

Element 1: Signature Page

PRESCRIBED FIRE PLAN

ADMINISTRATIVE UNIT NAME(S): Fort Eustis

PRESCRIBED FIRE NAME:

Prescribed Fire Unit (Ignition Unit): Fort Eustis North, South, East, West

PREPARED BY:

Name (print): Michael Gawronski Qualification/Currency: RXB2 / 2030

Signature: *Michael Gawronski* Date: 3/3/25

TECHNICAL REVIEW BY:

Name (print): Steve Holmes Qualification/Currency: RXB2 / 2030

Signature: *Steven Holmes* Date: 3/3/2025

COMPLEXITY RATING: Moderate

MINIMUM BURN BOSS QUALIFICATION: RXB2

APPROVED BY:

Name – Agency Administrator (print): Don Calder - 733d CEIE Chief

Signature – Agency Administrator: _____ Date: _____

Element 2A: Agency Administrator Ignition Authorization

Instructions: The Agency Administrator Ignition Authorization must be completed before a prescribed fire can be implemented. If ignition of the prescribed fire is not initiated prior to expiration date determined by the agency administrator, a new authorization will be required.

Prior to signature the agency administrator should discuss the following key items with the fire management officer (FMO) or burn boss. Attach any additional instructions or discussion documentation (optional) to this document.

Key Discussion Items

A. Has anything changed since the Prescribed Fire Plan was approved or revalidated? <i>Such as drought or other climate indicators of increased risk, insect activity, new subdivisions/structures, smoke requirements, Complexity Analysis Rating.</i>
B. Have compliance requirements and pre-burn considerations been completed? <i>Such as preparation work, NEPA mitigation requirements, cultural, threatened and endangered species, smoke permits, state burn permits/authorizations.</i>
C. Can all of the elements and conditions specified in Prescribed Fire Plan be met? <i>Such as weather, scheduling, smoke management conditions, suitable prescription window, correct season, staffing and organization, safety considerations, etc.</i>
D. Are processes in place to ensure all internal and external notifications and media releases will be completed?
E. Have key agency staffs been fully briefed about the implementation of this prescribed fire?
F. Are there circumstances that could affect the successful implementation of the plan? <i>Such as preparedness level restrictions, resource availability, other prescribed fire or wildfire activity</i>
G. Have you communicated your expectations to the Burn Boss and FMO regarding if and when you are to be notified that contingency actions are being taken?
H. Have you communicated your expectations to the Burn Boss and FMO regarding decisions to declare the prescribed fire a wildfire?

Implementation Recommended by:

FMO or Prescribed Fire Burn Boss Signature: _____ Date: _____

I am authorizing ignition of this prescribed fire between the dates of _____ and _____. It is my expectation that the project will be implemented within this time frame and as discussed and documented and attached to this plan. If the conditions we discussed change during this time frame, it is my expectation you will brief me on the circumstances and an updated authorization will be negotiated if necessary.

Additional Instructions or Discussion Documentation attached (Optional): Yes No

Ignition Authorized by:

Agency Administrator Signature and Title: _____ Date: _____

Element 2B: Prescribed Fire Go/No-Go Checklist

Preliminary Questions	Circle YES or NO
A. Have conditions in or adjacent to the ignition unit changed, (for example: drought conditions or fuel loadings), which were not considered in the prescription development? If NO proceed with the Go/NO-GO Checklist below, if YES go to item B.	YES NO
B. Has the prescribed fire plan been reviewed and an amendment been approved; or has it been determined that no amendment is necessary? If YES , proceed with checklist below. If NO , STOP: Implementation is not allowed. An amendment is needed.	YES NO
GO/NO-GO Checklist	Circle YES or NO
Have ALL permits and clearances been obtained?	YES NO
Have ALL the required notifications been made?	YES NO
Have ALL the pre-burn considerations and preparation work identified in the prescribed fire plan been completed or addressed and checked?	YES NO
Have ALL required current and projected fire weather forecast been obtained and are they favorable?	YES NO
Are ALL prescription parameters met?	YES NO
Are ALL smoke management specifications met?	YES NO
Are ALL planned operations personnel and equipment on-site, available and operational?	YES NO
Has the availability of contingency resources applicable to today's implementation been checked and are they available?	YES NO
Have ALL personnel been briefed on the project objectives, their assignment, safety hazards, escape routes, and safety zones?	YES NO
<p>If all the questions were answered "YES" proceed with a test fire. Document the current conditions, location and results. If any questions were answered "NO", DO NOT proceed with the test fire: Implementation is not allowed.</p>	
<p>After evaluating the test fire, in your judgment can the prescribed fire be carried out according to the prescribed fire plan and will it meet the planned objective? Circle: YES or NO</p>	

Burn Boss Signature: _____ Date: _____

Prescribed Fire Name: Fort Eustis

Ignition Unit Name: Fort Eustis North, South, East, West

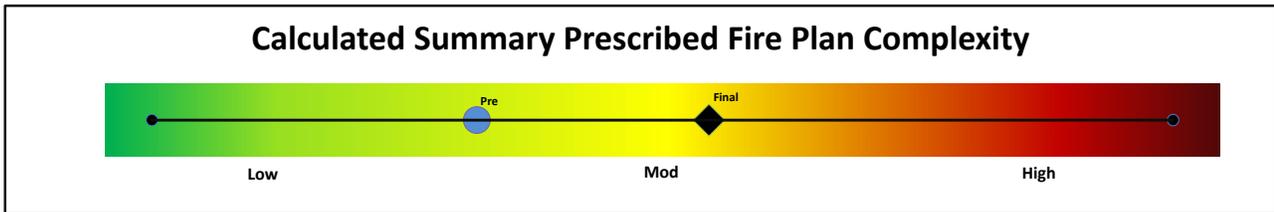
NWCG Prescribed Fire Summary and Final Complexity Worksheet, PMS 424-1

This worksheet is supplemental to the *Prescribed Fire Complexity Rating System Guide*, PMS 424. It is designed to enable effective risk management. The *Interagency Prescribed Fire Planning and Implementation Procedures Guide*, PMS 484, provides further explanation. This becomes Element 3 of the Prescribed Fire Plan.



Fort Eustis RX		Quantity	Significance
Values	On-Site	Multiple	Mod
	Off-Site	Multiple	Mod
	Public/Political Interest	Few	Mod

Element	Preliminary Risk	Post-Plan Risk	Technical Difficulty	Calculated Rating
Safety	Mod	Low	Low	Low
Fire Behavior	Low	Mod	Low	Mod
Resistance to Containment	Mod	High	Low	High
Ignition Procedures and Methods	Mod	High	Mod	High
Prescribed Fire Duration	Low	Low	Low	Low
Smoke Management	Low	Low	Low	Low
Number and Dependence of Activities	Low	Mod	Mod	Mod
Management Organization	Mod	Mod	Mod	Mod
Treatment/Resource Objectives	Mod	Mod	Mod	Mod
Constraints	Mod	High	Mod	High
Project Logistics	Mod	High	Mod	High



Final Complexity Determination	Final Complexity Determination Rationale
Low	All RX will take coordination and proper logistics being met per the plan. These will be easily done with the use of all parties involved.

Signatures	Signatures
	Rx Burn Plan Preparer's Name: _____ X _____ Date: _____ Preparer
	Technical Reviewer's Name: <u>Steven Holmes</u> X <u>Steven Holmes</u> Date: <u>3/3/2025</u> Technical Reviewer
	Agency Administrator's Name: _____ X _____ Date: _____ Agency Administrator

Element 4: Description of Prescribed Fire Area

A. Physical Description

Fort Eustis is a US Army Installation located in Newport News, Virginia. In 2010, it was combined with nearby Langley Air Force Base to Form Joint Base Langley-Eustis. Fort Eustis covers 7,868 acres of diverse natural, suburban and urban habitats. The Warwick River flows along the east and south boundary of the installation. To the south, the base is bordered by the community of Newport News VA, and a mixture of commercial and residential property. To the East is Newport News Along with Interstate 64, To the North Is Skiffes Creek and to the west is the James River. Units are divided into manageable size based on Natural features and manmade features and structures.

B. Vegetation/Fuels Description:

Fort Eustis has three fuel models: Fuel model 1 Short Grass typical of Grasslands and savannas. Fuel Model 3 which consists of Tall grass averaging 3' in height with some patches taller in height. Fuel Model 9 with the primary carrier being mixed hard woods timber liter.

C. Description of Unique Features, Natural Resources, Values:

Fort Eustis has multiple Structures on the base some having historical value. Adjacent to the base is Wildland Urban Interface (WUI). Active Military life fire ranges are all present. Prior to any ignitions all units will require smoke modeling (hysplit, V-smoke, or others) will be used to determine smoke impact. All prescribed fires need to be coordinated with Natural resources and base command to ensure they do not have an adverse effect on missions. Winds will be looked at to determine what impacts there may be, RXB2 shall use favorable winds to minimize any impact to the community.

D. Maps-Attach in Appendix A

1. Vicinity (Required)
2. Project/Ignition Unit(s) (Required)
3. Values (Optional): Included Not Included
4. Significant or Sensitive Features (Optional): Included Not Included
5. Fuels or Fuel Model(s)(Optional): Included Not Included
6. Smoke Impact Area (Optional): Included Not Included

Element 5: Objectives

A. Resource Objectives:

The prescribed burn will be used to control the spread of Invasive species and stimulate the growth of native species. Working to kill sweetgum, poplar, woody vegetation, green briar and cool season grasses. Targeting invasives species (Autumn Olive, Privet, Johnson grass and Stiltgrass). Manage forested areas to reduce non-native species and maintain a healthy ecosystem.

- Maximize plant diversity and restore it to a condition similar to what existed in the 1800s, based on best available records from area botanists.
- Maintain and restore natural ecosystems by promoting rare fire dependent species with prescribed fire.
- Improve breeding and foraging habitat of endangered species with the reduction of non-native species.

B. Prescribed Fire Objectives:

- Objective to promote early successional habitat by controlling woody and cool season vegetation species, increase songbird and pollinator diversity and reintroduce native species in the following Units:
Archery Range, Driving Range, MJH, Quick 6, TA17A, TA17C, TA19 and Wilson Patch
- Objective to control woody vegetation and invasive species in support of Felker Army Airfield Clear Zone and reduce fuel loads within the airfield Accident Potential Zone (APZ) and combat sod landing zone; promote herbaceous vegetative cover to be utilized by soldier land navigation and tactical maneuver training and reduce arthropod (tick) questing opportunities in the following units:
Com Sod, KFAF North, KFAF South and TA19
- Objective to control woody invasive species and undesirable plants in and adjacent to tactical bivouac sites, to reduce arthropod (tick) questing opportunities and reduce Japanese stiltgrass in the following Unit:
TA18 Inner Loop
- Objective to reduce fuel loads adjacent to live fire rifle ranges and reduce arthropod (tick) questing opportunities in the following unit:
R3 Fire Line

Element 6: Funding

A. Cost:

- Planning \$500 a day 5 days = \$2500.00
- Preparation \$500 a day 10 days = \$5000.00
- Implementation \$5000 a day 1 day = \$5000.00
- Mop-up / patrol \$300 a day 1 day = \$300.00
- Monitoring \$300 a day 2 days = \$600.00
- TOTAL \$13,400.00
-

B. Funding Source:

Funding Codes may vary over time, personnel will be given appropriate code provided. AFWFB wildland support module budget will be primary source of funding.

Element 7: Prescription

A. Prescription Narrative:

Use strip head firing, flanking, or backing fire to meet resource objectives. Produce slow burning/high intensity fire to scorch shrub cambium causing shrub mortality within the unit. Prescribed fire intensities may vary as fire moves through the unit, providing a mosaic effect or non-uniform patchy pattern. On-site weather conditions will be measured or calculated within 30 minutes of ignition to ensure compliance with wind speeds, directions, and to calculate fine dead fuel moisture.

B. Prescription Parameters:

- 1. Environmental or fire behavior (or both)

	Acceptable low	Acceptable high
Temperature	30 degrees F	85 degrees F
Relative humidity	20 %	75%
Mid-flame wind speed	0 mph	10
Wind Direction	ALL	ALL
Calculated 1Hr fine dead fuel moisture	3 %	10 %
Mixing Height	>1000	

Wind direction and speed restrictions are smoke receptor and adjacent fuel dependent. All wind directions are acceptable for all units. Restriction of use is dependent on likelihood of impact to smoke receptors and / or ability to maintain control lines. For example, on a unit adjacent to a highway at the northern boundary, burning with a 10 mph, south wind and fair dispersion may create negative impacts onto that receptor. However, burning with a light south wind (2 mph) and very good dispersion may allow that smoke to lift and disperse above the highway creating no impacts. It is the responsibility of the Burn Boss to evaluate these different interactions, expected fire behavior, expected weather, and smoke receptors to utilize opportunities for prescribed fire without creating negative impacts on smoke receptors or holding lines. Therefore, wind direction, wind speed, dispersion, fuel moisture, fuel loading, acceptable firing techniques, transport winds, and smoke receptors must all be considered in determining acceptable wind direction and wind speed for the given burn unit on a given day.

2. Fire Modeling or empirical documentation (or both)

Refer to behave runs in Appendix E: There are a range of prescriptive interactions that must be accounted for to maintain the project within prescription. Burning at the high end of all prescriptions could result in negative effects.

Element 8: Scheduling

A. Implementation Schedule:

1. Grass units needs to be coordinated due to bird nesting season. Timber units implementation may be growing and or dormant season.

B. Projected Duration:

Most prescribed burns will be completed within one operational period. However, residual burning/smoldering may continue within burn areas for several days. Holding, patrol, and/or monitoring resources may remain onsite during subsequent days to ensure containment. Coordination with Natural Resources, Base Command and Flightline will need 24 hours prior to planned ignitions.

C. Constraints:

Missions, Events, Public and winds may be limiting constraints.

Element 9: Pre-burn Considerations and Weather

A. Considerations:

1. On-site
 - Public and firefighter safety.
 - Prep work completed
 - All resources available.
2. Off-site
 - Activate notification checklist prior to burn.
 - Daily airfield flight schedule-permission granted?
 - Ensure all necessary signage is in place.
 - Coordinate with Fort Eustis Security Forces to ensure necessary support available to limit public access.

B. Method and Frequency for Obtaining Weather and Smoke Management Forecast(s):

1. Request spot-weather forecast from National Weather Service.
(<http://www.weather.gov/spot/?site=iln>) afternoon before anticipated burn.
2. Conduct on-site weather monitoring (temp, RH, wind speed, wind direction and Probability of Ignition) utilizing hand held weather monitoring device prior to briefing. Weather readings will be acquired hourly by crew member appointed by the Burn Boss.
3. Weather will be broadcasted via radio to all personnel on the prescribed fire.

Prescription Fire Name: Fort Eustis
 Ignition Unit: North., South, East; West

C. Notifications:

WHO	WHEN	PHONE	EMAIL	DATE	METHOD
633d ABW/SJA	Morning of	N/A	deempres.graves@us.af.mil		Email
633d ABW/PAO	Morning of	757-878-4920	633abw.pa.eustis@us.af.mil		Email
633d ABW/SE	Morning of	N/A	1fw.sechiefofsafety@us.af.mil		Email
MEDDAC	Morning of	N/A	eric.l.scott40.civ@health.mil		Email
733d CES	Morning of	757-878-7380	donald.w.calder.civ@mail.mil		Email
CEF, Eustis Fire Dept. Assit.	Morning of	757-878-4281	michael.s.holland2.civ@mail.mil		Phone
733 SFS	Morning of	757-878-4555	steven.m.galay.civ@army.mil		Phone
Range Operations	Morning of	757-878-7404	ralph.e.miller24.civ@army.mil		Phone
Airfield Safety	Morning of	757-878-5865	abdul.williams@us.af.mil		Phone
Airfield Management	Morning of	757-878-2584	teddy.harlow@us.af.mil		Phone
Virginia Dept. of Forestry	Morning of	804-966-5092	N/A		Phone
Newport News/Williamsburg International Airport	Morning of	757-234-0568	N/A		Phone
Bon Secours Mary Immaculate Hospital	Morning of	757-886-6000	N/A		Phone
City of Newport News Dispatch	Morning of	757-247-2500	N/A		Phone

Prescription Fire Name: Fort Eustis
Ignition Unit: North., South, East; West

Element 10: Briefing

A. Briefing Checklist; including, but not limited to: (additional items may be added)

- Burn organization and assignments
- Prescribed Fire objectives and prescription
- Description of prescribed fire project area
- Expected weather and fire behavior
- Communications
- Ignition plan
- Holding plan
- Contingency plan and assignments
- Wildfire declaration
- Safety and medical plan
- Aerial ignition briefing (if aerial ignition devices will be used)

Element 11: Organization and Equipment

A. Positions:

Minimum requirements for prescribed fire

Burn Boss	1
FIRB	1
Ignition crew FFT2	2
Holding FFT2	3
UTV Operator	2
ENGB	1
TOTAL	10

B. Equipment:

Minimum required equipment for prescribed fire.

Type 6 Engine or Equivalent	1
UTV w/skid unit	2
Drip torch	3
Torch mix	10 Gallons
Portable pump	1

Element 12: Communication

A. Radio Frequencies:

1. Command frequency(ies): Will be on JBMDL WSM supplied radio.
2. Tactical frequency(ies): Will be on JBMDL WSM supplied radio; as needed for Rx Fire.
3. Air operations frequency(ies): Will be on Felker Army Airfield (KFAF) Air Traffic Control Tower; as needed.

B. Telephone Numbers:

Personnel/Agency	Office	Cell
WFPC - Adam Priestley	(757) 878-1055	(757) 952-5204
733d FES - Chief Bryan Anthony	(757) 878-4281	(757) 878-1008
733d SFS - Shift Supervisor	(757) 878-4555	N/A
1 OSS Airfield Manager - Ted Harlow	(757) 878-5865	N/A
WSM Lead - Steve Holmes	(609) 562-4784	(609) 694-4029
VA Department of Forestry	(804) 966-5092	N/A

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Element 13: Public and Personnel Safety, Medical

A. Safety Hazards:

Please reference Appendix D Job Hazard Analysis (JHA) for Prescribed Burning and Prep.

B. Mitigation: Measures Taken to Reduce the Hazards:

All resources are required to review general safety mitigation measures of the JHA in Appendix D and sign annually. Prior to ignition, the Burn Boss will conduct an operational briefing to cover weather, safety, logistics, objectives, assignments, and contingency plans. All personnel involved with the project will wear the required personnel protective equipment (PPE) in accordance with NWCG policy. Prescribed fire signs may be placed along roadways and/or where trails intersect the project area. Fire vehicles along roadways will utilize emergency lights to increase their visibility.

C. Emergency Medical Procedures:

In the event of a medical emergency the Burn Boss shall be notified immediately. Clear the channel for medical emergency traffic only. Ensure the scene is safe. Have the crewmember with the highest medical training access the injury and apply first aid (medical protocols in the Incident Response Pocket Guide IRPG) page 105). Complete the 8 line Medical Incident Report (Page 118 & 119 IRPG) and determine the adequate response. The Burn Boss may suspend firing operations and establish an Incident Commander for the Incident within the Incident. Call 911 and/or FES Dispatch immediately if life threatening injury and give the 8 line information. **DO NOT USE THE PATIENTS NAME ON THE RADIO!**

D. Emergency Evacuation Methods:

Depending on the severity of the injury the patient may be moved off site and driven to a medical facility or moved to a staging area to wait for an ambulance. Determine the best evacuation method relative to the nature of the injury.

CALL 911 and/or FES DISPATCH IMMEDIATELY if the injury is life threatening. They will contact life flight and /or burn center if needed.

When transporting a patient to meet an ambulance, pick a well-known accessible place to meet and let EMS/FES Dispatch know your ETA to a communicated location. Do not change plans unless all involved parties know of the change. Make a contingency plan, locate and construct a helispot if needed.

E. Emergency Facilities:

NAME	Address and /or coordinates	Travel Time		Phone	Helipad		Burn Center	
		Air	Ground		Yes	No	Yes	No
Bon Secours Mary Immaculate Hospital	2 Bernardine Dr. Newport News VA 23602	10 Min	20 Min	757-886-6000	X			X
Sentra Norfolk General Hospital	600 Gresham Dr Norfolk, VA 23507	15 Min	30 Min	757-388-3000	X		X	

Element 14: Test Fire

A. Planned Location:

The test fire will be ignited within the burn unit to determine if fire behavior will meet management objectives. The Burn Boss will notify all resources on the prescribed fire of the results of the test fire and the decision of whether to proceed with ignition.

B. Test Fire Documentation:

1. Weather conditions on-site will be recorded by the Burn Boss and/or someone assigned to weather by the Burn Boss. This will be recorded on SF-214.
2. Test fire results will be recorded by the Burn Boss and/or someone assigned to monitor fire behavior and recorded on SF-214 and put into the project folder.

Element 15: Ignition Plan

A. Firing Methods:

1. Techniques:
Backing, flanking, dot and strip head fires will be conducted where appropriate based upon unit shape, slope, wind direction, fuel loading, and burn unit objectives. It may be preferable to blackline the edge of the burn unit one day and return to burn the interior of the unit with drier conditions to meet unit objectives.
2. Sequences:
Burn Boss may change ignition sequence according to predicted wind and on site winds.
3. Patterns:
Ignition will primarily be strip head firing, flanking fire, backing fire and may use point source ignitions. All will be dependent on the observed fire behavior and holding concerns.

B. Devices:

Various Hand ignition devices may be used.

C. Minimum Ignition Staffing:

See Element 11

Element 16: Holding Plan

A. General Procedures for Holding:

Containment lines can be various combinations of natural and/or man-made barriers to create a fire break. The Burn Boss will be responsible for determining the suitability of natural barriers (snow, fuel type or fuel moisture changes) under current weather and fuel moisture conditions. Fireline, mower lines, and/or blower line with or without hose lays may have been prepped for various units to hold fire within the unit. For units where fireline has not been constructed and natural barriers are not adequate create and utilize wet line, black line, blower line, or handline to hold fire within the unit.

Holding resources will be utilized to protect values at risk and monitor and patrol containment lines securing fire within the burn unit during and after firing operations. Holding resources will coordinate with ignition operations through the assigned FFT1, Holding Boss, FIRB, and/or Burn Boss. Foot patrol, engines, UTV's, and/or FES vehicles will be utilized to monitor and patrol containment lines. Engines or FES vehicles may be utilized to patrol roads and private land boundaries if needed. Extinguish, fall, or monitor burning snags threatening containment lines and mop-up to the standards briefed the day of ignition by the Burn Boss.

Ignition personnel will revert to holding forces when ignition is completed or as directed by the Burn Boss.

B. Critical Holding Points and Actions:

Critical holding points are values within the burn unit and containment lines which are located adjacent and/or downwind from structures, improvements, or values that could be threatened from prescribed fire activities.

Burn Boss and the Holding Boss should be familiar with these locations and ensure they have been properly prepped and staffed. Actions would include any measure to mitigate critical holding points such as wet lines, mower lines, additional resources being staged or prepositioned, or setting up drop tanks.

C. Minimum Organization or Capabilities Needed:

Minimum staffing needs are listed in Element 11.

Once the burn perimeter is secure, the burn will be monitored until it is declared out. Predicted 20' winds of greater than or equal to 20 mph (10 min average) will require staffing.

If mop-up standards have not been met, adequate resources will return the following day to continue to mop-up and patrol the burn unit.

The Burn Boss will notify Dispatch, FMO, duty officer, and agency administrator when the burn is declared out.

Element 17: Contingency Plan

Management Action Points or Limits:

An assessment of the current wildfire situation, other prescribed burning activities, and expected fire behavior will be discussed with the duty officer. Minimum contingency resources and their response times are identified in the table below.

Trigger Point (Observation)	Actions Needed	Additional Resources (Number & Type)	Resource Response Time (ETA)
Weather observations outside of prescription parameters (i.e. temperature, RH, or winds speeds)	Notify Dispatch		
	Cease ignitions when safe to do so or until weather is back in prescription		
	Monitor and/or mop-up the fire until it is safe to leave or until prescription parameters are met (i.e. RH comes back into range)		
Unexpected weather conditions that increase potential for holding problems and/or escape fire	Move contingency resources closer to the burn site		<1 hour
Fire has potential to escape the unit boundary and has exceeded or is expected to exceed the capabilities of the resources on scene	Evaluate the need for additional resources and order as appropriate		
Fire has spread outside the project boundary, and	Notify Dispatch	Resources needed will be	
	Follow Wildfire Declaration		

cannot be contained by the end of the next burn period.	(Element 18)	determined by the IC in cooperation with the FES Chief	
	Focus containment efforts on values at risk		
	Consider complexity analysis of the situation and maintain LCES & 10&18		
	Anticipate needs for next operational period		
	Provide for fire fighter and public safety		

Additional Contingency Resources and Minimum Response Times			
Contingency Resources	Phone #	Response Time	Available Equipment
(FES) Fire & emergency services	757-878-4281	<5 minutes	Crash Trucks, Engines, Tender
NewPort News Fire Department		<30 Minutes	Type 6 Engine, Tender
VA-Division of Forestry	804-966-5092	>120 Minutes	Type 6 Engine, Dozer

Element 18: Wildfire Declaration

A. Wildfire Declared By:

The Burn Boss has the authority to declare the prescribed fire a wildfire when either or both of the following criteria are met:

- Prescription parameters are exceeded and holding and contingency actions cannot secure the fire by the end of the next burning period, or,
- The fire has spread outside the project area or is likely to do so, and the associated contingency actions have failed or are likely to fail and the fire cannot be contained by the end of the next burning period.

A prescribed fire can be declared a wildfire for reasons other than those identified above, if events cannot be mitigated as determined by the Burn Boss and agency administrator.

B. IC Assignment:

If a wildfire is declared, the Burn Boss can complete an Incident Complexity Analysis (page 10 IRPG). The Burn Boss will act as IC until another ICT4 or higher is assigned. Personnel within the prescribed fire organization will transition into ICS wildfire positions they are qualified to carry out. The IC will organize all on site resources for a safe and aggressive response. The IC may order additional suppression resources identified in the contingency plan (Element 17) as well as any additional resources needed to support suppression efforts. Unified command will be established with installation Fire Department.

C. Notifications:

The Burn Boss may notify East Region AFCEC FMO/AFMO prior to converting the escaped burn to a wildfire. Dispatch will be notified of the escape and identify who is IC. Dispatch will notify Fort Eustis FES and others on the notification list in Element 9 as appropriate. The IC should attempt to notify land owners that may be affected by the escape.

D. Extended Attack Actions and Opportunities to Aid in Fire Suppression (Optional):

When the prescribed fire is declared a wildfire, managers have the full range of suppression options available as determined by the Wildland Fire Decision Support System (WFDSS). A “fire number” will be assigned and all suppression costs will be charged to it.

The following actions will be taken on all prescribed fires that escape and are declared wildfires:

- Installation Fire Department will be notified Immediately
- Prompt and reasonable action will be taken to suppress the fire.
- Document the time and environmental conditions that existed when the escape occurred.
- Document all actions prior to and after the escape and put together a file of pertinent information including chronology of events, unit logs, individual statements, weather forecasts and observations, AAR, etc.

Element 19: Smoke Management and Air Quality

A. Compliance:

All prescribed burns will be conducted to minimize the impacts of smoke on smoke sensitive areas and will be in compliance with Environmental Protection Agency.

B. Permits to be Obtained:

Prior notification to Regional Air Pollution Control Authority (RAPCA)

C. Smoke-Sensitive Receptors:

Felker Army Airfield, Base housing, Interstate 64, McDonald Army Health Center, TRADOC HQ, Child Development Centers and General Sanford Elementary School.

D. Potential Impacted Areas:

Much of the installation has potential for short term impacts depending on wind direction. No long term impacts are

expected due to high nighttime humidity recovery, transport winds and utilization of ignition patterns to minimize residual burning.

E. Mitigation Strategies and Techniques to Reduce Smoke Impacts:

- Smoke will be monitored throughout burning operations and until declared out.
- Smoke signs will be placed at critical areas where smoke issues may arise.
- Any known areas of concern will be identified prior to ignition.
- Hy-split runs will be received from National Weather Service.

Element 20: Monitoring

A. Fuels Information Required and Procedures:

- KBDI will be checked and recorded along with fine dead fuel moisture from NWS and recorded and placed in project file.

B. Weather Monitoring (Forecasted and Observed) Required and Procedures:

- Obtain General Fire Weather Forecast and Spot Weather Forecast from NWS.
- Continue to monitor on-site weather conditions every hour utilizing hand-held weather monitoring equipment.
- All weather observations will be documented and put into project file upon completion of post burn report.

C. Fire Behavior Monitoring Required and Procedures:

- Fire behavior will be monitored by all on-site resources.
- Primary responsibility will be Burn Boss or on-site resource appointed by the Burn Boss.
- Ignition patterns may be adjusted to help regulate fire behavior.

D. Monitoring Required to Ensure that Prescribed Fire Plan Objectives are Met:

- Continued monitoring of fire behavior and weather by all on-site personnel.
- Adjust ignition patterns to best meet burn objectives.

E. Smoke Dispersal Monitoring Required and Procedures:

- During ignition operations all personnel will monitor smoke dispersion.
- Patrol of downwind areas may also be completed by ground vehicles or outside resources.

Element 21: Post-burn Activities

C. Post-Burn Activities that must be Completed:

1. Conduct After Action Review and document to track trends.
2. Submit Fire Report to AFWFC within 10 days. This will be completed by the Wildland Fire Module.
3. Submit spatial data of fire boundary to AFWFC within 10 days of treatment. This is completed by the Wildland Fire Module.
4. Complete Post burn evaluations.

Prescribed Fire Plan Appendices

Appendix A: Maps: Vicinity, Project or Ignition Units (or both), Optional: Significant or Sensitive Features, Fuels or Fuel Model, Smoke Impact Areas

Appendix B: Technical Reviewer Checklist

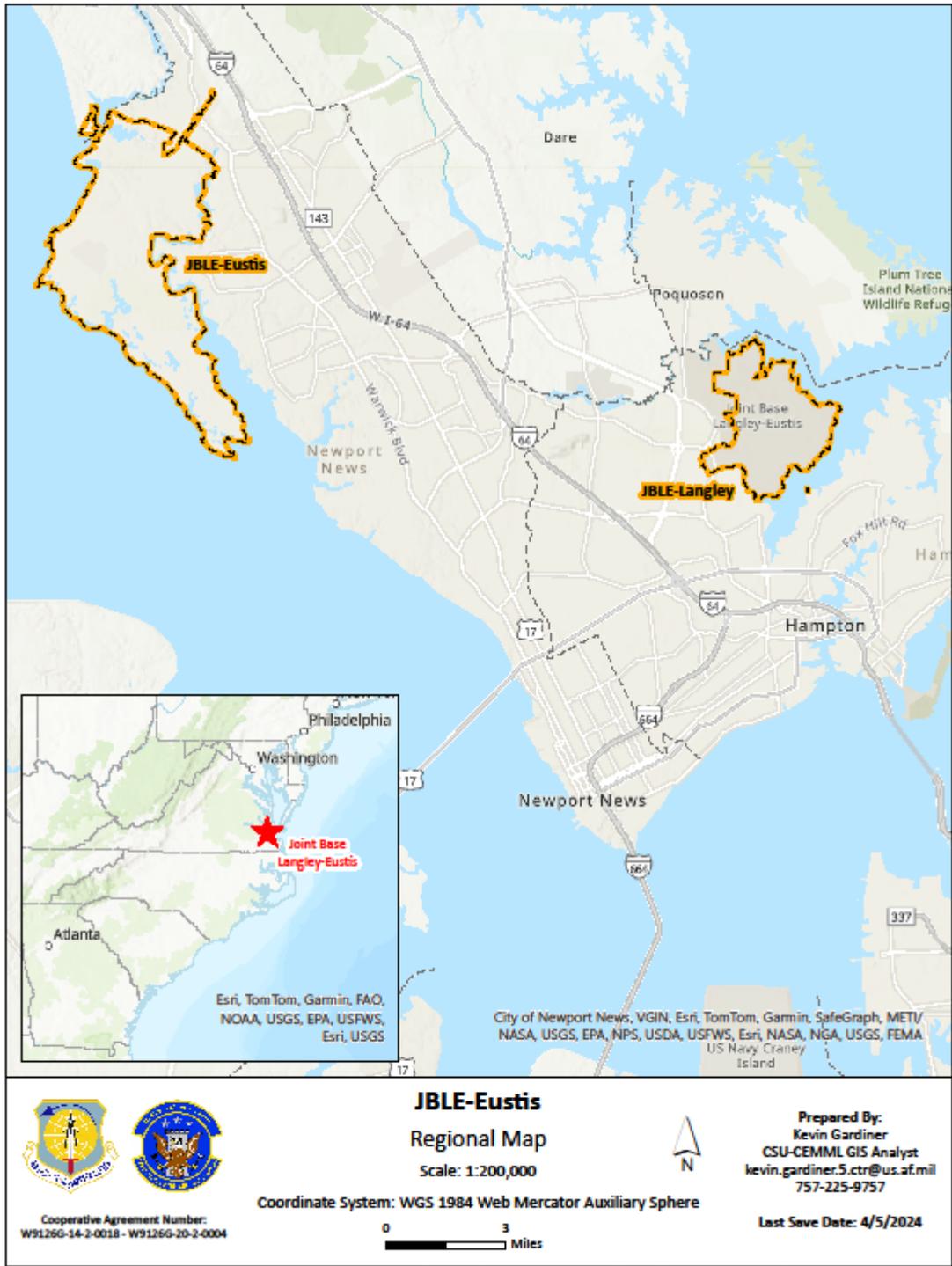
Appendix C: Complexity Analysis

Appendix D: Agency-Specific Job Hazard Analysis or Risk Assessment

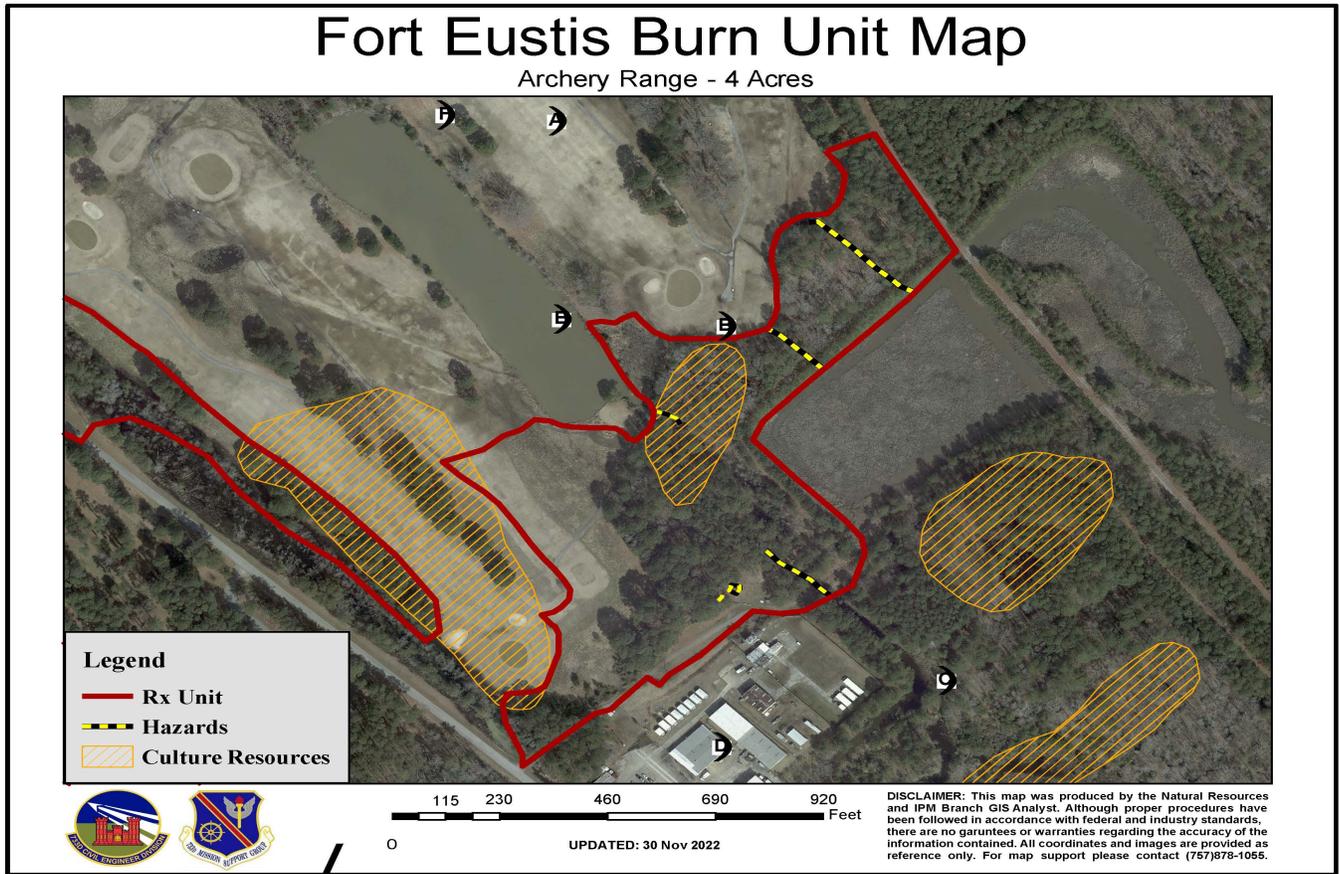
Appendix E: Fire Behavior Modeling Documentation or Empirical Documentation

Appendix F: Smoke Management Plan and Smoke Modeling Documentation (Optional)

Appendix A: Vicinity Map

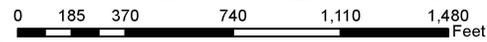
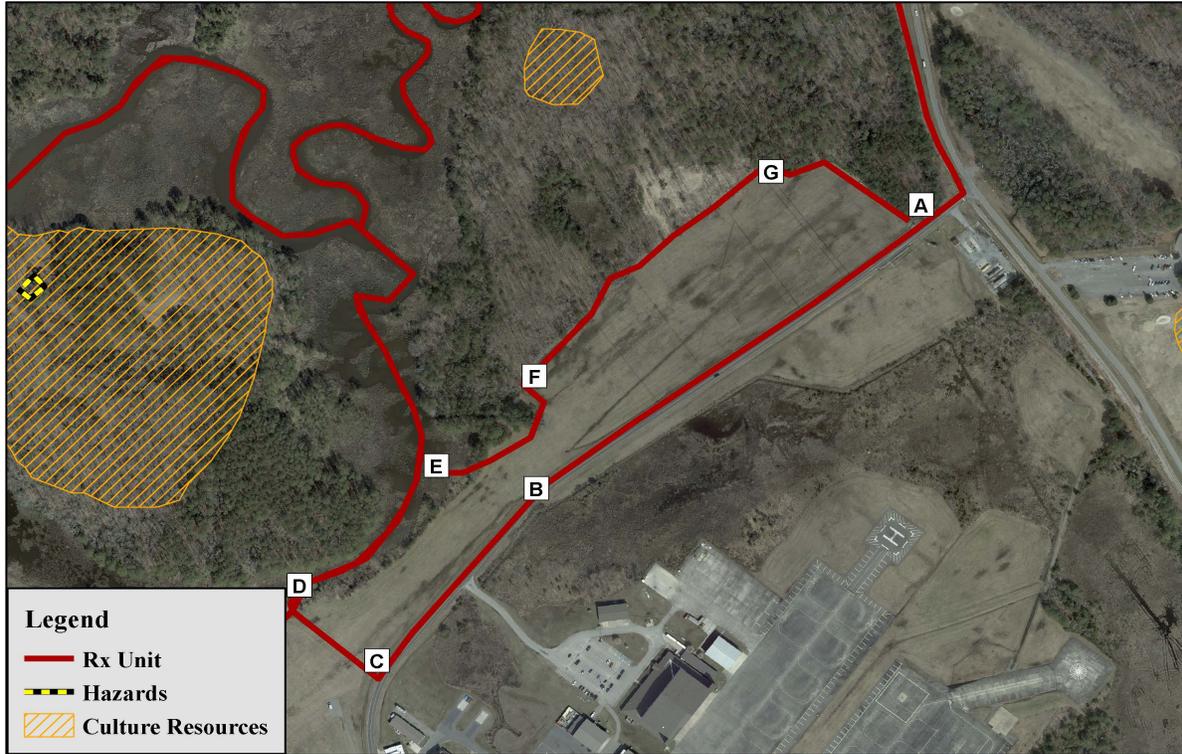


Appendix A: Project (Ignition Units) Maps



Fort Eustis Burn Unit Map

ComSod - 18 Acres



UPDATED: 30 Nov 2022

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Fort Eustis Burn Unit Map

Driving Range - 3 Acres



Legend

- Rx Unit
- Hazards
- Culture Resources

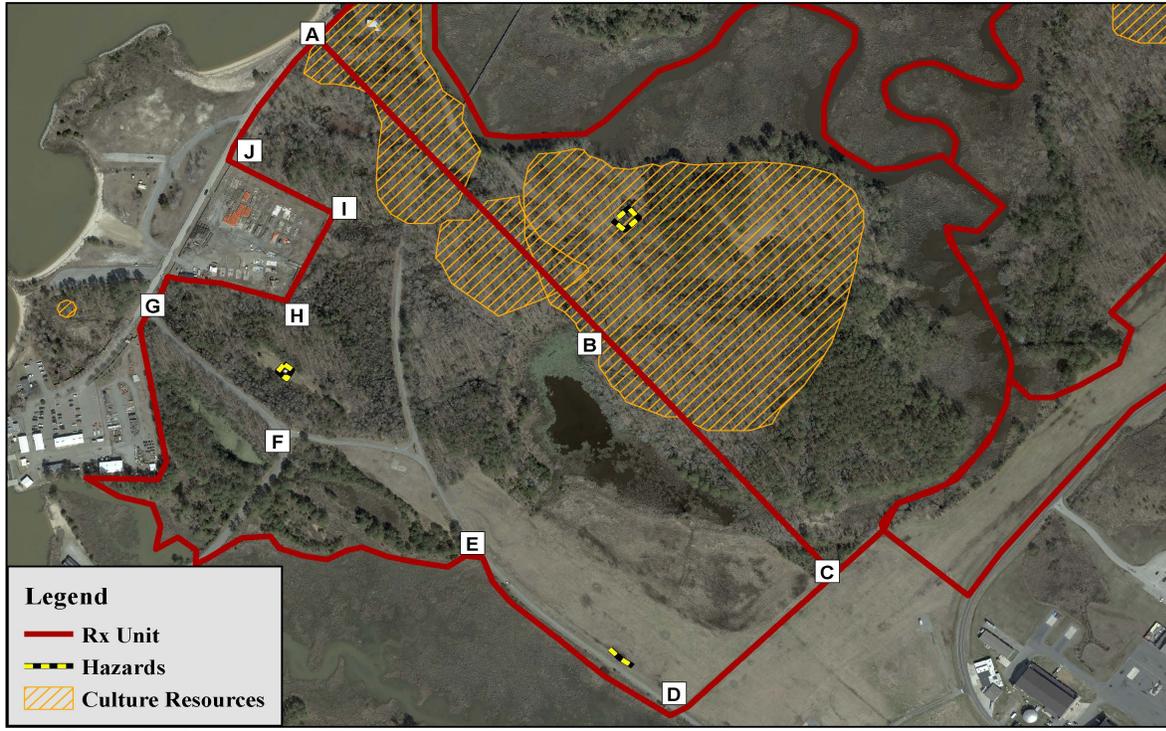


UPDATED: 30 Nov 2022

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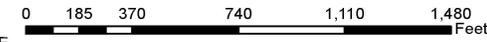
Fort Eustis Burn Unit Map

KFAF North - 65 Acres



Legend

- Rx Unit
- Hazards
- Culture Resources

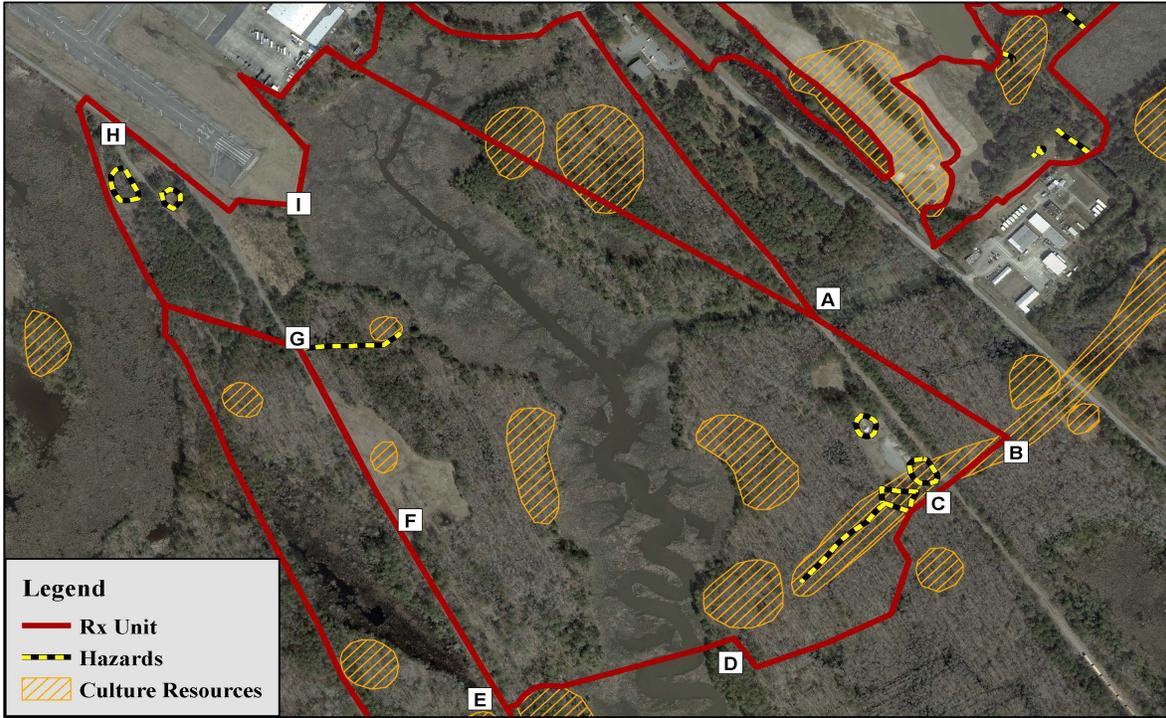


UPDATED: 30 Nov 2022

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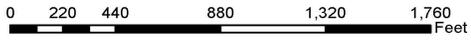
Fort Eustis Burn Unit Map

KFAF South - 140 Acres



Legend

- Rx Unit
- Hazards
- Culture Resources

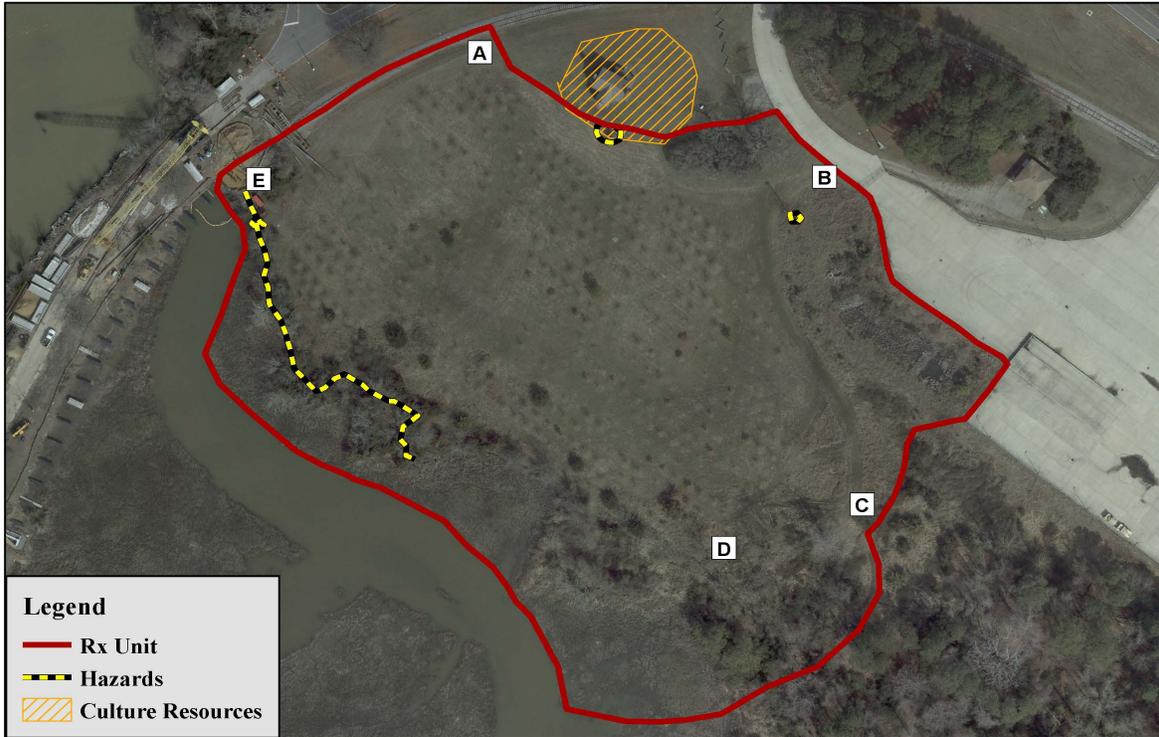


UPDATED: 30 Nov 2022

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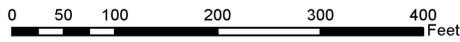
Fort Eustis Burn Unit Map

MJH - 20 Acres



Legend

- Rx Unit
- Hazards
- Culture Resources



UPDATED: 30 Sept 2021

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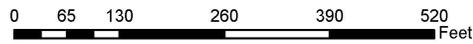
Fort Eustis Burn Unit Map

Quick 6 Restoration - 6 Acres



Legend

- Rx Unit
- Hazards
- Culture Resources

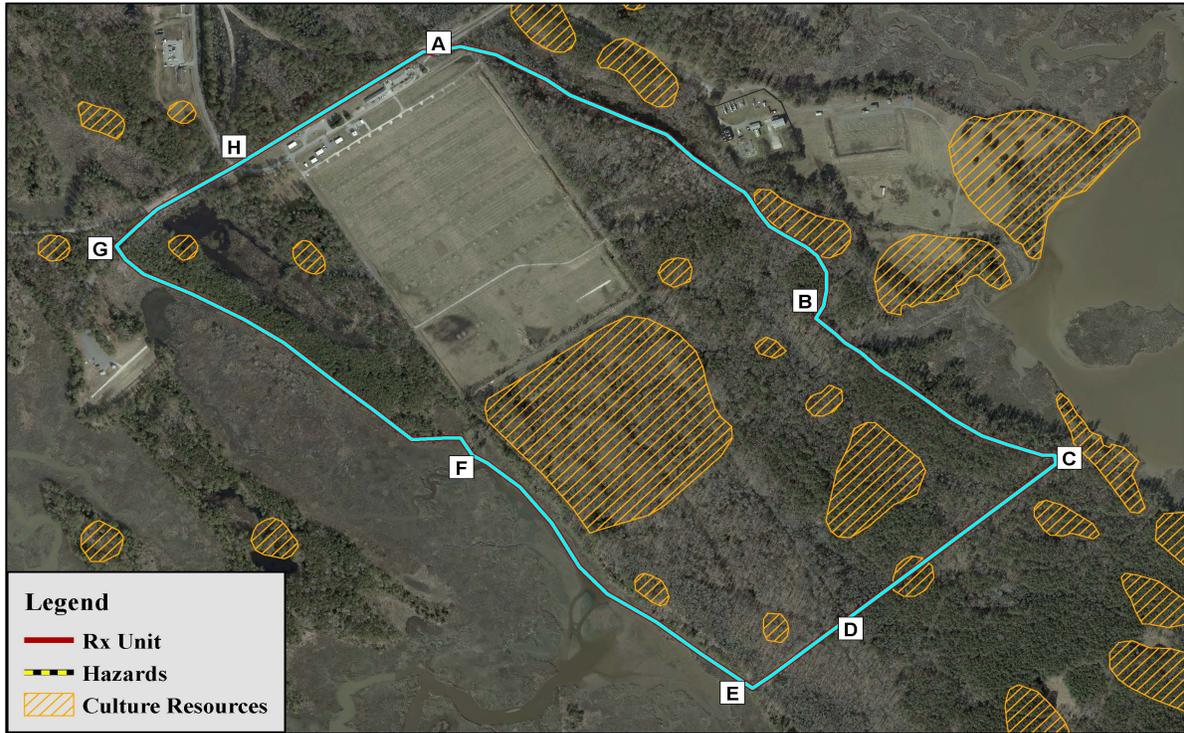


UPDATED: 30 Nov 2022

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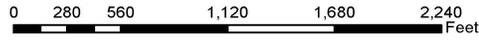
Fort Eustis Burn Unit Map

Range 3 Fire Line - 215 Acres



Legend

- Rx Unit
- Hazards
- Culture Resources



UPDATED: 30 Nov 2022

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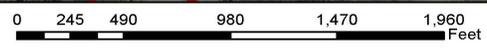
Fort Eustis Burn Unit Map

TA17A - 87 Acres



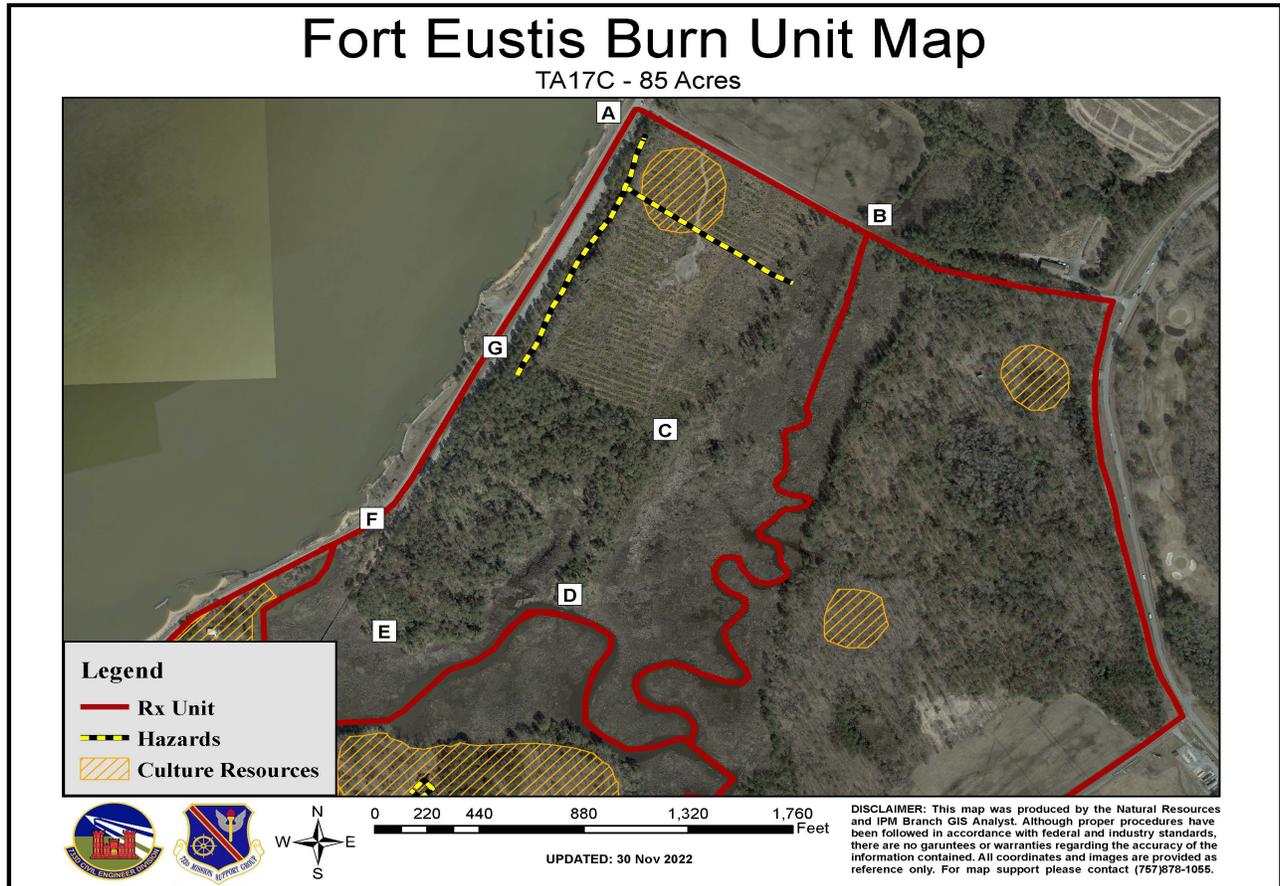
Legend

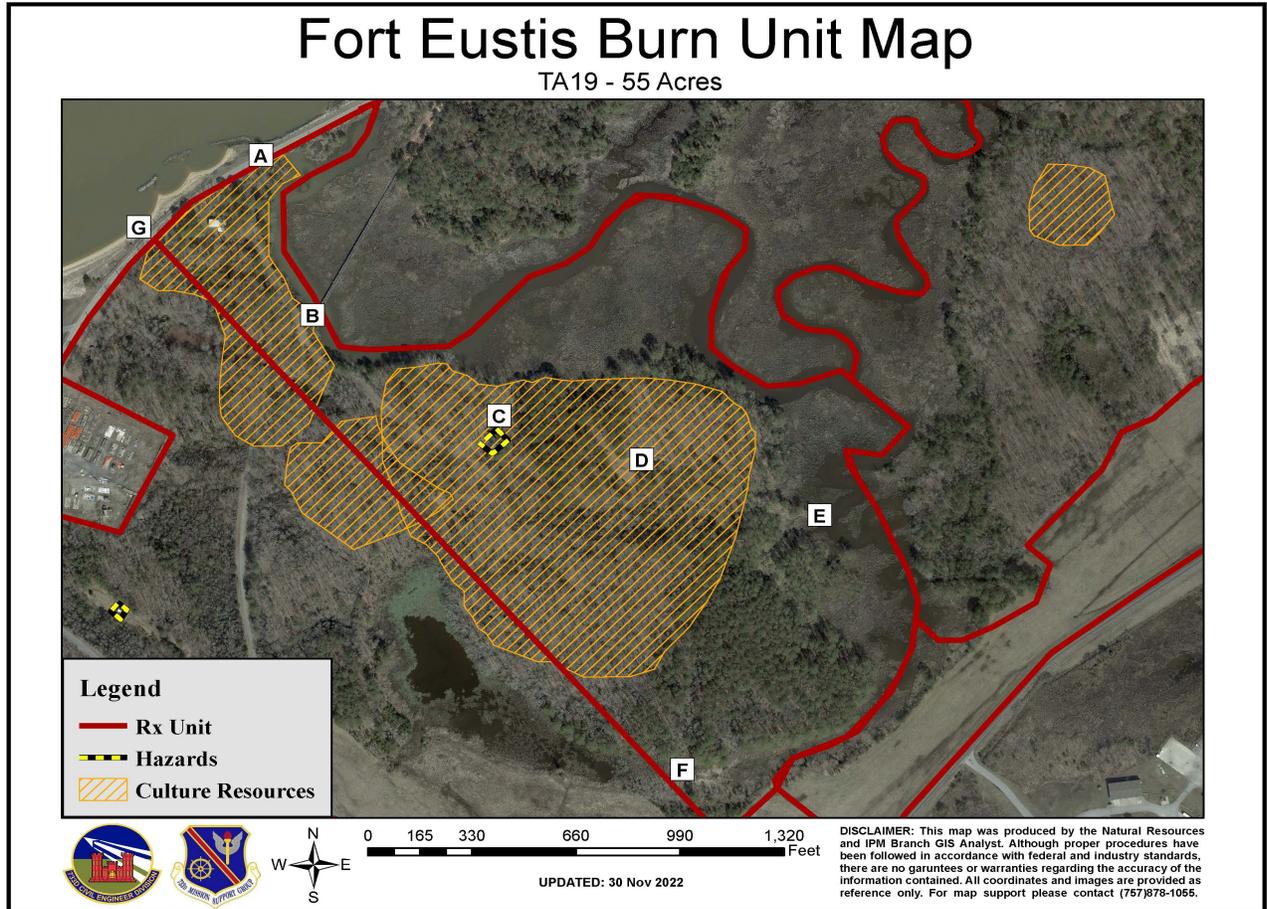
- Rx Unit
- Hazards
- Culture Resources

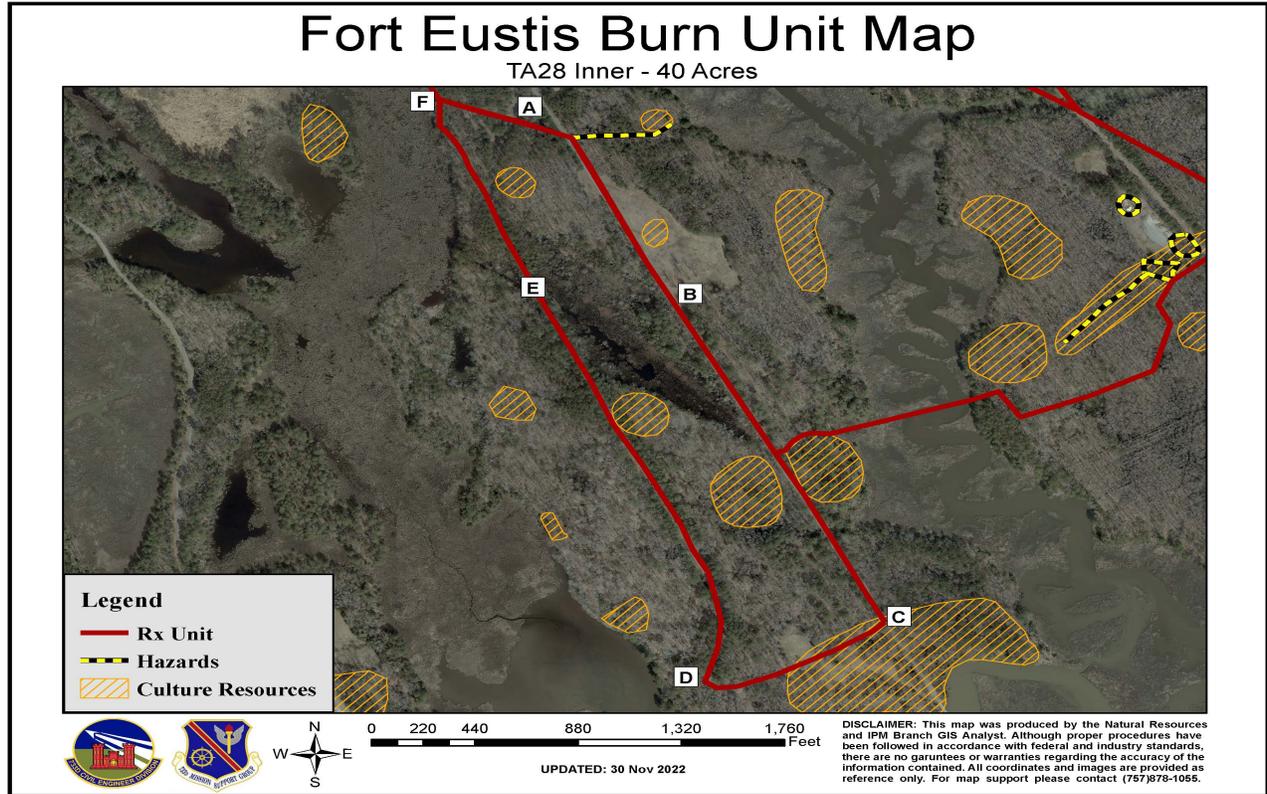


UPDATED: 30 Nov 2022

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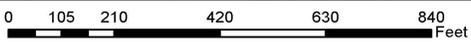
Fort Eustis Burn Unit Map

Wilson/Patch Timber Stand - 25 Acres



Legend

- Rx Unit
- Hazards
- Culture Resources



UPDATED: 30 Nov 2022

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Appendix B: Technical Reviewer Checklist

Fill out this checklist based on the guidance provided in the Technical Review section in the *Interagency Prescribed Fire Planning and Implementation Procedures Guide*, PMS 484. Rate each element in the following table with an “S” for Satisfactory or “U” for Unsatisfactory. Use Comment field as needed to support the element rating.

PREScribed FIRE PLAN ELEMENTS	RATING	COMMENTS
1. Signature Page	S	
2. A. Agency Administrator Ignition Authorization	S	
2. B. Prescribed Fire GO/NO-GO Checklist	S	
3. Complexity Analysis Summary	S	
4. Description of Prescribed Fire Area	S	
5. Objectives	S	
6. Funding	S	
7. Prescription: Prescription Narrative and Prescription Parameters	S	
8. Scheduling	S	
9. Pre-Burn Considerations and Weather	S	
10. Briefing	S	
11. Organization and Equipment	S	
12. Communication	S	
13. Public and Personnel Safety, Medical	S	
14. Test Fire	S	
15. Ignition Plan	S	
16. Holding Plan	S	
17. Contingency Plan	S	
18. Wildfire Declaration	S	
19. Smoke Management and Air Quality	S	
20. Monitoring	S	
21. Post-Burn Activities	S	
Appendix A: Maps	S	
Appendix C: Complexity Analysis	S	
Appendix D: Agency-Specific Job Hazard Analysis or Risk Assessment	S	
Appendix E: Fire Behavior Modeling Documentation or Empirical Documentation	S	
Appendix F: Smoke Management Plan and Smoke Modeling Documentation (Optional)	N/A	
Other		

Approval is recommended subject to the completion of all requirements listed in the comments section, or on the Prescribed Fire Plan.

Recommendation for approval is not granted. Prescribed Fire Plan should be re-submitted for technical review subject to the completion of all requirements listed in the comments section, or on the Prescribed Fire Plan.

Technical Reviewer Signature: Steven Holmes

Qualification and Currency: RXB2 / 2030

Date Signed: 3/3/2025

Prescribed Fire Name: Fort Eustis

Ignition Unit Name: Fort Eustis North, South, East, West

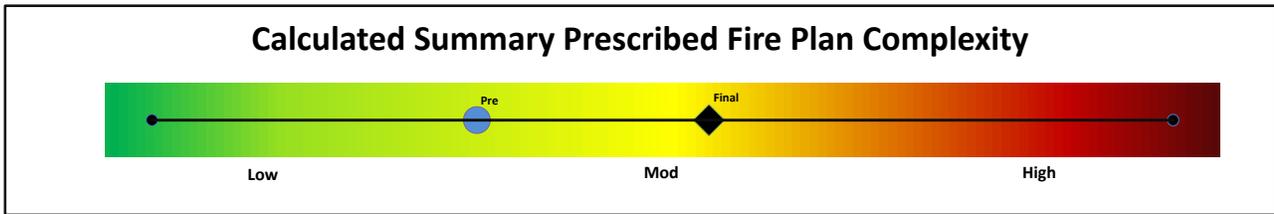
NWCG Prescribed Fire Summary and Final Complexity Worksheet, PMS 424-1



This worksheet is supplemental to the *Prescribed Fire Complexity Rating System Guide, PMS 424*. It is designed to enable effective risk management. The *Interagency Prescribed Fire Planning and Implementation Procedures Guide, PMS 484*, provides further explanation. This becomes Element 3 of the Prescribed Fire Plan.

Fort Eustis RX		Quantity	Significance
Values	On-Site	Multiple	Mod
	Off-Site	Multiple	Mod
	Public/Political Interest	Few	Mod

Element	Preliminary Risk	Post-Plan Risk	Technical Difficulty	Calculated Rating
Safety	Mod	Low	Low	Low
Fire Behavior	Low	Mod	Low	Mod
Resistance to Containment	Mod	High	Low	High
Ignition Procedures and Methods	Mod	High	Mod	High
Prescribed Fire Duration	Low	Low	Low	Low
Smoke Management	Low	Low	Low	Low
Number and Dependence of Activities	Low	Mod	Mod	Mod
Management Organization	Mod	Mod	Mod	Mod
Treatment/Resource Objectives	Mod	Mod	Mod	Mod
Constraints	Mod	High	Mod	High
Project Logistics	Mod	High	Mod	High



Final Complexity Determination	Final Complexity Determination Rationale
Low	All RX will take coordination and proper logistics being met per the plan. These will be easily done with the use of all parties involved.

Signatures	Rx Burn Plan Preparer's Name: <u>MICHAEL GAWronski</u> X _____ Date: _____ Preparer Technical Reviewer's Name: Steve Holmes X <u>Steven Holmes</u> Date: <u>3/3/2025</u> Technical Reviewer Agency Administrator's Name: _____ X _____ Date: _____ Agency Administrator
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Prescribed Fire Name: Fort Eustis
 Ignition Unit Name: Fort Eustis North, South, East, West

Prescribed Fire Duration	Low	<ul style="list-style-type: none"> Ignition operations should be accomplished within one operational period. Burn unit is small in size and residual burning is not expected after primary burn out of the unit. Decrease in seasonal severity is expected. Short time frame does not require special logistical support. Mop-up is minimal or none is anticipated/planned. 	No
Smoke Management	Mod	<ul style="list-style-type: none"> Noticeable smoke will be produced creating at least some public concern. Short-term health or safety concerns related to smoke exposure may occur if actual weather deviates from forecasted. Nearby communities are highly conscious of smoke from wildland fire. Some possibility for a NAAQS exceedance violation. The prescription or ignition portions of the plan need to consider smoke management. 	No

Management Organization	Mod	<ul style="list-style-type: none"> Two levels of supervision are needed (i.e. Burn Boss, Ignition Specialist, and/or Holding Specialist, plus lighters and holders). Special skills or supervision required for one function (RXB2 is suggested). 	No
Treatment/Resource Objectives	Low	<ul style="list-style-type: none"> Few if any issues are present that hamper meeting treatment resource objectives. Few or no adverse impacts are expected if resource objectives are not met. No critical holding points. 	No

Project Logistics	Low	<ul style="list-style-type: none"> Minimal logistical support is needed to safely meet prescribed fire objectives. No special equipment, support or communications needs are required. 	No
-------------------	-----	--	----

Element	Preliminary Risk	Post-Plan Risk	Risk Rating Descriptors	Elements and Actions in the RX Fire Plan that Address Risk Mitigation
Safety	Low	Low	<ul style="list-style-type: none"> Safety issues and hazards are easily identifiable, addressed in briefings, and managed. Minimal organization produces little exposure of personnel to hazards. Adverse impacts to public health and safety are unlikely. Activities are high frequency/low risk. Fatigue and exposure to hazards are limited. Standard safety briefings and attention to Lookouts, Communications, Escape Routes, and Safety Zones (LCES) are 	Free Text
Fire Behavior	Low	Low	<ul style="list-style-type: none"> Terrain is mostly flat or the slope and aspect are uniform, leading to a relatively unvarying fire. Winds, fuel moisture, microclimate, and other fire conditions are relatively uniform and are not conducive to active fire spread. Fire behavior is highly predictable. 	Free Text
Resistance to Containment	Mod	Mod	<ul style="list-style-type: none"> Potential for multiple wildfire mechanisms such as spot fires or slopovers that can propagate at moderate rates of spread but can be held by prompt holding actions. Some fuel concentrations or ladder fuels exist near critical holding points. Expected fire intensities in the primary fuel type create little potential to challenge standard fire lines. The probability of ignition in fuels outside of control lines is low to moderate. Some dependency on natural fuel breaks to hold the prescribed fire. Local drought and or fire indices are expected to be moderate to high. 	Free Text

Element	Preliminary Risk	Risk Rating Descriptors	Agency Administrator/Preparer Discussion Completed
Safety	Mod	<ul style="list-style-type: none"> • Safety issues are pronounced and require detailed briefings, with certain hazards requiring special caution. • A small organization with a single branch results in modest exposure of personnel to hazards. • Adverse impacts to public health and safety are possible. • At least one activity is low frequency/high risk. • Fatigue and extended exposure to hazards are anticipated. 	No
Fire Behavior	Low	<ul style="list-style-type: none"> • Terrain is mostly flat or the slope and aspect are uniform, leading to a relatively unvarying fire. • Winds, fuel moisture, microclimate, and other fire conditions are relatively uniform and are not conducive to active fire spread. • Fire behavior is highly predictable. • Fire spread beyond the immediate ignition area(s) is not likely to occur or contribute to any control problems. 	No
Resistance to Containment	Mod	<ul style="list-style-type: none"> • Potential for multiple wildfire mechanisms such as spot fires or slopovers that can propagate at moderate rates of spread but can be held by prompt holding actions. • Some fuel concentrations or ladder fuels exist near critical holding points. • Expected fire intensities in the primary fuel type create little potential to challenge standard fire lines. • The probability of ignition in fuels outside of control lines is low to moderate. • Some dependency on natural fuel breaks to hold the prescribed fire. • Local drought and or fire indices are expected to be moderate to high. 	No
Ignition Procedures and Methods	Mod	<ul style="list-style-type: none"> • Multiple firing sequences patterns and timing must be coordinated to meet project objectives and reduce the risk of an unexpected or adverse event. • Specific fire intensities or ROS are somewhat critical for meeting resource objectives but are readily attained by placing local skill sets in firing boss positions. 	No
Prescribed Fire Duration	Low	<ul style="list-style-type: none"> • Ignition operations should be accomplished within one operational period. • Burn unit is small in size and residual burning is not expected after primary burn out of the unit. • Decrease in seasonal severity is expected. • Short time frame does not require special logistical support. • Mop-up is minimal or none is anticipated/planned. 	No

Element	Preliminary Risk	Risk Rating Descriptors	Agency Administrator/Preparer Discussion Completed
Smoke Management	Low	<ul style="list-style-type: none"> • Smoke concerns are generally few or easily mitigated. • Smoke will be short-lived or inconspicuous. • Exposure to smoke by firefighters and the public will be minimal. • Few concerns exist about smoke from nearby communities. 	No
Number and Dependence of Activities	Low	<ul style="list-style-type: none"> • Activities are mostly independent from each other. • Coordination of activities is simple and straightforward. • The project does not involve another land management agency or jurisdiction. 	No
Management Organization	Mod	<ul style="list-style-type: none"> • Two levels of supervision are needed (i.e. Burn Boss, Ignition Specialist, and/or Holding Specialist, plus lighters and holders). • Special skills or supervision required for one function (RXB2 is suggested). 	No
Treatment/Resource Objectives	Mod	<ul style="list-style-type: none"> • Issues are present that hamper or may prevent meeting treatment resource objectives. • Failure to meet objectives could have short-term adverse impacts. • Associated resources could be damaged if the prescribed fire did not meet resource objectives. • Few critical holding points. 	No
Constraints	Mod	<ul style="list-style-type: none"> • Constraints exist with some constraints imposing limits on implementing the prescribed fire or achieving objectives. 	No

Element	Preliminary Risk	Risk Rating Descriptors	Agency Administrator/Preparer Discussion Completed
Project Logistics	Mod	<ul style="list-style-type: none"> Some phases of the prescribed fire may require logistical support in order to safely meet project objectives. Limited amount of special equipment or communication equipment requiring more intensive logistical support may be needed to complete the project. 	No

Element	Preliminary Risk	Post-Plan Risk	Risk Rating Descriptors	Elements and Actions in the RX Fire Plan that Address Risk Mitigation
Safety	Mod	Low	<ul style="list-style-type: none"> • Safety issues and hazards are easily identifiable, addressed in briefings, and managed. • Minimal organization produces little exposure of personnel to hazards. • Adverse impacts to public health and safety are unlikely. • Activities are high frequency/low risk. • Fatigue and exposure to hazards are limited. • Standard safety briefings and attention to Lookouts, Communications, Escape Routes, and Safety Zones (LCES) are sufficient. 	Safety issues re addressed and looking at smoke modeling will reduce impact on nearby communities
Fire Behavior	Low	Mod	<ul style="list-style-type: none"> • Fuels vary within the unit, both in loading and arrangement. • Fire behavior may present control challenges that are easily mitigated. • Medium fuel loadings with some high concentrations are present. • Variable terrain features may significantly affect fire behavior and present moderate ignition and control problems. • Local winds and burning conditions may vary enough to cause shifts in fire behavior that briefly exceed modeled fire behavior and threaten controllability. • Periodic torching can be expected either as isolated points or in limited areas. • Probability of ignition outside of the unit is low and any spotting is expected to be short-range. 	
Resistance to Containment	Mod	High	<ul style="list-style-type: none"> • There is a potential for multiple wildfire mechanisms (spot fires, slopovers, fire creeping etc.) that exceeds the capability of the holding force to detect and suppress. • Fuel concentrations near critical holding points include ladder fuels that challenge holding operations. • Expected fire intensities in the primary fuel type creates potential to challenge standard fire lines. • Probability of ignition in fuels outside the unit is moderate to high. • High dependence on natural fuel breaks to hold the prescribed fire. • Local drought and or fire indices are expected to be high to extreme. 	Free Text
Ignition Procedures and Methods	Mod	High	<ul style="list-style-type: none"> • Multiple firing devices, firing sequences, patterns, coordination and timing are critical to meet project objectives and reduce the risk of an unexpected adverse event. • Specific fire intensities or ROS are critical for meeting resource objectives. The use of experienced skill sets in supervision and lighting is mandatory for meeting objectives. 	Free Text

Element	Preliminary Risk	Post-Plan Risk	Risk Rating Descriptors	Elements and Actions in the RX Fire Plan that Address Risk Mitigation
Prescribed Fire Duration	Low	Low	<ul style="list-style-type: none"> Ignition operations should be accomplished within one operational period. Burn unit is small in size and residual burning is not expected after primary burn out of the unit. Decrease in seasonal severity is expected. Short time frame does not require special logistical support. Mop-up is minimal or none is anticipated/planned. 	Free Text
Smoke Management	Low	Low	<ul style="list-style-type: none"> Smoke concerns are generally few or easily mitigated. Smoke will be short-lived or inconspicuous. Exposure to smoke by firefighters and the public will be minimal. Few concerns exist about smoke from nearby communities. 	Use of smoke modelig will help address smoke concerns for nerby communties
Number and Dependence of Activities	Low	Mod	<ul style="list-style-type: none"> Several activities depend on achievement of previous or concurrent actions. Several activities are interactive. Communication is routine for coordination of activities and project success. The project involves another land management agency, ownership or jurisdiction but project completion is not dependent on coordinated implementation. Adjacent ownership supports the implementation of the prescribed fire. 	Free Text
Management Organization	Mod	Mod	<ul style="list-style-type: none"> Two levels of supervision are needed (i.e. Burn Boss, Ignition Specialist, and/or Holding Specialist, plus lighters and holders). Special skills or supervision required for one function (RXB2 is suggested). 	A RXB2 and a firing boss will be required to manage the RX

Element	Preliminary Risk	Post-Plan Risk	Risk Rating Descriptors	Elements and Actions in the RX Fire Plan that Address Risk Mitigation
Treatment/Resource Objectives	Mod	Mod	<ul style="list-style-type: none"> • Issues are present that hamper or may prevent meeting treatment resource objectives. • Failure to meet objectives could have short-term adverse impacts. • Associated resources could be damaged if the prescribed fire did not meet resource objectives. • Few critical holding points. 	Critical holding points will be addressed during the briefing and fired accordingly, along with these areas getting special detail in prep and for holding
Constraints	Mod	High	<ul style="list-style-type: none"> • Significant and/or competing constraints exist and impose limits on implementing the prescribed fire or achieving objectives. 	Due to missions there are constraints on implementing RX
Project Logistics	Mod	High	<ul style="list-style-type: none"> • Extensive dedicated logistical support through most phases of the prescribed fire is required to safely meet project objectives. • Large amount of equipment or a communications network is needed that require intensive logistical support. 	Special equipment is required to implement the burn

Element	Post-Plan Risk	Technical Difficulty	Rating Descriptors
Safety	Low	Low	<ul style="list-style-type: none"> No special actions are required to mitigate potential minor accidents or injuries identified in the risk assessment/Job Hazard Analysis (JHA). Safety concerns can be easily mitigated through LCES. No preparation work or special project design features are required.
Fire Behavior	Mod	Low	<ul style="list-style-type: none"> Standard fire safety precautions are adequate to ensure personnel safety. No fire behavior variations are expected and numerous barriers to fire spread exist. The number, size or likelihood of spot fires and slopovers is minimal and do not require additional suppression resources. Fire behavior is such that holding forces can easily control possible spot fires and slopovers using direct attack tactics. No on-site operational fire behavior specialists are required.
Resistance to Containment	High	Low	<ul style="list-style-type: none"> Minimal holding resources are involved in the holding operation. The burn unit and project area is easily accessible to the holding resources identified in the plan. Minimal line width required to contain expected fire spread. Minimal site prep is required.
Ignition Procedures and Methods	High	Mod	<ul style="list-style-type: none"> The need for multiple firing devices, sequences, techniques, or patterns has been identified. Firing procedures are somewhat complex in at least some portions of the project area and a single Firing Boss (FIRB) is used. Two different types of ignition devices are planned. The ignition pattern requires direct control of the lighters to achieve project objectives and manage safety concerns. Communications may require the use of a command (repeater) and at least two tactical frequencies will be used. The project area is large but can be observed from high points and terrain and/or distance does not contribute to sequence and timing problems.
Prescribed Fire Duration	Low	Low	<ul style="list-style-type: none"> Ignition and mop-up operations are usually completed in 1 to 2 operational periods. Mop-up and patrol is typical with minimal resource and equipment needs. Standard press release is sufficient for public notification.

Element	Post-Plan Risk	Technical Difficulty	Rating Descriptors
Smoke Management	Low	Low	<ul style="list-style-type: none"> • ERTs and SMTs are simple, routine and straightforward to achieve and will provide desirable smoke management outcomes. • Some limitations may be present in the plan. • Wind and dispersion parameters are not constrained. • No sensitive receptors exist. • Minimal coordination with air quality officials is required.
Number and Dependence of Activities	Mod	Mod	<ul style="list-style-type: none"> • Holding and lighting require close coordination and are dependent on each other to prevent spots or slopovers. • Continuous communication is necessary for successful project completion. • Some pre-burn considerations are required before ignition.
Management Organization	Mod	Mod	<ul style="list-style-type: none"> • At least one primary team member may need to come from outside of the local unit and may not be familiar with local factors. • The numbers of qualified personnel available on the local unit are limited. • Special skills or supervision required for one function (RXB2 suggested). • Some pre-burn preparation work may require special organizational planning and/or coordination. • Protection of resource values requires extra considerations when developing certain elements of the prescribed fire plan. • Few resources are required for mop-up and patrol.
Treatment/Resource Objectives	Mod	Mod	<ul style="list-style-type: none"> • There are several resource objectives to meet. • Measures to achieve the objectives are either 1) easy to complete but there are restrictions on the techniques or 2) moderately difficult to complete and there are few or no restrictions on techniques. • Additional monitoring of fire behavior and weather is needed to determine if prescribed fire objectives are being met. • Other opportunities to meet objectives are very limited in a given year.
Constraints	High	Mod	<ul style="list-style-type: none"> • Some constraints are not easily accommodated and increase the difficulty of completing the project or achieving objectives. • Some prescribed fire parameters are dependent upon marginal environmental conditions. • The length of time to complete the project and the size of the organization may need to be increased.
Project Logistics	High	Mod	<ul style="list-style-type: none"> • Project implementation requires a small logistical support operation. • Logistical support may be combined with other functions. • Obtaining some personnel may require additional contacts and advanced scheduling. • Additional support may be needed for out-of-area personnel.

Fort Eustis RX		Quantity	Significance	Values Description: Describe the identified off-site, on-site and political values
Values	On-Site	Multiple	Mod	On Site are Historical structures,
	Off-Site	Multiple	Mod	Historical Structures, Nearby Communities,
	Public/Political Interest	Few	Mod	Multiple communities adjacent

Prescribed Fire Name: Fort Eustis

Ignition Unit Name: Fort Eustis North, South, East, West

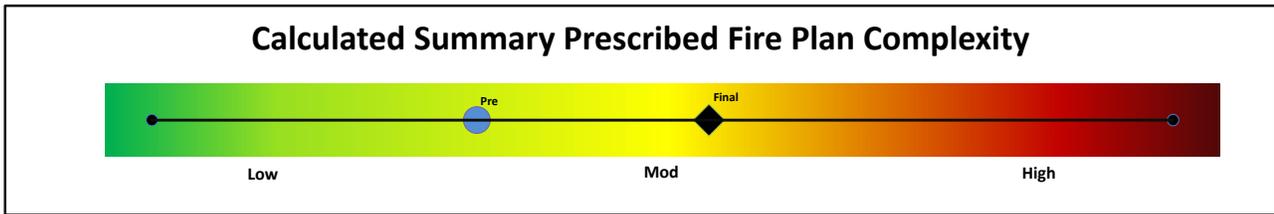
NWCG Prescribed Fire Summary and Final Complexity Worksheet, PMS 424-1



This worksheet is supplemental to the *Prescribed Fire Complexity Rating System Guide*, PMS 424. It is designed to enable effective risk management. The *Interagency Prescribed Fire Planning and Implementation Procedures Guide*, PMS 484, provides further explanation. This becomes Element 3 of the Prescribed Fire Plan.

Fort Eustis RX		Quantity	Significance
Values	On-Site	Multiple	Mod
	Off-Site	Multiple	Mod
	Public/Political Interest	Few	Mod

Element	Preliminary Risk	Post-Plan Risk	Technical Difficulty	Calculated Rating
Safety	Mod	Low	Low	Low
Fire Behavior	Low	Mod	Low	Mod
Resistance to Containment	Mod	High	Low	High
Ignition Procedures and Methods	Mod	High	Mod	High
Prescribed Fire Duration	Low	Low	Low	Low
Smoke Management	Low	Low	Low	Low
Number and Dependence of Activities	Low	Mod	Mod	Mod
Management Organization	Mod	Mod	Mod	Mod
Treatment/Resource Objectives	Mod	Mod	Mod	Mod
Constraints	Mod	High	Mod	High
Project Logistics	Mod	High	Mod	High



Final Complexity Determination	Final Complexity Determination Rationale
Low	All RX will take coordination and proper logistics being met per the plan. These will be easily done with the use of all parties involved.

Signatures	Signatures
	Rx Burn Plan Preparer's Name: _____ X _____ Date: _____ Preparer
	Technical Reviewer's Name: Steven Holmes X <i>Steven Holmes</i> Date: 3/3/2025 Technical Reviewer
	Agency Administrator's Name: _____ X _____ Date: _____ Agency Administrator

Appendix D: Agency-Specific Job Hazard Analysis or Risk Assessment

Appendix D: JOB HAZARD ANALYSIS

Project Name:

Unit Name:

Appendix D: JOB HAZARD ANALYSIS

United States Department of Interior US fish & Wildlife / US Air Force JOB HAZARD ANALYSIS (JHA)	1. WORK PROJECT/ACTIVITY Prescribed Fire	2. LOCATION Fort Eustis	3. UNIT ALL
	4. NAME OF ANALYST M. Gawronski	5. JOB TITLE Wildland Fire Module Assistant lead	6. DATE PREPARED 3/10/23
7. TASKS/PROCEDURES	8. HAZARDS	9. ABATEMENT ACTIONS Engineering Controls * Substitution * Administrative Controls * PPE	
*Travel to, from and on Project	Motor vehicle accidents Slippery road surfaces, soft shoulders, unimproved and narrow roadways. Weather darkness, smoke.	Driving Defensively. Use seat belts. Identify road conditions during briefings. Post Road Guards. Mark hazards. Use Headlights. Perform pre-use inspections on equipment. Scout roads and identify turnouts before ignition of project. Maintain communications. Use Backers and chock vehicle tires. Have vehicles facing out. Do not leave vehicles parked unattended on consumable fuel.	
*Qualifications For assigned Position	Lack of Experience Injuries	Workers recruited for burn assignments shall be qualified for regular firefighting duties and meet Prescribed Burn qualifications.	
*Briefing	Lack of communications	Provide project briefing before burning clarify firing order, organization responsibilities, communications, hazards, weather, and expected fire behavior.	
*Protective Clothing and equipment	Injuries, burns and death	Wear hard hat with chin strap, safety glasses, gloves, Nomex Fire resistant pants and shirts NFPA 1977 compliant. Keep sleeves rolled down. Wear leather, lace type, boots with skid resistant soles, and tops at least 8 inches high. Carry drinking water and fire shelter. Wear hearing protection when working around equipment where noise level exceeds 90 dba. Wear additional protective equipment as dictated by local conditions and exposure to special equipment.	
*Lighters/igniters	Injuries and death falls, smoke, burns, rolling material.	Always have an escape route. Maintain LCES. Follow the Standard Fire Orders and Watch Out Situations. Maintain communications with other Lighters and RX Firing Boss. Do not fill drip torches near ignition sources. Do not spill burn mix on clothing. Shall be trained in 1) the proper techniques for ignition and, and 2) firing equipment included to, but not limited to fusees, drip torches.	
*Fuel Mixing	Burns, spills, fuel saturated clothing and boots.	No smoking within 25 feet of mixing and filling area. Do not fill or mix in pick up beds with bed liners. Avoid the use of cellular telephones in and around fill or mixing area. Avoid fuel contact with bare hands, clothing and boots. Provide pour spouts. Use only approved fuel containers.	

Project Name:

Unit Name:

		3:1 mix ratio
*Holding/Mop Up/Patrol Crews	Smoke, burns, Falls, back injuries, rolling material, eye injuries, Heat Stress, Dehydration CO Poisoning	Wear PPE listed above. Maintain LCES, Follow Standard Fire Orders and Watch out Situations. Receive briefing from Holding and Mop Up Boss. Identify hazards in work area. Flag hazards for others. Use warning lights and provide traffic control on roadways during smoky and nights operations. Maintaining a high level of aerobic fitness is one of the best ways to protect yourself against heat stress. Drink lots of fluids before, during and after work. Periodically rotate crews from work sites with high smoke levels to areas of less smoke or smoke free areas. Protective clothing and equipment shall be the same as required for firefighting. Crews shall follow all guidelines in the NWCG Fireline Handbook Chapter 5 Firefighting Safety (Rev. 9/98).
*Chain Saw Operation	Inexperienced operators, snags/widow makers, saw cut injuries, falling hazards	Sawyers and swampers shall have completed S212 and be red carded or under the supervision of a qualified sawyer. Call out appropriate warnings during falling operations. Be aware of adjacent ongoing operations and crews, warn all on site personnel of pending falling operations and locations. Be aware of and maintain situational awareness of snags, broken limbs, and hang-ups. Use spotters. Sawyers and swampers shall wear all required PPE including chaps. Avoid contacting bar tip with objects to reduce potential for kick-back. Use proper felling techniques and procedures. Operator must have completed S211. Ensure pump is set up correctly and in a secure position. Use proper lifting and carrying techniques, ask for assistance. Watch footing around water sources, be alert for slip hazards. Allow for required warm-up and cool down times during use. Ensure pump has cooled prior to refueling. Wear hearing protection when operating pump. Advise other personnel prior to shutting down or starting up pump.
*Portable Pump Operation	Burns from pump motor, refueling hazards, drafts, injuries, back injuries	Notify burn boss of injury. Provide type of injury, location, access, number of patients. Provide first aid O2 and medical kit will be on site. Identify EMT's and available medical equipment on project during briefing. Familiarity with medical plan.
*Emergency Evacuation Procedures (EEP)	Serious illness Injuries	

Prescribed Fire Name: Fort Eustis
Ignition Unit Name: Fort Eustis North, South, East, West

Project Name:

Unit Name:

<p>10. SUPERVISOR SIGNATURE</p>	<p>Fire Management Officer _____</p>																					
<p style="text-align: center;">A Instructions</p> <p>The JHA shall identify the location of the work project or activity, the name of employee(s) writing the JHA, the date(s) of development, and the name of the appropriate line officer approving it. The supervisor acknowledges that employees have read and understand the contents, have received the required training, and are qualified to perform the work project or activity.</p> <p>Blocks 1, 2, 3, 4, 5, and 6: Self-explanatory.</p> <p>Block 7: Identify all tasks and procedures associated with the work project or activity that have potential to cause injury or illness to personnel and damage to property or material. Include emergency evacuation procedures (EEP).</p> <p>Block 8: Identify all known or suspect hazards associated with each respective task/procedure listed in block 7. For example:</p> <ul style="list-style-type: none"> a. Research past accidents/incidents b. Research the Health and Safety Code, FSH 6709.11 or other appropriate literature. c. Discuss the work project/activity with participants d. Observe the work project/activity e. A combination of the above <p>Block 9: Identify appropriate actions to reduce or eliminate the hazards identified in block 8. Abatement measures listed below are in the order of the preferred abatement method.</p> <ul style="list-style-type: none"> a. Engineering Controls (the most desirable method of abatement). For example, ergonomically designed tools, equipment, and furniture. b. Substitution. For example, switching to high flashpoint, non-toxic solvents. c. Administrative Controls. For example, limiting exposure by reducing the work schedule, establishing appropriate procedures and practices. d. PPE (least desirable method of abatement). For example, using hearing protection when working with or close to portable machines (chain saws, rock drills, portable water pumps) e. A combination of the above. <p>Block 10: The JHA must be reviewed and approved by a line officer. Attach a copy of the JHA as justification for purchase orders when procuring PPE.</p> <p>Blocks 11 and 12: Self-explanatory.</p>	<p>11. TITLE</p>	<p>12. DATE</p> <p style="text-align: center;">Emergency Evacuation Instructions</p> <p>Work supervisors and crew members are responsible for developing and discussing field emergency evacuation procedures (EEP) and alternatives in the event a person(s) becomes seriously ill or injured at the worksite.</p> <p>Be prepared to provide the following information:</p> <ul style="list-style-type: none"> a. Nature of the accident or injury (avoid using victim's name). b. Type of assistance needed, if any (ground, air, or water evacuation) c. Location of accident or injury, best access route to the worksite (road name/number, identifiable ground/air landmarks). d. Radio frequency(s) e. Contact person f. Local hazards to ground vehicles or aviation. g. Weather conditions (wind speed & direction, visibility, temp) h. Topography i. Number of person(s) to be transported j. Estimated weight of passengers for air/water evacuation. <p>The items listed above serve only as guidelines for the development of emergency evacuation procedures.</p> <p style="text-align: center;">JHA and Emergency Evacuation Procedures Acknowledgment</p> <p>e. the undersigned work leader and crewmembers, acknowledge participation in the development of a JHA (as applicable) and accompanying emergency evacuation procedures. We have thoroughly discussed and understand the provisions of each of these documents:</p> <table border="0" style="width: 100%; text-align: center;"> <tr> <td>SIGNATURE</td> <td>DATE</td> <td>SIGNATURE</td> <td>DATE</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </table>	SIGNATURE	DATE	SIGNATURE	DATE	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
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Appendix E: Fire Behavior Modeling Documentation or Empirical Documentation

BehavePlus 6.0.0 (Build 626 Beta 3)

Fort Eustis #1

Head Fire

Fri, Mar 24, 2023 at 09:44:42

Input Worksheet

Inputs: SURFACE, IGNITE

Input Variables Units Input Value(s)

Fuel/Vegetation, Surface/Understory

Fuel Model 1

Fuel Moisture

1-h Fuel Moisture % 2, 4, 6, 8, 10

10-h Fuel Moisture %

100-h Fuel Moisture %

Live Herbaceous Fuel Moisture %

Live Woody Fuel Moisture %

Weather

Midflame Wind Speed (upslope) mi/h 0, 1, 2, 3, 4, 5

Air Temperature oF 80

Fuel Shading from the Sun % 0

Terrain

Slope Steepness % 0

Notes

Run Option Notes

Maximum effective wind speed limit IS imposed [SURFACE].

Fire spread is in the HEADING direction only [SURFACE].

Wind is blowing upslope [SURFACE].

Wind and spread directions are degrees clockwise from upslope [SURFACE].

Direction of the wind vector is the direction the wind is pushing the fire [SURFACE].

Head Fire

Results for: Surface Fire Rate of Spread (ch/h)

1-h Fuel Midflame Wind Speed (upslope)

Moisture	mi/h					
%	0	1	2	3	4	5
2	6.2	11.0	26.3	52.6	90.4	139.8
4	4.8	8.4	20.1	40.2	69.1	106.9
6	4.2	7.4	17.6	35.3	60.7	93.9
8	3.6	6.4	15.2	30.5	52.4	81.1
10	2.4	4.2	10.1	20.2	34.6	53.6

Head Fire

Results for: Surface Fire Flame Length (ft)

1-h Fuel Midflame Wind Speed (upslope)

Moisture	mi/h					
%	0	1	2	3	4	5
2	1.5	1.9	2.9	3.9	5.1	6.2
4	1.2	1.6	2.3	3.2	4.1	5.0
6	1.1	1.4	2.1	2.9	3.8	4.6
8	1.0	1.3	1.9	2.6	3.4	4.1
10	0.7	0.9	1.3	1.9	2.4	2.9

Head Fire

Results for: Probability of Ignition from a Firebrand (%)

1-h Fuel Midflame Wind Speed (upslope)

Moisture	mi/h					
%	0	1	2	3	4	5
2	99	99	99	99	99	99
4	75	75	75	75	75	75
6	57	57	57	57	57	57
8	43	43	43	43	43	43
10	32	32	32	32	32	32

BehavePlus 6.0.0 (Build 626 Beta 3)
Fort Eustis #2
Head Fire
Fri, Mar 24, 2023 at 09:42:51

Input Worksheet

Inputs: SURFACE, IGNITE

Input Variables Units Input Value(s)

Fuel/Vegetation, Surface/Understory

Fuel Model 3

Fuel Moisture

1-h Fuel Moisture % 2, 4, 6, 8, 10

10-h Fuel Moisture %

100-h Fuel Moisture %

Live Herbaceous Fuel Moisture %

Live Woody Fuel Moisture %

Weather

Midflame Wind Speed (upslope) mi/h 0, 1, 2, 3, 4, 5

Air Temperature oF 80

Fuel Shading from the Sun % 0

Terrain

Slope Steepness % 0

Notes

Run Option Notes

Maximum effective wind speed limit IS imposed [SURFACE].

Fire spread is in the HEADING direction only [SURFACE].

Wind is blowing upslope [SURFACE].

Wind and spread directions are degrees clockwise from upslope [SURFACE].

Direction of the wind vector is the direction the wind is pushing the fire [SURFACE].

Head Fire

Results for: Surface Fire Rate of Spread (ch/h)

1-h Fuel Midflame Wind Speed (upslope)

Moisture	mi/h					
%	0	1	2	3	4	5
2	6.9	28.0	59.3	96.0	136.8	180.9
4	5.5	22.1	46.7	75.6	107.8	142.5
6	4.5	18.2	38.6	62.5	89.1	117.8
8	3.9	15.8	33.5	54.2	77.2	102.1
10	3.5	14.3	30.2	48.8	69.6	92.0

Head Fire

Results for: Surface Fire Flame Length (ft)

1-h Fuel Midflame Wind Speed (upslope)

Moisture	mi/h					
%	0	1	2	3	4	5
2	4.1	7.9	11.1	13.9	16.3	18.6
4	3.4	6.6	9.3	11.5	13.6	15.5
6	3.0	5.7	8.0	10.0	11.8	13.4
8	2.7	5.1	7.3	9.1	10.7	12.1
10	2.5	4.8	6.8	8.5	10.0	11.4

Head Fire

Results for: Probability of Ignition from a Firebrand (%)

1-h Fuel Midflame Wind Speed (upslope)

Moisture	mi/h					
%	0	1	2	3	4	5
2	99	99	99	99	99	99
4	75	75	75	75	75	75
6	57	57	57	57	57	57
8	43	43	43	43	43	43
10	32	32	32	32	32	32

BehavePlus 6.0.0 (Build 626 Beta 3)
Fort Eustis #9
Head Fire
Fri, Mar 24, 2023 at 09:49:24

Input Worksheet

Inputs: SURFACE, IGNITE

Input Variables Units Input Value(s)

Fuel/Vegetation, Surface/Understory

Fuel Model 9

Fuel Moisture

1-h Fuel Moisture % 2, 4, 6, 8, 10

10-h Fuel Moisture % 10

100-h Fuel Moisture % 10

Live Herbaceous Fuel Moisture %

Live Woody Fuel Moisture %

Weather

Midflame Wind Speed (upslope) mi/h 0, 1, 2, 3, 4, 5

Air Temperature oF 80

Fuel Shading from the Sun % 0

Terrain

Slope Steepness % 0

Notes

Run Option Notes

Maximum effective wind speed limit IS imposed [SURFACE].

Fire spread is in the HEADING direction only [SURFACE].

Wind is blowing upslope [SURFACE].

Wind and spread directions are degrees clockwise from upslope [SURFACE].

Direction of the wind vector is the direction the wind is pushing the fire [SURFACE].

Head Fire

Results for: Surface Fire Rate of Spread (ch/h)

1-h Fuel Midflame Wind Speed (upslope)

Moisture	mi/h					
%	0	1	2	3	4	5
2	1.3	2.0	3.8	6.3	9.5	13.4
4	1.0	1.6	3.0	5.0	7.5	10.6
6	0.8	1.3	2.5	4.1	6.2	8.7
8	0.7	1.2	2.1	3.6	5.4	7.6
10	0.7	1.0	1.9	3.2	4.9	6.8

Head Fire

Results for: Surface Fire Flame Length (ft)

1-h Fuel Midflame Wind Speed (upslope)

Moisture	mi/h					
%	0	1	2	3	4	5
2	1.4	1.7	2.3	2.9	3.5	4.1
4	1.1	1.4	1.9	2.4	2.9	3.4
6	1.0	1.2	1.6	2.1	2.5	2.9
8	0.9	1.1	1.5	1.9	2.3	2.7
10	0.8	1.0	1.4	1.8	2.1	2.5

Head Fire

Results for: Probability of Ignition from a Firebrand (%)

1-h Fuel Midflame Wind Speed (upslope)

Moisture	mi/h					
%	0	1	2	3	4	5
2	99	99	99	99	99	99
4	75	75	75	75	75	75
6	57	57	57	57	57	57
8	43	43	43	43	43	43
10	32	32	32	32	32	32

Prescribed Fire Name: Fort Eustis

Ignition Unit Name: Fort Eustis North, South, East, West