

**Wildland Fire Management RD&A**  
**Decision Support**  
**Standard Operating Procedures and FAQs**  
**Version 2014 - 3.0**

**Section 4: Information for ANALYSTS/SPECIALISTS: FIRE BEHAVIOR/WFDSS DECISIONS/GIS**

**Are there opportunities to be involved with the WFM RD&A as a Fire Behavior/WFDSS Decision/GIS specialist?**

The WFM RD&A provides opportunities for fully qualified analysts and trainees to participate in two ways: Call When Needed and Details.

Call When Needed – The WFM RD&A maintains a list of people interested in supporting incidents when a request comes in. Often the support is virtual but occasionally travel to a decision support center may be requested. Commitments can be a few hours to a full 14 day assignment. [Click here](#) to read about the program and submit your name to the ***CWN List of Analysts***

Details and Mentee assignments – Occasionally the WFM RD&A will have the opportunity for 14 day mentee assignments and longer duration detail assignments. [Click here](#) to read about the two programs and submit your name for consideration.

You can also contact your Geographic Area Editor or the WFM RD&A ON-Call Coordinator 208-473-8107 if you have questions

**What types of assignments may I participate in?**

The WFM RD&A provides support in a variety of ways:

- **Virtual/remote support:** Analysts will work from their home unit providing fire behavior modeling outputs and/or other decision support such as decision document assistance. Analysts provide this support using telephone, computer, web-conferencing and other technology to communicate with the hosting unit.
- **On Site:** Analysts travel to a hosting unit to provide fire decision support (fire behavior analyses, decision document assistance) with face to face communications.
- **Geographical area, regional, national support:** Analysts may be assigned to a Decision Support Center at a GACC, dispatch center, or other government office supporting multiple fires – regardless of agency. In this case the analyst would work directly for a Decision Support Team Lead providing support to individual fires or units.

**How might I be contacted during the fire season?**

- You may be contacted directly by a local unit if a Geographic Area Editor recognizes you as a local/regional resource. In this case a local unit has likely contacted the GA Editor for help and your name has been given to the local unit.
- In some cases a GA Editor may contact you and inquire about your availability to provide support. In this case you would be given the specifics of the request, the local incident contact and you would proceed with the request.
- The WFM RD&A On-Call coordinator may contact you to provide support to an incident or local unit. In this case you would be given the pertinent information and you would proceed with the request.
- The WFM RD&A On-Call coordinator may contact you to mobilize with WFM RD&A personnel to establish a Decision Support Center in a geographic area. In this case you would be dispatched (standard fire assignment dispatch procedures) and would report to the Decision Support Team Lead assigned to the Decision Support Center.

**What will I need to bring if I am dispatched to assist at a Decision Support Center?**

Consider the following items:

<b>Required Items in <i>Bold Italic</i></b>		
<b>Hardware</b>	<b>Software (latest version)</b>	<b>Supporting Docs/Items</b>
<b><i>Laptop</i></b>	Wind Ninja	<b><i>Red Card</i></b>
External Hard drive	FlamMap	Fire Behavior Field Reference Guide
<b><i>Broadband Card- or wireless capabilities</i></b>	Google Earth Pro	40 Fuel Models (Scott & Burgan)
Multi-Card reader	Arc GIS	Red Book
<b><i>Cell Phone</i></b>	X-tools Pro	Fire Gear (pack, nomex, boots, hard hat, fire shelter, etc) *
<b><i>Thumb/flash drives</i></b>	FireFamily Plus	Calculator
Power strip	BehavePlus	Pens/Pencils
	FARSITE	Red bag (clothes, toiletries, etc) *
		If camping, tent, sleeping bag, pad *

\*Check with the DSC team lead for specifics, you may need fire gear to travel to an incident to assess fuels, meet with the IMT’s FBAN etc.

**Who will I need to coordinate with if I am working remotely for an individual incident?**

- If you are working for an individual incident or a local unit you will coordinate with the local point of contact provided to you when you were assigned to the incident.
- In addition, you must coordinate with the WFM RD&A On-Call Coordinator or the Geographic Area Editor, depending on who assigned you, throughout your support of the incident, especially as you complete analyses/decision support or are transitioning with another analyst. In some cases that incident may need more assistance in the future and you may not be available help in which case a different analyst will be assigned.

**Who will I need to coordinate with if I am working remotely for a Decision Support Center?**

1. You will work directly for the Decision Support Team Lead and you will be coordinating your workload with them – and -

2. You will coordinate with whoever your local point of contact is for your assigned analysis/decision support.

### **How should I record my time if I am working remotely?**

Personnel assigned to an incident will charge to the incident charge code as determined by the WFM RD&A On-Call Coordinator, Decision Support Team Lead, local incident contact or Geographic Area.

- Check with the local unit or person who assigned you as to the preferred way of communicating this information. It may be necessary to fill out an OF-288 Firefighter Time Report or CTR etc.

## **PROVIDING FIRE BEHAVIOR SUPPORT AS A FIRE BEHAVIOR SPECIALIST, LTAN, FBAN, OR GSAN**

### **What will be expected of me as an analyst assigned to work with the WFM RD&A?**

- Analyst workload and priorities will be determined by the WFM RD&A On-Call coordinator or Decision Support Team Lead.
- Communicate directly with the local contact requesting decision support to understand their needs, and suggest additional or alternative products when appropriate.
- Communicate regularly with the assigned WFM RD&A Coordinator (On-Call or DSC Lead) to provide updates on your status and progress on analyses. This will assist future analysts so they are well briefed of the situation.
- Whenever necessary, especially when working with field users unfamiliar with Fire Behavior modeling tools, document the interpretation of your fire behavior analyses within the WFDSS notes section. This is to ensure that the interpretation of the modeling outputs is communicated clearly and is documented so the users can easily understand the outputs.
- When working on a **fire behavior analysis** you should be competent in the following:
  - **Seek intelligence** from any on-site fire behavior personnel (local fire personnel, FBAN, FOBS, etc) to understand current and expected fire behavior, burn period, barriers to spread, and locally relevant weather stations.
  - **Landscape Calibration:** Analysts will be expected to critique and then modify and calibrate landscapes (LANDFIRE) to better match local fuel matrixes when necessary. Calibrating models to represent current and expected fire behavior is essential.
  - **Thoroughly Document** analysis activities directly in WFDSS – utilize the notes sections as much as possible utilizing the ***“Annotations for Analysis in WFDSS”***.
  - **Fire Modeling:** Analysts will be expected to run fire behavior models such as Short Term, Near Term and FSPro, and be able to critique and interrupt the results. Running the models will include building or uploading ignition and barrier files.
    - **Calibrate** Near Term Fire Behavior and FSPro as recent fire perimeters will allow.
    - **Document** the rationale and analysis thought process in the “Analysis/Notes” portion of WFDSS, allowing future analysts or reviewers to follow your logic.
    - **RAWS Analysis:** Analysts will review RAWS data to determine accuracy, completeness and compatibility with the fire area.

## **What type of questions can I expect to be asked to answer with the Fire Behavior Analysis Tools?**

### **Example Questions about Risk Assessment:**

- What is the probability that our fire will burn point X (reach a particular value) in a given time period?
- Where can we expect fire to “want” to move under specific weather conditions?

### **Example Questions about Fire Growth:**

- When will the fire reach point (X) under specific weather conditions?
- When will the fire reach point (X) under forecasted weather conditions?

### **Example Questions about Fire Behavior:**

- What Fire behavior can we expect under (X) weather across (X) area?
- What Fire behavior can we expect under (X) weather at (X) location?

## **What will I need to document when completing Fire Behavior Analyses in WFDSS?**

The primary place for documentation of fire behavior analyses is directly within WFDSS. Utilize “Annotations for Analysis in WFDSS”. This will help the host unit and analysts who transition with you to calibrate the model for future runs, as well as to provide documentation.

- Analysts should use the notes menu tab to document thought processes and rationale such as;
  - Why a particular RAWs was used,
  - Why fuel models were changed or various settings were modified.
  - The notes should also be used to provide interpretation, express confidence, caveats and concerns with the model run.
- Depending on the experience of the local unit, analysts will be expected to document analysis information within the **WFDSS Notes Section** so the local unit can properly interpret the results in the absence of an analyst.

## **Should I have my fire behavior model runs reviewed before I accept them?**

If you are assigned as an analyst by the WFM RD&A, the WFM RD&A On-Call Coordinator or Decision Support Team Lead will ask you to discuss your first few fire behavior analyses with another analyst skilled in the WFDSS fire behavior tools (LTAN, FBAN, or Super Analyst in WFDSS) when you first arrive at the Decision Support Center or begin a virtual assignment. This is to ensure that analyses are conducted in a consistent manner and that local information and assumptions are accounted for when beginning an assignment. Any trainee LTAN or FBAN will need to have their analyses reviewed by a fully qualified individual before “accepting” an output in WFDSS.

## **If I am asked to review a fire behavior analysis what types of things should I look for?**

An analysis review can include many things depending on the situation, some suggestions are as follows:

- Did the Analyst document their inputs adequately – do the documentation notes make sense and can you follow their rationale for their process?
- Was the analysis calibrated? If not, why? If so how close was the calibration? Does the calibration methodology make sense?
- Has the Analyst gathered as much intelligence as is reasonable given the time frames and constraints?
- Is the fire information current? Is the best available data utilized for the analysis?

- Was the Analyst able to acquire adequate local information and is this documented in the notes?

### **How should I close out with a LOCAL UNIT when I have finished my analyses?**

As an analyst assigned to assist a local unit, you should complete the following upon conclusion of an assignment or analysis:

- Ensure that your analysis results and interpretation are understood by the primary contact.
- Ensure the local unit has your contact information or understands who you will be transitioning with if additional analysis is required
- If necessary fill out and send an email with analysis documentation/screen shots etc. to the local unit to ensure they have a record of analysis information
- If requested provide a copy of your timesheet (OF-288) or CTR so they can track incident costs.
- Send any documentation completed outside of WFDSS to local contact if requested.

### **How should I close out with the WFM RD&A when I have finished my analyses or assignment?**

As an analyst assigned to assist the WFM RD&A, you should complete the following upon conclusion of an assignment or analysis.

- Fill out the [2014 WFM RD&A Support Log](#) which summarizes information about the incident, days involved, analysis completed, etc. This information will be critical to evaluate the program and determine how to refine it in the future.
- Discuss any issues or problem areas with the On-Call Coordinator so other analysts that may work on your assigned incidents in the future can be advised.

## **WFDSS DECISION SPECIALIST**

### **What will be expected of me if I am assisting with Publishing a Decision in WFDSS?**

- Familiarization with the Decision process in WFDSS: navigation, content structure, editing, troubleshooting, etc.
- Understand Interagency partnerships and roles as they relate to Publishing Decisions in WFDSS and provide coordination as necessary.
- Recognize that the Published Decision is the agency administrator's responsibility and your role as support specialist is to facilitate approval and publishing.
- Understand how to incorporate supporting documentation into a Decision – ERC charts, fire behavior assessments, seasonal situation information, values inventory or values at risk, smoke concerns, etc.
- Understand how long term planning information is incorporated into a Decision
- Communicate regularly with the assigned WFM RD&A Coordinator (On-Call or DSC Lead) to provide updates on your status and progress.
- While working under the WFM RD&A, you may be asked to follow WFM RD&A guidelines that differ from your home unit, this is to provide consistency to the field when they are obtaining support from the WFM RD&A.

### **If I am working virtually, how do I coordinate with the On-Call Coordinator/Decision Support Center?**

- The WFM RD&A Coordinator (On-Call or DSC Lead) will establish a check-in schedule (ie. Conference call or individual coordination), which will depend on the complexity of your situation as well as other coordination efforts being managed. Keep the WFM RD&A Coordinator (On-Call or DSC Lead) informed as questions or issues arise.
  - Keep the WFM RD&A Coordinator (On-Call or DSC Lead) informed of your progress and estimated publishing date.
  - Coordinate with the WFM RD&A Coordinator (On-Call or DSC Lead) if you need additional assistance with products for the decision.

**What kind of support/oversight can I expect from the DSC Team Lead**

- Due to the flexible nature of publishing a Decision in WFDSS, you can expect periodic review and input from the WFM RD&A Coordinator (On-Call or DSC Team Lead).

**What will I need to document if I am helping with Publishing Decisions in WFDSS?**

- The WFM RD&A encourages individuals providing Decision Publishing support to maintain a unit log when assisting the local units. This is generally for your own reference, but could be useful if future support is requested and information needs to be shared with other individuals providing assistance.