



COLORADO

Division of Fire Prevention & Control

Department of Public Safety

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MEMORANDUM

TO: Governor John Hickenlooper &
Members of the Colorado General Assembly

FROM: Mike Morgan, Director

DATE: April 14, 2017

RE: 2017 Wildfire Preparedness Plan

Colorado law; specifically Section 24-33.5-1227 (2) (a), C.R.S. requires the Director of the Division of Fire Prevention and Control to develop an annual Wildfire Preparedness Plan, in collaboration with a representative of the County Sheriffs of Colorado, a representative of the Colorado State Fire Chiefs' Association, the Director of the Office of Emergency Management and the Adjutant General.

The Wildfire Preparedness Plan shall be designed to address the following:

- (1) The amount of aerial firefighting resources necessary for the state of Colorado at times of high and low wildfire risk;
- (2) The availability of appropriate aerial firefighting equipment and personnel at times of high fire risk to respond to a wildfire;
- (3) The availability of state wildfire engines and staffing of the engines at different levels of wildfire risk;
- (4) The availability of wildfire hand crews, including state inmate wildfire hand crews, at different levels of wildfire risk; and
- (5) A process for ordering and dispatching aerial firefighting equipment and personnel that is consistent with, and supportive of, the statewide mobilization plan prepared pursuant to Section 24-33.5-705.4, C.R.S.

Wildfire Preparedness Fund - History

The Wildfire Preparedness Fund (WPF) in Colorado was authorized by the 2006 Legislature through Senate Bill 06-096, which also appropriated funding for state fiscal years 2006 through 2010 to support implementation of the actions directed by the legislation. SB11-238 extended the annual



transfer of \$3.25 million by the Department of Local Affairs from the mineral leasing fund to the Division of Fire Prevention and Control for two years beginning July 1, 2012.

Senate Bill 13-270 amended Section 10-3-209 (4), C.R.S., and allows for appropriations to be made by the General Assembly for the Wildfire Emergency Response Fund and the WPF from insurance premium taxes (IPT) collected by the Division of Insurance in the Department of Regulatory Agencies prior to their transfer to the General Fund. However, SB13-270 did not make an appropriation for FY 2014-15 to the WPF.

The Department of Public Safety requested an annual appropriation of \$4,150,000 Cash Funds from the proceeds of insurance premium taxes to the WPF for FY 2014-15, FY 2015-16, and beyond for the ongoing funding of wildfire suppression functions within the Division of Fire Prevention and Control (DFPC). The request was approved and the moneys in the WPF are now continuously appropriated.

DFPC may use the moneys in the Wildfire Preparedness Fund to implement the Wildfire Preparedness Plan, including:

(a) Increase upgrades to fire engines acquired through the federal excess personal property program that are on loan to local fire departments;

(b) Increase technical assistance in wildland fire preparedness to counties, municipalities, and fire protection districts; and

(c) Ensure, in conjunction with the wildfire preparedness plan, that state firefighting equipment is fully operational and both available to and coordinated with the equipment capacities of fire protection districts and that county, municipality, and fire protection districts personnel are fully trained in the use of such equipment;

(d) The division may use moneys in the wildfire preparedness fund for the purpose of training, equipping, or supervising one or more hand crews employed by veterans' fire corps programs in Colorado for wildland fire mitigation and suppression.

Other Wildland Fire Funding – History

House Bill 12-1283 consolidated the State's fire prevention and control and homeland security and emergency management functions, resources, and personnel within the Department of Public Safety. In addition to various structure inspection and certification programs, H.B. 12-1283 also transferred the State responsibilities for wildland fire preparedness, response, suppression, coordination, and management from the Colorado State Forest Service (CSFS) to DFPC.

Since the passage of HB 12-1283, the following legislation has further expanded the responsibilities of DFPC related to wildland fire prevention, control, and research:

- Senate Bill 13-083 – Colorado Prescribed Burning Act;

- Senate Bill 13-245 and SB 14-164 – Colorado Firefighting Air Corps and the Center of Excellence for Advanced Technology Aerial Firefighting (Center of Excellence). \$19.7 million General Fund and 19.3 FTE in FY 2014-15, \$9.8 million General Fund and 27.0 FTE in FY 2015-16, and \$9.6 million and 27.0 FTE in FY 16-17;
- Senate Bill 14-008 – Creation of the Wildfire Information and Resource Center. \$27,175 General Fund and 0.5 FTE in FY 2014-15 and \$22,472 General Fund and 0.5 FTE in FY 2015-16 and beyond;
- Senate Bill 15-205 – Veterans Fire Corps for Wildland Firefighting. The bill appropriated 6.0 FTE to DFPC for this function. The bill authorized DFPC to expend moneys out of the Wildfire Preparedness Fund for the implementation of the bill;
- House Bill 15-1129 – Colorado Disaster Prediction and Decision Support System. \$600,000 General Fund and 0.5 FTE for five fiscal years, FY 2015-16 through FY 19-20;
- Senate Bill 15-234 (Long Bill) \$1,660,000 Capital Construction Fund for the purchase of 5 wildland firefighting engines.

For FY 16-17, DFPC has approximately \$15.0 million total funds available for wildland firefighting operations through two main funding sources, General Fund and the Wildfire Preparedness Fund. Please note that at the time of the writing of this report, the FY 2017-18 base operating budget for the Division has not been approved, however, the Division requested continuation funding from FY 2016-17. The funds and activities are summarized in the table below:

DFPC Wildland Fire Management Operations Budget - FY 2016-17				
	General Fund	Cash Funds	Reappropriated Funds	Total Funds
Aviation Program	8,794,161	0	0	8,794,161
Center of Excellence (CoE)	795,668	0	0	795,668
Colorado Disaster Prediction and Decision Support System (H.B. 15-1129)	600,000	0	0	600,000
Other Wildland Fire Management Programs*	706,984	60,000	4,150,000	4,916,984
Total WFMS Operating Budget	\$10,896,813	\$60,000	\$4,150,000	\$15,106,813

* Funding includes General Fund, cash funds from the Wildland Fire Equipment Repair Cash Fund, and reappropriated funds from the Wildfire Preparedness Fund for the following programs: 1. Wildland fire management services, technical assistance, and training through the Fire Management Officers (FMOs) Program; 2. Suppression and Prescribed Fire Program including staff and engines located strategically throughout the state; 3. Veterans Fire Corps Program; 4. State Wildland Fire Team (SWIFT) Crews; 5. Vehicle Maintenance Shop; and 6. various other support staff.

As the table above shows, the majority of the wildland fire preparedness budget for the Division is provided through General Fund appropriations as well as the Wildfire Preparedness Fund (Reappropriated Funds).



In addition to the base operating budget of the Wildland Fire Management Program, the State has available resources from other funding sources to cover expenses for state responsibility wildland fire emergencies and disasters. These funding sources include:

- Emergency Fire Fund (EFF) - funded by a \$1.0 million yearly voluntary contribution assessed among 42 participating counties as well as approximately \$30,000 in contributions from four non-county participants (Colorado Springs Utilities, Denver Water, City of Aurora, Denver Mountain Parks). This is the first resource the state uses when responsibility for a wildland fire is transferred to the State. Once this fund is used up, Disaster Emergency Funds are requested from the Governor.
- Wildfire Emergency Response Fund (WERF) – This fund provides at a minimum funding or reimbursement for:
 - The first aerial tanker flight or the first hour of a firefighting helicopter operating on a wildfire at the request of any county sheriff, municipal fire department, or fire protection district; and
 - The employment of wildfire hand crews to fight a wildfire for the first two days of a wildfire at the request of any county sheriff, municipal fire department, or fire protection district, with a preference for the use of wildfire hand crews from the inmate disaster relief program created in section 17-24-124, C.R.S.

The Governor may increase the use of WERF funding on wildland fires in his discretion. The fund does not currently have a dedicated annual revenue source, however, the fund can be replenished through appropriations by the General Assembly either from direct General Fund dollars or insurance premium tax dollars pursuant to Section 10-3-209 (4)(a)(II), C.R.S, or from the Disaster Emergency Fund (DEF) pursuant to Section 24-33.5-706 (4.5)(b), C.R.S.

Within the past 5 fiscal years, WERF-funded activities have received resources twice, once through a General Fund appropriation of \$608,200 through the FY 2012-13 supplemental process (S.B. 13-101) to cover requests for reimbursement from the 2012 wildland fire season and again in FY 2013-14 through a transfer of \$500,000 in insurance premium tax dollars into the fund (S.B. 13-270).

- Disaster Emergency Fund (DEF) – The Disaster Emergency Fund is available to provide state funding for state disasters upon a commitment by the Governor of DEF resources through an executive order. During the 2016 wildland fire season, there were 6 wildland fires that became state responsibility fires, of those, five fires received an executive order and funding from the DEF. Of the five fires that received funding from the DEF, three fires also received a FEMA declaration and FMAG funding.
- Federal Emergency Management Agency (FEMA), Fire Management Assistance Grant Program (FMAG) - Fire Management Assistance is available to States, local and tribal governments, for



the mitigation, management, and control of fires on publicly or privately owned forests or grasslands, which threaten such destruction as would constitute a major disaster. During the 2016 wildland fire season the Cold Springs Fire, Beulah Hill Fire, and the Junkins Fire received an FMAG declaration.

Situation

Wildfires occur as unscheduled emergency events in wildland fuels (grassland, shrub land, and forest vegetation) and in fuels that include a combination of wildland and human introduced fuels such as houses and improvements. Wildfires involve or threaten human life, residential housing, other improvements, and natural resources.

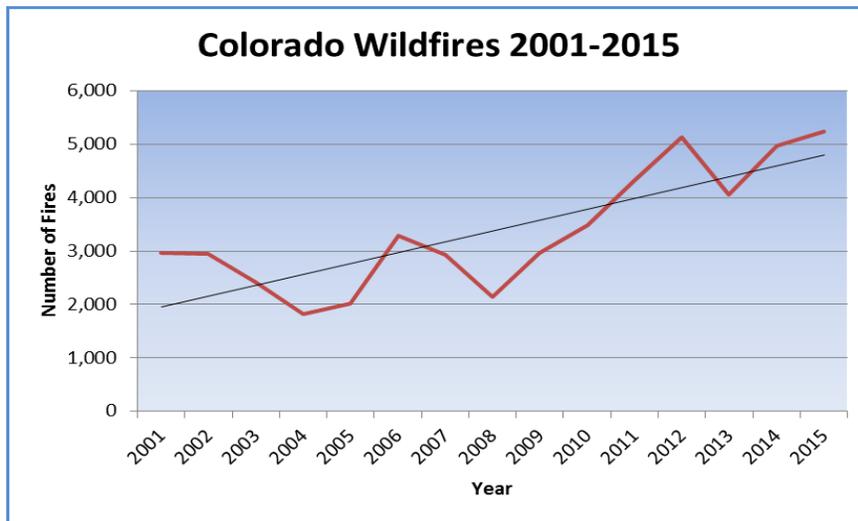
Wildfire knows no boundaries; it does not recognize jurisdictional responsibilities. A single wildfire often crosses private, county, state, tribal and federal lands and threatens communities, infrastructure, economies, watersheds, and valuable natural resources that affect citizens, landowners and fire managers across all landscapes. A large wildfire has significant potential to impact millions of lives including those who live, work or play in our great State, as well as those who rely on Colorado for their water supply. In-as-much, wildland firefighting in Colorado is interagency in nature involving state, county, local, federal, and tribal partners.

Due to natural fuels build-up, declining forest health, and increased population in wildland-urban interface areas, wildfires that exceed the control efforts of local and county resources are becoming more common. Colorado's wildfires have become fires within subdivisions requiring additional management efforts and coordination of resources. Further compounding the criticality of the situation, is that Colorado's traditional fire season has expanded into times of the year that we have not traditionally experienced fires. DFPC has engaged in a Strategic Planning process and is working with our partners and stakeholders to identify ideas and solutions to assist in making resource availability mirror our changing fire seasons.

Since the 1990s, the number, intensity, and complexity of wildfires in Colorado have been growing exponentially, and experts predict that it will continue to worsen. In the 1960s, the average annual number of wildfires in Colorado was 457, and these fires burned an average of 8,170 acres annually. By the 1990s the average number of fires and acres burned had more than doubled to about 1,300 fires with 22,000 acres burned. Between the 1990s and the 2000s, the average number of fires and acres burned more than doubled again.

In the "average year", there will be 4,536 fires in Colorado that will burn 102,284 acres. On average, 39 of these fires will be considered large wildfires¹ that will burn 98,820 acres of land and will result in \$41.8 million in fire suppression expenses.

¹ For statistical purposes, a large wildland fire is a fire of 100 acres or more or is of a complexity requiring a Type 1 or Type 2 IMT to manage.



In 2016, there were a total of 4,783 wildland fires reported by local fire agencies that burned 42,112 acres. Of these, a total of 36 were classified as large fires.

Preparedness Planning Assumptions

- Public and firefighter safety is the priority.
- Wildfires that exceed the capabilities of local and county resources will occur.
- Wildfires will threaten lives, property, and natural resources.
- Wildfires threaten water supplies for residents and non-residents of Colorado.
- Wildfires have significant potential to threaten local and state economies.
- No single entity or jurisdiction alone can suppress every wildfire.
- Successful suppression and extinguishment of catastrophic wildfires require organized interagency cooperation at all levels of government.
- Ensuring that state wildfire resources are identified, staffed, and positioned to respond will prevent some wildfires from becoming large catastrophic events and will assist in the containment and suppression of those wildfires that do escape initial attack thereby minimizing the far reaching impacts of these large incidents.

Fire Season Outlook 2017

In late April and early May of every year, scientists and land managers produce coordinated outlooks for fire season across the western US to better prioritize resources. While it is too early to forecast with accuracy what the 2017 fire season will bring, the current National Predictive Services models indicate a near average to slightly below average core fire season.

- Weather patterns in February and March prior to green-up of grasses and herbaceous fuels resulted in significant fire activity on the Eastern side of the Continental Divide. These conditions resulted in the first state responsibility fire occurring on March 19th in Boulder County, which used approximately 50% of the Emergency Fire Fund.



- As a result of recent and forecast precipitation, an average progression of green-up is anticipated through May; reducing the severity and threat of an earlier than average onset to the 2017 Colorado core wildfire season.²
- Long range predictors point towards average Colorado precipitation during the core fire season (June-July-August), but above average temperatures.
- Large fire risk and the core fire season in the higher mountains of Colorado is anticipated to get off to a later than average start, with overall large fire risk predicted to be below average from May through June. This is a result of recent and forecast precipitation, as well as from residual effects of above median snowpack lingering during the spring. For lower elevations and the foothills, the expectation is for average large fire potential from April through July.
- There is less certainty with outlooks for late summer and early fall. Development of El Nino conditions could lead to a slightly higher probability of wetter than average conditions, while continued neutral ENSO conditions could lead to a slightly higher probability of warmer and drier than average conditions.
- It is important to note that there are three primary contributors to large fire potential. Those contributors are, weather, fuel, and topography. While the weather conditions appear to be indicating average potential for large fires, the fuel conditions are such that there are increased opportunities for large fires to occur above normal predictive services forecasts.

Colorado's Wildfire Management Goals

Suppression costs escalate significantly as fire size increases. A wildland fire becomes a local emergency before it evolves into a State, then regional, then national incident. Colorado's wildfire management program should continue to hold as a high priority the strengthening of first response firefighting forces to safely and effectively suppress wildland fires.

Fast, aggressive, initial attack on new fires (for fires where full suppression efforts is the appropriate management response) can reduce the number of mega fires that may burn hundreds of homes and cost the taxpayers tens of millions of dollars in suppression costs. The safety of firefighters and the public will continue to be the first priority in all fire management activity.

DFPC's strategic policy initiative for wildland fire management is to reduce the number of large wildland fires that threaten lives or property by 5.0 percent by June 30, 2017 and by 10.0 percent by June 30, 2019 for the people of Colorado.

Enabling Objectives

Because DFPC's role is primarily to support local and county firefighting organizations, in order to achieve this wildfire management goal, accomplishment of the following enabling objectives will be necessary:

1. Generate an incident assessment for every fire within 60 minutes of request or detection.

2. Deliver the appropriate aviation suppression resources to every fire within 60 minutes of the request.

Aviation assets will be strategically located based on preparedness levels, interagency situational awareness of fire activity, weather, National Fire Danger Rating System (NFDRS) indices, location of other aerial assets, etc.

2017 Wildfire Preparedness Plan

Following is a summary of the activities that will be implemented to address the required components of the annual Wildfire Preparedness Plan as well as facilitating the achievement of DFPC's wildfire management goals:

Wildland Fire Management

Wildland fire management services, technical assistance, and incident support will continue to be implemented and delivered to counties and local fire departments through the Wildland Fire Management Section, consisting of the Section Chief, Deputy Chief, Planning Branch and Operations Branch, which includes the Area and Regional Fire Management Officers (FMOs), and available State aviation and suppression resources.

Leaders' intent on incident priorities:

When developing incident strategies, tactics, and plan implementation. The following list, in numerical importance, shall be considered:

1. Public and Firefighter safety
2. Incident Stabilization
3. Property Conservation
4. Endangered species, environmental, and economic impacts
5. Resource benefit

Aerial Firefighting Resources

The 2017 plan for DFPC aerial firefighting resources will be based on wildfire risk and need, as well as available funding, and may include any number of potential arrangements. To the degree practicable and possible, the minimum deployment of DFPC aerial firefighting resources will be:

Multi-Mission Fixed-Wing Aircraft – In order achieve the goal of generating an incident assessment for every fire within 60 minutes of request or detection of a wildfire, DFPC will operate two fixed-wing multi-mission aircraft.

Rotor-Wing Multi-Mission Aircraft – In order achieve the goal of providing the appropriate aviation suppression resources to every fire within 60 minutes of the request, DFPC will operate a minimum of two helicopters with helitack crews through an exclusive-use contract.

Single Engine Air Tankers (SEATs) – In order to achieve the goal of providing the appropriate aviation suppression resources to every fire within 60 minutes of the request, DFPC will operate a minimum of two SEATs through an exclusive-use contract. DFPC will also administer a “Call-When-Needed” (CWN) program that makes additional SEATs available if the wildfire situation dictates the need for additional resources.

Other Aviation Resources – DFPC will continue to investigate and evaluate other opportunities for Call When Needed resources to enhance firefighting capabilities.

Principal funding for DFPC’s fire aviation program will be from a General Fund appropriation.

Suppression & Prescribed Fire Program

DFPC's Suppression and Prescribed Fire Program will address the required availability of state wildfire engines and staffing of the engines at different levels of wildfire risk; as well as the availability of wildfire hand crews, including state inmate wildfire hand crews, at different levels of wildfire risk.

The 2017 plan for state engines and firefighters will be based on wildfire risk and need, as well as available funding, and may include any number of potential arrangements, including:

- Strategically located State Engines (with Permanent, Seasonal, and/or local government staffing)
- Strategically located Squads and Hand crews.

To the degree practicable and possible, the minimum deployment of state engines will be:

- 2 DFPC staffed engines
- 5 state engines staffed jointly by DFPC and local agencies

Veterans Fire Corps Program

Senate Bill 15-205, which was signed into law on May 12, 2015, directs DFPC “to the extent practicable, should train, equip, and supervise hand crews employed by Veterans’ Fire Corps program in Colorado for wildland fire mitigation and suppression.”

In 2016, DFPC converted the Ft. Collins Engine into a 5 person squad by adding 2 additional personnel. The resource is available for initial attack as a squad, and has the capability to form the overhead and supervision for a 20 person hand crew. The squad partners with Veterans’ Fire Corps, BLM Team Rubicon (comprised of military veterans), and local government personnel to increase hand crew capacity in Colorado. When not involved in incident response, the squad is actively involved in teaching courses to Veterans and local agencies, implementing fuels management projects, and planning and implementing prescribed fire projects.

² The core wildfire season typically begins late May over southern Colorado and progresses northward through the remainder of the summer months.

State Wildland Inmate Fire Team (SWIFT) Crews

DFPC will continue to support the State Wildland Inmate Fire Team (SWIFT) crews operated by CCi; providing training, logistical and/or overhead support that may be needed to ensure operational readiness and hazardous fuel reduction projects.

DFPC will also ensure the maintenance of process for ordering and dispatching aerial firefighting equipment and personnel that is consistent with, and supportive of, the statewide mobilization plan prepared pursuant to Section 24-33.5-705.4, C.R.S. DFPC will provide the technical assistance and program management that identifies local, county, and state resources; their qualification to national standards; and their listing in interagency zone dispatch centers and in the Colorado Statewide Resource Mobilization System.

2017 Wildfire Preparedness Fund Budget

The 2017 Wildfire Preparedness Fund Budget estimate reflects funding specifically authorized in Section 24-33.5-1227 (1) (a), C.R.S. It is based on state Fiscal Year 2017-18 that runs from July 1, 2017 to June 30, 2018. The funding provided through the Wildfire Preparedness Fund is used to support personnel and operating activities aimed at meeting Colorado’s wildfire management goals and the 2017 Wildfire Preparedness Plan.

Wildfire Preparedness Fund				
Section 24-33.5-1227 (1)(a), C.R.S.				
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
	Actual	Actual	Estimate	Estimate
Assets	3,270,646	5,025,353	4,439,319	3,842,894
Liabilities	<u>61,612</u>	<u>519,685</u>	<u>250,000</u>	<u>250,000</u>
Ending Fund Balance	\$3,209,034	\$4,505,668	\$4,189,319	\$3,592,894
Revenues	4,235,923	4,296,925	4,250,000	4,250,000
Expenses	<u>2,845,269</u>	<u>3,000,290</u>	<u>4,316,349</u>	<u>4,596,425</u>
Net Cash Flow	\$1,390,654	\$1,296,635	(\$66,349)	(\$346,425)
Personal Services	1,567,254	1,775,221	3,031,172	3,182,731
Operating Expenses	1,029,658	1,156,477	1,119,953	1,045,095
Other Expenses	<u>248,356</u>	<u>68,592</u>	<u>165,224</u>	<u>368,600</u>
Total Expenditures	\$2,845,268	\$3,000,290	\$4,316,349	\$4,596,425



2017 Other Funding for Wildland Fire Preparedness and Suppression

Senate Bill 14-164 and House Bill 14-1336 (FY 2014-15 Operating Budget Bill) provided funding to support a Colorado Aviation Program and a Center of Excellence for Advanced Technology Aerial Firefighting within the DFPC.

The first-year funding for the Aviation Program created a Multi-Mission Aircraft (MMA) program comprised of two Pilatus PC-12 airplanes outfitted with state-of-the-art infrared and color sensors. Based out of Centennial, CO the PC-12 aircraft can takeoff and be over a wildland fire almost anywhere in Colorado in less than an hour.

The aviation funding also allowed the Division to expand contracting for helicopters and single engine air tankers (SEAT). The table below provides an overview of General Fund appropriations used to support various wildland fire management programs as well as the estimated allocation of funding by program for FY 2017-18.

Various DFPC General Fund Programs - Summary				
	BFY 2014-15	BFY 2015-16	BFY 2016-17	BFY 2017-18
	Actual	Actual	Estimate	Estimate¹
Aviation	15,249,621	7,267,944	8,933,242	8,794,161
Engines	480,742	471,854	581,492	472,492
Center of Excellence	33,935	535,766	926,668	795,668
Center of Excellence-HB 15-1129	0	290,893	600,000	600,000
Other-Miscellaneous	<u>394,119</u>	<u>357,219</u>	<u>234,492</u>	<u>234,492</u>
	\$16,158,417	\$8,923,676	\$11,275,894	\$10,896,813

¹ FY 2017-18 does not include centrally appropriated employee benefit dollars.

The table below provides an overview of General Fund appropriations used to support various Aviation Program activities. The FY 2017-18 estimate of available base General Fund dollars to support aviation operating activities is approximately \$6.5 million.

Aviation Program General Fund Operating Expenditures ONLY by Program- Summary				
	BFY 2014-15	BFY 2015-16	BFY 2016-17	BFY 2017-18
	Actual	Actual	Estimate	Estimate
Multi-Mission Aircraft	12,593,578	3,499,610	3,994,838	3,994,838
Helicopters	1,004,342	911,682	1,058,146	1,058,146
Single Engine Air Tankers (SEAT)	652,798	477,950	1,246,580	1,246,580
On-Call SEAT	0	0	200,000	200,000
Other	<u>514,265</u>	<u>889,129</u>	<u>433,678</u>	<u>44,597</u>
	\$14,764,983	\$5,778,371	\$6,933,242	\$6,544,161

2017 Wildland Fire Preparedness Staffing Plan

In order to achieve its goals for the 2017 Wildfire Preparedness Plan, the DFPC relies on a core group of Wildland Fire Management Section employees. Based on estimated funding levels for FY 2017-18, the DFPC staffing assumptions for wildland firefighting personnel are based on approximately 60.0 FTE and 16 temporary employees.

