SWAT_LUC User manual

Step-1: Uploading the Swat input folder:

This application prompts the user to upload the Swat input folder which contains the following folder and files. The folder should be compressed into a zip file.

1) **SwatFolder-> Watershed->Grid->hrus1-> w001001.adf file**
2) **SwatFolder-> Watershed->Shapes->hru1.shp file**
3) **SwatFolder-> Scenarios->Default->TxtInOut->*.hru files**

If at least one of the above required folders and files are not available, then the application returns an error asking the user to upload right folder.

If all files are available, then the user is prompted to upload the next input.

P.S. The name of both the zip file and folder that is compressed should have same names

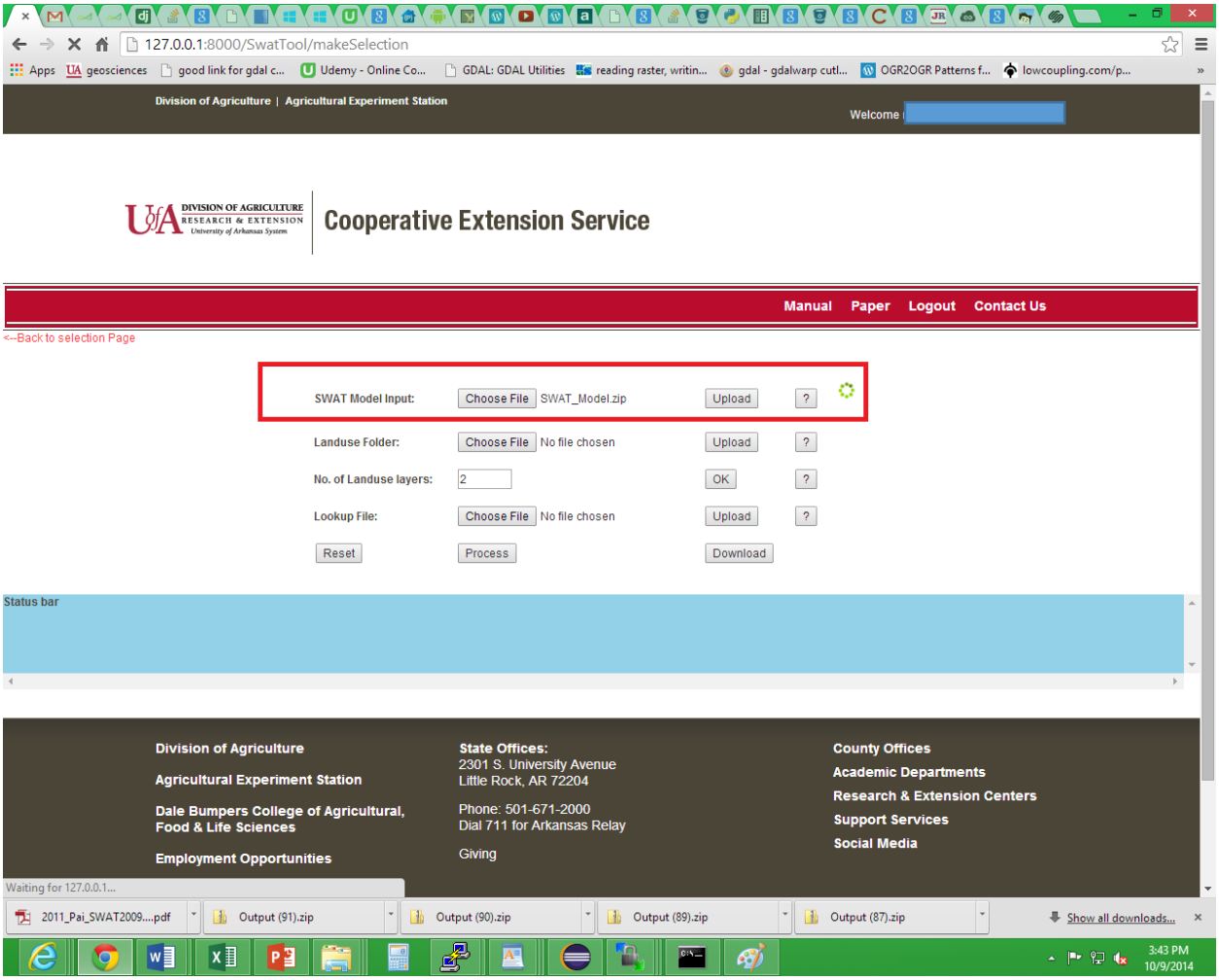

Fig-1: Upload SwatInput folder in zip format

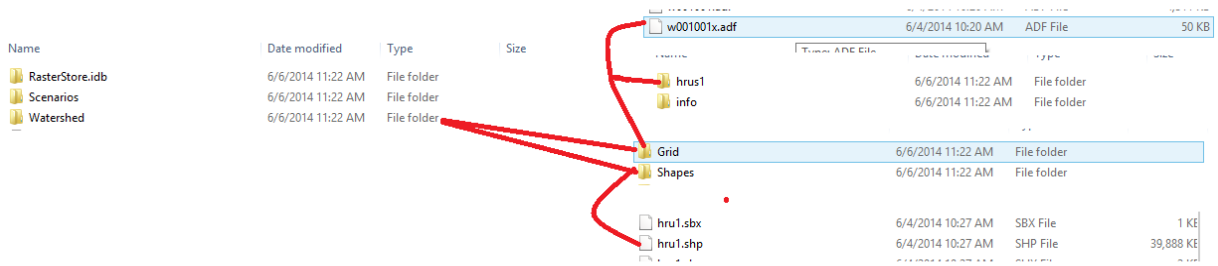

Fig-2: Watershed Directory required inside Swat input folder

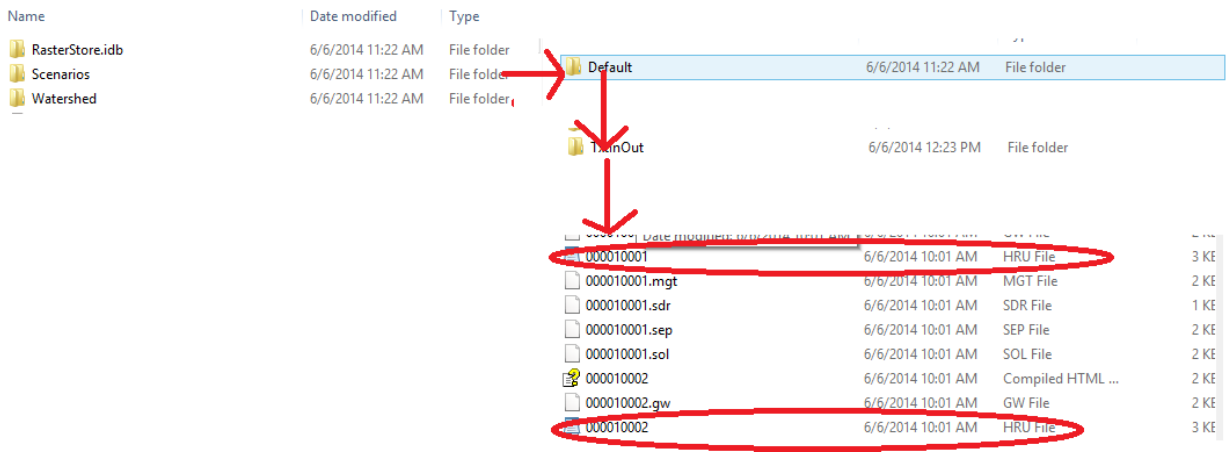

Fig-3: Scenario directory required inside Swat Input folder

Step-2: Uploading the landuse folder:

After uploading Swat input folder, upload button for land use folder will be enabled. The landuse folder that is uploaded should have landuse files in adf format with **w001001.adf** name.

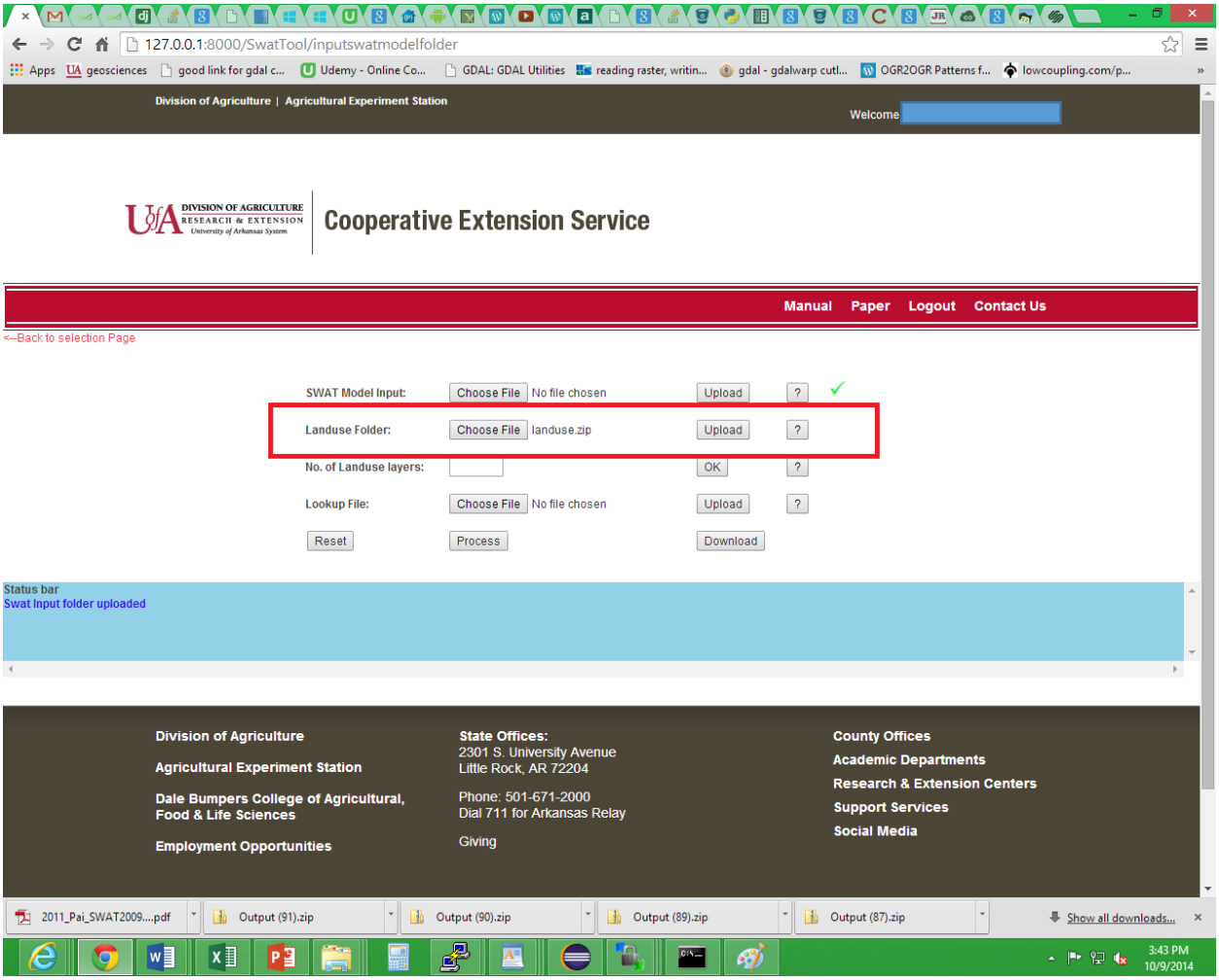

Fig-4: Upload land use folder in zip format

Step-3: Specifying land use layer count:

This step takes count of total land use layers that needs to be processed.

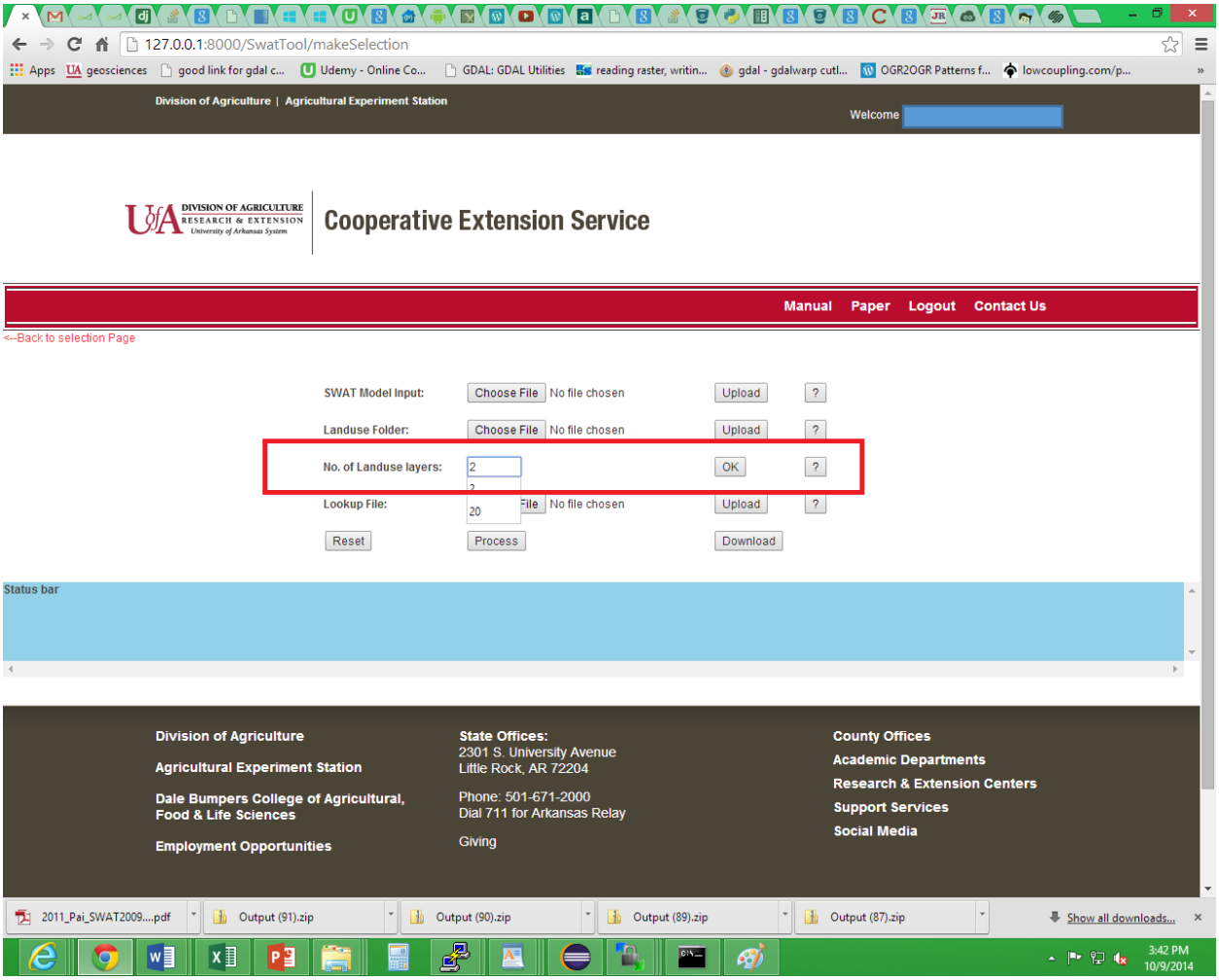

Fig-5: Input total number of landuse layers need to be uploaded

Step-4: Selecting the landuse file name:

This step allows to select any files that has the landuse file name with dates. Auxilary files are available in landuse folder with land use file names. If user selects these files, the application takes the name of the land use file. Following conditions needs to be met while selecting landuse file names.

1) If a file named ‘xyz’ is selected, then there should exist a path Landuse->xyz->w001001.adf
2) Count specified in the previous step should match with the number of files selected.

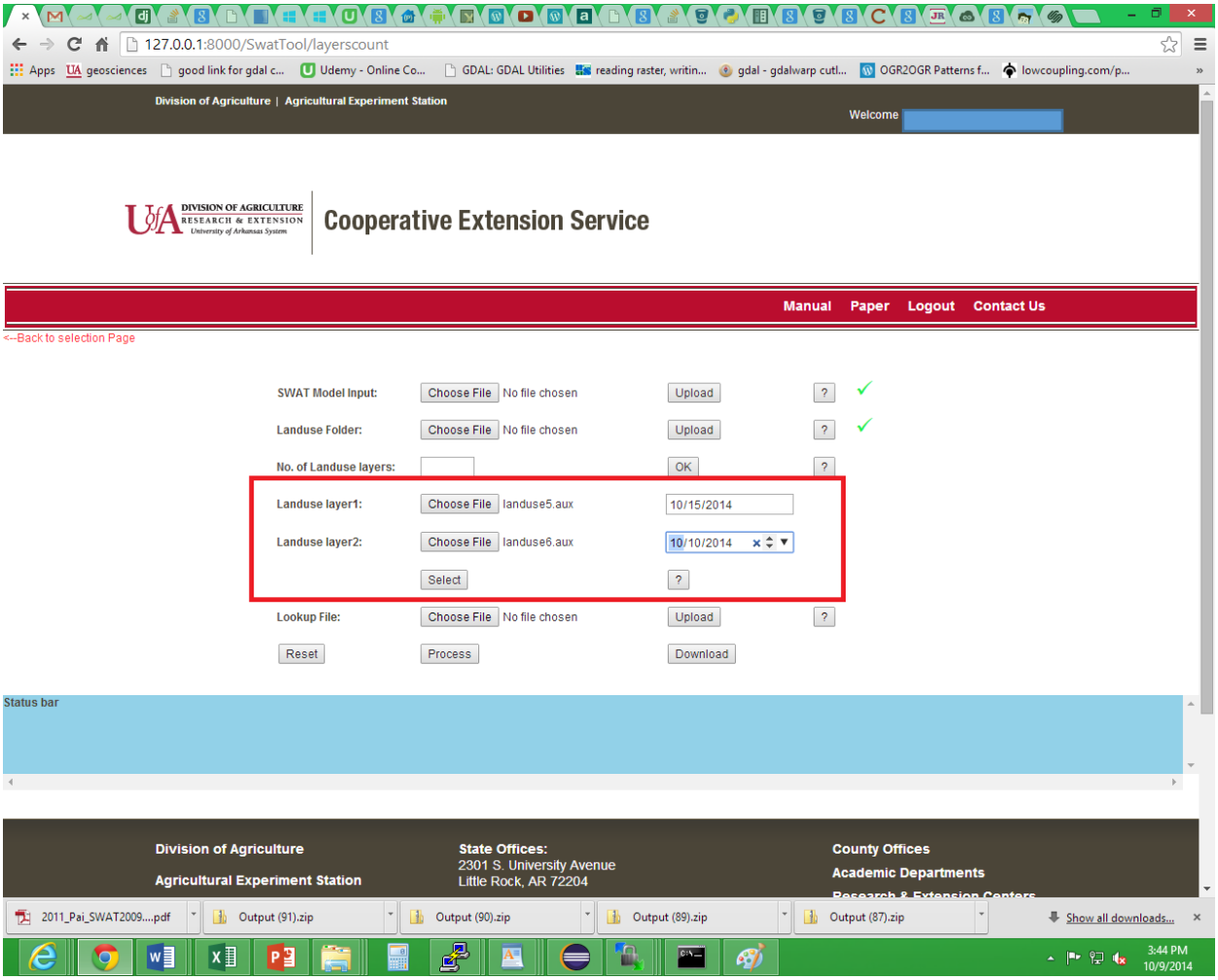

Fig-6: Selecting file with land use name

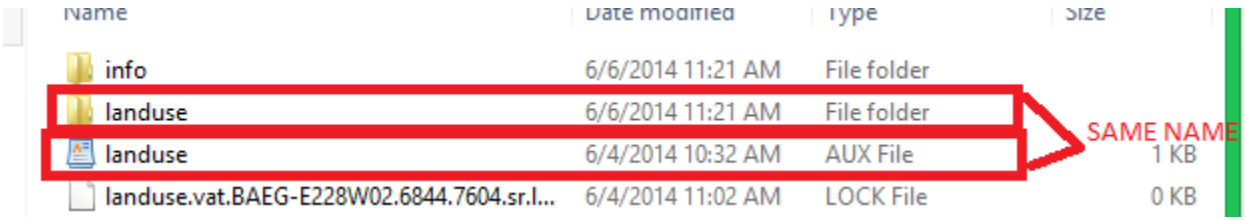

Fig-7: Directory inside landuse folder with auxiliary file and folder with landuse raster

Step-5: Selecting luc lookup text file:

This step takes the lookup file which contains land use value and id. The file should be in CSV format.

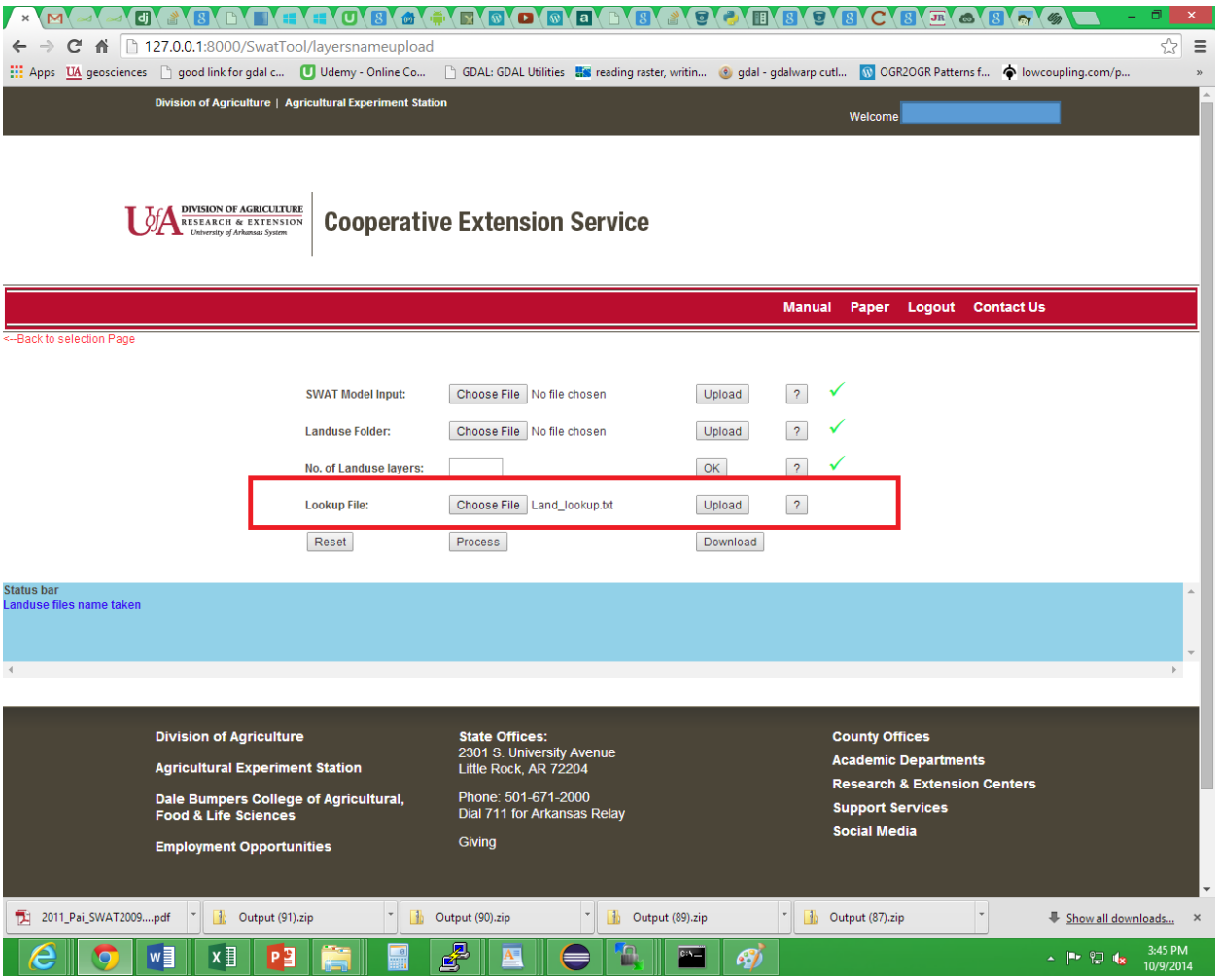

Fig-8: Uploading lookup file in CSV format

Step-6: Process:

If all the steps above are executed successfully, process button is enabled. Once the process button is clicked, the execution starts. This may takes several minutes depending on the size of raster and number of landuse files selected.

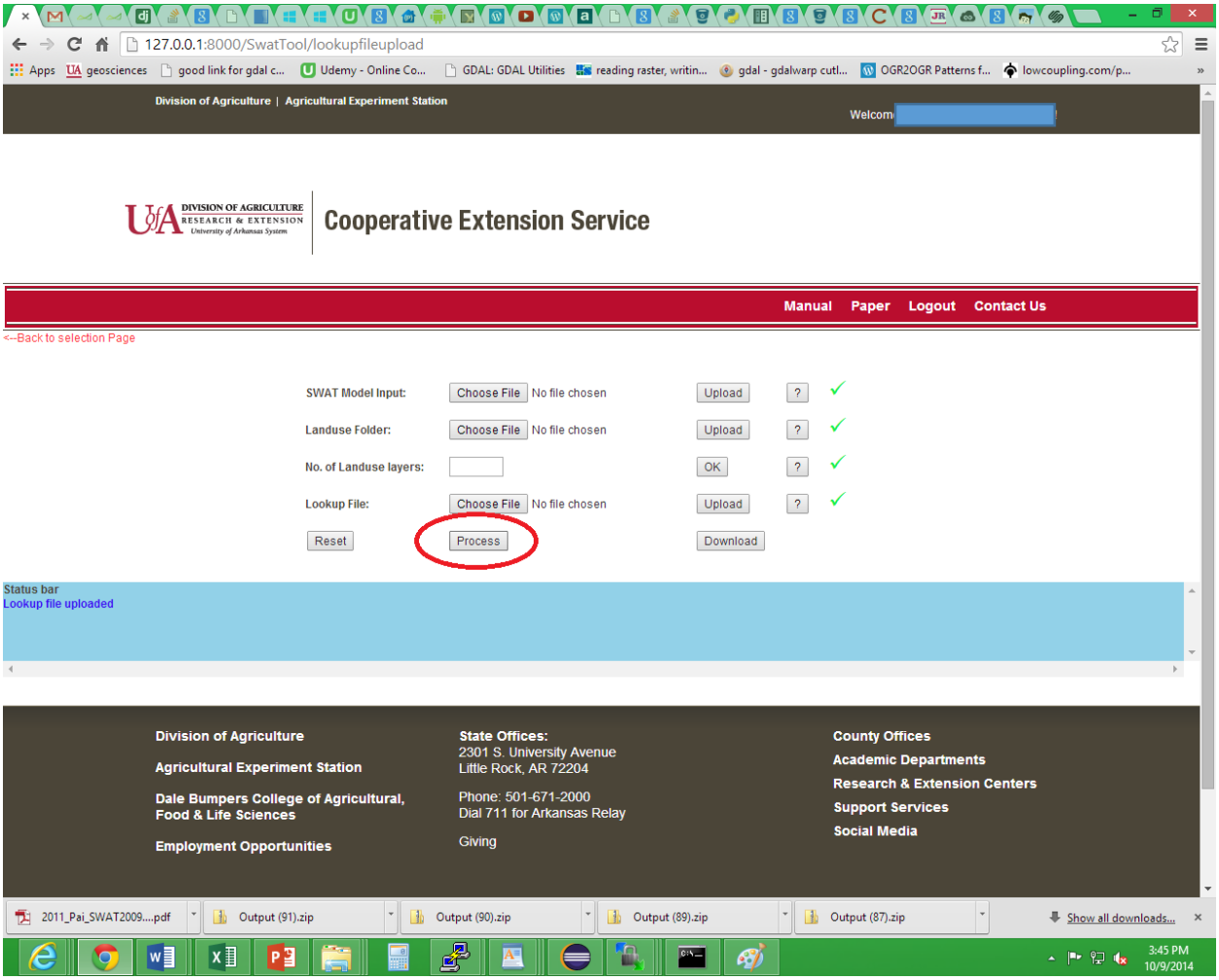

Fig-9: Process button enabled after uploading all inputs

Step-7: Download Output:

If the process is executed successfully, the output folder is available for download. Clicking the download button downloads the output folder in zip format.

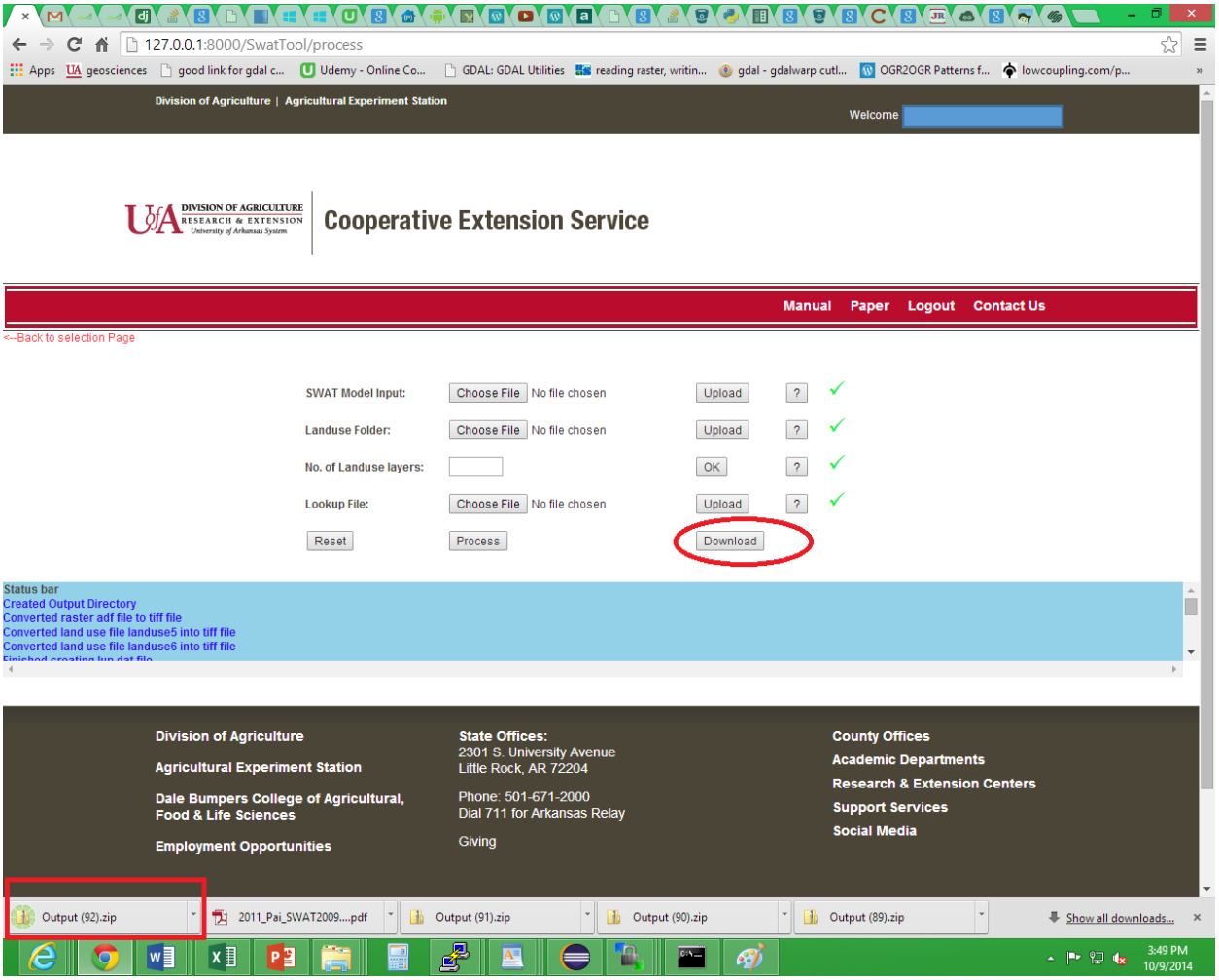

Fig-10: Download button and enabled and output folder downloaded by clicking button

Step-8: Reset:

Hitting the reset button will reset everything and user needs to upload all the inputs starting from step-1.

If user wants to change one or two inputs and execute the process with same other files, this can be done without clicking the reset button.