Chapter 10
Preparedness

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

Preparedness Plan
The preparedness plan is a comprehensive compilation of essential fire management information. Copies of the plan must be available in the refuge's fire management and/or dispatch offices. For additional guidance refer to the Redbook.

Preparedness Level/Step-up Plans
The Step-Up Plan (Exhibit 1) should include:

- Accurate break-points between preparedness (staffing) levels
- Description of actions to be taken at each preparedness (staffing) levels
- Users should choose the particular NFDRS index that works best for their area

Exhibit 1

STAFFING CLASS	DESCRIPTION	STEP-UP ACTION/CONSIDERATION
1	No large fire activity on wildland fire agency's jurisdictional lands. Most Districts or units have low to moderate adjective class ratings. Little or no commitment of resources locally or nationally. Preseason preparedness duties being accomplished. Other characteristics of this preparedness level may include the following: **ERC** - less than 24th percentile	A. Review and update all operating plans and cooperative agreements. B. Fire Management Plans are updated C. Prepare Preseason BPA=s, Equipment Rental Agreements D. Weather Stations activated before fire season starts so they can adjust properly

	1000 hr fuels - greater than 20% **Resources committed** - 10% or less **KBDI** - 0 to 300 **Burning Index-** BI trend is less than the 30th percentile **US Drought Monitor –** normal, some pockets of abnormally dry area exist. Conditions are normal with some short term dryness, slowing plant growth, some lingering water deficits	E. Red cards completed and Work Capacity Tests administered F. Preparedness review meetings with other agencies as needed G. Analyze Fire Severity, resources committed and validate preparedness levels. H. Prescribed fire operations monitored

2	Class A and B fires occurring on jurisdictional lands and /or adjacent lands and a potential for escapes to larger (project) fires. One or more Districts or Units experiencing moderate to high adjective rating class. Resources within District or Zone are handling the situation with help from cooperators. Other Characteristics of this preparedness level may include the following: **ERC** - 25th to 50th percentile **1000 hr fuels** - 16% to 20% **Resources committed** - 11% to 25% **KBDI** - 301 to 399 **Burning Index-** BI trend is at or near the 35-55th percentile **US Drought Monitor – A**bnormally dry and moderate drought building into some areas. Some damage to crops and rangelands, streams reservoirs or well low, some water shortages developing	A. Analyze Fire Severity, fire resources ready and in place during fire season C. Check for action needed for prevention, detection, pre-suppression and suppression on districts D. Prescribed burning operations reviewed at the start of each day before there are any new ignitions

3	Two or more incidents (Class B, C or larger) on jurisdictional lands or adjacent lands requiring a major commitment of resources or major special event with significant increase in human caused risk and resultant drain on resources. Likelihood of additional resources being requested and mobilized through GACC. The weighted adjective rating class across the Zone is high to very high. Other characteristics of this preparedness level may include the following: **ERC** - 51st to 80th percentile **1000 hr fuels** - 13% to 16% **Resources committed** - 50% to 75% **KBDI** - 400 to 449 **Burning Index-** BI trend is at or near the 60-80th percentile **US Drought Monitor –** Severe and moderate drought dominates much of the area. Crop and rangeland losses likely water shortages common water restrictions imposed	A. All prescribed burning operations suspended B. Evaluate need for fire restrictions on jurisdictional lands C. Consider requesting other resources for pre-positioning F. Consider utilizing detection flights as needed G. Review Fire Severity Plan for implementation H. If a high visitation period has been determined to pose exceptional human caused risk of wildland fire, move to SC-4 (e.g. historic records of a specific three-day holiday weekend, opening days of hunting seasons on adjacent lands producing additional human caused fires). I. If live and/or dead fuel moistures are sufficiently low (e.g. live fuel moisture in sagebrush of 90%, 100 HR TL FM 7%, 1000 HR TL FM 9%) to allow rapid fire spread or high fire intensity in the presence of wind, step-up may be moved to SC-4. This section is included because wind velocities often increase in late afternoon after NFDRS indices have been obtained for the day.

4	Potential for numerous incidents exist and/or numerous other incidents being reported or are in progress, depleting local resources. Adjective rating class is high to extreme on jurisdictional lands. Most of the local reinforcement resources are committed to local, regional, and national responses. No relief in fire severity or fire weather conditions predicted near term. Other characteristics of this preparedness level may include the following: **ERC** - 81st to 95th percentile **1000 hr fuels** - 8% to 12% **Resources committed** - greater than 75% **KBDI** - 450 to 499 **Burning Index-** BI trend is at or near the 85-90th percentile **US Drought Monitor –** Extreme drought exists across a large area. Widespread crop and rangeland losses continue to occur. Widespread water shortages or restrictions are in place.	A. ALL PRESCRIBED BURNING OPERATIONS must be actively moved to "OUT" status declarations B. Consider more wide-spread fire restrictions C. All fire equipment will be kept in a fire ready condition and positioned appropriately. No fire equipment will be used for project work. D. If the LAL is between 3 and 6, a fixed wing detection over-flight may be requested from an adjacent cooperator. If cooperating aircraft are not available, a fixed wing aircraft may be hired for a detection flight. Cooperators and the RFMC will be advised of these situations daily. E. The normal tour of duty for fire lookouts will ordinarily be staggered, with one lookout staffed from 0800 to 1630 and the other staffed from 0930 to 1800. Tours of duty will be extended through the burning period and/or during distinct evening and nighttime periods when the observed LAL is 3 or greater or when observations suggest the likelihood of LAL between 3 and 6. If these LAL levels occur during the night, the lookouts should begin detection efforts by 0800 the next morning.

5	Interagency and cooperator resources are committed to multiple incidents and/or major incidents and initial attack on jurisdictional lands or committed to regional / national suppression efforts. Adjective rating class is very high to extreme. Other characteristics of this preparedness level may include the following: **ERC** - greater than 95th percentile **1000 hr fuels** - less than 8% **Resources committed** - most assigned to incidents, initial attack capability severely limited **KBDI** - greater than 500 **Burning Index** - BI trends is at or near the 95th percentile **US Drought Monitor –** Extreme to Exceptional drought exists across large areas. Exceptional and Widespread crop and rangeland losses continue to occur. Shortages of water creating a water emergency.	A. All available resources assigned to incidents or ready and in contact for immediate initial attack response B. Active enforcement of fire orders in effect C. Tours of duty for fire lookouts will be extended through the burning period and/or during distinct evening and nighttime periods when the observed or predicted LAL is 3 or greater. D. Workweeks and/or daily tours of duty for regular initial attack/monitoring personnel and key permanent personnel may be expanded, particularly when predicted or observed LAL is between 3 and 6 and/or human caused risk is exceptionally high (MR=80). E. In these situations, the initial attack/monitoring team will, if possible, consist of a minimum of three qualified people, and will be held on duty through the burning period. F. The main standby initial attack/monitoring team in any SC-5 incident should be in the area where risk is considered highest. Initial attack/monitoring teams may be held on standby in other areas if conditions warrant. G. Temporary closures may be imposed on areas in the refuge or for certain activities (e.g. open fires) in conjunction with similar impositions by adjacent land managing agencies.

Fire Severity Funding

Fire Severity Funding is the authorized use of suppression operations funds (normally used exclusively for suppression operations, and distinct form preparedness funds) for extraordinary preparedness activities that are required. For additional guidance refer to the general requirements in the Fire Business Reference Guide and the Interagency Standards for Fire and Aviation Operations (Red Book).

- Severity requests may cover a maximum of 30 days. Supplemental requests may be submitted if severity conditions persist. Unless supplemental requests are approved, any unused severity authorization will expire after 30 days.
- Severity justifications must identify collaboration and coordination with interagency partners and the general severity conditions within the geographic area.
- Regional Directors may approve short-term severity requests for FWS individual field stations. The annual total authorized is not to exceed $300,000 per region.

Fire Severity Funding Levels	Fire Severity Authorization	Additional Resources (as specified in preparedness plans)
Regional Level Short-Term Events (severity conditions and expected SC4 or 5 for less than one week)	Regional level severity funding PER1, PER2, etc. (unless a national level severity funding request has to be prepared for other resources)	Approved by Regional Office
National Level Long-Term Events (severity conditions and predicted SC 4 or 5 for more than one week)	National level severity funding is provided for a 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.	Approved by National Office

Normal Unit Strength (NUS) - Refuges that have a Fire Management Plan 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 Normal Unit Strength (NUS). It is the responsibility of the refuge 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 assignments. 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 GSA supply channel. 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 GSA Wildfire Protection Equipment and Supplies catalog. GSA 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. In most areas of the country, your order for supplies and/or equipment will not come directly from NIFC, but from the nearest fire cache operated by another Federal agency. Crews and overhead are brought in using the closest forces concept. Resource Order Forms are available that simplify tracking orders from initiation to receipt. These forms are color coded for overhead, crews, supplies and equipment. Fire Management Officers or Regional Fire Management Coordinators can assist in preparing requests.

Item	NUS Formula
Rations, Shelters, Hard Hats, Head Lamps, Goggles, Packs, Line Gear, First Aid Kits, Sleeping Bags, Water Bottles	1 per red-carded individual plus 20%
Tents	1 per red-carded individual
Aramid Pants, Aramid Shirts, Gloves	2 per red-carded individual plus 20% for each size issued
Shovels, Pulaskis, McLeods, Flaps, Fire Rakes (Hand Tools)	2 per red-carded individual plus 10% for each type of tool. Mix of tools is determined by station based on local needs.
Flight Helmets	6 per helicopter contract plus 2 spares. Stations w/o contract aircraft that frequently use helicopters for fire activities should obtain 4.
Back Pack Pumps	1 per 2 red-carded individuals
Chain Saws, Portable Pumps, Fold-A-Tank	As approved by the RFMC depending on firefighting tactics.
Foam	15 gallons per engine
Hose - Portable Pump used for hose lays or any size engine	1.5 inch -900 feet 1 inch - 900 feet
Nozzles (1" and 1.5" - total)	2 - Portable Pump 4 - Light Engine 5 - Medium or Heavy Engine Plus 20% for total number of nozzles on engines, water and foam combined

Wyes, Tees, Wrenches, Relief Valves, Hose Clamps, etc.	2 - Portable Pump 2 - Light Engine 3 - Medium Engine 4 - Heavy Engine Plus 10% for each item listed as required in the inventory
Adapters and Reducers (Based on local and anticipated needs)	2 - Portable Pump 2 - Light Engine 4 - Medium Engine 5 - Heavy Engine Plus 10% for each item listed as required in the inventory.

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 National Fire Danger Rating System (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. WIMS and NIFMID run on the IBM mainframe computer at the USDA National Information Technology Center in Kansas City, and are available on a twenty-four hour basis. 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 user specific and requires a user identification and password. A WIMS user guide is located at http://www.nwcg.gov/nwcg_admin/resources.htm. For questions concerning WIMS access please call the WIMS help desk at NIFC (208) 387-5290.

- **Remote Automated Weather Stations (RAWS)**
There are nearly 2,200 interagency Remote Automated Weather Stations (RAWS) strategically located throughout the United States – mostly in the Western states. Weather data assists land management agencies with a variety of projects – monitoring air quality, rating fire danger, and providing information for research applications. More information on RAWS is located on the Internet at http://www.fs.fed.us/raws.

Most of the stations owned by the wildland fire agencies are placed in locations where they can monitor fire danger. RAWS units collect, store, and forward data to a computer system at the National Interagency Fire Center (NIFC) in Boise, Idaho via the Geo-stationary Operational Environmental Satellite (GOES). The data is automatically forwarded to several other computer systems including the Weather Information Management System (WIMS) and the Western Regional Climate Center in Reno, Nevada.

Fire managers use the data to predict fire behavior and monitor fuels; resource managers also use the data to monitor environmental conditions. Locations of RAWS stations can be searched online courtesy of the Western Regional Climate Center at http://www.wrcc.dri.edu.

- **The Fire Effects Information System (FEIS)**

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.fs.fed.us/database/feis/.

- **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 National Fire Danger Rating System (NFDRS). NFDRS computations are based on once-daily, mid-afternoon observations (2 p.m. LST) 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 days 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/.

- **Lightning Detection System (LDS)**

Fish and Wildlife Service (FWS), National Interagency Fire Center (NIFC) has an Annual licensing contract with the Bureau of Land Management (BLM) for a pre-determined amount of Lightning User licenses. The User Licenses enables identified FWS Users access to the Bureau of Land Management (BLM) Lightning Detection System. FWS User licenses are updated each time this annual contract becomes due. Identified FWS users can access the site via internet at http://www.nifc.blm.gov A Username and Password is required to access the system. Near real time lightning data can be acquired once logged onto BLM Lightning. Users can generate custom maps for their specific purpose.

Wildland Fire Prevention/Mitigation

Information on risk assessments and planning can be found at:

- http://www.nwcg.gov/pms/pubs/
- PMS 457 Recreation Area Fire Prevention (1999)
- PMS 458 Fire Communication and Education (1999)
- PMS 459 Fire Education Exhibits and Displays (1999)
- http://www.nifc.blm.gov/nsdu/fire_planning/rams/
- Risk Assessment and Mitigation Strategies

- **Prevention Goals**
  - Reduce the likelihood of both human-caused and unwanted naturally-ignited wildland fire 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 wildland fire 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.
  - Minimize damage from unwanted wildland fire occurrence.
  - Incorporate prevention programs into our fire management outreach programs.
- **Prevention Priorities**
  - Our highest priority in the prevention program is to prevent catastrophic fires and human-caused wildland fires. All levels from the field through the Washington Office Directorate will exhibit action committing to an effective prevention program.
  - Our prevention program is designed to minimize losses from wildfire while considering resource management objectives.
  - 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.
  - The inadvertent or intentional ignition of wildland fuels by humans is illegal. We will investigate all human-caused wildland fires at the earliest possible time. The investigation may range from a documented determination of cause by the initial attack fire crew to criminal investigation by a qualified arson investigator.
- **Prevention Analysis**
  - 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.

- The National Wildfire Coordinating Group's (NWCG) Wildfire Prevention Handbook, Chapter 10, NFES 1818, PMS 450-1 references components your prevention analysis should contain.

- **Prevention Plan**
  - 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.
  - **Plan Components.** The NWCG Wildfire Prevention Handbook, Chapter 20, NFES Publication 1818, and the Handbook give references for the components you should include in the prevention plan.
  - **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.
  - **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.
  - **Engineering.** NWCG's Wildfire Prevention Handbook, Chapter 50, NFES 1818, PMS 450-1 contains technical information on engineering such as power lines, rights-of-way, and industrial activities.
- **Prevention Plan Implementation.**
  - **Visitor Use Regulation.** Practice prevention enforcement at the level necessary to gain compliance with fire laws and regulations.
  - **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.
  - **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.**
  - 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.**
  - All personnel are responsible for wildfire prevention. Appropriate employees should complete Introduction to Wildfire Prevention (PMS P101) to ensure a basic understanding of wildfire prevention. This basic course is available for purchase through the Publication Management System.
  - Our field offices should work with their local cooperators to develop effective prevention training programs for the mutual benefit of both.

Wildland Fire Cause Determination & Fire Trespass

Wildland fire trespass refers to the occurrence of unwanted and unplanned wildland fire on Fish and Wildlife Service (Service) lands where the source of ignition is tied to some type of human activity. Fire trespass is a legal/law enforcement activity and the appropriate Service and local law enforcement authorities should be contacted and standard criminal and/or civil investigative procedures and reports used.

The initial determination of the ignition as being human-caused usually results from an eyewitness report or with the arrival of the Initial Attack Incident Commander at the fire scene. Service policy requires any fire to be investigated to determine cause, origin, and responsibility. For all human-caused wildfires where responsibility can be determined, trespass actions are to be taken to recover the cost of suppression activities, land rehabilitation, and damages to the resources and improvements.

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 wildland fire 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.

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 org code-9242-original fire incident project code** and forwarded 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 FFS, 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 FWS 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 wildland fire 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 (9262), restoration of developments damaged by a fire could not be accomplished.

Please refer to the Fire Business Reference Guide for additional administrative instructions and guidance at:
https://fii.fws.gov/ then under the "Administration" tab. Click on the link for the Guide listed under Administrative Resources.

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 (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 wildland fire 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 wildland fire 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).

The costs incurred during suppression operations must be recovered in full if there is the ability to pay. There is no room for negotiation on these costs. 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 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. The investigator must arrive on the fire scene and complete the investigation as soon as possible, since evidence is easily destroyed. The information in this chapter will assist all personnel in completing this important, but tedious and time consuming job.

Cause Determination - Initial Attack
Things To Do En Route To The Fire
YOU MUST START YOUR FIELD NOTES AT THE TIME YOU RECEIVE THE FIRE REPORT. Your notes from the time the initial report of fire is received until you arrive at the fire should include the following information: Reference NFES 1874 – Wildfire Origin & Cause Determination Handbook 1 (Revised 2005)

- **Identification of yourself**. Put your name, unit, and a title on your notes.
- **Time and date**. Record the time and date you received the initial report of the fire.
- **Person reporting fire**. Record the complete identification of the person reporting the fire. This person may be the only witness your fire investigator will be able to interview. Be sure to get their address and telephone number, if possible.

- **People and/or vehicles**. Record complete descriptions (including license numbers), locations, and time of any people or vehicles observed coming from the direction of the fire.
- **Gates and/or tracks**. Record any gates that are broken, open, or locked. If on dirt roads or trails, watch carefully for vehicle tracks or footprints. Drive or walk in such a manner as to avoid disturbing these tracks. Notify the fire fighters following you of their presence and the need for protection.
- **Smoke column**. While en route, observe the appearance of the smoke column and make an estimate of wind direction and approximate speed. Estimate the size of the fire and record the time and observations in your notebook.
- **Weather items.** Record weather conditions, temperature, type of clouds, rain, etc.
- **Other items**. Things that are missing may be as important as things that are obvious. Make a note of both. If a camera is available, take pictures.

Lightning-caused fires
Lightning detection information, weather forecasts, and reports from the public can be used to determine whether there is a high probability of a lightning-caused fire. No further action is required if the fire is determined to be lightning caused.

Person-caused fires
Treat each fire investigation as if it is a criminal case. When you get to the fire, your first responsibility is to prevent further spread of the fire. At the same time, you should be able to do the following: MAKE NOTES OF YOUR ACTIONS.

- Estimate fire size. Record your estimate and the time of your estimate. Note direction and rate of spread, type of fuel, slope, wind direction and speed, and other weather conditions. Determine legal location of fire and verify with dispatch.
- Locate and protect general origin area of fire. If you are able to locate the fire's general area of origin as soon as you arrive, immediately flag the area. Evaluate the size of the fire and other factors in "A" above. Post a guard if possible, and flag the area surrounding the general origin. Keep suppression efforts in this area to a minimum. Ensure fire fighters do not put materials such as cigarette butts into this flagged area. If the fire is so large that the origin area is not easy to find, flag off or restrict access to a large area which you suspect contains the fire's immediate origin point. At this time, it is most important to protect the entire area from further disturbance.
- Search for and protect evidence. After protecting the origin area, look for such things as vehicle tracks, footprints, ignition devices, discarded Polaroid backings, paper bags, beer cans, or any other objects. DO NOT DISTURB THESE OBJECTS. Use flagging to mark anything you find. Tracks on roads can be protected by parking a vehicle over them. Footprints or tracks on trails should be protected by routing traffic to one side of the trail. If there is no way to avoid disturbing evidence, photograph if possible. Handle all evidence carefully and put it in a safe place. If the fire is determined to be person-caused but accidental, proceed with a normal civil course of action. If the fire is determined to be a person-caused suspected felony violation, involve a Service Law Enforcement Officer or Special Agent. At this point they will assume general case responsibility.

- Identify witnesses. Interviewing witnesses at the scene is a very important part of a fire investigation but, because of varied State and Federal laws, possible suspects should be interviewed only by a trained investigator. You can help by recording the following information in your field notes:
  - Names, addresses, phone numbers, and descriptions of persons at the scene.
  - Make, license number, and description of vehicles at the scene; notes of any remarks made by persons at the scene that are in any way related to the fire.

- Other persons. Persons at the scene when you arrive or who arrive during the progress of a fire will often give written statements voluntarily, but would be reluctant to do so at a later date. Do not hesitate to capitalize on this situation. This should not be confused with interviewing a possible suspect. You are merely asking these persons to record any observations or other knowledge they are willing to give in their own handwriting. Whether this statement is ever introduced in a court of law is not as important as having an immediate and accurate record of all stated observations and knowledge. Do not share facts concerning the fire with anyone other than the Law Enforcement Officer, Fire Investigator, or the Fire Management Officer (FMO) who has responsibility for the Fire Management Program. The following guidelines can be used when obtaining voluntary statements:
  - Have the person write the facts in detail.
  - If possible, provide the person with some degree of privacy so this can be accomplished without interruption.
  - Have the person number, date, and sign each page and include their address and phone number.
  - The person obtaining a voluntary statement should witness the statement by signing, dating, and recording time of statement.

- **Initial Attack Incident Commander (IAIC).** The IAIC is responsible for protecting the fire scene origin and, if possible, starting the preliminary fire investigation or notifying the Fire Investigator.

- **Service employees (Resource Specialist, fire crew).** Service employees are responsible for protecting the fire scene origin and notifying their supervisor of any observation made relating to the fire. The fire investigation job cannot be accomplished by the Fire Investigator alone. The assistance of all Service employees is required.

Wildland Fire Investigator Responsibilities
Service or local (State, county, etc.). Different violations have different burdens of proof and elements to be proven. It is also recommended to look for signs of wildlife mortality and destroyed nests.

Duties and responsibilities.
It is the responsibility of the Fire Investigator to determine and/or verify the point of origin and determine the cause of ignition. It is the duty of the Fire Investigator to attempt to locate individuals responsible for ignition of the fire. The Fire Investigator will be adequately prepared to process a case from the beginning to its conclusion.

Training and qualifications
The Fire Investigator should have successfully completed an intermediate fire cause determination class. Normally, these classes are 40 to 80 hours in duration and cover char patterns and ignition sources, interviewing and case report preparation, and courtroom procedures and presentation.

Evidence
Evidence has been defined as all the means by which any alleged matter of facts 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.

- **Collection of evidence.** Evidence should be collected by a Fire Investigator whenever possible. Photograph and sketch the fire scene before collecting evidence

- **Preservation of evidence.** Utmost care must be taken in the preservation of evidence. Use clean, sealable metal containers. Avoid the use of plastic containers when accelerants are suspected. Keep damage to a minimum and protect the integrity of the evidence, i.e., fingerprints, etc.

- **Recording of evidence.**
  - Physical evidence: Photograph and inventory physical evidence.
  - Witnesses' statements: Record in the case report exhibits, as appropriate.

- **Chain of custody.** To further ensure the integrity of evidence and its "admissibility" in court, make sure all evidence shows a "track of security" and has not been tainted in any manner. Appropriate chain of custody receipts and storage in a secure, locked area ensure the chain of custody. The back of the FWS Evidence Seizure Tag (FWS Form 3-487) is a good place to track chain of custody.

- **Disposition of evidence**. Upon a finding by the court of the suspect's guilt or innocence, the court will direct the disposition of evidence. Be sure to obtain a written document as to the court's disposition directions and a receipt for the action completed. In out-of-court settlements, the disposition of evidence should be included in the settlement agreement. If not addressed in the written agreement, the property will be disposed of in accordance with Service Property Disposal Procedures.

Wildland Fire Investigation Case Reports
At this point, an Initial Report of Unauthorized Use (Exhibit 2: Wildland Fire Investigation Illustration and Exhibit 3: Sample Case Report) has been completed and submitted to the Project Leader. The recommendation is to proceed with further investigation. The only question at this point is whether this will be a civil or criminal investigation. Law Enforcement will be consulted to determine in which direction to proceed. The Initial Report of Unauthorized Use will become a part of the investigative report.

A trespass case number will be assigned from the Document Control Register (LEMAS) or Law Enforcement Incident Log maintained at each Refuge office. 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

- **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 spoke with and when, what was said, and what was observed. It is an account of all matters developed in the investigation. Even minor things can prove extremely important at a later date. Give authentic information regarding 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 which will 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 related reports and forms relevant to the case such as burning permits, Notice of Violation, record of fire conditions, operating permits, slash status, weather records, dispatch and radio logs.

- **Processing**. Once evidence has been processed and suppression costs determined, the case report should be put in final form. 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 begun. A copy of the fire investigative report should be included in the fire package.

Criminal

- **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 fire rehabilitation plus any value of resources burned, less any salvage value.

Emergency Fire Stabilization Costs
These are charged to emergency stabilization funds and must be tied to a specific fire number (i.e., five-digit organization code-9142-fire number). Emergency stabilization is planned actions taken during and after a wildland fire 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.

Rehabilitation Costs
This is the non-emergency replacement of facilities and resources damaged by wildland fire or the re-establishment of ecosystem structure and functions. Rehabilitation is tied to a specific fire number (1.e., fire digit organization code 9262_fire number).

Suppression Related Rehabilitation Costs
These are charged to suppression operations (subactivity 9141) for rehabilitating on-site and off-site damage to resources caused by fire fighting 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 structures which have dried up or in some other way have been 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), Aviation Management Directorate (AMD), National Interagency Fire Center (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 (subactivity 9141).

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 will be added to the Service's direct amount being billed. 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. Correct costing 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. Use of a form such as the Firefighting Cost Report is suggested (Exhibit 4: Sample Firefighting Cost Report).

Civil Case Procedures and Billing

Fire Trespass and Case File
All information regarding the fire case should be included in the case file. Included in the case file are 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 documentation for court litigations can be tremendous and in many cases, originals of everything are required, i.e., T&As, invoices, etc. Once the fire investigation case report has been completed and the case folder is in order, there are several options to be considered in recovering 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 (revised August 1973) (Exhibit 6: Sample Bill For Collection). This action does not eliminate the use of the judicial systems, if necessary. It is important, however, 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 (Exhibit 5: Sample Billing 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 6: Sample Bill For Collection). All Bills for Collection must be sent by certified mail, return receipt requested.

The Bill for Collection form, DI-1040 (Exhibit 6: Sample Bill For Collection), 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:

- 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
- The "Remit To" portion 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	Lake Wood, CO 82035
	Phone (303) 984-6800

- 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 FFS. 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.
- "Payer" is the name and address of the individual or company billed.
- 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. The current rate for Calendar Year 97 is 5 percent. The current administrative charge, determined periodically as the Service's cost of follow-up notices, is $8. 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 organization, 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 wildland fire 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.

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.

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
Any unauthorized ignition of fire upon lands of the United States under the jurisdiction of the Service.

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)
These ICS positions are responsible for overall management of the incident and reports to the Agency Administrator for the agency having incident jurisdiction. These positions may have one of more deputies assigned from the agency or from an assisting agency (s).

Initial attack forces
The first people assigned to a wildland fire 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

NFES 1874 – Wildfire Origin & Cause Determination Handbook 1 (Revised 2005)

Exhibit 2: Wildfire Investigation Illustration

INITIAL REPORT OF UNAUTHORIZED USE	Number
	Region
	Refuge
	Date

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	

Exhibit 3: Sample Case Report

CONFIDENTIAL
WILDFIRE INVESTIGATIVE CASE REPORT

Fire Name & Number:	Banner Fire #096
Refuge:	Chincoteaque
Fire Date:	June 23, 1997
Report Prepared By:	John Rones
Position Title:	Forest Technician
Period of Investigation:	June 24 - August 23, 1997[1]
Date of Report:	August 26, 1997

SYNOPSIS

Investigation reveals that the above fire was caused by sparks from an HD 14 Allis-Chalmers loader being used by Don Banner Logging Company on the day the fire started. This loader was not equipped with a spark arrester or any device to prevent the escape of sparks as required by Oregon Forest Law, Chapter 477.645, and OAR 629-43-015. There is also evidence that on the morning of the fire there was a small fire at the landing in the vicinity of the origin of the later fire which was not properly extinguished, and either caused the main fire or contributed to its ignition and spread.

On June 23, 1997, the Don Banner Logging Company was conducting logging operations in Section 2, Township 33 South, Range 8 West, near the town of Mono in Josephine County. Sometime during the morning a fire started near the diesel loader, which was being used to load logs on Banner's trucks to take to his mill in Mono. These logs had been cut during the previous year, and there was much dry slash on the ground. During the week preceding this operation the temperature had been high, with low afternoon humidity and easterly winds. These conditions prevailed on June 23.

During the morning of the operation on the 23rd, there had been a small fire on the north slope of the landing near the loader. Harper, the loader operator, claims to have put this fire out. Banner claims to have sent a man to the landing from Mono to have the operation shut down because of low humidity around 11 a.m.; however, Herman Franks, Banner's foreman at the landing, had the loader operate until 12:45 p.m. to finish loading. The fire was reported at 2:11 p.m. The State Forestry Department arrived at 2:30 p.m. and observed the fire burning on the north slope of the landing behind the loader.

Investigation of the origin area revealed the fire had started in or near a clump of matted, dried grass about 25 feet from and in line with the tailpipe of the loader. The undersigned is of the opinion that the fire was caused by sparks from the loader, which was not equipped with a spark arrester.

This is further borne out by the observation of persons who were at the scene at the time and said they first observed the fire behind the loader on the north slope. It was apparently commonly known that the loader could start a fire and that it shot out sparks "like a Roman candle." The sparks from this loader either directly caused the fire to break out, or the fire earlier that morning had not been properly extinguished and smoldered, causing the fire.

A Notice of Violation and Notice to Appear were issued to Banner, and a complaint charging Banner with violation of ORS 477.645 has been filed in Josephine County District Court. Hearing has been set for September 15, 1976.

Persons Named in the Report

John J. Rones
Oregon State Department of Forestry
1825 West Elm Street
Roseburg, Oregon 97842
Telephone (503) 627-4831
Unit Forester

William Able
Mono Guard Station
927 Fury Lane
Mono, Oregon 97247
Telephone (503) 726-1384
Forest Officer

Fred Cook
Robert Day
Mono Guard Station
927 Fury Lane
Mono, Oregon 97247
Telephone (503) 726-1384
Fire Fighters

Don Banner
231 West High Street
Mono, Oregon 97842
Telephone (503) 627-4832
Owner, Banner Logging Company

Herman Franks
Box 296
Mono, Oregon 97842
Telephone (503) 627-4931
Foreman, Banner Logging Company

Ansil Adams
12684 Highland Circle
Roseburg, Oregon 97924
Telephone (503) 496-8721
Timber Owner

A. L. Harper
710-1/2 Clover Lane
Mono, Oregon 97842

Bill Isle
17 Bush Street
Mono, Oregon 97842
Logging Crew Member

Jake Jones
3120 Flower Street
Mono, Oregon 97842

"Loop" Klappett
Box 30
Mono, Oregon 97842

Clark Mann
Address Unknown

(Moved to Alaska)

Mrs. Clara Nodel
Mount Baldy Lookout
No Telephone
Lookout

97274 Honeydew Boulevard
Halfway, Oregon 97392
Telephone (503) 222-2222
Fire Boss

T. V. Quick
Address/Phone Burned
Mono, Oregon 97842
Burned-out/Upset Homeowner

Syd O'Neal
72 Maiden Lane
Mono, Oregon 97842
Telephone (503) 672-9112
Adjacent Owner

Fred Pratt

INVESTIGATION[1]

1. On June 24, 1997, the undersigned was assigned to investigate the subject fire.

2. That day at 1530 hours I contacted William Able, Forest Officer at the Mono Guard Station. He was the first person to arrive at the fire.[2] Able said that on the previous day, June 23, 1997, at 2:11 p.m., he was at the station and received a radio call from the Mount Baldy Lookout reporting a fire about 2 miles north of the station near the Banner Logging Company logging operations.

He said he and Fred Cook and Bob Day,[3] both fire fighters, arrived at the fire about 2:30 p.m. The fire was around 5 acres in size, burning on the north slope of a log landing. The fire had burned and was burning in a "V" shape up the slope, with the base of the "V" about 20 feet above the level of the landing. There was no one at the landing at the time, but he later saw several men working at the head of the fire, over the ridge above it. The fire was burning fast and hot in slash and brush. There was very little wind at the landing, but he could see that a wind was blowing the fire at the top of the ridge near the head.[4]

He said he called for help when he returned to the truck, and went around to the other side of the hill to start work on the head of the fire. He said he worked on the fire the rest of that day, and had not talked with any of the men who were already there about the fire or how it started.

3. At the same time I talked with Fred Cook and Bob Day, both fire fighters. Cook stated he went with Able to see the fire when they first arrived. They had to park the truck on the hill leading up to the landing since they couldn't get through. He affirmed what Able had said. Day stated he hadn't seen anything since he had remained with the truck.[5]

4. Able, Cook, Day, and I went to the landing that day about 5 p.m. Able and Cook pointed out where the fire was when they first saw it. At this time, I took a photo of the north slope of the hill. Later on July 5, 1997, Able made the marks shown on the photo to indicate where the fire was burning and had burned when he arrived and first saw it.[6]

The landing is about 1 acre in size. When we were there, there was a log deck in approximately the center with around a dozen logs on it.

The landing is saucer shaped, surrounded on the north, east, and south sides by steep slopes covered with burned remains of slash, logs, and brush. A spar pole is located to the north of the deck, and an AC HC 14 diesel loader was about 50 feet to the east and about 10 feet from the north slope. The attached diagram shows their relative positions. The road leading into the landing is on the west.[7]

The place on the hill where Able said he first saw the base of the "V" of already burned material was on the slope behind the loader. The tailpipe of the loader was canted at an angle and pointed toward the direction of the slope. We measured and found that the

distance from the end of the pipe to the slope in a clump of charred and matted grass near the base of the "V" to be 25 feet. This area was practically in direct line with the tailpipe.

The loader had no muffler or spark arrester of any kind. The attached photo shows the loader and the tailpipe, and the absence of any spark arrester. Photos demonstrate the line of the tailpipe with the deeply charred and matted grass on the hill behind it.[8]

5. The following day, June 25, 1997, at 10:30 a.m., I talked with Don Banner, owner and operator of the Banner Logging Company,[9] at his home at 231 West High Street, Mono, Oregon.[10]

He stated he had not been present at the landing when the fire started.[11] He said he had been at his mill in Mono at the time. He stated he had been logging at the landing during the morning of June 23, 1997, but had shut down about noon because of low humidity.

He said he had sent a man out around noon from the mill to tell his foreman, Herman Franks, to close down.[12]

Banner stated he had around 12 men working at the landing on the morning of the fire. They were skidding and loading logs he had cut during the previous season under a contract he had with Ansil Adams, owner of the timber. The logs were being hauled to his mill in Mono.

Banner said he had no idea how the fire started. He suggested that it may have been started by hunters.

6. Franks, Banner's foreman, was at the mill at the time and I talked with him after talking with Banner. Banner was present when I spoke with Franks. Franks' address is Box 296, Mono. He lives about 3 miles east of Mono on Highway 19 at the Happy Dell Trailer Oasis.[13]

Franks stated he had started working on the morning of the fire about 6 a.m., skidding cut logs and loading them. I asked him if he had seen the fire start, and he said that he had not. I asked him when it started, and he said around 1 p.m. I asked him how he remembered the time. He said he had shut down about 12 noon because of low humidity. Everyone was sitting around eating lunch when the fire was first observed. I asked him where the fire was when he first saw it, and he said it was high on the ridge above the landing. He drew a sketch to show me; he located the fire at that time about 200 feet up the north slope.

He said the fire was about 20 feet in diameter when he first saw it. A copy of this sketch and his distances, written by him, is attached.[14]

I asked him whether this was the fire that escaped and caused the wildfire. He said all of his men went up to put it out but by the time they could reach it, it was too big to handle.

I asked him whether he had a fire anywhere on the slope in back of the loader that morning. He said there had been a "smudge" in some grass near there a little earlier in the morning,

but that it had been put out. He was sure that hadn't caused the fire because that fire had been put all the way out.

I again asked him how long after he first saw the fire that it got away. He said, "Almost immediately. It seemed to explode."

I asked him whether he could be mistaken as to the time the fire got away. Could it have been around 2 p.m.?

He said no, because he was at the mill at 2 p.m. He had gone back to report the fire and get help.[15]

He added that the cats had stopped working around noon, but that they had loaded until about 12:45 p.m. because he did not want to send any trucks back empty.

I asked him who had been working at the landing that morning. He couldn't remember all their names, but said the following were there:

A. L. Harper, operated the ladder, address unknown.
Bill Isle, a faller, address unknown.
Jake Jones, a cat operator, address unknown.
"Loop" Klappett, a cat operator, address unknown.[16]

Banner said he had their addresses, but it would take some time to round them up.

6. On June 26, 1997, I contacted Mrs. Clara Nodel (lookout at the Mount Baldy Lookout Station), who was on duty the afternoon of June 23, 1997.[17]

She stated she remembered the report of the fire very clearly. The lookout is located about 3 miles west of where the smoke was first observed. It looks down into the canyon where Banner's operations were taking place. When she first saw the smoke, it was a thin blue column extending around 1,000 feet into the air. It remained this way for about 10 minutes and then broadened quickly. It seemed to spread very fast after that. It burned up the mountain toward the lookout that afternoon and at 6:30 p.m., from her log, the station was evacuated because it was threatened by fire. She went in again the next morning. The fire did not do any damage, though it burned to the edge of the clearing around the station.

The station is located about 1,000 feet above where the fire was first observed. The weather records of the station taken and recorded by Mrs. Nodel show a period of low humidity, high afternoon temperatures, and late afternoon easterly winds for the week prior to the fire. A copy of these records is attached to this report. The originals of these records are located at the Grants Pass Unit headquarters and will be retained until further word is received on this matter.

Mrs. Nodel checked her log and fire sightings, and verified that she first observed and reported the fire at 2:10 p.m. on June 23, 1997. A copy of the Lookout's Smoke Report and radio log is attached showing her entry of this sighting.

8. On June 27, 1997,[18] I located A. L. Harper at his home at 710-1/2 Clover Lane, Mono, at about 1:30 p.m. I was accompanied by Bob Land, Forest Officer. Mrs. Harper was also present during the interview.[19]

Harper stated he had been operating the loader on the morning of the fire. He remembered they had closed down the operation because of low humidity. He couldn't remember the time. He couldn't remember whether it was before or after lunch. He said he had just turned off the loader when he heard someone yell, "Fire!" He turned around and saw a fire about 50 feet up the hill in back of the loader. It was about 10 or 15 yards square, and was burning pretty fast and hot. He and the others at the landing immediately went up to where the fire was burning and started putting a line around it. He doesn't remember how long they worked on it, but it seemed a long while. It looked as though they had pretty well gotten it out when a gust of wind came up and started a couple of spots up the hill. By the time they reached these spots, the fire was all over the hill. It spread up and over the ridge, and there was nothing they could do.

He said he did not notice what the others were doing and he did not know where Franks was during this time, though he imagined he was working with the others.

I asked him when the small fire earlier in the day had occurred. He was surprised I knew about this fire. He said it was a small fire in some grass up on the hill. I asked how high it was and he became evasive - he couldn't remember. I asked him whether it had been put out. He said he had put the fire out himself and had Franks come over and take a look to make sure it was out. He said he didn't want to take any chances with a fire happening near his loader. I asked him what he meant, but he said he thought he had said enough.

When asked who was working on that morning, he said:[20]

Franks, foreman.
Bill Isle, faller, address unknown.

9. On June 28, 1997, I contacted Bill Isle, Banner's faller, at a bar in Mono called the Fallen Angel. Land was also present. Isle's address is 17 Brush Street, Mono.

When I asked Isle about the fire, he asked me not to ask him any questions about it. I asked him why. He said he knew I was investigating the fire and if he said anything that might hurt Banner, it could hurt him (Isle). He had to live too, he said. I asked Isle whether he thought that anything he said would hurt Banner. He said Banner was a fine fellow, and he didn't want any tricks. That was all we could get from him.[21]

10. At about 2:45 p.m. that afternoon I contacted Jake Jones at his home at 3120 Flower Street in Mono. Land was present.

Jones said he didn't know anything about the fire earlier in the morning, but he remembers the big fire. He said everyone knew the fire had been caused by that old loader, but if he were asked that question in court he would deny he ever said it. He said they were loading a bunch of logs on a truck that came up after they had all knocked off for lunch. He thought they had closed down because of humidity, but when this truck came Franks decided to load

it. They were right in the middle of loading when someone yelled, "Fire!"[22] Jones said his back was to the fire and when he turned around, he saw a small fire burning about halfway up the slope. He couldn't estimate the distance, nor does he remember its position in relation to the loader, but it was not any 200 feet up the slope.[23]

He stated he went up with the others to try to put it out. He said they worked on it for a while, but a wind came up and spread it up the hill. There wasn't anything that could be done after that.[24]

I asked him how he knew the fire had been started from the loader. He answered that the loader didn't have any muffler on it, and every time it was revved up it sprayed sparks " like a Roman candle."[25] He said he would testify to the sparks he saw come from the loader, but that he wouldn't say the fire started from the loader.

I noted that he spoke bitterly about Banner, and I asked him whether he and Banner got along all right. He said they got along fine, except Banner owed him wages from a previous job, hadn't paid him for it, and claimed he didn't owe him.

He then went into a long story as to why Banner owed him the money.[26]

I asked him who else was at the landing at the time of the fire. He said:

Franks, foreman.
Harper, operated the loader.
Bill Isle, a faller.
Clark Mann, a faller.

Jones said he knew Mann, and right after the fire Mann went to Alaska. He didn't know how he could be contacted.

11. I located "Loop" Klappett, Box 30, Mono, at the timber operations of Hardey Logging Company near Plowtown, Oregon, on July 16, 1997. Land was also present. Klappett said he had not been working for Banner on the day the fire started. He had worked for him the preceding week, but after drawing his time on Friday, had gone to Portland and hadn't returned until the day before yesterday.[27]

12. In order to further check out the names and addresses of everyone at the landing and to check about the maintenance of the loader, I telephoned Banner at his home on the night of July 16, 1997. I asked him the above questions and he said his attorney had told him not to talk to any Forestry Department people about the fire. He said he couldn't give any more information on this matter under the circumstances.[28]

13. On August 2, 1997, I contacted Mr. Syd O'Neal, adjoining landowner, at his home at 72 Maiden Lane, Mono.

Mr. O'Neal stated he and his insurance company estimated that 750 acres of his land, including his barn and $2,000 worth of hay, had been burned in the fire. He stated he owns about 2,500 acres of land in all. On the boundary between his land and that on which

Banner was cutting, there is a fence which follows the section line for about a mile and a half. He said that last year Banner had come to him and asked him about this fence since he understood he was to cut to the creek, which lies about 100 feet inside O'Neal's property from this fence. O'Neal talked with Ansil Adams, the owner of the land. Adams must have told Banner to cut to the fence line because he never heard anything more about it.

O'Neal had checked the cutting during the previous year, and Banner had stopped at the fence line.[29] In any event, O'Neal said, the fire burned past this fence line and the creek and into his property about a mile before it was stopped.

He was satisfied with the manner in which the department had fought the fire on his property, but said he heard there was dissatisfaction about the way the fire had been fought to the east of his property. He didn't know any details and did not want to mention any names.[30] He would not say any more.

14. I talked with Fred Pratt, State fire boss on the fire, on August 12, 1997. I told him what Mr. O'Neal had said and asked him if he knew what O'Neal meant, and whether there had been any difficulty in fighting the fire in general.

Pratt said the complaint probably came from T. V. Quick, the owner just east of O'Neal. Quick had lost his home and felt the Department had not given enough protection to it. The house was constructed in a clearing near the property line between his and Adams' timber and about a mile from the origin area. Grass was growing right up to the house and the timber came up to 30 feet all around the house. Late on the afternoon of June 23, 1997, the fire caught in some heavy slash to the north of the house and took off. A heavy wind came up and spread the fire toward the house. It was an impossible place to put in protection lines. If anyone tried to stay in there and protect the house, they would have been killed.

Right after the State crews arrived, Mr. Quick was evacuated from his house. He put up a fuss when we told him that he and his family should clear out as soon as possible. Afterwards he came up to me and said he had five men who had told him the fire crews had panicked and could have saved the house if they had remained. This is untrue.

The fire was generally difficult to control because it burned mostly in dried slash from the year before. Late afternoon winds on the first day caused the fire to spread almost 2 miles before it died down during the night. It was fortunate there were enough men to take advantage of the break that night and the next morning and keep it from going farther.[31]

15. Attached is the District Fire Cost Report, showing fire suppression costs incurred on this fire were $14,350.[32]

16. Attached is the District Fire Report, showing action taken by the Forestry Department on this fire.[33]

17. Attached are the Notice of Violation and Notice to Appear issued to Banner for violation of ORS 477.645.[34]

18. Attached are signed statements taken during investigation and a list of individuals interviewed and to what they can attest.

19. Attached are copies of all Record of Fire Conditions and Request for Assistance issued during fire action.

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Report Endnotes:

[1]*This is the body of the report. It should consist of a chronological description of what the investigator did in their investigation, whom they talked to and when, what they said, and what they observed. It is an account of the important matters.*

[2]*The first person or crew on a fire should always be contacted early in the investigation. Their observations will give critical information about the location, size, etc., of the fire before it was too large to form a conclusion as to where and how it started, etc. Also note that it is frequently desirable to commence an investigation by questioning persons with the Refuge or others who would be expected to testify to essential facts. In this case, the location of the fire at its first observation by persons not motivated by bias to claim it was elsewhere is vital.*

[3]*Be sure to ascertain any other persons present when witnesses observe important facts. Question these persons as to corroborating facts. (See footnote 4.)*

[4]*These are valuable observations. Such evidence often can be decisive to dispute claims of a potential defendant stating the fire started far from any operations he was conducting. The fire may burn over the area later and completely destroy evidence of where the origin was or how it was burning.*

[5]*See footnote 3. Cook could be an independent witness of the essential facts. It is explained why Day cannot testify to these facts: It is because he did not go up - not because he did not appear, as able and Cook say they did.*

[6]*Able's description to Rones, the Fire Investigator, and the narrative of the report cannot convey the details necessary to continue effectively. Hence, Rones wants to see exactly where the fire was when Able saw it and clear up any questions he may have as soon as possible. This use of a photo is invaluable. It shows the marks on it are Able's, not Rones trying to reconstruct what Able said - which may be wrong.*

[7]*Try to imagine you are describing the area to someone who has never seen it. A series of photos could be used for this purpose, but there is no substitute for a clear, verbal, narrative description of what is there. A sketch showing important references which will be used throughout the report to refer to places other witnesses are likely to (or do) refer to avoids confusion and will assist in setting these facts on paper.*

[8]*The most effective use of photos is to show exactly what is on the ground. They are not substitutes for clear explanation, but add to clear verbal description. A jury seeing an important fact in a photo, just the way you testify, cannot help but be impressed.*

[9]*No investigation is complete unless the person upon whom responsibility is finally indicated is talked to, particularly in circumstantial cases. His explanation of what occurred may well include the investigation. His excuse or view of the facts may well be the one presented at any trial of the matter; this should be known. His statements may be inaccurate or colored with bias, but they should be*

included in the report. Even if these statements indicate an absolute defense to what happened and there is no indication they are false, they should always be included. When this party is interviewed will depend upon the judgment of the Fire Investigator. It is best to interview him, however, after as many definite facts as possible are established for the obvious reason that your questions can then be as precise as possible. Otherwise, the questioning tends to wander and the party can effectively evade or avoid areas which you may not have reason to pursue. When you come back to check these out, he may not even talk to you. (See footnote 28.)

[10]Note that the addresses of any persons referred to should be included. This is necessary for directing demands and serving summons and complaints or subpoenas, if necessary. It is also necessary for the attorney to know, should he wish to take the person's deposition.

[11]Remember that - concerning important matters - what a person says he does not know, particularly one upon whom suspicion rests, is as important as what he does know. He will have trouble testifying at trial to what he previously said he did not know in this respect.

[12]Note that if an employer or principal is to be held liable for the torts of his employee or agent, evidence of the agency or employment and the scope of his authority to act on the employer's behalf must be introduced. This evidence may be in the form of facts showing the employment independently. A statement by the employer to this effect, however, coupled with evidence of what duties that agent actually performed, is effective for this purpose. An investigator should not rely solely on the statement of the employee as to who his employer is as this evidence is given very little weight and is often inadmissible to prove the employment.

[13]See footnote 10. A box number as an address is of no help in giving directions to a sheriff in serving a subpoena or summons and complaint.

[14]Note that this sketch is attached to the report as an exhibit. It should be included as an actual copy of the sketch made by the witness. Franks' statement is in conflict with what Able and Day said. To be sure you have not misunderstood Franks and to inform what Banner's probable defense of hunters will be based upon, this information should be included. This is the first major inconsistency in your theory, and suggests you should quickly talk with others at the landing to ascertain whether they will also testify that the fire started so far up the hill. This is also the point where the investigator may well wish to consider getting written statements from others at the landing because of the possibility that Banner may talk to them and convince them that the fire was high, or suggest this fact if they don't actually remember.

[15]The inconsistency as to the time the fire started may or may not prove to be important. Franks says the fire escaped immediately at 1 p.m. This may be based upon inaccurate estimation of the time it started or what he means by "immediately." It may be a feeble attempt to suggest that the fire had nothing to do with his operations since he may suspect that you know exactly when it first got away.

[16]These are, of course, essential persons to talk to as soon as possible. They are possible witnesses as to exactly where the fire occurred and what caused it. It will take a great deal of opinion testimony and hypothetical testimony to overcome the statements of five or six persons who actually say they saw the fire start at a place and in a manner totally inconsistent from your theories. They must be reached as quickly as possible for their memories may be bad, or someone else could suggest other possibilities which might cause them to doubt what they actually saw. Note the fact that Banner and Franks do not give the addresses may be an attempt to slow down the investigation.

[17]*The interview with the lookout can often be very useful in developing what occurred during the initial spread of the fire. Her log will verify Able's recollection of the time of the report of the fire, and will give a jury visible evidence of the entry of the sighting of the fire should this time become important. If the lookout is close enough, her recorded weather observations will help to establish the weather picture. Often, the lookout's description of a fire and its spread is very dramatic and helps to paint the picture of the spread of the fire to a jury who may only hear about it from seasoned firemen, who tend to take such matters in stride.*

[18]*It may often be very difficult to locate a person who has been referred to you. It is not necessary to describe your efforts in your report unless germane to some issue in the matter.*

[19]*Note that Rones has decided to take an assistant with him in interviewing those at the landing. This, in lieu of written statements, is for the judgment of the investigator. Note also who else was in attendance at the interview. Should it be necessary to prove what a person has said - either by way of proving his admission or to impeach the person if he testifies differently on the stand - the investigator should have a record as to when, where, and who was present when the statement was made. The form of this report is in part designed to establish and record the information as a routine matter.*

[20]*Asking each person at the landing who else was there will not only be a check against the recollection of the others, but may reveal the names of persons whom Franks feels would not help him and, hence, whom he "doesn't recall" at the time.*

[21]*This is typical of negative information which, far from hurting the case, may be of invaluable help should Isle decide to testify on Banner's behalf at the trial. It shows not only that he refused to say anything to the investigator, which might throw light on the incident, but that he is probably prejudiced in favor of Banner and his testimony would have to be tempered accordingly.*

[22]*Franks had said they had just stopped loading and Harper had said he had just turned off the engine when they first saw the fire. These could be mistaken estimates or consciousness on their part that operation of the loader was connected with the fire, particularly after they had been told to stop because of low humidity. Jones' statement, however, strongly suggests such a connection.*

[23]*One may be reluctant to be tied down on exact location, so the reverse approach may be helpful to have the witness indicate it was not as far up the hill as Franks says it was.*

[24]*This helps explain the time difference when Franks said the fire escaped and when it was first reported. They apparently fought the fire for a while before it went off "immediately." It may be that Franks either has an aversion for the truth or he may deeply feel that not enough was done to control the fire while it could have been stopped, and was attempting to steer the investigator away from inquiring into the point.*

[25]*An investigator would be lucky to get this kind of evidence. The description, however graphic, is undoubtedly exaggerated. This witness appears friendly now, and it might be advisable to get his written statement in case Banner decides to pay him his back wages.*

[26]*This witness has corroborated many facts of your case. It would be a mistake, however, to stop your investigation at this point. You want to get as many statements as possible from those at the landing at the time. Remember that this fellow might be as prejudiced against Banner as some others*

are for him. He might even see this as a possible means of blackmailing Banner into giving him wages to which he is actually not entitled.

[27]*This is further negative information which should be included. See footnote 11.*

[28]*Usually an investigation cannot be conducted from a desk, and the best way to find out what people know is to talk with them face to face. Therefore, a telephone contact of this sort is not recommended, except perhaps to make an appointment. Should a person indicate that he has been advised by his attorney not to talk with you, you should not attempt to contact him. Sometimes an attorney will call you direct and advise you not to get in touch with his client. You should not attempt to do so. This is particularly important if a criminal or civil case is pending in the matter against the attorney's client. It is highly improper in such a case for opposing counsel or his investigator to contact the client directly. At the trial you may testify to the fact that you attempted to obtain further information, but were unable to do so because you were told that the party would not talk to you on advice of counsel.*

[29]*An often neglected part of investigations is to ascertain what proof is available as to the fact that the fire escaped to the property of another. It may be in this particular case that the fact the fire burned to the land of Adams, the party with whom Banner had contracted, is sufficient for this purpose. This information from O'Neal, however, avoids the necessity of relying upon Adams - who, depending upon the nature of his contract with Banner, may himself be liable under the Landowner/Operator Liability Law. O'Neal's information suggests there are no boundary line disputes which would have to be settled in the present case to enforce the State's claim.*

[30]*Whenever it is suggested that the Department did not properly control the fire, be sure to check into the matter. The claim of improper or incompetent fire fighting may be of no substance. If it appears that the person responsible for the fire will make such a contention, the matter should be brought out in the report so that a proper evaluation may be made of the case.*

[31]*See footnote 30. Note also that a preliminary inquiry of the fire boss or line boss as to the difficulty in fighting the fire may well be made during the investigation. Testimony from these persons will generally be necessary to establish that costs were in fact incurred and that they were incurred in fighting this fire. If a particularly large amount is spent, a jury may question its reasonableness unless such persons can testify there were difficulties in fighting the fire which required certain men or equipment. This preliminary inquiry may bring out important considerations, such as the fact that great efforts had to be made to protect a Boy Scout camp with 100 children campers. Other than its impact, no one will question the expenditure of funds to afford such protection.*

[32]*No further explanation than this is usually required. Note, however, if it is determined the matter will be pursued by a court action, all of the underlying records of this fire cost report should be assembled and kept.*

[33]*Always include the District Fire Report. The investigator should always verify the accuracy of this report against any other information he has obtained from others, such as first report of the fire, first person to respond, time of response, weather observations, etc. If inconsistencies are noted, an appropriate memorandum to the file should be made by the person responsible for the report. This is a public record. It can readily be seen how an attorney could cast doubt upon the testimony of Able, for example, when the report shows that someone else was first on the fire (20 minutes, for instance) after he actually arrived.*

[34]*Where a strong case is indicated, it is not necessary to await the outcome of any pending criminal action before submitting the report. If the matter is actually taken to trial and a conviction is obtained, this fact cannot be used in evidence in the civil case for fire suppression costs. If the criminal trial does not convict, this does not bar the civil action. If the defendant pleads guilty, this fact may be used in evidence as an admission. If the trial turns up something unexpected, or the defendant attempts to justify his conduct in any way, or any other matter which in the judgment of the investigator will affect future handling of the matter, he should prepare a supplemental report and point these things out.*

[35]*Every report should be signed by the person making it.*

Exhibit 4: Firefighting Cost Report

Firefighting Cost Report

Refuge Florida Panther Date May 25, 2006

Fire Name No Name Fire No. 2221 Date May 5, 2006

Prepared By Steve Jones Phone 239-353-9999 Approved By Bob Smith

Personnel	$ 400.00	
Sub Total Personnel:		$ 400.00
Equipment		
200 gal. engine	$ 121.00	
800 gal. engine		
Heavy Equipment		
Sub Total Equipment:		$ 121.00
Aviation Costs:		
Helicopter Rental		
Support Vehicle		
Sub Total Aviation:		
Repair Costs:		

Sub Total Repair:			
Meals:			
Sub Total Meals:			
Administrative Services	18%		
Sub Total Admin:			$ 111.78
Rehabilitation Costs		$ 100.00	
Sub Total Rehab:			$ 100.00
Mutual Aids Costs	RFD #5	Forest Service	
Personnel	$ 700.00	$ 500.00	
Equipment	$ 500.00		
Equipment Rental			
Retardant		$ 150.00	
Other		$ 2000.00	
Travel			
Sub Total Mutual Aid:	$ 1200.00	$ 2650.00	$ 3850.00
TOTAL:			**$ 4582.78**

Exhibit 5: Billing Cover Letter

Billing Cover Letter
(Fish and Wildlife Service Letterhead)

FILE CODE

DATE

CERTIFIED MAIL No.

RETURN RECEIPT REQUESTED

John Doe
Main Street
USA
RE: Oakbrook Fire No. 445

Dear Mr. Doe:

On July 9, 1997, a fire known as the Oakbrook Fire on the lower Deschutes River was reported to Fish and Wildlife Service Dispatch in Prineville. The fire occurred in Wasco and Sherman Counties in the Gordon area.

An investigation of the fire indicated you were responsible for the ignition. We have enclosed a bill for our suppression costs of $_____. Also included are itemized accounts of the costs. Your check should be made payable to

U.S. Fish and Wildlife Service
P.O. Box 840114
Dallas, Texas 75284-0114

If you have any questions regarding this matter, please contact Roy Hogue at 447-4115.

Sincerely,

James L. Hancock
Refuge Manager

Enclosure

Exhibit 6: Bill for Collection

D.1040 Revised (Aug. 1973)	**BILL FOR COLLECTION**	Bill No. 81520-2-C001 (1)

Make Remittance Payable to: U.S. Fish and Wildlife Service Finance Center Date: _____
(Bureau or Office)

Mail Payment To: (2) P.O. Box 272060, Denver, CO 80227
(Address)

PAYER: (BILLEE)

Please detach top portion of this bill and return with remittance.

Amount of Payment $

Date	DESCRIPTION	Quantity	Unit Price	Amount
	Fire Suppression Costs for Fire #XXXX			$ 521.00
	Rehabilitation Costs			$ 100.00
	Administrative Costs			$ 111.78
	Mutual Aid Costs			$ 3,850.00

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 _____

AMOUNT DUE THIS BILL. $4,582.78

NOTE: A receipt will be issued for all cash remittances and for all other remittances when required by applicable procedures. Failure to receive a receipt for cash payment should be promptly reported to the bureau of office shown above.