Chapter 10
Preparedness

The Service Fire Management Handbook incorporates, by reference, all guidance in the Interagency Standards for Fire and Fire Aviation Operations (Redbook, NFES #2724) Chapter 10 in addition to the following Service specific clarifications:

Preparedness Plan

Refer to the Interagency Standards for Fire and Fire Aviation Operations (Redbook, NFES #2724) Chapter 10 for general Preparedness Plan definitions and information.

Preparedness Level/Step-Up Plans

Refer to the Interagency Standards for Fire and Fire Aviation Operations (Redbook, NFES #2724) Chapter 10 for general Preparedness Level/Step-up definitions and information.

The Step-Up Plan (example in Exhibits 10-1 and 10-2) will be reviewed and updated annually based on more current weather information as well as lessons learned from previous year(s). The Step-Up Plan:

- Will include an introduction explaining the purpose of Step-Up Plan, how breakpoints were derived, weather station(s) utilized, potential issues with weather data, etc.
- Will contain accurate breakpoints between preparedness (staffing) levels.
- Will be based on National Fire Danger Rating System (NFDRS) or Canadian Fire Danger Rating System (CFDRS) derived indices. NFDRS indices include Burning Index (BI), Ignition Component (IC), Energy Release Component (ERC), and Spread Component (SC). The Step-Up Plan may also include other locally used indices such as Drought monitor, Live Fuel Moisture (LFM), Keetch-Byram Drought Index (KBDI), etc.
- Will include a description of actions taken at each preparedness (staffing) levels.

Exhibit 10-1

<table>
<thead>
<tr>
<th>Danger Rating Adjective Class</th>
<th>Preparedness Level</th>
<th>Model T</th>
<th>Model G</th>
<th>Model L</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ERC Range</td>
<td>BI Range</td>
<td>ERC Range</td>
<td>BI Range</td>
</tr>
<tr>
<td>Low</td>
<td>I</td>
<td>0 - 18</td>
<td>0 - 20</td>
<td>0 - 10</td>
</tr>
<tr>
<td>Moderate</td>
<td>II</td>
<td>19 - 36</td>
<td>21 - 40</td>
<td>11 - 19</td>
</tr>
<tr>
<td>High</td>
<td>III</td>
<td>37 - 71</td>
<td>41 - 80</td>
<td>20 - 39</td>
</tr>
<tr>
<td>Very High</td>
<td>IV</td>
<td>72 - 90</td>
<td>81 - 98</td>
<td>40 - 50</td>
</tr>
<tr>
<td>Extreme</td>
<td>V</td>
<td>&gt; 90</td>
<td>&gt; 98</td>
<td>&gt; 50</td>
</tr>
</tbody>
</table>

Release Date: January 2019
### Exhibit 10-2

<table>
<thead>
<tr>
<th>STAFFING &amp; ADJECTIVE CLASS; &amp; DETERMINATION GUIDE</th>
<th>DESCRIPTION</th>
<th>ACTIONS TO BE TAKEN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staffing Class I</strong></td>
<td>Numbers below for BI, ERC, and KBDI represent 90th percentile value divided by 4.</td>
<td>• Normal tours of duty;</td>
</tr>
<tr>
<td>Adjective Class Low</td>
<td><strong>Fuel Model G:</strong></td>
<td>• Fire danger rating signs activated at start of the fire season;</td>
</tr>
<tr>
<td>Determination Guide:</td>
<td>• BI: Range 0 – 20</td>
<td>• Carry PPE while on duty;</td>
</tr>
<tr>
<td>Four of the five criteria within description column fall within identified ranges for this severity level.</td>
<td>• ERC: Range 0 – 18</td>
<td>• Notify Pueblo Dispatch Center (PBC) of staffing class at intervals requested by PBC;</td>
</tr>
<tr>
<td></td>
<td>• 1000 hr fuels: Greater than 20%</td>
<td>• Minimum ICT5 + FFT2 respond to reported fire;</td>
</tr>
<tr>
<td></td>
<td>• LFM: Greater than 250%</td>
<td>• In early season, complete pre-season risk analysis;</td>
</tr>
<tr>
<td><strong>For Fuel Model L:</strong></td>
<td><strong>KBDI:</strong> 1 – 98</td>
<td></td>
</tr>
<tr>
<td>BI: Range 0 – 9</td>
<td><strong>Yearly Precipitation:</strong> Normal or Above</td>
<td></td>
</tr>
<tr>
<td>ERC: Range 0 – 10</td>
<td><strong>Drought Monitor:</strong> None</td>
<td></td>
</tr>
<tr>
<td><strong>For Fuel Model G:</strong></td>
<td><strong>KBDI:</strong> 99 – 196</td>
<td>All Level I Activities plus:</td>
</tr>
<tr>
<td>BI: Range 21 – 40</td>
<td><strong>Yearly Precipitation:</strong> 1 – 10% Below Normal</td>
<td>• All initial attack equipment ready in cache at all times;</td>
</tr>
<tr>
<td>ERC: Range 19 – 36</td>
<td><strong>Drought Monitor:</strong> D0 – D1 (Abnormally Dry to Moderate Drought)</td>
<td>• Engines, Pumps and Saws checked weekly;</td>
</tr>
<tr>
<td><strong>1000 hr fuels:</strong> Greater than 20%</td>
<td><strong>For Fuel Model L:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>LFM:</strong> 225 - 250%</td>
<td>BI: Range 10 – 17</td>
<td></td>
</tr>
<tr>
<td><strong>For Fuel Model L:</strong></td>
<td>ERC: Range 11 – 19</td>
<td></td>
</tr>
<tr>
<td><strong>KBDI:</strong> 99 – 196</td>
<td><strong>Yearly Precipitation:</strong> 1 – 10% Below Normal</td>
<td></td>
</tr>
<tr>
<td><strong>Drought Monitor:</strong> D0 – D1 (Abnormally Dry to Moderate Drought)</td>
<td><strong>KBDI:</strong> 99 – 196</td>
<td></td>
</tr>
</tbody>
</table>

### Staffing Class II

<table>
<thead>
<tr>
<th>STAFFING &amp; ADJECTIVE CLASS; &amp; DETERMINATION GUIDE</th>
<th>DESCRIPTION</th>
<th>ACTIONS TO BE TAKEN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adjective Class Moderate or Normal</strong></td>
<td>Numbers below for BI, ERC, and KBDI represent 90th percentile value divided by 2.</td>
<td>All Level I Activities plus:</td>
</tr>
<tr>
<td><strong>Determination Guide:</strong></td>
<td><strong>For Fuel Model G:</strong></td>
<td>• All initial attack equipment ready in cache at all times;</td>
</tr>
<tr>
<td>Four of the five criteria within description column fall within identified ranges for this severity level.</td>
<td>• BI: Range 21 – 40</td>
<td>• Engines, Pumps and Saws checked weekly;</td>
</tr>
<tr>
<td></td>
<td>• ERC: Range 19 – 36</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1000 hr fuels: 16 – 20%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• LFM: 225 - 250%</td>
<td></td>
</tr>
<tr>
<td><strong>For Fuel Model L:</strong></td>
<td><strong>KBDI:</strong> 99 – 196</td>
<td></td>
</tr>
<tr>
<td>BI: Range 10 – 17</td>
<td><strong>Yearly Precipitation:</strong> 1 – 10% Below Normal</td>
<td></td>
</tr>
<tr>
<td>ERC: Range 11 – 19</td>
<td><strong>Drought Monitor:</strong> D0 – D1 (Abnormally Dry to Moderate Drought)</td>
<td></td>
</tr>
<tr>
<td>STAFFING &amp; ADJECTIVE CLASS; &amp; DETERMINATION GUIDE</td>
<td>DESCRIPTION</td>
<td>ACTIONS TO BE TAKE’N</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-------------</td>
<td>---------------------</td>
</tr>
</tbody>
</table>
| **Staffing Class III**                          | **For Fuel Model G:**  
  - BI: Range 41 – 80  
  - ERC: Range 37 – 71  
  - 1000 hr fuels: 13 – 16%  
  - LFM: 150 - 224%  
  **For Fuel Model L:**  
  - BI: Range 18 – 34  
  - ERC: Range 20 – 39  
  **KBDI:** 197 – 390  
  **Yearly Precipitation:** 11 – 25% Below Normal  
  **Drought Monitor:** D1 – D2 (Moderate to Severe Drought)  
  **Numbers for BI, ERC, and KBDI below represent 90th thru 96th percentile.**  
  **For Fuel Model G:**  
  - BI: Range 81 – 98  
  - ERC: Range 72 – 90  
  - 1000 hr fuels: 8 – 12%  
  - LFM: 85 - 149%  
  **For Fuel Model L:**  
  - BI: Range 35 – 42  
  - ERC: Range 40 – 50  
  **Yearly Precipitation:** 26 – 45% Below Normal  
  **KBDI:** 391 – 460  
  **Drought Monitor:** D3 (Extreme Drought)  
  **All Level II Activities plus:**  
  - Minimum ICT5/ENGB + FFT2 with engine respond to reported;  
  - Engines, Pumps, and Saws checked daily  
  - Detection patrol following lightning activities and around high public use areas;  
  - Post fire danger signs at entrances and high public use areas;  
  - Stage 1 or Stage 2 Fire Restrictions may be implemented;  
  - Begin coordination of potential closures with adjacent agencies;  
  - Monitor availability of local fire suppression resources;  
  - Begin preparing request for Short Term Severity and / or Severity Funding;  
| **Adjective Class** High | **Determination Guide:**  
  Four of the five criteria within description column fall within identified ranges for this severity level.  
| **Staffing Class IV** Very High | **Determination Guide:**  
  Four of the five criteria within description column fall within identified ranges for this severity level.  
| **For Fuel Model G:**  
  - BI: Range 81 – 98  
  - ERC: Range 72 – 90  
  - 1000 hr fuels: 8 – 12%  
  - LFM: 85 - 149%  
  **For Fuel Model L:**  
  - BI: Range 35 – 42  
  - ERC: Range 40 – 50  
  **Yearly Precipitation:** 26 – 45% Below Normal  
  **KBDI:** 391 – 460  
  **Drought Monitor:** D3 (Extreme Drought)  
  **All Level III Activities plus:**  
  - Minimum ICT5 + ENGB (or trainee) + FFT2 with engine respond to reported fire;  
  - No fire equipment will be utilized for project work;  
  - ICT4 available to respond;  
  - 7-day effective coverage, including extended hours as determined by Fire Duty Officer (FDO);  
  - Request activation of Short – term Severity and / or Severity Funding;  
  - Detection Patrol Conditional;  
  - Ensure that dispatch coverage maintains the capability to handle fire prevention, detection, and incident management activities;  
  - Consider Information Officer working in conjunction with PFB distribute press releases regarding fire danger;  
  - Coordinate Stage 1 or Stage 2 fire restrictions with adjacent agencies;  
  - Coordinate potential closures with adjacent agencies;  
  - FDO will monitor availability of PIDC Type III team and aviation resources.
STAFFING & ADJECTIVE CLASS; & DETERMINATION GUIDE

<table>
<thead>
<tr>
<th>Staffing Class</th>
<th>Description</th>
<th>Actions to be take’n</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>Numbers for BI, ERC, and KBDI below represent 97th and above percentile.</td>
<td>All Level IV Activities plus:</td>
</tr>
<tr>
<td>Extreme</td>
<td>For Fuel Model G:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• BI: Greater than 98</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ERC: Greater than 90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1000 hr fuels: Below 8%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• LFM: Below 85%</td>
<td></td>
</tr>
<tr>
<td>Determination Guide: Four of the five criteria within description column fall within identified ranges for this severity level.</td>
<td>For Fuel Model L:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• BI: Greater than 42</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ERC: Greater than 50</td>
<td></td>
</tr>
<tr>
<td>Yearly Precipitation: Greater than 45% Below Normal</td>
<td>KBDI: Greater than 460</td>
<td></td>
</tr>
<tr>
<td>Drought Monitor: D4 (Exceptional Drought)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Considerations to above table:
- When STAFFING LEVEL 3 or 4 is accompanied by a Lightning Activity Level of 4, 5, or 6 for the current day or within the previous 5 days, the STAFFING LEVEL may be adjusted to the next higher level respectively.
- Drought Monitor Index of D2 (Severe Drought) or higher (D3, D4, etc) may be used to justify adjustment of STAFFING LEVEL 3 to 4, and 4 to 5 respectively.
- Periods of elevated probability of human-caused fire occurrence, such as holiday weekends with increased visitation, may also be used to adjust the STAFFING LEVEL to the next highest level.
- STAFFING LEVELS 3 and 4 may be adjusted to 4 and 5 respectively if the Rocky Mountain Area preparedness level is Level 4 or Level 5.
- The FDO will monitor the availability of other staff. Once initial attack resources are committed to an incident, the FDO will determine the need(s) for ensuring that adequate staffing is maintained for any additional response that may simultaneously occur.

Remote Automated Weather Stations (RAWS)

The NWCG Fire Weather Subcommittee provides national leadership in wildland fire weather and climatology in support of effective fire management decision-making. As part of their role, the Fire Weather Subcommittee developed and maintains the Interagency Wildland Fire Weather Station Standards and Guidelines (NWCG PMS 426-3). The Service has adopted and follows the standards in this publication.
RAWS Maintenance

Maintenance and repair of RAWS stations is critical to fire behavior indices as well as for use by other agencies. RAWS owned by the Service will meet maintenance and repair standards identified in the current version of the Interagency Wildland Fire Weather Station Standards and Guidelines. RAWS maintenance and repair is the responsibility of the Zone Fire Management Officer and station owner.

Individuals responsible for the maintenance of RAWS are required to have an individual access to the Wildland Fire Management Information (WFMI) Weather Module. WFMI Weather allows users in the field the ability to order sensors, update station narratives, notes, and routes. Information on obtaining a WFMI Weather account can be found at WFMI Homepage.

The WFMI Weather module provides access to the weather data that is transmitted from the more than 2500 RAWS located throughout the U.S. Locations of RAWS can be searched online at Western Regional Climate Center (WRCC). Additionally, the WRCC website allows users to graph sensor outputs making it easier to locate potential problems.

Annual Maintenance – The Zone FMO and station owner are responsible for ensuring:

1) annual maintenance is completed per standards in NWCG PMS 426-3; and

2) maintenance and all other significant station activity is documented in the WFMI Weather Module.

RAWS that are over one month past due for annual maintenance can be set to not send information to the Weather Information Management System (WIMS) to prevent these stations from being used to inform critical fire management decisions. The decision to turn off a station is the responsibility of the Regional RAWS Coordinator in coordination with the Service National RAWS Coordinator and Regional Fire Management Coordinator. Once annual maintenance has been completed, the station can be re-set to send information to WIMS.

Unscheduled Maintenance/Emergency RAWS Repairs - Repairs to RAWS are to be completed per standards identified in NWCG PMS 426-3. During the unit’s fire season, the ZFMO has 3 days to initiate repairs (such as contacting RAWS depot and ordering parts, etc.). If repairs are not completed within 7 days, NFDRS indices will become inaccurate and corrections to station data may need to be completed in WIMS. Regardless if WIMS data corrected or not, the station will need to be recalculated in WIMS to correct NFDRS indices. All activities will be documented in the WFMI Weather Module. More information on RAWS is located on the RAWS website.

Weather Information Management System (WIMS) - Maintaining the RAWS information in WIMS is the responsibility of the Zone FMO. State of Weather and observed weather observations will be completed daily. Dates for vegetative stages (such as green-up, frozen, etc.) will also be completed annually by the Zone FMO following guidance identified in the WIMS user guide.
Fire Severity Funding

Fire Severity Funds are suppression operations funds intended to support extraordinary preparedness activities and its use is consistent with approved preparedness plans. Fire severity funding is not intended to raise preparedness funding levels to cover differences that may exist between funds actually appropriated and those identified in the fire planning process.

Units may request fire severity funding when wildfire response resources are insufficient to meet the predicted fire workload on Service lands. Units/Regions may request 2 types of severity funding depending upon the anticipated duration of need (see table).

Short-term Fire Severity Funding
Short-term Fire Severity Funding can be requested to implement preplanned actions from an approved preparedness or step-up plan when the unit anticipates being at Preparedness Level 4 or 5 (or equivalent) for less than seven consecutive days, or when the need is only for extending the days/hours of existing staff. In rare instances, local interagency resources may be utilized to cover Service short-term severity events. If local interagency resources are required to support Service severity activities for a period longer than 4 days, the long-term severity process must be utilized. RFMCs are authorized to approve the expenditure of short-term fire severity funds up to the annual $300,000 Regional cap. Units must request, through their RFMC, authority to expend Short-Term Severity funds detailing the conditions necessitating the increase in preparedness activities. Short-term Fire Severity Funding approvals are valid for the short-term event detailed in the request and do not constitute a blanket annual approval to expend short-term severity funds. Upon conclusion of short-term preparedness actions, FMOs are required to submit a report to the RFMC detailing the funds expended and activities conducted during emergency preparedness.

Long-term Fire Severity Funding
Long-term Fire Severity Funding can be requested when additional outside resources are needed for an extended period of time. The need for additional resources must be based upon existing approved preparedness plans or documentation of extraordinary conditions that were not anticipated in the existing preparedness plans. Long-term Fire Severity Funding requests must be approved by the Chief, Branch of Fire Management and must follow the FWS Severity Request Format. Severity funding templates, job aids and checklists have been created for field units and Regional Offices and are located on the Severity page of the Service’s Fire Management SharePoint site: https://fishnet.fws.doi.net/regions/9/nwrs/fire/ops/severity/default.aspx

Severity Cost Accounting
Fire severity work breakdown structures are initiated by the National Office in the Fire Management Information System. Refer to the Fire Business Guide and FWS Fire Management SharePoint site for additional information.
Refer to the Fire Business Guide, the Redbook, and the Service SharePoint site for additional severity guidance and templates for use.

<table>
<thead>
<tr>
<th>Fire Severity Funding Levels</th>
<th>Fire Severity Authorization</th>
<th>Additional Resources (as specified in preparedness plans)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Level</td>
<td>Work Breakdown Structures are provided by the National Office to each Region on an annual basis</td>
<td>Approved by Regional Office</td>
</tr>
<tr>
<td>Short-Term Events (severity conditions and expected PL4 or 5 for less than one week)</td>
<td>Complete short term severity expense reports</td>
<td></td>
</tr>
<tr>
<td>National Level</td>
<td>Maximum of 30 days per request; however, regardless of the length of the authorization, use of severity funding must be terminated when abnormal conditions no longer exist. Work Breakdown Structures are provided by the National Office for each approved request.</td>
<td>Approved by National Office</td>
</tr>
<tr>
<td>Long-Term Events (severity conditions and predicted PL4 or 5 for more than one week)</td>
<td>Complete long term severity expense reports</td>
<td></td>
</tr>
</tbody>
</table>

**Reporting Requirements**

Units will email a final report to the RFMC and the FMB within 30 days of ending long-term severity. The final severity report must include the following:

- Total amount authorized
- Total amount expended
- Short narrative of fire activity

The requesting unit must keep all fiscal documents pertaining to the severity expenditures separate from other fiscal documents for audit purposes. This includes timesheets, both for permanent and any AD hires, travel vouchers, purchase documents, etc. Given potential changes in conditions, identify anticipated duration for continued use of the authorization.

**Normal Unit Strength (NUS)**

Refuges that have a Fire Management Plan and provide suppression responsibilities should also have a cache of firefighting tools and personal protective equipment (PPE) adequate to support all refuge initial attack staff. The numbers, types, and distribution of materials in caches will be dictated by the staffing, suppression strategy, fuels and fire history of the refuge. Cache equipment, other than capitalized property, is considered to be the station's NUS. It is the responsibility of the refuge, in coordination with local and regional fire management staff to establish specific refuge and complex initial attack NUS levels. Requirements beyond the initial attack level will be supported through the regional and national fire cache system. Maintenance of NUS is the responsibility of the refuge. NUS is a maximum level of all items for initial attack fire suppression efforts, not for support of fires exceeding initial attack or prescribed fire activities. NUS will include personal protective equipment and safety items required by personnel for prescribed fire
Personnel ordered for extended attack activities are not to be equipped from the refuge's NUS, but will either come equipped or equipped by a ground support facility. All refuges will develop a NUS list and have it approved by the RFMC. The list will become an attachment to the refuge's Fire Management Plan. Only those approved items may be replaced. The initial stocking of the cache with NUS items is a one-time expenditure of preparedness funds. If additional items are needed, they must be approved through the RFMC. All NUS items are to be maintained in such a way that they are not used for routine refuge operations. This may be accomplished by storing equipment in designated areas protected by a seal or in an individual locked enclosure. The inventory and location of these items should be included in the pre-attack plan. Excess and unneeded supplies and equipment should be transferred to other refuges or interagency caches.

Once a NUS level of equipment and PPE is established, routine replacement of lost, broken or worn out equipment should be through the normal Defense Logistics Agency fire program. Items can be ordered by using the National Stock Number found in the NWCG National Fire Equipment System Catalog, Part 1: Fire Supplies and Equipment, or through the Defense Logistics Agency (DLA) Wildland Fire supply program Website. DLA should be considered the first source of supply, but other sources can also be used.

Supporting Ongoing Fires - Ordering - During wildland and prescribed fire operations, support in the form of NUS supplies, other fire suppression equipment, crews and overhead can be ordered through the local interagency zone dispatch/coordination center.

<table>
<thead>
<tr>
<th>Item</th>
<th>NUS Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rations, Shelters, Hard Hats, Head Lamps, Goggles, Packs, Line Gear, First Aid Kits, Sleeping Bags, Water Bottles</td>
<td>1 per red-carded individual plus 20%</td>
</tr>
<tr>
<td>Tents</td>
<td>1 per red-carded individual</td>
</tr>
<tr>
<td>Aramid Pants, Aramid Shirts, Gloves</td>
<td>2 per red-carded individual plus 20% for each size issued</td>
</tr>
<tr>
<td>Shovels, Pulaskis, McLeods, Flaps, Fire Rakes (Hand Tools)</td>
<td>2 per red-carded individual plus 10% for each type of tool. Mix of tools is determined by station based on local needs.</td>
</tr>
<tr>
<td>Flight Helmets</td>
<td>6 per helicopter contract plus 2 spares. Stations w/o contract aircraft that frequently use helicopters for fire activities should obtain 4.</td>
</tr>
<tr>
<td>Back Pack Pumps</td>
<td>1 per 2 red-carded individuals</td>
</tr>
<tr>
<td>Chain Saws, Portable Pumps, Fold-A-Tank</td>
<td>As approved by the RFMC depending on firefighting tactics.</td>
</tr>
<tr>
<td>Foam</td>
<td>15 gallons per engine</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Hose - Portable Pump used for hose lays or any size engine</th>
<th>1.5 inch - 900 feet 1 inch - 900 feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nozzles (1&quot; and 1.5&quot; - total)</td>
<td>2 - Portable Pump 4 - Light Engine 5 - Medium or Heavy Engine Plus 20% for total number of nozzles on engines, water and foam combined</td>
</tr>
<tr>
<td>Wyes, Tees, Wrenches, Relief Valves, Hose Clamps, etc.</td>
<td>2 - Portable Pump 2 - Light Engine 3 - Medium Engine 4 - Heavy Engine Plus 10% for each item listed as required in the inventory</td>
</tr>
<tr>
<td>Adapters and Reducers (Based on local and anticipated needs)</td>
<td>2 - Portable Pump 2 - Light Engine 4 - Medium Engine 5 - Heavy Engine Plus 10% for each item listed as required in the inventory.</td>
</tr>
</tbody>
</table>

**Information Systems**

There are a number of computer applications, which provide analysis and decision support for fire manager/resource manager. Numerous other computer applications exist which have merit and can be used by refuges, but are not supported by the national office. Supported applications include:

- **Weather Information Management System (WIMS)**
  A comprehensive system that helps you manage weather information. WIMS is the host for the NFDRS. WIMS accesses the National Interagency Fire Management Integrated Database (NIFMID). NIFMID is a relational database that contains historic fire weather and historic fire record information. Requirements for WIMS data are identified in Chapter 14. WIMS allows you to retrieve weather information by providing timely access to many weather information sources, efficient tools for managing data, data manipulation and display functions, and interactive communications environment. System access is through National Applications Portal (NAP) at [https://nap.nwcg.gov/NAP/#](https://nap.nwcg.gov/NAP/#) and requires a user identification and password. A WIMS user guide is located at [http://fam.nwcg.gov/fam-web/pocketcards/wims_ug_final/wims_ug.html](http://fam.nwcg.gov/fam-web/pocketcards/wims_ug_final/wims_ug.html) For questions concerning WIMS access please call the WIMS help desk at NIFC (866) 244-7677.

- **The Fire Effects Information System (FEIS)**
  FEIS is a computerized encyclopedia of scientific information describing the fire ecology of more than 1,000 plants and animal species and plant communities. Access to FEIS is available through the Internet at [http://www.feis-crs.org/beta/](http://www.feis-crs.org/beta/).
• **Wildland Fire Assessment System (WFAS-MAPS)**

The broad area component of the Wildland Fire Assessment System (WFAS-MAPS) is generating National Maps of selected fire weather and fire danger components of the NFDRS. NFDRS computations are based on once-daily, mid-afternoon observations (2 p.m. Local Standard Time) from the Fire Weather Network that is comprised of some 1,500 weather stations throughout the Conterminous United States and Alaska.

Observations are reported to the Weather Information Management System (WIMS) where they are processed by NFDRS algorithms. Many of the stations are seasonal and do not report during the off season. WFAS queries WIMS each afternoon and generates maps from the day’s weather observations. Each afternoon Fire Weather Forecasters from the National Weather Service also view these local observations and issue trend forecasts for fire weather forecast zones. WIMS processes these forecasts into next-day index forecasts. Additional information is located on the Internet at [http://www.wfas.net/](http://www.wfas.net/).

• **Lightning Detection System (LDS)**

Near real time lightning data can be acquired and exported without a username or password at [https://wfmi.nifc.gov/cgi/WfmiHome.cgi](https://wfmi.nifc.gov/cgi/WfmiHome.cgi) by clicking on Lightning Viewer Webpage.

Another source of lightning data is the National Interagency Fire Enterprise Geospatial Portal (EGP) at [https://egp.nwcg.gov/egp/default.aspx](https://egp.nwcg.gov/egp/default.aspx). A username and password are required to log into the Situation Analysis (SA) page. Once logged in, user can select and view near real time lightning data.

### Wildfire Prevention/Mitigation

Information on risk assessments and planning can be found at the [NWCG Communication, Education, and Prevention Committee](https://www.nwcg.gov/) website.

• **Prevention Goals**

  - Reduce the likelihood of both human-caused and unwanted naturally-ignited wildfire spread that could result in unacceptable loss.
  - Decrease the frequency of human-caused fires.
  - Reduce emergency suppression costs.
  - Reduce fire size and intensity by developing programs such as fuels reduction/Modification.
  - Establish cost-effective prevention programs at the national, regional, and refuge levels.
  - Integrate and coordinate prevention programs with State foresters, nearby land management agencies, and wildfire protection organizations.
  - Promote the creation of incentives for building and maintaining fire-safe structures and fire-safe communities to reduce the unwanted consequences of fire.
• **Prevention Priorities**
  o Our highest priority in the prevention program is to prevent catastrophic fires and human-caused wildfires. All levels from the field through the Washington Office Directorate will exhibit action committing to an effective prevention program.
  o Our prevention program is designed to minimize losses from wildfire while considering resource management objectives.
  o Our prevention program encourages a cooperative interagency approach among all Federal, State, county, and municipal agencies/entities and is consistent with our objectives and National Outreach Strategy guidance.
  o The Project Leader is responsible for ensuring the investigation of every wildfire to determine cause. Where evidence indicates the fire was caused by arson or negligence (trespass), the Project Leader must protect evidence and initiate a fire investigation. This investigation may range from getting the responding fire crew to document the cause to requesting a qualified arson investigator to perform a criminal investigation.
  o The Project Leader must notify the Regional Fire Management Coordinator of suspected arson.

• **Prevention Analysis**
  o Each field office is responsible for performing a prevention analysis. Your completed prevention analysis determines the scope, contents and need of the fire prevention plan. Complete your prevention analysis for the same planning period used in developing the Fire Management Plan. If this is not possible the data base should be for the most recent 5 years. The analysis serves as a justification for increasing, decreasing, and modifying existing prevention activities.

• **Prevention Plan**
  o Your prevention analysis helps you determine if a prevention plan is required. The problems you identify in the prevention analysis are addressed and treatments are identified in the prevention plan.
  o **Plan Submission.** If you identify a prevention problem when you complete your prevention analysis, you must complete a prevention plan unless your Regional Director issues an exemption.
  o **Plan Amendment**
    - You must periodically review your prevention analysis to determine changes in human-caused fire incidence, cause, class of people, location, changes in fuel loading or public use patterns. A significant change or problem may require redirecting the current program giving more emphasis to this area.
    - A prevention plan amendment is necessary when your review justifies a change in the prevention program. The amendment is submitted in the same way as the prevention plan.
• **Prevention Plan Implementation.**
  
  o **Visitor Use Regulation.** Practice prevention enforcement at the level necessary to gain compliance with fire laws and regulations.
  
  o **Public Use Restrictions.** Project Leaders have the authority to impose public use and access restrictions in times of high fire danger. These public use restrictions include:
    - Restricted fire use in back-country; e.g., no cooking or warming fires outside developed sites, etc.
    - Restricting public use activities; e.g., off-road vehicles, back-country access, etc.
    - Restricting refuge operations or contract activities; e.g., construction, blasting, chain saw use, etc.
    - Total or partial closure of the refuge.
  
  o **Coordination of Closures.** You should coordinate all closures with the State and adjacent Federal land management agencies. Joint agency closures can be very effective and they are easier to manage and better understood by the public when lands of similar hazard, regardless of ownership, are treated the same. Notify and coordinate a closure or restriction with all Federal, State, and local organizations responsible for wildfire control whenever possible.

• **Interagency Cooperation.**

  o Interagency cooperation is critical at all levels. Coordinating and sharing resources among agencies can make prevention programs much more effective. Carefully coordinate programs so they are complementary and reinforce each other. Cooperative prevention programs should include interagency committees, developing interagency public outreach programs, and development and coordinated release of news stories to the media. Cooperative interagency efforts in prevention activities with other local fire authorities provide an excellent avenue for establishing cordial relationships which pay dividends at the time of an emergency.

• **Prevention Training.**

  o All personnel are responsible for wildfire prevention. Appropriate employees should complete Fire Prevention Education 1 (PMS P101) to ensure a basic understanding of wildfire prevention. This basic course is available for purchase through the Publication Management System.
  
  o Our field offices should work with their local cooperators to develop effective prevention training programs for the mutual benefit of both.

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**Wildfire Cause Determination & Fire Trespass**

To start things in motion, make a thorough investigation of the facts surrounding the fire and provide documentation in a trespass report. The report is completed by the Service employee who discovered the wildfire trespass or is assigned to the investigation. The trespass report is submitted to the Project Leader. Management shall at this point request
assistance from Law Enforcement Officer (LEO) if there is any question on civil versus
criminal penalties. The Project Leader should ensure investigation of each fire to
determine whether natural or human causes started the fire. Where evidence indicates the
fire was human caused, protect the evidence and initiate an investigation using qualified
fire investigators. Initiate trespass actions to recover suppression costs and resource
losses. Notify the Regional Fire Management Coordinator.

If the recommendation is to pursue as a trespass action because responsibility can be
determined, a case number is assigned from the Refuge Case Log and the investigative
file begins. If information at this point indicates the case to be criminal in nature, the
LEO takes over further investigation. If information indicates the case will be a civil
action, a Refuge employee with knowledge of investigative procedures may pursue the
investigative process.

Upon fire trespass legal ruling and settlement determination (collection amount), the
Service is responsible for the billing, collection and dispersal of collected funds. The
collecting office will prepare a Bill for Collection DI-1040 indicating the incident cost
center FF.F46000 original fire incident project code and forward the Bill for
Collection to the cost accounting section (per Regional direction) along with supporting
documentation. The cost accounting section will enter the Bill for Collection into FBMS,
as well as prepare and send a “formal” bill to the plaintiff.

NOTE: It is CRITICAL that fire trespass collections and resultant spending
transactions cite the original fire incident project code or the funds will lose their
identity. A copy of the Bill for Collection must be forwarded to the Service Branch
of Fire Management, Budget and Planning for National oversight.

Funds (check or money order) are to be deposited via Collection Transmittal 1 (fire
trespass). Once fire trespass funds are deposited, they will be held by the collecting
Region until the NFLT meets to discuss/negotiate current needs; funds will then be
allocated based on NFLT decisions throughout the year. These funds may only be used
for non-recurring contracts, interagency activities, temporary labor, and one-time
purchases not requiring continued monetary commitment. These funds are not base
funds; they are considered one-time funds and cannot be used to augment the
preparedness budget. Funds may be used for fire activities in the wildfire prevention
planning process, examples include: fire awareness, educational activities, law
enforcement activities, and prevention and trespass training. Funds can also be used for
restoration that is needed as a result of fire where, due to limitations on the use of
rehabilitation funds, restoration of developments damaged by a fire could not be
accomplished.

Please refer to the Fire Business Guide for additional administrative instructions and
guidance.

Depending upon a number of actions and reactions, there are situations where managers
must seek advice from appropriate Service specialists and Field or Regional Solicitors
Preparedness

Chapter 10

(Solicitor) through established channels. The question of civil versus criminal recourse requires outside input from technical experts. The nuances of investigation under civil versus criminal cases differ, and require expert advice.

This Chapter should not be relied upon as the final authority in pursuing wildfire trespass cost recovery. The references cited in the Departmental Manual, Part 620, 50 CFR, Part 28.32, and the Service Manual should be reviewed by those involved in wildfire trespass. Managers need to know or be advised on what their roles, limitations, and capabilities are in trespass cases (Service Manual 621 FW 1.5 and 1.14).

The agency must pursue cost recovery, or document why cost recovery is not required for all human-caused fires on public lands. If the ability to pay does not exist, a court decision could be handed down that might provide for payment in kind.

The manager does have the latitude to recommend alternative methods for recovery of damages to natural resources or improvements. This recommendation would be forwarded to the Solicitor through appropriate channels for a decision. If full payment is not made to the Service while in the administrative phase of trespass, then it falls to the legal system and its representatives to recover costs in whatever form is most appropriate.

It should also be remembered that an aggressive trespass program is also an excellent prevention program. An appropriate level of media attention should be given to successes of the trespass program in an effort to emphasize the positive preventative actions that can be gained.

**Fire Investigation**

**Introduction**
All fires must be thoroughly investigated to determine the cause and if negligence and/or criminal intent were factors. Whether the fire was started from a careless act or was willfully set must be determined in order to develop a successful fire investigation. Fire investigation must be concurrent with fire suppression. Fire Investigation Methodology and Techniques can be found in the Guide to Wildland Fire Origin and Cause Determination (NWCG PMS 412, NFES 1874).

**Wildland Fire Investigation Case Reports**
At this point, an Initial Report of Unauthorized Use (Exhibit 10-3), Wildland Fire Investigation Illustration and Sample Case Report has been completed and submitted to the Project Leader. After a decision to proceed with further investigation has been reached, the next decision point is whether to pursue a civil or criminal action. Law Enforcement personnel will be consulted to determine which course of action to pursue. The Initial Report of Unauthorized Use will become part of the investigative report.

A trespass case number will be assigned from the Document Control Register or Law Enforcement Management Information System (LEMIS) which is a reporting system.
used by Service law enforcement to document all case work. The investigation will then proceed. At this point, the trespass is still in the administrative process. The Service could issue a billing and make full recovery of costs. We have not gone to the judicial system yet.

Civil Case Reports

- **Format.** The case report should be divided into five parts: Title Page, Synopsis, Persons Named in the Report, Fire Investigation, and Appendix.

  - **Title Page.**
    - Fire name and number
    - Refuge
    - Fire date
    - Report prepared by
    - Position title
    - Period of investigation
    - Date of report

  - **Synopsis.** The Synopsis should be as brief as the writer deems necessary to explain the case and to tie evidence into a narrative description. Discuss specific elements of the violation (e.g., willfully and without Authority, sets fire on National Wildlife Refuge). The writer should present facts that show negligence and discuss any problems of conflicting evidence. It is not a substitute for the investigation portion of the report. It should be factual, rather than conclusive. It should be based upon the evidence developed during the investigation.

  - **Persons named in the report.** Attach a list of all persons mentioned in the report by full name, address, phone number, and occupation.

  - **Investigation.** This is the body of the report. It should consist of a chronological description of what the Fire Investigator did in the investigation, whom he/she spoke with and when, what was said, and what was observed. It is an account of all matters developed in the investigation. Even seemingly minor notations or observations can prove extremely important at a later date. Include the names of property owners who are involved in the case and any other individuals who might be connected with the case, either as defendants or in any other direct manner.

  - **Appendix.** Attach maps, sketches, and photographs to aid in comprehending locations, conditions, and circumstances described in the report. Attach any statements taken from witnesses and a list of who was interviewed without written statements, and to what they can attest. Include all relevant forms to the case such as burning permits, Notice of Violation, record of fire conditions, operating permits (ie. Special Use Permit), weather records, dispatch logs, and radio logs.
Processing. Once evidence has been processed and suppression costs determined, the case report should be finalized. The case report should be submitted for review to the FMO and Project Leader.

If a responsible party has been identified, a billing will be prepared and cost collection procedures initiated. A copy of the fire investigative report should be included in the fire package.

**Criminal Case Report**

**Investigative Reports – Criminal**

- The incident report is given a number and opens the case. It includes:
  - Subject - address and physical description.
  - Reporting person - either a confidential informant (CI) or informant. Include address and phone number for informant, but not for the CI.
  - Details clearly stating the violation and the "who, what, where, when, why, and how" in a brief paragraph or two.
  - Action and recommendation - describe what actions are to be initiated and recommendations to consider.
- The investigative report consists of:
  - Cover page with primary information as to suspect, witnesses, violation, and a short synopsis.
  - Investigative results report which includes all actions taken by the Fire Investigator concerning evidence collected, persons interviewed, sketches, photographs, chain of custody receipts, and disposition form used when the case has been adjudicated.
  - Format example of the chronological order of a criminal report
    - Criminal complaint
    - Investigative report
    - Investigative results
    - Statement(s) of witness(es)
    - Statement(s) of suspect(s)
    - Photographs
    - Sketches
    - Evidence exhibits

**Cost Determination**

**Introduction**

All costs associated with a fire are to be determined by a qualified specialist who can assess damages and complete a damage appraisal report to accompany the fire trespass case.
Based on the appraisal, all costs to be reimbursed by the responsible party are determined and prepared by the associated refuge office. Calculation should encompass all costs, including those associated with the Service, States, other Federal agencies, rural fire districts, etc., and include resource damage rehabilitation costs, costs of repair or replacement of physical improvements, as well as all associated administrative costs.

Every attempt should be made to include all costs on the initial Bill for Collection. However, costs incurred after the initial bill has been sent should be documented with a subsequent Bill for Collection being sent or added during negotiation or with any settlement as a result of a court trial. The Service's Finance Center will follow up on any bills issued and not paid or not paid in full.

Resource Damages
Each burned area will be examined and the damages evaluated. The appropriate Resource Specialist should make the appraisal. Generally, damages will be the cost of emergency stabilization, burned area rehabilitation, and the value of resources burned minus any salvage value.

Emergency Stabilization Costs
These are charged to emergency stabilization funds and must be tied to a specific fire number (i.e., 10 digit cost center-FF.F2200000-fire number followed by a 0). Emergency stabilization is planned actions taken during and after a wildfire to stabilize and prevent unacceptable resource degradation or to minimize threats to life or property resulting from the fire. It includes such costs as reseeding to prevent immediate wind or water erosion and to prevent establishment of undesirable vegetative species, fencing of areas to prevent animals or humans from entering sensitive areas, and felling damaged trees posing threats to human safety.

Burned Area Rehabilitation Costs
This is the non-emergency replacement of facilities and resources damaged by wildfire or the re-establishment of ecosystem structure and functions. Rehabilitation is tied to a specific fire number (i.e. cost center FF.F3200000 fire code followed by a 0).

Suppression Related Rehabilitation Costs
These are charged to suppression operations (FF.F20000) for rehabilitating on-site and off-site damage to resources caused by firefighting actions, and are part of the fire bill.

Physical Improvement Damage
The damage or destruction of an improvement caused by the fire or fire suppression acts should be examined by qualified specialists and the cost of repair or replacement determined through bid estimates, appraisal, or contracting. Include only refuge-owned improvements.

Off-Site Values
These values are usually related to water sources which have dried up or structures damaged as a result of fire. Damage should be assessed using replacement cost. The damage of off-site values caused by the fire and/or fire suppression acts should be
examined by qualified specialists and the cost of rehabilitation and/or values lost and repair or replacement determined through bid estimates, appraisal, or contracting.

**Service Suppression Operations Costs**

All direct costs incurred for the benefit of a specific fire are properly included as true fire costs for that case. They will include charges by the Service through Refuge(s), Regional Office(s), Office of Aircraft Services (OAS), NIFC, Alaska Fire Service, agency fire caches, and agency coordination and dispatch centers. Other direct costs, such as the cost of fire investigation and preparing and processing a report, should be charged to suppression operations (FF.F20000).

These direct costs are the amounts applicable to a specific fire case that can be accurately and readily determined. Fire costs improperly charged to a fire should not be included in a billing. In order to accurately account for these fire costs, it is important that all Service financial input documents are coded directly to the specific fire number. Subsequently, all reasonable and necessary Service suppression costs will be reflected on the Fire Suppression Cost Report/Project Obligation Transactions Report produced by the Service's Financial Management Section.

**Indirect (Administrative) Costs**

An indirect cost rate may be added to the Service's direct amount being billed. This rate is commonly negotiated at the Regional or Unit level. Administrative/indirect costs include centralized data management, general administration, and other support functions performed jointly for which the amounts pertaining to specific fires cannot be determined accurately. These costs also are incurred for the benefit of more than one subactivity or fire, and in amounts too small to be reported on time and attendance reports or other financial documents that obligate monies.

**Cost Database**

The Service's Finance Center issues a monthly Project Obligation Transaction Report (POTR) that displays the costs associated with fire incidents. Ensuring charges of the correct amount to these fire codes is the responsibility of the organization. If costs are not coded to the correct fire code, it will be nearly impossible to determine the exact cost of a particular fire.

- Costs associated with aircraft services must be obligated/paid before these will be reflected in the POTR.
- Payroll costs will be recorded in the month during which the actual payday falls.
- Emergency Fire Fighter payroll will not be recorded until the certified schedule reaches the Service's Payroll Office (Bureau of Reclamation), Denver, Colorado.

**Other Related Direct Costs**

Costs incurred by third parties such as State organizations, rural fire districts, protection associations, and other Federal or State organizations must be compiled accurately for billings and recovery from the party or parties responsible for the fire. These costs will not appear on the Suppression Cost Report, and must be added.
Civil Case Procedures and Billing

Fire Trespass and Case File
All information regarding the trespass fire should be included in the case file such as the fire investigation case report, photos, newspaper clippings, cost report documents and any correspondence. It should be organized in a logical manner and kept in chronological order. Each case should be treated as if it will go into litigation.

Trespass Register
The case should be assigned a trespass case number from the regular Document Control Register log.

Case Preparation
Back-up or supporting documentation may provide crucial evidence for cases that may be litigated. Originals of everything are required, i.e., T&A’s, invoices, etc. Once the fire investigation case report is complete several options should be considered to recover costs associated with a trespass fire:

- If it is apparent that collection of the costs will be uncontested, the refuge should generate a Bill for Collection form, DI-1040 (Exhibit 10-4). This action does not eliminate the use of the judicial systems. However, it is important that the criminal case is resolved before pursuing civil remedies. It always strengthens the civil case if any kind of criminal judgment is passed against the responsible party. This can be a grand jury indictment up to and including an arson conviction. Each case should be treated as if it will go into litigation.

- In most cases the Service is under proprietary jurisdiction, and the option exists to either use the State court system or the Federal judicial system to pursue collection of fire costs. The option to pursue a State court remedy is not available in those cases where the Service holds exclusive jurisdiction. Each case should be reviewed to see which system will be most effective. Often, State laws are more appropriate when dealing with negligent type offenses, such as reckless burning. These factors, along with applicable State and Federal laws, should be considered when deciding what avenue to pursue. If the facts and evidence of the investigation are insufficient to show probable cause or the starting of the fire was clearly accidental and without intent or negligence, then cases should be collected through a billing or demand letter process. If this administrative procedure fails to obtain a full settlement, then it may be necessary to file a civil suit against the person in U.S. District Court. This is normally done through the Solicitor with the advice and consent of the U.S. Attorney.

Trespass Notification
Personal contact should be made, if possible, with the responsible party before a Bill for Collection is sent. A cover letter should accompany each bill. The cover letter should contain information such as the fire date, location, and cause of fire. It should list why the individual is the responsible party and is receiving a bill. It should also outline procedures and due dates for payment.
Trespass Billing

All Bills for Collection must be combined with the cover letter and a supplemental sheet that itemizes a breakdown of costs (retardant, etc). Once a bill has been issued (Exhibit 10-4), all Bills for Collection must be sent by certified mail, return receipt requested.

The Bill for Collection form, DI-1040, is used by all field stations to notify individuals or companies of outstanding debts owed the Service. One copy of the completed form is to be submitted in a blue envelope to the Service Finance Center, Cost Accounting Section, promptly upon issuance by field stations.

The Service Finance Center will be responsible for any subsequent notices to the customer. A copy of all ensuing notices will be furnished to the appropriate organization. Instructions for preparing a Bill for Collection are as follows:

1. The "Bill Number" will consist of 10 numbers, with the first 5 digits being the organization code, the sixth digit being the fiscal year, the seventh digit being a "C," and the last 3 digits corresponding to your sequential document numbering system. Numbers can be obtained either from the regular Document Control Register log or a Collection Control Register log maintained at the Regional/field office. Example: Bill Number 61520-4-C001

2. The "Remit To" will mailed to the current lockbox address:

Mailed Correspondence: FedEx Delivery:
U.S. Fish and Wildlife Service U.S. Fish and Wildlife Service
Cost Accounting Section Cost Accounting Section
P.O. Box 272065 7333 W. Jefferson Avenue, Suite 300
Denver, CO 80227-9060 Lakewood, CO 82035
Phone (303) 984-6800

3. The "Date" is the billing date. With the "Description," a due date will be placed which is 30 days from the billing date. NOTE: The first overdue notice will be sent out 32 days from the date the Finance Center loads the bill into FBMS. The bill will be loaded within 1 work day of receipt. The 32-day period allows for interest and administrative charges to be assessed prior to the overdue notice being generated.

4. "Payer" is the name and address of the individual or company billed.

5. In the "Description," furnish a detailed explanation of the materials/services performed for the payer. In addition, the statement which follows must appear on all DI-1040s: NOTE: Full payment is due within 30 days after the above billing date. Prompt remittance is required to avoid the interest, administrative, and penalty charges on delinquent debts. The interest rate applicable to this bill is _____%, in addition to the $____ administrative charge per each delinquent notice. In order for your account to be properly credited, please include a copy of this bill with your payment. If you have any questions regarding this bill, please contact

_______. Accounts more than 120 days overdue will be assessed a 6% penalty.
The interest rate applicable for inclusion into the above statement is determined by the Department of Treasury. As this percent changes, notification will be provided through subsequent FFS Bulletins. Penalties are charged in accordance with the Debt Collection Act of 1982.

In addition, provide the payer with the name of a contact who is knowledgeable about the specific nature of the issued bill.

Fill in the "Amount Due This Bill."

Provide all pertinent information necessary to properly classify the funds. This includes cost center, subactivity, project, and fiscal year to which the billing is applied. Upon remittance, the Service Finance Center will apply the collection to the billing document number. The originating organization will be responsible for sending any confirmation of receipt of payment to the payer. The Finance Center must be notified any time the amount of the bill is going to be modified (upward or downward), and also "cc" the Finance Center with any correspondence regarding the billing. This documentation is required in the files if the bill has to be referred elsewhere.

Less Than Full Payment

If at any time it appears that less than full payment may be negotiated, the Regional Solicitor (Solicitor) will be involved. A complete case file should be submitted to the Regional Office with a memo recommending the case be forwarded to the Solicitor. The Solicitor acts upon recommendations by the Refuge and Regional Offices regarding compromised settlements. The receiving office will apply monies received to the bill using established collection procedures. At the same time, the difference between the original bill amount and compromise amount will be written off as uncollectible.

Litigation

Each case should be handled as if it will ultimately end up in litigation. Careful attention should be paid to following proper investigation and reporting techniques. Since wildfire cases are relatively new to the judicial community, it may be necessary to spend some time familiarizing the attorneys with char patterns and burn indicators, as well as general fire terminology. It is well worth the effort to establish a rapport with these individuals.

Once the case is received and put into the judicial system, the attorneys will be in control of the case. However, they will still work closely with Service personnel when additional information or recommendations are needed.

Case Follow-up and Closeout

Not every case will come to a hasty conclusion. There are statutes of limitations from the fire date to when action must be taken to identify the responsible party and prosecute or pursue collection. Cases should be considered active until termination for cause or the statute of limitations has expired.

Closeout of a case should include notification of the Regional Office, the appropriate Refuge Manager, and any outside agencies involved. It should include letters to key witnesses and notification to the news media.
Criminal Case Procedures

If the facts and evidence in the investigation indicate possible criminal intent, a law enforcement officer should be contacted to determine if sufficient probable cause exists to seek prosecution. Upon determination of probable cause, criminal prosecution may be initiated.

Misdemeanors
Misdemeanors of a less serious nature may be handled administratively by oral and/or written warnings. This is normally done when there is a technical violation of the law (misdemeanor), but under the circumstances, the violation appears to have occurred inadvertently or through ignorance of the law. Remember that the law requires us to prove willful neglect under Section 303 of the Federal Land Policy and Management Act. Either a Service resource or law enforcement personnel can issue a warning.

- More serious misdemeanor violations are to be treated by the violation notice that calls for mandatory appearance before a U.S. Magistrate or by forfeiture of collateral in accordance with a bail schedule. Only delegated Law Enforcement Officers are authorized to issue violation notices.
- The option of filing a criminal complaint with the U.S. Attorney's office instead of a violation notice is an option of the Law Enforcement Officer, depending on circumstances and gravity of the violation.
- As in all law enforcement actions, appropriate line officials should be kept informed of the law enforcement actions taken.
- After appropriate administrative measures have been completed, the case should be closed with the closeout disposition form.

Examples of fire investigation processes and documents are located on the Service Fire Management SharePoint site.

Felonies
In most cases, a felony committed in the presence of a Law Enforcement Officer should be dealt with by making an arrest. Some circumstances might merit serving an arrest warrant when more assistance is available, e.g., other refuge officers, special agents, local law enforcement, etc.

- Where an actual physical arrest was not made, a criminal complaint becomes the necessary document to bring the violator into custody.
- An affidavit clearly spelling out the crime and the probable cause to arrest is then reviewed by a judge.
- When an arrest is made with or without an arrest warrant, a thorough search of the suspect is to be performed to ensure the safety of the officer, the suspect, and other persons.
- Only delegated Law Enforcement Officers are authorized to make arrests.
**Channel for Prosecution**

U.S. Attorneys prosecute all Federal laws, but will many times allow District Attorneys at the county level to handle particular cases. Many times, District Attorneys will prosecute cases when there is a corresponding State statute.

- A clear policy and understanding should be obtained from the U.S. Attorney's office and individual District Attorneys to ensure appropriate procedures
- Law Enforcement Officers will coordinate criminal cases with appropriate prosecutors.
- The Service policy regarding news releases relative to criminal investigations or charges should be coordinated between Service Public Affairs personnel and the Office of the U.S. Attorney with regard to Federal cases, and the local prosecutor for State law violations. Normally, a press release is proper only after charges have been filed with the court and/or the defendant has made an initial appearance before the court system. These guidelines can vary, and should be formulated according to local rules.

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**Trespass Glossary of Terms**

**Civil case**
A civil case involves a trespass or civil wrong against a person or corporation. A civil case can be proven upon a preponderance of evidence, whereas a crime must be "proven beyond a reasonable doubt."

**Civil offense**
Any negligent act that causes damage to resources or properties of the United States.

**Chain of custody**
The steps an officer takes to ensure evidence is not "tainted" constitute the chain of custody. All persons handling the evidence must be able to show the evidence was not tampered with, and was in a secure location at all times prior to being introduced into court action.

**Criminal case**
A criminal case involves a felony or a misdemeanor crime. A crime is a positive or negative act in violation of treaties, statutes, and regulations pursuant to statutes. A criminal case must prove the elements of the crime charged.

**Criminal complaint**
There are two types of criminal complaints - misdemeanor and felony. The complaint charges a person or persons with a particular crime. It involves the use of witnesses and confidential informants, evidentiary material, and shows "probable cause." Probable cause is needed in the complaint to show the legal reasons why a person is charged with a crime.
Criminal offense
Any unlawful ignition act intended to damage the United States or its properties, or persons using public lands.

Evidence
Evidence has been defined as all the means by which any alleged matter of fact is established or disproved. It includes testimony, records, documents, objects, etc., that can be legally presented at a trial for the purpose of inducing a belief in the minds of the court and jury as to the truth of the issue involved.

Federal prosecution
After a citation, criminal complaint, or arrest is made by an officer, the case is written up as an official criminal report for review by an Assistant U.S. Attorney. When the case warrants court action, the Assistant U.S. Attorney introduces the complaint to the court. The defendant is then brought before the court for his initial appearance. At that time, the judge will set a court date involving a court trial or trial by jury, or set sentencing if the defendant pleads guilty.

Felony
Any offense punishable by death or imprisonment for a term exceeding 1 year is a felony. An example of a felony would be 18 U.S.C. 1855, Wildlands Arson. This felony is punishable by a fine of $5,000 or imprisonment of not more than 5 years, or both.

Fire investigation
The process of determining the ignition source, materials first ignited, ignition factors, and party responsible for a fire.

Fire origin
The primary purpose of a fire investigation is to determine what caused the fire, and whether it was started by a natural ignition source (lightning) or person-caused. In most fires, the first step is to determine where the fire originated. Determining the origin narrows the search for and frequently pinpoints what caused the fire.

Fire trespass
The occurrence of unauthorized fire upon agency-protected lands where the source of ignition is tied to some type of human activity.

Fire suppression
All work and activities connected with control and fire-extinguishing operations, beginning with discovery and continuing until the fire is completely extinguished.

Incident Commander (ICT1, ICT2, ICT3, ICT4, or ICT5)
The IC is responsible for overall management of the incident and providing reports to the Agency Administrator with incident jurisdiction. These positions may have one or more deputies.
Initial Attack Forces
The first people assigned to a wildfire incident.

Initial Attack Incident Commander (IAIC)
The Incident Commander at the time the first attack forces commence suppression work on a fire.

Law Enforcement Officer
The Service has two types of Law Enforcement Officers.

- **Special Agent** - A criminal investigator of the Service who is qualified, trained, and delegated authority by the Director to enforce applicable laws and regulations by conducting criminal investigations.

- **Zone/Refuge Officers** - An employee of the Service, who is qualified, trained, uniformed, and who is delegated authority by the Director to enforce applicable laws and regulations for the protection of resources.

Litigation
Any time a case has been referred to a Solicitor or prosecuting attorney for consideration, it is said to be in litigation until conclusion of the case.

Misdemeanor
An offense less than a felony. A misdemeanor involves a monetary fine and/or imprisonment not exceeding 1 year. An example would be 18 U.S.C. 1856, Fires Left Un-attended and Un-extinguished. This misdemeanor is punishable by a fine not to exceed $500.00 and/or imprisonment of not more than 6 months.

Negligent act
Any unplanned act which lacks sufficient caution to prevent unwilling damage to properties of the United States.

State prosecution
Crimes are prosecuted in a similar manner at the State level as at the Federal level.

Witness
Witnesses are persons who, through their senses, have knowledge of an act. Witnesses have information that can be used in legal proceedings. The courts may require that witnesses testify to first-hand information.

Trespass References
Exhibit 10-3: Initial Report of Unauthorized Use

<table>
<thead>
<tr>
<th>INITIAL REPORT OF UNAUTHORIZED USE</th>
<th>Number</th>
<th>Region</th>
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<tbody>
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</table>

1. Name of person reporting violation*
   Address (include zip code)

2. Occupation and title

3. Date
   a) Reported (month, day, year)
   b) Discovered (month, day, year)

4. Type of unauthorized use
   FIRE

5. LOCATION
   Section  Township  Range  Subdivision
   Meridian  County  State

6. How was the unauthorized use discovered?

7. What does unauthorized use appear to be? (Check One)
   □ Criminal
   □ Civil in nature

8. What is the recommendation? (Check one)
   □ Report immediately to FWS Special Agent
   □ Investigate further

Name of reporting Officer  Title

Comments and Recommendations
(Include name and address of suspected unauthorized user, if known)

(Signature of Reporting Officer)

*Informant=s name may be held confidential at their request