United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
NATIONAL INTERAGENCY FIRE CENTER
3833 South Development Avenue
Boise, Idaho 83705-5354

September 25, 2012

Memorandum

To: Regional Directors, All Regions
            Attention: Forestry/Fire Management

From: Director, Branch of Wildland Fire Management

Subject: Bureau of Indian Affairs Fuels Treatment Effectiveness Interim Guidance

From 2001 through 2012, the Bureau of Indian Affairs (BIA) has accomplished over a million acres of hazardous fuels reduction treatments. However, effects of the hazardous fuels treatment program in reducing wildfire impacts have not been adequately demonstrated. By documenting fuels treatment effectiveness, the BIA, and the interagency community will have data to show how fuels treatments contribute to modifying fire behavior, aiding in wildfire management, and reducing wildfire costs/impacts.

This message outlines interim procedures for documenting Hazardous Fuels Reduction (HFR) Program Treatment Effectiveness. Currently, an online tool called Fuels Treatment Effectiveness Monitoring (FTEM), is being developed to assist all of the Department of Interior Bureaus and the Forest Service in documenting HFR treatment effectiveness. FETM will provide a single, interagency, national source to document the interaction of wildfires and fuels treatments. The tool is a simple and easy way for users to enter information about fire weather, fuels, and supporting documentation (e.g., photos, maps) and allows the user to compare treated areas to adjacent areas. This data will be available for use at various levels of the DOI Bureaus and the Forest Service to:

- Answer congressional and Office of Management and Budget (OMB) questions about the effectiveness of the HFR program.
- Verify whether HFR treatments have changed fire behavior.
- Establish baseline data to use when making future HFR program decisions.
- Document what we have learned from wildfire events to adjust future HFR treatment prescriptions.
- Share documentation with our partners, the public, and congressional representatives to demonstrate HFR program success.

The FTEM information is intended to supplement the National Fire Plan Operating and Reporting System (NFPORS) and Wildland Fire Management Information (WFMI) Fire Reporting data.

Interim direction is that all wildfires for the 2012 fire season, which start in or burn into a fuel treatment that has been completed within the last ten years (FY2003 - FY2012), **must** have a fuel treatment effectiveness assessment report completed. The *BIA Fuels Treatment Effectiveness Interim Spreadsheet 2012* will be used to document the assessment. Please refer to attached Interim *User Guide for Fuel Treatment Effectiveness and Technical Guidance for the BIA Fuels Treatment Effectivness (GTE) Interim Spreadsheet* for additional information.

Information should be recorded on the interim spreadsheet, including, at a minimum, the items that are identified as required (* **Orange** indicates required fields). It is important that, when filling out this form, that all corresponding Project and Treatment data are consistent with the National Fire Plan Operating and Reporting System (NFPORS), and the wildfire information is consistent with the data recorded in the Wildland Fire Management Information (WFMI) system. Effective immediately, regions will ensure that fuels treatment effectiveness data is reported on the interim spreadsheet within 90 days of a wildfire intersecting a fuels treatment. By October 31, 2012 all regions should consolidate the information from all Tribes and Agencies. By October 31, 2012 a SharePoint site will have been identified where each region will upload one (1) interim spreadsheet.

In addition to utilizing the *BIA Fuels Treatment Effectiveness Interim Spreadsheet 2012*, we intend to evaluate the FTEM System web tool by coordinating with each Region to identify a number of testers for the 2012 fire season. This will provide an opportunity for personnel to evaluate the input questions, as well as the system accessibility and usability. The *FTEM Technical Guidance for Testers,* and *Draft Users Guide* will be sent directly to each Regional Tester individually.

For questions related to the Fuels Treatment Effectiveness Guidance, contact Kim Kelly NWR Fire Ecologist at 503-231-2115.

Attachment

Technical Guidance for the BIA Fuels Treatment Effectiveness (FTE) Interim Spreadsheet
August 1, 2012

This technical guidance document outlines the interim procedures for documenting Hazardous Fuels Reduction (HFR) Program Treatment Effectiveness for fire season 2012. Interim direction for all wildfires for the 2012 fire season, which start in or burn into a fuels treatment that has been completed within the last ten years (FY2003-FY2012) must have a fuel treatment effectiveness assessment report completed.

1) Timelines for implementation of the FTE Reporting for 2012:
   - Effective immediately, regions will ensure that fuels treatment effectiveness data is reported on the interim spreadsheet within 90 days of a wildfire intersecting a fuels treatment.
   - By October 31, 2012 all regions should consolidate the information from all tribes and Agencies.
   - By October 31, 2012 a SharePoint site will have been identified where each region will upload one (1) interim spreadsheet

2) To document these instances, utilize the interim *FTE Template Spreadsheet* as the official record of FTE Reports for 2012. -
   BIA Fuels Treatment Effectiveness Interim Speadsheet.xls

Fuels Treatment Effectiveness Interim Template Spreadsheet

3) This spreadsheet will contain a series of attributes, most of which will be available from either the National Fire Plan Reporting and Operating System (NFPORS), and the Wildland Fire Management Information (WFMI) Fire Reporting system.

4) There are a number of required attributes to must be entered into the spreadsheet. These include:

- NFPORS Region/State Name
- NFPORS Unit Name
- Contact Name
- Contact Phone
- Contact Email
- Wildfire Name (must match entry in WFMI)
- WFMI Fire # (must match entry in WFMI)
- Fire Acres (Final size)
- NFPORS Fuels Treatment Type
- Treatment Date
- Acres of Treatment Burned
- Treatment and Wildfire Intersection Details
- Did Fire Behavior Change as of the result of the Treatment?
- Did Treatment contribute to the control of the Fire?

Non required attributes may also be included to provide additional information to the report.

5) To assist with the input of the required attributes, please see the ***BIA User Guide for the Interim Fuels Treatment Effectiveness Spreadsheet 2012.doc*** for an explanation of the attributes and desired input.

6) Questions regarding the spreadsheet or the User Guide, please contact.

Kim Kelly @ 503-231-2115 or kim.kelly@bia.gov

User Guide for Fuel Treatment Effectiveness

Interagency Fuels Management Committee

About Fuels Treatment Effectiveness

The objective of this data collection is to provide a central location where documentation can be provided by on-the-ground personnel that describe the effect of fuel treatments on wildfire behavior. It will further provide the ability for fire managers to roll up this data into a single report that shows cumulatively the impacts of the HFR program across agency and interagency boundaries.

Field personnel from the local unit will fill out an interim spreadsheet for each wildfire that intersects with a HFR treatment based on department/bureau policy:

USDA Forest Service (Interim Directive 5140-2012-1):

- Complete a fuel treatment effectiveness assessment on all wildfires which start in or burn into a fuel treatment area that has been completed within the last 10 years (within last 3 years in the Southern Region and other areas designated by regional foresters).

- All fuel treatment effectiveness assessment reports must be submitted within 90 days of control of the fire.

DOI:

- Complete a fuel treatment effectiveness assessment on all wildfires which start in or burn into a fuel treatment area that has been completed and reported accomplishment acres in NFPORS from fiscal year (FY) 2003 to present. It is important that, when filling out this form online, that all corresponding Project and Treatment data is consistent with NFPORS.

- All fuel treatment effectiveness assessment reports must be submitted within 90 days of the wildfire burning into the treatment area.

The FTE Interim Spreadsheet is intended to supplement the treatment data found in either the National Fire Plan Reporting and Operating System (NFPORS) or FACTs and wildfire reporting systems, and will apply whenever a wildfire spreads into, or starts within, a treatment.

This user guide will assist the user to access and enter the appropriate information into the FTE Interim Spreadsheet.

DOI Agencies enter the **Wildfire Lat/Long** of the wildfire by using either the starting point (as record in your agency wildfire system) or approximate center location of the wildfire. Lat/Longs should be entered in Decimal Degrees and Longitude should be negative.

$$\text{Decimal Degree} = \text{Degrees.(Sum of Minutes/60 + Seconds/3600)}$$

For example: $-115\,°\,45'\,35''$ would be $-115.75972 = -115.(45/60 + 35/3600\,)$

Enter the **Date the Wildfire entered the treatment**. This should be the date that the wildfire intersected the fuels treatment for which you are recording information.

Enter the **Approximate Time the Wildfire entered the treatment**. Please enter in military time. This should be the time date that the wildfire intersected the fuels treatment for which you are recording information.

Fuels Treatment Information

Obtain detailed information about the fuel treatment for which you are recording information by going to NFPORS for the DOI Agencies or FACTS for the Forest Service.

Enter the **NFPORS**

> DOI Agencies enter the seven digit number Treatment ID (ACT_TRT_ID) in NFPORS. This field is required for DOI Agencies. If there is no NFPORS idea please enter XXXXXX.

> If the wildfire burned into more than one NFPORS or FACTS ID units, please enter each unit into the FTEM database by using the Replicate button in your Home area – see below.

Enter the **Treatment Name:**

> DOI Agencies enter the treatment name (ACT_TRT_NM) found in NFPORS.

Select the **Treatment Type** from the dropdown menu (see list below).

> DOI Agencies:

> - Select the type identical to the recorded treatment type found in NFPORS. If the area had more than one treatment, select only the treatment that contributed the most to fire behavior modification.

> - If area had more than treatment type, DOI recommends you record additional treatments information (treatment type and treatment year) in the Comments

on site. If a weather station is used; indicate the name and RAWS station number used in the **Comments** section.

Select the estimated **1 hour** fuel moisture percent from the dropdown menu (see below).

- 1-5
- 6-10
- 11-15
- 16-20
- >20

Select the estimated **10 hour** fuel moisture percent from the dropdown menu (see below). Leave this field blank if no 10 hours fuels existed in the treatment area.

- 1-5
- 6-10
- 11-15
- 16-20
- >20

Select the estimated **100 hour** fuel moisture percent from the dropdown menu (see below). Leave this field blank if no 100 hours fuels existed in the treatment area.

- 1-5
- 6-10
- 11-15
- 16-20
- >20

Select the estimated **1000 hour** fuel moisture percent from the dropdown menu (see below). Leave this field blank if no 1000 hours fuels exist in the treatment area.

- 1-5
- 6-10
- 11-15
- 16-20
- >20

Enter the **Live fuel moisture** percent (single value or range) if measurements/estimates are available from on-site or the local area that would be representative of woody/herbaceous fuels in the treatment/wildfire.

Select the live fuel moisture **Sample type** used to determine **live fuel moistures** from the dropdown menu (see below).

- Woody
- Herbaceous

- 70 – 79
- 80 – 89
- 90 - 99
- 100+

Enter the estimated relative humidity-**RH** in percent.

Treatment and Wildfire intersection

Enter the **Treatment and Wildfire intersection details** from the list below. If other or multiple please pick the dominant action and explain the rest in the **Comments** section.

- Wildfire started in the treatment
- Wildfire spotted into treatment
- Wildfire burned through all acres treated
- Wildfire burned through some acres treated
- Treatment was used primarily for suppression actions
- Other

Treatment Effects

Did the fire behavior change as a result of the treatment (as planned in the treatment objectives)? *

- "Yes" or "No."

This question focuses on the expected changes in fire behavior (intensity, flame length, or rate of spread) when the fuel treatment is tested by a wildfire, **that was described in the treatment objectives** when the fuel treatment was planned, conducted, and/or completed. (For example: In forest fuel types the fire behavior went from a crown fire to a surface fire. Or, in shrub fuel types the fire behavior decreased in flame length or intensity or rate of spread.)

If changes in fire behavior met treatment objective, then check "**Yes.**" If changes in fire behavior did not meet the treatment objectives, then check "**No,**" and explain in the **Comment** section.

Did the treatment contribute to control of the fire? *

- "Yes" or "No."

For example: If treatment unit was used as a barrier in a burnout operation, or used to support field crews by providing an effective retardant dropped, or used to dig hand line, or used to catch the wildfire during initial attack (before it got big) then the answer would be "**Yes**". Treatment might also allow for the management of a multiple objective fire, allowing fire to burn through

- 4.1 - 6
- 6.1 - 8
- 8.1 - 12
- 12 and over

How did the treatment contribute to the control of the fire? Check all that apply:

- ○ Able to do direct attack
- ○ Used treatment for burn out operations
- ○ Fire spread was arrested in the treatment unit
  (Arrested is used here to mean: stopped (for example: wildfire was stopped in treatment area because of a burnout) or caught (for example: the wildfire started in treatment area and was caught by initial attack)
- ○ Fire spread was slowed as it moved through treatment (decreased R.O.S.)
- ○ Other (*If selected, fill in a description*)

Other might include: "allowed for point protection," "able to do indirect attack," "able to use retardant for attack," "was the treatment useable as a safety zone" and needs to be specified.

Check the **Dominant Type of Fire Spread Outside the Treatment** from the list below:

- ○ Active Crown Fire
- ○ Passive Crown Fire (Group or single tree torching)
- ○ Surface Fire
- ○ Other (*If selected, fill in a description*)

Check the **Dominant Type of Fire Spread Inside the Treatment** from the list below:

- ○ Active Crown Fire
- ○ Passive Crown Fire (Group or single tree torching)
- ○ Surface Fire
- ○ Other (*If selected, fill in a description*)

Comments

Please provide any other additional information that help explains the fuel treatment effectiveness or helps clarifies answers to the questions answered on this form.

	Contact Info					

*Indicate required inputs in current FS FTEM online system

		Fire Lat/Long		Time Fire intersected Treatment	NFPORS Treatment ID	NFPORS Treatment Name

Treatment Info				1 hr Fuel Moisture (FM) estimate	10 hr FM Estimate

1000 hr FM Estimate	Live FM Estimate	Live FM sample type	Date FM estimated	ERC Percentile	Weather Conditions		
					Mid Flame Windspeed	Wind Direction	Temp in Degrees

Est. % Relative Humidity			Was Treatment strategically located to aid in control of wildfire? **Yes or No**	Dominant Fuel Model **INSIDE** Treatment Unit

Dominant Fuel Model OUTSIDE Treatment Unit	Flame Length INSIDE Treatment Unit	Flame Length OUTSIDE Treatment Unit	How did the treatment contibute to the contol of the fire?

Dominant Fire Type **INSIDE** Treatment Unit	Dominant Fire Type **OUTSIDE** Treatment Unit

Comments

Comments (note if you have Pictures, writeup,etc)