DISCUSSION PAPERS
for
Draft NWCG Data Standards
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INITIAL FIRE STRATEGY

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The Standardized Data Values were selected based GPRA reporting requirements.

The Limited Suppression option is not the same as Partial Suppression that you might see under Fire Use. It does include monitoring, or reduced suppression response due to low fire danger or low resource impact.

NWCG Data Standard

LOCAL FIRE REPORT IDENTIFIER

Discussion Paper

November 29, 2007

1. Because the local practices vary, the standards for the LOCAL REPORT IDENTIFIER are purposefully defined in relatively general terms. The intent of the data element is to ensure each reporting unit has a scheme for uniquely identifying its individual fires for a given calendar year. Broad latitude is allowed to accommodate the many coding or numbering schemes that are in use now or may be devised to satisfy this requirement.
2. Typically, the LOCAL REPORT IDENTIFIER is the FireCode or other cost accounting code; the LOCAL INCIDENT IDENTIFIER, or a sequential number assigned in the unit's fire reporting system.
3. The reporting unit's agency policies and guidelines will determine whether multiple reports are allowed for a single fire. If there are multiple reports associated with a single fire, each report must have a unique LOCAL REPORT IDENTIFIER.
4. To provide consistency and ensure uniqueness of individual records in interagency data sets, the data exchange standard for LOCAL REPORT IDENTIFIER specifies a minimum length of 6 characters. Allowing for a special character such as a period or hyphen, this standard allows every reporting unit to issue up to 99,999 unique LOCAL REPORT IDENTIFIERS for a particular calendar year (assuming the characters used are numbers).

NWCG Data Standard
LOCAL INCIDENT IDENTIFIER
Discussion Paper
November 29, 2007

1. Because the local practices vary, the standards for the LOCAL INCIDENT IDENTIFIER are purposefully defined in relatively general terms. The intent of the data element is to ensure each reporting unit has a scheme for uniquely identifying its individual fires for a given calendar year. Broad latitude is allowed to accommodate the many coding or numbering schemes that are in use now or may be devised to satisfy this requirement.
2. The LOCAL INCIDENT IDENTIFIER must be assigned before action is initiated for the incident. This allows the LOCAL INCIDENT IDENTIFIER to be communicated to any responding or cooperating units.
3. Typically, the LOCAL INCIDENT IDENTIFIER is the FireCode or other cost accounting codes, or a sequential number assigned in the unit's annual dispatch log for the corresponding fire.
4. The reporting unit's agency policies and guidelines will determine whether a fire with multiple points of ignition is documented as a single fire. Based on this local discretion, a LOCAL INCIDENT IDENTIFIER may correspond to multiple ignitions if they are documented as a single fire.
5. To provide consistency and ensure uniqueness of individual records in interagency data sets, the data exchange standard for LOCAL INCIDENT IDENTIFIER specifies a minimum length of 6 characters. Allowing for a special character such as a period or hyphen, this standard allows every reporting unit to issue up to 99,999 unique LOCAL INCIDENT IDENTIFIERS for a particular calendar year (assuming the characters used are numbers).
6. The uniqueness of the LOCAL INCIDENT IDENTIFIER applies to a local fire management organization and a particular calendar year. Other fire management organizations may use the same values for their LOCAL INCIDENT IDENTIFIER (for example, two adjacent Zone Dispatch offices will probably have an incident #5 in any given year). Similarly, a local fire management organization may reuse a value assigned as LOCAL INCIDENT IDENTIFIER (for example, a particular Zone Dispatch will have an incident #5 this year and another incident #5 next year).

NWCG Data Standard
POINT OF ORIGIN ACCURACY
Discussion Paper
December 20, 2007

The fire report must specify the location of the incident's point of origin. There are two general factors that collectively determine the quality of the location data: 1) certainty and 2) precision.

The certainty of location coordinate values can be indicated by reporting whether the location selected is the incident's true point of origin, probable point of origin, or a lower-confidence guess.

The precision of location coordinates can be indicated by reporting the Location Method and the actual coordinate values. The Location Method reported implies that a certain level of precision can be expected. For example, location coordinates that you derive from a map probably are less precise than those determined using a GPS unit. In addition, it is assumed that the coordinate values entered into the fire report have been adjusted to reflect the appropriate level of precision, given the method by which they are derived. For example, it would not be appropriate to specify a location in Decimal Degrees to five decimal places unless that coordinate value was derived from corrected GPS data. Also, the concept of significant digits applies, so trailing zeros should not be added indiscriminately, lest they falsely imply precision (43° 34' is obviously precise to only the nearest minute, but 43° 34' 00" is assumed to be precise to the nearest second).

Origin Accuracy is a qualitative assessment of accuracy that essentially answers the question: How certain are we that the incident's exact point of origin has been located? Occasionally, the exact point of origin cannot be determined with certainty or even isolated to a high-probability site within a general area, so it is relatively uncertain whether the location coordinates correspond to the actual point of origin. More commonly, the origin usually can be traced back to at least a general area, and coordinates selected to identify a point that was the probable origin within that area. Ideally, the exact point of origin has been determined, and its location coordinates are therefore considered accurate.

Location Method is a descriptor that indicates the mapping method by which the location coordinates were determined. Because each mapping method is associated with a corresponding level of precision, this field provides another qualitative assessment of the location coordinates. While the location methods correspond to the most common sources from which location data is derived, the location method descriptions explain that these choices are broader than their literal labels. For example, when the location of a fire's point of origin is determined from a map display in GIS, the proper method descriptor is Quad Map if the base GIS data layers were derived from scanned or digitized quad maps.

Location coordinates with the least precision includes those derived from small-scale area maps, such as the USGS land use and land cover maps (1:100,000 and 1:250,000 scale), BLM surface management status maps (1:100,000 scale), USGS state maps (typically, 1:500,000 scale), USFS Forest maps (typically 1:126,720 scale), and state highway maps (scale varies, but usually much smaller than 1:100,000). More precision is expected for coordinates derived from the larger-scale quad maps, such as the USGS 7.5 minute topographic maps, orthophoto quads, and orthophoto maps (all 1:24,000 scale), plus any GIS layers that used these products for their source data. Nowadays, most location coordinates are determined on-site using GPS technology. When collected under favorable conditions, a single raw GPS coordinate is typically precise to within about 30 feet (10 meters). The best precision is obtained from corrected GPS, which includes coordinates determined by a WAAS-enabled unit, derived by averaging a large number of raw coordinates, or differentially corrected using base station data, yielding a refined coordinate that is precise to less than 3 feet (sub-meter).

Taken as a pair, Origin Accuracy and Location Method serve as an indicator of the quality of the point of origin location coordinates.

NWCG Data Standard

SPECIAL LAND DESIGNATION

Discussion Paper

January 9, 2008

Background Information

The list of special land designations included in this data standard includes only officially designated lands and not locally or informally declared lands so that a discrete list could be created. Statistical analysis can only be done with a discrete list and not free form text entries.

Some officially designated lands are not included in this list such as national parks. The reason this was done is because no special fire management activities would be taken by the park beyond their normal business as usual. However, within a national park a research natural area (one of the special land designations) might require special management activities or limit the types of operations that would be allowed.

Definitions

Area of Critical Environmental Concern (ACEC)

Definition: Areas of Critical Environmental Concern designated by the BLM under the 1976 Federal Lands Policy and Management Act.
Extended Definition: The Areas of Critical Environmental Concern (ACEC) program is managed by the Bureau of Land Management. The ACEC program was conceived in the 1976 Federal Lands Policy and Management Act (FLPMA), which established the first conservation mandate for the BLM. The ACEC mandate directs the BLM to protect important riparian corridors, threatened and endangered species habitat, cultural and archeological resources and unique scenic landscapes throughout the Southwest that the agency believes need special management attention. To be designated as an ACEC, an area must meet the relevance and importance criteria listed in BLM Manual 1613 (1988) and require special management to protect and prevent irreparable damage to relevant and important resource values. Specific evaluation questions for each of these three elements are listed below.

Endangered Species Critical Habitat

Definition: Designated Critical Habitat as defined in section 3(5)(A) of the Endangered Species Act From the Endangered Species Act - "Critical habitat" is defined in section 3(5)(A) and includes:

- Areas within a listed species' current (at time of listing) range that contain the physical or biological features that are essential to that species' conservation or that for some reason require special management; and
- Areas outside the species' current range that the secretary determines to be essential to its conservation.

Wilderness/Primitive Area

- ***Definition (Wilderness):*** Land designated by congress as Wilderness as defined in the Wilderness act (Public Law 88-577) – 1964 or Land designated as primitive.
- ***Definition (Primitive Area):*** Those lands officially designated as primitive areas (typically this was done before the wilderness act became law)

Research/Public Use Natural Area

- Research Natural Areas are part of a nationwide network of ecological areas set aside for both research and education. The United States Forest Service establishes these areas containing pristine areas that typify certain types of important forest, shrubland, grassland, aquatic, geological, alpine or similar environments that have unique characteristics of scientific interest.
- These areas are established under the Organic Administration Act of 1897. Areas designated as Research Natural Areas are primarily located inside National Forests.

Late-successional reserve

- An Option 9 land designation (see AMA, Matrix, and Riparian Reserves). A LSR contains forests set aside from Matrix type logging, to be held in reserve for wildlife habitat. Old clear cuts as well as old-growth forests are in LSRs. Logging is allowed if it will help the LSR reach old growth characteristics faster (see Old Growth Forest).

Tribal or Native Allotment (including Alaska Native Claims Settlement Act lands)

The Alaska Native Allotment Act of 1906, 34 Stat. 197, enacted on May 17, 1906, permitted individual Alaska Natives to acquire title to up to 160 acres of land in a manner similar to that afforded to Native Americans in the other states and territories of the United States under the General Allotment Act of 1887 (Dawes Act). However, the General Allotment Act and the Alaska Native Allotment Act, while in some ways similar, differed considerably in their purpose and political circumstances under which they were enacted, and differed in their effects as well.

The Alaska Native Allotment Act was repealed in 1971 with the passage of the Alaska Native Claims Settlement Act (ANCSA), but with a savings clause that preserved allotment applications still pending on ANCSA's effective date of December 18, 1971. As of 2001, nearly 300,000 acres (1,200 km²) were still pending determination of entitlement.

Nuclear Reservation

- officially designated as a Nuclear Reservation

Roadless Area

- ***Definition:*** Areas inventoried by the USFS as being roadless where special rules regarding development may apply.

Military Operations Area

- ***Definition:*** An area designated for Military Operation, typically training, and may contain special military related hazards.

Wild and Scenic River Corridor

- An area designated by Congress or the Secretary of Interior to protect certain wild and or scenic rivers from development.

Wilderness Study Area

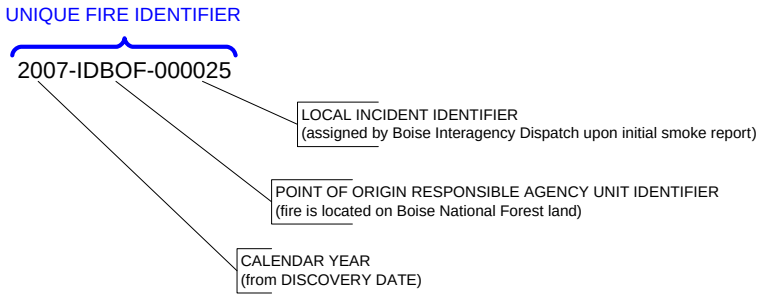
- ***Definition:*** A wilderness study area (WSA) contains undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation, and managed to preserve its natural conditions. WSAs are not included in the National Wilderness Preservation System until Congress passes wilderness legislation.
- On Bureau of Land Management lands, a WSA is a roadless area that has been inventoried (but not designated by Congress) and found to have wilderness characteristics as described in Section 603 of the Federal Land Policy and Management Act of 1976 and Section 2(c) of the Wilderness Act of 1964. BLM manages wilderness study areas to protect their value as wilderness until Congress decides whether or not to designate them as wilderness. Wilderness bills often include so-called "release language" that eliminates WSAs not selected for wilderness designation.
- Some WSA's are managed exactly the same as wilderness areas, and the rules for others permit activities that are generally excluded from wilderness. For example, some WSAs allow mountain bikes and off-road vehicles.

Wilderness – Proposed

- ***Definition:*** Those lands that have been officially proposed as wilderness. In some cases these lands are managed as if they were wilderness and in other cases they are not.

NWCG Data Standard
UNIQUE FIRE IDENTIFIER
Discussion Paper
November 29, 2007

1. Every fire report should reference the UNIQUE FIRE IDENTIFIER to which that report pertains. There can only be one UNIQUE FIRE IDENTIFIER per fire, but there may be multiple reports across the various Agencies' fire reporting systems that reference that fire. By including the UNIQUE FIRE IDENTIFIER, related fire reports from multiple agencies and units can be linked to provide a more complete record of the fire.
2. Example scenario: Unit A owns the land where the fire originated and is therefore considered the responsible unit. Upon discovery of the fire, Unit A assigns it a number that will be used as the unit's LOCAL INCIDENT IDENTIFIER. With this, the UNIQUE FIRE IDENTIFIER is determined by concatenating Unit A's unit identifier, the calendar year, and the LOCAL INCIDENT IDENTIFIER. Unit B then sends resources to assist in the suppression effort for this fire. When Unit B issues a corresponding support action fire report, its report will reference this UNIQUE FIRE IDENTIFIER, thus allowing the two fire reports to be linked to the same fire.
3. Note that this requires communication between the unit that issues the UNIQUE FIRE IDENTIFIER for a fire and all the other units that will ultimately submit other reports pertaining to that fire to ensure that the UNIQUE FIRE IDENTIFIER is included in all related reports.
4. If another entity issues UNIQUE FIRE IDENTIFIERS, that entity must notify the responsible units of any UNIQUE FIRE IDENTIFIERS attributed to them. For example, if an interagency dispatch office issues the UNIQUE FIRE IDENTIFIER for a BLM District, the dispatch office must notify the BLM District.
5. When a UNIQUE FIRE IDENTIFIER is combined with the reporting unit's UNIT IDENTIFIER, the resulting string will be a unique and meaningful identifier for fire report data that is combined for multiple units from the same agency or for interagency data sets (see UNIQUE FIRE REPORT IDENTIFIER).
6. Diagram showing the constituent parts of the UNIQUE FIRE IDENTIFIER:



NWCG Data Standard
UNIQUE FIRE REPORT IDENTIFIER
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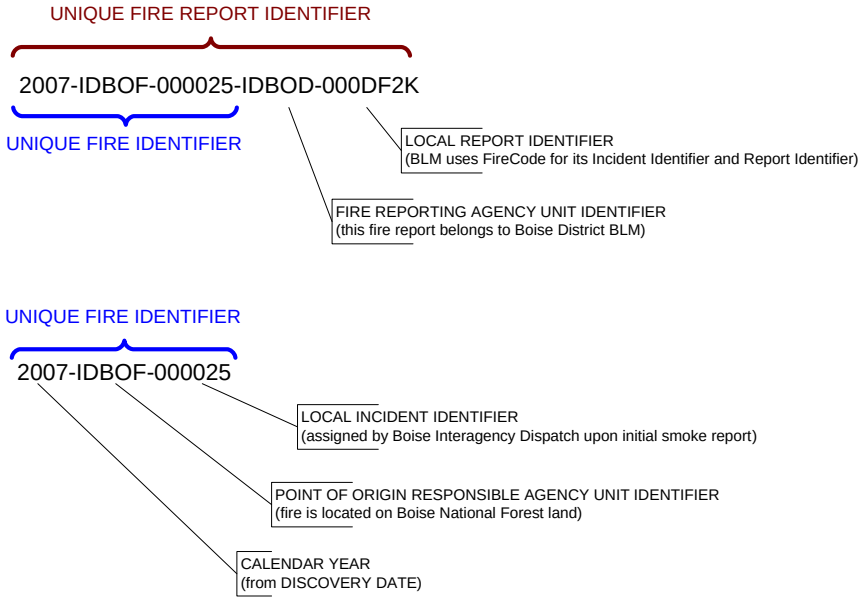
November 29, 2007

1. The UNIQUE FIRE REPORT IDENTIFIER provides a unique and meaningful identifier for fire report data that is combined for multiple units from the same agency or for interagency data sets. It associates each record with the incident, the reporting unit, and the record within the reporting unit's fire reporting system.

2. Diagram showing the constituent parts of the UNIQUE FIRE REPORT IDENTIFIER:



NWCG Data Standard
WUI INDICATOR
Discussion Paper
December 18, 2007

The following discussion on WUI was submitted by Kelly Hawk, WUIWT vice chair on 11/28/2007.

The definition used in *NFPA 1144 Standard for Reducing Structure Ignition Hazards from Wildland Fire* was developed through the consensus process.

The standard was written by the NFPA Technical Committee on Forest and Rural Fire Protection, a panel of wildland fire SMEs representing federal and municipal sectors of the wildland fire service; insurance, safety testing and research interests; and members representing related industry (forest products, suppression systems, etc).

3.3.28 Wildland Urban Interface: "The presence of structures in locations in which the Authority Having Jurisdiction (AHJ) determines that topographical features, vegetation fuel types, local weather conditions, and prevailing winds result in the potential for ignition of the structures within the area from flames and firebrands of a wildland fire."

WUI Indicator only applies to residences or other structures.

This definition allows for the AHJ's (authority having jurisdiction) discretion, and provides credible reference for definition and consistent sideboards for certain conditions in the determination of WUI

It doesn't incorporate designated WUI that may be delineated by CWPPs, or the 1.5 mile default.