



# **SOUTH CAROLINA FORESTRY COMMISSION**

## **Fire Report Instruction Manual**

**Rev. March 2013**

**SOUTH CAROLINA FORESTRY COMMISSION**  
**Fire Report Instruction Manual**  
**March 19, 2013**

**GENERAL INSTRUCTIONS**

Requirements

A complete and accurate fire report is required for all wildfires. The IC will submit the fire report to the Dispatch Center within twenty-four (24) hours after the fire is controlled.

Method of Preparation

A Firefighter's Incident Checklist is available to assist in reporting to the Dispatch Center all the necessary information to complete a fire report. This information can be given to the Dispatch Center over the radio if overall radio traffic is low or by phone.

Correcting Errors

The records management system (RMS) used to capture fire incident report data will utilize information collected during the Call for Service and data provided by the IC. The system will also conduct a number of data validation checks before it can be marked as "complete" by the dispatcher. These validation checks look for common errors to help insure accuracy.

RMS is configured to provide several levels of reviews and approvals before a report reaches a point where changes can no longer be made (i.e. "Processed"). The Dispatch Manager and Dispatch Coordinator will conduct a "cursory" review to insure appropriate fields have been completed and appear reasonable. Supervisors are responsible to see that the data that has been entered is accurate.

If field personnel find errors or need to revise information previously reported, they are to contact the Dispatch Manager for their region. The Fire Management Duty Officer should be notified if the correction will result in an increase or decrease in the number of fires, acreage burned, or property loss values previously reported; or involves a fatality. These changes may require an Incident Status Summary Report (ICS Form 209) to be submitted to the USFS.

Filing and Length of Record

Supervisors will examine various summary reports generated from RMS for missing fires and errors.

Columbia Office - will retain in a database, on tape, or other storage media fire report information until authorized to discard by the Division of Archives.

**SOUTH CAROLINA FORESTRY COMMISSION**  
**Fire Report Instruction Manual**

**INSTRUCTIONS FOR FILLING OUT THE FIRE REPORT**

**INCIDENT NUMBER:**

The computer aided dispatch (CADS) and records management systems (RMS) will automatically generate the numbering for all fire reports. Numbers will be by fiscal year and dispatch center; starting with report number one (1) for the first fire occurring on or after July 1 and numbered consecutively thereafter. Format: 6WF0212 where 6 represents the fiscal year; W represents the dispatch center (W=Walterboro, F=Florence, N=Newberry, C=Columbia); F represents a Fire report; and 0212 represents the sequential fire number since July 1 for that dispatch center.

**FIRE NAME:**

If the fire was significant, it may be given a name. For most fires, this will be left blank.

**COMPLETED REPORT:**

Dispatcher will mark this as “YES” when the person in charge of the fire has provided all the information to complete the report. Some validation checks will be performed by the system and any discrepancies will be reported back to the dispatcher marking the report as complete.

**DISPATCHER:**

This is the dispatcher on record for taking the Call for Service (CFS). The System gets this information from the CFS that is associated with this Fire Incident Number

**INFORMATION SOURCE:**

This is how the dispatch center received the Call for Service. The System gets this information from the CFS that is associated with this Fire Incident Number.

911 = County or Fire Dispatch Center  
AS = Aircraft – SCFC  
AC = Aircraft – Contract  
AO = Aircraft – Other  
SCFC = SCFC Personnel  
Pub = Public/Other

**REPORTED DATE/TIME:**

This is when the Call for Service was initiated by dispatch. The System gets this information from the CFS that is associated with this Fire Incident Number.

LOCATION:

This is the street address, landmark or latitude/longitude from the Call for Service location field. The System gets this information from the CFS that is associated with this Fire Incident Number. If the address is preceded by a "U:" or "B:", it was unverified by the system. The latitude and longitude fields for unverified address will contain "-1".

READINESS LEVEL:

This is the readiness level for the administrative Unit the location of the fire incident falls within on the day the Call for Service was received. The System gets this information from the CFS that is associated with this Fire Incident Number.

REPORTED BY:

This is the name of the individual reporting the fire to dispatch as recorded on the CFS "Caller Name" field associated with this Fire Incident Number.

REGION:

This is the administrative Region the location of the fire incident falls within. The System gets this information based on the location on the CFS that is associated with this Fire Incident Number.

COUNTY:

This is the county the location of the fire incident falls within. The System gets this information based on the location on the CFS that is associated with this Fire Incident Number.

LATITUDE:

This is the latitude in degrees, minutes and seconds of the fire incident's location. The System gets this information based on the location on the CFS that is associated with this Fire Incident Number. If the location on the CFS was unverified, this field may contain a "-1".

LONGITUDE:

This is the longitude in degrees, minutes and seconds of the fire incident's location. The System gets this information based on the location on the CFS that is associated with this Fire Incident Number. If the location on the CFS was unverified, this field may contain a "-1".

## **1300 HOUR WEATHER AND NFDRS READINGS**

Fields in this section are automatically filled in with data collected from the automated weather stations for the day the Call for Service was received. If no data was collected for the listed weather station for that day, these fields will be blank.

### **STATION ID:**

The weather station selected is based on the location of the fire incident.

CONGA = Congaree National Park Weather Station  
FTJAK = Fort Jackson Weather Station  
LONGC = USFS Long Cane Weather Station  
MARIO = SCFC Marion Office Weather Station  
OCON = USFS Mountain Rest Weather Station  
SAND = USF&W Carolina Sandhills Refuge Weather Station  
SRSN = USFS Savannah River Site North Weather Station  
SRSS = USFS Savannah River Site South Weather Station  
WALT = SCFC Walterboro Office Weather Station  
WHIT = USFS Whitmire Weather Station  
WMBAW = USFS Wambaw Weather Station  
WTHRB = USFS Witherbee Weather Station

### **FIRE DANGER READINGS:**

Fire report will include the 1300 Hour temperature; relative humidity; wind direction (in azimuth degrees); wind speed; 1 hour fuel moisture; 10 hour fuel moisture; burning index; and KBDI (Keetch-Byrum Drought Index) for the indicated weather station in the Station ID field. If no data was collected for the listed weather station for that day, these fields will be blank.

If a spot weather forecast is obtained or weather data measured at the fire, this information will need to be added as Comments to the CSF associated with this Fire Incident Number to be captured on the Fire Incident Report.

## **ACRES BURNED**

Acreage burned must be accurate. All acreage measurements will be entered to the nearest tenth of an acre when fire is less than 1.0 acre in size. Fires 1.0 acre and larger will be recorded to the nearest acre.

### **FORESTLAND:**

Land at least 16.7 percent stocked by forest trees of any size, or formerly having such tree cover, and not currently developed for non-forest use.

NON FORESTLAND:

Land that has never supported forests and lands formerly forested where timber production is precluded by development for other uses such as crops, improved pasture, residential areas, improved roads and adjoining rights-of-way, power line clearings, etc.

FUEL MODEL:

Select one of the following 13 standard Anderson Fire Behavior fuel models that best describe the fuel loading and type that carried the fire. If the fire involved multiple types, select the one that sustained the largest acreage burned.

- 1 - Short Grasses (1 ft.)
- 2 - Short Grasses with Timber overstory (i.e. Longleaf with wiregrass)
- 3 - Tall Grasses (2.5 ft.)
- 4 - High Pocosin Shrubs over 6 ft.
- 5 - Brush/Shrubs (2 ft.)
- 6 - Low Pocosin Shrubs less than 6ft.; also hardwood slash
- 7 - Southern Rough Shrubs 2-6 ft (i.e. Palmetto/Gallberry understory with Pine overstory)
- 8 - Closed Timber Litter (i.e. Short-needed Conifers or Hardwoods)
- 9 - Timber Litter (i.e. Long-needed Conifers or Oak- Hickory)
- 10 - Heavy timber Litter (i.e. Insect or Disease-ridden stands)
- 11 - Light Slash (fuel bed depth 1 ft.)
- 12 - Medium Slash (fuel bed depth 2 ft.)
- 13 - Heavy Slash (fuel bed depth 3 ft.)

FIRE SIZE CLASS:

The system will automatically calculate the Fire Size Class based on the acreage entered under Forestland and Non-forestland.

<u>Size Class</u>	<u>Description</u>
A	less than 0.3 acres
B	0.3 to 9.9 acres
C	10 to 99.9 acres
D	100 to 299.9 acres
E	300 to 999.9 acres
F	1,000 to 4,999.9 acres
G	5,000 acres or greater

ACRES IN PLANTED PINE:

If the acreage burned included pines that were planted or artificially seeded, record the acreage involved under Acres in Planted Pine.

Note: Pine plantation acreage will be listed twice -- once under "Forestland", and again under "Acres in Planted Pine".

### PLANTATION AGE:

The estimated age of the pine plantation that burned. If more than one age burns, record the age group that sustained the largest acreage burned.

### TOTAL ACRES BURNED:

The system will automatically calculate the Total Acres Burned based on the acreage entered under Forestland and Non-forestland.

### FEDERAL REPORTED FIRE:

A report will be prepared on all fires suppressed by Forestry Commission personnel. The US Forest Service, US Fish and Wildlife Service, National Park Service and some military installations (i.e. Shaw AFB and Ft. Jackson) will report their fires directly to the US Forest Service. To prevent double counting of fires where the entire acreage burned was on one or more of these agency's lands, the "Federal Reportable Fire:" Yes box is to be checked. The acreage burned will also be recorded under Non-Reportable Federal Acres.

If the fire involved other ownerships in addition to the ones listed above, the "Federal Reported Fire" No box is to be checked. Under Non-Reportable Federal Acres, record only the total acres that burned on the Federal agencies listed above. This acreage will be subtracted out of the total when reported to the US Forest Service.

Note: This federal acreage will be listed twice -- once under "Forestland" and/or "Non Forestland:", and again under "Non-Reportable Federal Acres".

Note: Fires on Interstate Highways is not considered federal fires.

### ACRES IN CORPORATE LIMITS:

A fire report should be prepared on a forest fire inside the corporate limits of a city if the Forestry Commission took suppression action on the fire. The acreage that burned within a corporate limit will be recorded under "Acres in Corporate Limits"

Note: Corporate Limits acreage will be listed twice -- once under "Forestland" and/or "Non Forestland:", and again under "Acres in Corporate Limits".

### REFORESTATION NEEDED:

Enter Yes, if reforestation is needed on any portion of the burned area.

Enter No, if no reforestation is needed on any portion of the burned area.

When in doubt as to reforestation needs, enter Possibly.

### TREE DAMAGE:

1. Light - scorch line is less than 1/4 of total tree height. Very little of the lower vegetation consumed by fire.
2. Medium - scorch line is 1/4 to 3/4 of total tree height. A few crowns may be scorched entirely. Needles or leaves on the lower part of the crown are consumed. Much of the lower vegetation consumed.
3. Heavy - The scorch line may go to top of the trees. There is considerable needle and leaf consumption. Most or all of lower vegetation consumed.

or

4. None – no scorch line or no trees involved.

### FIRE CAUSE:

Circle fire cause. Refer to definitions of fire cause. See Definitions section of the manual for detail explanations of each listed below.

- 1 - Lightning
- 2 - Campfire
- 3 - Smoking
- 4 - Debris Burn
- 5 - Incendiary
- 6 - Equip. Use
- 7 - Railroad
- 8 - Children
- 9 - Miscellaneous
- 10- Fireworks
- 11- Powerlines
- 12- Structures

### DATE & TIME:

Dates are to be entered by month, day and year. Example: if June 20, 2006, enter 06/20/2006. Times are to be entered using twenty-four hour time (see Appendix C).

Estimated Fire Start - the best estimate as to when fire started.

Contained - the time when fireline construction is basically complete and only routine mop-up remains to be done.

Controlled - the time the fire is suppressed, all mop-up completed, and all personnel are released from the fire.

### SIZE AT INITIAL ATTACK (IA):

Record the size of the fire when initial attack action began.

## LAW ENFORCEMENT:

Record the violation of any fire laws. If none were violated, enter "None". If unsure if a fire law was violated, enter "Needs or Under Investigation". More than one violation can be recorded. Example: Could have a Notification and an Allowing Fire to Spread violation on the same fire. Refer to the **South Carolina Forest Law Handbook** for detail explanations of laws listed below.

None  
Needs or Under Investigation  
Notification/Precaution (48-35-10)  
Allowing Fire to Spread (16-11-180)  
Intentional (16-11-150)  
Willful/Malicious (16-11-170)  
State Forester Ban (48-35-50)  
Governor's Ban (48-31-20)  
Burning Crops/Personal Prop. (16-11-140)  
Attempts to Burn (16-11-190)  
Arson First Degree (16-11-110A)  
Arson Second Degree (16-11-110B)  
Arson Third Degree (16-11-110C)  
Other

## INCIDENT COMMANDER

Enter the radio call sign and name of the Incident Commander for the fire. For most fires, this will be the Initial Attack (I/A) Warden. If the Incident Commander changes, dispatch should be notified immediately.

## I/A WARDEN

Enter the radio call sign and name of the first warden attacking the fire. If no wardens (i.e. tractor/transport unit) were involved, this will be left blank.

## INCIDENT CROSS REFERENCE

Enter any CFS, Fire Incident, or Law Enforcement Incident numbers that are to be associated with this fire.

## RESOURCES USED

Enter all Forestry Commission resources used by type under the heading “SCFC”. All Non-Forestry Commission resources by type will be entered in a like manner under the heading of “Other”. See Definitions section of the manual for detail explanations of each listed below.

- 1 - Tractor Plow
- 2 - Engine
- 3 - Water Tender
- 4 - Airplane
- 5 - Helicopter
- 6 - Airtanker
- 7 - Rescue/Medical
- 8 - Other
- 9 - Crew
- 10 - Overhead Personnel

## TOTAL PERSONNEL

Record the total number of SCFC personnel on the fire; including those operating trucks, tractors aircraft, hand crews, overhead, etc. under the heading of SCFC. All Non-Forestry Commission personnel will be entered in a like manner under the heading of “Other”.

## AGENCIES NAME:

The names of individual Fire Departments, Forest Industries, etc. assisting with the fire are to be recorded in the blanks provided.

## LANDOWNER:

Enter the landowner name, address, ownership type (see list below) and acreage burned by the fire. If multiple landowners were involved, acreage should add up to the total being reported.

- P= Private (includes timber investment management organizations)
- S= State
- I = Forest Industrial (involved in the manufacturing of a forest product)
- F= US Forest Service (non reportable federal)
- W= US Fish & Wildlife Service (non reportable federal)
- C= Corps of Engineers (reportable federal)
- D= Shaw AFB, Ft. Jackson (non reportable federal)
- M= Other Military (reportable federal)
- N= National Parks, Monuments (non reportable federal)
- O=Other Public (city, county, school district, etc. reportable)

## HOMES:

Enter number of homes (i.e. structures designed for someone to live in) that were threatened, destroyed and damaged as a result of the forest fire. Try to get Fire Department estimates of

values. If this is not available, use your best judgment as to values. Do not include losses not caused by the forest fire. Example: If a house burns and a forest fire results from the house fire, the house would not be included as a loss on the fire report. A home is threatened if it would have burned if your actions were taken an hour later.

#### OTHER STRUCTURES:

Enter number of other structures that were threatened, destroyed and damaged as a result of the forest fire. Try to get Fire Department estimates of values. If this is not available, use your best judgment as to values. Do not include losses not caused by the forest fire. Example: If a barn burns and a forest fire results from the barn fire, the barn would not be included as a loss on the fire report. A structure is threatened if it would have burned if your actions were taken an hour later.

#### VEHICLES:

Enter number of vehicles that were damaged as a result of the forest fire. Try to get Fire Department estimates of values. If this is not available, use your best judgment as to values. Do not include losses not caused by the forest fire. Example: If a vehicle burns and a forest fire results from the vehicle fire, the vehicle would not be included as a loss on the fire report.

#### OTHER LOSSES:

Enter a description of other losses as a result of the forest fire not captured above. Try to get Fire Department estimates of values. If this is not available, use your best judgment as to values. Do not include losses not caused by the forest fire. Example: If a bale of hay burns and a forest fire results from the bale fire, the bale of hay would not be included as a loss on the fire report.

#### INJURIES AND FATALITIES

Record the total number of SCFC personnel injured or killed on the fire under the heading of SCFC. All Non-Forestry Commission personnel injured or killed will be entered in a like manner under the headings of "Other". Do not include injuries or deaths not caused by the forest fire. Example: If an individual dies in a house fire and a forest fire results from the house fire, the death would not be included on the fire report.

## **SPECIAL SITUATIONS**

### General

**All** of the instructions which precede this section give the basic information necessary for preparing fire reports. The variety of fire situations which can be encountered is almost limitless, and it is not practical to detail instructions for each. However, certain situations have been encountered often enough that further explanations are necessary to assure uniformity of reports. These situations are described below.

### “Burned Out” or “Rained Out” Fires

When a burn is discovered, that burned itself out or was rained out, a report should be prepared with as much detail as possible. Obviously, the “Time Record” will be estimated or modified and a Call for Service may need to be manually created after the fact by dispatch. Submit report as though the fire occurred during the month of discovery even though it may have burned earlier.

### Fires Suppressed by Person(s) Other Than Forestry Commission Employees

Handle as in the case of “Burned Out” or “Rained Out” fires. Include Time Record, if available. Explain under “Remarks or Comments”.

### “Fire Sets”

An incendiarist may set several fires in the same area. If all of the sets are suppressed as one fire, count them as one fire and make out only one fire report. Under “Remarks” show that this was one fire that was set in several places.

If the separate sets were plowed out separately, then a fire report should be completed for each fire. Under “Remarks or Comments” or in the Incident Cross Reference field, reference the fires by showing the Fire Incident numbers of the other fires that were set in this series of fires.

### Breakouts (Escapes)

Breakouts from legal fires will require a fire report if suppression action is required.

### Breakovers

Breakovers from a wildfire previously contained or controlled will have additional acreage burned added to the original Fire Incident Report. The Incident Cross Reference filed should list any additional CFS numbers associated with this report.

### Areas that Burn More Than Once a Year

If an area burns more than once in a fiscal year, and the second fire did not originate as a result of the first fire, a separate fire report will be required.

### Fires Crossing-County Lines

In the event a fire starts in one county and crosses into another county, only one fire report is necessary. Show all acreage in the county of origin. Explain under "Remarks or Comments".

### Fires-Crossing State Lines

In the event a fire starts in one State and crosses into another State, fill out a fire report as you would have if the fire had occurred solely in South Carolina. Record only acres that burned in South Carolina. Explain under "Remarks or Comments".

### Fires Suppressed by Federal Personnel Where Non-Federal Land Is Involved

If Federal personnel suppress a fire on non-Federal land, they will forward the necessary fire report information to the Forestry Commission. A fire report will be prepared on such fires by the Supervisor. These fires will be numbered in the normal manner.

## APPENDIX A

### DEFINITIONS

Airplane – A fixed wing aircraft.

Air Tanker – Fixed wing aircraft certified by the FAA as being capable of transport and delivery of fire retardant solutions.

Crew – A number of individuals that have been organized and trained and are supervised for an operational assignment on an incident.

Engine – Any ground vehicle providing pumping of water on an incident.

Overhead Personnel – Personnel assigned to supervisory positions on an incident.

Rescue/Medical – Any ground vehicle providing rescue or medical services.

Tractor Plow – Any tractor with a plow for constructing fireline by exposing mineral soil. (Includes the transport unit and personnel to operate the tractor plow.)

Water Tender – Any ground vehicle capable of transporting water but not able to spray the water on the fire.

Forest Land - Land at least 16.7 percent stocked by forest trees of any size, or formerly having such tree cover, and not currently developed for non-forest use.

Non-Forest Land - Land that has never supported forests and lands formerly forested where timber production is precluded by development for other uses such as crops, improved pasture, residential areas, improved roads and adjoining rights-of-way, power line clearings, etc.

Wildfire - A wildfire is a fire that burns uncontrolled in vegetative or associated flammable material, and either requires suppression action to protect natural resources or values associated with natural resources, or is destructive to natural resources.

### FIRE CAUSES

1. Lightning - a wildfire caused by lightning.
2. Campfire - a wildfire resulting from a fire started for cooking or for providing light or warmth. (Exclude campfires set by children or associated with railroad operations.)
3. Smoking - a wildfire resulting from smokers using matches, lighters, tobacco or other smoking material. (Exclude wildfires resulting from children smoking or smokers associated with railroad operations.)

4. Debris Burning - a wildfire spreading from land clearing operations, right-of-way clearing, range burning, field burning, the burning of slash, trash burning or any other prescribed burning (includes the burning of land for game management, fire hazard reduction, hardwood or pest control, etc.). Excluded are railroad operations and children caused fires.
5. Incendiary - a wildfire deliberately set by anyone to burn or spread to vegetation or property not owned or controlled by him without the consent of the owner or his agent. This includes grudge, job, range, pest control, hunting- related, and pyromaniac source fires.
6. Equipment Use - a wildfire caused by equipment. This includes fire resulting from a wreck/crash, exhaust or fuel sparks, friction and the use of electrical equipment (electric fences, etc.). Exclude railroad operations.
7. Railroad - a wildfire caused by railroad operations or anything or anyone associated with a railroad. This includes train brakes, carbon sparks from the engine, burning cargo, fusee fires, R/W maintenance, etc.
8. Children - those wildfires started by children under 12 years old. This includes playing with matches, smoking, building campfires, etc.
9. Miscellaneous - includes all wildfires which cannot be properly classified under other general causes. Examples are bee tree, animal den, outdoor washing, military operations, irresponsible adults and accidental fires (those that occur from something unrelated to the forest) .
10. Fireworks - includes wildfires caused by fireworks and/or pyrotechnic devices containing gunpowder and other combustible chemicals that emit sparks or cause a spectacular explosion when ignited (does not include fires intentionally set by fireworks).
11. Powerlines - wildfires that normally result from conductor failure or faulting, insulator failure, hardware failure, birds and small animals, or arcing from live powerlines to the fuel below.
12. Structures - fires spreading to the wildland due to failures and activities associated with a structure (example, a burning home sets the woods on fire).

## **APPENDIX B**

### **REGION, UNITS AND COUNTY CODES**

#### **1 COASTAL REGION**

##### 1 Edisto Unit

1. Aiken County
2. Allendale County
3. Bamberg County
4. Barnwell County
5. Beaufort County
6. Colleton County
7. Hampton County
8. Jasper County

##### 2 Santee Unit

1. Berkeley County
2. Calhoun County
3. Charleston County
4. Dorchester County
5. Orangeburg County

#### **2 PEE DEE REGION**

##### 1 Black River Unit

1. Darlington County
2. Dillon County
3. Florence County
4. Georgetown County
5. Horry County
6. Marion County
7. Williamsburg County

##### 2 Lynches River Unit

1. Chesterfield County
2. Clarendon County
3. Kershaw County
4. Lancaster County
5. Lee County
6. Marlboro County
7. Sumter County

#### **3 PIEDMONT REGION**

##### 1 Piedmont East Unit

1. Cherokee County
2. Chester County
3. Lexington County
4. Newberry County
5. Fairfield County
6. Richland County
7. Spartanburg County
8. Union County
9. York County

##### 2 Piedmont West Unit

1. Abbeville County
2. Anderson County
3. Edgefield County
4. Greenville County
5. Greenwood County
6. Laurens County
7. McCormick County
8. Oconee County
9. Pickens County
10. Saluda County

## APPENDIX C

### TWENTY-FOUR HOUR TIME

1:00 A.M.	0100
2:00 A.M.	0200
3:00 A.M.	0300
4:00 A.M.	0400
5:00 A.M.	0500
6:00 A.M.	0600
7:00 A.M.	0700
8:00 A.M.	0800
9:00 A.M.	0900
10:00 A.M.	1000
11:00 A.M.	1100
12:00 Noon	1200
1:00 P.M.	1300
2:00 P.M.	1400
3:00 P.M.	1500
4:00 P.M.	1600
5:00 P.M.	1700
6:00 P.M.	1800
7:00 P.M.	1900
8:00 P.M.	2000
9:00 P.M.	2100
10:00 P.M.	2200
11:00 P.M.	2300
12:00 Midnight	2400