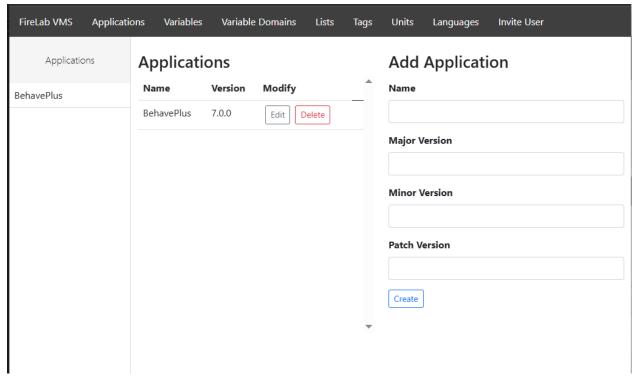
Hitchhiker's Guide to the Variable Management System (VMS)





Contents

1	Fin	ding VMS elements in the Application	3
	1.1	Modules/Submodules/Groups/Group Variables	4
	1.2	Variables	6
		1.2.1 Variable Entities	6
		1.2.2 Variable Associated with a Group Variable	6
	1.3	List and List Options	7
	1.4	Filter and Color Tags	11
		1.4.1 Filter and Color Tags Entities	11
		1.4.2 Filter and Color Tags associated with a Group Variable	12
	1.5	Variable Domains	13
		1.5.1 Variable Domain Entities	13
		1.5.2 Variable Domains Associated with a Group Variable	14
	1.6	Units and Precision	16
2	Up	dating Text	17
	2.1	Submodule/Group/Group-Variables	18
	2.2	List Options	19
	2.3	Tags	21
3	Up	dating Default Unit Preferences	22
	3.1	Units	22
	3.2	Precision	23
4	Up	dating Units Dropdown Selections	24
5	Re-	Ordering	25

1 Finding VMS elements in the Application

The VMS holds the structure of our application. The data is a tree like structure that determines how the application is rendered. This section aims to help you understand how the data in the VMS translates to how it is shown in the application.

1.1 Modules/Submodules/Groups/Group Variables

In the VMS Use the side bar to navigate down these paths:

Applications \to Modules \to Submodules \to Group \to Group Variables \to Variables Example:

Behave Plus \to Surface \to Fire Behavior (output) \to Surface Fire \to Heading Rate of Spread \to Heading Rate of Spread

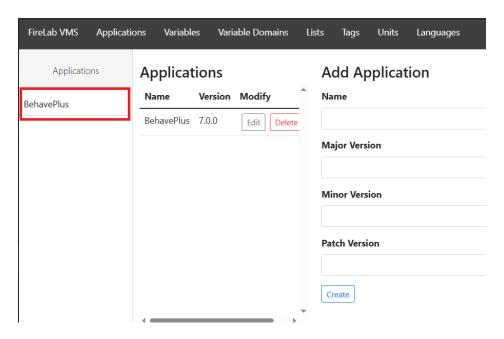


Figure 1: VMS: Home page

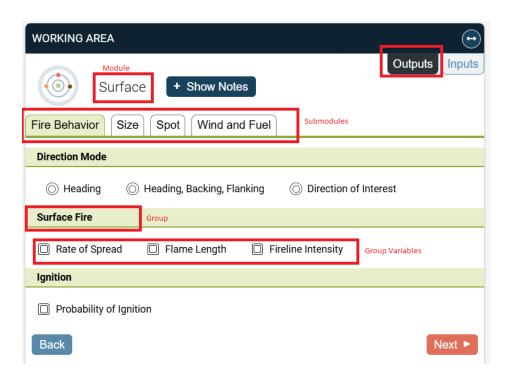


Figure 2: Application: Outputs page after a Surface Only workheet has been created.

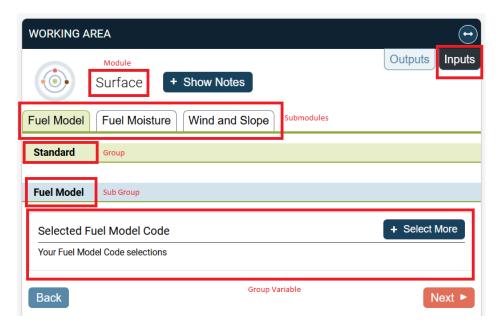


Figure 3: Application: Inputs page after a Surface Only workheet has been created. NOTE Groups can have sub groups.

1.2 Variables

The Variables can be associated with multiple group variables but group variables can only be associated to a single variable. The Variable entity will hold information about Domains/Dimension/units

1.2.1 Variable Entities

1. Navigate to the "Variables" tab

1.2.2 Variable Associated with a Group Variable

- 1. Navigate to the Application \rightarrow Module \rightarrow Group
- 2. "Expand" the "Variables" accordion
- 3. Find the variable you are interested in and click "Edit". This will take you to the "Variables" page and populate the form with the variable's info.

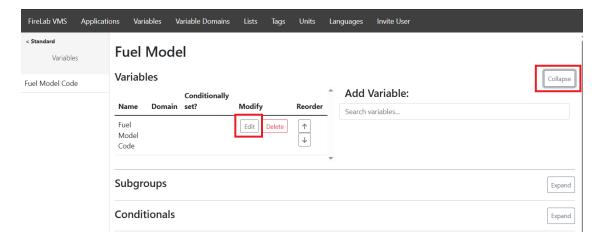


Figure 4: VMS: Finding the variable associated with a group variable

1.3 List and List Options

Certain Group Variables have a list associated with it (usually inputs). In the application lists show up as either radio selections or drop down selections.

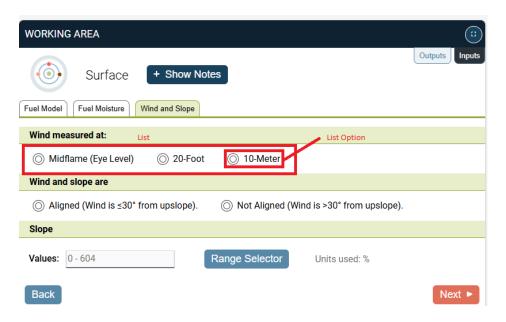


Figure 5: Application: List options as radio selections.

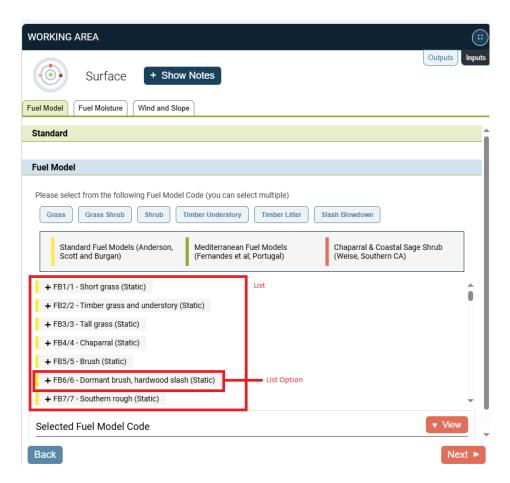


Figure 6: Application: List options as multi select dropdown.

In the VMS you can find the list associated to a group variable by:

- 1. Navigating to the Module \rightarrow Submodule \rightarrow Group
- 2. Click "Expand" on the "Variables" accordioin. Then click "Edit" on the Variable listed. This will Navigate you to the "Variables" page and populate the form with the variable's information.

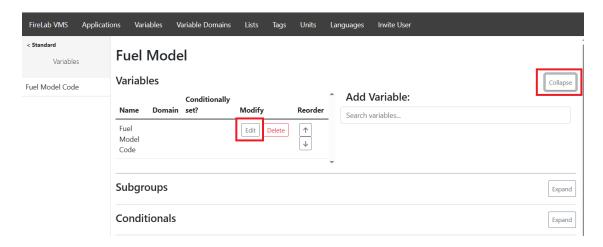


Figure 7: VMS: Group page

1. Look for the "List" field and note the list selected.

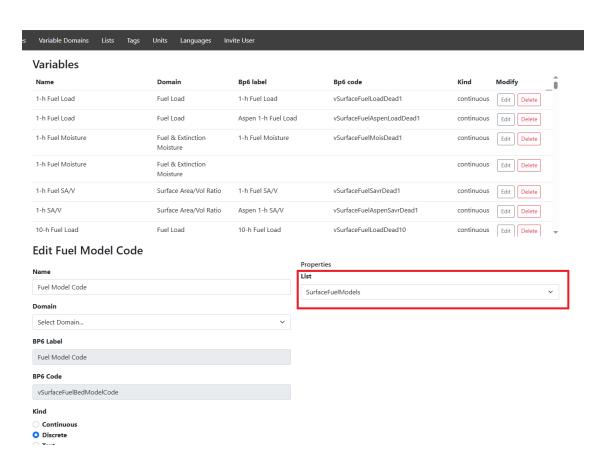


Figure 8: VMS: Variables page

1. Navigate to the "List" tab and scroll down or (Ctrl +f) to find the list mentioned above.

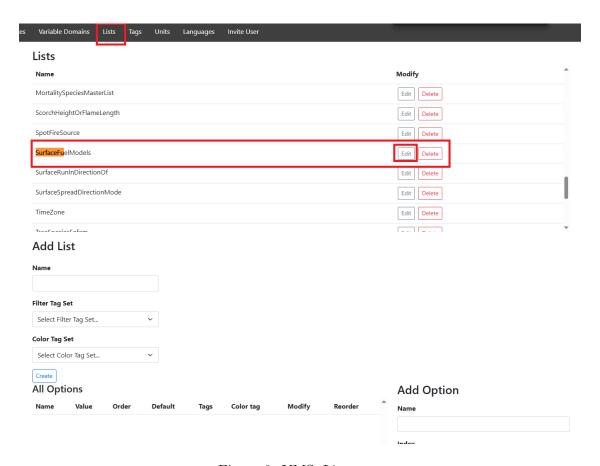


Figure 9: VMS: List page

1. Click "Edit". This will populate the form at the bottom of the page.

1.4 Filter and Color Tags

1.4.1 Filter and Color Tags Entities

Filter and Color tags in the application can be found in input group variables that allow users to select multiple inputs.

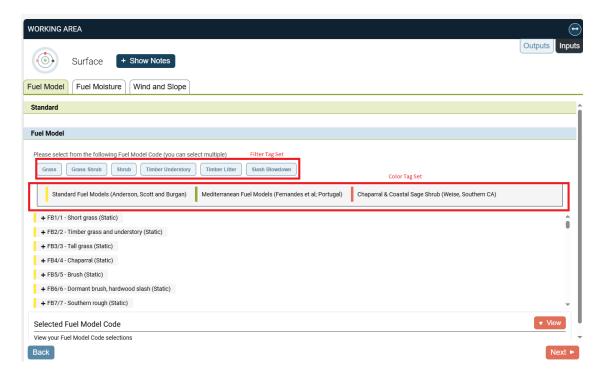


Figure 10: Application: Filter Tag and Color Tag example.

You can find existing tags in the VMS by:

1. Navigate to the "Tags" tab

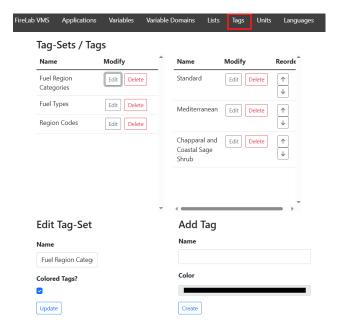


Figure 11: VMS: Tags page

1.4.2 Filter and Color Tags associated with a Group Variable

You can find the tag sets associated with a group variable by:

- 1. Find the list associated to the group variable, see List and List Options section.
- 2. Click "Edit" on the list
- 3. Once the form on the list page has been populated you can find the associated tag sets.

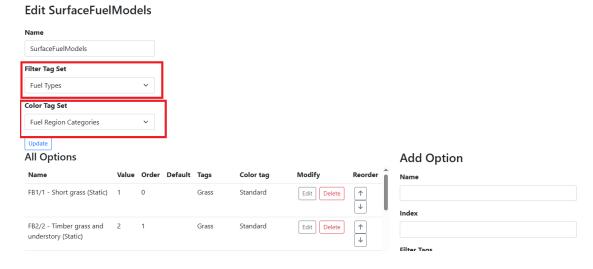


Figure 12: VMS: List page

1.5 Variable Domains

1.5.1 Variable Domain Entities

The Variable Domain entities is used primarly to associate a group of variables to some default units and decimal precision. Domain entities are grouped into Domain sets, primarly used for creating collapsing accordions in the application.

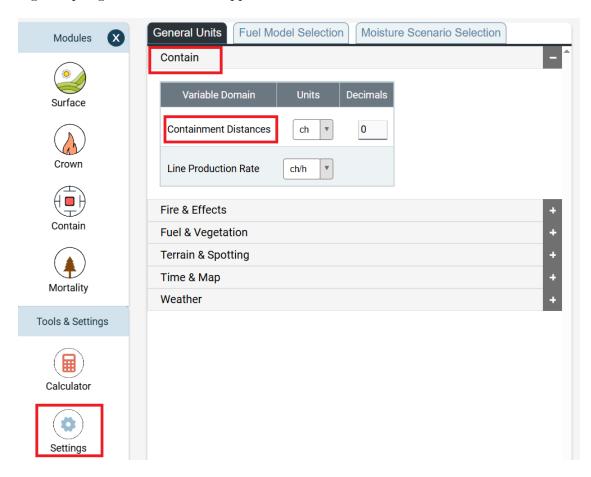


Figure 13: Application: Custom Unit Preferences table.

- 1. Navigate to the "Variable Domains" tab
- 2. Click "Edit" on the "Domain Set". This will populate the form on the right with a list of domains that belong to this set.

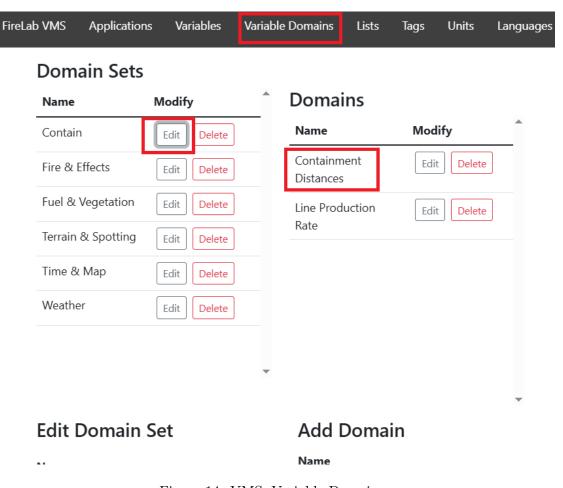


Figure 14: VMS: Variable Domains.

1.5.2 Variable Domains Associated with a Group Variable

- 1. Find the Variable associated with your group variable of interest. see Variable Associated with a Group Variable section
- 2. You can find the domain associated to the variable under the "Domain" field

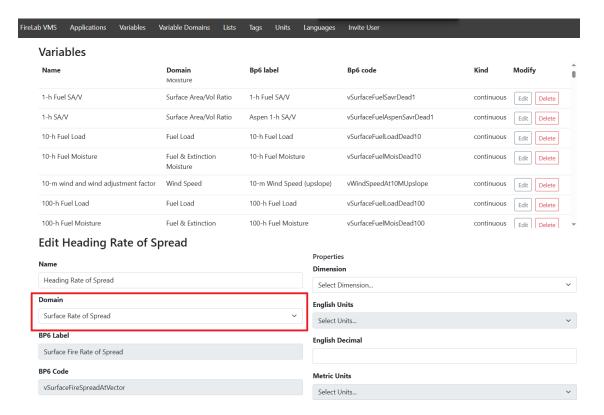


Figure 15: VMS: The Domain associated with this variable.

1.6 Units and Precision

Default Units and Precision live in the Domain Entities.

- 1. Find the Domain associated with your group variable see Variable Domains Associated with a Group Variable section.
- 2. Navigate to the "Domains" page and lookup the domain.
- 3. Click "Edit" on the "Domain Set" and "Edit" on the "Domain" entity to populate the forms.
- 4. Default units is shown under "Native Unit"
- 5. Default precision is shown under "Decimals"

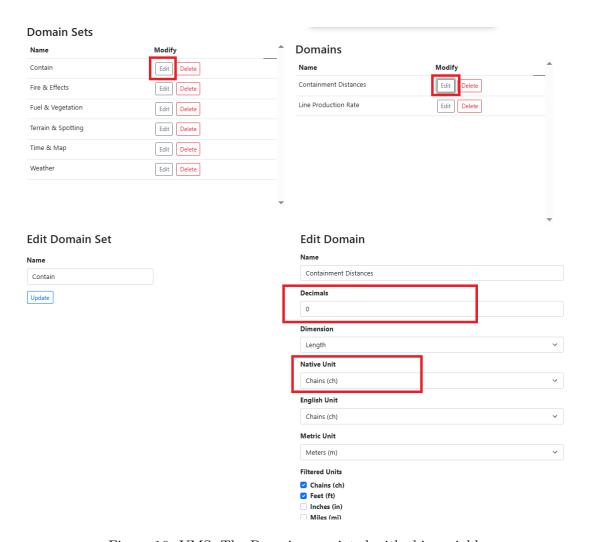


Figure 16: VMS: The Domain associated with this variable.

2 Updating Text

Most texts for entities displayed in the application can be updated by changing the translation field for that entity. These entities will have 2 translation fields. One field is used in the worksheet wizard (pages before computation) and the second is used for the results page. Usually the result translations are a short form of the worksheet translations. Here are some of the common entities you might want to update. The application will default to the worksheet translation if a result translation is not present.

2.1 Submodule/Group/Group-Variables

- 1. For these entities navigate to the entity page, see Modules/Submodules/Groups/Group Variables section.
- 2. Update the "Translation" field.

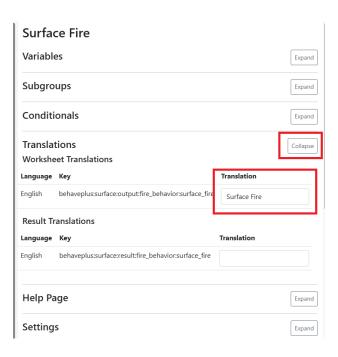


Figure 17: VMS: Group page after navigating BehavePlus \rightarrow Surface \rightarrow Fire Behavior(output) \rightarrow Surface Fire

2.2 List Options

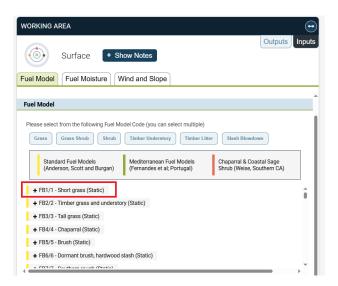


Figure 18: Application: Worksheet translations appear in the wizard.

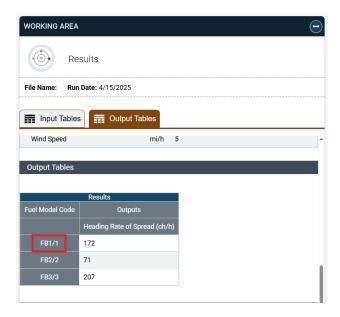


Figure 19: Application: Result translations appear in the results matrices and tables.

- 1. Find the list associated to the group variable, see List and List Options section.
- 2. Click "Edit" on the list.
- 3. Find the list option you are interested in updating and click "Edit".
- 4. Update the "Translation" field and the "Name" field.
- 5. Navigate to the list associated with the group variable. see List and List Options

6. Click "Edit" on the list option you want to update.

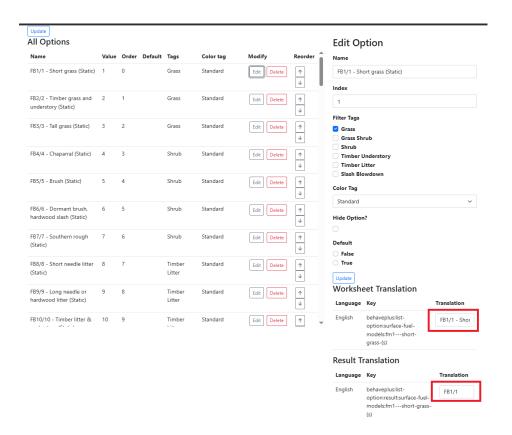


Figure 20: VMS: List Page

2.3 Tags

- 1. Navigate to the tag set associated with your group variable of interest. See Filter and Color Tags associated with a Group Variable
- 2. Click "Edit" on the tag set. This will populate the table on the right.
- 3. Click "Edit" on the tag option you'd like to update.
- 4. Update the "Translation" field and the "Name" field.

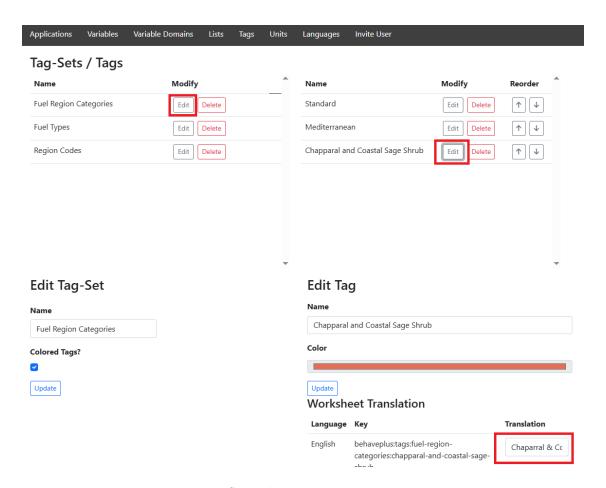


Figure 21: VMS: Updating translations on tags page.

3 Updating Default Unit Preferences

3.1 Units

- 1. Find the Domain associated with the variable you are interested in. See Variable Domains Associated with a Group Variable section.
- 2. Click "Edit" on the Domain set
- 3. Click "Edit" on the Domain found in step 1.
- 4. Update the "Native Unit" field

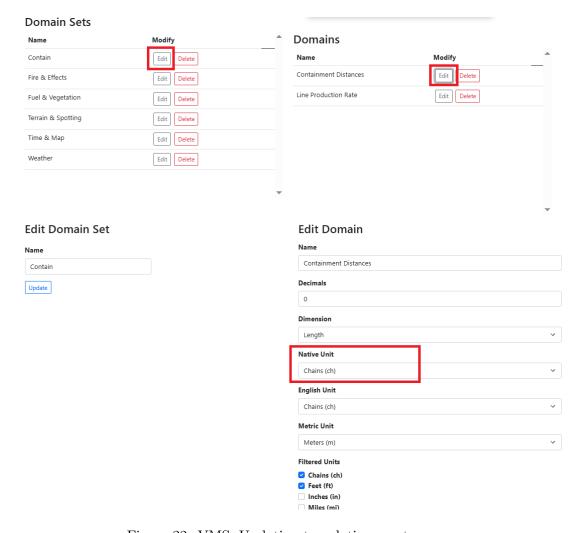


Figure 22: VMS: Updating translations on tags page.

3.2 Precision

- 1. Follow the steps from above to find the Domain entity.
- 2. Update the "Decimals" field

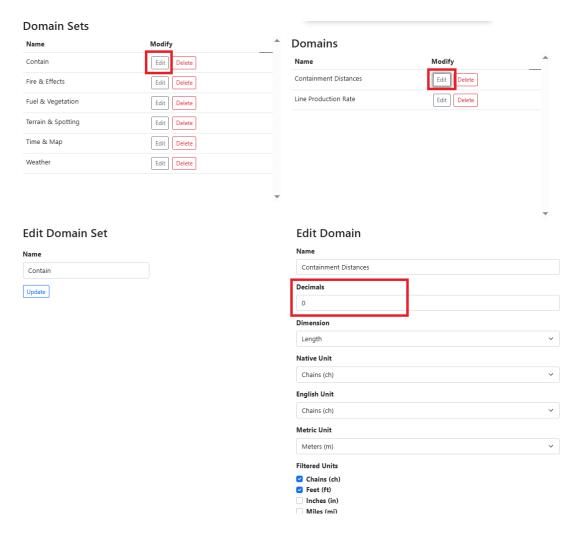


Figure 23: VMS: Updating translations on tags page.

4 Updating Units Dropdown Selections

In the Application's inputs page a user can change units via a drop down menu. By default a variable is linked to a "Dimension" (i.e. length) and will have all options available to select. However there are cases when this list should be limited to a subset. If this is desired do the following:

- 1. Find the Domain associated with the variable you are interested in. See Variable Domains Associated with a Group Variable section.
- 2. Click "Edit" on the Domain set
- 3. Click "Edit" on the Domain found in step 1.
- 4. Under "Filtered Units" select a subset of your desired units

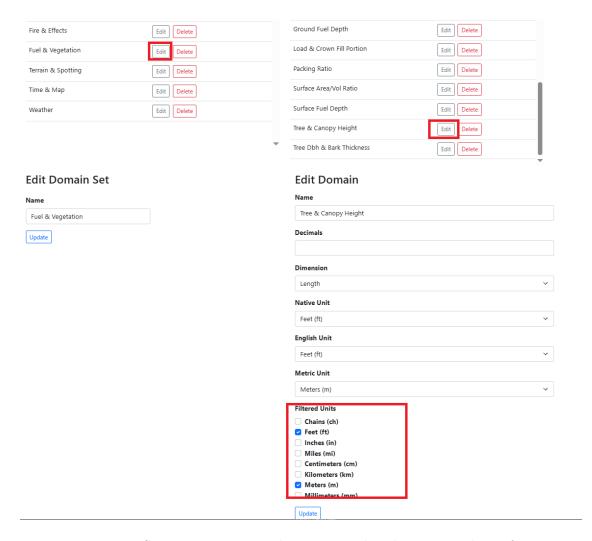


Figure 24: VMS: Domains Page Updating Units dropdown to a subset of units.

5 Re-Ordering

Certain entities can be re-ordered via the VMS. To do this:

- 1. Find the parent entity of the entity you are trying to reorder (i.e. Need to reorder groups? find the submodule entity page. Need to reorder a list options? Find the List entity page.)
- 2. Once you're on that page there should be a table that have a list of entities for you to reorder. Click on the "up" and "down" buttons to reorder

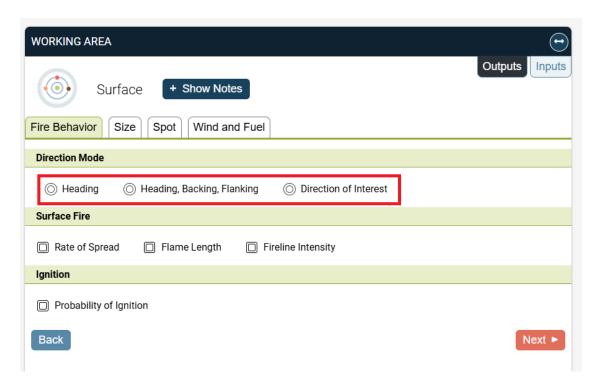


Figure 25: Application: Reordering Direction Mode output selections.

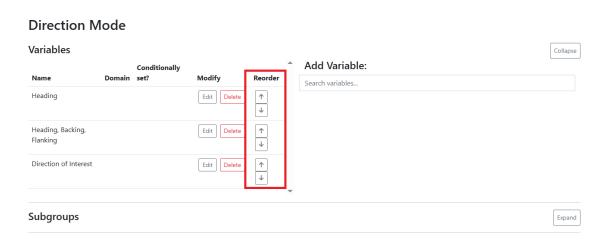


Figure 26: VMS: Reordering Direction Mode output selections: Navigate to BehavePlus \rightarrow Surface \rightarrow Fire Behavior(output) \rightarrow Direction Mode

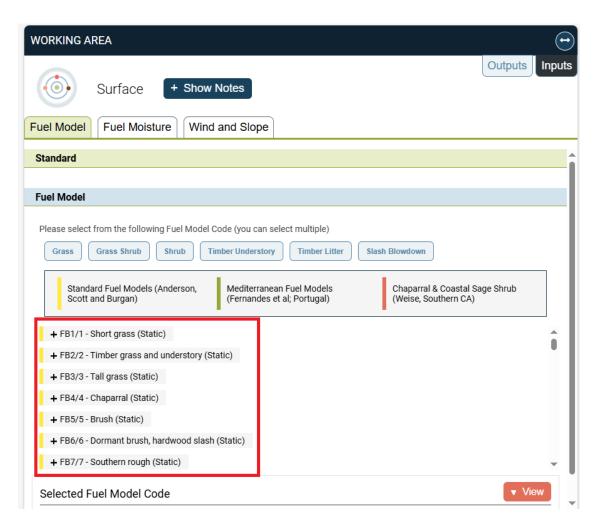


Figure 27: Application: Reordering fuel model codes.

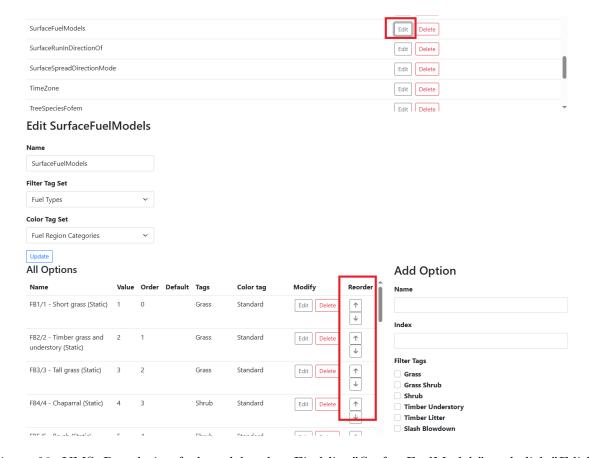


Figure 28: VMS: Reordering fuel model codes. Find list "SurfaceFuelModels" and click "Edit".