

# FRCC Software Application version 3.0.3.0 Tutorial

## **Introduction**

The Fire Regime Condition Class (FRCC) Software Application (FRCCSA) is a tool that facilitates non-spatial FRCC assessments based on the Standard Landscape Worksheet Method as detailed in the FRCC Guidebook (located at [www.frcc.gov](http://www.frcc.gov)). This NIFTT-designed tool provides an efficient and convenient automated way to conduct data entry and subsequent analysis instead of using paper data forms and conducting manual FRCC computations.

This tutorial explains how to install the FRCCSA and conduct a hypothetical Landscape assessment. This simple overview will cover basic functionality and will just briefly mention advanced features. For a complete explanation of FRCCSA capabilities, please refer to the FRCCSA User's Guide (located at [www.frcc.gov](http://www.frcc.gov)) after completing this tutorial.

## **Prerequisites**

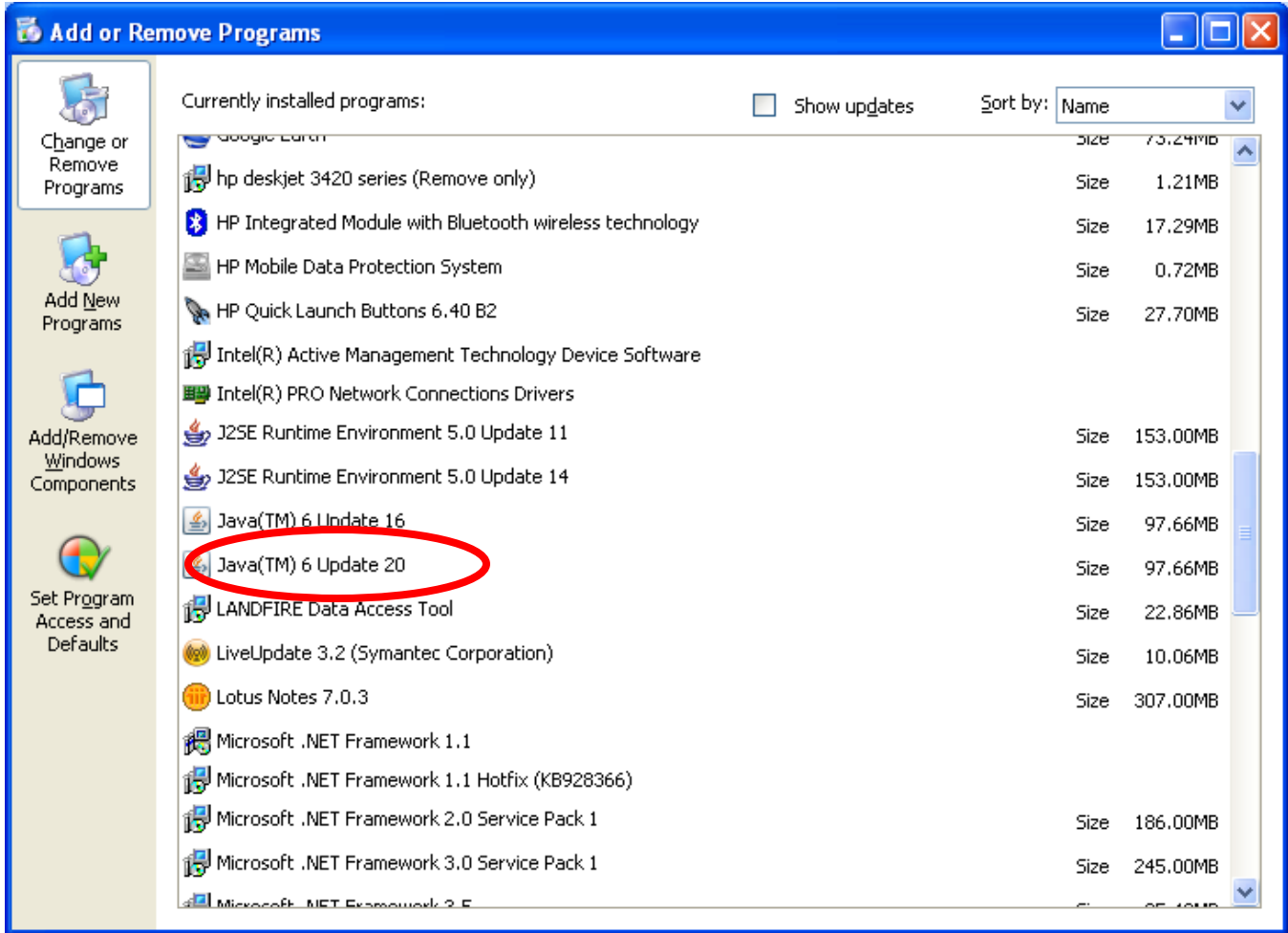
First, please ensure that your computer contains Microsoft Access 2000 or a later version as FRCCSA uses it for data management. Also note that if you have previous data created with FRCCSA version 1.3.2.4, you can import those data into version 3.0.3.0 (refer to the FRCCSA User's Guide for detailed information). After doing so, you must then uninstall any older versions of FRCCSA and any associated Desktop shortcuts.

## **Installing the Software**

Use the following steps to install the FRCC Software Application version 3.0.3.0:

1. Download the installation file from the FRCC website at [www.frcc.gov](http://www.frcc.gov). First, click on **Tools and User Documents** in the **FRCC Resources** section. Then click on the **FRCCSA** link on the bottom-right side of the subsequent page.
2. When prompted to open or save the file, choose *Save* and store the download folder in the directory of your choice.
3. Once the initial download is complete, you'll need to extract all data from the downloaded compressed folder. To do so, right-click on the downloaded folder and select *Extract All* or *Extract to Here*, depending on which Windows version is installed on your machine.
4. Note that Java Runtime Environment (JRE) must be installed on your computer before you can run the FRCCSA. To verify, click *Start > Control Panel > Add or Remove Programs*, and look for one of the following programs:

## FRCC Software Application version 3.0.3.0 Tutorial



If you don't see such a program in the list, navigate to your FRCCSA installation file, double-click on `jre-6u16-windows-i586-s.exe`, and choose *Run* to install the JRE.

5. Double-click the **setup.exe** file in the FRCCSA installation folder. You may receive a warning that the file is an executable file. Click *OK* to continue the installation. Next, you may receive the following warning: *The publisher could not be verified. Are you sure you want to run this software?* Select *Run*, then, if necessary, click *Accept* on the Microsoft .NET Framework 3.5 license agreement. Continue following the next several promptings, by repeatedly clicking *Next*, to complete the FRCCSA installation.
6. (*Note:* If you are installing this software from an administrator account but planning to access it from a standard user account, you must customize your computer's security settings as described in Appendix A of the FRCCSA User's Guide).

## FRCC Software Application version 3.0.3.0 Tutorial

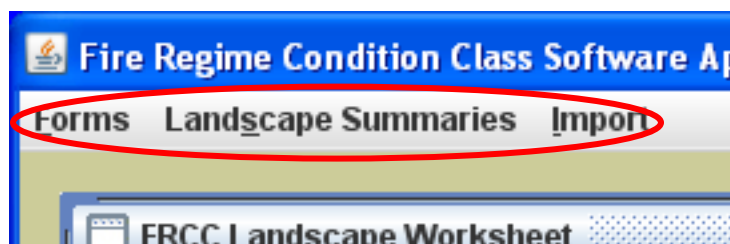
### Running the Software

Next you'll learn how to operate FRCCSA. In this tutorial, you will create an example FRCC Landscape, and you'll review some pre-existing data that come with the software. To begin, double-click on the FRCCSA icon that was automatically installed on your Desktop during the setup process:



(Or, open the software by clicking the Windows *Start* button and then selecting *All Programs - Fire Regime Condition Class - FRCC Software Application 3.0.3.0.*)

You should now see the dark brown *FRCC Landscape Worksheet* on your screen, with the *Landscape Data* tab activated. Notice that the worksheet already contains some example FRCC Landscape data (discussed below). Before examining this page, however, please turn your attention to the user interface controls at the top of the main software page. These controls are labeled *Forms*, *Landscape Summaries*, and *Import*, as shown below.



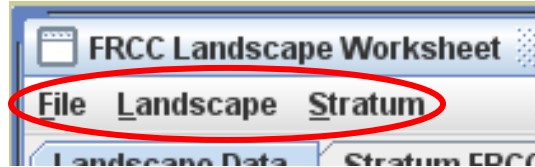
Click on the *Forms* option to display the drop-down menu. In this menu, the *FRCC Landscape Worksheet* option lets you open another *FRCC Landscape Worksheet* (which is useful if you happen to accidentally close the software during this tutorial). Next, the *Code List Maintenance* option allows the user to edit some of the codes used by the software. And finally, the *Exit* button can be used for closing the software.

Now simply slide your cursor to the right without clicking to activate the *Landscape Summaries* drop-down menu. This menu allows you to compile Multi-Landscape Summaries and Global Summaries of FRCC results in the software's database.

Next, slide your cursor to the right to display the *Import* menu. This option allows you to load previously created FRCC Landscapes into the software.

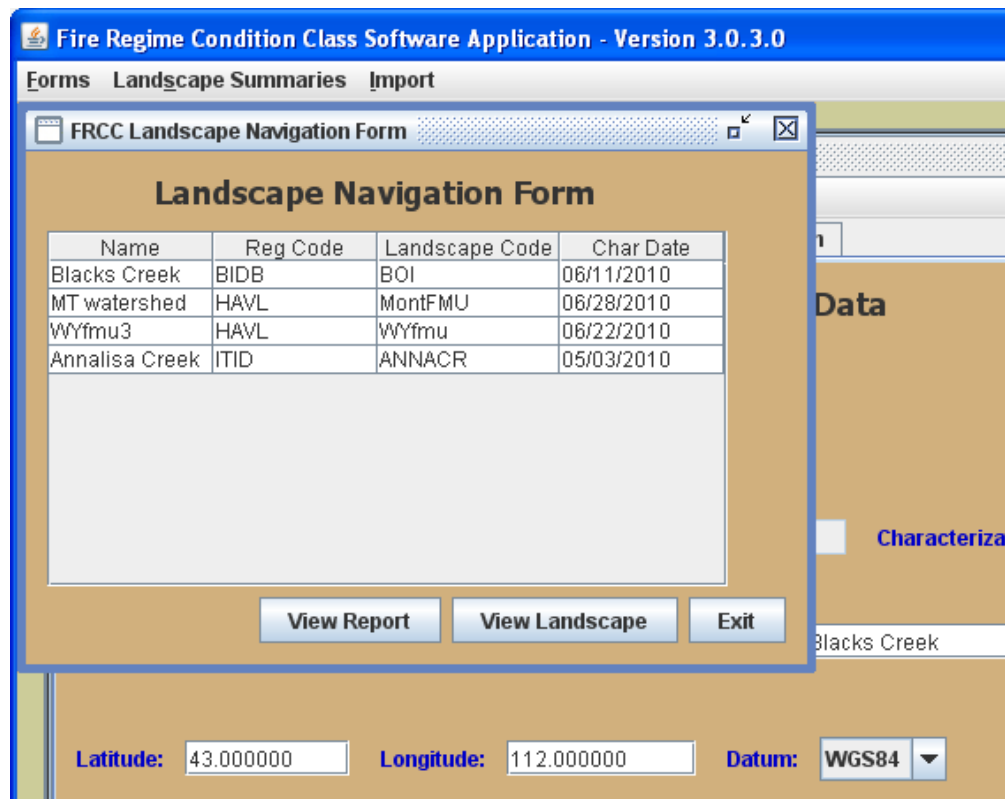
Now use the same cursor techniques to quickly review the three controls located beneath the *FRCC Landscape Worksheet* heading:

## FRCC Software Application version 3.0.3.0 Tutorial



As you can see, the *File*, *Landscape*, and *Stratum* buttons are used for such common file management tasks as Saving, Deleting, Copying, and more.

Next, click on the *Landscape List* button on the upper-left side of the *FRCC Landscape Worksheet*. Doing so activates the *Landscape Navigation Form*, as shown below.

A screenshot of the "FRCC Landscape Navigation Form" dialog box. The title bar reads "Fire Regime Condition Class Software Application - Version 3.0.3.0". The dialog box has a menu bar with "Forms", "Landscape Summaries", and "Import". The main area contains a table with the following data:

Name	Reg Code	Landscape Code	Char Date
Blacks Creek	BIDB	BOI	06/11/2010
MT watershed	HAVL	MontFMU	06/28/2010
WYfmu3	HAVL	WYfmu	06/22/2010
Annalisa Creek	ITID	ANNACR	05/03/2010

Below the table are three buttons: "View Report", "View Landscape", and "Exit". At the bottom of the dialog box, there are input fields for "Latitude: 43.000000", "Longitude: 112.000000", and a "Datum:" dropdown menu set to "WGS84".

Notice that four example Landscapes come with the software installation package to facilitate user learning. In the future, you can review any Landscape by highlighting it in the list and then clicking on the *View Report* or *View Landscape* buttons. We won't explore that process at this point because you'll learn how to create your own FRCC Landscape in a moment. So please click the *Exit* button (or the **X** icon in the upper-right corner of the dialog box) to return to the *Landscape Data* form.

(*Note:* For more information about any of the above features, please consult the FRCCSA User's Guide after completing this tutorial).

## FRCC Software Application version 3.0.3.0 Tutorial

**Creating an FRCC Landscape.** Now you're ready to create your own hypothetical Landscape. First you'll complete a new *Landscape Data* page (or "form"). Then you'll create three *Stratum FRCC Inputs* pages for that Landscape. And lastly, you'll generate the FRCC results with the *Report* function.

**Landscape Inputs.** Click on *New Landscape* button on the upper right to activate a blank page. Notice that some of the data fields have blue-colored labels, whereas other fields are labeled in black. The blue-colored fields represent required data, without which the software cannot generate any FRCC outputs. (Also note that warning messages will alert whenever required data are missing or incomplete).

Please complete your *Landscape Data* page by entering the data shown in the following graphic. Work sequentially from top to bottom, typing the data directly into each field and selecting from the drop-down menus as required. (Any mistakes can be edited by highlighting the field and re-typing or by re-selecting from the drop-down menus).

The screenshot displays the 'FRCC Landscape Worksheet' application window. The title bar reads 'Fire Regime Condition Class Software Application - Version 3.0.3.0'. The menu bar includes 'Forms', 'Landscape Summaries', and 'Import'. The main window has a menu bar with 'File', 'Landscape', and 'Stratum'. Below the menu bar are three tabs: 'Landscape Data' (selected), 'Stratum FRCC Inputs', and 'Additional Stratum Information'. The 'Landscape Data' form contains the following fields and controls:

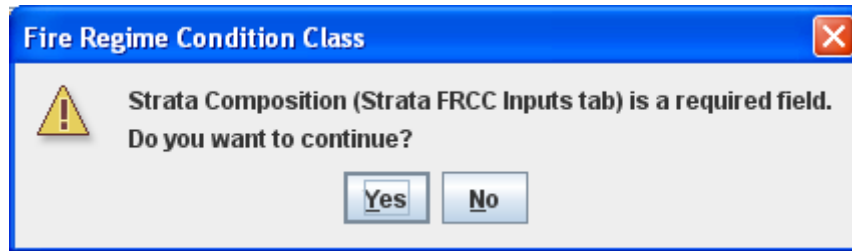
- Buttons: 'Landscape List' and 'New Landscape'.
- Registration Code: BCCFO
- Landscape Code: TUTOR1
- Characterization Date: 9/30/2010
- Examiner: myemail@server.net
- Landscape Name: TUTORIAL CREEK
- Area: 100,000 Acres (dropdown menu)
- Latitude: 48.120100
- Longitude: 114.185400
- Datum: WGS84 (dropdown menu)
- Current Photo: [text field] Browse View Date: [text field]
- Reference Photo: [text field] Browse View Date: [text field]
- Comment: THIS IS MY TUTORIAL LANDSCAPE
- Buttons: Report, Summary, Save, Exit.

## FRCC Software Application version 3.0.3.0 Tutorial

For this tutorial, you did not complete the data fields that document current and reference (historical) photographs. Although those data aren't required, note that the *Browse* button can be used for navigating to and selecting representative photographs that you have previously stored on your computer.

In a moment, you will click the *Save* button to save your work. But be aware that the following warning will alert you to the fact that your data entries are incomplete:

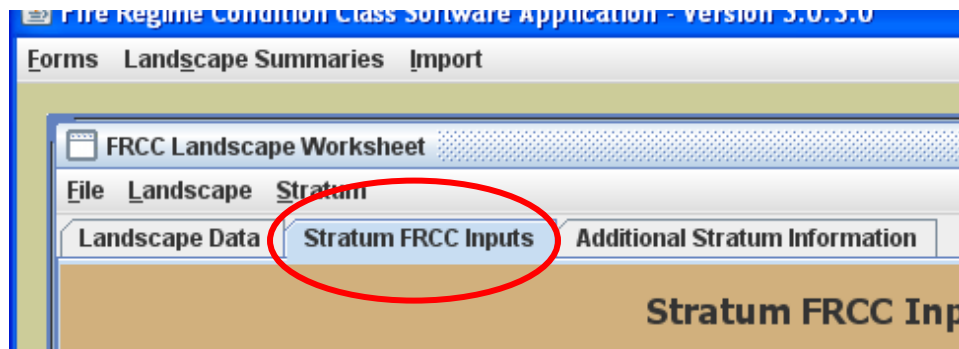
:



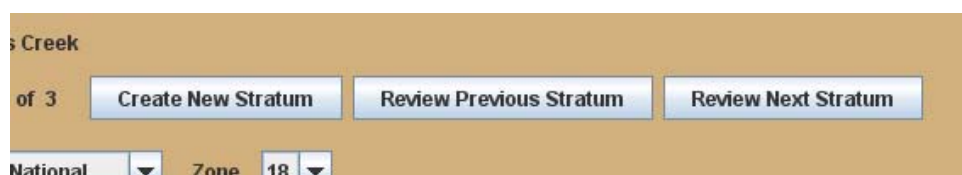
So click the *Save* button now, and then click *Yes* to save your work and return to the Landscape form.

(Note: Similar warnings will occur if the *Report* or *Summary* buttons are likewise activated before all required data have been entered.)

**Stratum Inputs.** To create the first Stratum, click on the *Stratum FRCC Inputs* tab near the top of the dark brown form.



Before entering the data shown below, please consider the following software elements. First, required fields are again labeled in blue. Also notice the three buttons on the upper-right side of the page. These controls are used for creating new strata pages, and for reviewing any stratum pages that have already been created.



## FRCC Software Application version 3.0.3.0 Tutorial

Next observe the yellow-colored fields in the center and lower-left portions of the page. These fields automatically track the values entered for each Stratum's percent of the total Landscape, and the values entered for each Succession Class's cumulative percent of the Stratum. Those fields will display red text with a yellow background until the values total 100 percent, after which the color scheme will change to black text with a gray background.

Now you're almost ready to begin entering data for Stratum 1. The following graphic shows the applicable data, but first consider these key points:

- For the *BpS Source* field, you'll accept the suggested default choice, which is the LANDFIRE National set of reference condition models; however, feel free to activate the drop-down list to examine the other choices offered by that menu.
- For the *Zone* data field, you'll select "19" (which represents a LANDFIRE mapping zone in the Northern Rocky Mountains).
- For the *Biophysical Setting* field, you'll use the drop-down menu to select the BpS model code that is shown in the graphic below; also note that the model's descriptive name will display next to the drop-down menu when you make your selection.
- Once you enter the BpS model code, the software will automatically populate the *Reference Frequency* and *Reference Severity* data fields.
- Similarly, the software will automatically populate the *Ref %* column in the succession classes table.
- Therefore, you will enter only the values for the following data fields: *Composition (%)*, *Current Frequency*, *Current Severity*, and *Cur %*.

Please complete your Stratum 1 page using the data shown below.

# FRCC Software Application version 3.0.3.0 Tutorial

Fire Regime Condition Class Software Application - Version 3.0.3.0

Forms Landscape Summaries Import

FRCC Landscape Worksheet

File Landscape Stratum

Landscape Data Stratum FRCC Inputs Additional Stratum Information

### Stratum FRCC Inputs

Landscape Name: TUTORIAL CREEK

Stratum No: 1 1 of 1

BpS Source: LANDFIRE National Zone: 19

Biophysical Setting: 1910800 Inter-Mountain Basins Big Sagebrush Shrubland

Composition (%): 60 Total Composition: 60

Reference Frequency: 80 Current Frequency: 100

Reference Severity: 100 Current Severity: 100

#### Succession Class Data

	Code	Ref %	Cur %
Perc Total:	A	20	5
Ref 100	B	30	10
Cur 100	C	50	65
	D	0	0
	E	0	0
	U	0	20

Notice that the color scheme of the percent total fields on the lower-left side changed from red text with a yellow background to a black-and-gray scheme when the succession class entries totaled 100 percent of the Stratum, as shown below:

Reference Frequency: 80 Current Fr

Reference Severity: 100 Current Se

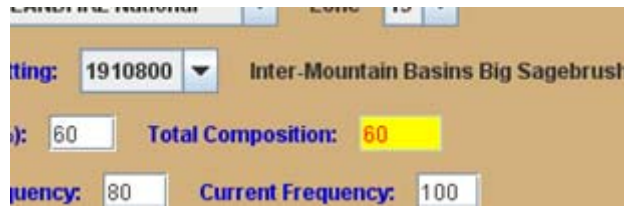
#### Succession Class Data

	Code	Ref %	Cur %
Perc Total:	A	20	5
Ref 100	B	30	10
Cur 100	C	50	65
	D	0	0
	E	0	0
	U	0	20



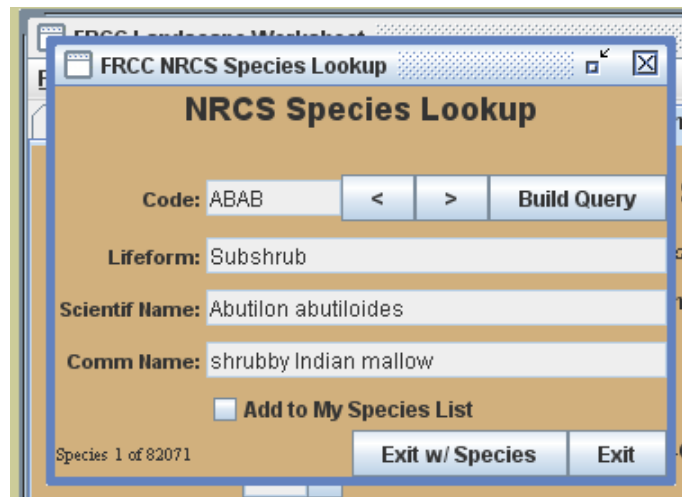
## FRCC Software Application version 3.0.3.0 Tutorial

Conversely, the *Total Composition* field in the middle of the page retains the red/yellow scheme until your three Strata total 100 percent of the Landscape:



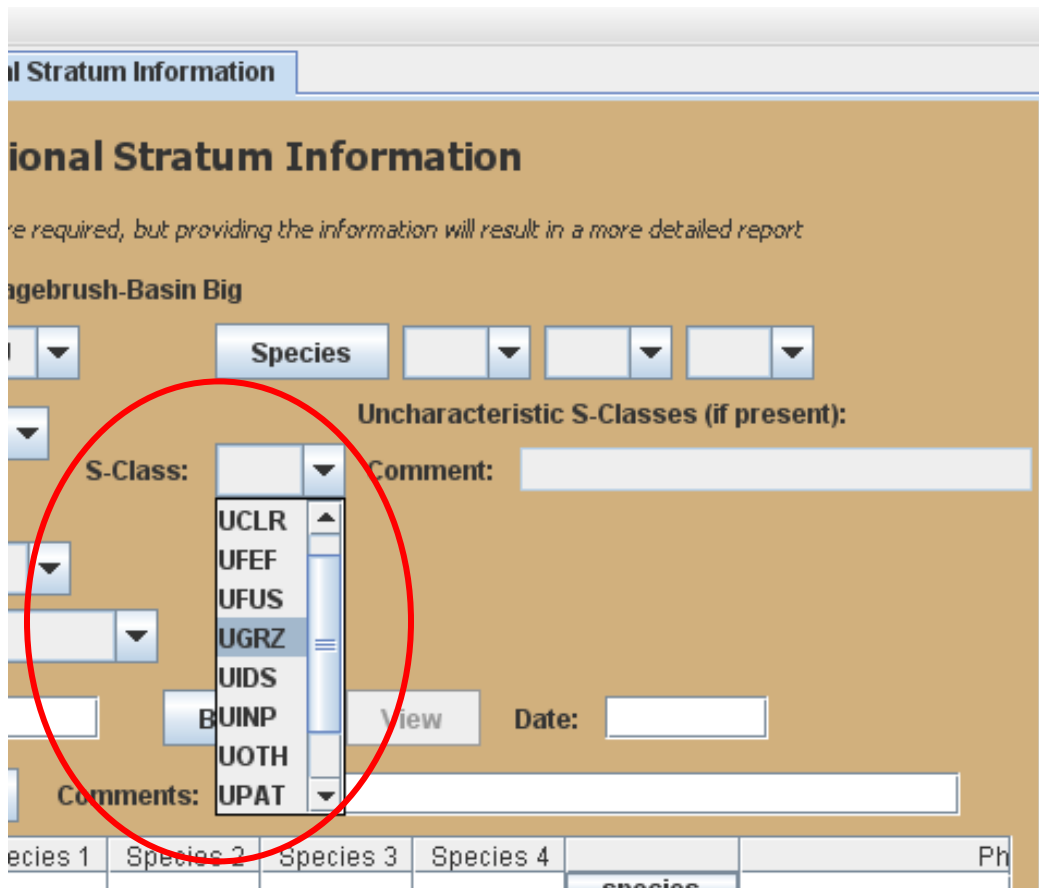
Next, open the *Additional Stratum Information* page by clicking on that tab. You won't enter any data on this page during this tutorial, but please conduct a quick review of the various data elements as described below.

First, the software contains a lookup function that allows you to automatically search for and record plant species for your stratum. This tool can quickly perform searches of the approximately 80,000 species-long list that is maintained by the USDA Natural Resources Conservation Service. Please activate the tool by clicking on any *Species* button in the white table (and note that the tool's dialog box may take a few seconds to load).



Please click the *Exit* button to return to the main page.

Next examine the fields that can be used for describing any Uncharacteristic succession classes in the stratum. For example, click anywhere in the *SClass* field to activate its drop-down menu.



Now place your cursor over any uncharacteristic code without clicking. Notice that the associated descriptive label appears on the right. (*Note:* If you mistakenly clicked on one of the codes, cancel the selection by reactivating the drop-down menu and clicking on the “blank” choice at the top).

Please return to the *Stratum FRCC Inputs* page by clicking on its tab once again. Click the *Create New Stratum* button and enter the following data for Stratum 2:

# FRCC Software Application version 3.0.3.0 Tutorial

Fire Regime Condition Class Software Application - Version 3.0.3.0

Forms Landscape Summaries Import

FRCC Landscape Worksheet

File Landscape Stratum

Landscape Data Stratum FRCC Inputs Additional Stratum Information

### Stratum FRCC Inputs

Landscape Name: TUTORIAL CREEK

Stratum No: 2 2 of 2

BpS Source: LANDFIRE National Zone 19

Biophysical Setting: 1911661 Middle Rocky Mountain Montane Douglas-fir Forest and Woodland

Composition (%): 30 Total Composition: 90

Reference Frequency: 31 Current Frequency: 100

Reference Severity: 42 Current Severity: 75

Succession Class Data

	Code	Ref %	Cur %
Perc Total:	A	20	5
	B	15	35
Ref 100	C	30	5
	D	20	10
Cur 100	E	15	45
	U	0	0

Notice that the *Total Composition* field now shows that your two strata account for 90 percent of the Landscape. So the red/yellow color scheme remains until the value reaches 100 percent.

Now create Stratum 3 as shown, using the same sequence of steps used for the first two strata.

## FRCC Software Application version 3.0.3.0 Tutorial

Fire Regime Condition Class Software Application - Version 3.0.3.0

Forms Landscape Summaries Import

FRCC Landscape Worksheet

File Landscape Stratum

Landscape Data Stratum FRCC Inputs Additional Stratum Information

### Stratum FRCC Inputs

Landscape Name: TUTORIAL CREEK

Stratum No: 3 3 of 3

BpS Source: LANDFIRE National Zone 19

Biophysical Setting: 1911390 Northern Rocky Mountain Lower Montane-Foothill-Valley Grassland

Composition (%): 10 Total Composition: 100

Reference Frequency: 17 Current Frequency: 50

Reference Severity: 100 Current Severity: 100

#### Succession Class Data

	Code	Ref %	Cur %
Perc Total:	A	5	5
	B	25	20
	C	70	55
	D	0	0
	E	0	0
	U	0	20
Ref	100		
Cur	100		

All required data have now been entered for your Landscape. Before proceeding, please check your data entries as follows. First, verify that your strata occupy 100 percent of the Landscape (*Total Composition* field, black/gray color scheme). Then check your data entries against those shown in the graphic above. Similarly, check your Strata 1 and 2 entries by using the *Review Previous Stratum* and *Review Next Stratum* buttons.

Now you're ready to generate the FRCC Report as described below.

(*Note:* The software will automatically save your Landscape upon clicking the *Report* button. But remember to use the *Save* button if you need to close the software beforehand.)

**Generating the FRCC Outputs.** In this final section, you'll generate and review the results for your hypothetical Landscape. Bear in mind that the goal of this tutorial is to provide

## FRCC Software Application version 3.0.3.0 Tutorial

simply a brief introduction to the software. So, you can quickly scan the major elements of the report without critically evaluating the outputs.

Click the *Report* button on the bottom-right side of your *FRCC Landscape Worksheet*. The first page provides an overview for the Landscape and for the Strata. Notice that some data fields are blank because you didn't fill out any *Additional Stratum Information* pages during this tutorial. Conversely, the software automatically filled in the codes for the lifeforms and plant species when you selected the BpS models.

**Fire Regime Condition Class Landscape Report** version 3.0.3.0

**Landscape**

Registration Code: BCCFD      Landscape Code: TUTOR1      Characterization Date: 09/30/2010  
 Examiner: myemail@server.net      Landscape Name: TUTORIAL CREEK      Area: 100000 Acres  
 Lat: 48.120100      Lon: 114.185400      Datum: WGS84  
 Comment: THIS IS MY TUTORIAL LANDSCAPE

**Biophysical Stratification**

Num	Life-form	BpS	Species	Land-form	Slope Class	Insol Class	Elevation Low	Elevation High	Stratum Comp (%)	Ref Freq	Curr Freq	Ref Sev	Curr Sev	Strata Depart	Strata FRCC
1	SU	1910800	ARTRW&ARTRT	ERNA10					60	80	100	100	100	23	1
2	CF	1911661	PSME PICO PIFL						30	31	100	42	75	53	2
3	HU	1911390	PSSP6 FEID FECA4						10	17	50	100	100	27	1
									100						

Now scroll down to review the next three pages, which show more-detailed Stratum results. That is, each page shows the data entered on the *Stratum FRCC Inputs* and *Additional Stratum Information* pages. Also notice that the bottom of each page shows the outcomes for the vegetation variables, for the fire regime variables, and for the entire stratum, as shown in the example below:

## FRCC Software Application version 3.0.3.0 Tutorial

Fire Regime Condition Class Landscape Report
[Icons]

### Fire Regime Condition Class Landscape Report - Stratum Data

Registration Code: BCCFO      Landscape Code: TUTOR1      Characterization Date: 09/30/2010

Stratum Num: 1    Biophysical Setting: 1910800      Stratum Name: Inter-Mountain Basins Big Sagebrush Shrubland

Stratum Composition (% of area): 60      BpS Lifeform: SU      Landform:      Avg Slope Class:      Insol Class:

Stratum Area: 60000 Acres      Species: ARTRW8 ARTRT    ERNA10    Low Elevation:      High Elevation:

Reference Frequency: 80    Current Frequency: 100      Latitude:      Longitude:      Datum: WGS84

Reference Severity: 100    Current Severity: 100      Reference Composition Source: D      Current Composition Source: R

Comments:

#### Succession Classes

Code	Upper Layer Majority Lifeform	Majority Size	Dominant Species				Ref Comp	Curr Comp	Acre	Sim	Diff	Relative Amount	Stand FRCC	Stand Depart	S-Class Acres Departed from Reference
A	HERB	NNNN	LECI4	ELTR7	HECO26	PSSP6	20	5	3000	5	-75	TRACE	1	0	-9000
B	SHRB	NNNN	ARTRT	ARTRW8	PSSP6	LECI4	30	10	6000	10	-67	TRACE	1	0	-12000
C	SHRB	NNNN	ARTRT	POSE	ARTRW8	PSSP6	50	65	39000	50	23	OVER REP	2	23	9000
D							0	0	0	0	N/A				0
E							0	0	0	0	N/A				0
U							0	20	12000	0	100	ABUNDANT	3	100	12000
<b>Total</b>							100	100	65						

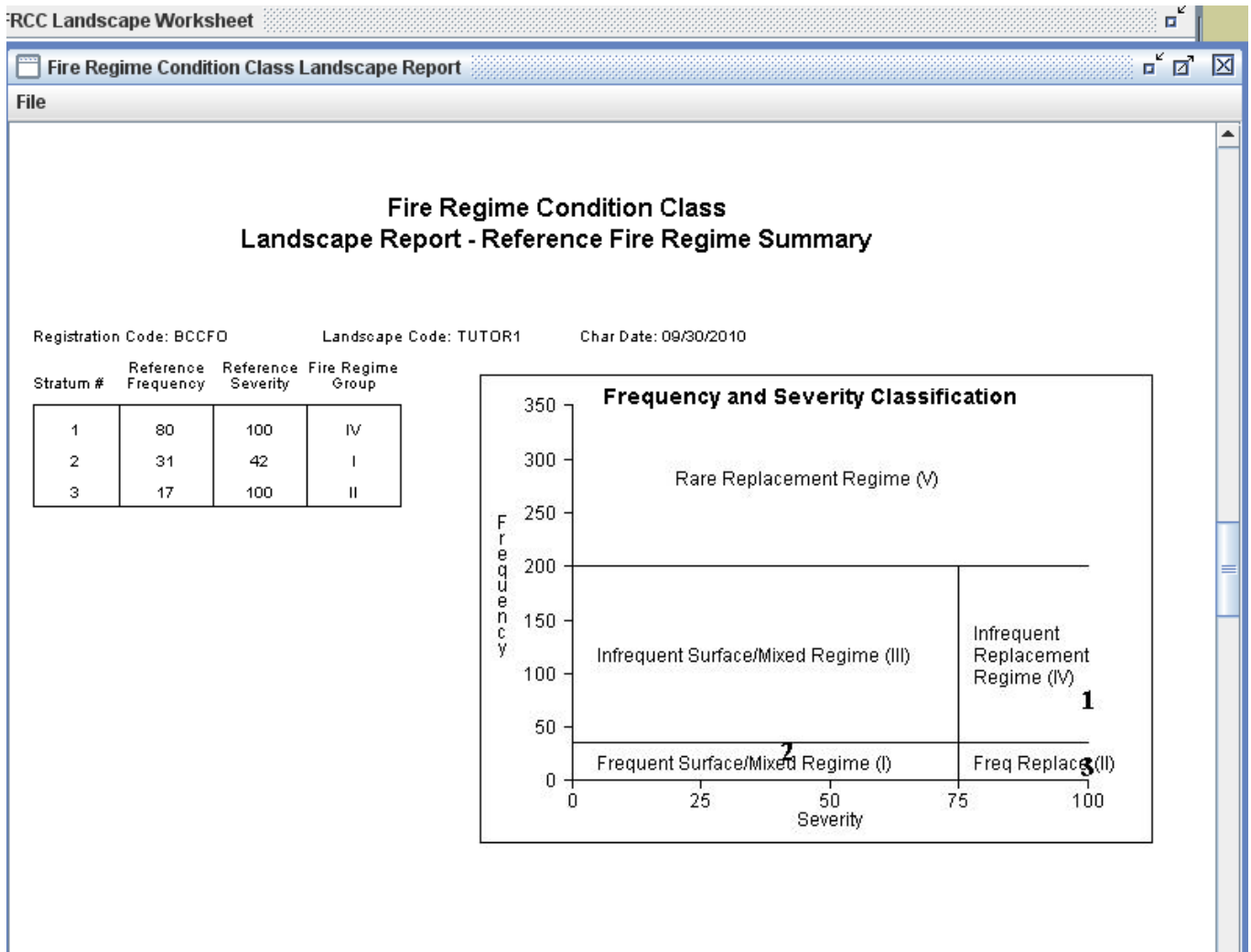
Stratum Vegetation Departure: 35      Stratum Fire Frequency Departure: 20      Stratum Regime Departure: 10

Stratum Vegetation Condition Class: 2      Stratum Fire Severity Departure: 0      Stratum Regime Condition Class: 1

Stratum Fire Regime: IV - Infrequent Replacement      Stratum Departure: 23      Stratum Fire Regime Condition Class: 1

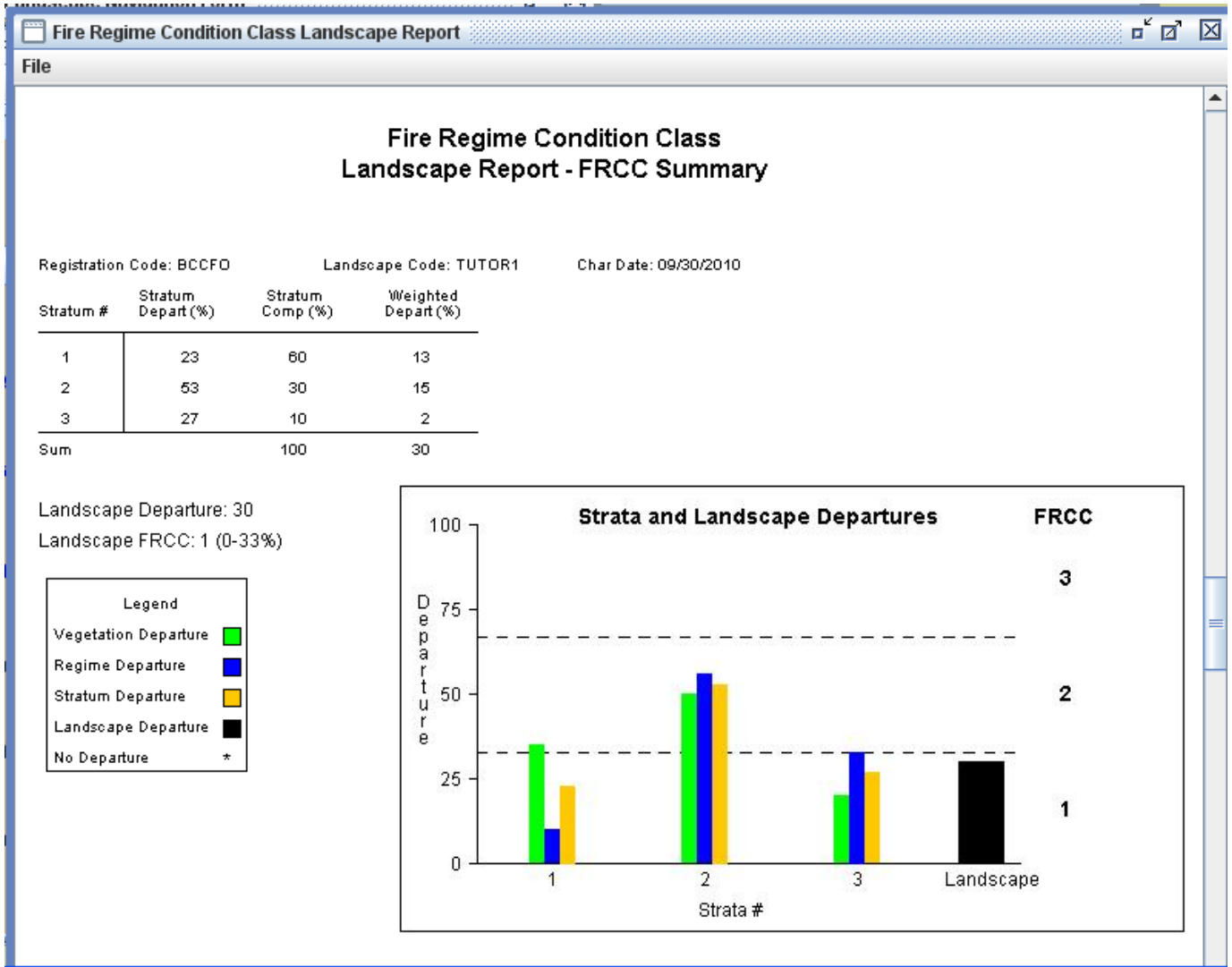
After reviewing your three Stratum pages, please scroll to the *Reference Fire Regime Summary*. Notice that this page shows the fire regime traits for each stratum in both tabular and graphic formats. For example, the software automatically plots the reference frequency and severity data by inputting bold black numbers to represent each stratum.

# FRCC Software Application version 3.0.3.0 Tutorial



Next examine the FRCC Summary page, which shows the departures for each stratum and for the entire Landscape. Also notice the applicable condition classes on the far-right side of the graph:

# FRCC Software Application version 3.0.3.0 Tutorial



Now scroll to the next page. This table shows the FRCC acreages based on the percent composition values that you input for each Stratum:

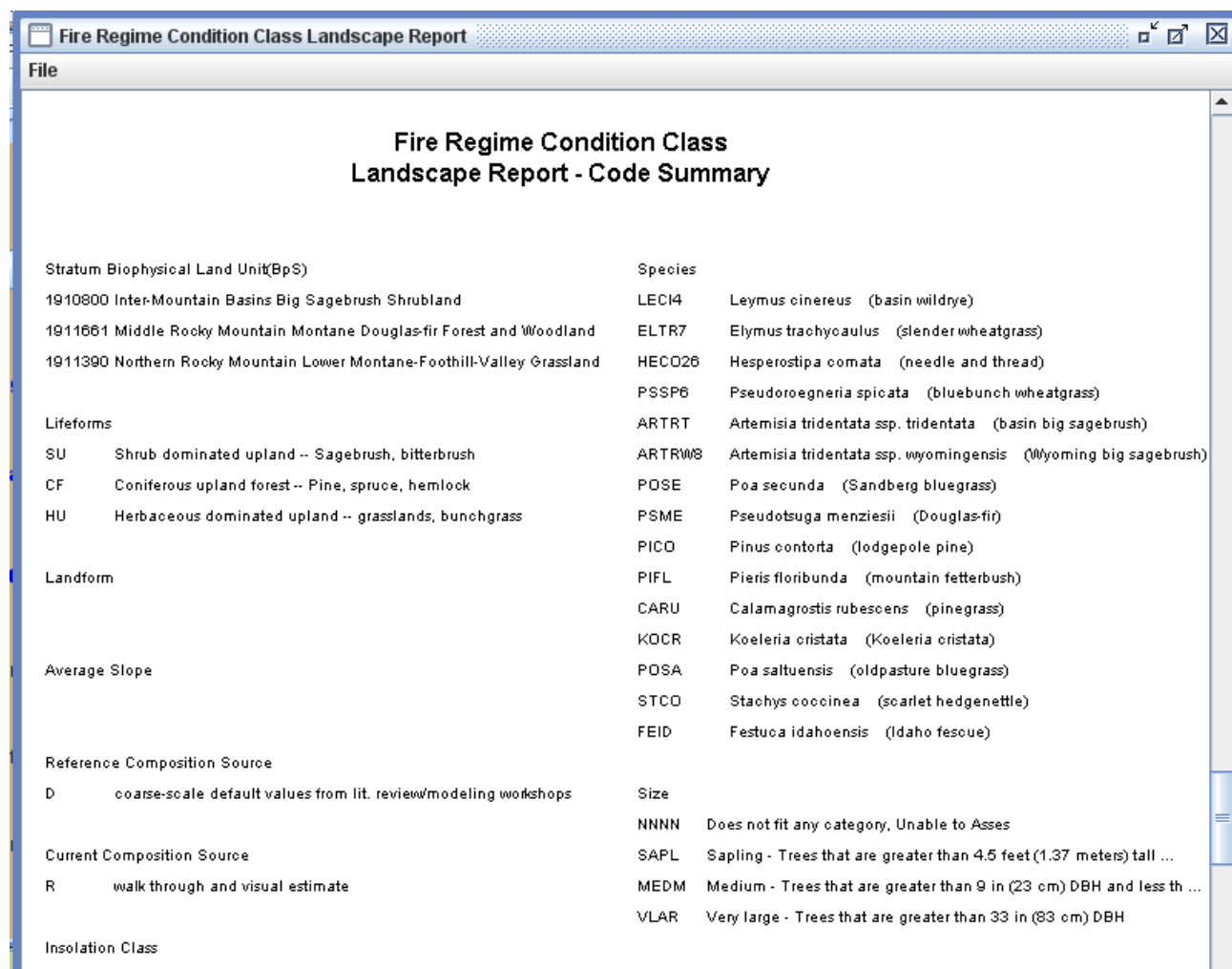


## FRCC Software Application version 3.0.3.0 Tutorial



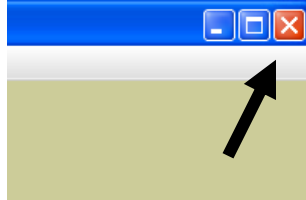
<b>FRCC Landscape Report for TUTORIAL CREEK</b>					
<b>Biophysical Setting (BpS Code)</b>	<b>FRG (I-V)</b>	<b>Condition Class 1 (Acres)</b>	<b>Condition Class 2 (Acres)</b>	<b>Condition Class 3 (Acres)</b>	<b>Total Acres</b>
Inter-Mountain Basins Big Sagebrush... (1910800)	IV	9000	39000	12000	60000
Middle Rocky Mountain Montane Doug... (1911661)	I	6000	24000	0	30000
Northern Rocky Mountain Lower Mont... (1911390)	II	8000	0	2000	10000
<b>Total Acres</b>		23000	63000	14000	100000

And finally, the last portion of the Report shows all of the data codes for your Landscape:



## FRCC Software Application version 3.0.3.0 Tutorial

When you're finished examining the Report, you can close the software and automatically save your Landscape by clicking the **X** icon in the upper-right corner of the main page:



### **Conclusion**

Today you learned how to create a basic FRCC assessment with the FRCC Software Application, and you learned about the software's diverse functionality. Although this tutorial did not cover advanced features such as the Multi-Landscape and Global Summary functions, we encourage you to explore those software elements after reading the FRCC<sub>SA</sub> User's Guide and conducting additional practice assessments on your own.

### **Additional Help**

Please refer to [www.frcc.gov](http://www.frcc.gov) and the FRCC<sub>SA</sub> User's Guide for more information about the FRCC Software Application. Also, questions about the software and about general FRCC methods can be sent to the FRCC helpdesk at [helpdesk@frcc.gov](mailto:helpdesk@frcc.gov)