

# **Standard Operating Procedure (SOP) 1.1: Acquire and Review Final Fire Reports and Perimeter Data, Version 1.0**

## **Fire Monitoring Protocol for the Arctic Network**

### *Fire Extent, Severity and Effects*

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The main Narrative for the Fire Monitoring Protocol for the Arctic Network: Fire Extent, Severity, and Effects is available from the NPS Inventory and Monitoring Network website (<https://www.nps.gov/im/arcn/protocols.htm>), the Natural Resource Reports website (<https://www.nps.gov/im/reports-nrr.htm>) and the Integrated Resource Management Applications (IRMA) Data Store (<https://irma.nps.gov/DataStore/Reference/Profile/2254884>).

# SOP 1.1 – Acquire and Review Final Fire Reports and Perimeter Data

Standard Operating Procedure #1.1

Version 1.0 (March 2020)

## Revision History Log:

| Version No. | Revision Date | Author | Changes Made | Reason for Change |
|-------------|---------------|--------|--------------|-------------------|
|             |               |        |              |                   |
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## **Acquiring and Reviewing Fire Reports**

Under the Alaska Statewide Annual Operating Plan (AOP), protection agencies are responsible for reviewing and updating submitting final fire reports to the Alaska Interagency Coordination Center (AICC) for review within 10 days after the fire is called out. AICC then provides the Jurisdictional Agencies with the final fire report within 5 working days of receipt. If unable to meet the 15-day deadline, the Jurisdictional Agency is notified to negotiate an acceptable date. The final fire report package generally includes the fire report (Figure 1.1.1), chronological narrative, final perimeter map, dispatch fire report (DFR), and master title plat (MTP).

The NPS Alaska Regional Office collects all fire reports for fires that originate in or burn into park administrative unit boundaries, regardless of land ownership. By default, AICC will send all final fire reports where NPS is listed as a land owner. However, using the land ownership designation alone will not capture all fires in which NPS is responsible for reporting. At the end of fire season, NPS fire GIS staff generates a list of required fire reports by downloading the fire points and perimeters from the [Alaska Interagency Coordination Center \(AICC\) - Maps/Imagery/Geospatial](#) website and reviewing each park. This list is cross-checked as final fire reports are received from AICC and any missing reports are requested.

The final fire reports are then distributed to the corresponding NPS Area Program Fire Management Officers (FMO) for approval (Table 1.1.1). FMOs review all reports to ensure dates and times match, suppression actions are identified correctly, acres match those from the final fire perimeter, and all other aspects are properly represented. Any changes are documented on a NPS Wildland Fire Report Form (Figure 1.1.2) or communicated via email to the designated staff for entry into current NPS fire reporting system, the Wildland Fire Management Information System (WFMI). See SOP 1.2: Fire Report Data Entry into WFMI for data entry standards.

## Fire Reporting - Fire Report

| General Reporting Information               |                                                                                               |                                     |                                                                                  |        |         |
|---------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------|--------|---------|
| <b>Status:</b>                              | Complete                                                                                      | <b>Fire Name:</b>                   | Noatak Grand Canyon                                                              |        |         |
| <b>Bureau:</b>                              | National Park Service                                                                         | <b>Incident (Fire) Number:</b>      | 157                                                                              |        |         |
| <b>Region:</b>                              | Alaska Region                                                                                 | <b>Fire Code:</b>                   | GW1Z                                                                             |        |         |
| <b>Park:</b>                                | Noatak National Preserve                                                                      | <b>Fire Type - Protection Type:</b> | Suppressed Fires - For fires suppressed under a confine or contain strategy (14) |        |         |
| <b>Unit Identifier:</b>                     | AKNOP                                                                                         | <b>Cause Category:</b>              | Natural - Lightning                                                              |        |         |
| <b>Calendar Year:</b>                       | 2012                                                                                          | <b>Reimbursable:</b>                |                                                                                  |        |         |
| <b>Fiscal Year:</b>                         | 2012                                                                                          | <b>Burning Index:</b>               |                                                                                  |        |         |
| Statistical Data                            |                                                                                               |                                     |                                                                                  |        |         |
| <b>State</b>                                | <b>Landowner</b>                                                                              | <b>Burned Acres</b>                 |                                                                                  |        |         |
| AK                                          | NPS                                                                                           | Non-Commercial Forest               |                                                                                  | 4625.6 |         |
| Location Data (point of origin of the fire) |                                                                                               |                                     |                                                                                  |        |         |
| <b>Merged Fire:</b>                         |                                                                                               |                                     |                                                                                  |        |         |
| <b>Landowner:</b>                           | NPS                                                                                           |                                     |                                                                                  |        |         |
| <b>Origin Accuracy:</b>                     | Location coordinates are within the burn perimeter; the exact point of origin is undetermined |                                     |                                                                                  |        |         |
| <b>Location Method:</b>                     | Uncorrected GPS coordinates or equivalent precision                                           |                                     |                                                                                  |        |         |
| <b>Latitude:</b>                            | 67:52:39 (67.8775) North                                                                      | <i>entered as: 67:52:39 North</i>   |                                                                                  |        |         |
| <b>Longitude:</b>                           | 160:43:50 (160.7306) West                                                                     | <i>entered as: 160:43:50 West</i>   |                                                                                  |        |         |
| <b>UTM:</b>                                 | Zone: 4 North                                                                                 | Easting: 427,280                    | Northing: 7,530,224                                                              |        |         |
| <b>Datum:</b>                               | NAD83                                                                                         |                                     |                                                                                  |        |         |
| Fire Management Data                        |                                                                                               |                                     |                                                                                  |        |         |
|                                             | Date                                                                                          | Time                                | Detection or Resource Type                                                       | Amount | Acres   |
| <b>Discovery/Start:</b>                     | 06/05/2012                                                                                    | 18:25                               | Other Aircraft                                                                   |        | 1.0     |
| <b>Initial Attack:</b>                      | 06/06/2012                                                                                    | 00:08                               | Monitoring Fire by Air; Flights                                                  | 3      | 200.0   |
| <b>Controlled/Completed:</b>                | 06/18/2012                                                                                    | 17:48                               |                                                                                  |        | 4,625.6 |
| <b>Declared Out:</b>                        | 06/18/2012                                                                                    |                                     |                                                                                  |        |         |

**Figure 1.1.1.** Example of a final fire report provided by the BLM- Alaska Fire Service (a fire protection agency) to the National Park Service for fires that occur on park lands.

**NPS WILDLAND FIRE REPORT FORM**  
**FIRE TYPE / PROTECTION TYPES 11, 12, 13, 14**

| GENERAL REPORTING INFORMATION |                                   |                                       |                                                                                                 |                    |  |
|-------------------------------|-----------------------------------|---------------------------------------|-------------------------------------------------------------------------------------------------|--------------------|--|
| REGION<br>Alaska              | PARK<br>Noatak National Preserve  | FIRE NAME<br>Noatak Grand Canyon      |                                                                                                 | FIRE NUMBER<br>157 |  |
| FIRE CODE<br>GW1Z             | FIRE TYPE / PROTECTION TYPE<br>14 | CAUSE CATEGORY<br>Natural - Lightning | REIMBURSABLE?<br><input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO | BURNING INDEX      |  |

  

| FIRE MANAGEMENT DATA     |         |       |                            |        |         |
|--------------------------|---------|-------|----------------------------|--------|---------|
|                          | DATE    | TIME  | TYPE                       | AMOUNT | ACRES   |
| DISCOVERY/<br>START      | 6/5/12  | 18:25 | H - Other Aircraft         |        | 1.0     |
| INITIAL ATTACK           | 6/6/12  | 0008  | S - Monitoring fire by air | 3      | 200     |
|                          |         |       |                            |        |         |
|                          |         |       |                            |        |         |
|                          |         |       |                            |        |         |
|                          |         |       |                            |        |         |
| CONTROLLED/<br>COMPLETED | 6/18/12 | 17:48 |                            |        | 4625.60 |
| DECLARED OUT             | 6/18/12 |       |                            |        |         |

  

| STATISTICAL DATA |          |                             |              |
|------------------|----------|-----------------------------|--------------|
| STATE            | OWNER    | VEGETATION                  | BURNED ACRES |
| AK - Alaska      | 03 - NPS | 2 - Non-commercial Forest L | 4625.60      |
|                  |          |                             |              |
|                  |          |                             |              |
|                  |          |                             |              |
|                  |          |                             |              |
|                  |          |                             |              |
|                  |          |                             |              |
|                  |          |                             |              |
|                  |          |                             |              |

  

| LOCATION DATA                                                                                                                                                |                                                                                                                            |                                                                                                              |                                                                                      |                    |                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------|-----------------------------------------|
| OWNER<br>03 - NPS                                                                                                                                            | ORIGIN ACCURACY<br>Uncertain (exact point undetermined)                                                                    | LOCATION METHOD<br>Raw GPS (Non-differentially corrected GPS)                                                |                                                                                      |                    |                                         |
| NOTE: Coordinates required in either a Lat/Long or UTM (not both).<br>Latitude & Longitude: Record with ONE of the three options for Lat/Long format below   |                                                                                                                            |                                                                                                              | UTM Zone <u>Required</u> when entering UTM coordinates                               |                    | Datum <u>Required</u>                   |
| LATITUDE LONGITUDE<br>Degrees, Minutes, Seconds (2<br>Decimal Places)<br>Example:<br>40° 59' 14.80" LAT<br>109° 43' 25.30" LONG<br><br>67:52:39<br>160:43:50 | LATITUDE LONGITUDE<br>Degrees, Decimal Minutes<br>(4 Decimal Places)<br>Example:<br>40° 59.2460' LAT<br>109° 43.4220' LONG | LATITUDE LONGITUDE<br>Decimal Degrees<br>(6 Decimal Places)<br>Example:<br>40.987440 LAT<br>-109.723700 LONG | UTM EASTING &<br>NORTHING<br>(0 Decimal Places)<br>Example:<br>607360 E<br>4538147 N | UTM ZONE<br>(1-16) | Datum<br>Example:<br>NAD83<br><br>NAD83 |

**Figure 1.1.2.** Example of a final fire report completed by the National Park Service for fire/protection types 11, 12, 13, and 14 that occur on park lands.

**Table 1.1.1.** ARCN Parks by Fire Management Program Area.

| Western Area                                                                                                                         | Eastern Area                                   |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Bering Land Bridge National Preserve<br>Cape Krusenstern National Monument<br>Kobuk Valley National Park<br>Noatak National Preserve | Gates of the Arctic National Park and Preserve |

### Final Fire Perimeters

All fires in Alaska over 10 acres are required to be mapped, published to the AICC [Alaska Wildland Fire Information Map](#) and included in the final report package. Fire perimeters are closely monitored throughout the fire season by NPS fire management staff. Timely fire surveillance and perimeter updates are coordinated between NPS and the protection agency to provide the most accurate information for ongoing fires.

Near the end of fire season or soon before fires are called out, NPS Fire Management staff will verify all fire perimeters against the best available information including LANDSAT/Sentinel 2 satellite imagery and operational maps for inclusion with the final fire report. Any perimeter updates are then submitted through the BLM – Alaska Fire Service GIS Specialists following consultation with the appropriate jurisdictional and protection FMOs. Reference the Alaska Wildland Fire Perimeter Submission Guide found on the [AICC – Maps/Imagery/Geospatial](#) website for instructions on how to submit perimeter updates.

All of the final fire perimeters submitted with final fire report package are published to the Alaska statewide fire history geospatial data set of fire perimeters (“Alaska Fire History Polygons 1940-20XX”) and available for download here: <https://fire.ak.blm.gov/predsvcs/maps.php> (Figure 1.1.3).

An Interagency Incident Support Website

**AICC** Alaska Interagency Coordination Center

Mobilizing Incident Resources ... throughout Alaska

**National** **AICC Home** **Alaska Fire Service** **About Us** **Links** **Contact Us** **Preparedness Level:** February 25, 2020

**Incident Information**

- Alaska Fires
- Interagency Newsroom
- InciWeb

**Predictive Services**

- Intelligence / Reports
- Maps / Imagery / Geospatial
- Fire Weather
- Fuels / Fire Danger
- Air Quality
- Outlooks

**Logistics and Dispatch**

- Interagency Mobilization Guide
- Aviation
- Crews
- ROSS
- AICC Equipment/Supply
- Teams
- Overhead
- New D110 Alternative Delivery Method

**Administration**

- Statewide Master Agreement
- Agency Administrator's Guide
- Incident Business Management
- AWFCG
- AWFCG Committees
- MAC Group

**Predictive Services - Maps/Imagery/Geospatial**

**BLM ArcGIS Online Web Mapping Services**

**Alaska Wildland Fire Maps**

**User Guides**

- Alaska Wildland Fire Information User Guide
- Alaska Wildland Fire Perimeter Submission Guide 2019

**AICC ArcGIS Server Services**

**AICC ArcGIS Server Services**

**National Interagency Fire Center ArcGIS Online**

**Alaska Known Sites DB Login (on NIFC-AGOL)**

**AICC GeoPDF Map products**

- GeoPDF Repository (Separate Page)
- Alaska\_Fire\_History
- Alaska\_Fire\_Management\_Options
- Alaska\_Fire\_Management\_Options\_with\_Jurisdictions
- Alaska\_Fire\_Management\_Zones

**The AICC ArcIMS Maps are broken, no estimated time on repair**

**Data and Metadata**

- Individual Fire Perimeters (Separate Page)
- + **Metadata**
- + **FireSpotterKMZ**
- + **Data Templates (zip)**
- + **Data (zipped Text Files)**
- **Data (zipped filegeodatabases)**

- AlaskaFireHistory\_Points\_1939\_2019
- AlaskaFireHistory\_Polygons\_1940\_2019**
- AlaskaFireManagementOptions\_2019.gdb
- AlaskaWildlandFireJurisdictions\_2019.gdb
- Alaska\_FireMgmtOptions\_Changes.gdb
- Fire\_Management\_Zones\_2017
- Historical\_Lightning\_1986\_2019
- Lightning\_2019



**Figure 1.1.3:** The Alaska statewide fire history geospatial data set of fire perimeters is available for download on the AICC Maps/Imagery/Geospatial site (<https://fire.ak.blm.gov/predsvcs/maps.php>).