



MEMORANDUM

- TO: Governor Jared Polis & Members of the Colorado General Assembly
- FROM: Mike Morgan, Director, Division of Fire Prevention and Control

DATE: April 10, 2020

RE: 2020 Wildfire Preparedness Plan

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;
- 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.

History of Wildfire Preparedness Fund

The Wildfire Preparedness Fund (WPF) in Colorado was authorized by the 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. Senate Bill 11-238 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 (WERF) and the WPF from insurance premium taxes collected by the Division of Insurance in the Department of Regulatory

Agencies prior to their transfer to the General Fund. However, SB 13-270 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:

- 1) Increase upgrades to fire engines acquired through the federal excess personal property program that are on loan to local fire departments;
- 2) Increase technical assistance in wildland fire preparedness to counties, municipalities, and fire protection districts;
- 3) 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; and
- 4) 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 Legislation and Funding

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. This legislation 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:

- 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 (CoE). SB 14-164 included \$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 on-going base funding;
- Senate Bill 14-008 Creation of the Wildfire Information and Resource Center. SB 14-008 included \$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 and 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. HB 15-1129 included \$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) included \$1,660,000 Capital Construction Fund for the purchase of five wildland firefighting engines. DFPC took delivery of five Type 3 Engines in 2017.

For FY 20-21, DFPC has approximately \$16.5 million total funds available for wildland fire planning, coordination, and firefighting operations. Please note that at the time of the writing of this report, the FY 2020-21 base budget for the Division has not been approved, however, the Division requested continuation funding from FY 2019-20.

Fund	Source	Amount
DFPC Engine Program	General Fund	\$500,000
Wildfire Preparedness Fund	General Fund and Insurance Premium Taxes	\$7,150,000
Colorado Firefighting Air Corps	General Fund	\$8,900,000

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 assistance or state responsibility wildland fire emergencies and disasters. These funds are listed below.

Wildfire Emergency Response Fund (WERF)

Utilized as part of the State's effort to assist in keeping fires small and reducing the number of State Responsibility Fires, WERF provides, at a minimum, funding or reimbursement for the first aerial tanker flight or the first hour of a firefighting helicopter, and/or two days of a wildfire hand crew at the request any county sheriff, municipal fire department, or fire protection district.

The Governor may increase the use of WERF funding on wildland fires at 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.

Over the past ten fiscal years, WERF-funded activities have received resources three times, 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, again in FY 2013-14 through a transfer of \$500,000 in insurance premium tax dollars into the fund (S.B. 13-270), and again in 2018 through a transfer of \$500,000 by Executive Order D 2018 018. The estimated available balance in the WERF for calendar year 2020 is \$152,253.

Colorado Firefighting Air Corps (CFAC)

CFAC funding provides the base operating budget of the DFPC aviation program. This includes: 2 Multi-Mission Aircraft (MMA) and Mission Sensor Operators; 2 Exclusive Use (EU) Helicopters, each with 12-person DFPC Helitack Crews; 2 EU Single Engine Air Tanker (SEATS); 3 Call-When-Needed (CWN) SEAT contracts; and other program operating expenses of supervision, facilities, travel, vehicles, etc.

In addition, CFAC funds are utilized in combination with WERF to cover the costs of DFPC, Interagency, and Federal aviation resources utilized by local agencies during initial attack. WERF and CFAC essentially cover the costs of all fixed and rotor wing assets utilized on the first day of a local agency fire, and operates under the Closest Forces concept so that nearest aviation resources regardless of ownership are ordered first.

While there were no State Responsibility Fires in 2019, it is important to note that the Division utilized \$1,022,000 in WERF and CFAC funds on 29 occasions to assist in suppression of local fires preventing them from growing to become State Responsibility Fires.

Emergency Fire Fund (EFF)

EFF is funded by an approximately \$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, City of Aurora, Denver Mountain Parks, Denver Water). This is the first funding resource the State uses when responsibility for a wildland fire is transferred to the State if the incident occurs within a County that contributes to the EFF. Once this fund is depleted, Disaster Emergency Funds are requested from the Governor. The estimated available balance in the EFF for calendar year 2020 is \$2,388,480.

Disaster Emergency Fund (DEF)

Per 24-33.5-706, C.R.S., 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.

Federal Emergency Management Agency Fire Management Assistance Grants (FMAG)

Through FMAG, fire management assistance is available to State, 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.

Colorado Fire Commission

In 2019, the first ever Colorado Fire Commission (CFC) was established by Senate Bill 19-040. The CFC is charged with drafting and implementing recommendations on how to collaboratively and proactively reduce the overall loss of resources as a result of fire in Colorado, including within the Wildland Urban Interface. CFC membership consists of 24 voting members and 8 Ex-Officio members, representing numerous disciplines and diverse geographic areas of the State. The CFC is addressing three priority topics this year, will be presenting recommendations to the Legislature and the Governor's Office by August 31, 2020, and will implement the recommendations as they are approved and associated resources are made available. The three priority areas for the Commission's first year are:

- Wildfire Funding develop an updated, sustainable method of paying for large fires that exceed County capacity; and improve and enhance options for DFPC to provide critical resource and funding assistance in the early stages of a fire to reduce the number of incidents that become State Responsibility;
- Enhanced Regional Mutual Aid develop systems and processes to improve mutual aid response and assistance between local fire agencies and between regions of Colorado during the early stages of escalating fire incidents before the "cavalry arrives" 24 to 72 hours later; and
- Fire Data improved data collection and analysis to understand Colorado's fire problems. Identify gaps in existing data and issues with existing systems, and develop recommendations to improve the quantity and quality of data available to support decision-making.

The Division will continue proactive engagement with these stakeholders and partners at the community, local, state, and federal level in our continued efforts to proactively address the growing fire problem within Colorado. We are all confident that continual evaluation of capacity and resource availability to support initial attack from a local, regional, statewide, and national basis for rapidly growing fires threatening citizens, visitors, natural resources, and economies, through on-going post incident analysis and collaborative strategic planning efforts and activities will reduce our overall risk profiles. The Division will continue to remain focused on the diverse needs of all areas of the state as it relates to coordination and response to fire incidents and reduction of the likelihood or severity of an event when it does occur.

History and Background on Wildland Fire in Colorado

Wildfires occur as unscheduled emergency events in wildland fuels (grass, shrub, and forest vegetation) and in areas that include a combination of wildland and human introduced fuels such as houses and improvements. Wildfires increasingly involve or threaten human life, residential housing, commercial occupancies or other improvements, communities, natural resources, watersheds, the economy, and quality of life in Colorado. Wildfire knows no boundaries and does not respect jurisdictional responsibilities. For this reason, wildland firefighting in Colorado is interagency in nature, involving local, county, state, federal, and tribal partners.



Due to natural fuels build-up, declining forest health, and increased population in wildlandurban-interface (WUI) areas, wildfires that exceed the control efforts of local and county resources are becoming more common. Colorado's wildfires are now occurring within subdivisions, which increases the risk to public and firefighter safety and requires additional management efforts and coordination of local, state, and federal resources. Further compounding the criticality of the situation, Colorado's traditional fire season has expanded into times of the year that we have not traditionally experienced fires. DFPC continues to engage in strategic planning processes and works with our partners and stakeholders to implement recommended changes. This allows us to continually identify ideas and solutions to assist in ensuring resource availability and types mirror Colorado's growing fire seasons and changing fire risk. 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. 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. Looking at the historical data of the twenty largest wildfires in Colorado's history, five of those (25%) occurred in 2018, thirteen of those (65%) have occurred since 2010, and all twenty (100%) have occurred since 2000.

Years	State Responsibility Fires (SRF)	SRF Average per Year	FEMA Incidents	FEMA Average per Year
1967-1969	0	0	0	0
1970-1979	1	.1	1	.1
1980-1989	8	.8	1	.1
1990-1999	15	1.5	4	.4
2000-2009	65	6.5	32	3.2
2010-2019	74	7.4	20	2.0
Total	161		58	

In 2019, there were a total of 4,735 wildland fires reported on state and private lands by local fire agencies. These fires burned 16,216 acres. Of those, 24 were classified as large fires (100 acres or more in timber or brush fuels, or 300 acres or more in grass fuels, or is of a complexity requiring a Type 1 or Type 2 Incident Management Team).





Note: at the time of report, combined federal and non-federal acres for 2019 are not available, due to issues with interagency databases. 2019 numbers will be similar to 2014 and 2015.

The number of State Responsibility fires has continually increased since the creation of the Emergency Fire Fund (EFF) in 1967. Between 1967 and 1979 there was a total of 1 fire that became a state responsibility fire, from 1980 to 1989 there were 8, from 1990 to 1999 there were 15, and from 2001 to 2009 that number exploded to 65 qualifying events. Over the last decade, even with the single qualifying fire in 2014 and no qualifying fires in 2015 or 2019, we have had 74 state responsibility fires costing an estimated \$168,000,000.00 in EFF and State suppression costs alone. It is estimated that \$95,000,000.00 of these State costs are eligible for reimbursements through FEMA Fire Management Assistance Grants. This number does not include local or federal agency suppression costs, property losses, insured losses, recovery costs, secondary impact cists (flooding, re-seeding), watershed impacts, water system infrastructure costs, or economic losses that resulted from the fires. With an estimated 2.9 million Coloradoans living in the Wildland Urban Interface, while we may experience years of low fire occurrence, the overall outlook requires robust preparedness capacities and continual improvement in capacities and collaboration.

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 will threaten water supplies for Colorado residents and non-residents.
- Wildfires have significant potential to threaten local and State economies.
- No single entity or jurisdiction alone can manage every wildfire.

- Successful suppression and extinguishment of catastrophic wildfires requires 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 mitigating the far reaching impacts of these large incidents.

Fire Season Outlook 2020

In late April and early May of every year, scientists and land managers produce coordinated outlooks for fire season across the western United States to better prioritize resources. While it is too early to forecast with accuracy what the 2020 fire season will bring, the current National Predictive Services models indicate average large fire potential this spring and into the summer.

- Winter precipitation amounts have been variable with above average snowfall occurring in October and November of 2019, well below average snowfall in December of 2019 and January of 2020, and increased amounts in February and March of 2020. Currently, the Statewide Snow Water Equivalent is 110% of average, which is less than at this same time in 2019 (140%) but more than in 2018 (70%).
- Precipitation amounts over the last 90 days have been above average for northeastern Colorado. During that time, precipitation deficits have been observed west of the Continental Divide, and southeast Colorado having the driest areas.
- In addition to weather and drought factors, overall forest health remains a concern for fire impacts and risk in the higher elevations of Colorado.
- Currently there are robust levels of light, flashy fuels in the lower elevations east of the Continental Divide. Due to compaction from snow load over the winter, these fuels will remain available until green-up has occurred.
- Overall, average temperatures and precipitation are predicted across the state for the period of April to July, with a drying trend beginning in June for southern and particularly southwestern Colorado.
- Current models predict an average onset and duration of the southwest monsoon in July.
- Average Large Fire Potential is predicted for the next four months. Southern portions of Colorado may see an earlier than average onset of fire season in May (late May is average) due to a combination of drought and drier than average forecasted conditions.
- In 2018, many factors lined up for above average fire season conditions, especially for southern portions of Colorado. Pre-season outlooks for 2019 indicated average to below average fire potential, with below average potential and activity observed following significant precipitation events in late spring and early summer. Current and expected conditions for 2020 indicate average potential into mid-summer.

It is important to note that even in an average fire season in Colorado, there will be approximately 4,472 fires burning an average of 168,401 total acres, with large State Responsibility Fires likely occurring. The 2016 and 2017 calendar years were both considered below average from a statistical standpoint, however there were a combined total of 16 State Responsibility Fires in those years, with a total cost of over \$13 million in State funds for suppression alone.

Colorado's Wildfire Management Goals

Suppression costs escalate significantly as fire size increases and as values within the WUI are threatened. A wildland fire becomes a local emergency before it evolves into a State, then regional, and then national incident. Colorado's wildfire management program will continue to prioritize the strengthening of first response firefighting forces to safely and effectively suppress wildland fires when the fires are small.

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

Enabling Objectives

Because DFPC's role is primarily to support local and county firefighting organizations in keeping fires small, 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.
- 3) Provide on-scene technical assistance and support within 90 minutes of request for support from a local agency.

Aviation assets will be strategically located based on Colorado's preparedness levels, occurrence of fire activity, weather, National Fire Danger Rating System indices, location of other aerial assets, and other relevant factors. In an effort to achieve these enabling objectives, the Division will coordinate with our federal partners to send the closest available resource to requests for aviation and other types of assistance.

Leader's Intent on Incident Priorities

When developing incident strategies, tactics, and plan implementation. The following list, in order of 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.

2020 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

Colorado's structure for combatting wildland fires is a cooperative, interagency system involving local, county, state, and federal agencies. Wildland fire protection responsibilities on non-federal lands in Colorado follow a hierarchy of local jurisdiction, to the county sheriff, and finally to the Director of DFPC for the State of Colorado. DFPC is the lead state agency for wildland fire management and suppression as identified in the Colorado State Emergency Operations Plan and in accordance with the provisions of Section 29-22.5-103(3)(a), C.R.S.

DFPC's Wildland Fire Management Section (WFMS) will continue to provide technical assistance, incident support, and fire suppression resources to counties and local fire departments. In order to achieve its goals for the 2020 Wildfire Preparedness Plan, DFPC relies on a core group of WFMS employees. Based on estimated base funding levels for FY 2019-20, the DFPC staffing assumptions for wildland firefighting personnel are based on a mixture of approximately 99.8 FTE equivalent (80 full-time and 21 part-time positions) and 40 temporary employees. This includes the Section Chief, Deputy Section Chief, Planning Branch, and Operations Branch, which houses four District Chiefs, 14 Regional Battalion Chiefs, and State aviation and ground firefighting resources.

Technical Support

Based upon stakeholder driven strategic planning efforts, in 2019 the DFPC changed its field structure to better support local Government needs. At the request of local governments, the Division reorganized from two Area Fire Management Officers (FMOs) and ten Regional Fire Management Officers, to four District Chief and 14 Battalion Chief positions strategically positioned throughout Colorado to provide the desired level of technical assistance and support to local jurisdictions. These Battalion Chiefs are the first point of contact for local jurisdictions when they need training, funding support, or subject matter expertise in any component of wildland fire management. Battalion Chiefs also direct local jurisdictions to contacts who can assist with needs provided by other DFPC programs, including assistance in local mitigation projects and prescribed fire.

Aerial Firefighting Resources

The 2020 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 to 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 State-owned fixed- wing multi-mission aircraft. This resource performs fire detection, extended attack surveillance and support, and other non-fire mission support when needed and appropriate.

- Rotor-Wing Aircraft: 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 Type 2 helicopters with twelve-person DFPC helitack crews through a 120-day exclusive-use contract. The aircraft and crews perform a variety of tasks including recon, transport of personnel and supplies, water delivery, and non-fire missions when needed and appropriate. One helicopter is equipped with night operations capabilities making Colorado the only State fire agency in the nation providing night operations capabilities. Night operations of helicopters adds a level of risk and complexity, and therefore will only be utilized when values at risk warrant the additional risk, and when the pilot has already flown the incident during the day and is familiar with the associated hazards in the area. DFPC anticipates the first helicopter to begin contract on May 15th, 2020 in Canon City and the second to begin on June 12th, 2020 in Montrose.
- 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. DFPC will start the first exclusive-use SEAT contract on April 6th, 2020. The start date for the second SEAT is tentatively set for June 1st, 2020, but will be based on early fire activity and fire aviation needs.
- Large Air Tankers and Very Large Air Tankers: DFPC continues to evaluate and pursue other opportunities for CWN resources to enhance firefighting capabilities. This includes an existing CWN agreement for the use of a Large Air Tanker (LAT) with Airstrike. In previous fire seasons, DFPC had a CWN contract for a Very Large Air Tanker with Global Supertanker, but their aircraft does not currently meet the requirements of the Interagency Air Tanker Board requirements or the CWN contract with DFPC, so we do not anticipate that resource being available in 2020.

For many aviation resources, DFPC coordinates availability and location of aviation assets with federal partners and sends the closest available resource to a fire, regardless of ownership.

DFPC Engine Program and Modules

The DFPC Engine Program provides assistance to local jurisdictions when local firefighting resources are overburdened due to number, complexity, or duration of fires. When areas of the state are under elevated fire danger, DFPC engines may be pre-positioned on severity assignments for the purpose of supplementing local resources for rapid initial attack. The state engines work with our partners to develop regional strike team / task force capabilities to enhance initial attack capacity. DFPC has engines located in Berthoud, Sterling, La Junta, Alamosa, and Montrose. These engines consist of Type 3, Type 4, and Type 6 engines and utilize a combination of staffing models to maximize efficiency and availability, including co-staffing with local agency personnel. In addition to wildfires, the Engines augment local resources for non-wildfire and all-hazard incidents when needed.

In addition to State-staffed Engines, the CDPS Logistics Branch and DFPC assist rural fire agencies through the Federal Excess Personal Property (FEPP) program, by acquiring excess military equipment through the US Forest Service, retrofitting and fabricating those vehicles into fire engines, which are then loaned to those smaller fire departments. Currently there are 93 FEPP engines assigned to local agencies, with seven newly fabricated FEPP engines scheduled for delivery in April.

In 2016, DFPC converted an Engine in Northeast Colorado into a five-person squad by adding two additional personnel. In 2019, DFPC redirected resources to build this into a ten-person Module available for initial attack and has the capability to form the overhead and supervision for a twentyperson hand crew. In 2020 DFPC has added three additional ten-person Modules, one in each quadrant of the state (Colorado Springs, Dolores, and Steamboat Springs). Additionally, DFPC redirected existing positions to convert the Black Hawk engine into a seven-person hybrid Engine/Module. These Modules can be pre-positioned or deployed wherever needed based upon current or anticipated fire activity. The Modules partner with local government personnel, to the extent those entities are available, to increase hand crew capacity in Colorado. The decision to increase staffing is based on a documented shortage of available handcrews during periods of high fire activity. When not involved in incident response, the Modules are actively involved in teaching courses to Veterans' Fire Corps and local fire agencies, implementing fuels management projects, and planning and implementing prescribed fire projects.

The 2020 plan for state Engines and Modules 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) and
- Strategically located Modules and Handcrews.

The increased number and year-round capacity of DFPC Engine and Module personnel has resulted in increased mitigation accomplishments in the first few months of 2020 alone. DFPC has burned over 1,000 piles this winter, which includes 3 projects that had been on the books for over 5 years. In comparison, DFPC burned approximately 750 piles in the previous five winters combined. In addition, DFPC is coordinating with the Colorado State Forest Service, Colorado Parks and Wildlife, and the Stand Land Board to identify and plan high priority, low acreage fuels treatment projects for DFPC resources to work on in 2020 and beyond.

State Wildland Inmate Fire Team (SWIFT) Crews

DFPC will continue to support the State Wildland Inmate Fire Team (SWIFT) crews operated by the Colorado Department of Corrections to provide training, logistical and/or overhead support that may be needed to ensure operational readiness and hazardous fuel reduction projects, as available. Per an email from the Colorado Department of Corrections on March 17, 2020, SWIFT crews are not allowed to leave their facilities and will be unavailable for fire response and mitigation projects for an indefinite period.

Heavy Equipment Pilot Program

DFPC continues to partner with the Colorado Department of Transportation (CDOT) to increase the availability of bulldozers, road graders, and other heavy equipment for wildfire suppression. CDOT provides the operators, heavy equipment and transports, while DFPC provides training, overhead for fireline supervision, and coordinates mobilization of resources. To date, 75 CDOT equipment operators have received basic training. These resources were utilized on several fires in 2018, including the Spring, Chateau, Lake Christine, and Weston Pass Fires.

Resource Availability and Mobilization

DFPC will also ensure the maintenance of the 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 technical assistance and program management to identify 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.

COVID-19

At the time this plan was prepared, impacts from the COVID-19 pandemic were escalating in Colorado and across the United States. COVID-19 exposures and activity levels are increasing just as we are beginning to move towards the core wildfire season, which usually occurs over the summer months. Additional planning efforts and contingency actions will be necessary to meet the expanding need for resources as wildfire activity increases during the year.

Wildland fire management is a collaborative, interagency effort in the Western United States. No single state or agency is capable of responding to and managing all wildland fires on their own. Utilization of available resources from local, county, state and federal agencies is a necessity and standard practice on an annual basis. Many local government firefighters that typically assist with these interagency efforts will not be available to respond outside of their home jurisdictions due to COVID-19 impacts and demands in their local communities. In addition, infections from this respiratory illness will further limit availability and capability of firefighters. Also, as previously noted, the three Colorado Department of Corrections SWIFT handcrews are unavailable for response for an indefinite period of time due to COVID-19 factors.

Given the current and pending challenges, it is imperative that we place an even higher than normal emphasis on early detection of fires and rapid, aggressive initial attack actions. Taking these proactive steps will reduce impacts to already stressed communities, and decrease the need for extended use of limited firefighting resources. In addition to reducing impacts to communities, infrastructure, and budgets, reducing the number of extended, large fires will affect the availability and health of firefighters. Large fire Incident Command Posts (ICP) and camps create an environment conducive to the transmission of infectious disease: high-density living and working conditions, reduced access to hygiene products and equipment, and a mobile workforce from various locations. Environmental and occupational hazards such as smoke, heat, fatigue and physically demanding work can compound this situation.

Following are additional actions and recommendations that are underway or that will need to be considered this year because of the impacts of COVID-19 on firefighting resources:

- An Area Command Team has been assigned to the 5-State Rocky Mountain Region (Colorado, Kansas, Nebraska, South Dakota, and Wyoming). The team's task is to develop a strategic Wildland Fire Response Plan for the Region that addresses initial attack, extended attack and large fire response, as well as coordination of dispatch and support functions;
- Identify, define, and document protocols on how to manage potential COVID-19 exposures during incidents, as well as coordination needs with State and local health officials;

- Staffing of Incident Management Teams (IMTs) may be limited by the number of personnel who are available to leave their home jurisdictions. DFPC is developing cadre lists of State and available local personnel to form multiple Type 3 IMTs for management of wildfires; and
- Identify funding needs and vendors for Emergency Contracting and Purchasing support functions such as caterers and meal providers, showers and hygiene equipment, heavy equipment for wildfire response, etc.

Contingency Planning for Potential Resource Needs for the 2020 Fire Season

Due to the COVID-19 outbreak and the likelihood for limited availability of ground resources, DFPC has developed contingency plans that can be implemented, if it becomes necessary, to enhance wildland fire suppression capability in Colorado during the coming year:

- Replenish the Wildfire Emergency Response Fund (WERF) to the regularly targeted operating level of \$500,000. The WERF balance as of March 27, 2020 is \$152,253, which may be depleted before the peak fire season begins, as it is the main source of state assistance provided to local fire departments and counties in an effort to keep fires small with aggressive initial attack. An appropriation of \$347,747 will increase the fund to \$500,000.
- Increase and expand current DFPC funding guidelines to cover resources utilized on the second and third day of local incidents, to reduce the likelihood of fires exceeding County capacity and becoming State Responsibility Fires.
- Implement a pilot program between the Colorado National Guard and DFPC military assets to detect and provide near real time informational updates for wildfires in the state, adding to our existing incident assessment and situational awareness tools. Estimated funding needed for this pilot program would be \$135,000 for additional DFPC expenses to supplement available National Guard funding.
- Increased authority to DFPC for direct access (Executive Order) to Colorado National Guard aviation resources as conditions dictate to supplement rotor wing aircraft capacity.
- Utilize one-time emergency funding to convert Call-When-Needed (CWN) aviation contracts to temporary Exclusive Use (EU) contracts, and to increase the number of aviation resources that are under the operational control of DFPC and not subject to interagency movement for needs elsewhere in the country. Existing DFPC resources and personnel will be utilized to provide as much management and oversight as possible. In order to provide aggressive initial attack and supplement the limited ground resources because of COVID-19, DFPC requests the following additional aviation resources for the 2020 fire year:
 - One Large Air Tanker (LAT) on a 120 day EU contract. Estimated funding need for this year is \$3,696,000, which includes daily availability costs and estimated flight hour costs;
 - Two additional Single Engine Air Tankers (SEAT) on 150 day EU contracts. Estimated funding need for additional SEAT contracts is \$2,023,000, which includes daily availability costs and estimated flight hour costs;
 - One additional Type 2 Helicopter on a 120 day EU contract. Estimated funding need for this additional helicopter is \$1,055,000, which includes daily availability, estimated flight hour costs, opportunity cost for additional equipment, and support personnel.
 - One Air Attack fixed-wing platform on a 180 day EU contract for aerial supervision and airspace coordination, that is often in limited supply during times of high fire activity.

Estimated funding need for one air attack platform is \$950,000, which includes daily availability and flight time.

• Twenty-person handcrews are typically a critical shortage resource across the country in most years. Develop the ability to order and pre-position handcrews in the State during periods of elevated fire conditions and high fire activity, when these resources are often in short supply nationally. Estimated funding need to have a handcrew stood up and available for 28 days is \$280,000.

These are not in priority order, and DFPC will work with stakeholders to prioritize these requests if funding is not available for all of the anticipated needs for the 2020 fire season. The total costs for these additional needs and recommendations is \$8,486,747. While this is a large amount, DFPC is anticipating that COVID-19 will have a significant impact on the availability of resources this fire season. State of Colorado suppression costs for State Responsibility Fires range between \$6 million and \$40 million annually. That does not include local and federal fire suppression costs. If we can proactively fund early detection and aggressive initial attack resources, Colorado will be better positioned to reduce impacts and damage from destructive wildland fires in 2020.

Concurrence

The following organizations and individuals were consulted in the development of the Wildfire Preparedness Plan and concur with the recommendations contained therein:

For the County Sheriffs of Colorado

Signature

CSOC Printed Name

For the Colorado State Fire Chiefs

CHIEF EMINT

RA

CSFC Printed Name

CSFC Signature

For the Director of the Office of Emergency Management

Kevin R. Klein

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OEM Printed Name

OEM Signature

For the Adjutant General

Michael A. Loh, Major General

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Date: 2020.04.03 17:01:20 -06'00'

AG Printed Name

AG Signature