Managing FWA Behavior Attributes

The information in this chapter describes how to enter fire behavior attributes for each FWA including Diurnal Rate of Spread and Fuel Model Rate of Spread Adjustment.

FPA applies attributes at the FWA level, but users may enter them at the Fire Planning Unit (FPU) level, Fire Management Group (FMG) level, or directly into each FWA.

Data Requirements for Managing FWA Behavior Attributes

Enter the following information into FPA before managing FWA behavior attributes:

- FPUs and FWAs as entered in Set Up FPU >FPU Attributes, Set Up FPU > FPU Agencies, Set Up FPU > Define Team screens.
- Import the FWA set using the **Set Up FPU >FPU Attributes**, **Select FWA Set to Import** box.

In This Chapter

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This chapter discusses managing FWA behavior attributes.

Managing FWA Behavior Attributes

Use this screen to enter fire behavior attributes for each FWA in your Fire Planning Unit (FPU). Fire behavior attributes include Diurnal Rate of Spread Adjustment and Fuel Model Rate of Spread Adjustment. FPA can reduce data entry time by allowing users to enter attribute values at the FPU or FMG level and have those values globally applied to all FWAs. For example, if Fire Planners enter fire behavior attribute information at the FPU level, the same information automatically populates values for all FWAs within the FPU. Similarly, if users enter attributes at the FMG level, the same information applies to all FWAs within that FMG.

Use the global feature to save time by setting those fields that are common among FWAs at the FPU or FMG level then go back to the individual FWAs and adjust attributes that are unique for each work area.

If you edit attributes at the FWA level, do not use the global feature because the global feature overwrites all previous changes made at the FWA level.

Required fields have an asterisk (*) before the field name.

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Refer to Managing FWA Attributes to further information about setting non-behavioral attributes.

1. Select Input Data > FWAs > Behavior Attributes.

Displays the default view for the FWA Behavior Attributes box.

Attributes only display at the FWA levels.

All checkboxes and fields are disabled.

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an FWA	Diurnal R	ate of Spread	Adjustment				
🚽 badlands							
🔹 badla ds	Time	Co- Efficient	Time	Co- Efficient	Time	Co- Effici	ent
bald peter	0000		0800		1600		
black canvon	0100		0900		1700		
black canyon	0100		0500		1700		_
f bridge creek	0200		1000		1800		
 bridge creek 	0300		1100		1900		
broken top	0400		1200		2000		
cascade north					2000		-
cascade north	0500		1300	1.0	2100		_
cascade south	0600		1400		2200		
 cascade south 	0700		1500		2300		
central warm springs entral warm springs		(a				1	1
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🔶 cline wui		in Rate of Spri	eau Aujustina	ent			
	Fuel Mode	el	Co- Efficient	Fuel Mod	del	E	o- fficient
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This box contains two sections.

- **Diurnal Rate of Spread Adjustment**: Users can adjust the calculated rate of spread for each hour of the fire.
- **Fuel Model Rate of Spread Adjustment**: Users can adjust the fuel model and associate this value with a rate of spread coefficient.
- 2. Click the cross next to the FPU name, EA_IA_001 to expand the folder and display FMGs and FWAs for that FPU.
- 3. In the Select an FWA box, click to highlight the appropriate FWA you want to edit.
- 4. Click **Edit**.

The Attributes screen refreshes and enables all fields and checkboxes. The Import Diurnal Data button is disabled if an FPU or FMG is selected.

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altalta	Diurnal Kate of	Spread Adjustment			
badla ds	Time Co	- ficient Time	Co- Efficient	Time	Co- Efficient
bald peter	0000	0800		1600	
black canyon	0100	0900		1700	
black canyon	0200	1000		1800	
• bridge creek	0300	1100		1900	
broken top broken top	0400	1200		2000	
Cascade north	0500	1300	1.0	2100	
cascade south	0600	1400		2200	
cascade south central warm springs	0700	1500		2300	
 central warm springs 			3 <u>3</u>		
cline wui	Fuel Model Rate	e of Spread Adjustn	nent		
	Fuel Model	Co- Efficien	t Fuel Mod	el	Co- Efficient
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- 5. Accept the displayed values, or enter new values, or import diurnal data.
 - **Diurnal Rate of Spread Adjustment:** Coefficient used to adjust the calculated rate of spread for the hour specified based upon user input. FPA calculates the Rate of Spread (ROS) for each fire event using a one time of day weather observation. The time of day is 1300 hours local time. If you know that fires discovered at 0600 hours spread half as fast as fires starting at 1300 then you should enter a value of .50 for 0600. If the 1300 calculated ROS were 10ch/hr then fires starting between 0600 and 0659 hours would have an adjusted ROS of 10 * .50 or 5 ch/hr. The system accepts values as low as .01 and as high as 2.0.
 - **Fuel Model Rate of Spread Adjustment**: This box allows users to adjust the rate of spread by fuel model and FWA. Users select the appropriate 40 fuel model from the dropdown list in the Fuel Models column and associate this value with a rate of spread coefficient. The Co-efficient value is between .01 and 5.0. Users may select the same fuel model twice, but the system uses the last value entered. To not use this field, enter one (1) in the Coefficient boxes.

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If you plan to import a Diurnal Rate of Spread file, ensure that the column headings are entered as shown in the following example of a Diurnal Rate of Spread file. This prevents errors during the import process.

	А	В	С
1	Time	Coefficier	nt
2	-C	0.05	
3	1	0.05	
4	2	0.05	
5	3	0.05	
6	4	0.05	
7	5	0.1	
8	6	0.25	
9	7	0.5	
10	8	0.6	

- 6. Click
- Import Diurnal Data if needed. Displays the Import Diurnal Spread Sheet dialog.

Import [iurnal Spre	ead Sheet	×
		Browse	
Apply	Dismiss		
· · · · · ·	· · · · · ·		

7. Click Browse... to find the Diurnal Rate of Spread file and click

Click Dismiss to exit the Import Diurnal Spread Sheet dialog and return to the FWA Behavior Attributes page.

- 8. After entering the required fire attributes, click **save** to save the information and update the database.
 - If a user entered fire attributes at the FPU level, the global update box displays.

Windows	; Internet Explorer
2	All FWAs in the FPU will be updated to reflect the all the field values exactly as you have entered them (i.e., if you left something blank, it will become blank)
	OK Cancel
Click	OK to continue the global update, or click Cancel and return to
Click the FW	to continue the global update, or click and return to

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• If a user entered fire attributes at the FMG level, the global update box displays.

Windows	Internet Explorer
2	All FWAs in the FMU will be updated to reflect the all the field values exactly as you have entered them (i.e., if you left something blank, it will become blank)
	OK Cancel
Click	OK to continue the global update, or click Cancel and return to
the FW	A Behavior Attributes screen.

Users return to the FWA Behavior Attributes box.

If the user clicks Cancel the screen returns to the FWA Behavior Attributes box. No database updates occur.

• If a user entered fire behavior attributes at the FWA level, the system updates the changes and returns users to the FWA Behavior Attributes box.