



Wildland Fire Decision Support System

Dispatcher Role Overview

Wildland Fire Management RD&A
National Interagency Fire Center
Boise, Idaho
February 26, 2009



OBJECTIVES:



- Define the Dispatcher Role
- Explore the Intelligence tab
 - Zone Fire Weather Forecasts
 - ERC- G
 - Values Inventory
 - Basic Fire Behavior
- Create an Incident
- Explore the Situation Sub tab

Objectives:

Define the Dispatcher Role

Explore the Intelligence tab

Zone Fire Weather Forecasts

ERC- G

Values Inventory

Basic Fire Behavior

Create an Incident

Explore the Situation Sub tab



Dispatcher Role

- Enter information for a new WFDSS Incident.
- Edit incident information for incidents they create.
- Run simple (unsupervised) fire behavior analyses.
- Expected to be granted to those individuals responsible for the initial response, firecode and fire number. Will vary Unit to Unit, Agency to Agency



Dispatcher Role Definition:

Enter information for a new WFDSS Incident.

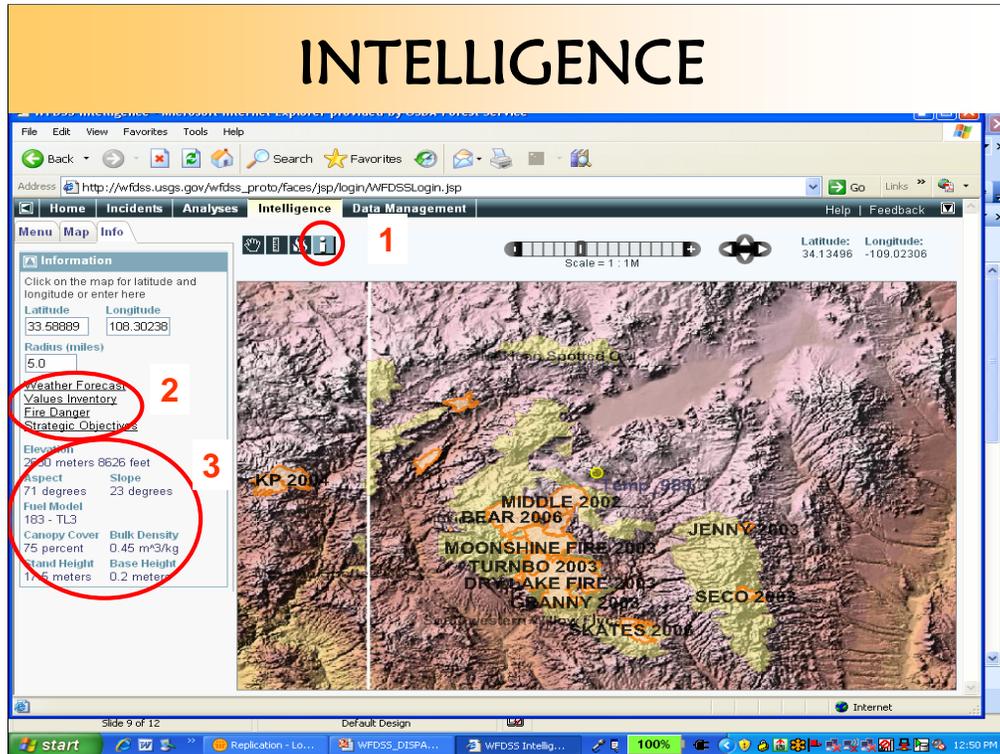
Edit incident information for incidents they create.

Run simple (unsupervised) fire behavior analyses.

Expected to be granted to those individuals responsible for the initial response, firecode and fire number. Will vary Unit to Unit, Agency to Agency

Every user in the WFDSS application requires their OWN LOGIN ID due to security requirements, just like the rest of the federal applications.

INTELLIGENCE



Intelligence Tab offers easy access to a variety of basic decision support information Spatial information – T&E species, Fire History

- **Weather Forecasts**
- **Values Inventory – based on tier1 RAVAR data in a radius – similar to RiVAT products from 2008**
- **Fire Danger – ERC-G**
- **Strategic Objectives that were pre-loaded into the system**

(1) Using the “i” button, users can click on the map.

(2) Users can then choose to view the Weather Forecasts, Values Inventory, Fire Danger or Strategic Objectives

(3) Users can also view the underlying LANDFIRE data.

Zone Fire Weather Forecasts

The screenshot displays the Wildland Fire Decision Support System (WFDSS) web interface. The browser window title is "http://wfdss.usgs.gov - Fire Weather Forecast - Microsoft Internet Explorer provided by...". The address bar shows "http://wfdss.usgs.gov". The page header includes the "Wildland Fire Decision Support System" logo and navigation links for "Home", "Help", and "Feedback".

The main content area is divided into two columns. The left column contains a menu with options like "Info", "Click", "longit", "Latitu", "33.58", "Radiu", "5.0", "Weath", "Value", "Fire D", "Strate", "Elevat", "2630", "Asped", "71 de", "Fuel M", "103", "Canop", "75 pe", "Stand", "17.5 r". The right column displays a satellite-style map of a region with labels "ENNY 2003" and "ECO 2003". Above the map, the coordinates "Latitude: 34.19845" and "Longitude: -107.44837" are shown.

The main text area contains the following information:

000
FNUSS4 KEPZ 191458
FWFEPZ

FIRE WEATHER PLANNING FORECAST FOR NEW MEXICO
NATIONAL WEATHER SERVICE EL PASO TX/SANTA TERESA NM
758 AM MST FRI DEC 19 2008

..DISCUSSION...
YESTERDAY'S QUICK HITTING TROUGH HAS EXITED THE REGION. TODAY AND THROUGH THE WEEKEND WESTERLY FLOW ALOFT WILL KEEP THE REGION FREE OF ANY STORM SYSTEMS. DESPITE PERIODS OF HIGH CLOUDS...DRIER AIR AT LOW AND MID LEVELS WILL MOVE IN TO TRIM RELATIVE HUMIDITY VALUES. NEAR BREEZY CONDITIONS EXPECTED SATURDAY. SUNDAY A BACKDOOR COLD FRONT WILL PUSH IN FROM THE EAST TO THE RIO GRANDE AND TO THE CONTINENTAL DIVIDE BY MONDAY MORNING. TUESDAY IS THE NEXT DAY WITH THE POTENTIAL FOR SIGNIFICANT WEATHER. AN UPPER LEVEL PACIFIC STORM SYSTEM WILL SWING ACROSS THE AREA. WINDY CONDITIONS ARE EXPECTED TO DEVELOP WITH THE DEVELOPMENT OF A DEEP SURFACE TROUGH. SCATTERED RAIN AND SNOW SHOWERS ARE ALSO LIKELY.

&&

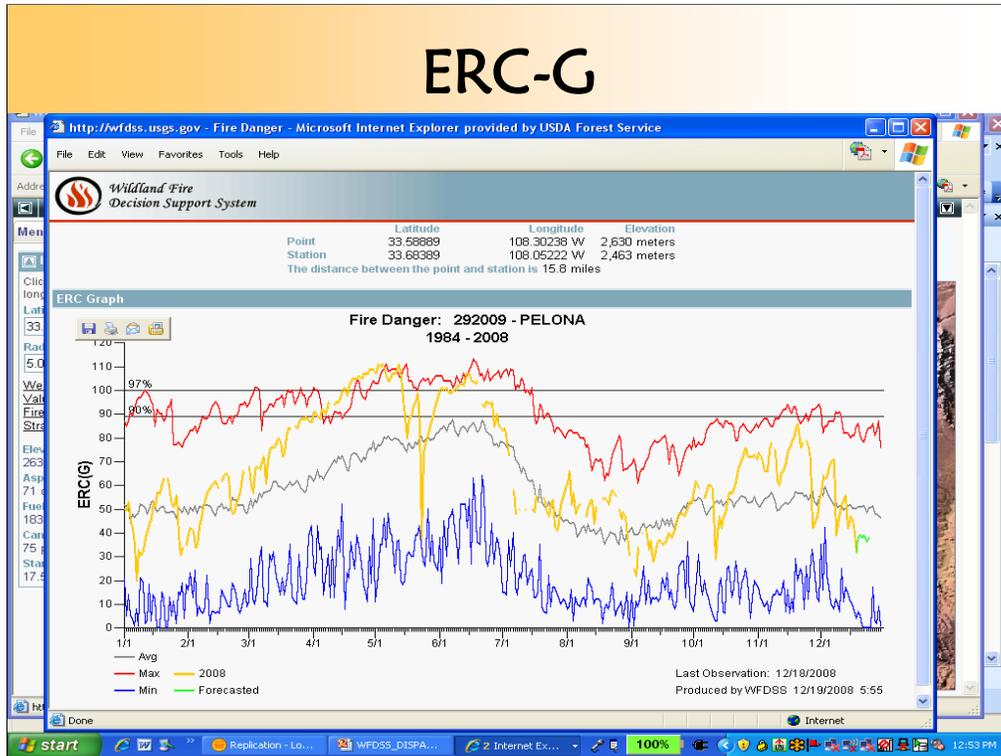
...PERCENTAGES SHOWN IN THE SKY/WEATHER PORTION REFLECT SKY COVER AMOUNT...

...MEAN ELEVATIONS USED TO OBTAIN MIXING HEIGHTS AS FOLLOWS:
ZONE 110 - RESERVE (5900 FT)
ZONE 111 - DEMING (4300 FT)
ZONE 112 - LAS CRUCES(3900 FT)
ZONE 113 - RUIDOSO (6900 FT)

VENTILATION CATEGORIES ARE DETERMINED BY CRITERIA ESTABLISHED BY THE STATE OF NEW MEXICO.

At the bottom of the browser window, the status bar shows "Done", "Internet", and "100%". The Windows taskbar at the very bottom includes the "start" button, several open applications, and the system clock showing "12:51 PM".

Spatial data in WFDSS allows the system to access the zone forecast for the specific area.



ERC-G graph for nearest weather station

Strategic Objectives

http://wfdss.usgs.gov - WFDSS Strategic Objectives - Microsoft Internet Explorer provided by USDA Forest Service

Wildland Fire Decision Support System

Strategic Objectives

Latitude Longitude Radius (miles)
33.56889 108.30238 5.0

- [-] **NM-GNF** - Gila National Forest (39,937 acres)
 - [-] **0 - State/Private Land** (14,567 acres)
 - [-] Strategic Objectives
 - Contain unwanted fires at the smallest possible size.
 - Protect structures.
 - [-] **10 - Reserve Low Risk** (25,370 acres)
 - [-] Strategic Objectives
 - Wildland Fire Use allowed when Slaughter Mesa RAW5 7-day average ERC-K is below the 95th percentile.
 - Unless other resource values dictate, suppression actions will be planned to control fires at no larger than the designated sizes, if suppression is the chosen management response:

Vegetation Type	Fire Intensity Levels	Max. Size (Acres)
Riparian	Level 1 and 2	50
	Level 3 and 4	10
	Level 5	5
Grassland and PJ	Level 1 and 2	5000
	Level 3 and 4	500
	Level 5	100
Timber (Unsuitable and Suitable)	Level 1 and 2	5000
	Level 3 and 4	250
	Level 5	50

Ecosystems are restored and maintained, consistent with land uses and historic fire regimes and condition class utilizing wildland fire use, prescribed fire, and mechanical fuel treatments.

Increase the number of acres treated annually by prescribed fire and wildland fire use.

Strategic objectives . . . In the future WFDSS is planned to have spatial FMU information that will pull specific strategic objectives for the location by linking the text to the spatial data

Values Inventory

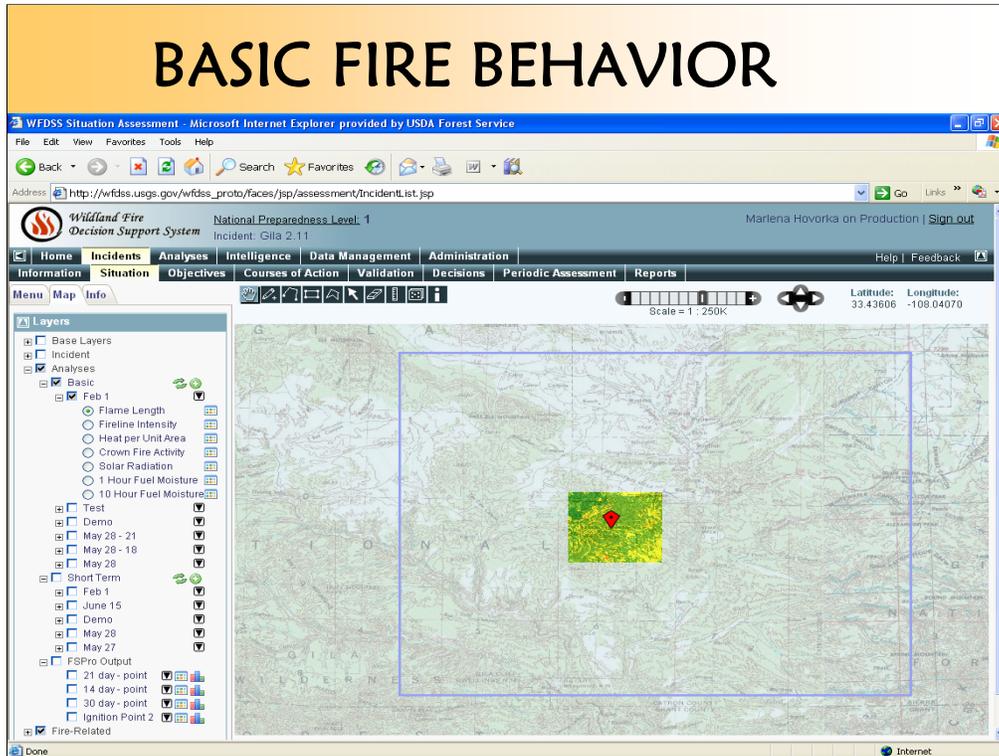
Wildland Fire Decision Support System

Values Inventory Information

Latitude: 33.58689 Longitude: 108.30238 W Radius: 5.0 miles

Asset	Value	Data Source	Currency	Coverage
Census Housing Values	\$0	U.S. Census Bureau	Jan 01, 2000	National coverage
Habitat: Mexican Spotted Owl	2,343 acres	Gila National Forest	Mar 01, 2008	Habitat restricted to Gila National Forest
Jurisdiction: USFS	25,579 acres	Various		AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY
Jurisdiction: BLM	9,359 acres	Various		AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY
Jurisdiction: Private	14,721 acres	Various		AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY
Jurisdiction: State	807 acres	Various		AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY

Value inventory displayed is a 5-mile radius of coordinates

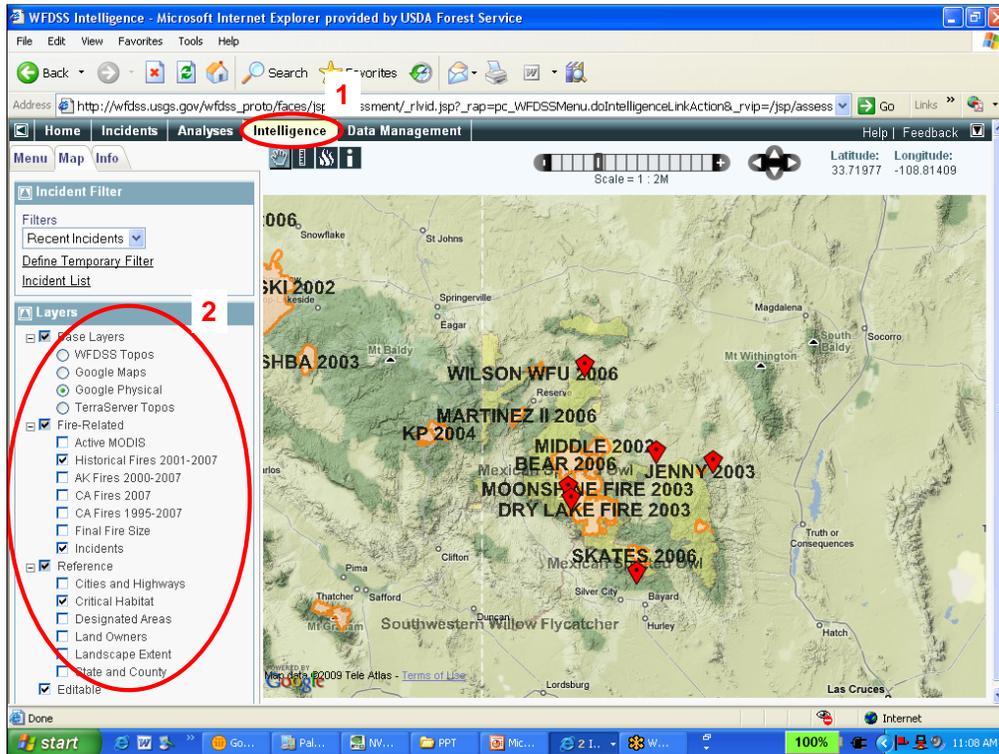


Basic fire behavior outputs can be produced by Dispatchers or Authors. This analysis runs on an un-calibrated landscape chosen on the fire information page. Example, folks in CA are directed to use the CA Landscape layer instead of the LANDFIRE layers available. The analysis also chooses weather from the closest weather station. Also available will be a minimum travel time product to show flow paths and expected arrival times.



How To Create a WFDSS Incident and use the Intelligence Tab

Basic fire behavior outputs can be produced by Dispatchers or Authors. This analysis runs on an un-calibrated landscape chosen on the fire information page. Example, folks in CA are directed to use the CA Landscape layer instead of the LANDFIRE layers available. The analysis also chooses weather from the closest weather station. Also available will be a minimum travel time product to show flow paths and expected arrival times.

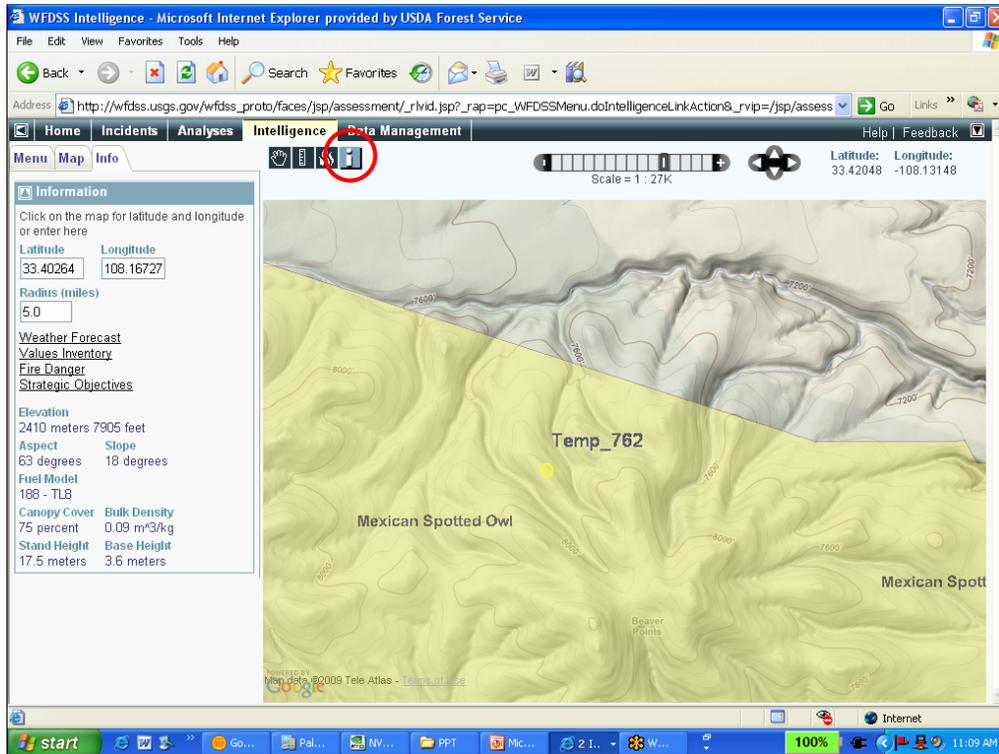


Creating a new incident and gathering intelligence:

After signing into WFDSS, click on the INTELLIGENCE tab.

(1) - Click on the INTELLIGENCE tab

(2) - Users can choose base layers and other fire related spatial data for viewing near the incident

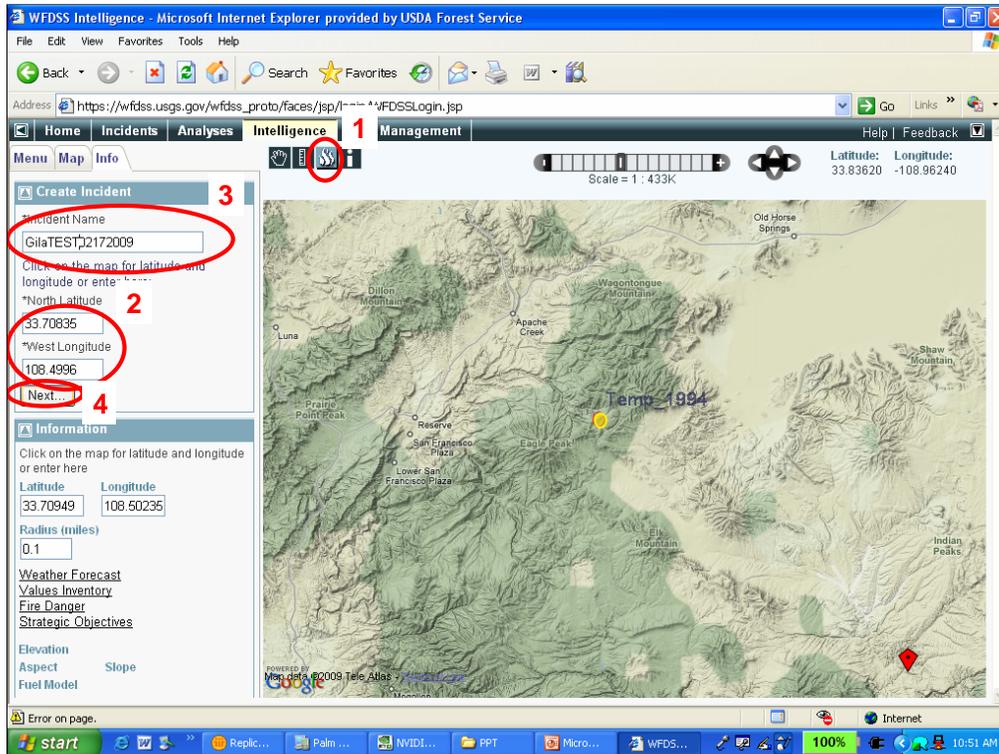


Gather INTELLIGENCE - Current Weather Forecast, Values Inventory, and Fire Danger Information provided by:

Choose the “ i ” tool and click on the map where the incident is located

Users can now view:

- LANDFIRE data at the temporary point created**
- Weather Forecast based on spatial data for the fire weather zone in the area**
- Values Inventory for the set radius – 0.1 miles radius produces information for a 20 acre area**
- Fire Danger (ERC-G graph for closest weather station or if coordinates for a weather station are entered, the ERC graph for that station will appear)**
- Strategic Objectives will be available based on spatial data for fire management units. This feature will only be available when spatial fire management/land management unit data is available**



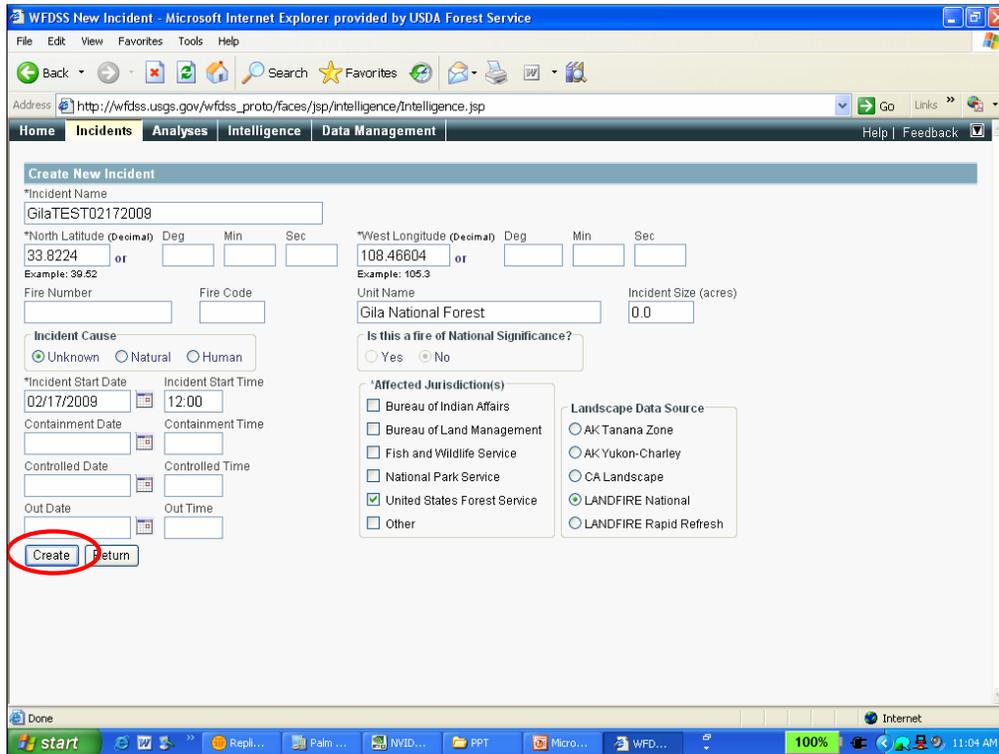
Next, to **CREATE** the incident from coordinates or by clicking on the map:

(1) - Click on the WFDSS Symbol on the tool bar, then click on the map for fire coordinates

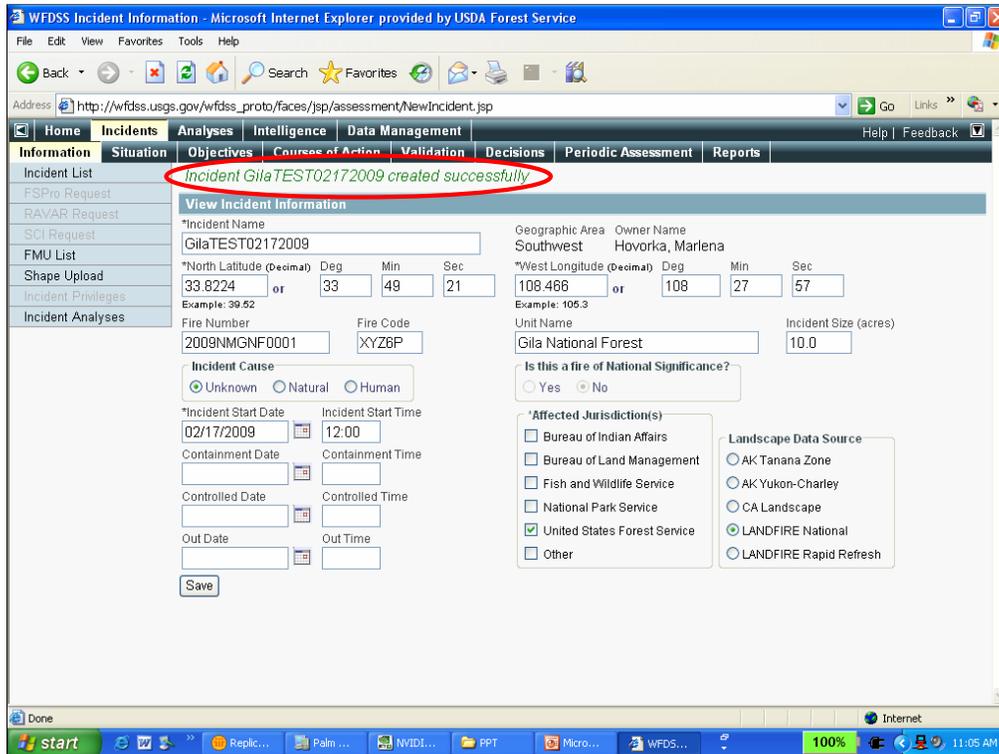
(2) - Coordinates can also be adjusted by directly entering into the text box after the map has been clicked

(3) - Add Incident Name

(4) - Click Next

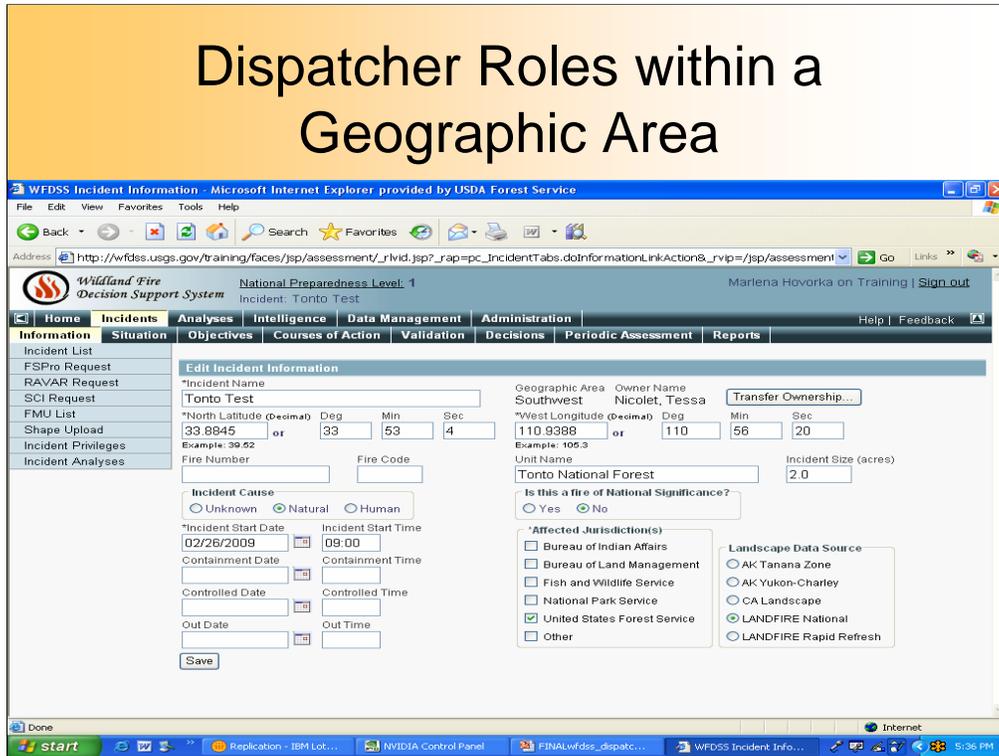


Notice – The next screen that appears already has several fields pre-field (Affected Jurisdictions, Forest Name, and Landscape Data Source). Fields are automatically populated when an incident is created from the INTELLIGENCE tab. Simply verify the information on the screen. Acreage and Affected Jurisdictions can be modified as needed. Add the affected acreage if know. This can be updated as the incident evolves. The fire number should be entered. It is the NWCG standard year-state unit-number (2009-NMGNF-00011). The firecode should be entered to help with account tracking. Also in the future as fire systems are connected the fire number and firecode will be integral in linking systems together. Click CREATE.

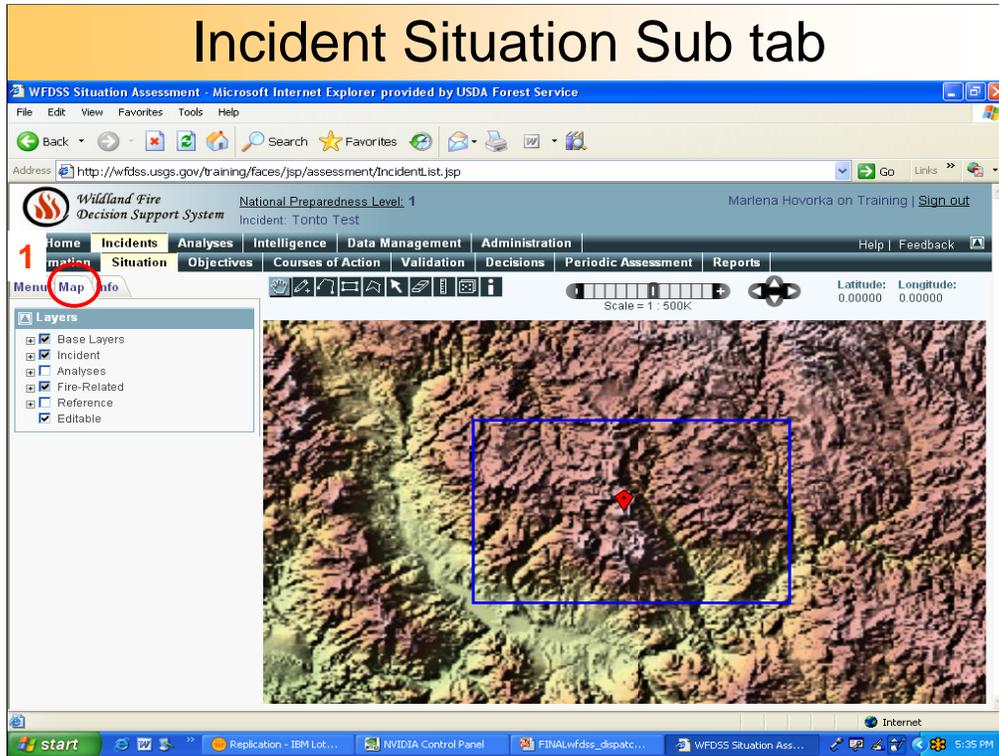


After the CREATE button is pushed, users will see the incidents are successfully created at the top of the next screen. Information can still be edited on this screen and saved. This information can be edited by any user with a Dispatcher Role within the same Geographic Area. The Dispatcher Role can edit the Fire Information page even after the decision documentation begins and a user with Author Role privileges owns an incident. Incident Ownership will be covered in the Author Role training material.

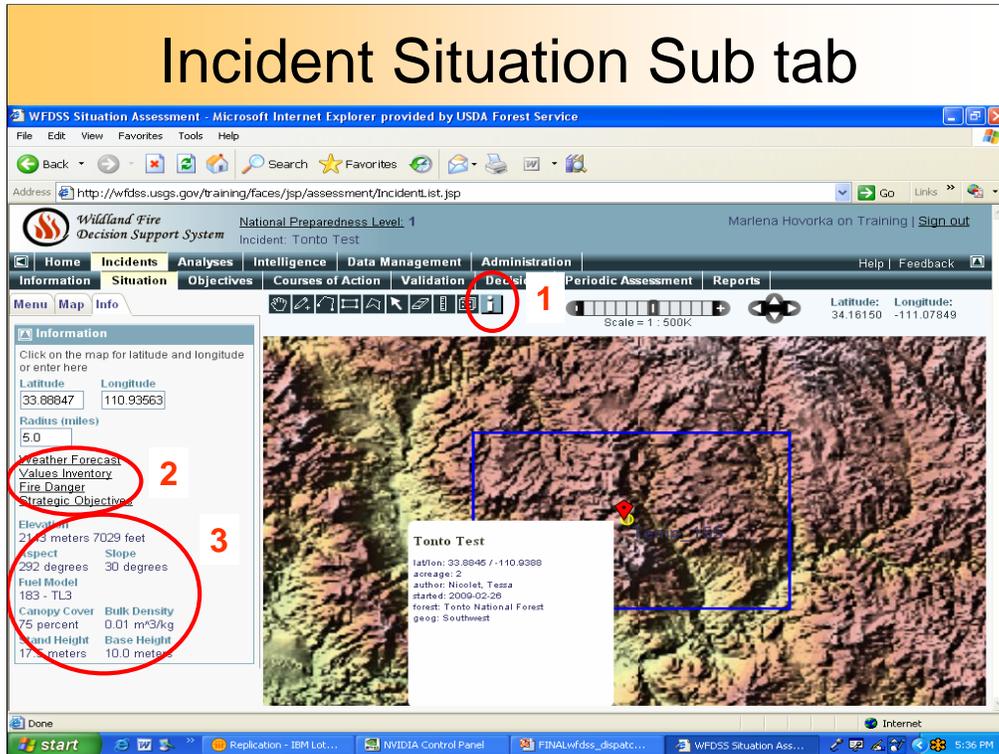
Dispatcher Roles within a Geographic Area



Dispatcher Role users can edit Incident Information for other incidents within their Geographic Area. Incident Ownership does not affect Dispatcher Role users. Incident Ownership will be covered in the Author Role.



The **SITUATION** subtab of an **INCIDENT** functions like the **INTELLIGENCE** tab.
(1) Users can view data layers on the Map tab.



Situation Sub Tab offers easy access to a variety of basic decision support information Spatial information – T&E species, Fire History

-Weather Forecasts

-Values Inventory – based on tier1 RAVAR data in a radius – similar to RiVAT products from 2008

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SUMMARY:

- Defined the Dispatcher Role
- Explored the Intelligence tab
 - Zone Fire Weather Forecasts
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SUMMARY:

There are other functions on some of the tabs we have visited that are not related to the Dispatcher Role. These functions will be covered in other material related to the Author Role, Fire Behavior and Fire Perimeters.

We did complete the following objectives:

Define the Dispatcher Role

Explore the Intelligence tab

Zone Fire Weather Forecasts

ERC- G

Values Inventory

Basic Fire Behavior

Create an Incident

Explore the Situation Sub tab

Where to find WFDSS



- <http://wfdss.usgs.gov>
- Request your user account now!!