

IFTDSS Workshop

Handout 8: Fuels Treatment – Minimum Travel Time

1. From the Project Summary page, click on **Create New Run**.

IFTDSS 2.0 beta About Help Feedback Log Out
Home Collaborate Projects Data Admin Logged in as Huang, ShihMing

Workshop

Create New Run

Project Summary

Information [Edit](#)

Organization Name:
Project Start Date:
Project End Date:
Project Size:
Treatment Type:
Project Status: Planned
Description:
Date Modified: 01/15/2013
Date Created: 01/15/2013

Area of Interest

Resolution: 30.0m x 30.0m

Northeast corner:
Latitude: 38.1515207°
Longitude: -122.5333747°

Southwest corner:
Latitude: 38.1034121°
Longitude: -122.5980415°

Total Area:
7,481.78 Acres
30,277,800 m²

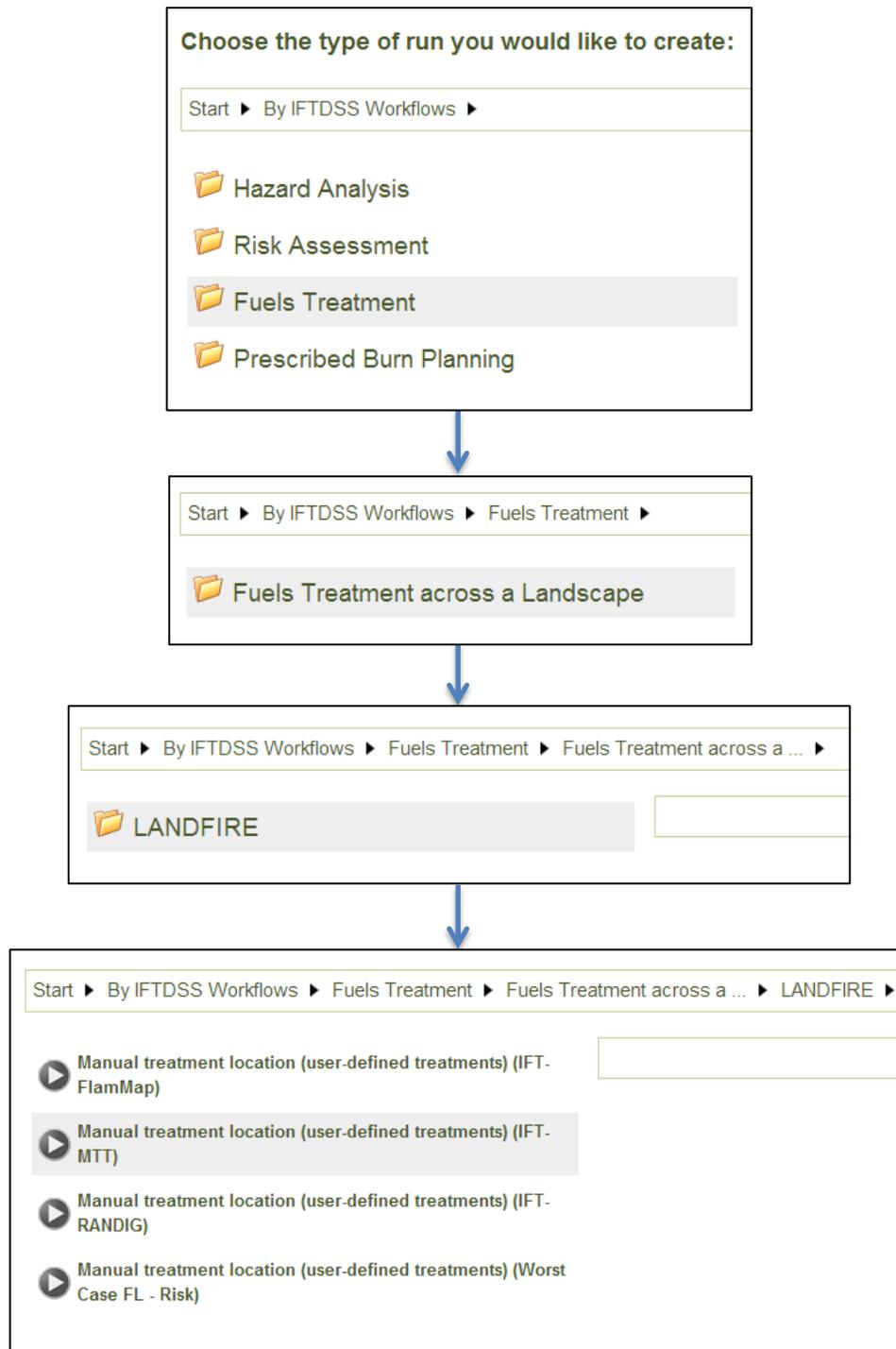
[Import Landscape data from LANDFIRE](#)
[Import Fuelbeds from LANDFIRE](#) [Upload Landscape Data Set](#)

Run Name	Pathway	Date Modified	Date Created	Actions
Run_1	Manual treatment location (user-defined treatments...	01/15/2013	01/15/2013	

Filters: (all) (all) (all)

Create New Run

2. Select the **Fuels Treatment** workflow, then select **Fuels Treatment Across a Landscape**, select **LANDFIRE**, and finally select the **Manual treatment location (user-defined treatments) (IFT-MTT)** pathway.



3. On the Configure screen, select the landscape data set that was used in the previous fuels treatment (IFT-FlamMap) exercise. Under the Import Polygons section, select the polygon that you saved during the previous fuels treatment (IFT-FlamMap) exercise. Click **Next**.

Configure Review Landscape Data Inputs Ignitions Barriers Pre-Treatment Outputs

Run 1 - Manual treatment location (user-defined treatments) (IFT-MTT) Help Tools

Select Data Set

Available Data Sets: North Novato (100%)

Percentages next to data set names indicate the percent that the data set covers the selected run area. Data sets below 100% coverage will display a smaller area of data than the selected run area.

A copy of the data set that you select will be made for this run. Changes to the original data set will not affect the data in this run. If you would like to re-import the selected data set into this run, return to this step later and click the Edit button.

Select Ignitions Data Set

Import Ignitions (optional):

Select Barriers Data Set

Import Barriers (optional):

Import Polygons

Import Polygons (optional): SMH_Treatment

Next >

- Review your spatial landscape data using the Overlays panel on the left. You should see the polygons that you imported in step 3 on the map displayed as drawn polygons. After reviewing your data, select **Next**.

Configure — Review Landscape Data — Inputs — Ignitions — Barriers — Pre-Treatment Outputs ▶

MFT - MTT (copy) - Manual treatment location (user-defined treatments) (IFT-MTT) Help Tools

You may review your spatial input data using the map below. The map editing tools along the top of the map window can be used to edit the data.

Layers Point Edit Exports

Base Layer

- Street Map
- Topo Map
- Imagery

Overlays

- USA Federal Lands
- Drawn Polygons
- Data Set Boundary

Landscape

- Fire Behavior Fuel Model
- Elevation
- Slope
- Aspect
- Canopy Coverage
- Canopy Height
- Canopy Base Height
- Canopy Bulk Density

Drawn Polygons

- unit 2
- unit 3
- Unit 1

Fire Behavior Fuel Model

- NB1: Urban/Developed
- NB3: Agricultural
- NB6: Open Water
- NB9: Bare Ground
- GR1(101): Short, Sparse Dry Climate Grass (Dry)
- GR2(102): Low Load, Dry Climate Grass (Dynamic)
- GR7(107): High Load, Dry Climate Grass (Dynamic)
- GS1(121): Low Load, Dry Climate Grass-Shrub
- GS2(122): Moderate Load, Dry Climate Grass-Shrub
- SH2(142): Moderate Load Dry Climate Shrub
- SH7(147): Very High Load, Dry Climate Shrub
- TU2(162): Moderate Load, Humid Climate Timber
- TU5(165): Very High Load, Dry Climate Timber
- TL2(182): Low Load Broadleaf Litter
- TL3(183): Moderate Load Conifer Litter
- TL4(184): Small downed logs
- TL6(186): Moderate Load Broadleaf Litter
- TL7(187): Large Downed Logs
- TL8(188): Long-Needle Litter
- TL9(189): Very High Load Broadleaf Litter

To save any polygons you've drawn, enter a data set name (optional).

Save Polygons As:

US Customary Units

◀ Back **Next >**

5. Now, you are on the Inputs step. Customize the IFT-MTT inputs and select **Next**.

MFT - MTT - Manual treatment location (user-defined treatments) (IFT-MTT) Help Tools

Properties

Crown Fire Calculation Method Scott & Reinhardt Method

Fuel Moisture

Parameter	Unit	Simulation #1
1-hr Fuel Moisture	percent	<input type="text" value="6"/>
10-hr Fuel Moisture	percent	<input type="text" value="7"/>
100-hr Fuel Moisture	percent	<input type="text" value="8"/>
Live Herbaceous Fuel Moisture	percent	<input type="text" value="60"/>
Live Woody Fuel Moisture	percent	<input type="text" value="90"/>

Weather

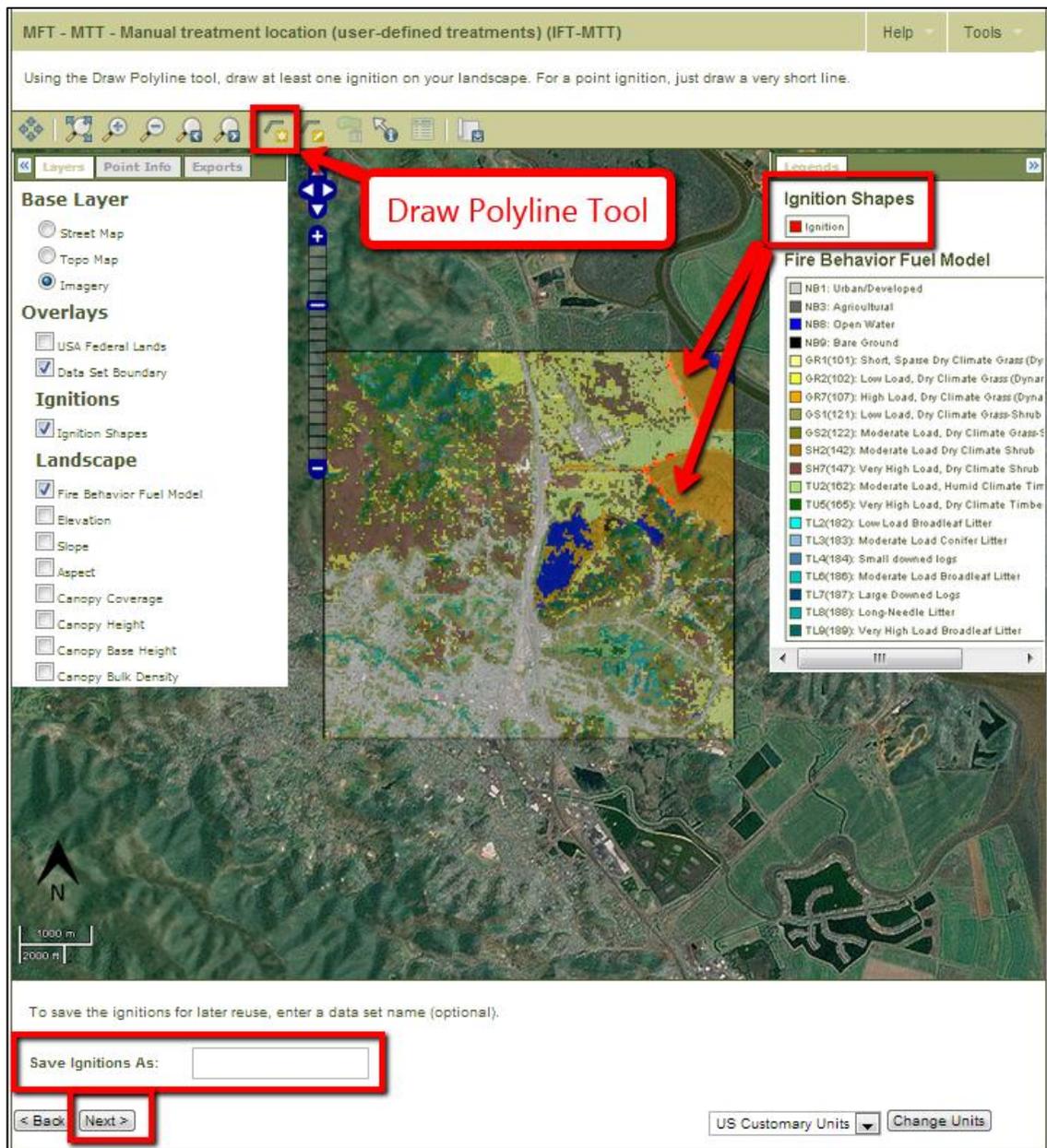
Parameter	Unit	Simulation #1
Wind Direction	deg	<input type="text" value="180"/>
20-ft Wind Speed	mi/h	<input type="text" value="15.00"/>

Simulation Inputs

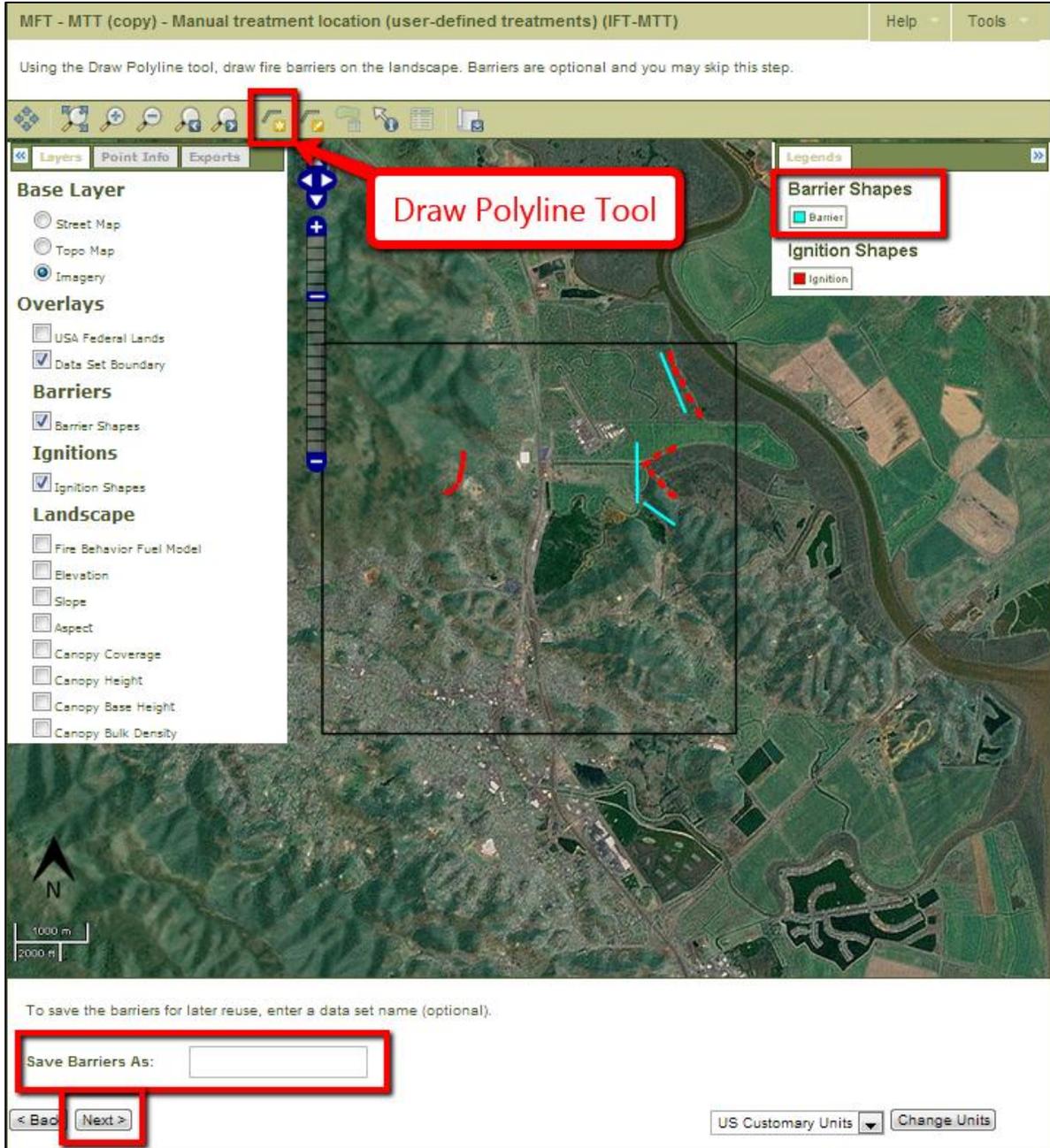
Parameter	Unit	Simulation #1
Duration of the Simulation	min	<input type="text" value="120"/>
Travel Path Interval	ft	<input type="text" value="500"/>
Spot Fire Probability		<input type="text" value="0.00"/>
Fill Barriers		Yes

< Back Next > US Customary Units Change Units

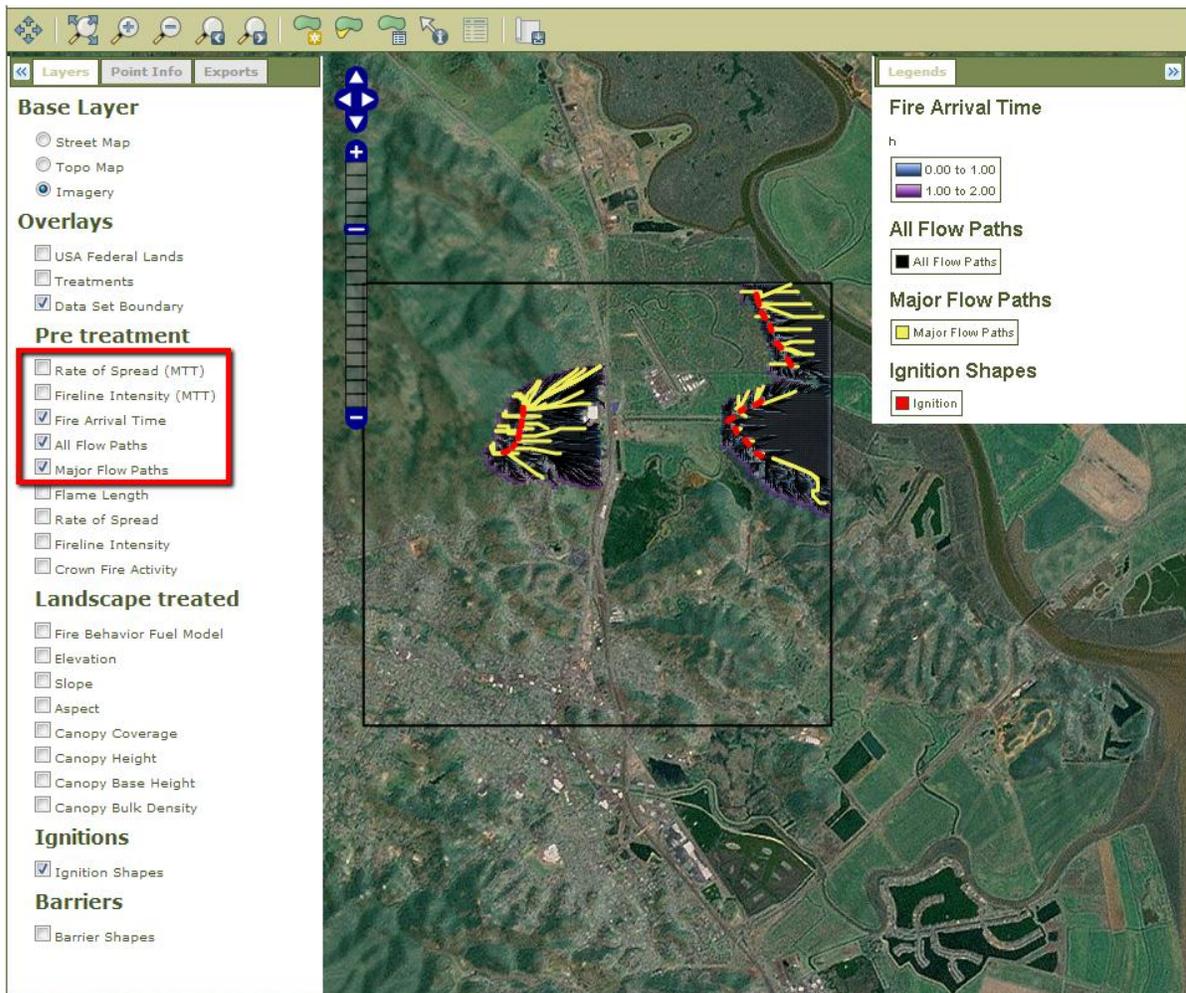
6. On the Ignitions step, draw at least one ignition on your landscape near the fuels treatment locations using the **Draw Polyline** tool.
 - a. To draw a line, select the **Draw Polyline** tool, click on the map once, move to a different point, and click again. Continue clicking until you are done drawing the ignition. Double-click to finalize and create the polyline.
 - b. You can draw multiple ignitions across the landscape. For a point ignition, just draw a very short line.
 - c. When all ignitions are drawn, you can save the ignitions by assigning them a name in the **Save Ignitions As:** space below the map. After saving the ignitions, you can use them in different IFT-MTT runs. Select **Next** to save ignitions and continue.



- Now, you are on the Barriers step. Use the same method as you did for drawing ignitions to draw barriers. Barriers are optional; you may skip this step. When all barriers are drawn, you can save the barriers by assigning them a name in the **Save Barriers As:** space below the map. After saving the barriers, you can use them in different IFT-MTT runs. Select **Next** to save barriers and continue.



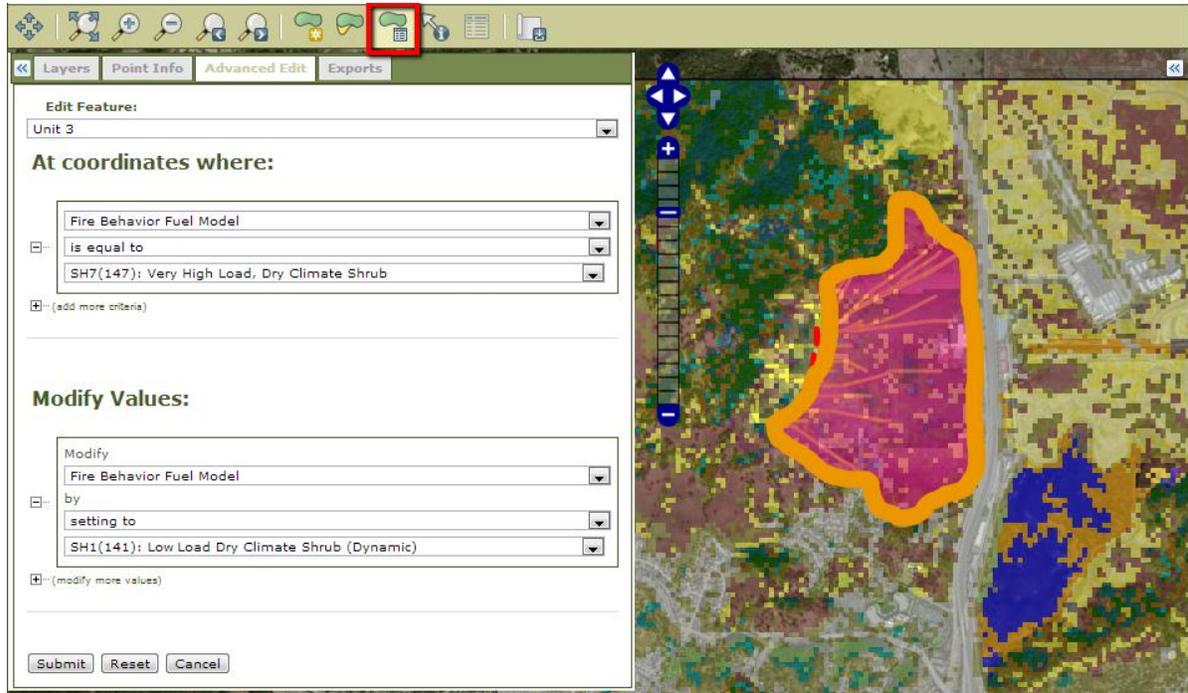
8. On the Pre-Treatment Outputs step, you can review MTT outputs, including fire arrival time, flow paths, rate of spread (MTT), and fireline intensity (MTT), as well as fire behavior outputs and landscape data.



- Next, turn on the Treatments layer, and select the **Polygon Advanced Edit** tool from the toolbar.

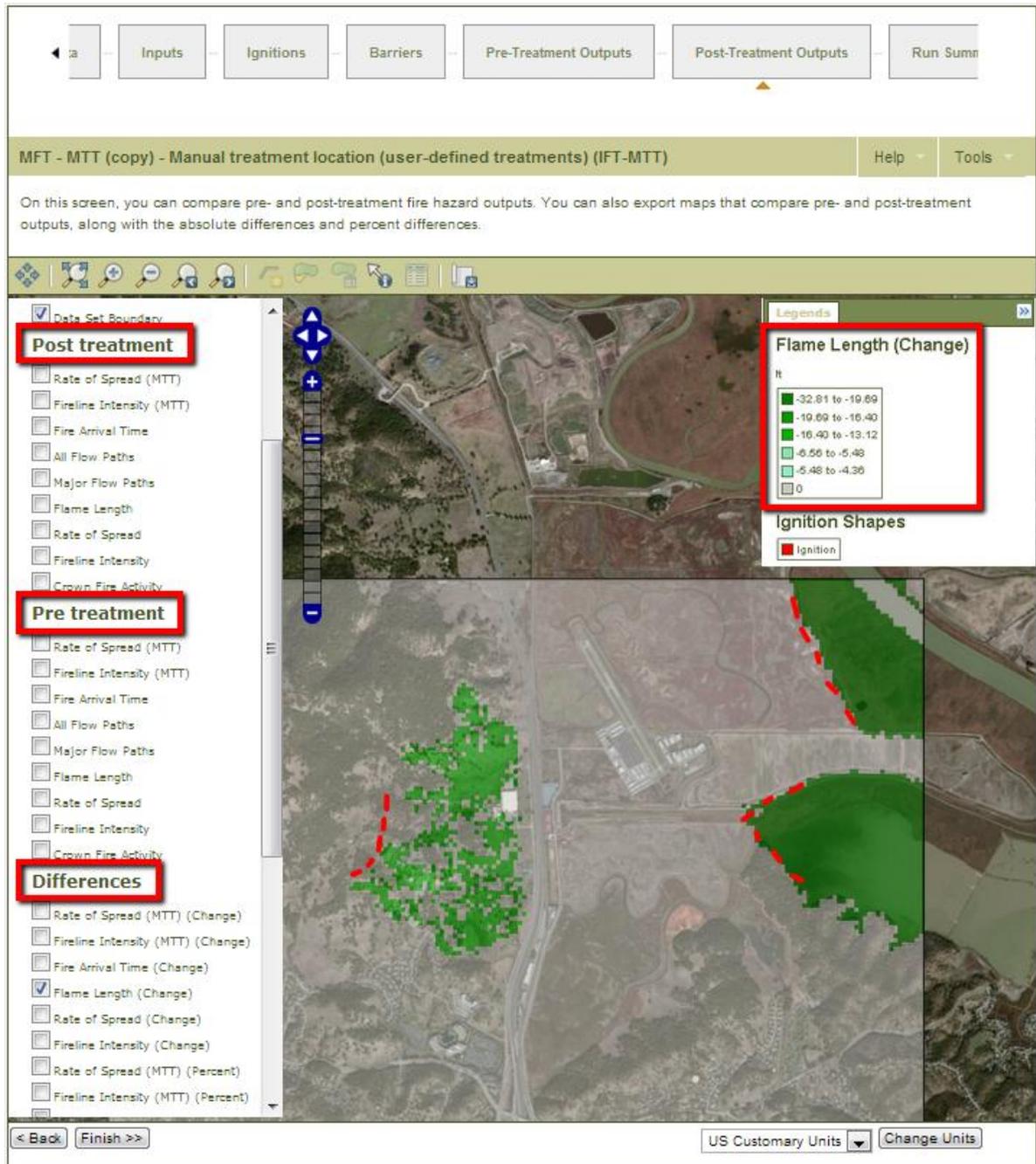
In this step, you will edit pixels within your polygon to simulate a fuels treatment (e.g., change the fire behavior fuel model from “SH2 (142): Moderate Load Dry Climate Shrub” to “SH1 (141): Low Load Dry Climate Shrub”). Click on a polygon you have created, and the Advanced Edit panel appears.

- Under **At coordinates where:**, set the criteria for selecting pixels to be edited.
- Under **Modify Values:**, set the change to be made to the pixels selected.
- Click **Submit** to save changes.



- Repeat Step 9 until you are done editing your fuels treatment polygons. Select **Next** to continue.

11. Now you are on the Post-Treatment Outputs step. In this step, you can view post-treatment output layers, pre-treatment output layers, and “difference” layers between pre- and post-treatment.



12. Click **Finish** to end the run and go to the Run Summary page.