WinSLAMM v 10.0
User's Guide

Introduction

Building a No Management Conditions Model File

WinSLAMM v10 routes hydrographs and particle size distributions through the network from control device to control device.

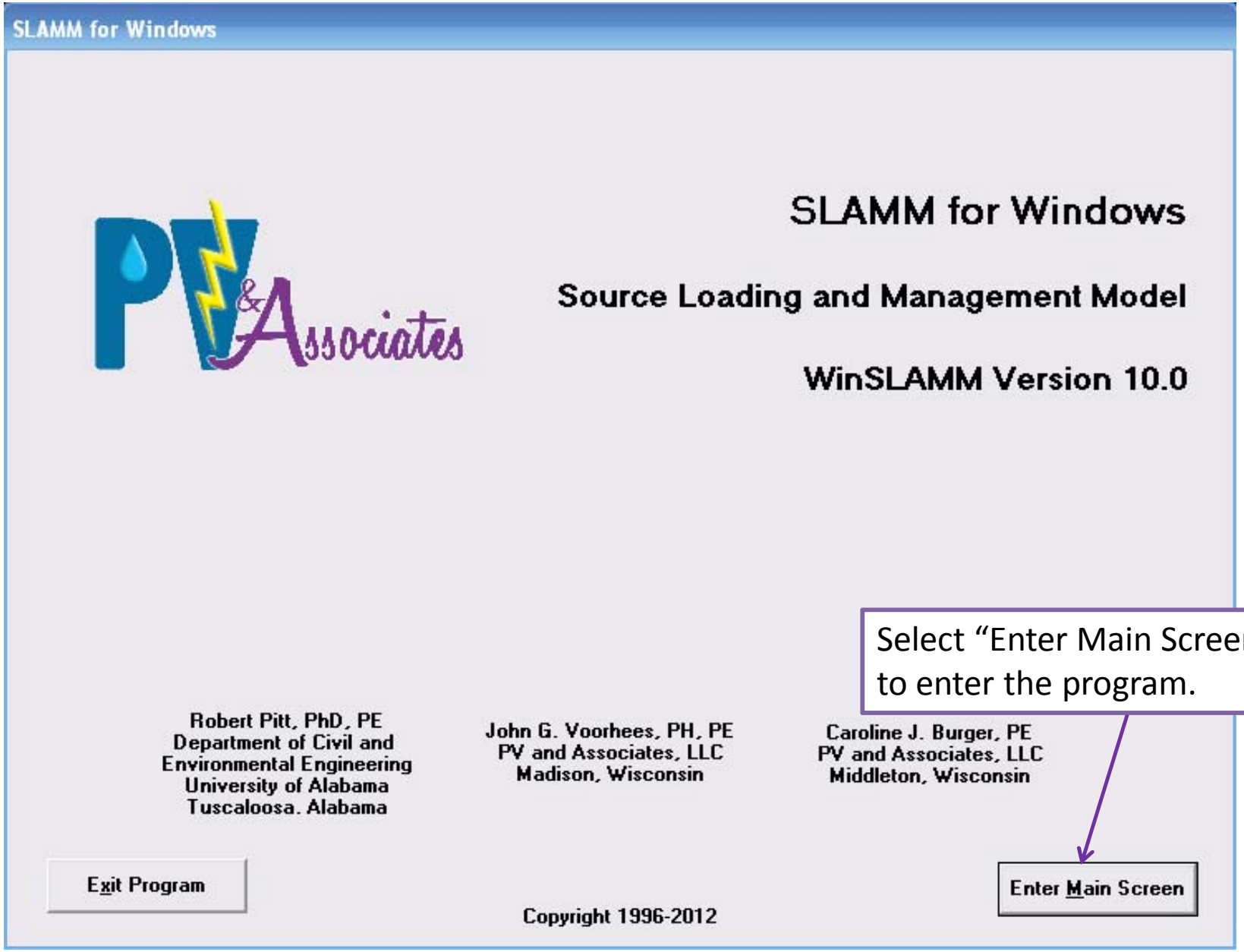
Pollutant reduction by particle size and hydrograph attenuation are tracked and reported for each land use, junction, and control device.

WinSLAMM v10 has a database format, meaning each model file can be opened in database programs such as Microsoft Access.

Future versions will allow direct import from programs containing databases such as ArcGIS (not available in v10.0).

WinSLAMM began in the 1970s and has been continuously updated as new research becomes available.

Thank you for taking the time to review this User's Guide.


SLAMM for Windows
PV & Associates
SLAMM for Windows
Source Loading and Management Model
WinSLAMM Version 10.0
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Department of Civil and
Environmental Engineering
University of Alabama
Tuscaloosa, Alabama
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PV and Associates, LLC
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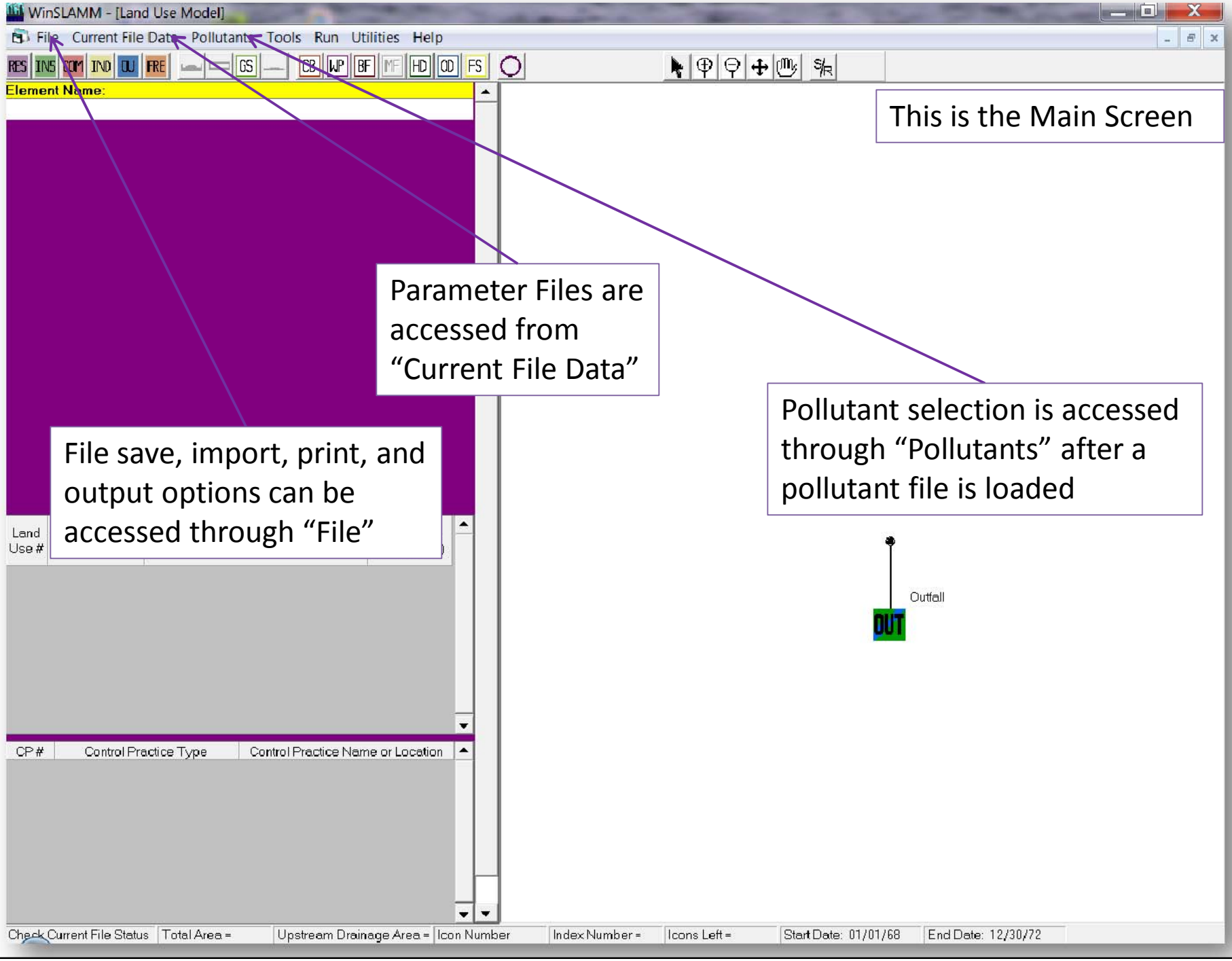
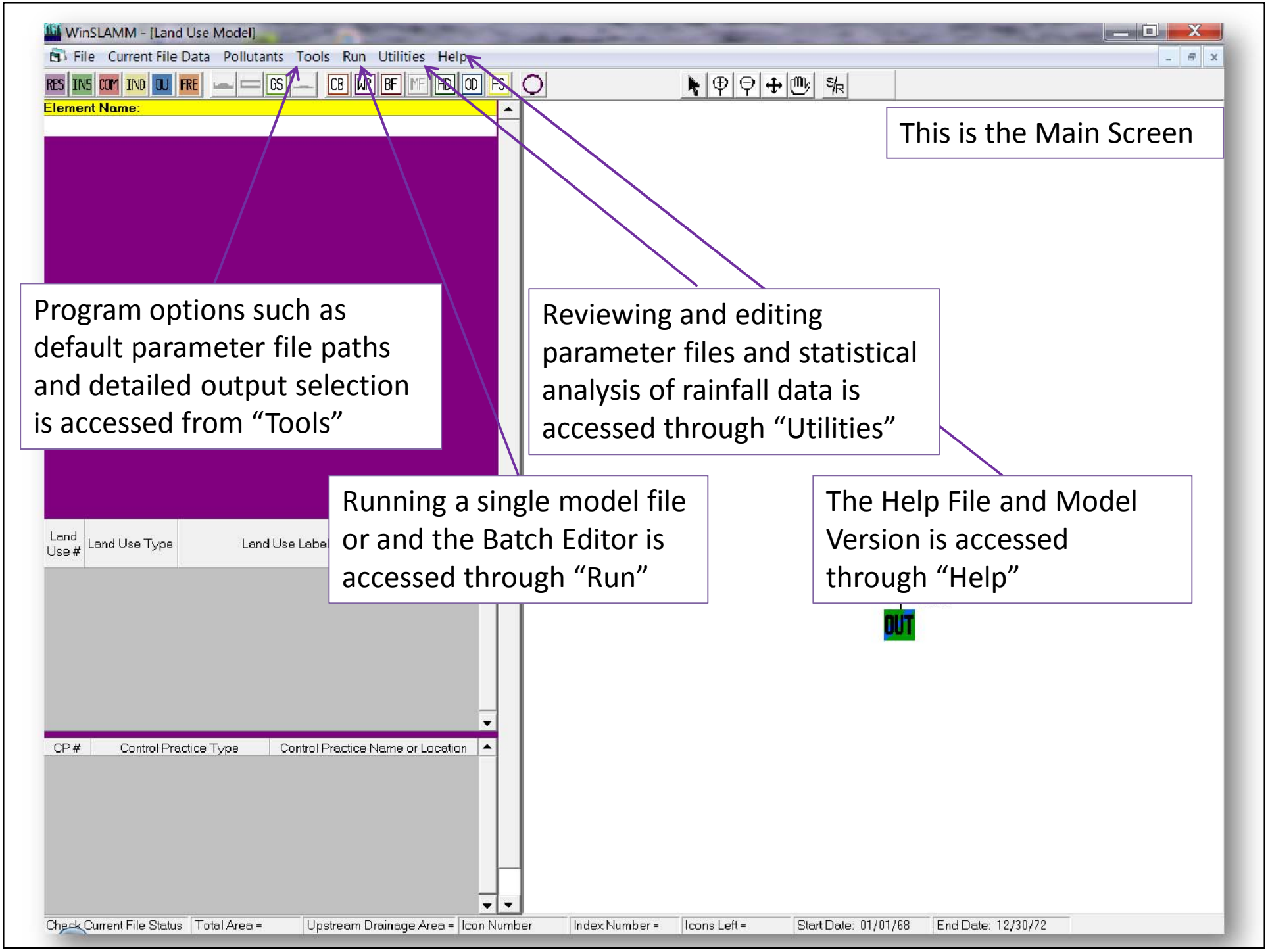
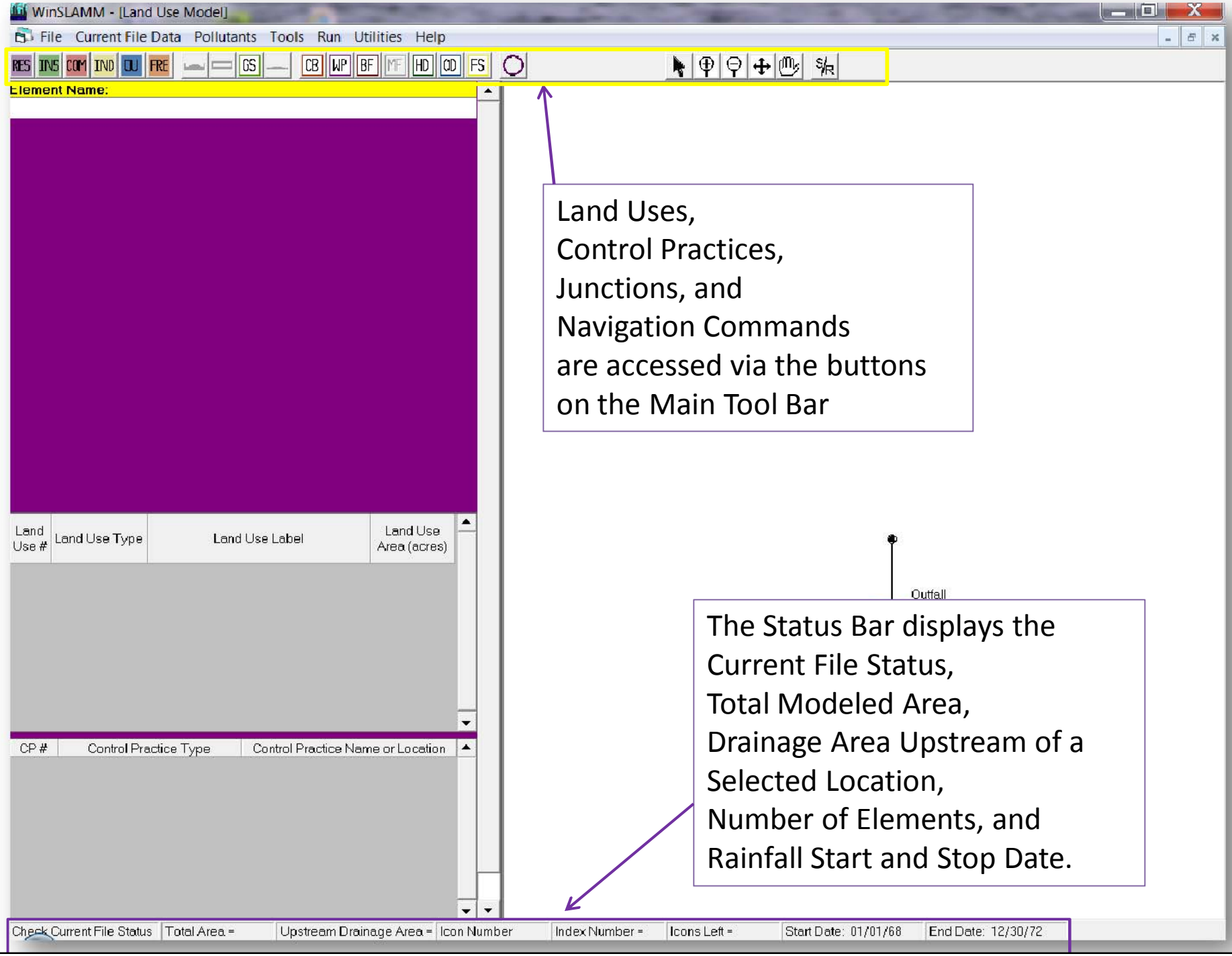
Exit Program
Copyright 1996-2012
Enter Main Screen
Select “Enter Main Screen” to enter the program.

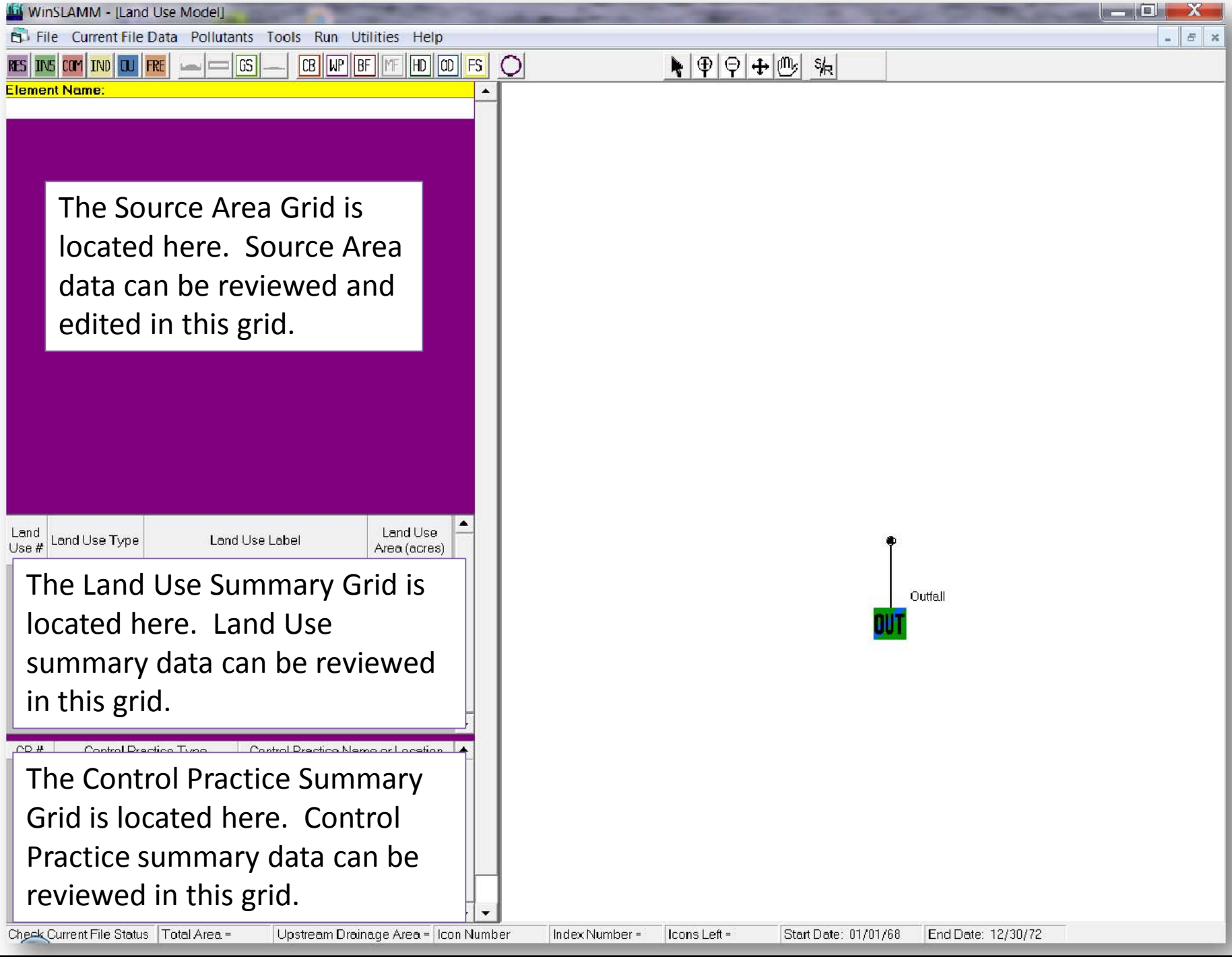

WinSLAMM - [Land Use Model]
File
Current File Data
Pollutants
Tools
Run
Utilities
Help
Element Name:
This is the Main Screen
Parameter Files are accessed from "Current File Data"
Pollutant selection is accessed through "Pollutants" after a pollutant file is loaded
File save, import, print, and output options can be accessed through "File"
Land Use #
CP #
Control Practice Type
Control Practice Name or Location
Outfall
OUT
Check Current File Status
Total Area =
Upstream Drainage Area =
Icon Number
Index Number =
Icons Left =
Start Date: 01/01/68
End Date: 12/30/72


WinSLAMM - [Land Use Model]
File
Current File Data
Pollutants
Tools
Run
Utilities
Help
Element Name:
Land Use #
Land Use Type
Land Use Label
CP #
Control Practice Type
Control Practice Name or Location
Check Current File Status
Total Area =
Upstream Drainage Area =
Icon Number
Index Number =
Icons Left =
Start Date: 01/01/68
End Date: 12/30/72
This is the Main Screen
Program options such as default parameter file paths and detailed output selection is accessed from “Tools”
Reviewing and editing parameter files and statistical analysis of rainfall data is accessed through “Utilities”
Running a single model file or and the Batch Editor is accessed through “Run”
The Help File and Model Version is accessed through “Help”
OUT

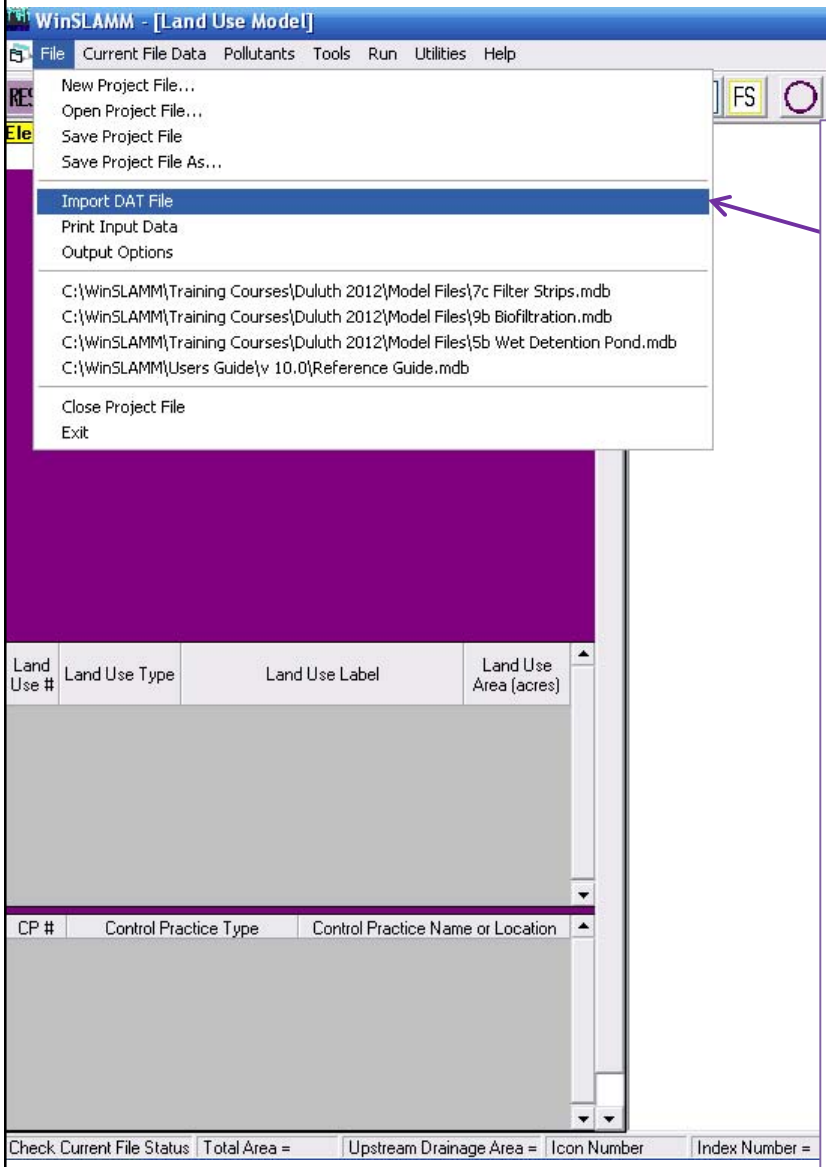


Land Uses,
Control Practices,
Junctions, and
Navigation Commands
are accessed via the buttons
on the Main Tool Bar

The Status Bar displays the
Current File Status,
Total Modeled Area,
Drainage Area Upstream of a
Selected Location,
Number of Elements, and
Rainfall Start and Stop Date.


WinSLAMM - [Land Use Model]
File Current File Data Pollutants Tools Run Utilities Help
Element Name:
The Source Area Grid is located here. Source Area data can be reviewed and edited in this grid.
Land Use # Land Use Type Land Use Label Land Use Area (acres)
The Land Use Summary Grid is located here. Land Use summary data can be reviewed in this grid.
The Control Practice Summary Grid is located here. Control Practice summary data can be reviewed in this grid.
Outfall
OUT
Check Current File Status Total Area = Upstream Drainage Area = Icon Number Index Number = Icons Left = Start Date: 01/01/68 End Date: 12/30/72

Importing Files



v9.4 *.dat files may be imported into v10.

If WinSLAMM model files are prior to v9.4, use v9.4 update to previous version model files files to v9.4. After files are updated to v9.4, then import them into v10.

When importing into v10, errors may appear. This is common due to the file structure changes.

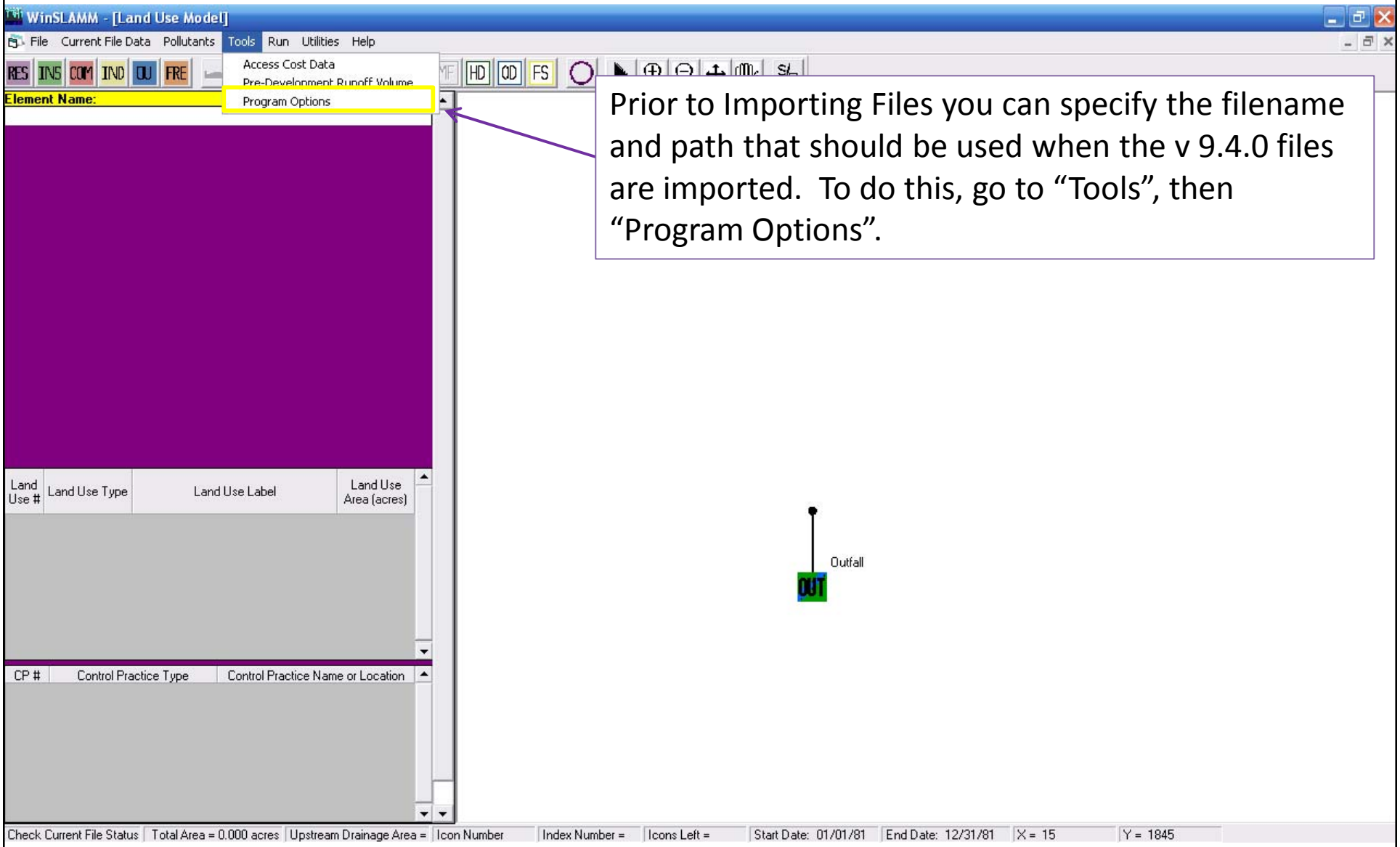
After importing into v10, update both the parameter files and the particle size distribution file. If you still receive, errors contact jvoorhees@winslamm.com. Include the *.dat file being imported and the resulting *.mdb file (save the *mdb file to a *.mmm extension prior to emailing).

Please note: Certain control device configurations cannot be imported. They include:

- Land Use Biofilters
- Land Use Specific Grass Swales
- Wet Ponds upstream of Biofilters.

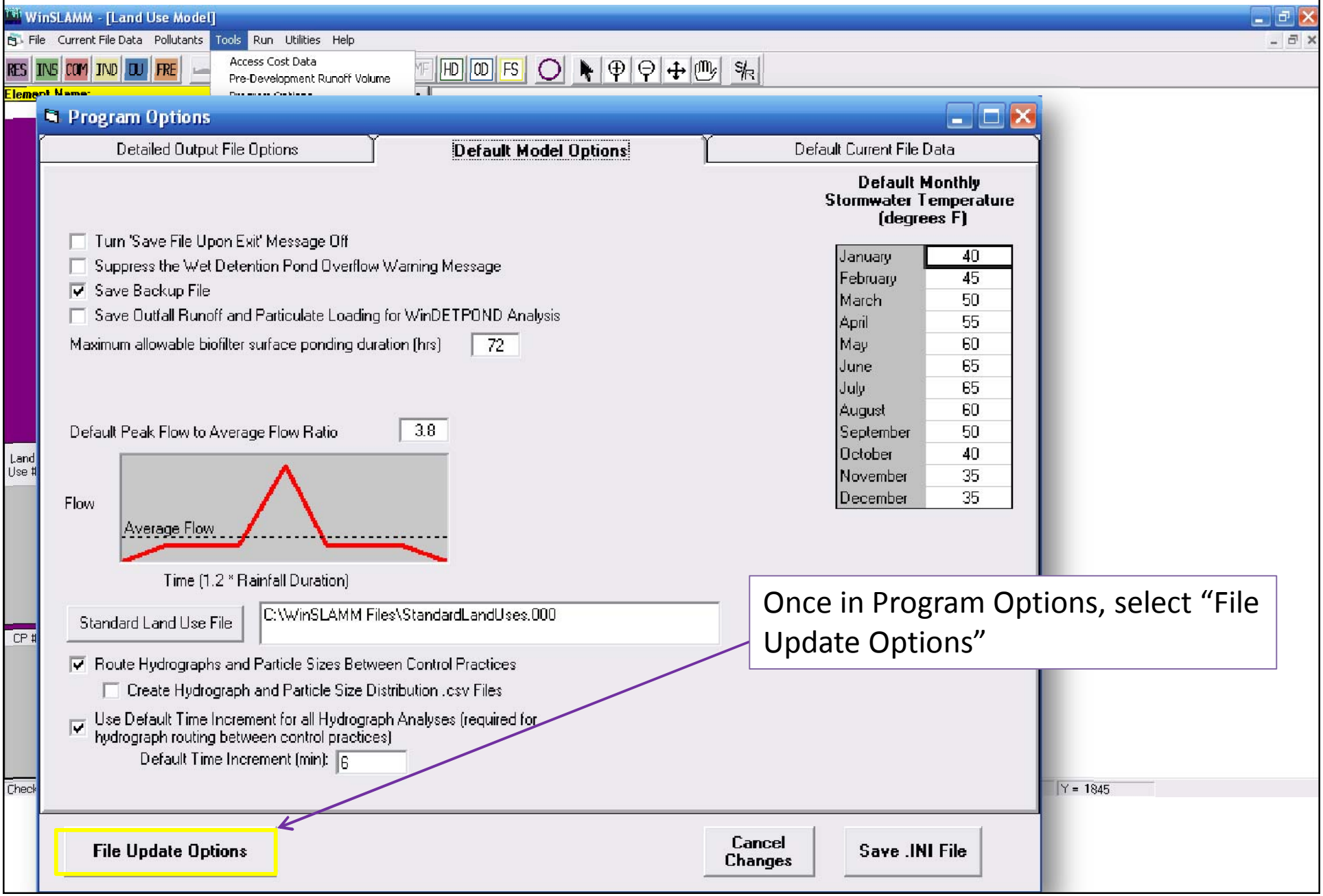
See the Help File for more information.

Importing Files

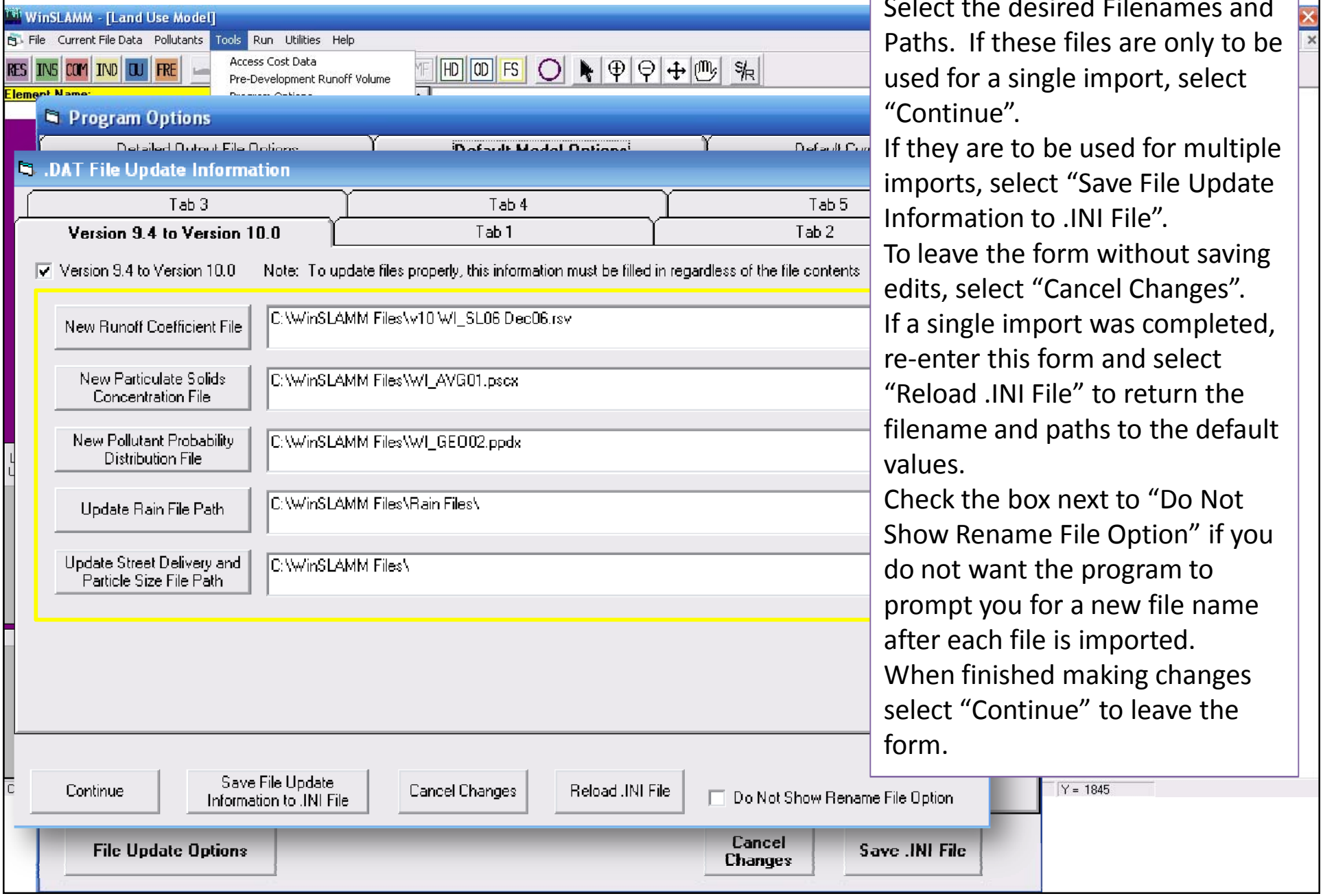


Prior to Importing Files you can specify the filename and path that should be used when the v 9.4.0 files are imported. To do this, go to “Tools”, then “Program Options”.

Importing Files



Importing Files



Select the desired Filenames and Paths. If these files are only to be used for a single import, select "Continue".

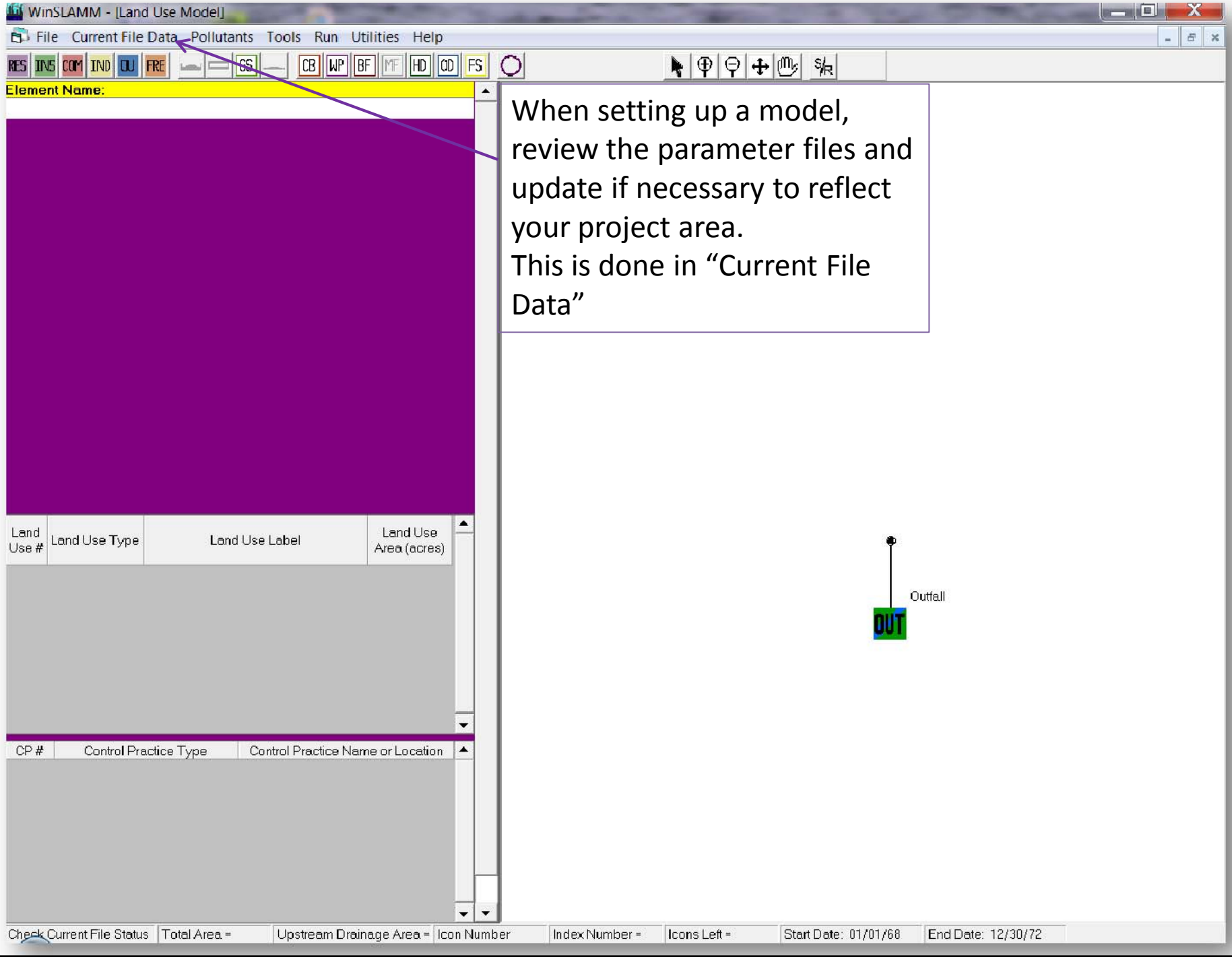
If they are to be used for multiple imports, select "Save File Update Information to .INI File".

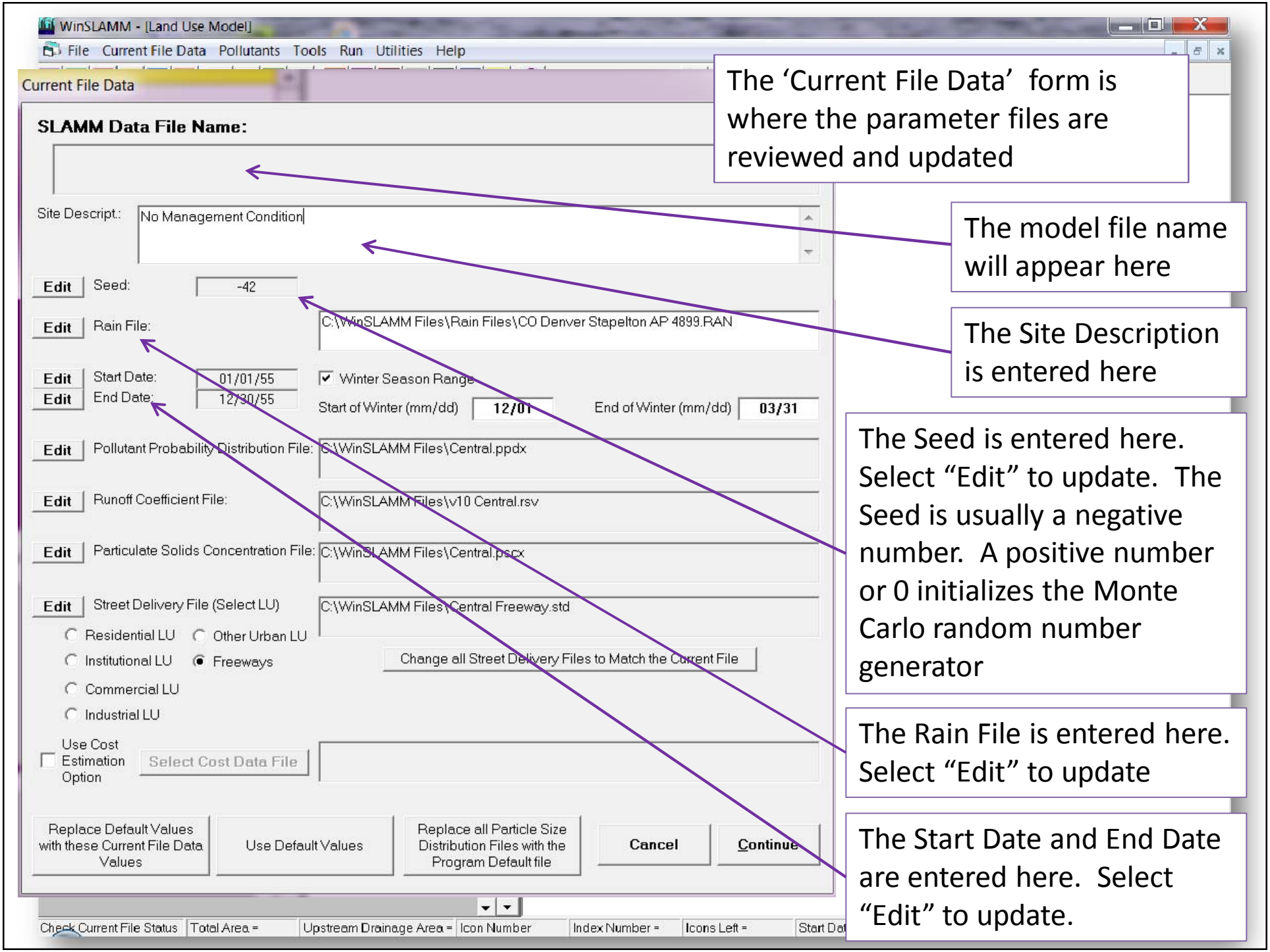
To leave the form without saving edits, select "Cancel Changes".

If a single import was completed, re-enter this form and select "Reload .INI File" to return the filename and paths to the default values.

Check the box next to "Do Not Show Rename File Option" if you do not want the program to prompt you for a new file name after each file is imported.

When finished making changes select "Continue" to leave the form.


WinSLAMM - [Land Use Model]
File
Current File Data
Pollutants
Tools
Run
Utilities
Help
Element Name:
When setting up a model, review the parameter files and update if necessary to reflect your project area.
This is done in “Current File Data”
Land Use #
Land Use Type
Land Use Label
Land Use Area (acres)
CP #
Control Practice Type
Control Practice Name or Location
Outfall
OUT
Check Current File Status
Total Area =
Upstream Drainage Area =
Icon Number
Index Number =
Icons Left =
Start Date: 01/01/68
End Date: 12/30/72



The 'Current File Data' form is where the parameter files are reviewed and updated

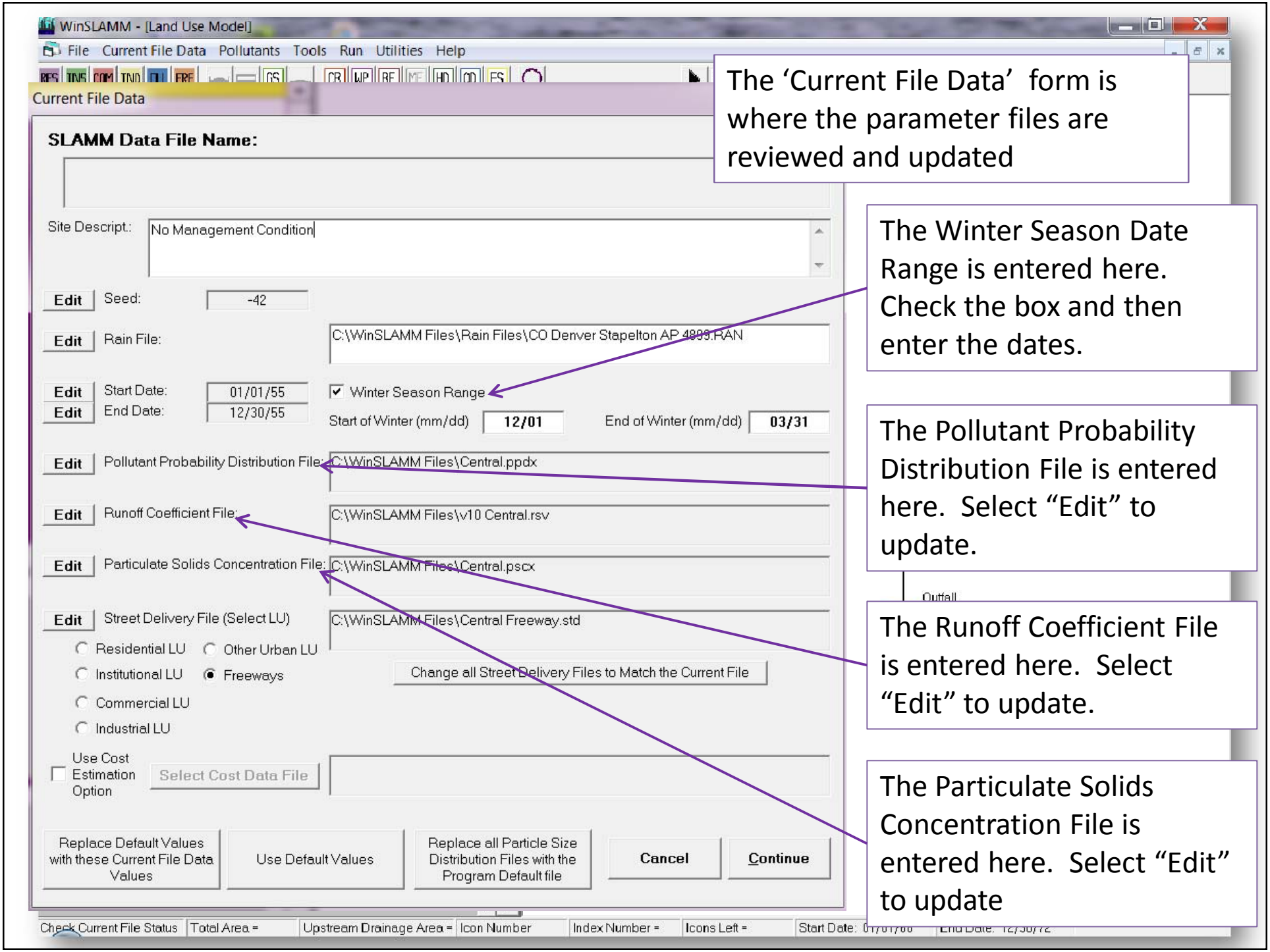
The model file name will appear here

The Site Description is entered here

The Seed is entered here. Select "Edit" to update. The Seed is usually a negative number. A positive number or 0 initializes the Monte Carlo random number generator

The Rain File is entered here. Select "Edit" to update

The Start Date and End Date are entered here. Select "Edit" to update.



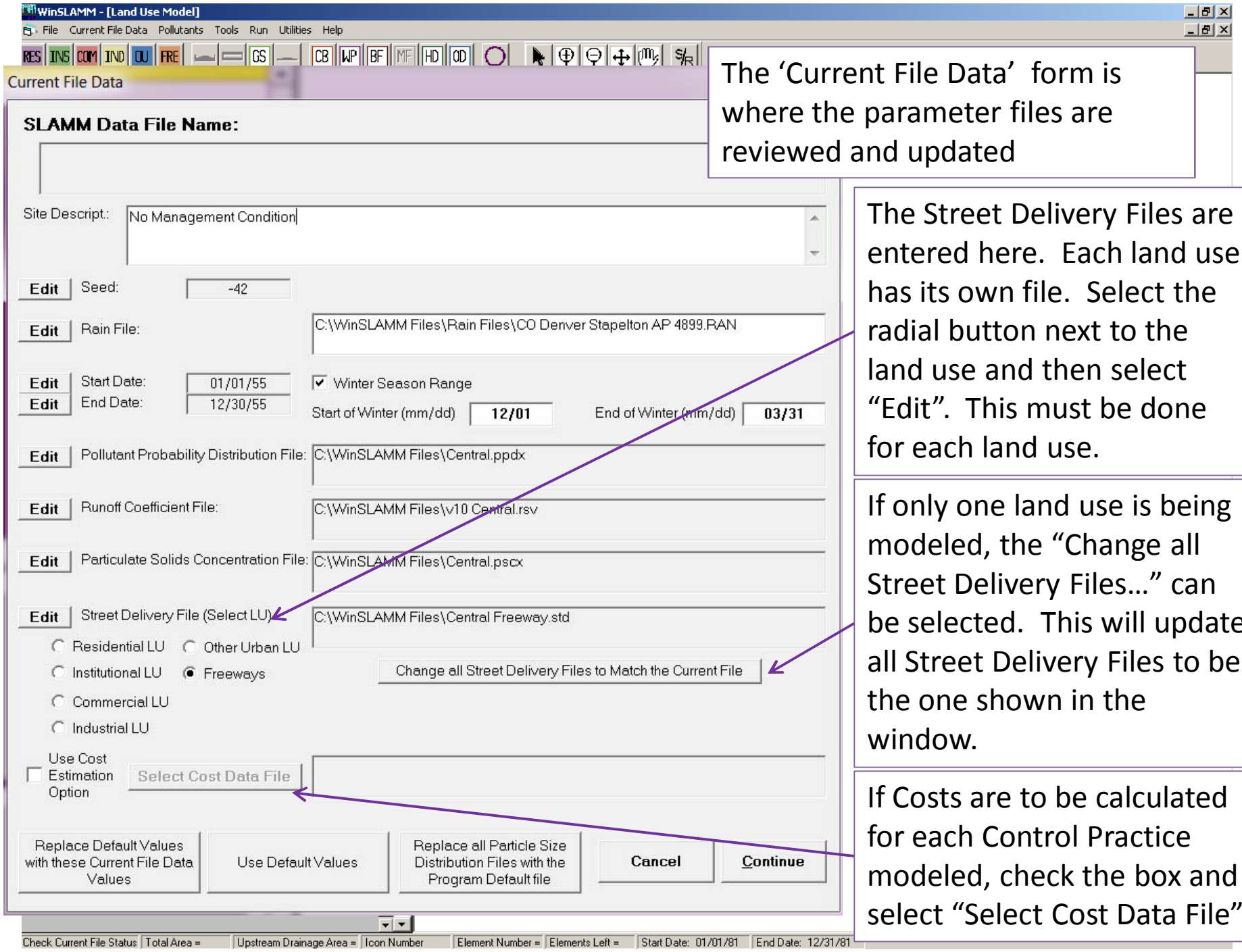
The 'Current File Data' form is where the parameter files are reviewed and updated

The Winter Season Date Range is entered here. Check the box and then enter the dates.

The Pollutant Probability Distribution File is entered here. Select "Edit" to update.

The Runoff Coefficient File is entered here. Select "Edit" to update.

The Particulate Solids Concentration File is entered here. Select "Edit" to update

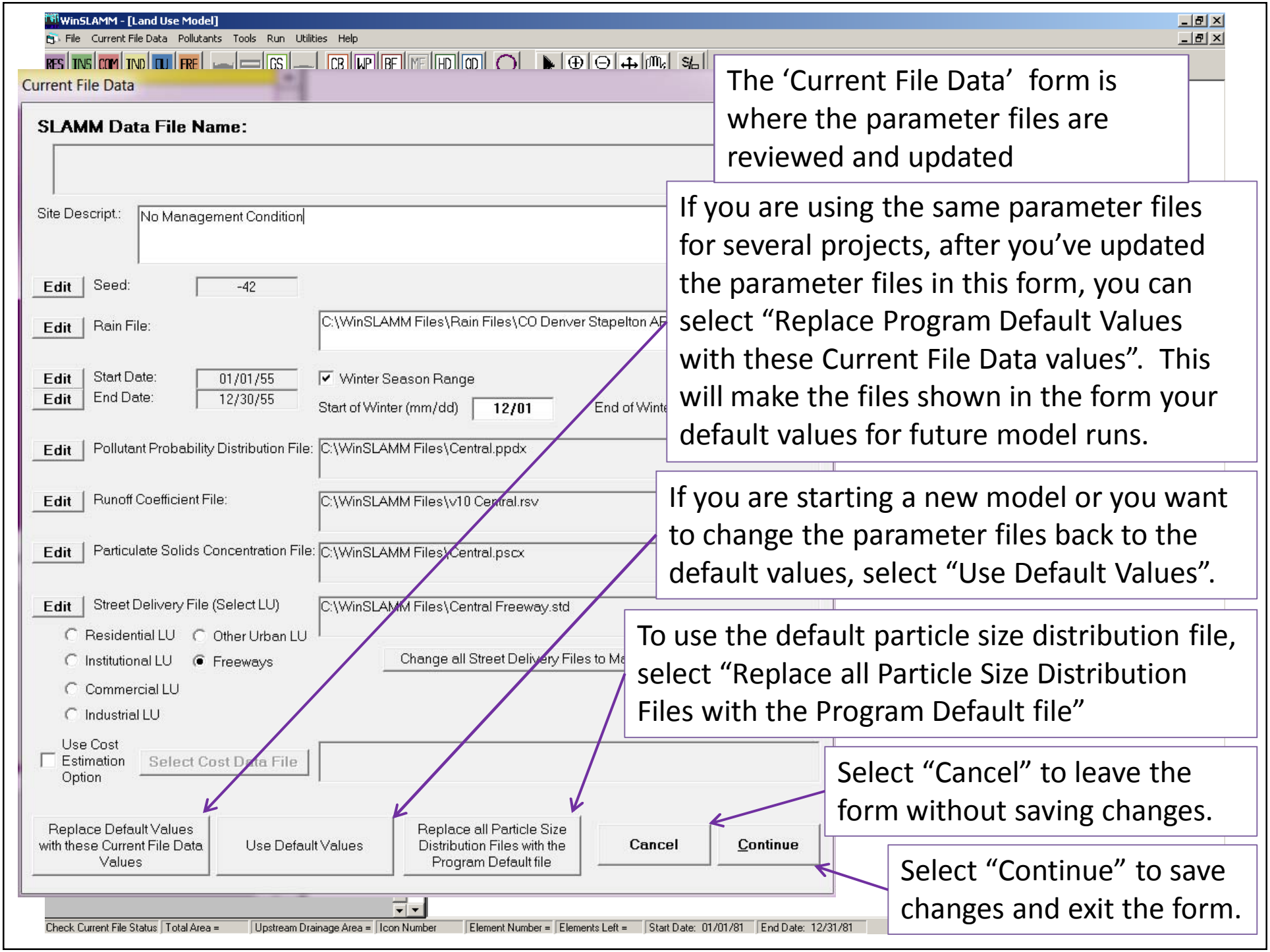


The 'Current File Data' form is where the parameter files are reviewed and updated

The Street Delivery Files are entered here. Each land use has its own file. Select the radial button next to the land use and then select "Edit". This must be done for each land use.

If only one land use is being modeled, the "Change all Street Delivery Files…" can be selected. This will update all Street Delivery Files to be the one shown in the window.

If Costs are to be calculated for each Control Practice modeled, check the box and select "Select Cost Data File"



The 'Current File Data' form is where the parameter files are reviewed and updated

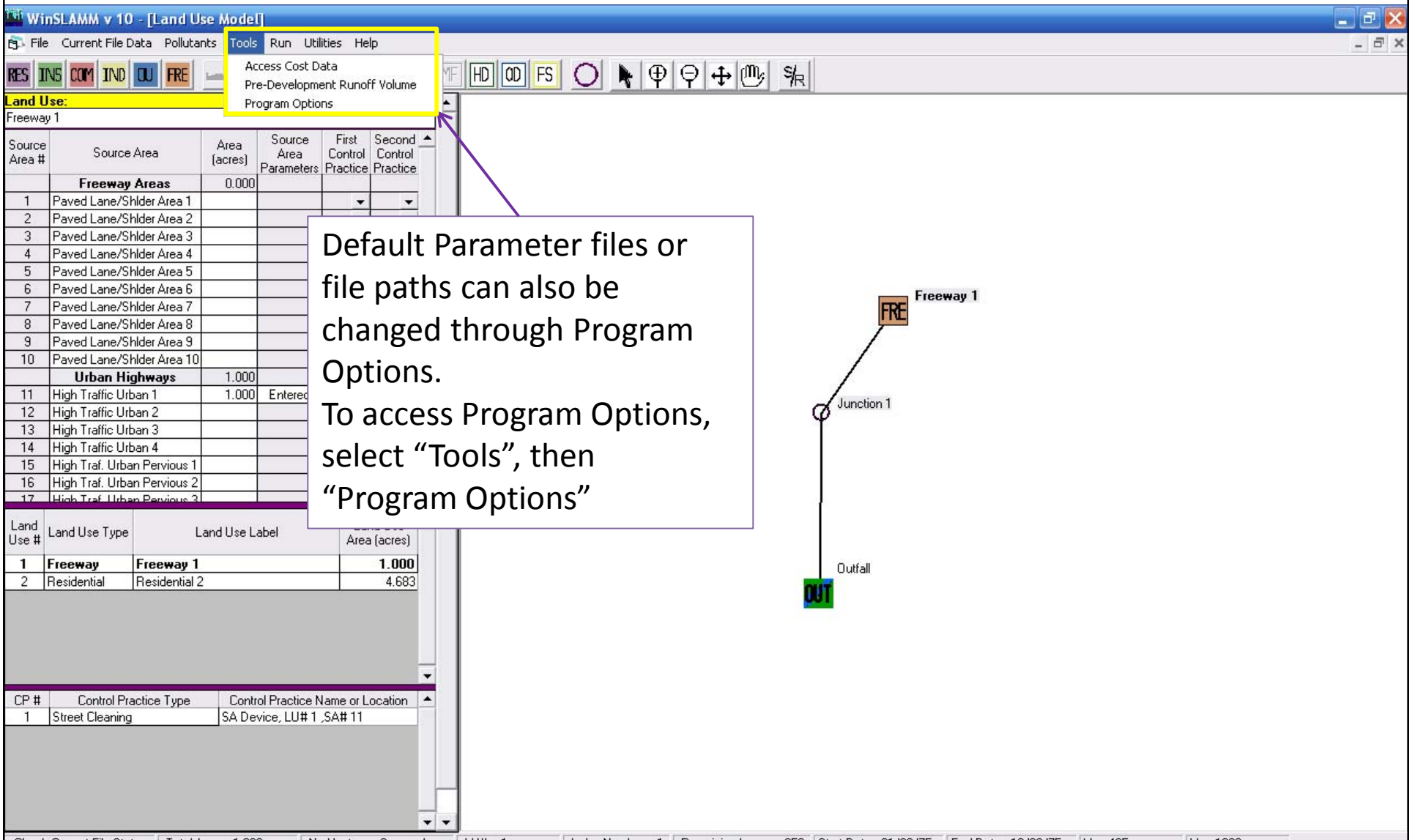
If you are using the same parameter files for several projects, after you've updated the parameter files in this form, you can select "Replace Program Default Values with these Current File Data values". This will make the files shown in the form your default values for future model runs.

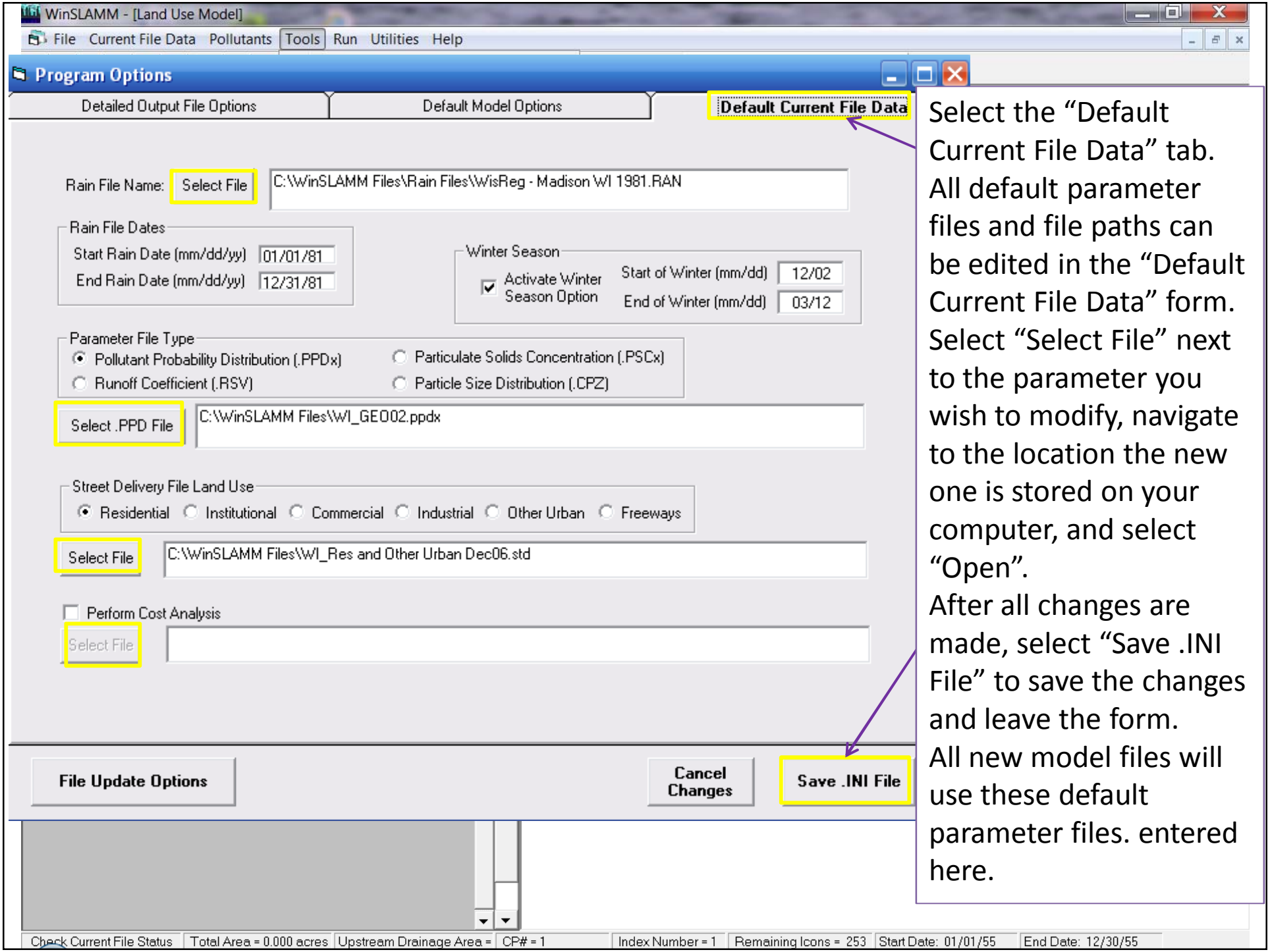
If you are starting a new model or you want to change the parameter files back to the default values, select "Use Default Values".

To use the default particle size distribution file, select "Replace all Particle Size Distribution Files with the Program Default file"

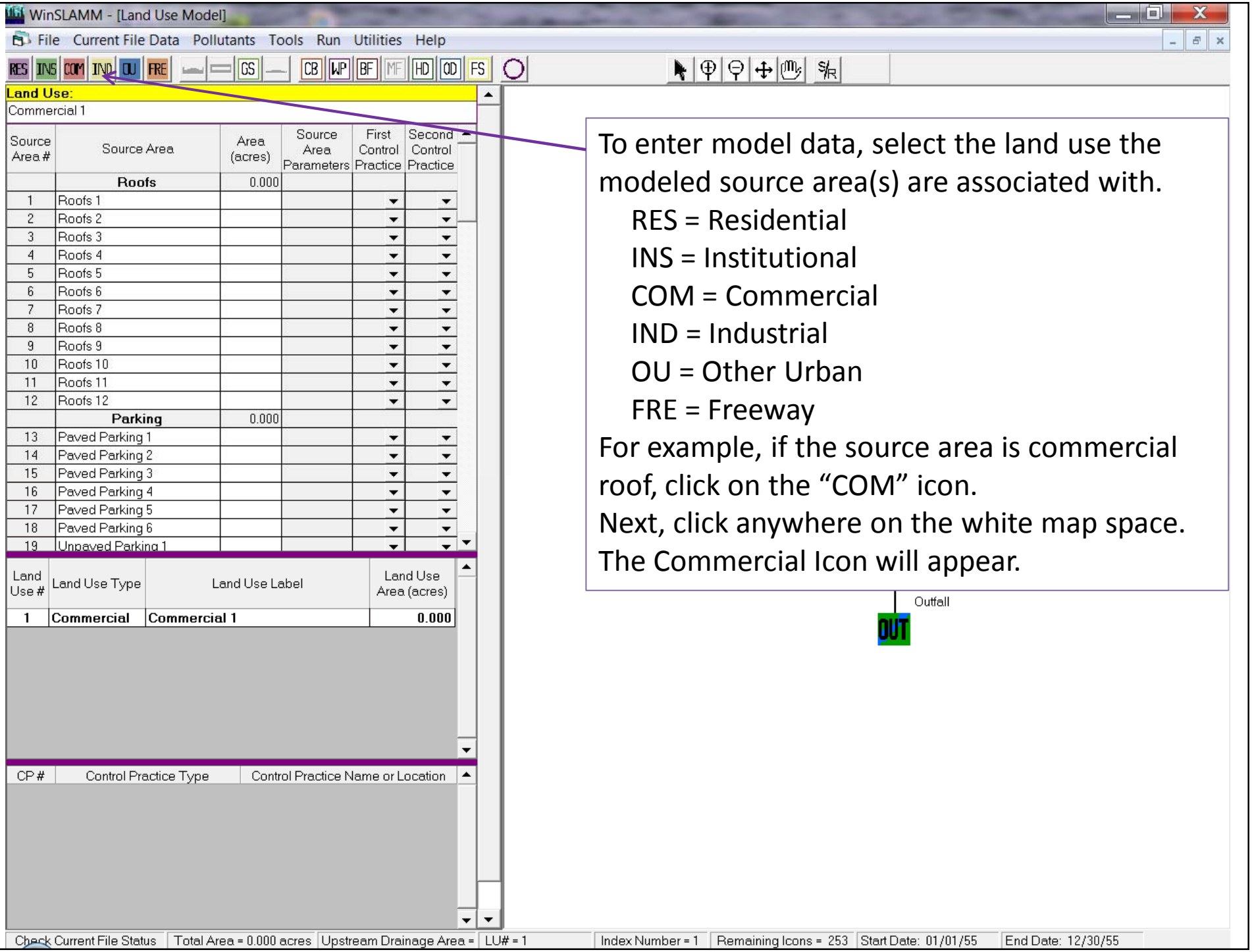
Select "Cancel" to leave the form without saving changes.

Select "Continue" to save changes and exit the form.


WinSLAMM v 10 - [Land Use Model]
File
Current File Data
Pollutants
Tools
Run
Utilities
Help
Access Cost Data
Pre-Development Runoff Volume
Program Options
RES
INS
COM
IND
OU
FRE
HD
QD
FS
Land Use:
Freeway 1
Source Area #
Source Area
Area (acres)
Source Area Parameters
First Control Practice
Second Control Practice
Freeway Areas
0.000
Paved Lane/Shlder Area 1
Paved Lane/Shlder Area 2
Paved Lane/Shlder Area 3
Paved Lane/Shlder Area 4
Paved Lane/Shlder Area 5
Paved Lane/Shlder Area 6
Paved Lane/Shlder Area 7
Paved Lane/Shlder Area 8
Paved Lane/Shlder Area 9
Paved Lane/Shlder Area 10
Urban Highways
1.000
High Traffic Urban 1
1.000
High Traffic Urban 2
High Traffic Urban 3
High Traffic Urban 4
High Traf. Urban Pervious 1
High Traf. Urban Pervious 2
Land Use #
Land Use Type
Land Use Label
Area (acres)
1
Freeway
Freeway 1
1.000
2
Residential
Residential 2
4.683
CP #
Control Practice Type
Control Practice Name or Location
1
Street Cleaning
SA Device, LU# 1 ,SA# 11
Default Parameter files or file paths can also be changed through Program Options.
To access Program Options, select “Tools”, then “Program Options”
Freeway 1
FRE
Junction 1
Outfall
OUT
Check Current File Status
Total Area = 1.000 acres
No Upstream Source Areas
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/02/75
End Date: 12/29/75
X = 465
Y = 1890



Select the “Default Current File Data” tab.
All default parameter files and file paths can be edited in the “Default Current File Data” form.
Select “Select File” next to the parameter you wish to modify, navigate to the location the new one is stored on your computer, and select “Open”.
After all changes are made, select “Save .INI File” to save the changes and leave the form.
All new model files will use these default parameter files. entered here.

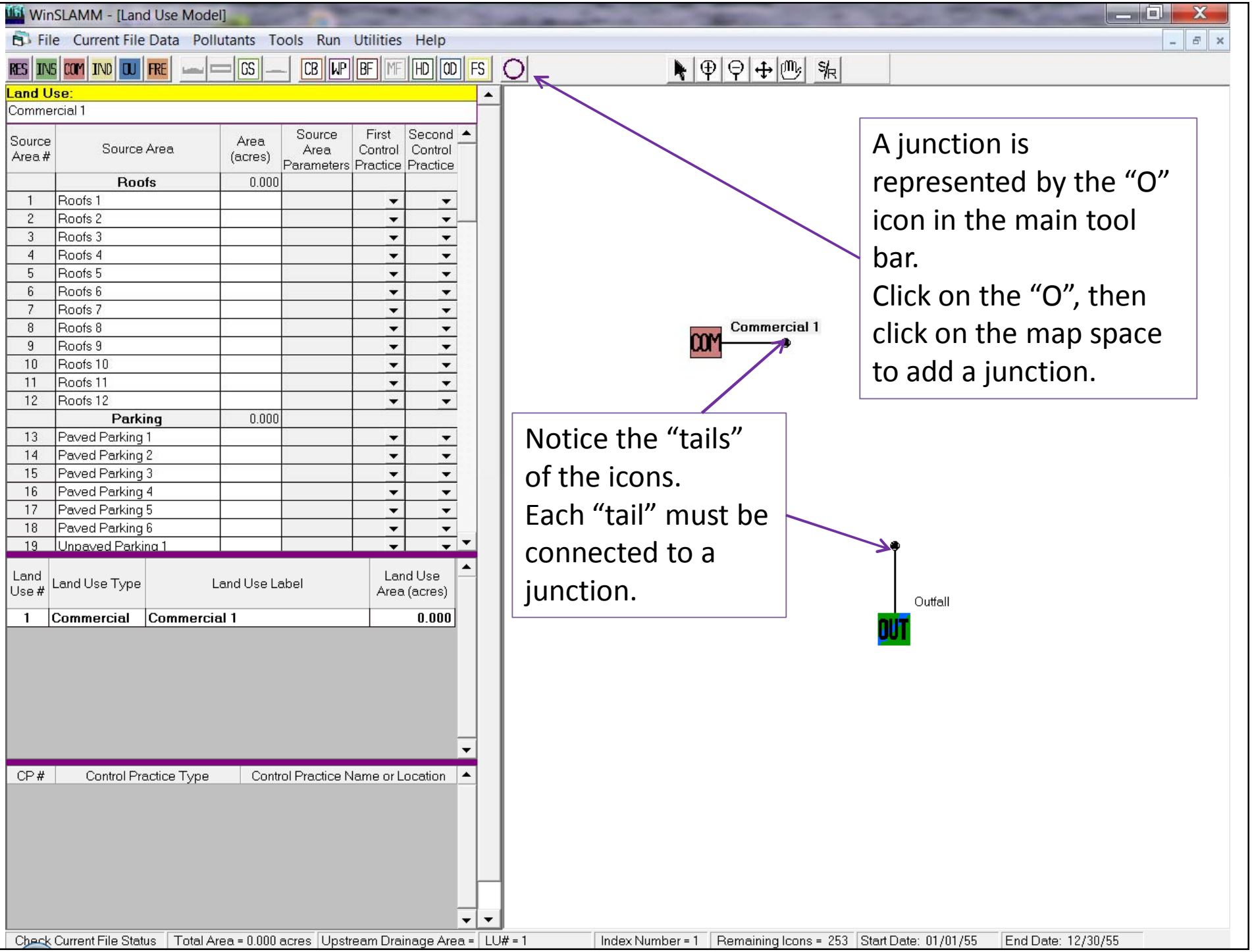


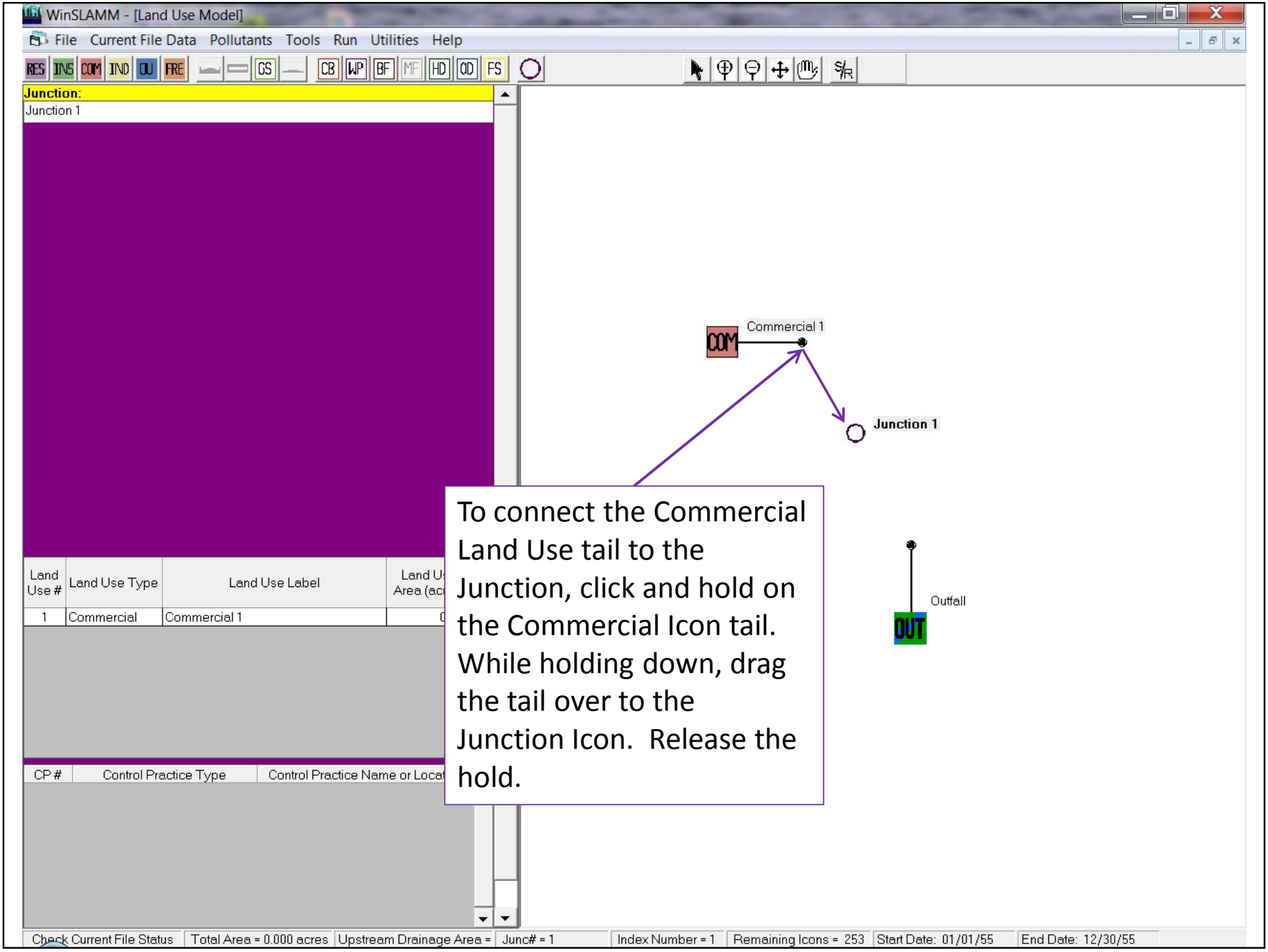
To enter model data, select the land use the modeled source area(s) are associated with.

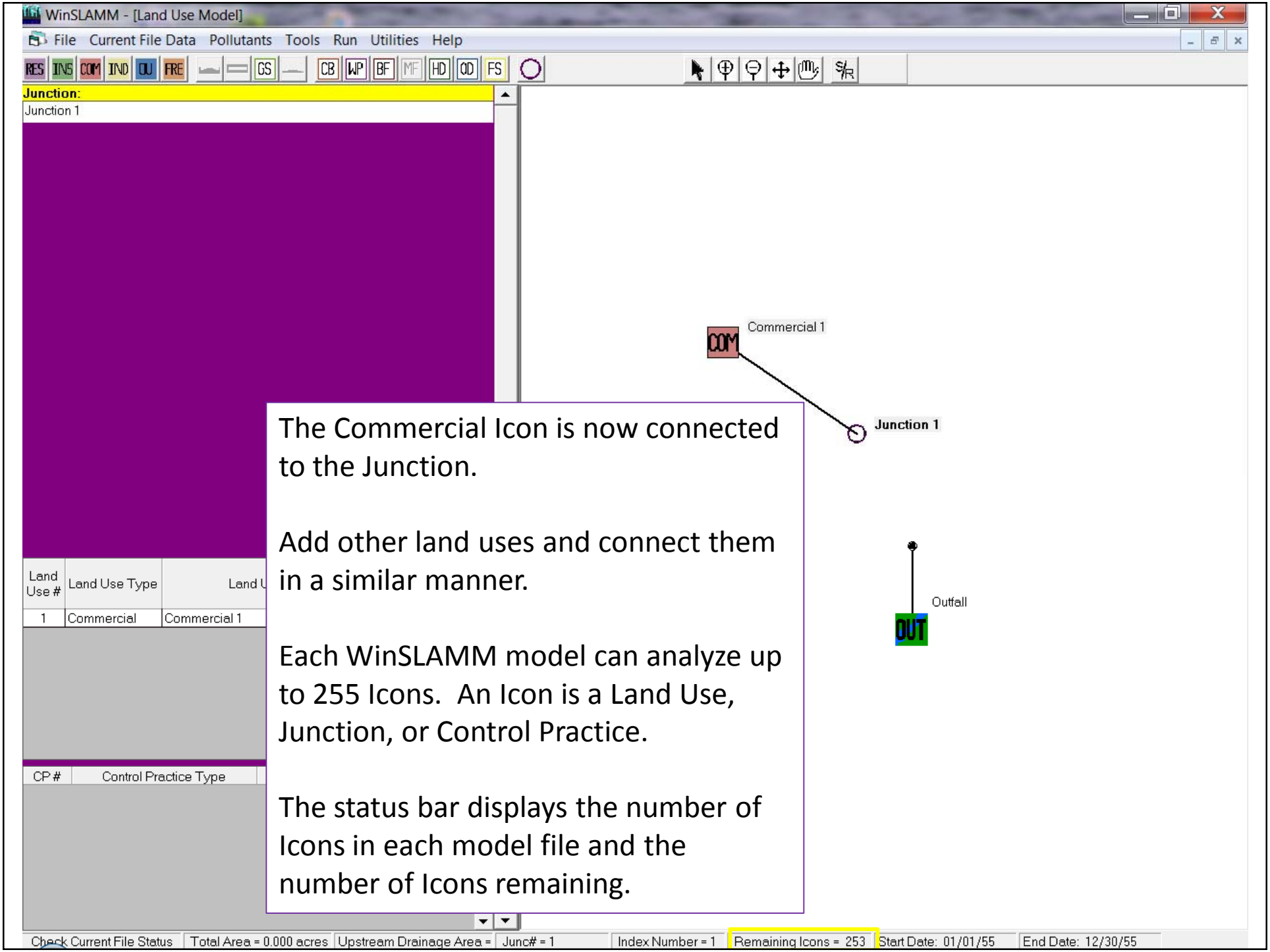
- RES = Residential
- INS = Institutional
- COM = Commercial
- IND = Industrial
- OU = Other Urban
- FRE = Freeway

For example, if the source area is commercial roof, click on the “COM” icon.

Next, click anywhere on the white map space. The Commercial Icon will appear.


WinSLAMM - [Land Use Model]
File Current File Data Pollutants Tools Run Utilities Help
Land Use:
Commercial 1
Source Area # | Source Area | Area (acres) | Source Area Parameters | First Control Practice | Second Control Practice
Roofs 0.000
1 Roofs 1
2 Roofs 2
3 Roofs 3
4 Roofs 4
5 Roofs 5
6 Roofs 6
7 Roofs 7
8 Roofs 8
9 Roofs 9
10 Roofs 10
11 Roofs 11
12 Roofs 12
Parking 0.000
13 Paved Parking 1
14 Paved Parking 2
15 Paved Parking 3
16 Paved Parking 4
17 Paved Parking 5
18 Paved Parking 6
19 Unpaved Parking 1
Land Use # | Land Use Type | Land Use Label | Land Use Area (acres)
1 Commercial Commercial 1 0.000
CP # | Control Practice Type | Control Practice Name or Location
A junction is represented by the "O" icon in the main tool bar.
Click on the "O", then click on the map space to add a junction.
COM
Commercial 1
Notice the "tails" of the icons.
Each "tail" must be connected to a junction.
Outfall
OUT
Check Current File Status
Total Area = 0.000 acres
Upstream Drainage Area =
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55


WinSLAMM - [Land Use Model]
File Current File Data Pollutants Tools Run Utilities Help
Junction:
Junction 1
Land Use #
Land Use Type
Land Use Label
1
Commercial
Commercial 1
CP #
Control Practice Type
Commercial 1
Junction 1
Outfall
To connect the Commercial Land Use tail to the Junction, click and hold on the Commercial Icon tail. While holding down, drag the tail over to the Junction Icon. Release the hold.
Check Current File Status
Total Area = 0.000 acres
Upstream Drainage Area =
Junc# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55

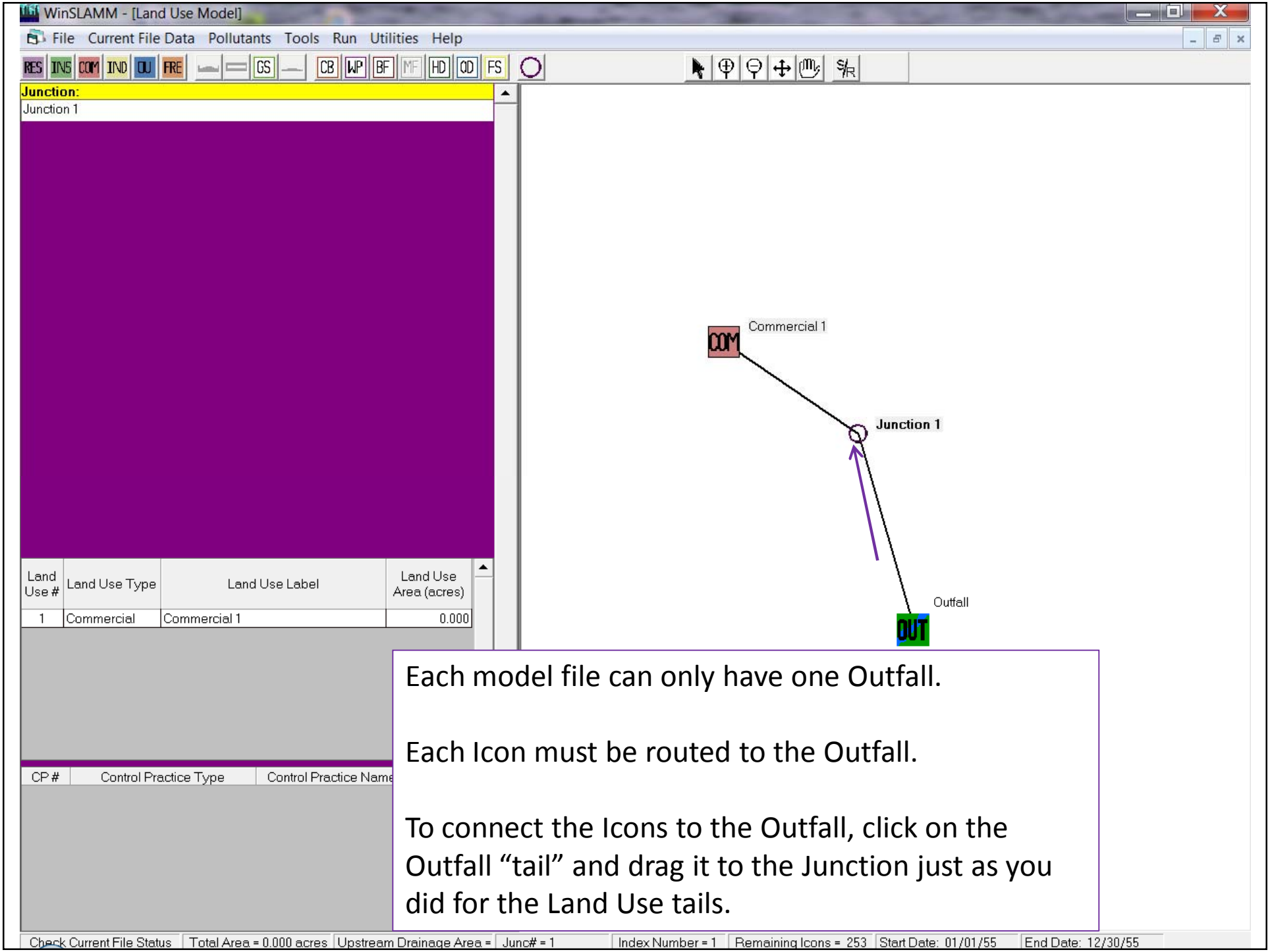


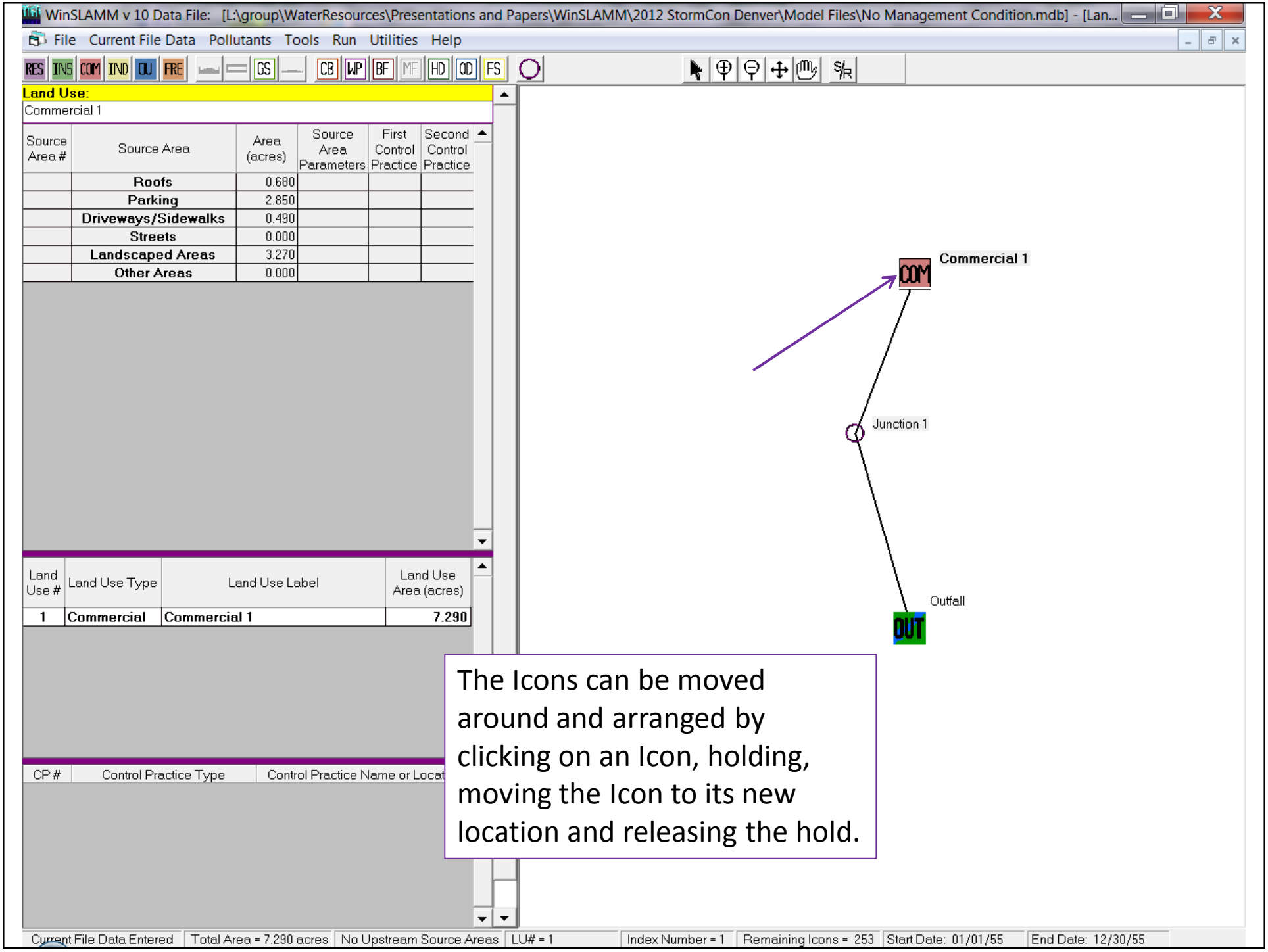
The Commercial Icon is now connected to the Junction.

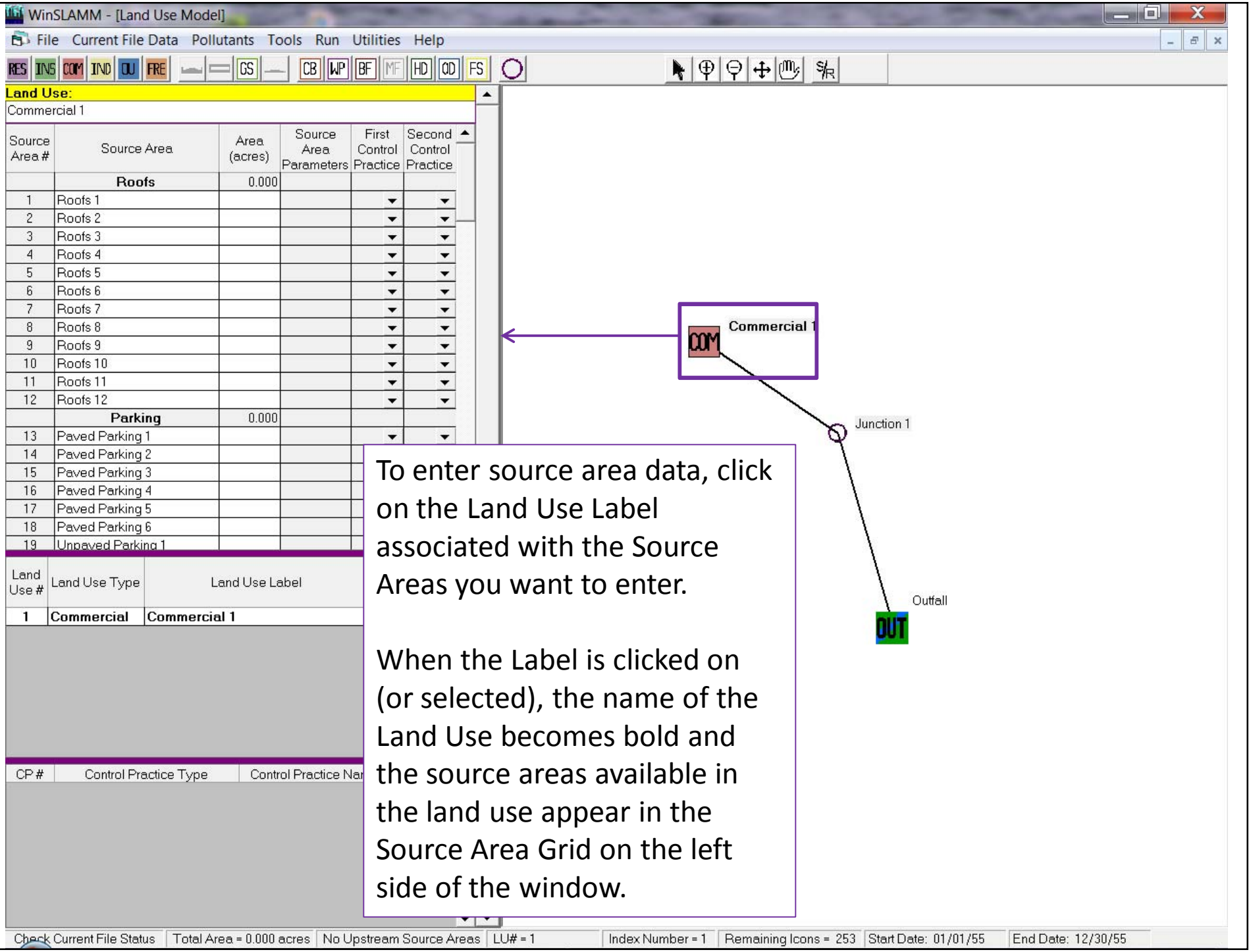
Add other land uses and connect them in a similar manner.

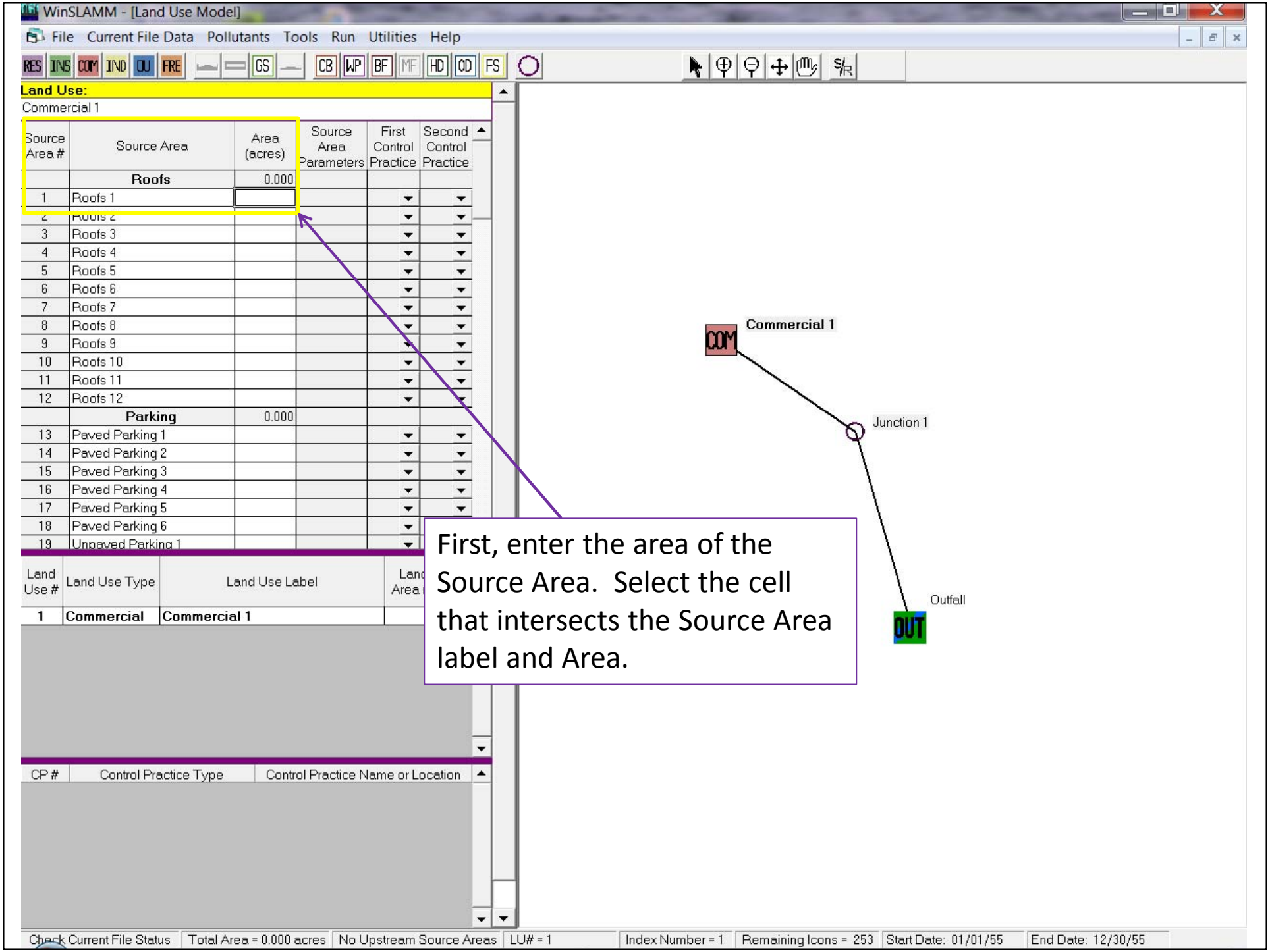
Each WinSLAMM model can analyze up to 255 Icons. An Icon is a Land Use, Junction, or Control Practice.

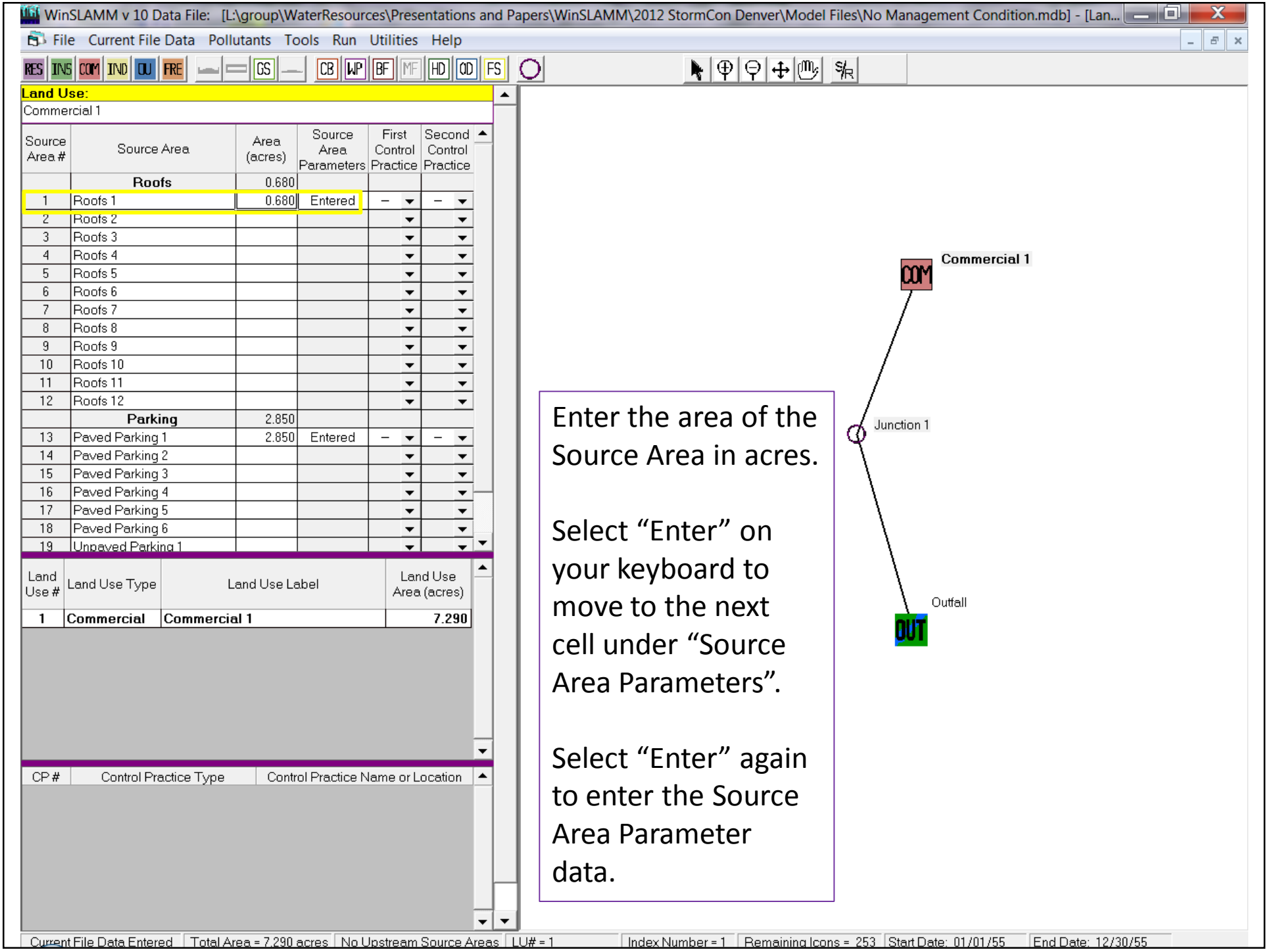
The status bar displays the number of Icons in each model file and the number of Icons remaining.

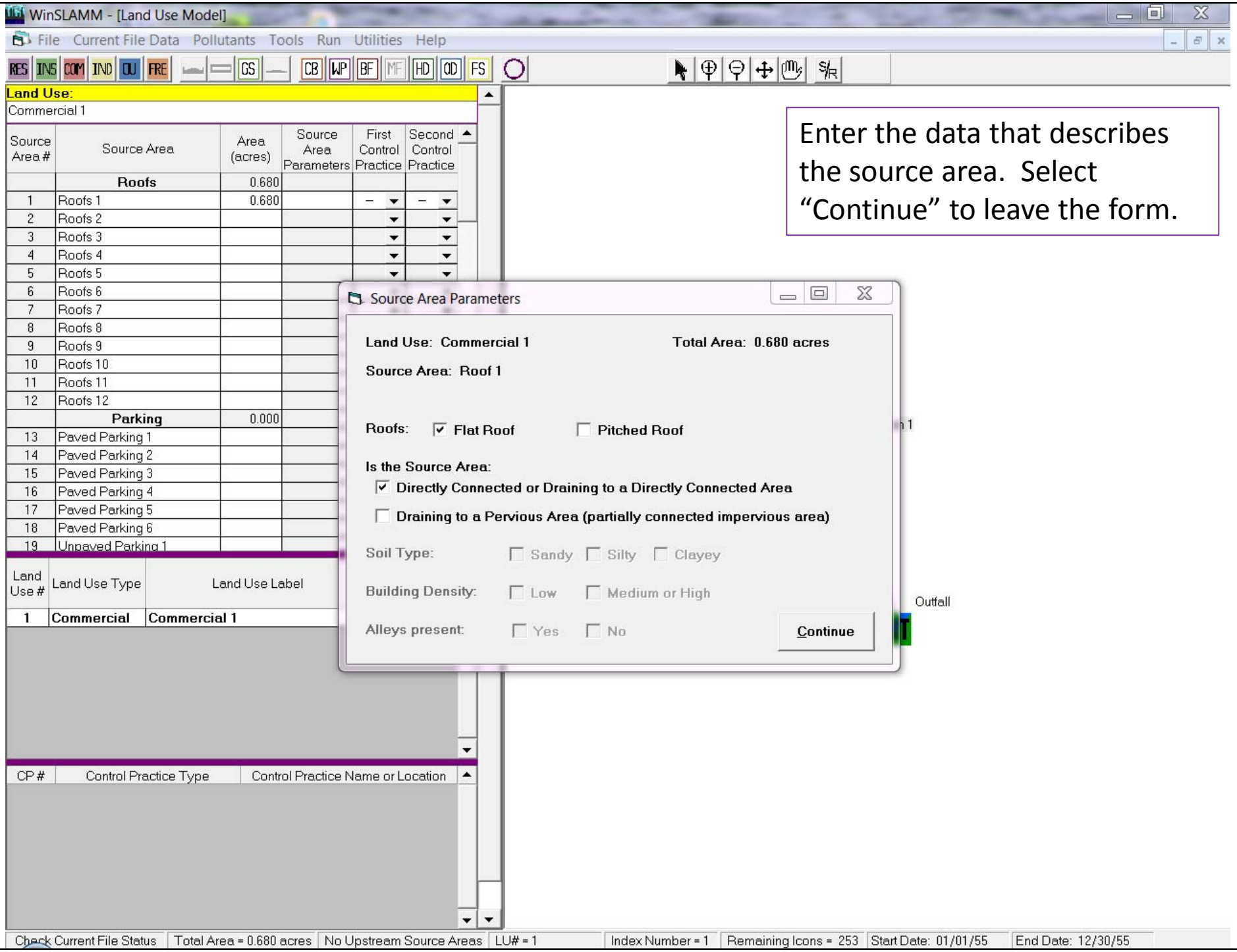

WinSLAMM - [Land Use Model]
File Current File Data Pollutants Tools Run Utilities Help
Junction:
Junction 1
Land Use #
Land Use Type
Land Use Label
Land Use Area (acres)
1
Commercial
Commercial 1
0.000
CP #
Control Practice Type
Control Practice Name
Commercial 1
COM
Junction 1
Outfall
OUT
Each model file can only have one Outfall.
Each Icon must be routed to the Outfall.
To connect the Icons to the Outfall, click on the Outfall “tail” and drag it to the Junction just as you did for the Land Use tails.
Check Current File Status
Total Area = 0.000 acres
Upstream Drainage Area =
Junc# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55


WinSLAMM v 10 Data File: [L:\group\WaterResources\Presentations and Papers\WinSLAMM\2012 StormCon Denver\Model Files\No Management Condition.mdb] - [Lan...
File Current File Data Pollutants Tools Run Utilities Help
RES INS COM IND OU FRE GS CB WP BF MF HD QD FS
Land Use:
Commercial 1
Source Area # | Source Area | Area (acres) | Source Area Parameters | First Control Practice | Second Control Practice
Roofs 0.680
Parking 2.850
Driveways/Sidewalks 0.490
Streets 0.000
Landscaped Areas 3.270
Other Areas 0.000
Land Use # | Land Use Type | Land Use Label | Land Use Area (acres)
1 Commercial Commercial 1 7.290
CP # | Control Practice Type | Control Practice Name or Locat
Commercial 1
COM
Junction 1
Outfall
OUT
The Icons can be moved around and arranged by clicking on an Icon, holding, moving the Icon to its new location and releasing the hold.
Current File Data Entered
Total Area = 7.290 acres
No Upstream Source Areas
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55

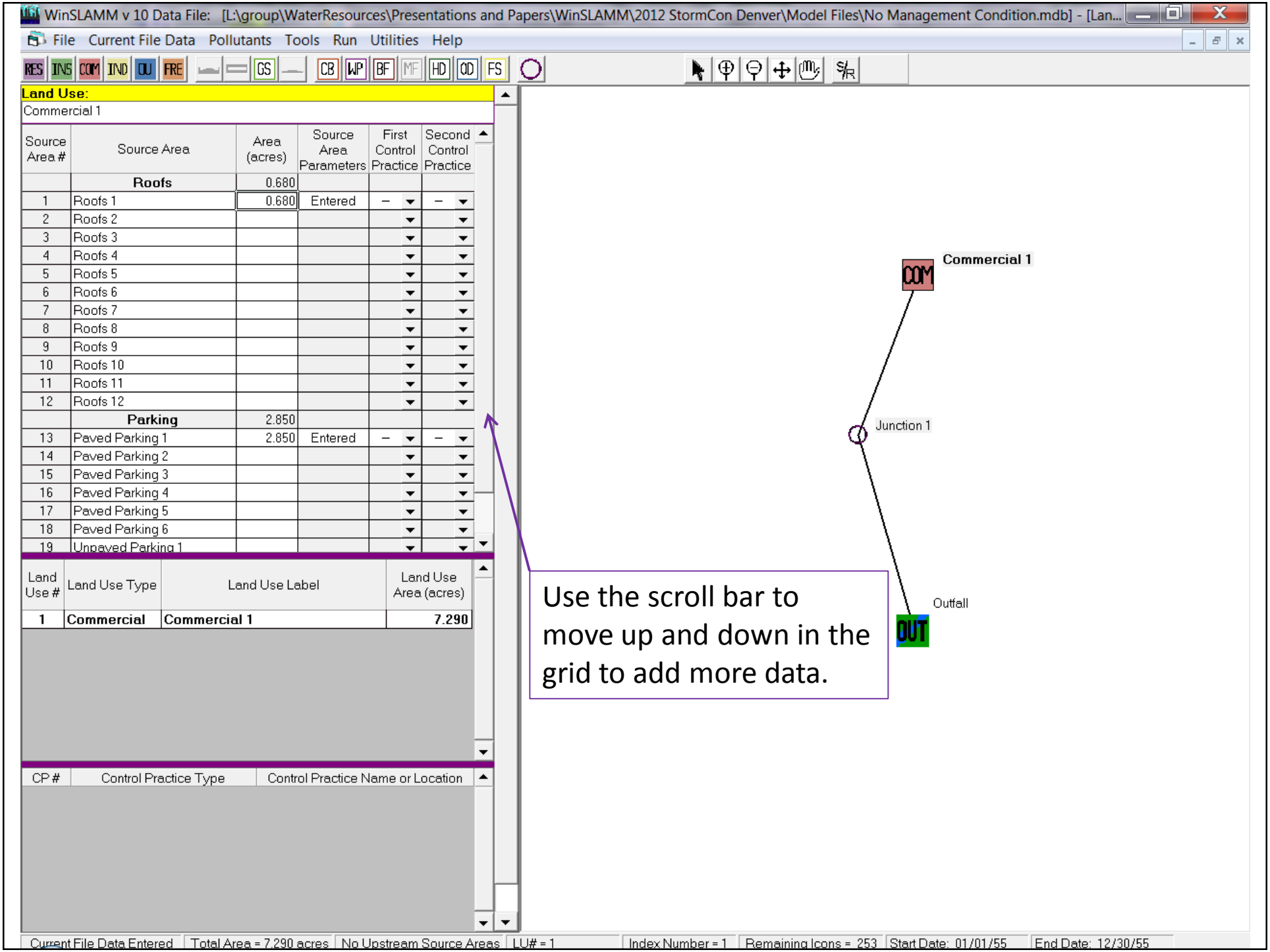

WinSLAMM - [Land Use Model]
File Current File Data Pollutants Tools Run Utilities Help
Land Use:
Commercial 1
Source Area # | Source Area | Area (acres) | Source Area Parameters | First Control Practice | Second Control Practice
Roofs 0.000
1 Roofs 1
2 Roofs 2
3 Roofs 3
4 Roofs 4
5 Roofs 5
6 Roofs 6
7 Roofs 7
8 Roofs 8
9 Roofs 9
10 Roofs 10
11 Roofs 11
12 Roofs 12
Parking 0.000
13 Paved Parking 1
14 Paved Parking 2
15 Paved Parking 3
16 Paved Parking 4
17 Paved Parking 5
18 Paved Parking 6
19 Unpaved Parking 1
Land Use # | Land Use Type | Land Use Label
1 Commercial Commercial 1
CP # | Control Practice Type | Control Practice Na
Commercial 1
COM
Junction 1
Outfall
OUT
To enter source area data, click on the Land Use Label associated with the Source Areas you want to enter.
When the Label is clicked on (or selected), the name of the Land Use becomes bold and the source areas available in the land use appear in the Source Area Grid on the left side of the window.
Check Current File Status
Total Area = 0.000 acres
No Upstream Source Areas
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55

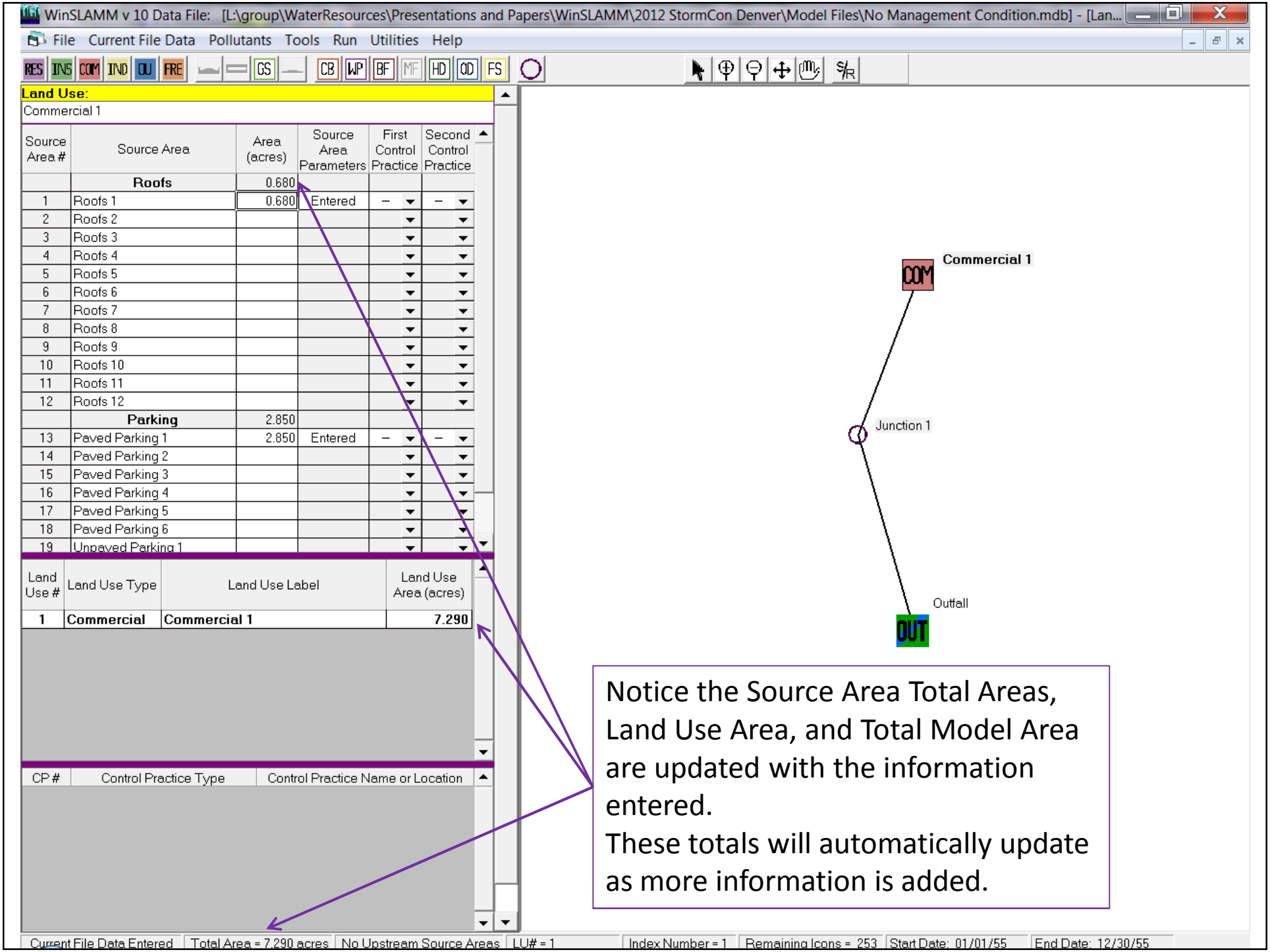

WinSLAMM - [Land Use Model]
File Current File Data Pollutants Tools Run Utilities Help
Land Use:
Commercial 1
Source Area #
Source Area
Area (acres)
Source Area Parameters
First Control Practice
Second Control Practice
Roofs 0.000
1 Roofs 1
2 Roofs 2
3 Roofs 3
4 Roofs 4
5 Roofs 5
6 Roofs 6
7 Roofs 7
8 Roofs 8
9 Roofs 9
10 Roofs 10
11 Roofs 11
12 Roofs 12
Parking 0.000
13 Paved Parking 1
14 Paved Parking 2
15 Paved Parking 3
16 Paved Parking 4
17 Paved Parking 5
18 Paved Parking 6
19 Unpaved Parking 1
Land Use #
Land Use Type
Land Use Label
1 Commercial Commercial 1
CP #
Control Practice Type
Control Practice Name or Location
First, enter the area of the Source Area. Select the cell that intersects the Source Area label and Area.
COM
Commercial 1
Junction 1
OUT
Outfall
Check Current File Status
Total Area = 0.000 acres
No Upstream Source Areas
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55

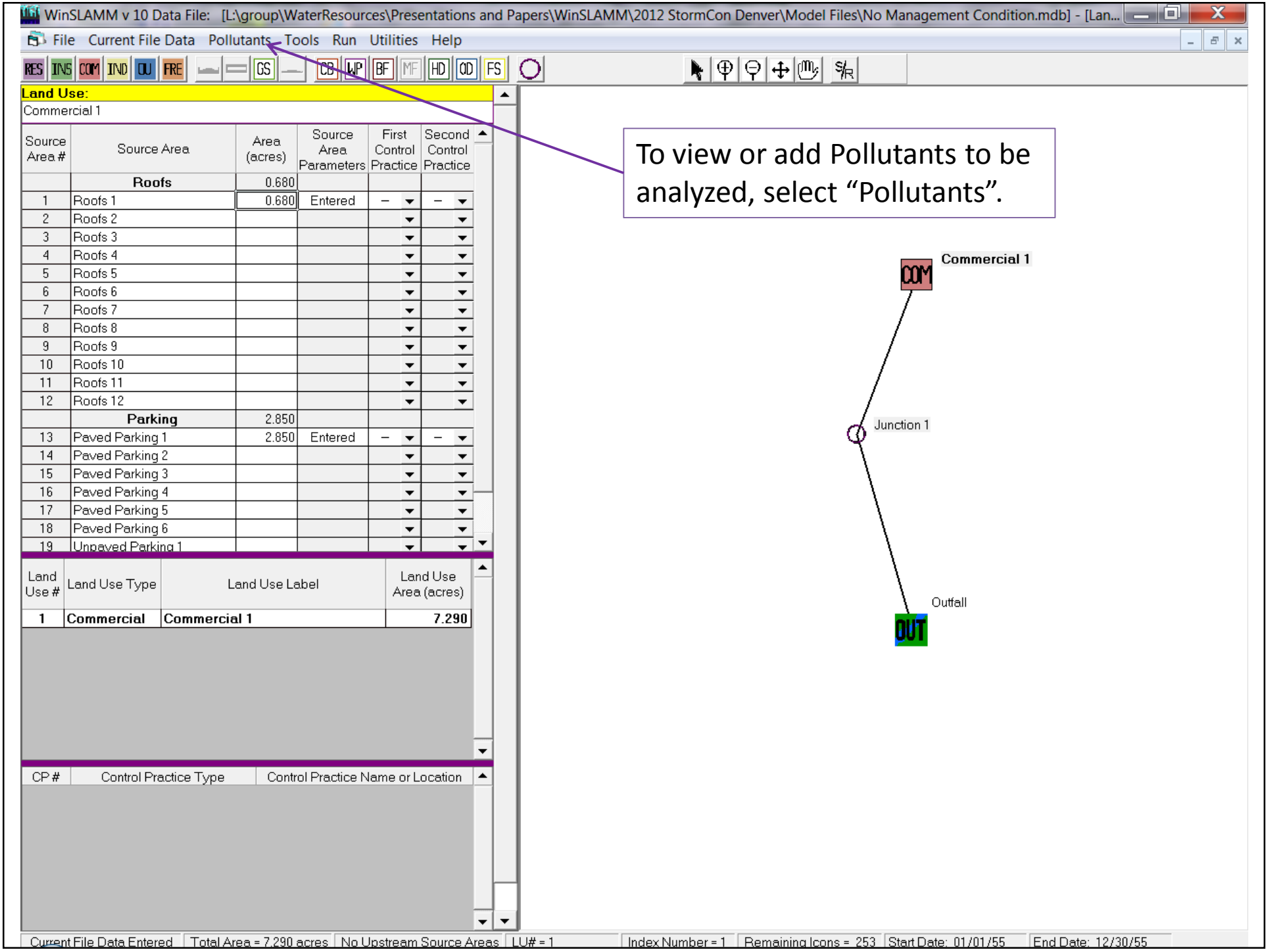

WinSLAMM v 10 Data File: [L:\group\WaterResources\Presentations and Papers\WinSLAMM\2012 StormCon Denver\Model Files\No Management Condition.mdb] - [Lan...
File Current File Data Pollutants Tools Run Utilities Help
Land Use:
Commercial 1
Source Area # | Source Area | Area (acres) | Source Area Parameters | First Control Practice | Second Control Practice
Roofs 0.680
1 Roofs 1 0.680 Entered
2 Roofs 2
3 Roofs 3
4 Roofs 4
5 Roofs 5
6 Roofs 6
7 Roofs 7
8 Roofs 8
9 Roofs 9
10 Roofs 10
11 Roofs 11
12 Roofs 12
Parking 2.850
13 Paved Parking 1 2.850 Entered
14 Paved Parking 2
15 Paved Parking 3
16 Paved Parking 4
17 Paved Parking 5
18 Paved Parking 6
19 Unpaved Parking 1
Land Use # | Land Use Type | Land Use Label | Land Use Area (acres)
1 Commercial Commercial 1 7.290
CP # | Control Practice Type | Control Practice Name or Location
COM
Commercial 1
Junction 1
Outfall
OUT
Enter the area of the Source Area in acres.
Select “Enter” on your keyboard to move to the next cell under “Source Area Parameters”.
Select “Enter” again to enter the Source Area Parameter data.
Current File Data Entered
Total Area = 7.290 acres
No Upstream Source Areas
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55

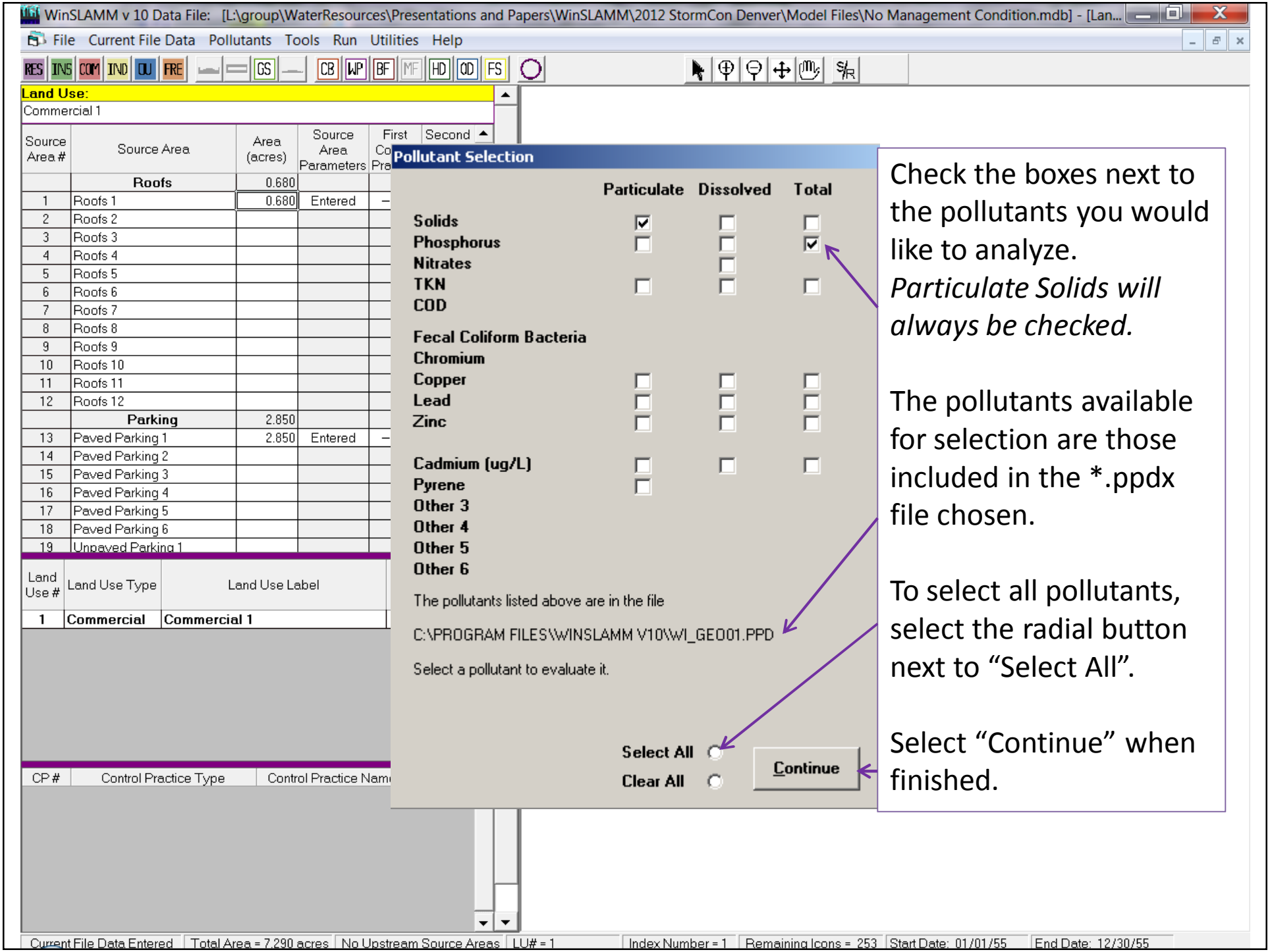


Enter the data that describes the source area. Select "Continue" to leave the form.


WinSLAMM v 10 Data File: [L:\group\WaterResources\Presentations and Papers\WinSLAMM\2012 StormCon Denver\Model Files\No Management Condition.mdb] - [Lan...
File Current File Data Pollutants Tools Run Utilities Help
RES INS COM IND OU FRE GS CB WP BF MF HD QD FS
Land Use:
Commercial 1
Source Area # | Source Area | Area (acres) | Source Area Parameters | First Control Practice | Second Control Practice
Roofs 0.680
1 Roofs 1 0.680 Entered
2 Roofs 2
3 Roofs 3
4 Roofs 4
5 Roofs 5
6 Roofs 6
7 Roofs 7
8 Roofs 8
9 Roofs 9
10 Roofs 10
11 Roofs 11
12 Roofs 12
Parking 2.850
13 Paved Parking 1 2.850 Entered
14 Paved Parking 2
15 Paved Parking 3
16 Paved Parking 4
17 Paved Parking 5
18 Paved Parking 6
19 Unpaved Parking 1
Land Use # | Land Use Type | Land Use Label | Land Use Area (acres)
1 Commercial Commercial 1 7.290
CP # | Control Practice Type | Control Practice Name or Location
Commercial 1
COM
Junction 1
Outfall
OUT
Use the scroll bar to move up and down in the grid to add more data.
Current File Data Entered
Total Area = 7.290 acres
No Upstream Source Areas
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55


WinSLAMM v 10 Data File: [L:\group\WaterResources\Presentations and Papers\WinSLAMM\2012 StormCon Denver\Model Files\No Management Condition.mdb] - [Lan...
File Current File Data Pollutants Tools Run Utilities Help
Land Use:
Commercial 1
Source Area # | Source Area | Area (acres) | Source Area Parameters | First Control Practice | Second Control Practice
Roofs 0.680
1 Roofs 1 0.680 Entered
2 Roofs 2
3 Roofs 3
4 Roofs 4
5 Roofs 5
6 Roofs 6
7 Roofs 7
8 Roofs 8
9 Roofs 9
10 Roofs 10
11 Roofs 11
12 Roofs 12
Parking 2.850
13 Paved Parking 1 2.850 Entered
14 Paved Parking 2
15 Paved Parking 3
16 Paved Parking 4
17 Paved Parking 5
18 Paved Parking 6
19 Unpaved Parking 1
Land Use # | Land Use Type | Land Use Label | Land Use Area (acres)
1 Commercial Commercial 1 7.290
CP # | Control Practice Type | Control Practice Name or Location
Commercial 1
Junction 1
Outfall
Notice the Source Area Total Areas, Land Use Area, and Total Model Area are updated with the information entered.
These totals will automatically update as more information is added.
Current File Data Entered
Total Area = 7.290 acres
No Upstream Source Areas
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55


WinSLAMM v 10 Data File: [L:\group\WaterResources\Presentations and Papers\WinSLAMM\2012 StormCon Denver\Model Files\No Management Condition.mdb] - [Lan...
File
Current File Data
Pollutants
Tools
Run
Utilities
Help
Land Use:
Commercial 1
Source Area #
Source Area
Area (acres)
Source Area Parameters
First Control Practice
Second Control Practice
Roofs 0.680
1 Roofs 1 0.680 Entered
2 Roofs 2
3 Roofs 3
4 Roofs 4
5 Roofs 5
6 Roofs 6
7 Roofs 7
8 Roofs 8
9 Roofs 9
10 Roofs 10
11 Roofs 11
12 Roofs 12
Parking 2.850
13 Paved Parking 1 2.850 Entered
14 Paved Parking 2
15 Paved Parking 3
16 Paved Parking 4
17 Paved Parking 5
18 Paved Parking 6
19 Unpaved Parking 1
Land Use #
Land Use Type
Land Use Label
Land Use Area (acres)
1 Commercial Commercial 1 7.290
CP #
Control Practice Type
Control Practice Name or Location
To view or add Pollutants to be analyzed, select “Pollutants”.
Commercial 1
COM
Junction 1
Outfall
OUT
Current File Data Entered
Total Area = 7.290 acres
No Upstream Source Areas
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55

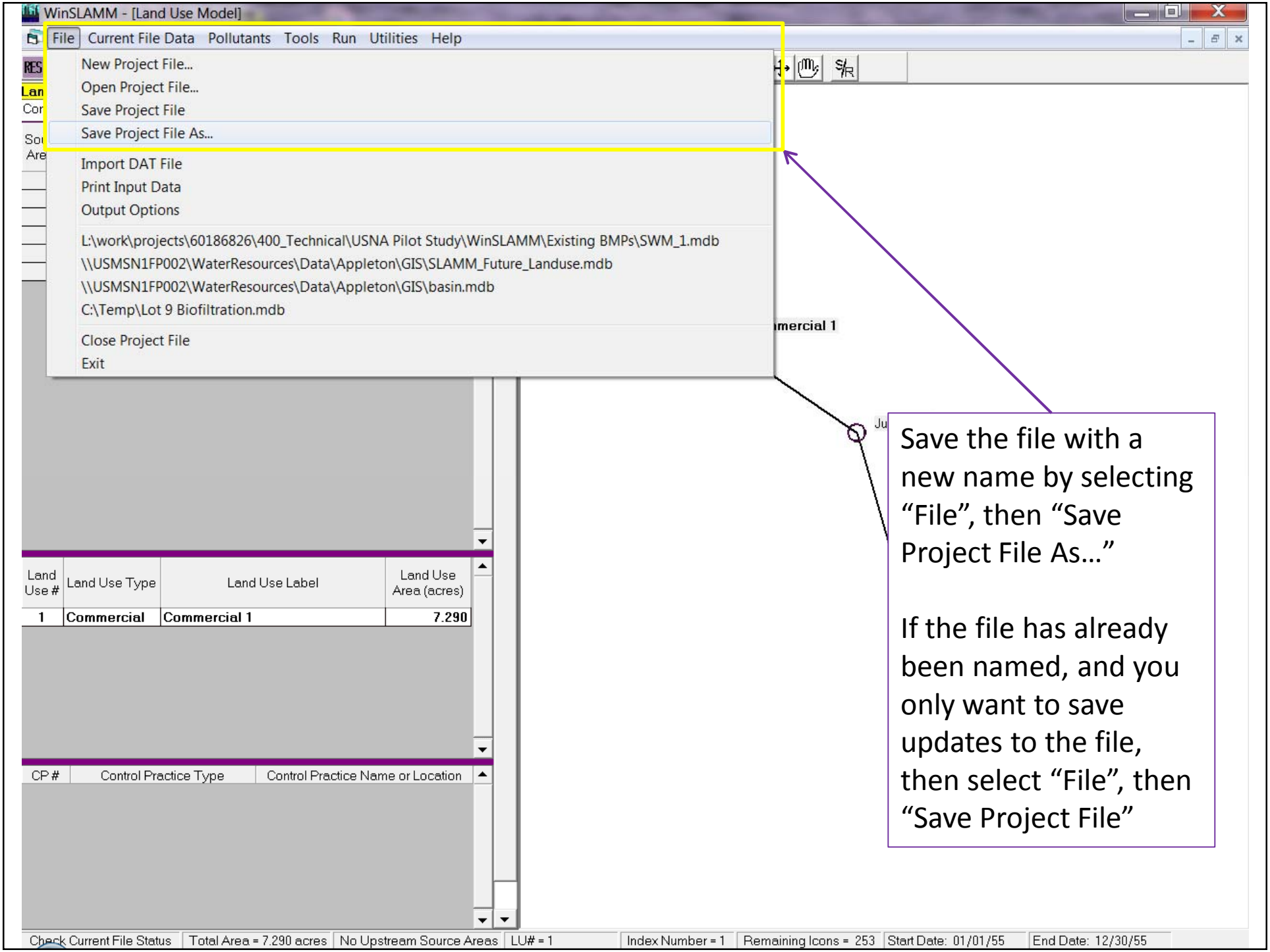


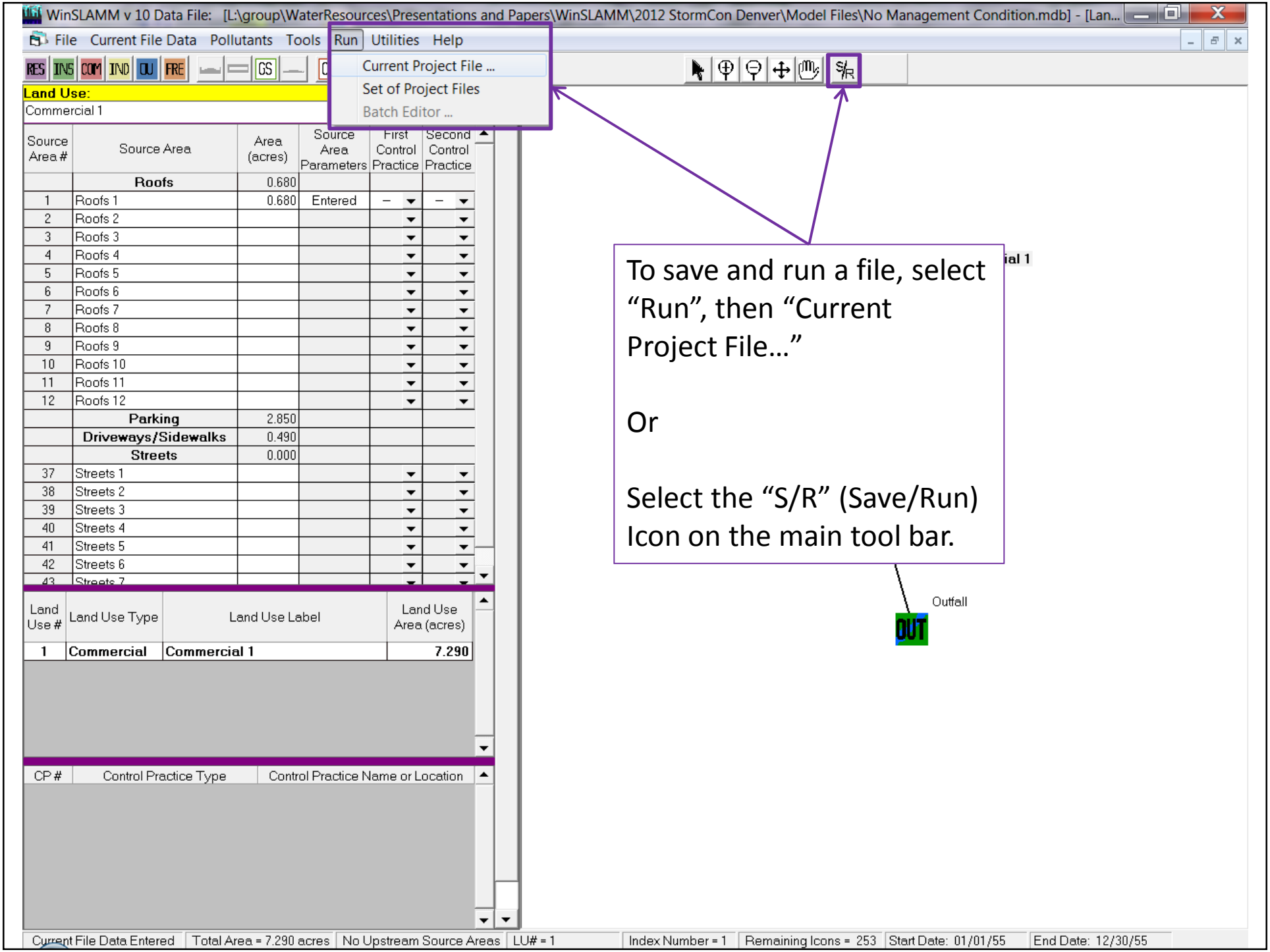
Check the boxes next to the pollutants you would like to analyze. *Particulate Solids will always be checked.*

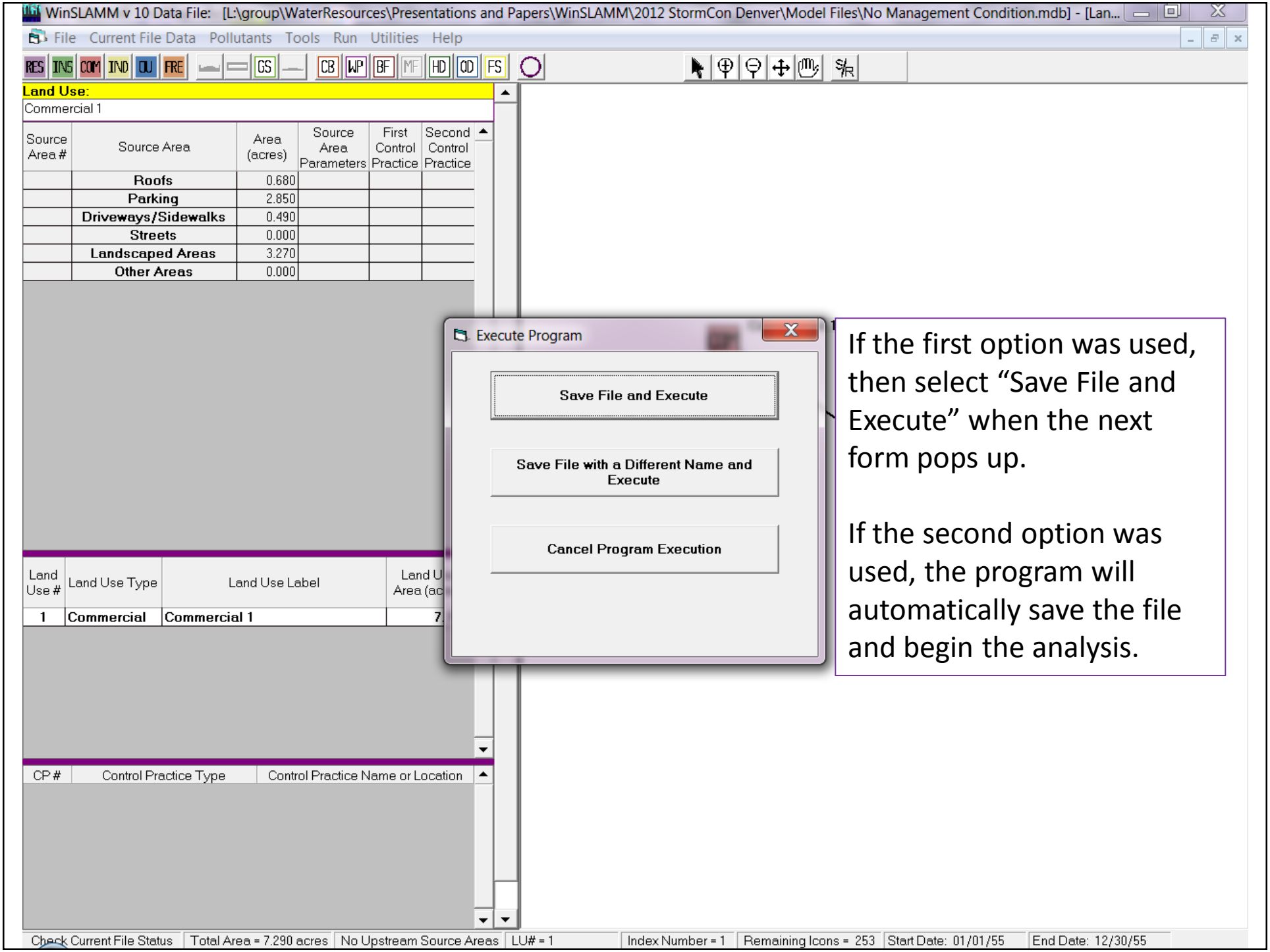
The pollutants available for selection are those included in the *.ppdx file chosen.

To select all pollutants, select the radial button next to “Select All”.

Select “Continue” when finished.

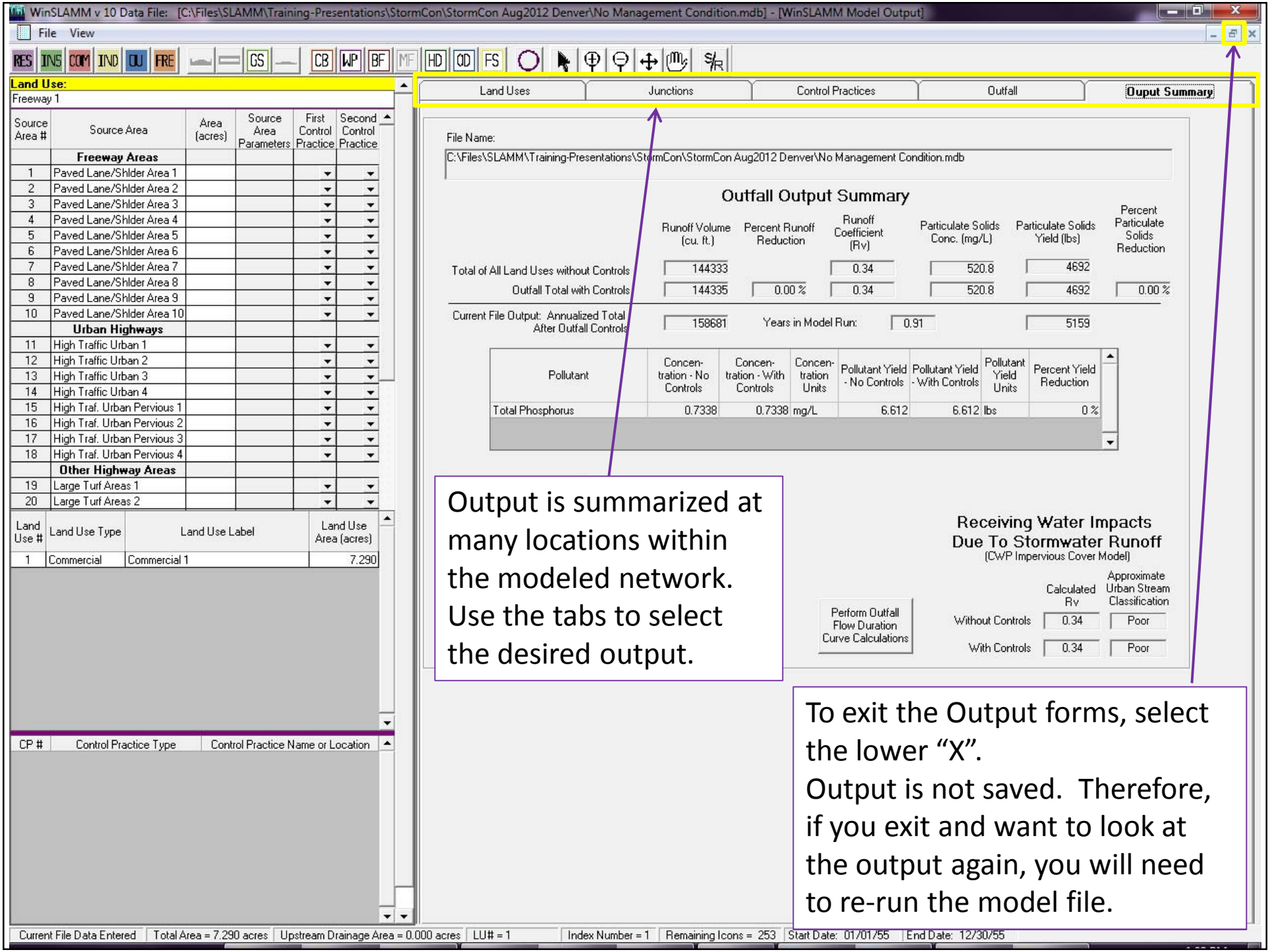

WinSLAMM - [Land Use Model]
File
Current File Data
Pollutants
Tools
Run
Utilities
Help
New Project File...
Open Project File...
Save Project File
Save Project File As...
Import DAT File
Print Input Data
Output Options
L:\work\projects\60186826\400_Technical\USNA Pilot Study\WinSLAMM\Existing BMPs\SWM_1.mdb
\\USMSN1FP002\WaterResources\Data\Appleton\GIS\SLAMM_Future_Landuse.mdb
\\USMSN1FP002\WaterResources\Data\Appleton\GIS\basin.mdb
C:\Temp\Lot 9 Biofiltration.mdb
Close Project File
Exit
Land Use #
Land Use Type
Land Use Label
Land Use Area (acres)
1
Commercial
Commercial 1
7.290
CP #
Control Practice Type
Control Practice Name or Location
Check Current File Status
Total Area = 7.290 acres
No Upstream Source Areas
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55
Save the file with a new name by selecting "File", then "Save Project File As…"
If the file has already been named, and you only want to save updates to the file, then select "File", then "Save Project File"

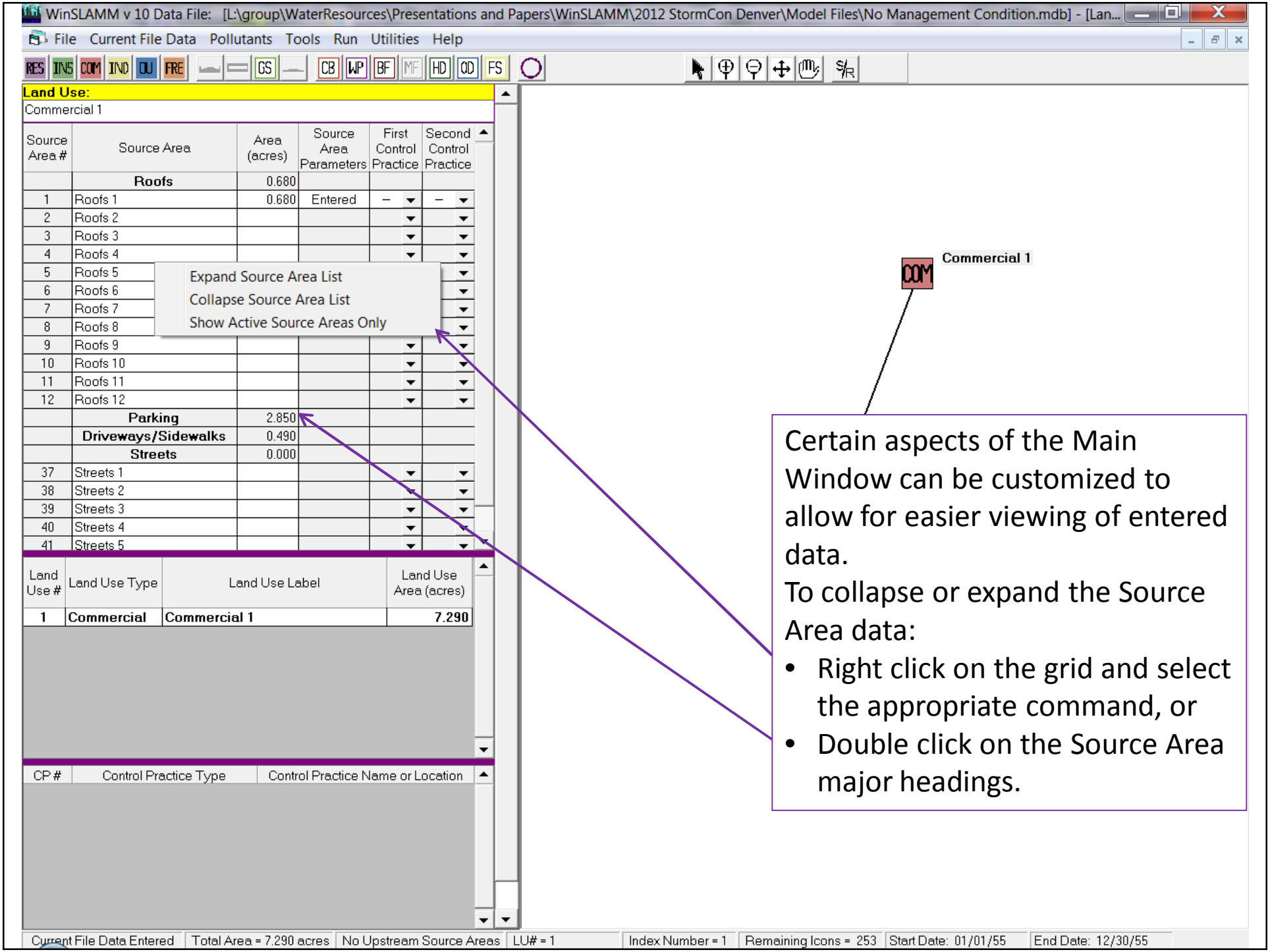

WinSLAMM v 10 Data File: [L:\group\WaterResources\Presentations and Papers\WinSLAMM\2012 StormCon Denver\Model Files\No Management Condition.mdb] - [Lan...
File
Current File Data
Pollutants
Tools
Run
Utilities
Help
Current Project File ...
Set of Project Files
Batch Editor ...
Land Use:
Commercial 1
Source Area #
Source Area
Area (acres)
Source Area Parameters
First Control Practice
Second Control Practice
Roofs 0.680
Roofs 1 0.680 Entered
Roofs 2
Roofs 3
Roofs 4
Roofs 5
Roofs 6
Roofs 7
Roofs 8
Roofs 9
Roofs 10
Roofs 11
Roofs 12
Parking 2.850
Driveways/Sidewalks 0.490
Streets 0.000
Streets 1
Streets 2
Streets 3
Streets 4
Streets 5
Streets 6
Land Use #
Land Use Type
Land Use Label
Land Use Area (acres)
1 Commercial Commercial 1 7.290
CP #
Control Practice Type
Control Practice Name or Location
To save and run a file, select "Run", then "Current Project File…"
Or
Select the "S/R" (Save/Run) Icon on the main tool bar.
Outfall
OUT
Current File Data Entered
Total Area = 7.290 acres
No Upstream Source Areas
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55



If the first option was used, then select “Save File and Execute” when the next form pops up.

If the second option was used, the program will automatically save the file and begin the analysis.

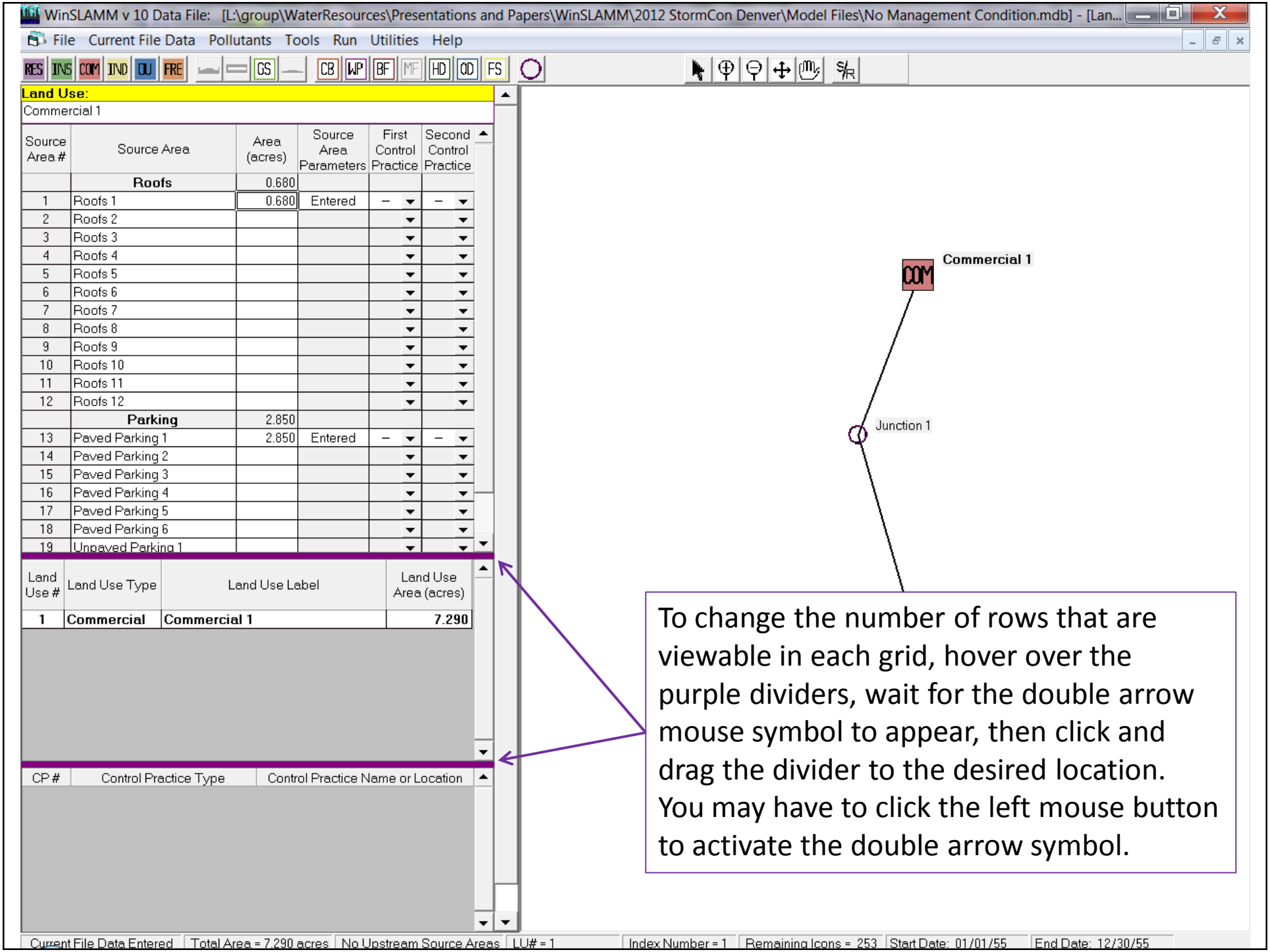

WinSLAMM v 10 Data File: [C:\Files\SLAMM\Training-Presentations\StormCon\StormCon Aug2012 Denver\No Management Condition.mdb] - [WinSLAMM Model Output]
File View
Land Use:
Freeway 1
Land Uses
Junctions
Control Practices
Outfall
Ouput Summary
File Name:
C:\Files\SLAMM\Training-Presentations\StormCon\StormCon Aug2012 Denver\No Management Condition.mdb
Outfall Output Summary
Runoff Volume (cu. ft.)
Percent Runoff Reduction
Runoff Coefficient (Rv)
Particulate Solids Conc. (mg/L)
Particulate Solids Yield (lbs)
Percent Particulate Solids Reduction
Total of All Land Uses without Controls
144333
0.34
520.8
4692
Outfall Total with Controls
144335
0.00 %
0.34
520.8
4692
0.00 %
Current File Output: Annualized Total After Outfall Controls
158681
Years in Model Run:
0.91
5159
Pollutant
Concen-tration - No Controls
Concen-tration - With Controls
Concen-tration Units
Pollutant Yield - No Controls
Pollutant Yield - With Controls
Pollutant Yield Units
Percent Yield Reduction
Total Phosphorus
0.7338
0.7338
mg/L
6.612
6.612
lbs
0 %
Receiving Water Impacts Due To Stormwater Runoff
(CWP Impervious Cover Model)
Calculated Rv
Approximate Urban Stream Classification
Without Controls
0.34
Poor
With Controls
0.34
Poor
Perform Outfall Flow Duration Curve Calculations
Source Area #
Source Area
Area (acres)
Source Area Parameters
First Control Practice
Second Control Practice
Freeway Areas
1 Paved Lane/Shlder Area 1
2 Paved Lane/Shlder Area 2
3 Paved Lane/Shlder Area 3
4 Paved Lane/Shlder Area 4
5 Paved Lane/Shlder Area 5
6 Paved Lane/Shlder Area 6
7 Paved Lane/Shlder Area 7
8 Paved Lane/Shlder Area 8
9 Paved Lane/Shlder Area 9
10 Paved Lane/Shlder Area 10
Urban Highways
11 High Traffic Urban 1
12 High Traffic Urban 2
13 High Traffic Urban 3
14 High Traffic Urban 4
15 High Traf. Urban Pervious 1
16 High Traf. Urban Pervious 2
17 High Traf. Urban Pervious 3
18 High Traf. Urban Pervious 4
Other Highway Areas
19 Large Turf Areas 1
20 Large Turf Areas 2
Land Use #
Land Use Type
Land Use Label
Land Use Area (acres)
1 Commercial Commercial 1 7.290
CP #
Control Practice Type
Control Practice Name or Location
Output is summarized at many locations within the modeled network. Use the tabs to select the desired output.
To exit the Output forms, select the lower “X”.
Output is not saved. Therefore, if you exit and want to look at the output again, you will need to re-run the model file.
Current File Data Entered
Total Area = 7.290 acres
Upstream Drainage Area = 0.000 acres
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55

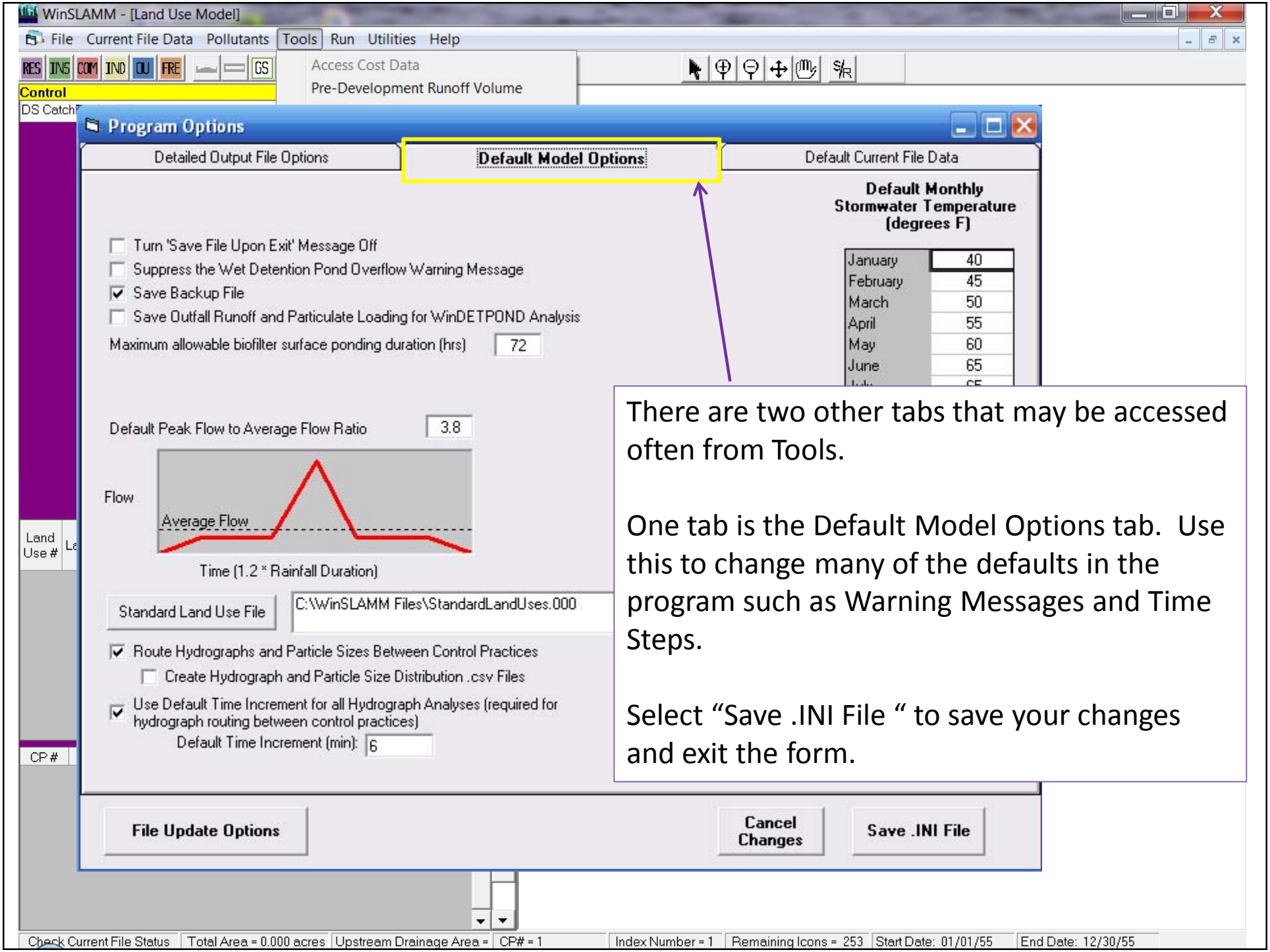


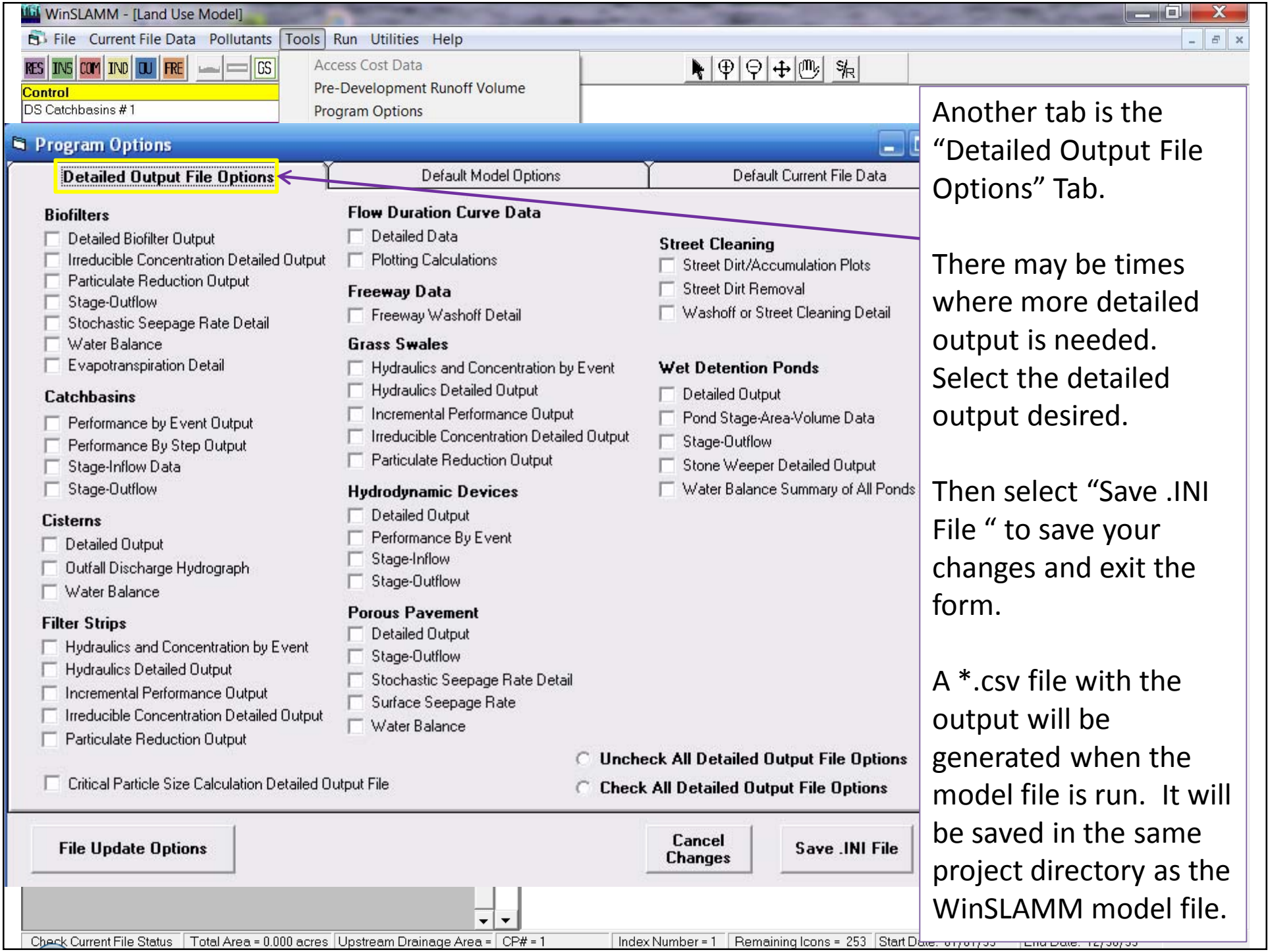
Certain aspects of the Main Window can be customized to allow for easier viewing of entered data.

To collapse or expand the Source Area data:

- Right click on the grid and select the appropriate command, or
- Double click on the Source Area major headings.


WinSLAMM v 10 Data File: [L:\group\WaterResources\Presentations and Papers\WinSLAMM\2012 StormCon Denver\Model Files\No Management Condition.mdb] - [Lan...
File Current File Data Pollutants Tools Run Utilities Help
Land Use:
Commercial 1
Source Area # | Source Area | Area (acres) | Source Area Parameters | First Control Practice | Second Control Practice
Roofs 0.680
1 Roofs 1 0.680 Entered
2 Roofs 2
3 Roofs 3
4 Roofs 4
5 Roofs 5
6 Roofs 6
7 Roofs 7
8 Roofs 8
9 Roofs 9
10 Roofs 10
11 Roofs 11
12 Roofs 12
Parking 2.850
13 Paved Parking 1 2.850 Entered
14 Paved Parking 2
15 Paved Parking 3
16 Paved Parking 4
17 Paved Parking 5
18 Paved Parking 6
19 Unpaved Parking 1
Land Use # | Land Use Type | Land Use Label | Land Use Area (acres)
1 Commercial Commercial 1 7.290
CP # | Control Practice Type | Control Practice Name or Location
Commercial 1
Junction 1
To change the number of rows that are viewable in each grid, hover over the purple dividers, wait for the double arrow mouse symbol to appear, then click and drag the divider to the desired location. You may have to click the left mouse button to activate the double arrow symbol.
Current File Data Entered
Total Area = 7.290 acres
No Upstream Source Areas
LU# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55


WinSLAMM - [Land Use Model]
File
Current File Data
Pollutants
Tools
Run
Utilities
Help
Access Cost Data
Pre-Development Runoff Volume
Control
Program Options
Detailed Output File Options
Default Model Options
Default Current File Data
Default Monthly Stormwater Temperature (degrees F)
January 40
February 45
March 50
April 55
May 60
June 65
Turn 'Save File Upon Exit' Message Off
Suppress the Wet Detention Pond Overflow Warning Message
Save Backup File
Save Outfall Runoff and Particulate Loading for WinDETPOND Analysis
Maximum allowable biofilter surface ponding duration (hrs) 72
Default Peak Flow to Average Flow Ratio 3.8
Flow
Average Flow
Time (1.2 * Rainfall Duration)
Standard Land Use File
C:\WinSLAMM Files\StandardLandUses.000
Route Hydrographs and Particle Sizes Between Control Practices
Create Hydrograph and Particle Size Distribution .csv Files
Use Default Time Increment for all Hydrograph Analyses (required for hydrograph routing between control practices)
Default Time Increment (min): 6
File Update Options
Cancel Changes
Save .INI File
There are two other tabs that may be accessed often from Tools.
One tab is the Default Model Options tab. Use this to change many of the defaults in the program such as Warning Messages and Time Steps.
Select “Save .INI File “ to save your changes and exit the form.
Check Current File Status
Total Area = 0.000 acres
Upstream Drainage Area =
CP# = 1
Index Number = 1
Remaining Icons = 253
Start Date: 01/01/55
End Date: 12/30/55



Another tab is the "Detailed Output File Options" Tab.

There may be times where more detailed output is needed. Select the detailed output desired.

Then select "Save .INI File " to save your changes and exit the form.

A *.csv file with the output will be generated when the model file is run. It will be saved in the same project directory as the WinSLAMM model file.

Questions?

For model information, go to www.winslamm.com

Remember to Press the "F1" to access the Help File