

# IFTDSS Workshop

## Handout 7: Fuels Treatment – IFT-FlamMap

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

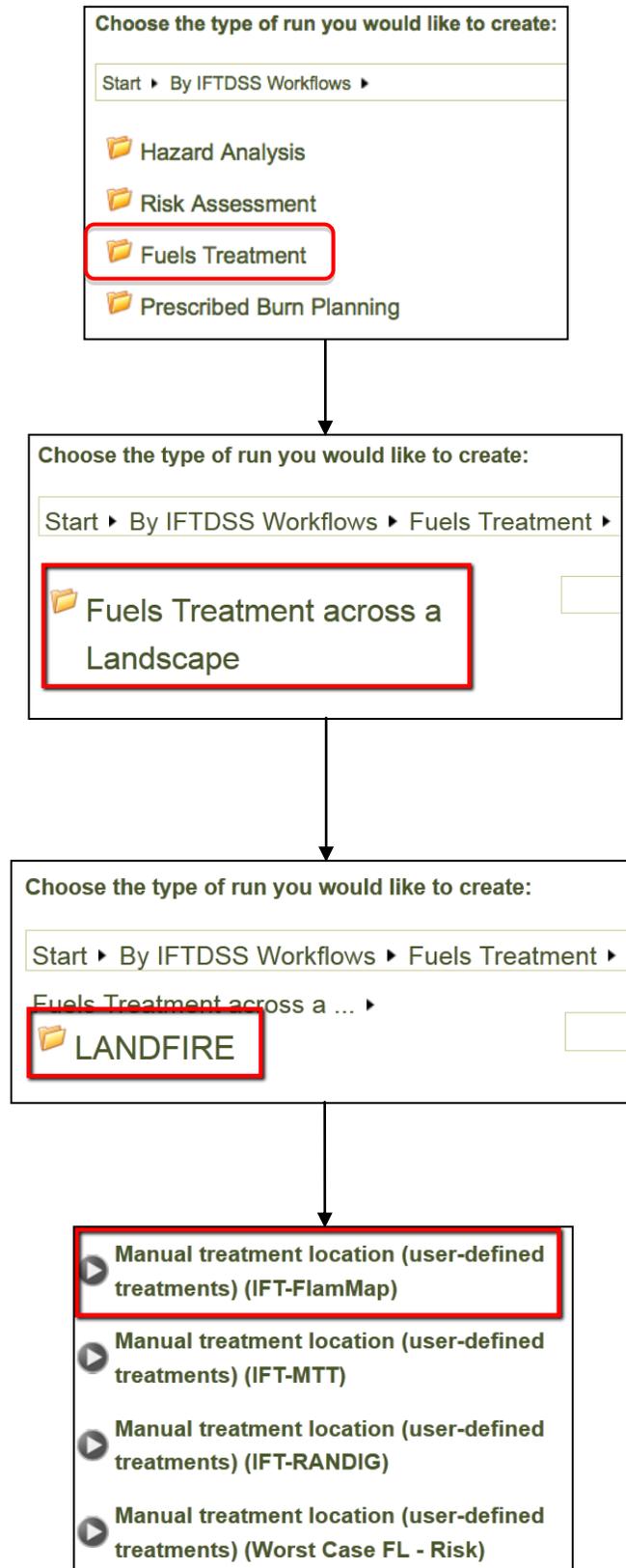
The screenshot displays the IFTDSS Portland Workshop interface. At the top, there are navigation tabs for Home, Collaborate, Projects, and Data, and a user login status: "Logged in as Banwell, Erin". The main heading is "IFTDSS Portland Workshop". A "Create New Run" button is highlighted with a red box in the top right corner.

The "Project Summary" section is divided into two main areas:

- Information:** Contains fields for Organization Name, Project Start Date, Project End Date, Project Size, Treatment Type, Project Status (Planned), Description, Date Modified (12/02/2012), and Date Created (12/02/2012). An "Edit" button is present.
- Area of Interest:** Features a satellite map with a yellow bounding box. To the right of the map, the following coordinates and area information are listed:
  - Northeast corner: Latitude: 38.2283047°, Longitude: -122.6637947°
  - Southwest corner: Latitude: 38.1891157°, Longitude: -122.7151747°
  - Total Area: 4,837.07 Acres, 19,575,000 m<sup>2</sup>
  - Resolution: 30.0m x 30.0mBelow the map are three buttons: "Import Landscape data from LANDFIRE", "Import Fuelbeds from LANDFIRE", and "Upload Landscape Data Set".

At the bottom, there is a "Runs" table with the following columns: Run Name, Pathway, Date Modified, Date Created, and Actions. The table is currently empty, displaying "No data available in table". Below the table are three filter dropdown menus, each set to "(all)". A "Create New Run" button is highlighted with a red box at the bottom left of the page.

2. Select **Fuels Treatment**, then **Fuels Treatment across a Landscape**, then **LANDFIRE**, and finally, select **Manual treatment location (user-defined treatments) (IFT-FlamMap)**.



3. Name your run and select **Next**.

Create New Run: Manual treatment location (user-defined treatments) (IFT-FlamMap)

Run Name Fuels Treatment	North 38.1645186	The extent of the box in the map window shows the project area that you have selected for this run. To change the area for this run, use the Draw Box tool to select a smaller area within the box shown in the map window.  Currently, the project and run areas are limited to 150,000 acres; however, this size limit will be increased to accommodate larger landscapes in future software releases.
West -122.611109	East -122.544699	
South 38.1196533		

Navigate Map  Draw Box Selected area: 7,242.26 acres



4. The LANDFIRE data set you acquired will be selected as your data set. Select **Next**.

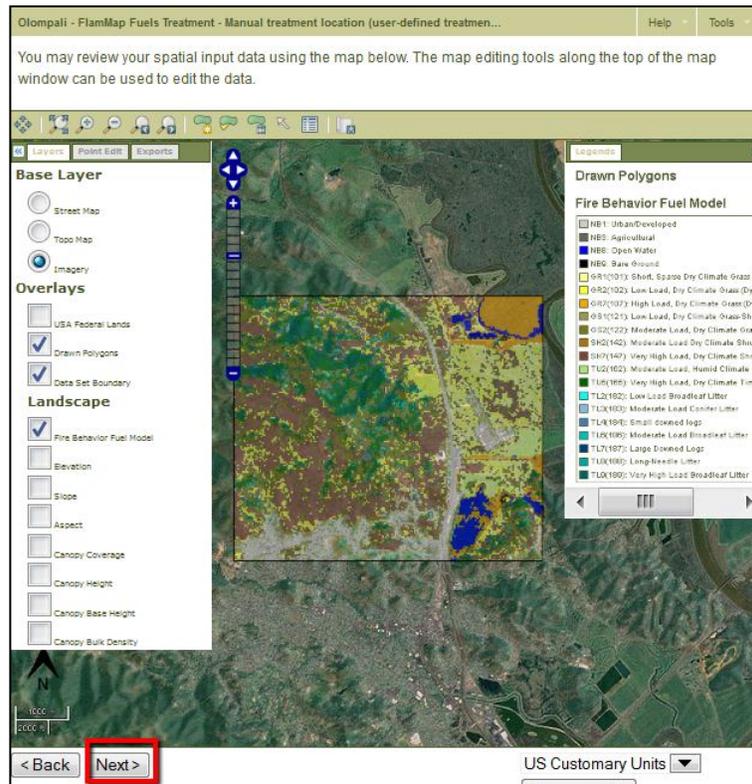
Select Data Set

Available Data Sets: West Petaluma (100%) ▾

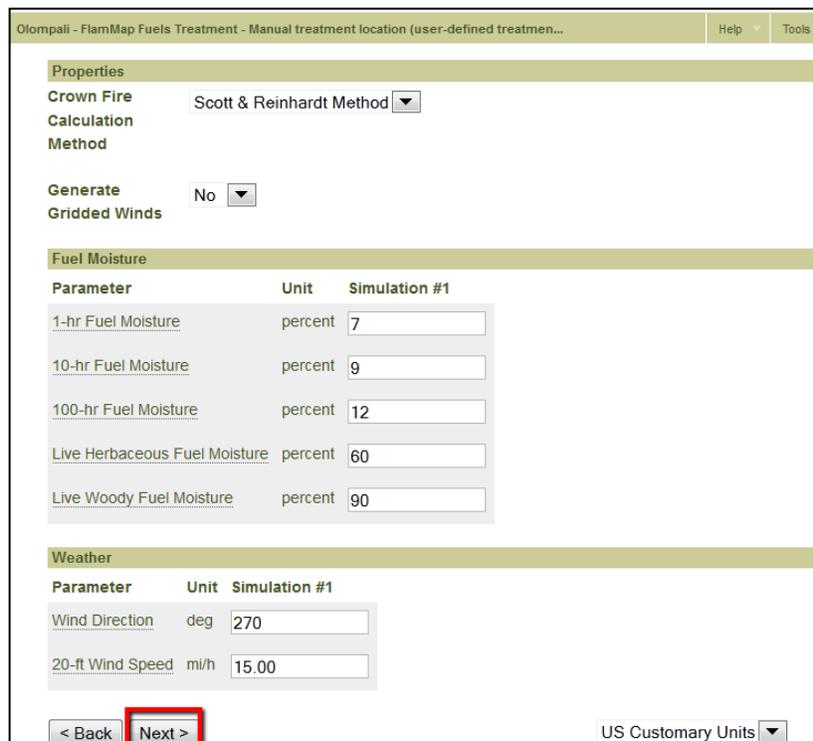
Percentages next to data set names indicate the percent that the data set covers the selected run area. Data sets below 100% coverage will display a smaller area of data than the selected run area.

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.

- Now, you can review your spatial landscape data using the Overlays panel on the left. After reviewing your data, select **Next**.



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



7. Now, you are on the Pre-Treatment Output step. In this step, you can review the spatial fire behavior overlays, as well as the landscape data. Find areas across your landscape that are at risk for high fire behavior (indicated in red). You can draw fuels treatments in these areas. Select the **Draw Polygon** tool on the toolbar.



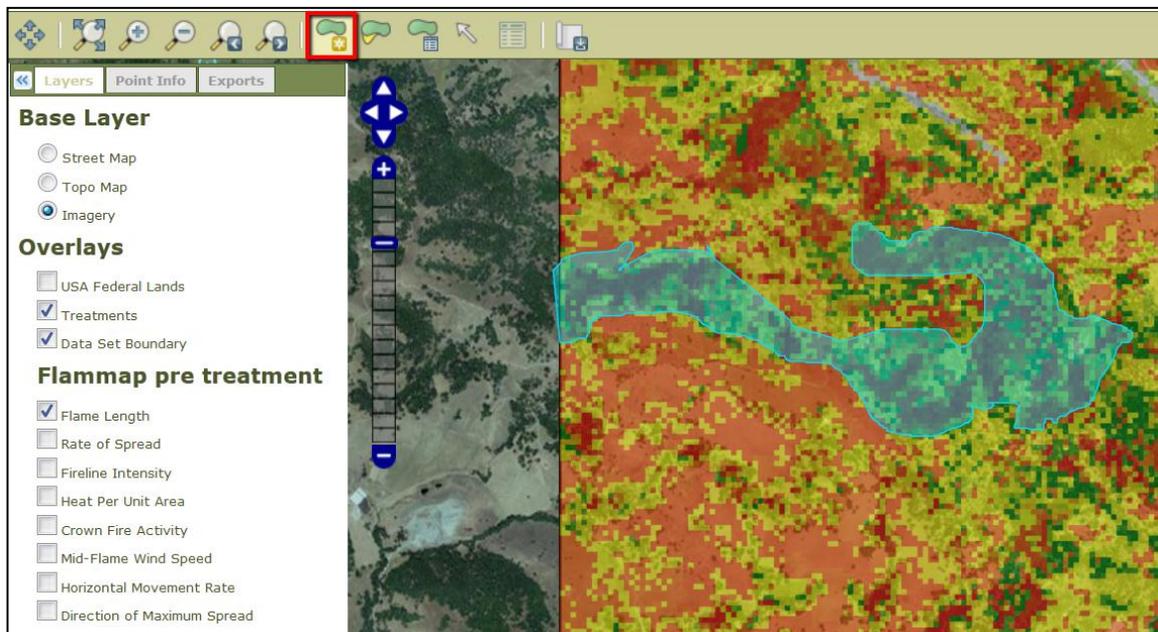
There are two methods for using the map tools to draw polygons: the freeform method and the point-and-click method.

a. The **freeform drawing method**

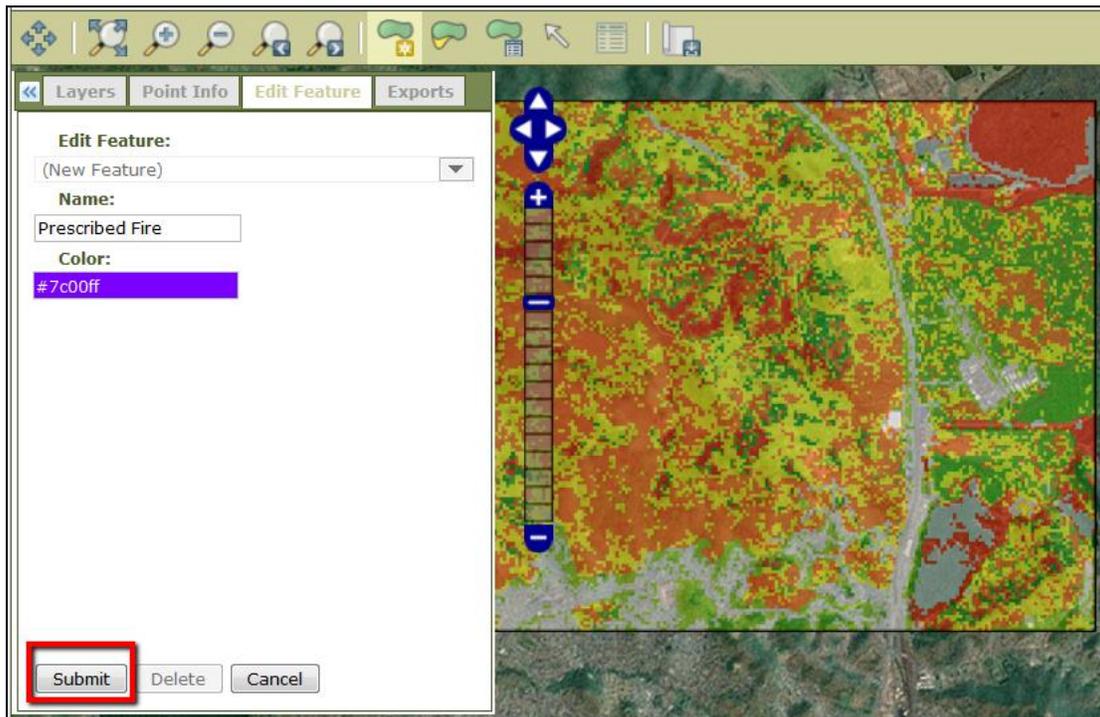
- While holding down the Shift key, click on the map, hold down the left mouse button, and start drawing your first polygon. While still holding down the Shift key and left mouse button, move the mouse as if it were a pencil to draw your polygon.
- Release the left mouse button when you are done drawing the polygon. This creates the polygon and opens the Edit Feature panel.

b. The **point-and-click method**

- To start drawing your first polygon, click on the map and release the mouse button.
- Move the mouse to a new point and click and release to add another point. Before moving on, make sure the point is established by moving the mouse away from the point.
- Continue this process until you are done drawing your polygon.
- When you are done drawing the polygon, double-click to create the polygon and to open the Edit Feature panel.



8. In the Edit Feature panel, name your polygon and choose a color. Click **Submit** to save your polygon.



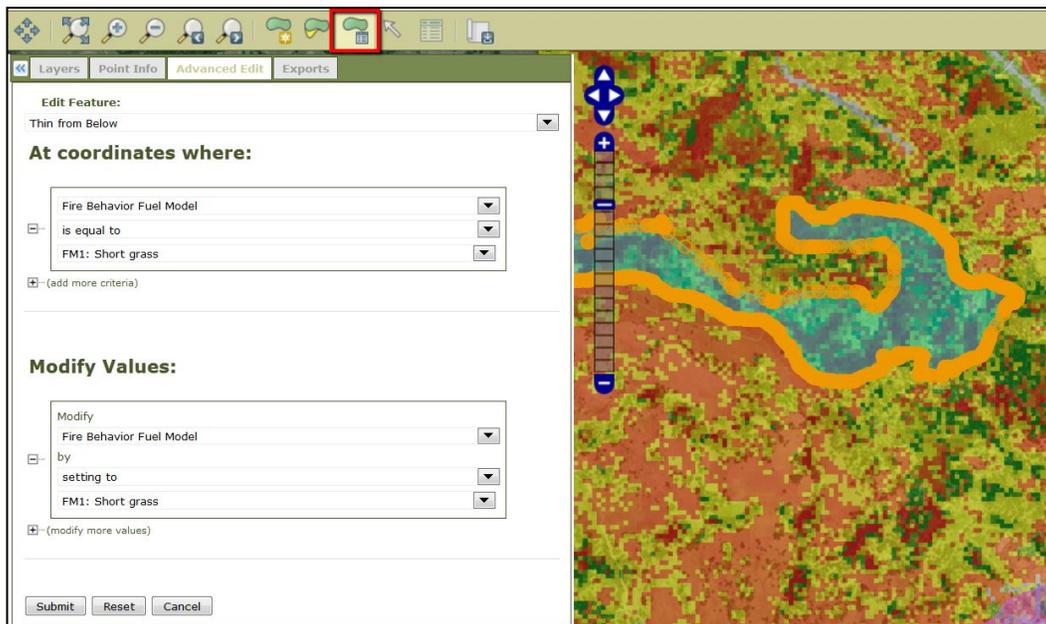
9. Repeat steps 7 and 8 to make more fuels treatment polygons if desired.

10. Next, 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. The Advanced Edit panel will appear.

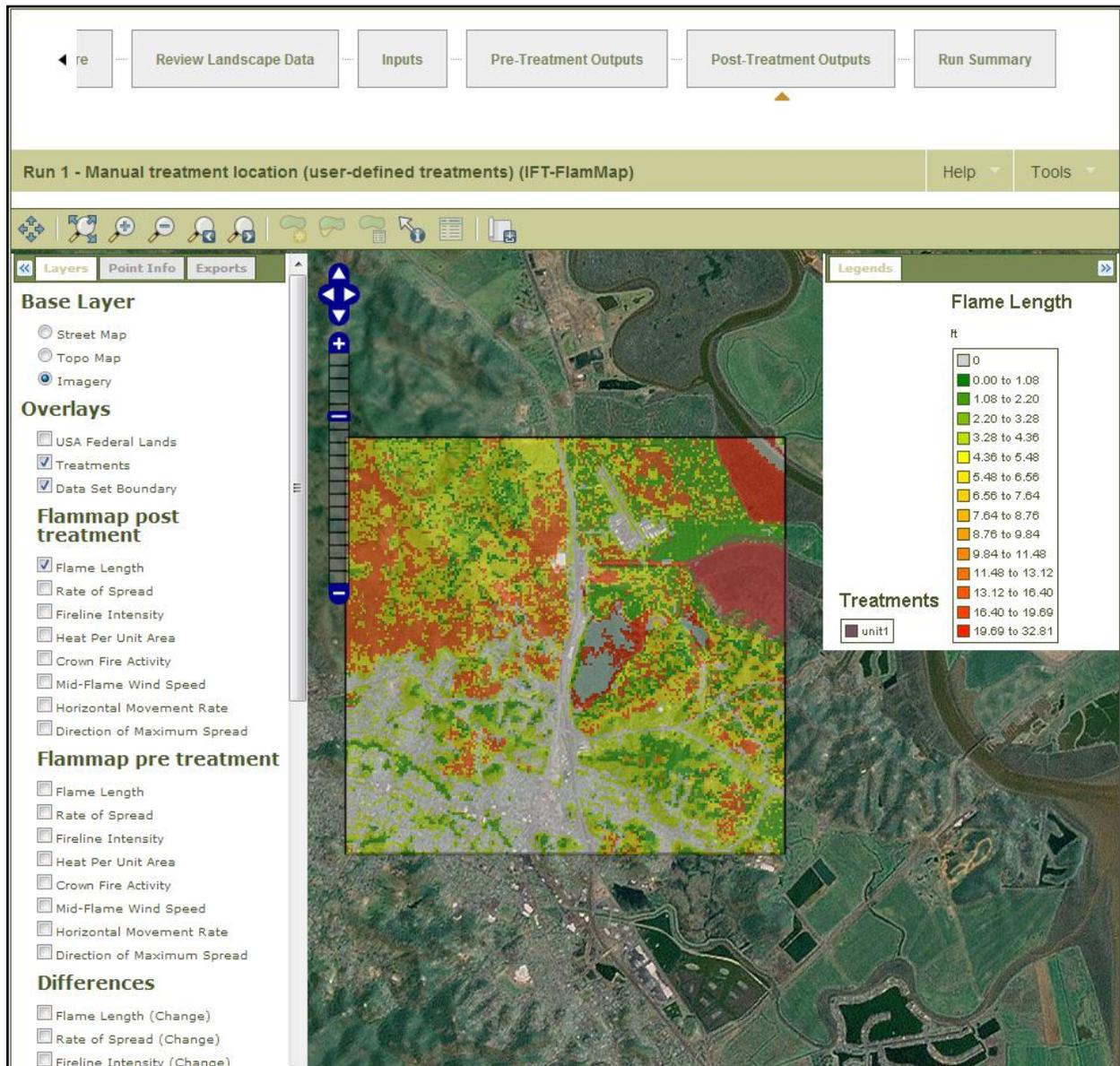
- Under **At coordinates where:**, set the criteria for selecting pixels to be edited.
- Under **Modify Values:**, set the change to be made to the pixels selected.
- Click **Submit** to save changes.



11. After you are done creating and editing your fuels treatment polygons, you can save the polygons by assigning a name in the **Save Polygons As:** space below the map. Saving the polygons allows you to use them in different runs. Select **Next** to save the polygons and continue.

The screenshot displays the IFTDSS software interface. On the left, there is a sidebar with several sections: 'Base Layer' (Street Map, Topo Map, Imagery), 'Overlays' (USA Federal Lands, Treatments, Data Set Boundary), 'Flammap pre treatment' (Flame Length, Rate of Spread, Fireline Intensity, Heat Per Unit Area, Crown Fire Activity, Mid-Flame Wind Speed, Horizontal Movement Rate, Direction of Maximum Spread), and 'Landscape treated' (Fire Behavior Fuel Model, Elevation, Slope, Aspect, Canopy Coverage, Canopy Height). The main map area shows a satellite image with a large, multi-colored polygon overlaid, representing a fuels treatment area. A legend in the top right corner identifies the colors: purple for 'Mowing', cyan for 'Thin from Below', and red for 'Prescribed Fire'. Below the map, a dialog box prompts the user to 'Save Polygons As:' with an empty text input field. The 'Next >' button is highlighted with a red box, indicating the next step in the process.

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



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