned events, DOI relies on analytical techniques to help predict what parts of the country might have conditions that support an above-normal occurrence of wildfires. However, this indicator does not yield a consistent trend from year to year, and data may not be available until post-season fire statistics are compiled. The above diagram depicts the relative magnitude of fire activity on DOI-managed lands for each geographic area from 2005 to 2019. Every year is ranked from highest to lowest number of acres burned within that geographic area, relative to the other years in the past 15 years.

As illustrated, each geographic area experiences significant variations in the number of acres burned from year to year with no consistent pattern. The Preparedness program manages the complexity and uncertainty of wildfire occurrence by ensuring that it has the capacity of a flexible and mobile workforce to respond quickly whenever and wherever wildfires strikes.

Data source: Giglio, L., Justice, C., Boschetti, L., Roy, D. (2015). MCD64A1 MODIS/Terra+Aqua Burned Area Monthly L3 Global 500m SIN Grid V006 [Data set]. NASA EOSDIS Land Processes DAAC. doi: 10.5067/MODIS/MCD64A1.006

Preparedness Resources Tables

Table 3A provides the total number of personnel employed within the Preparedness program and the type and amount of resources utilized (staffed or contracted). FY 2019 data is actual implementation, while FY 2020 and FY 2021 are estimated numbers.

Table 3A: Estimated Government Preparedness Resources FY 2019-2021

Firefighting Asset	Resource Type	2019 Actual	2020 Planned	2021 Request
Personnel	All Personnel	4,392	4,464	4,714
	<i>FTE</i>	2,189	2,277	2,619
	Smokejumpers	140	151	151
	Type 1 Hotshot Crews	17	18	18
Equipment	Engines	562	610	649
	Other Heavy Equipment	117	117	124
Aviation	Water Scoopers	6	6	6
	Single Engine Air Tankers	33	34	34
	Helicopters Type 1	1	1	1
	Helicopters Type 2	9	9	9
	Helicopters Type 3	29	29	29
	Smokejumper Plane	7	7	7
	ASM/Lead Plane	4	4	4
	Air Tactical	12	12	12
	Utility	5	5	5

This table is an estimate only. Actual numbers are dependent upon timing and implementation of specific budgetary actions.

Table 3B is an extension of Table 3A and identifies additional Tribal Preparedness Resources funded through agreements between the BIA and individual Tribes. FY 2019 data is actual implementation, while FY 2020 and FY 2021 are estimated numbers.

Table 3B: Estimated Tribal Preparedness Resources FY 2019-2021

Asset	Resource Type	2019 Actual	2020 Planned	2021 Request
Personnel	All Personnel	391	387	438
	Tribal Staff Equivalent	281	278	315
	Type 1 Hotshot Crews	4	4	4
Equipment	Engines	82	82	92
	Other Heavy Equipment	18	18	20
	Helicopters Type 3	1	1	1

This table is an estimate. Actual numbers are contingent on timing and implementation of specific budgetary actions.

Table 3C displays the DOI’s Preparedness expenditures across the different general cost categories. FY 2019 displays actual budget data generated from DOI’s financial accounting system. FY 2020 and FY 2021 display estimated cost category allocations.

Table 3C: Estimated Preparedness Program Costs (\$000) FY 2019 – 2021

General Cost Category	2019 Actual	2020 Planned	2021 Request
Salaries and Benefits	\$ 192,990	\$ 194,000	\$ 220,000
Travel and PCS Move	\$ 6,880	\$ 6,900	\$ 7,300
General Contracts and Agreements	\$ 39,079	\$ 39,000	\$ 41,000
Aviation Contracts and Use	\$ 35,505	\$ 36,000	\$ 38,000
Tribal Contracts and Agreements	\$ 23,274	\$ 23,000	\$ 25,500
Fire Vehicle and Equipment Fleet	\$ 6,535	\$ 6,500	\$ 7,000
Supplies and Materials	\$ 20,121	\$ 20,200	\$ 22,000
Other ¹	\$ 7,129	\$ 7,184	\$ 7,268
Total Program Cost	\$ 331,513	\$ 332,784	\$ 368,068

¹ This includes primarily expenditures in utilities and rental payments.

SUPPRESSION OPERATIONS



Suppression Operations comprises the range of actions taken to directly extinguish wildfires, prevent the movement and growth of unwanted fire, and manage fire for resource benefits.

Suppression Operations also provide funding for post-fire emergency stabilization.

Activity: Suppression Operations							
Subactivity: Suppression Operations							
	2019 Actual	2020 Enacted	FY 2021 Request				
			Fixed Costs (+/-)	Internal Transfers (+/-)	Program Changes (+/-)	2021 Request	Change from 2020 (+/-)
Dollars (in thousands)	388,135	383,657	-	-	-	\$383,657	-
<i>FTE</i>	265	265	-	-	-	265	-

Program Changes

The FY 2021 budget request for Suppression is \$383,657,000 and 265 FTE, which reflects no program or FTE change from FY 2020:

Maintain 10-Year Suppression Average at FY 2015 Level (\$0/0 FTE)

This request fully funds Suppression Operations at the 10-year average of suppression obligations as reported in the FY 2015 President’s budget, in accordance with PL 115-141.

Program Overview

When wildfires occur, the Suppression Operations program funds are used to support the direct response to manage these incidents in order to protect life, property, infrastructure, and natural and cultural resources at risk. It funds the extensive resources necessary for fireline operations in support of wildfire incidents, such as:

- Incident management and support functions.
- Aviation assets and operations.
- Logistical services, supplies, and equipment.
- Temporary emergency firefighters.
- Personnel costs above those covered by the Preparedness program.

Wildfire response actions are guided by resource priorities and objectives identified in bureau management plans, including fire management plans, and may include a range of activities, such as:

- Intensive suppression operations of wildfires that threaten lives, communities, and values-at-risk.
- Managing wildfires to accomplish resource goals.
- Implementing emergency stabilization projects that minimize threats to life or property; protect water quality; and reduce the risks of floods, landslides, and erosion. These projects are typically performed in the first year after a wildfire, and monitoring may take place for up to three years after wildfire containment. This work contributes to the protection of DOI and Tribal lands and water resources.
- Utilizing fire severity funding policy, in which Suppression Operations funds are used to increase Preparedness response capabilities during extraordinary situations. These funds ensure that DOI can effectively prepare for and manage wildfire response in periods of prolonged high fire danger or when wildfire seasons start earlier than normal or last longer than normal.



The installation of flood barriers to protect structures in the Whiskeytown National Recreation Area demonstrated one of many emergency stabilization efforts undertaken to safeguard critical values at risk from the Carr fire in northern California. (NPS/A. Schrenk)

FY 2021 Program Activities

The 2021 Request for Suppression Operations supports:

- Wildfire suppression and response throughout the United States and a workforce of 265 FTE that provides increased capacity for incident management operations.

Additionally, the Consolidated Appropriations Act, 2018 (Public Law 115-141) amended the Balanced Budget and Emergency Deficit Control Act to provide additional new budget authority for Fiscal Years 2020 through 2027. Under this provision, otherwise known as the *Stephen Sepp Wildfire Suppression Funding and Forest Management Activities Act*, both DOI and the Department of Agriculture are provided additional new budget authority “in excess of the average costs for wildfire suppression operations as reported in the budget of the President... for fiscal year 2015.”

The FY 2021 budget allocates as a preliminary split, \$310 million of the \$2.35 billion authorized cap adjustment resources to the Department of the Interior, with the remainder allocated the U.S. Forest Service. The Administration will reallocate resources between agencies as necessary to meet actual wildfire suppression needs.

Program Performance

DOI’s annual Suppression Operations obligations fluctuate from year to year. In calculating the ten-year average, obligations are adjusted annually to account for inflation.

Funding for Suppression Operations was historically formulated using a 10-year average of prior year obligations, which was updated annually. As previously noted, pursuant to PL 115-141, funding for Suppression Operations is now based on the 10-year average of suppression obligations as reported in the FY 2015 President’s budget. For informational purposes to show the trend in fire suppression costs, the Department continues to report the updated 10-year average, as shown in the table below.

SUPPRESSION OBLIGATIONS 2010–2019 (in thousands)					
Year	Net Nominal Suppression Obligations	GDP Inflater [2012=1.00]	GDP Deflator [2019=1.00]	Adjusted Obligations [2019=1.00]	Rolling 10-Year Average
2010	231,214	0.9581	0.8593	269,078	421,136
2011	318,788	0.9791	0.8781	363,036	419,233
2012	465,832	1.0000	0.8969	519,403	415,900
2013	399,199	1.0159	0.9111	438,140	418,117
2014	326,194	1.0317	0.9253	352,531	415,734
2015	417,545	1.0375	0.9305	448,735	422,443
2016	371,729	1.0453	0.9375	396,516	408,789
2017	508,103	1.0634	0.9537	532,758	404,435
2018	528,350	1.0908	0.9783	540,072	411,896
2019	440,708	1.1150	1.0000	440,708	430,098

As illustrated below, the trend over the past 20 years indicates a significant rise in costs, with obligations doubling during this time period.

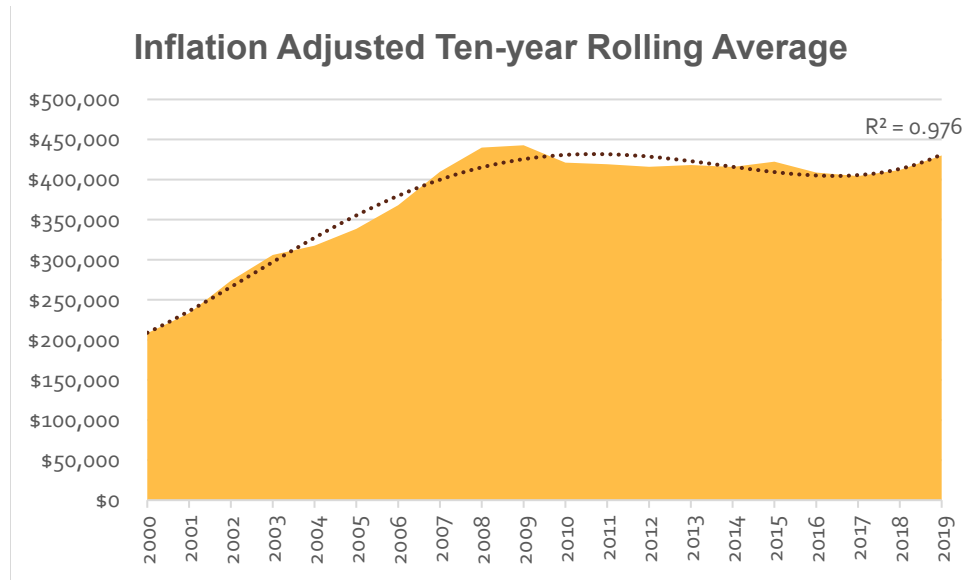


FIGURE 1: Trend in DOI Suppression Obligations Ten-year Average, FY 2000-2019

This rise in costs is attributable to many factors, such as the following:

- Increases in invasive annual grasses, resulting in increased flammability and shorter fire return intervals on rangelands.³
- Drought conditions, insect infestations, below normal snowpack or earlier mountain snow melt, and extended burning seasons, accelerating higher frequency of large fire incidences and greater wildfire severity in forests.
- Increased risk levels resulting from population growth and home construction in the Wildland Urban Interface (WUI). This rapid growth into wildland areas complicates landscape protection needs and creates additional sources of ignition.⁴

DOI is continuing to work closely with the U.S. Forest Service to address the challenge of rising suppression costs. This includes the use of risk-based strategies to reduce unwanted vegetation and manage wildfires to meet resource and protection objectives. A single wildfire may be simultaneously suppressed in one spot and allowed to burn in another to achieve resource benefits, including the reduction of fuel load. These operations balance the expenditure of Suppression funding with the risk a wildfire poses to firefighters, the public, or to natural and cultural resources.

³ Germino, Matthew J., Chambers, Jeanne C., Brown, Cynthia S. (2016). "Exotic Brome-Grasses in Arid and Semiarid Ecosystems of the Western US".

⁴ Stein, S.M., Menakis, J., Carr, M.A., Comas, S.J., Stewart, S.I., Cleveland, H., Bramwell, L. & Radloff, V.C. (2013). "Wildfire, wildlands, and people: understanding and preparing for wildfire in the wildland-urban interface—a Forests on the Edge Report". U.S. Department of Agriculture General Technical Report, RMRS-GTR-299, 36.

Interagency Coordination in Alaska



A morning spike camp briefing on the Swan Lake Fire. (DOI/Katy O'Hara)

On June 5, 2019 more than 4,000 lightning strikes were recorded across Alaska with 200 of those on the Kenai Peninsula. The Swan Lake Fire was reported on June 5th, 2019 approximately eight miles northeast of the community of Sterling, Alaska in the Kenai Wilderness.

The jurisdictional responsibility for the Swan Lake Fire was with the Kenai National Wildlife Refuge (USFWS), Chugach National Forest (USDA Forest Service) and the Kenia-Kodiak Area (Alaska Division of Forestry), while protection responsibility was with the Chugach National Forest and the Kenai-Kodiak Area. In addition to fire suppression efforts, firefighters took proactive measures to protect homes and businesses by assessing risk to the structures, clearing flammable vegetation, and setting up sprinklers. The fire response efforts protected more than 1,346 parcels valued at \$145,056,100.

In total, more than 3,000 firefighters and support personnel were assigned to the Swan Lake Fire over the course of nearly 150 days. As of October 2019, the fire size (167,182 acres) was equivalent to 261 square miles. Preseason planning, interagency agreements, and collaboration helped fire managers, across multiple jurisdictions, make informed decisions to better utilize suppression resources and funding based on the values at risk.

FUELS MANAGEMENT



The Fuels Management program represents a strategic investment in managing vegetation to reduce the intensity, severity or negative effects of wildfire. It provides cost-effective benefits to the American people, helps restore and maintain healthy ecosystems, supports communities in their efforts to become fire-adapted and helps protect highly valuable resources and assets.

Activity: Fuels Management							
Subactivity: Fuels Management							
	2019 Actual	2020 Enacted	FY 2021 Request				
			Fixed Costs (+/-)	Internal Transfers (+/-)	Program Changes (+/-)	2021 Request	Change from 2020 (+/-)
Dollars (in thousands)	189,000	194,000	+2,961	-	+30,934	\$227,895	+33,895
<i>FTE</i>	890	912	-	-	+259	1,171	+259
<i>Tribal FTE</i>	391	391	-	-	+59	450	+59

Summary of FY 2021 Program Changes for Fuels Management		
Request Component	(\$000)	FTE
<u>Program Changes:</u>		
DOI's Plan to Transform the Firefighting Workforce	+22,000	+259
Fuels Management Capacity	+8,934	+0
TOTAL Program Changes	+30,934	+259

Program Changes

The FY 2021 budget request for Fuels Management is \$227,895,000 and 1,171 FTE, which includes:

DOI's Plan to Transform the Firefighting Workforce (+\$22,000,000/+259 FTE)

The request reflects the Fuels Management funded component of DOI's proposed plan to increase Federal staffing levels and develop a wildland fire workforce that is better aligned to address the challenges associated with today's wildfire activity and to support more aggressive implementation of Executive Order 13855 to reduce wildfire risk. The total investment in DOI's Plan to Transform the Firefighting

Workforce is \$50.0 million, with \$28.0 million funded in Preparedness and \$22.0 million funded in Fuels Management. This funding enables DOI to continue investing in a professional, year-round wildland fire workforce to work collaboratively with partners to actively advance additional vegetation management.

Wildfires are becoming larger, costlier, and more complex. One of the primary factors driving this trend is more accumulated vegetation fueling catastrophic wildfire. A permanent Federal wildland fire workforce will support active management efforts to protect life, property, infrastructure, and natural and cultural resources. The requested funding supports an increase of 259 FTEs funded by the Fuels Management program to improve DOI's capacity to actively reduce and manage the vegetation that fuels wildfires, especially in the wildland urban interface. DOI will increase the number of permanent full-time positions through a combination of converting existing career seasonal and temporary term employees and hiring new personnel. Available workforce capacity within other WFM programs will also be leveraged to accomplish Fuels Management work, as fire experience is beneficial in identifying and treating fuels treatments. In addition, to more comprehensively address the vegetation conditions that fuel wildfires, starting in FY 2020, USDA and DOI will explore opportunities to better coordinate and leverage active management resources to achieve shared objectives.

Altering the nature and composition of DOI's wildland fire workforce enhances the capability and sustainability of the DOI WFM program. This translates to an increase in capacity of over 538,000 additional labor hours that plan and execute fuel treatment projects that contribute to active management, such as prescribed burning, mechanical thinning, and road and facility fire-prevention activities. A more stable, professional, and experienced workforce will support the strategic placement of fuels treatments to help reduce the intensity, severity, or negative effects of wildfire and increase safe and effective response to wildfire.

Fuels Management Capacity (+\$8,934,000/+0 FTE) – At the requested level, the Department will target resources to high priority projects on approximately 1,400,000 acres of DOI and Tribal lands, while supporting active management to reduce the spread, intensity, and/or severity of wildfire. While the funding for DOI's Plan to Transform the Firefighting Workforce will be specifically designated for strategic efforts to transform the wildland fire workforce structure and increase long-term staffing and implementation capacity, the funding requested in this component will be utilized for project implementation to increase the Department's FY 2021 fuels treatment accomplishments. This funding supports the essential planning, program administration, contracting, and monitoring activities associated with project implementation.

SPOTLIGHT ON DIVERSITY

ADVANCING WOMEN LEADERS THROUGH PRESCRIBED FIRE

Across Federal wildland fire management agencies, women hold less than 10 percent of fire positions and only seven percent hold positions of leadership. To address this imbalance, the National Interagency Prescribed Fire Training Center (PFTC) developed the Fire Leadership for Women (FLFW) program with the specific intent of encouraging leadership on the fireline, from entry level to upper management. Using prescribed fire as a catalyst to bring women together, the program creates a support

network to advance women in wildland fire management. Through this program that is designed for women by women, female firefighters are experiencing what may be a once-in-a-career opportunity to train and be mentored by other women. In 2019, for the first time ever, the BIA sponsored women to attend the FLFW program, which was held at the PFTC in Tallahassee, Florida. During the 20-day course, trainees safely conducted 11 prescribed burns in northern Florida, treating 2,507 acres.



The eight participants sponsored by BIA to attend the Fire Leadership for Women program in Tallahassee, Florida. (BIA/Cheryl Bright)

Program Overview

The strategic management of unwanted and burnable vegetation such as trees, shrubs, and grasses, known as fuels, in priority areas before a wildfire occurs is a cost-effective approach to reduce negative effects from wildfires to highly valuable resources and assets. The active management of DOI and Tribal lands is carried out in collaboration with multiple partners, including other Federal agencies, Tribes, States, counties, local organizations, and private landowners.

Trained bureau specialists strategically plan, implement, and monitor fuels management projects to mitigate wildfire risk and achieve priority land management objectives. This work occurs year-round, depending upon geographic location, vegetation type, and treatment method. Specialists use a variety of land management practices, including prescribed fire (broadcast burning, pile burning, etc.), mechanical methods (thinning of excess trees, mowing of brush and grass, etc.) or other methods (chemical, biological, grazing, etc.) in an integrated approach with resource management and stakeholders to ensure projects meet full regulatory compliance. Community assistance activities enhance and facilitate these efforts.

The strategic application of fuels projects:

- Contribute to public and firefighter safety;
- Protect highly valuable resources and assets;
- Maintain and restore the integrity of landscapes and their resilience to wildfires;
- Support fire-adapted communities;
- Increase the safe and effective response to wildfire;
- Contribute to national security objectives on the Southern border;
- Contribute to local economies, including Tribes;
- Mitigate fire risk and loss more effectively when implemented across land ownerships and when combined with community outreach and education;
- Provide an opportunity to manage wildfires to restore and maintain fire-adapted ecosystems and achieve fire-resilient landscapes; and
- Help avoid costs associated with wildfire suppression as well as negative impacts and losses incurred from wildfire damages.

Reserved Treaty Rights

The Reserved Treaty Rights Lands (RTRL) program provides \$10 million to Tribes to participate in collaborative projects with other landowners supporting the health and resiliency of priority Tribal resources at high risk to wildfire. BIA reported FY 2019 accomplishments include:

- 9 new RTRL projects
- 19,000 acres of fuels treatment accomplishments
- Over 120 individual collaborator parties
- 186 Tribal and collaborator priorities met
- Estimated \$1.09 billion in avoided costs
- 303 jobs directly supported across 14 States

The Fuels Management program supports Executive Order 13855 “Promoting Active Management of America's Forests, Rangelands, and Other Federal Lands To Improve Conditions and Reduce Wildfire Risk” and Secretarial Order 3372 “Reducing Wildfire Risks on Department of the Interior Land Through Active Management”. In 2019, DOI exceeded the active management targets required by EO 13855 and completed the action items included in SO 3372. Establishing an informed collaborative process to reduce wildfire risk – as required by both orders – remains an ongoing priority.



A masticator thins and mulches trees to reduce the fuel load in a forest outside Yellowstone National Park. By creating defensible space this project helps protect nearly 2,000 structures adjacent to the park from fire. (NPS/Jacob W. Frank)

Collaboration and partnerships with Federal, Tribal, State, and local stakeholders to leverage capabilities and resources to accomplish priorities are critical to the success of the DOI Fuels Management Program.

Treaties recognize and establish a unique set of rights, benefits, and conditions for Tribes who agreed to cede millions of acres of their lands to the United States in exchange for guarantees and protections. For many Tribes, the reserved rights areas fall under the management of other Federal agencies, and in some cases, Tribes share co-management rights with Federal agencies. Fuels Management funding has been designated for the purpose of treating and restoring Tribal landscapes within and adjacent to Reserved Treaty Right Lands (RTRL). The RTRL program enables Tribes to participate in collaborative projects with non-Tribal landowners to enhance the health and resiliency of priority Tribal natural resources at high risk to wildland fire. DOI will continue to direct \$10 million of Fuels Management funds to Tribes for this purpose, in addition to the allocation of Fuels Management funds provided to the BIA.



The BLM's all-female wildfire camp in eastern Oregon taught students how to dig fire line, roll hose, and mop up burned slash piles.

FY 2021 Program Activities

DOI will continue to partner with Federal, Tribal, State, and local partners and stakeholders to maximize resources and better incorporate fuels management into resource management planning. This includes collaborative efforts along the Southern border that meet resource management objectives and support national security operations that are carried out by the Department of Homeland Security (DHS)-Customs and Border Protection (CBP).

The 2021 Request for Fuels Management supports:

- 1,171 FTEs that plan, implement, and monitor fuels treatments in an integrated approach with resource management and stakeholders to ensure projects meet full regulatory compliance and DOI objectives, including increasing firefighter and public safety. Designated funding of \$22.0 million for DOI's Plan to Transform the Firefighting Workforce will be used to increase fuels treatment capabilities by investing in additional permanent Federal wildland fire personnel that includes an enhanced mix of permanent, career seasonal and temporary firefighting positions that carry out fuels management activities.
- Treatment of 1,400,000 acres on DOI and Tribal lands that meet program objectives. Fuels management practices include prescribed fires, as well as mechanical, chemical, and biological treatments, among other methods.
- Prioritization of fuels management activities that contribute to active management, in alignment with Executive Order 13855, Secretarial Order 3372, and the DOI Strategic Plan.
- Continued implementation of the Southern Border Fuels Management Initiative, which is a targeted fuels management program along the U.S. southern border intended to meet DOI's resource management objectives and support national security operations carried out by DHS-CBP.
- Continued support for the Reserved Treaty Rights Land (RTRL) program, which provides \$10 million in dedicated funding to BIA to enable Tribes to participate in collaborative projects.
- Integration of cost-effective advances in technology, including implementation of a shared wildfire risk mitigation tool to facilitate cross-jurisdictional leveraging of resources, capacity, and funding. The tool will help inform pro-active decision making at a local level, where stakeholders collaboratively identify shared values and establish wildfire risk mitigation priorities on a landscape scale.
- Efforts to create and maintain fire-adapted communities.
- Mitigation of impacts from potential wildfire emissions by promoting and maintaining land in desired condition.

SOUTHERN BORDER INITIATIVE

U.S. Fish & Wildlife Service fire crews conduct a prescribed fire at the Buenos Aires National Wildlife Refuge. This project promotes improved grassland habitat for endangered Masked Bobwhite Quail and other wildlife, and helps improve the viewscape for U.S. Border Patrol national security operations.

The Southern Border Fuels Management Initiative was introduced in 2018 as a targeted vegetation management strategy along the southern border. Projects continue to reduce risk of unwanted or catastrophic wildfire as well as facilitate national security operations carried out by the Department of Homeland Security.

OTHER OPERATIONS

Other Operations is a program activity within DOI’s WFM program. It consists of three sub-activities:

1. Burned Area Rehabilitation (BAR)
2. Facilities Construction and Maintenance
3. Joint Fire Science Program (JFSP)

Activity: Other Operations (dollars in thousands)							
Sub-activity	2019 Actual	2020 Enacted	FY 2021 Request				
			Fixed Costs (+/-)	Internal Transfers (+/-)	Program Changes (+/-)	2021 Request	Change from 2020 (+/-)
Burned Area Rehabilitation	20,470	20,470	-	-	-	\$20,470	-
Facilities Construction and Maintenance	18,427	18,427	-	-	-18,427	\$0	-18,427
Joint Fire Science Program	3,000	3,000	-	-	-	\$3,000	-
TOTAL Other Operations	41,897	41,897	-	-	-18,427	\$23,470	-18,427
<i>FTE</i>	55	55	-	-	-1	54	-1

The FY 2021 budget submission does not request funding for the Facilities Construction and Maintenance program in order to fund higher wildland fire priorities. DOI’s fire bureaus will fund priority fire facility needs through their base construction or deferred maintenance accounts. These projects will be integrated into the planning process the bureaus use for developing their individual Five-Year Deferred Maintenance and Capital Improvement Plans.

Burned Area Rehabilitation



The Burned Area Rehabilitation (BAR) program supports efforts to repair or improve burned landscapes unlikely to recover without human assistance.

Activity: Other Operations							
Subactivity: Burned Area Rehabilitation							
	2019 Actual	2020 Enacted	FY 2021 Request				
			Fixed Costs (+/-)	Internal Transfers (+/-)	Program Changes (+/-)	2021 Request	Change from 2020 (+/-)
Dollars (in thousands)	20,470	20,470	-	-	-	\$20,470	-
FTE	51	51	-	-	-	51	-
Tribal FTE	9	9	-	-	-	9	-

Program Changes

The FY 2021 budget request for BAR is \$20,470,000 and 51 FTE:

Maintain Rehabilitation Treatments (\$0/0 FTE)

At the requested level, the Department will focus treatments on the most vulnerable and highest priority burned landscapes. Funding will provide for treatment of approximately 700,000 acres, a level consistent with the planned accomplishments for FY 2020. DOI will also explore opportunities to increase capacity through workforce planning initiatives and strategic leveraging of resources.

Program Overview

The BAR program addresses the long-term restoration of landscapes damaged by wildfire that are unlikely to recover naturally. The DOI, along with partners from Tribal, State, county, and local governments, work on non-emergency, longer-term rehabilitation actions which may take up to five years to complete. Immediate threats after a fire, such as floods, debris flows, and landslides are treated using Emergency Stabilization funds from the Suppression Operations activity.

BAR projects help prevent further degradation of watersheds and landscapes affected by severe wildfire. Through these projects, agencies may re-seed or plant trees and other desired vegetation to mitigate the risk of catastrophic landslides, prevent the establishment of invasive species, maintain soil productivity, and initiate the recovery of critical wildlife habitat. Other activities may also include the repair of minor

assets such as signs damaged by wildfire, rehabilitation of Tribal trust resources, and monitoring treatment effectiveness and success.

Program managers evaluate and prioritize rehabilitation projects at the local and national level. Restoration projects that may be required five or more years after a fire fall under the land management agency’s program goals for long-term management.

Examples of BAR actions include:

BAR Action	Accomplishment
Chemical Treatment – application of herbicide to reduce the incidence of an undesired plant	Treated 200 acres affected by the Chimney Tops 2 Fire in Tennessee to reduce the incidence of invasive species.
Planting – placement of nursery stock, seedlings or cuttings into the soil	Planted tree seedlings on 404 acres affected by the Nena Springs Fire in Oregon.
Drill Seeding – placement of seed into the soil using a rangeland drill	Drill seeded 15,725 acres affected by the Rooster Comb Fire in Nevada to stabilize soil and increase the number of native plants in the burned area.
Aerial Seeding – placement of seed onto the soil using an aerial platform, such as an airplane	Aerial seeded 27,992 acres affected by the Bruneau Fire in Idaho to introduce vegetation on the burned area.
Minor Repairs – repair/replacement of minor assets damaged by a wildfire (small trail bridges, handrails, campgrounds, boat ramp, fence, stock tanks, informational kiosk, etc.)	Five miles of fence damaged by the Red Fire in Oregon was replaced.
Noxious Weed Detection – Detection of noxious weeds and treatment to reduce the incidence of the weeds	Detected noxious weed infestation on 4,876 acres burned in the Carr fire in California.

FY 2021 Activities

The FY 2021 Request funds the BAR program at \$20.5 million for post-wildfire treatments that restore and enhance ecosystem health and enable landscapes to be more resilient to wildfires. Without timely rehabilitation and recovery action to restore burned acres to their desired condition, post-wildfire damages become more complex and costly to treat.

The FY 2021 Request for BAR supports:

- 51 FTEs that evaluate and implement priority rehabilitation projects at the local and national level.
- Rehabilitation and restoration treatments for approximately 700,000 burned acres, up to five years after a fire.

Program Performance

DOI will continue to work cooperatively with the U.S. Forest Service, the U.S. Geological Survey, and various scientific institutions to implement monitoring protocols and methods to more accurately assess the effectiveness of wildfire rehabilitation treatments.

The WFM program established a baseline in 2009 to measure the long-term effect 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.

PROJECT HIGHLIGHT

Havasu National Wildlife Refuge Willow Rehabilitation



A southwest willow flycatcher. (USFWS/Jim Rorabaugh)

Completed rehabilitation work on sections of the Colorado River that were damaged as a result of the Willow Fire on the Havasu National Wildlife Refuge. This area is vital for several threatened or endangered species, including the southwest willow flycatcher, Yuma Ridgeway rail and the California black rail. The refuge determined the optimal locations along the river to promote habitat for these and other species. They used a combination of herbicide treatment of invasive tamarisk trees with planting and cultivating native willow species. The result was rehabilitation of willow habitat on nine sites for a total of approximately 90 acres.

Joint Fire Science Program



The Joint Fire Science Program (JFSP) delivers dedicated wildland fire research and science to inform fire management policies and decisions at local, regional and national levels.

Activity: Other Operations							
Subactivity: Joint Fire Science Program							
	2019 Actual	2020 Enacted	FY 2021 Request				
			Fixed Costs (+/-)	Internal Transfers (+/-)	Program Changes (+/-)	2021 Request	Change from 2020 (+/-)
Dollars (in thousands)	3,000	3,000	-	-	-	\$3,000	-
<i>FTE</i>	3	3	-	-	-	3	-

Program Changes

The FY 2021 budget request for JFSP is \$3,000,000 and 3 FTEs:

Fire Research and Science Capacity (\$0/0 FTE)

At the requested level, the Department will continue its emphasis on science delivery and knowledge exchange through its 15-regional member Fire Science Exchange Network (FSEN), workforce development, research targeted to meet the Department’s most pressing science priorities, and leadership and coordination of national wildland fire science assessment, synthesis, and research activities.

Program Overview

Created by Congress in 1998, JFSP is an interagency partnership between the DOI and the USFS. The program responds to the needs of the wildland fire community by competitively funding fire science research projects and science delivery to answer emerging questions and fill knowledge gaps on managing wildland fire, fuels, and fire-impacted ecosystems.

JFSP works across agency and programmatic boundaries to identify wildland fire research priorities that transcend agency-specific needs. In doing so, JFSP forms valuable cross-agency partnerships to address complex fire science questions that require multiple disciplines, funding sources, integration, and coordination to address. Results from JFSP research studies help agencies to:

- plan and implement fuels treatments,
- support fire management decisions,
- better understand the role of fire in various ecosystems,
- restore lands affected by fire,
- use the latest science to inform policy, and
- meet regulatory requirements.



JFSP is unique in supporting a national collaboration of 15 regional fire science exchanges – the FSEN.

Results from JFSP’s research studies are delivered to the fire management community, which consists of over 8,000 Federal, Tribal, State, and local fire and resource management

personnel, through the FSEN. This includes new science relative to firefighter safety, fuels management, co-management of risk within the wildland-urban interface, and post-fire recovery. The 15 regional members of the FSEN translate the science to ensure it is useful and actionable by managers and decision-makers, and they engage managers to identify new research and emerging management needs. In addition, the JFSP promotes future workforce development through JFSP’s core research funding and the Graduate Research Innovation (GRIN) program. Together these efforts support hundreds of undergraduate and graduate students—the next generation of fire, fuels, and natural resource scientists and managers.

FY 2021 Activities

The FY 2021 Request for JFSP supports an investment portfolio that includes:

- Science Delivery and Knowledge Exchange—During FY 2021 JFSP will begin to implement the findings of the 2020 FSEN evaluation that will enhance the Program’s ability to meet end-user wildland fire science needs.
- Research—JFSP will execute high-priority research to meet the needs of the wildland fire management and policy communities in collaboration and coordination with US Geological Survey and Forest Service Research.
- Assessments/Syntheses—JFSP will conduct assessments to ascertain the state of scientific understanding or management practice and syntheses to capture current scientific understanding and summarize in a manner useful to managers on high priority issues and topics to the wildland fire management and policy communities.
- Workforce Development—JFSP will support management- and policy-relevant research through the GRIN program and other initiatives that support workforce development for the wildland fire community.

Program Performance

JFSP will continue to manage ongoing research projects and execute new research that meets DOI and USDA priorities. It will also continue its funding and oversight of the FSEN and its activities, support workforce development programs, and exercise leadership and coordination functions across the wildland fire science community.

JFSP Performance Capacity							
Performance Measure	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Plan	2021 Request	Change from 2020 to 2021 Request
Research projects initiated ¹	45	22	9	24	16	20	+4
Research projects completed ¹	26	32	33	27	35	15	-20
Refereed publications completed ¹	35	37	34	25	25	25	0
Social media ²	10,000	8,978	13,042	6,100	6,100	6,100	0
Events/activities ²	3,198	3,240	1,751	1,250	1,250	1,250	0

¹JFSP projects are typically completed and published 2–4 years after initiation, depending on whether they are core or graduate student (GRIN) research. Fluctuations in numbers over years reflects funding availability for research. Completed projects reflect receipt and acceptance of final project deliverables. Refereed publication numbers are conservative in that they represent only the publications that notify JFSP.

²JFSP has expanded its science delivery program by establishing a national network of science exchange partnerships. In 2013, in lieu of reporting the number of “science delivery projects,” JFSP began tracking and reporting FSEN accomplishments in two sub-categories: social media and events/activities.

A list of ongoing and completed projects are published at http://www.firescience.gov/JFSP_research.cfm.

Other Exhibits

WFM Appropriations Language

Appropriation Language Sheet

**DEPARTMENT OF THE INTERIOR
DEPARTMENT WIDE PROGRAMS
WILDLAND FIRE MANAGEMENT
(INCLUDING TRANSFERS OF FUNDS)**

For necessary expenses for fire preparedness, fire suppression operations, fire science and research, emergency rehabilitation, fuels management activities, and rural fire assistance by the Department of the Interior, [\$952,338,000]\$1,003,090,000, to remain available until expended[, of which not to exceed \$18,427,000 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 of the funds provided [\$194,000,000]\$227,895,000 is for fuels management activities: *Provided further*, That of the funds provided [\$20,470,000]\$20,470,000 is for burned area rehabilitation: *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 fuels management activities, and for training and monitoring associated with such fuels management 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 fuels management 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 micro-businesses; 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 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 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 of the funds provided under this heading \$383,657,000 is provided to meet the terms of section 251(b)(2)(F)(ii)(I) of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended. (*Department of the Interior, Environment, and Related Agencies Appropriations Act, 2020.*)

WILDFIRE SUPPRESSION OPERATIONS RESERVE FUND (INCLUDING TRANSFERS OF FUNDS)

In addition to the amounts provided under the heading "Department of the Interior-Department-Wide Programs-Wildland Fire Management" for wildfire suppression operations, [~~\$300,000,000~~]*\$310,000,000*, to remain available until transferred, is additional new budget authority as specified for purposes of section 251(b)(2)(F) of the Balanced Budget and Emergency Deficit Control Act of 1985: *Provided*, That such amounts may be transferred to and merged with amounts made available under the headings "Department of Agriculture-Forest Service-Wildland Fire Management" and "Department of the Interior-Department-Wide Programs-Wildland Fire Management" for wildfire suppression operations in the fiscal year in which such amounts are transferred: *Provided further*, That amounts may be transferred to the "Wildland Fire Management" accounts in the Department of Agriculture or the Department of the Interior only upon the notification to the House and Senate Committees on Appropriations that all wildfire suppression operations funds appropriated under that heading in this and prior appropriations Acts to the agency to which the funds will be transferred will be obligated within 30 days: *Provided further*, That the transfer authority provided under this heading is in addition to any other transfer authority provided by law. (*Department of the Interior, Environment, and Related Agencies Appropriations Act, 2020.*)

Appropriations Language Citations

DEPARTMENT OF THE INTERIOR DEPARTMENT WIDE PROGRAMS

Appropriation: Wildland Fire Management (Including Transfers of Funds)

Appropriations language and citations:

1. For necessary expenses for fire preparedness, fire suppression operations, fire science and research, emergency rehabilitation, fuels management activities, and rural fire assistance by the Department of the Interior, \$1,003,090, to remain available until expended:

This language provides funding for fire preparedness, suppression operations, fire science and research, emergency rehabilitation, fuels management, and rural fire assistance. The language further provides that such funding is available until expended.

2. *Provided*, That such funds are also available for repayment of advances to other appropriation accounts from which funds were previously transferred for such purposes:

This language authorizes appropriations to be used to repay treasury accounts and transfers for previous fires and incidents.

3. *Provided further*, That of the funds provided \$227,895,000 is for fuels management activities:

This language provides funding for fuels management activities.

4. *Provided further*, That of the funds provided \$20,470,000 is for burned area rehabilitation:

This language provides funding for burned area rehabilitation.

5. *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:

This language allows the Department to feed and house firefighters with this appropriation.

6. *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:

This language allows DOI agencies to retain funds they receive as reimbursement for fire protection provided to other entities, rather than having to submit them over to the U.S. Treasury, and makes these collected amounts available for use until expended.

7. *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 fuels management activities, and for training and monitoring associated with such fuels management activities on Federal land, or on adjacent non-Federal land for activities that benefit resources on Federal land:

This language allows the Department to enter into procurement mechanisms (contracts, grants, and/or cooperative agreements) for firefighting, fuels management, and training for the benefit of federally held or adjacent lands.

8. *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:

This language allows the Department to utilize cost-shared cooperative agreements.

9. *Provided further*, That notwithstanding requirements of the Competition in Contracting Act, the Secretary, for purposes of fuels management 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 micro-businesses; 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:

This language indicates the Secretary may utilize contracting arrangements with the Youth Conservation Corp., local/private/non-profit entities, small businesses or any other entity that may hire or train a significant percentage (50%) of the project workforce to complete projects.

10. *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:

This language directs the Department to formulate and distribute guidance in order for field staff to utilize these contracts.

11. *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:

This language allows the Department to use appropriated funds to reimburse the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for consultation services necessary for compliance with the Endangered Species Act.

12. *Provided further*, That the Secretary of the Interior may use wildland fire appropriations to enter into 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:

This language allows the Department the ability to enter into leases with local governments for properties necessary to provide firefighting facilities and to provide payment in advance for any construction activities if necessary.

13. *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:

This language allows the Departments of the Interior and Agriculture to transfer funds up to \$50,000,000 annually between agencies to expedite joint wildland fire management programs or projects.

14. *Provided further*, That funds provided for wildfire suppression shall be available for support of Federal emergency response actions:

This language allows the Departmental wildland fire management personnel and services to be used in support of Federal emergency responses.

15. *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.

This language allows the Department's wildland fire management personnel and services to be used to assist foreign countries with the concurrence of the Secretary of State, in support of forestry, wildland fire management, and related natural resource activities, including technical assistance, education, training and cooperation outside the United States.

16. *Provided further*, That of the funds provided under this heading, \$383,657,000 is provided to meet the terms of section 251(b)(2)(F)(ii)(I) of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended.

This language provides funding for fire suppression based on the ten-year average of suppression obligations as reported in the FY 2015 President's Budget, in accordance with the Consolidated Appropriations Act, 2018 (PL 115-141), which amended the terms of section 251(b)(2)(F)(ii)(I) of the Balanced Budget and Emergency Deficit Control Act of 1985 to include this provision.

Justification of Fixed Costs

Wildland Fire Management
Table 4: Justification of Fixed Costs
(Dollars In Thousands)

Fixed Cost Changes and Projections	FY 2020 Total or Change	FY 2020 to 2021 Change
Change in Number of Paid Days This column reflects changes in pay associated with the change in the number of paid days (-1 day) between FY 2020 and FY 2021, from 2,096 hours in FY 2020 to 2,088 hours in FY 2021.	+1,534	-1,861
Pay Raise The President's Budget for FY 2021 includes one quarter of a planned 3.1% pay raise and three quarters of a planned 1% pay raise for FY 2021.	+0	+7,487
Employer Share of Federal Employee Retirement System The change reflects the directed 1.3% increase in the employer contribution to the Federal Employee Retirement System.	+880	+4,585
Departmental Working Capital Fund The change reflects the final FY 2021 Central Bill approved by the Working Capital Fund Consortium.	-367	+20
Worker's Compensation Payments The amounts reflect final chargeback costs of compensating injured employees and dependents of employees who suffer accidental deaths while on duty. Costs for FY 2021 will reimburse the Department of Labor, Federal Employees Compensation Fund, pursuant to 5 U.S.C. 8147(b) as amended by Public Law 94-273.	+0	+0
Unemployment Compensation Payments The amounts reflect projected changes in the costs of unemployment compensation claims to be paid to the Department of Labor, Federal Employees Compensation Account, in the Unemployment Trust Fund, pursuant to Public Law 96-499.	+0	+0
Rental Payments The amounts reflect changes in the costs payable to General Services Administration (GSA) and others 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 Department of Homeland Security (DHS). Costs of mandatory office relocations, i.e. relocations in cases where due to external events there is no alternative but to vacate the currently occupied space, are also included.	-3	+14
Baseline Adjustments for O&M Increases In accordance with space maximization efforts across the Federal Government, this adjustment captures the associated increase to baseline operations and maintenance requirements resulting from movement out of GSA or direct-leased (commercial) space and into Bureau-owned space. While the GSA portion of fixed costs will go down as a result of these moves, Bureaus often encounter an increase to baseline O&M costs not otherwise captured in fixed costs. This category of funding properly adjusts the baseline fixed cost amount to maintain steady-state funding for these requirements.	+0	+0

Employee Count By Grade

Office of the Secretary - Office of Wildland Fire			
Table 5: Employee Count by Grade (Total Employment)			
Employee Count by Grade	2019 Actuals	2020 Estimate	2021 Estimate
Executive Level V	0	0	0
SES	1	1	1
Subtotal	1	1	1
SL - 00	0	0	0
ST - 00	0	0	0
Subtotal	0	0	0
GS/GM -15	6	6	6
GS/GM -14	13	14	14
GS/GM -13	5	5	5
GS -12	2	2	2
GS -11	1	1	1
GS -10	0	0	0
GS - 9	1	1	1
GS - 8	0	0	0
GS - 7	0	0	0
GS - 6	0	0	0
GS - 5	0	0	0
GS - 4	0	0	0
GS - 3	0	0	0
GS - 2	0	0	0
GS - 1	0	0	0
Subtotal	28	29	29
Other Pay Schedule Systems	0	0	0
Total employment (actuals & estimates)	29	30	30

Note: This exhibit only displays personnel counts in the Office of Wildland Fire. The WFM appropriation funds thousands of firefighters and support personnel who are not shown in this table. These personnel are included in the "Employee Count by Grade" exhibits in the BIA, BLM, FWS, and NPS Budget Justifications.

Section 403 Compliance

Table 6: Section 403 Compliance
Wildland Fire Management
Dollars in Thousands

<i>Description of Assessment</i>	<i>Bureau</i>	<i>Preparedness</i>	<i>Suppression</i>	<i>Fuels</i>	<i>BAR</i>	<i>Basis</i>
<i>External Administrative Costs</i>						
Human Resource Fire Program Support	BIA	\$ -	\$ -	\$ -	\$ -	Estimated
Centrally Funded Initiatives includes Working Capital Fund Direct and Central Bill and BLM Director's Priorities	BLM	\$ 7,025	\$ -	\$ 3,355	\$ -	Share of total BLM appropriated funds
National Operations Center (Procurement, HR, IT, data management services centrally provided for entire agency)	BLM	\$ 1,847	\$ -	\$ 1,549	\$ -	FTEs
Headquarters support (General headquarters oversight, external affairs, IT, law enforcement, EEO, HR, resources, business practices)	BLM	\$ 635	\$ -	\$ 352	\$ 217	Evaluation of support needed for subactivity
National Training Center (Non-program specific training, centrally funded)	BLM	\$ -	\$ -	\$ -	\$ -	FTEs
User Pay Cost Share: The non-resource management cost share collects costs from multiple, distributed accounts. The funds collected are used to pay Service-wide charges that cannot easily be attributed to a specific program or subactivity.	FWS	\$ 2,950	\$ -	\$ -	\$ -	Percentage based on FTE
Enterprise Wide Cost Share: The Service assesses its resource management programs for costs that can be directly tracked back to users. This includes such items as software licenses, cell phone costs, ID cards and the like.	FWS	\$ 1,120	\$ -	\$ 225	\$ -	Percentage based on FTE
Working Capital Fund Central Bill: Costs covered include administrative and contract support for the Boise Acquisition Office related to centralized aviation contracts.	BIA	\$ 237	\$ -	\$ -	\$ -	The basis for distribution of costs includes elements such as aviation cost and utilization of contract support.
Working Capital Fund Central Bill: Costs covered include a variety of services including mail services, safety, security, property services, building management and services, and the finance branch.	OS	\$ 390	\$ -	\$ -	\$ -	The basis for distribution of costs includes elements such as FTE's and square footage.
Subtotal External Administrative Costs		\$ 14,204	\$ -	\$ 5,481	\$ 217	

Table 6: Section 403 Compliance
Wildland Fire Management
Dollars in Thousands

<i>Description of Assessment</i>	<i>Bureau</i>	<i>Preparedness</i>	<i>Suppression</i>	<i>Fuels</i>	<i>BAR</i>	<i>Basis</i>
Program Assessment Costs						
Office of Aircraft Services Central Bill (Administrative charges for OAS training, management, flight services, safety)	BLM	\$ -	\$ 3,786	\$ -	\$ -	Flight time by subactivity
Subtotal Program Assessment Costs		\$ -	\$ 3,786	\$ -	\$ -	
Bureau Administrative Costs						
Preparedness Indirect for Tribal Programs	BIA	\$ 3,856	\$ -	\$ 7,975	\$ -	7% of Base Prep. Allocation, 14.5% Fuels allocation.
State Level Indirect (Admin support at the State, district, and field office level: procurement, HR, IT)	BLM	\$ 13,100	\$ -	\$ 4,990	\$ -	10% of State Base allocation
Regional Program Management Support Share: This includes regional assessments made to meet specific administrative support and Regional Director priorities for that particular geographic region. Most methods based on FTE to cover HR, Contracting, and other admin costs.	FWS	\$ 2,825	\$ -	\$ 850	\$ -	Percentage based on FTE
Subtotal Bureau Administrative Costs		\$ 19,781	\$ -	\$ 13,815	\$ -	
Total Assessments and Reserves		\$ 33,985	\$ 3,786	\$ 19,296	\$ 217	

Appendix A – List of Tables and Figures

LIST OF TABLES

Table 1	2021 Budget at a Glance	Pg. 15
Table 2	2021 Summary of Requirements	Pg. 16
Table 3	Preparedness Resources Tables	Pg. 28-29
Table 3A	Estimated Government Preparedness Resources, 2019-2021	Pg. 28
Table 3B	Estimated Tribal Preparedness Resources, 2019-2021	Pg. 29
Table 3C	Estimated Preparedness Program Costs, 2019-2021	Pg. 29
Table 4	Justification of Fixed Costs	Pg. 55
Table 5	Employee Count by Grade	Pg. 56
Table 6	Section 403 Compliance	Pg. 57-58

LIST OF FIGURES

Figure 1	Trend in DOI Suppression Obligations Ten-year Average, FY 2000-2019	Pg. 33
----------	---	--------

Appendix B – References

ACRONYMS

DOI	The Department of the Interior
BAR	Burned Area Rehabilitation
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CR	Continuing Resolution
FSEN	Fire Science Exchange Network
FTE	Full-Time Equivalent (employees)
FWS	Fish and Wildlife Service
FY	Fiscal Year
GACC	Geographic Area Coordination Center
JFSP	Joint Fire Science Program
NPS	National Park Service
OWF	Office of Wildland Fire
RTRL	Reserved Treaty Rights Land
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
WFIT	Wildland Fire Information Technology
WFLC	Wildland Fire Leadership Council
WFM	Wildland Fire Management
WUI	Wildland-Urban Interface

Acknowledgements

Data and graphics used throughout this document have been sourced from the following:

- Program Graphics
 - Preparedness, Suppression Operations, Fuels Management, Burned Area Rehabilitation: Luis Prado/Noun Project
 - Facilities: Graphic Engineer/Noun Project
- Forests and Rangelands – The National Cohesive Wildland Fire Management Strategy: <https://www.forestsandrangelands.gov/strategy/>
- The National Interagency Fire Center: <https://www.nifc.gov/>
- The National Interagency Coordination Center – Predictive Services: <https://www.predictiveservices.nifc.gov/>
- Publications:
 - Germino, Matthew J., Chambers, Jeanne C., Brown, Cynthia S. (2016). “Exotic Brome-Grasses in Arid and Semiarid Ecosystems of the Western US”.
 - Stein, S.M., Menakis, J., Carr, M.A., Comas, S.J., Stewart, S.I., Cleveland, H., Bramwell, L. & Radeloff, V.C. (2013). “Wildfire, wildlands, and people: understanding and preparing for wildfire in the wildland-urban interface—a Forests on the Edge Report”. U.S. Department of Agriculture General Technical Report, RMRS-GTR-299, 36.

For more information on the DOI’s Wildland Fire Management Budget, please visit:

- <https://www.doi.gov/wildlandfire/budget>