Estimating Load Reductions using STEPL

(Spreadsheet Tool for the Estimation of Pollutant Load)

Before You Get Started

- Sort out your 12-digit HUC information
  - How many 12-digit HUCs had BMP implementation funded by our grant this year?
  - Organize BMPs installed by HUC.
  - Which ones have BMPs that will have load reduction estimates?
- Determine how many stream bank stabilization projects were implemented for the year, and which 12-digit HUC(s) they are in.

STEPL Updates

- New agricultural BMPs and riparian buffers added!! BMP efficiencies updated.
- More weather stations and updated land use data.
- New manure application worksheet to calculate area-weighted number of months treated across the watershed.
- Combined BMP Efficiency calculator updated.

STEPL Updates

- Added a E.coli as a placeholder for the next model update (TBD); won't calculate load reductions yet.
- Created 2 customized versions of the model (10 or 30 watersheds).
  - Easier to download
  - Can be used to see if treatment areas are meeting target load reductions.

★ See "Updates and New Features" PDF or STEPL User Guide for more info.

Overview of the STEPL Process

1. **Download and Install the latest version of STEPL program. Delete old version first!**

2. **Download standard land use information about the project for use in the STEPL model.**

3. **Run the STEPL program with appropriate BMPs selected and land use info copy/pasted into the necessary spots.**

4. **Get the estimates from the STEPL Total Load tab to submit as your project's load reduction numbers.**

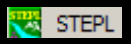
STEPL PROCESS DIAGRAM

Click on STEPL 4.4 Installation Package (zip file) http://it.tetratech-ffx.com/steplweb/models$docs.htm

Install STEPL 4.4

Collect appropriate land use information

Run the STEPL program

(from Start menu, Programs folder, STEPL folder, 

)

Enter the land use information into the STEPL Input fields

Select the BMPs installed in the project area, and enter percentages of the total land use area that the BMP(s) cover

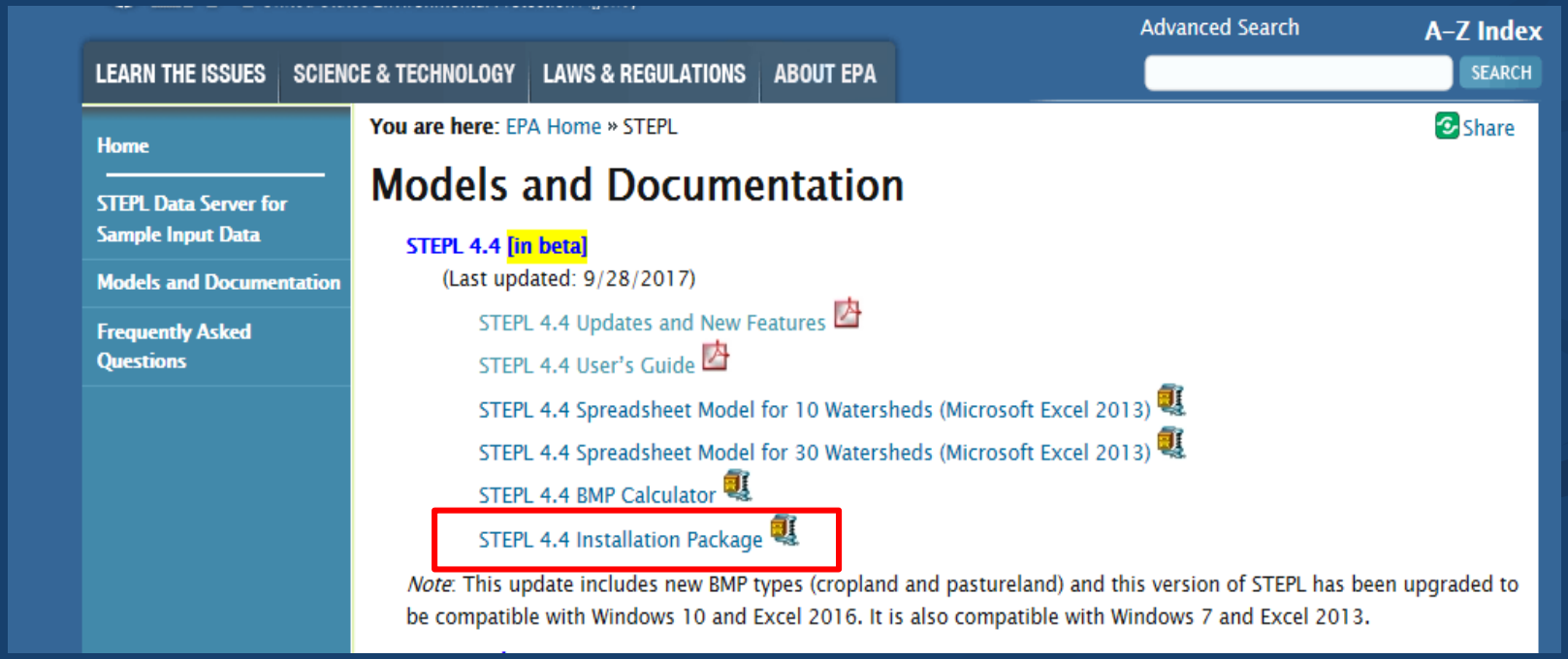
If needed, use the BMP Calculator to get values for "Combined BMP Efficiencies", when multiple BMPs are being applied within a single land use area

Get load reduction totals for reporting form

Downloading the STEPL Program

1. Go to: http://it.tetratech-ffx.com/steplweb/ and click on "Models and Documentation" in left menu to find the latest version of the model.

   Or Search "EPA STEPL Model" in Google, Bing, etc.



Downloading the STEPL Program

- Delete older versions from your computer first!
- Computer must have:
  - Windows 7 or 10; MS Excel 2013 or 2016, at least 40MB of hard disk space
  - Not compatible with Apple computers
- If you have issues downloading the executable STEPL 4.4 files:
  - Refer to STEPL User's Guide or open either-
  - STEPL 4.4 Spreadsheet Model for 10 Watersheds (Microsoft Excel 2013)
  - STEPL 4.4 Spreadsheet Model for 30 Watersheds (Microsoft Excel 2013

Downloading the STEPL Program

2. Click on STEPL 4.4 Installation Package
    - Choose to save the STEPL404.zip file on your computer in an easy to find location. Recommend default (C: drive)
3. The Winzip software must be installed on your computer in order to open the .zip file:
    - Locate the file you just saved and double click it.
    - Click the “Extract” or “Unzip” button in Winzip, and choose a location to save the files extracted from this .zip file.
    - After extracting the files, go to the folder and double click the STEPLSetup.exe file to begin the installation process.

Installing the STEPL Program

4. When the setup wizard opens, click “Next”, and repeat clicking “Next” a few more times until a window provides an “Install” button. Click the “Install” button and when it gets done installing, click the “Finish” button it provides.

5. The program is now installed. Located in programs folder from the Windows Start menu (green STEPL icon).

But don’t open it yet! There’s more…

Gathering Land Use Information

Note: The map can be slow to load. It is vital to let the page load fully to avoid malfunctions and having to restart from the beginning.

1. Open EPA's STEPL web page: http://it.tetratech-ffx.com/steplweb/

2. Click on the left side link titled "STEPL Data Server for Sample Input Data".

Gathering Land Use Information

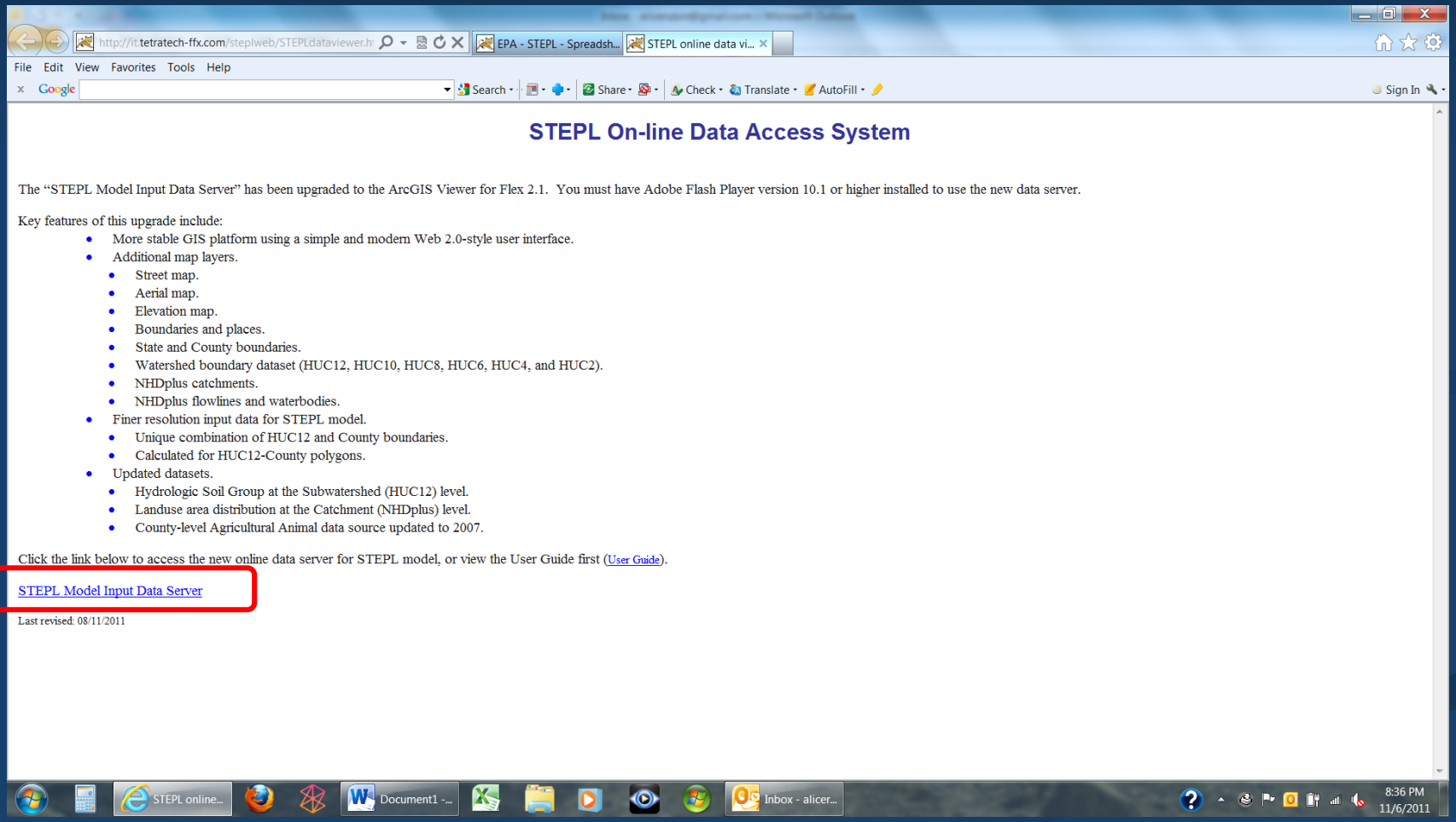
3. Click the bottom link to open the STEPL Model Input Data Server.

4. Select Washington State.

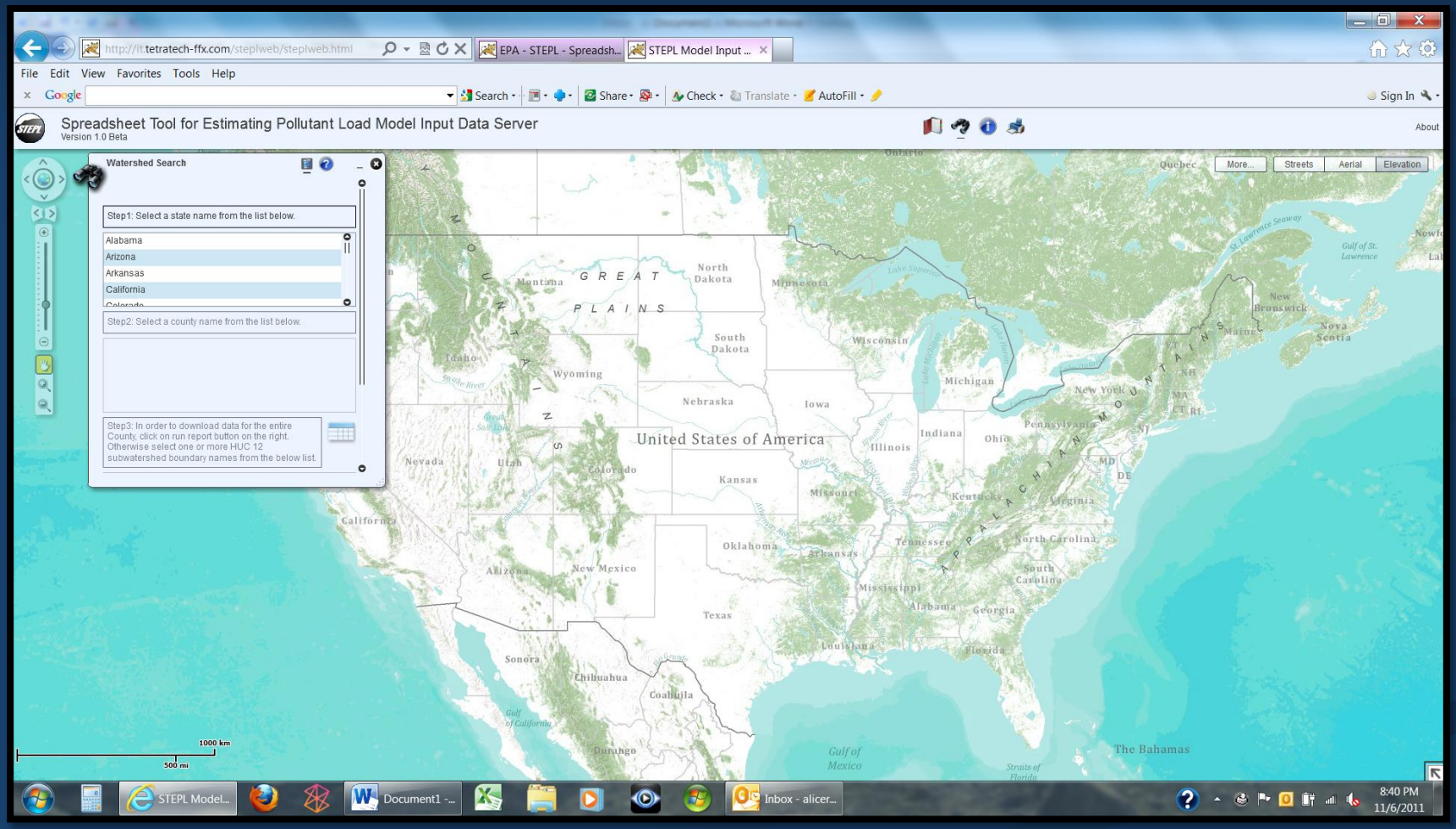
5. Select the County where BMPs were installed. If the BMPs are located across multiple counties, you will need to repeat all these Land Use Gathering steps for each county.

6. Scroll down and select all sub watersheds (same as 12-HUCs) where the BMP work was done. Select multiple watersheds by holding down the Ctrl key while clicking in the list.

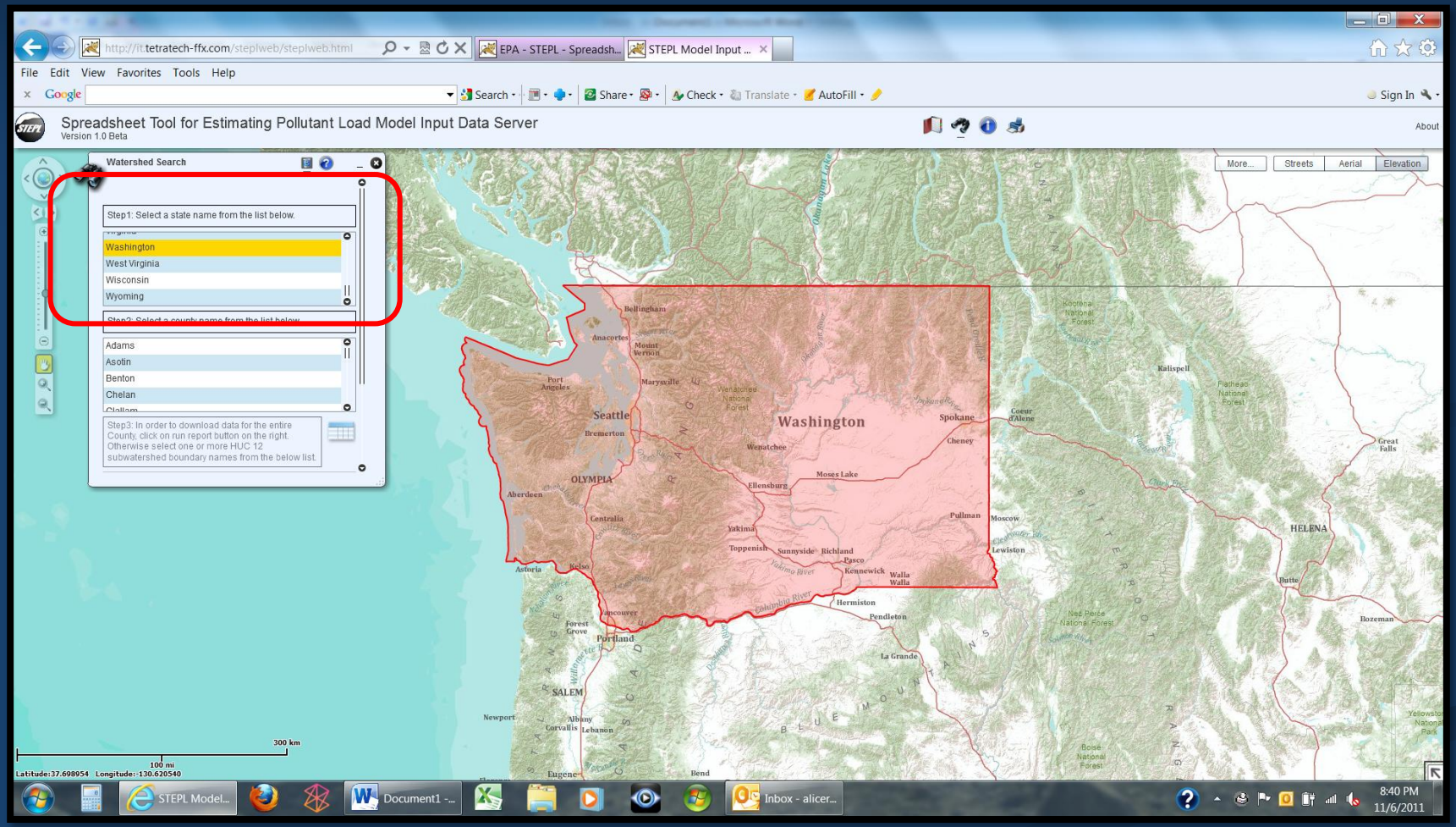
STEPL Data Server



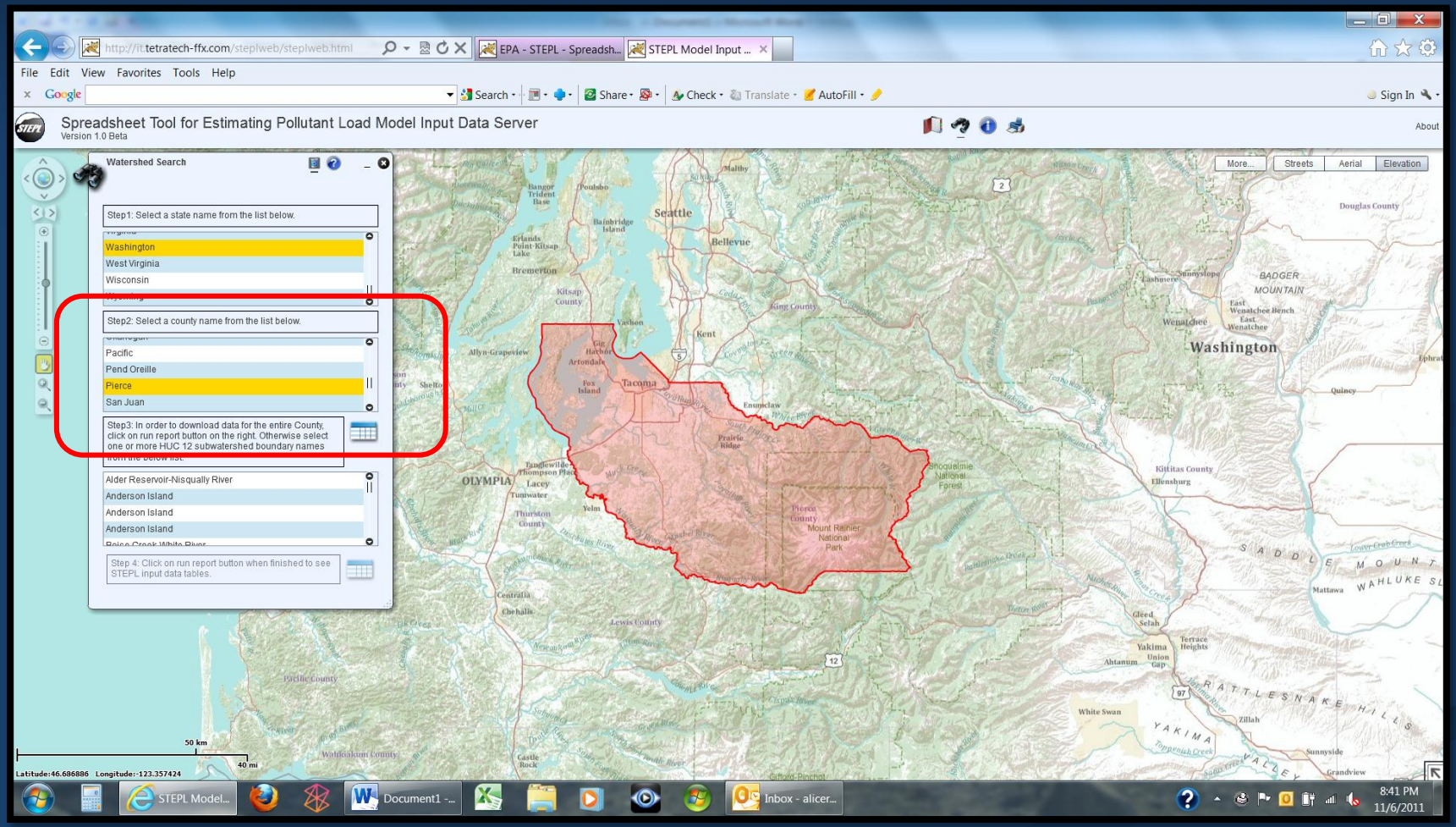
Load the STEPL Data Server



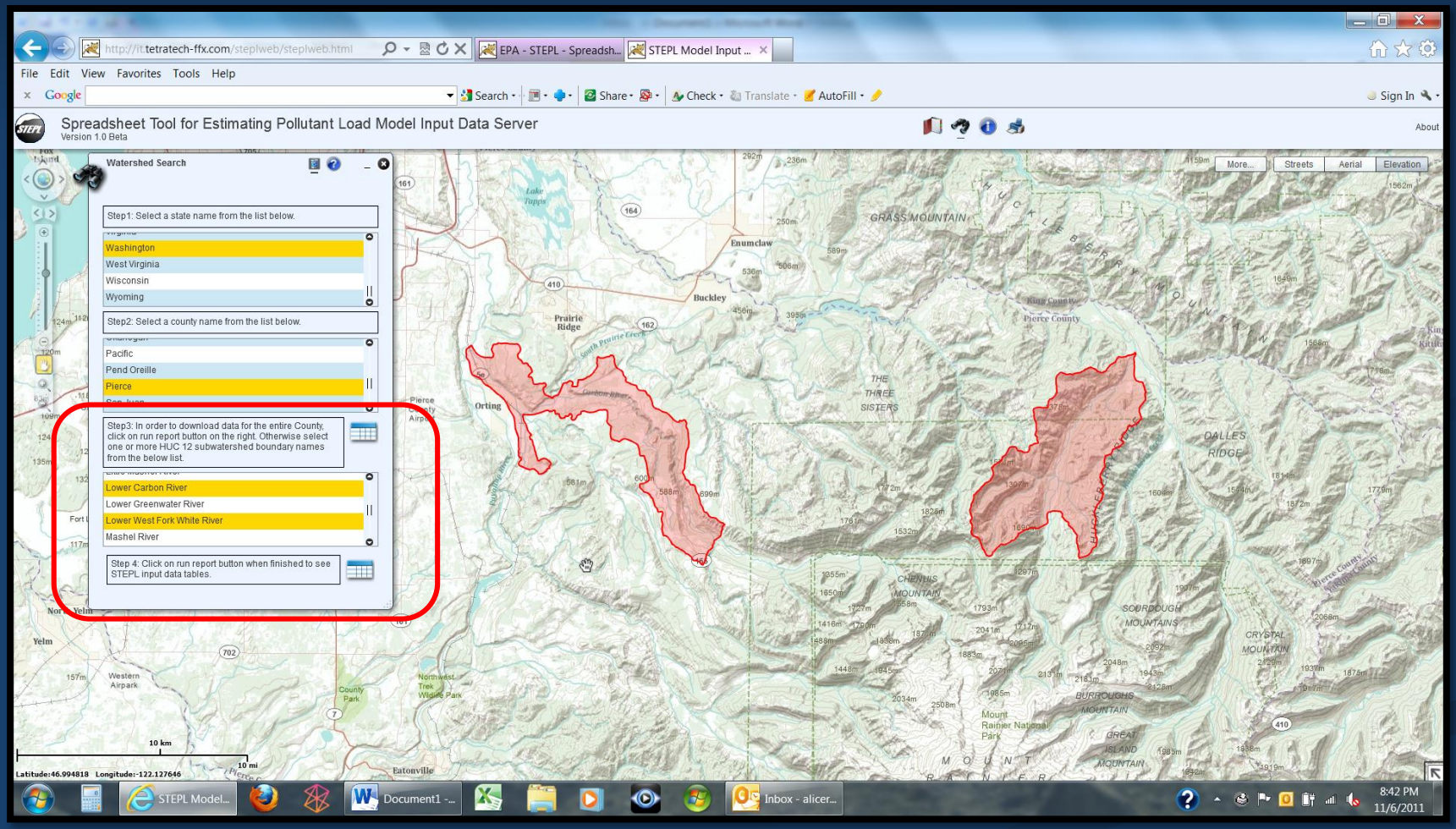
Step 1: Select the state



Step 2: Select the county



Step 3: Select the watersheds



Gathering Land Use Information

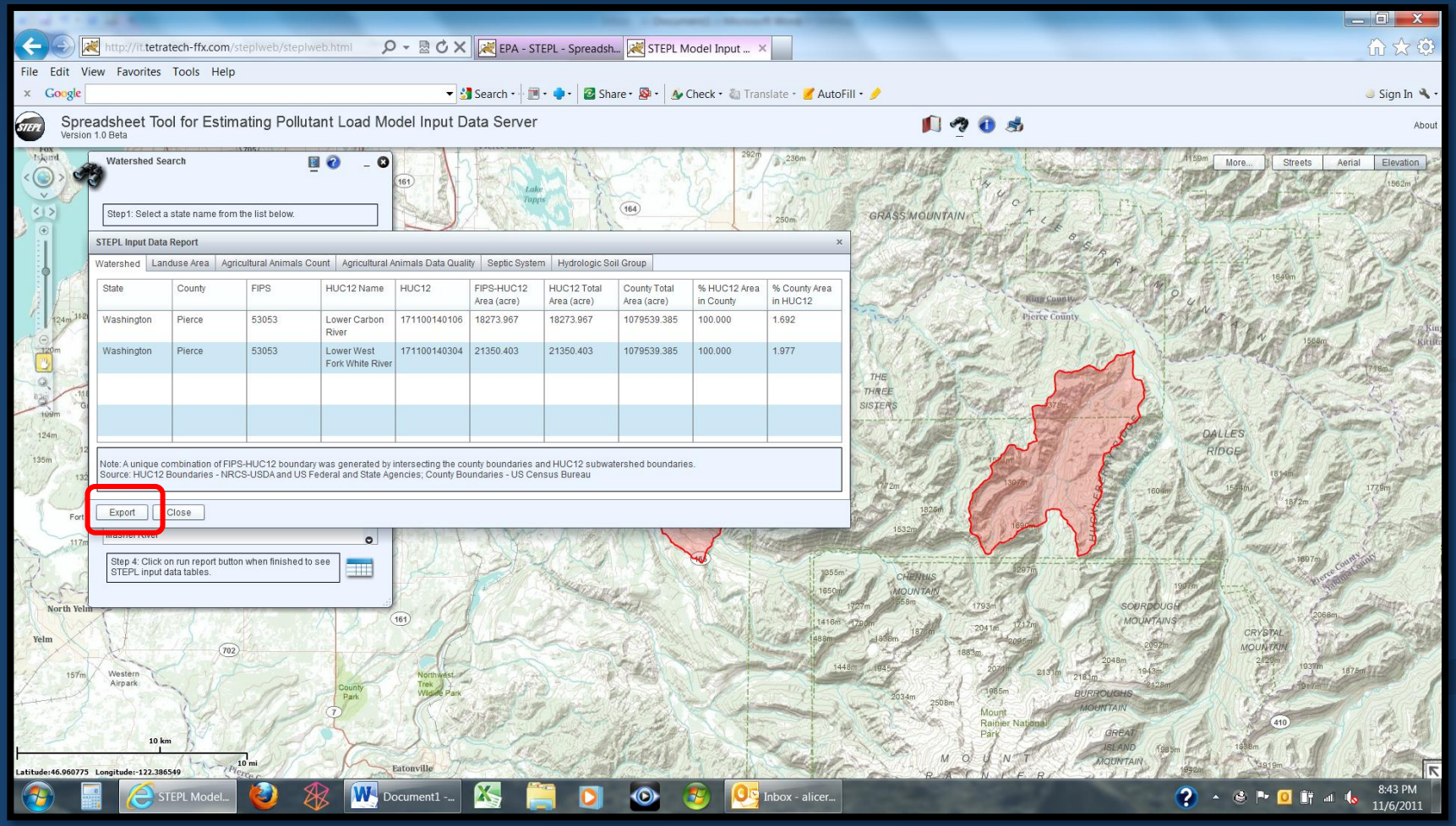
6. Once you have the sub watersheds selected, click on the report button (step 4).  A new window appears.

7. Click the Export button (lower left corner of the Report window). If you have watersheds in different counties, the land use data will need to be downloaded and saved separately.

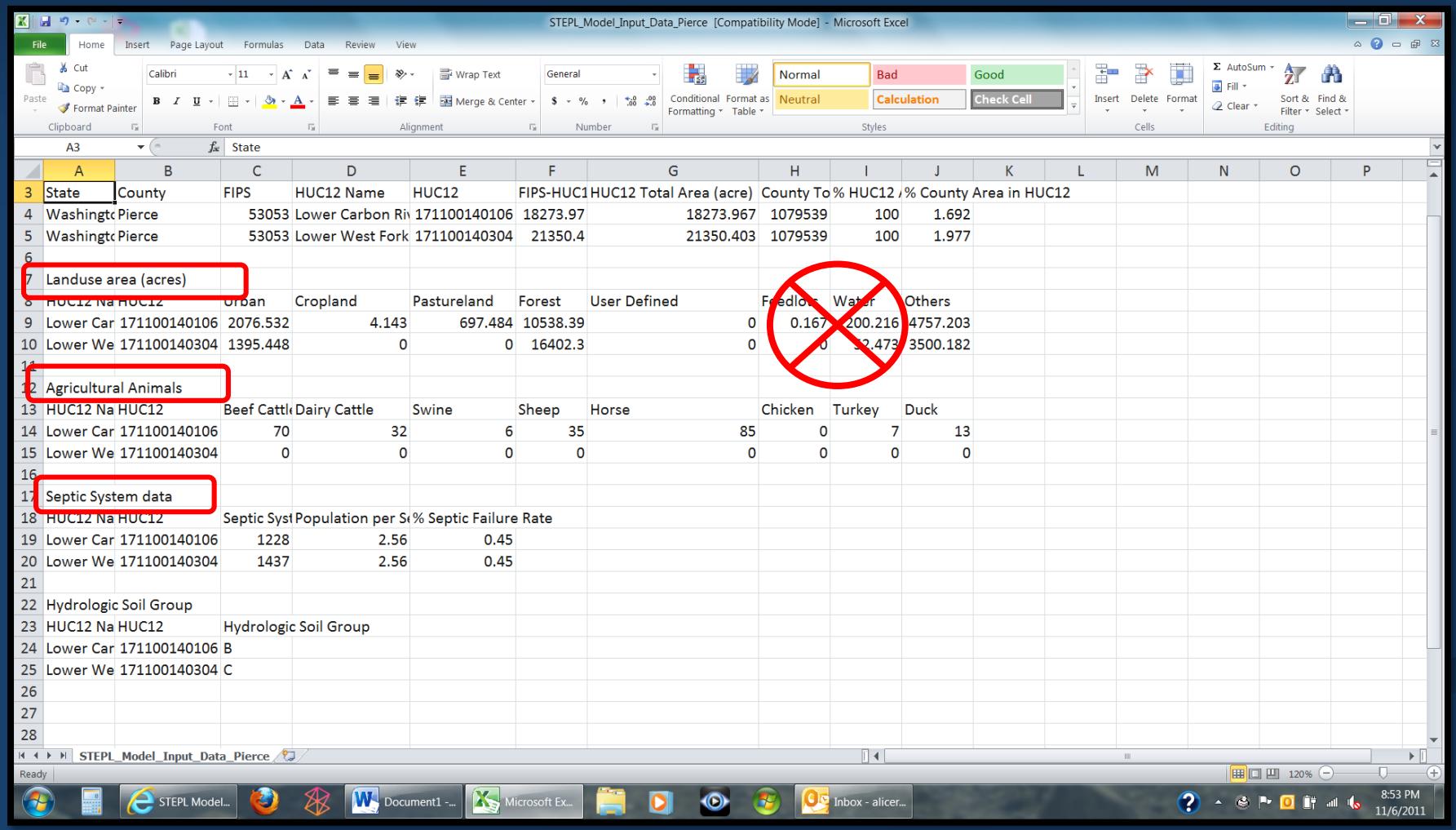
8. Save this Land Use Data report (Excel spreadsheet) and remember where for later use in the STEPL process.

9. Now its time to run the STEPL model to get load reduction estimates for installed BMPs.

Step 4: Get the land use data for the selected watersheds



Land use Information will be used in the model



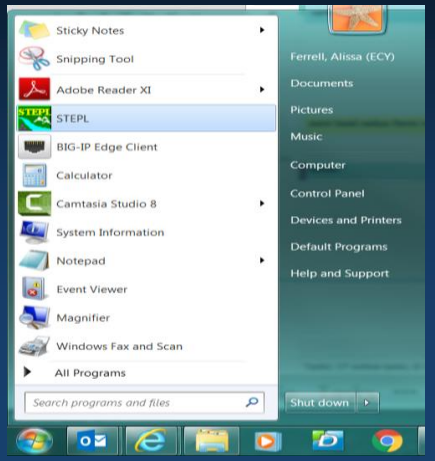
STEPL_Model_Input_Data_Pierce [Compatibility Mode] - Microsoft Excel

	A	B	C	D	E	F	G	H	I	J
3	State	County	FIPS	HUC12 Name	HUC12	FIPS-HUC1	HUC12 Total Area (acre)	County To	% HUC12	% County Area in HUC12
4	Washingtc	Pierce	53053	Lower Carbon Riv	171100140106	18273.97	18273.967	1079539	100	1.692
5	Washingtc	Pierce	53053	Lower West Fork	171100140304	21350.4	21350.403	1079539	100	1.977
6										
7	Landuse area (acres)									
8	HUC12 Na	HUC12	Urban	Cropland	Pastureland	Forest	User Defined	Feedlots	Water	Others
9	Lower Car	171100140106	2076.532	4.143	697.484	10538.39	0	0.167	200.216	4757.203
10	Lower We	171100140304	1395.448	0	0	16402.3	0	0	32.473	3500.182
11										
12	Agricultural Animals									
13	HUC12 Na	HUC12	Beef Cattl	Dairy Cattle	Swine	Sheep	Horse	Chicken	Turkey	Duck
14	Lower Car	171100140106	70	32	6	35	85	0	7	13
15	Lower We	171100140304	0	0	0	0	0	0	0	0
16										
17	Septic System data									
18	HUC12 Na	HUC12	Septic Syst	Population per S	% Septic Failure Rate					
19	Lower Car	171100140106	1228	2.56	0.45					
20	Lower We	171100140304	1437	2.56	0.45					
21										
22	Hydrologic Soil Group									
23	HUC12 Na	HUC12	Hydrologic Soil Group							
24	Lower Car	171100140106	B							
25	Lower We	171100140304	C							
26										
27										
28										

Using the STEPL Model for Load Reduction Estimates

Running the STEPL Program

1. Go to the Start menu, Programs folder, and click on green STEPL icon.



2. Click Start ⇨ opens a Settings Option window. Using the information you put together before you started:
   - Set "Number of Subwatersheds" to the number of 12- digit HUCs you selected in the Data Server (where the BMPs were installed). This gives you enough rows in the spreadsheet to input data. Add an extra watershed/row if you'd like.
   - Set Gully formation and Impaired streambanks to the number of streambanks or gullies where BMPs were installed.
   - Under Option for Initialization-click on "Set initial land use areas and animal numbers to zeros".
   - Click "OK". It may take several minutes to load/open.

Running the STEPL Program

3. Ensure security settings are set to allow STEPL to be fully functional. **Steps can vary by software version.

(Excel: Options>Trust Center>Trust Center Settings>Macro Settings>Enable all macros)

4. The “Save As” box appears. STEPL automatically sets the file name, STEPL.xlsm to be saved in the STEPL folder where the program stores your information and makes calculations.

Accept the name and location provided by the program and save.

(If the program asks, click “Yes” to replace the existing STEPL.xlsm file. This will reset any previously saved data.)

Running the STEPL Program

5. The spreadsheet will open. Start on the "Input" worksheet tab. Select the weather station closest to your BMP sites and insert the land use information from the Data Server.

   Complete the following before going to the next worksheet tab:

   - "State", "County", and "Weather Station".
   - Sections 1, 2, and 3.
   - Months per year that manure is applied to cropland or pastureland (in table #2).

6. Select the  radio button next to the item in order for it to be activated.

NOTE: Only fields with red font can be changed. Others (black font) are calculated by the model.

Required fields for the Input Tab are bound in red

Export input/output data: Export Data

☐ Treat all the subwatersheds as parts of a single watershed

☐ Groundwater load calculation

State	County	Weather Station
Wisconsin	Adams	_WI-Adams_Mean

Calculate Manure Application Months: Manure Application

1. Input watershed land use area (ac) and precipitation (in)

									Rain correction factors		
									0.854	0.435	
Watershed	Urban	Cropland	Pastureland	Forest	User Defined	Feedlots	Feedlot Percent Paved	Total	Annual Rainfall	Rain Days	Avg. Rain/Event
W1	0	0	0	0	0	0	0-24%	0	32	106	0.585
W2	0	0	0	0	0	0	0-24%	0	32	106	0.585
W3	0	0	0	0	0	0	0-24%	0	32	106	0.585

2. Input agricultural animals

Watershed	Beef Cattle	Dairy Cattle	Swine (Hog)	Sheep	Horse	Chicken	Turkey	Duck	# of months manure applied on Cropland	# of months manure applied on Pastureland
W1	0	0	0	0	0	0	0	0	0	0
W2	0	0	0	0	0	0	0	0	0	0
W3	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0		

3. Input septic system and illegal direct wastewater discharge data

Watershed	No. of Septic Systems	Population per Septic System	Septic Failure Rate, %	Wastewater Direct Discharge, # of People	Direct Discharge Reduction, %
W1	0	2.43	2	0	0
W2	0	2.43	2	0	0
W3	0	2.43	2	0	0

4. Modify the Universal Soil Loss Equation (USLE) parameters

Filled in manually

Running the STEPL Program

7. Now open the Excel file exported & saved from the Data Server, and fill in the required fields (red font areas) on the Input tab fields.

   - Under "1. Input watershed land use area", copy/paste the land use areas directly from the Excel file to their respective columns ("Urban" through "Feedlots") in STEPL. Each row (W1, W2, etc.) is a subwatershed/HUC-12.
   - Repeat for "2. Input agricultural animals".
   - Based upon your knowledge of the project area, fill in the average "# of months manure applied" boxes for pastureland or cropland (best estimate).

Running the STEPL Program

- Repeat for "3. Input septic system and illegal direct wastewater discharge data".

- Input tables 5-10 are optional and can be filled out if you have the information. Makes for more robust output (See STEPL 4.4 User Guide for more detail).

Next Step

8. Go to the BMPs worksheet tab in the spreadsheet.

Enter BMP types installed in the appropriate land use category table. Fill out fields bounded in red.

Best Management Practice Select an appropriate BMP except "Combined BMPs-Calculated" for each subwatershed in each land use table using the pull-down list-box if interactions between BMPs are not considered. Select "Combined BMPs-Calculated" if multiple BMPs and their interactions in the subwatersheds are considered; use BMP calculator (under STEPL menu) to obtain the combined BMP efficiencies and enter them in Table 7.

Urban BMP Tool | Gully and Streambank Erosion | Calculate Combined BMP Efficiency

1. BMPs and efficiencies for different pollutants on CROPLAND, ND=No Data

Watershed	Cropland						
	N	P	BOD	Sediment	E. coli	BMPs	% Area BMP Applied
W1	0	0	0	0	0	0 No BMP	0
W2	0	0	0	0	0	0 No BMP	0
W3	0	0	0	0	0	0 No BMP	0

2. BMPs and efficiencies for different pollutants on PASTURELAND, ND=No Data

Watershed	Pastureland						
	N	P	BOD	Sediment	E. coli	BMPs	% Area BMP Applied
W1	0	0	0	0	0	0 No BMP	0
W2	0	0	0	0	0	0 No BMP	0
W3	0	0	0	0	0	0 No BMP	0

3. BMPs and efficiencies for different pollutants on FOREST, ND=No Data

Watershed	Forest						
	N	P	BOD	Sediment	E. coli	BMPs	% Area BMP Applied
W1	0	0	0	0	0	0 No BMP	0
W2	0	0	0	0	0	0 No BMP	0
W3	0	0	0	0	0	0 No BMP	0

4. BMPs and efficiencies for different pollutants on USER DEFINED land use, ND=No Data

Watershed	User Defined						
	N	P	BOD	Sediment	E. coli	BMPs	% Area BMP Applied
W1	0	0	0	0	0	0 No BMP	0
W2	0	0	0	0	0	0 No BMP	0
W3	0	0	0	0	0	0 No BMP	0

5. BMPs and efficiencies for different pollutants on FEEDLOTS, ND=No Data

Watershed	Feedlots						
	N	P	BOD	Sediment	E. coli	BMPs	%Area BMP Applied
W1	0	0	0	0	0	0 No BMP	0

Running the STEPL Program

9. Select the most appropriate land use category where your BMP(s) were installed.
   - Cropland, Pastureland, Forest, or Feedlots

10. Scroll through the BMP options in the dropdown list and select the type of BMP installed.
    - Be sure to click the round radio button  to the left of the BMP for it to be selected.
    - <u>Only report eligible BMP types that were reimbursed by the grant.</u>

Running the STEPL Program

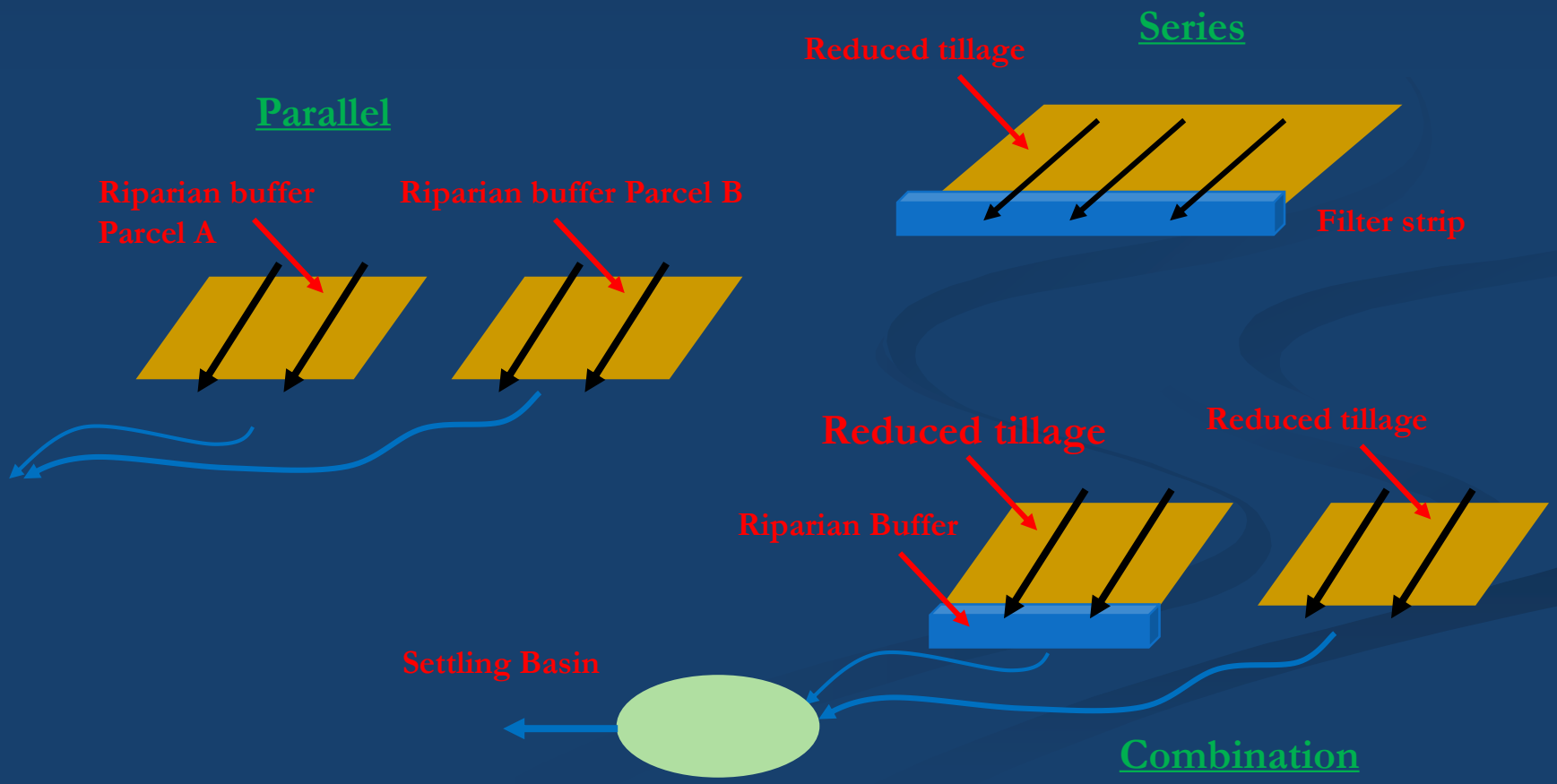
Combined BMPs-Calculated

- Use when you've installed more than one type of BMP for a single subwatershed/HUC-12 and land use area.

- New and improved calculator worksheet!!
  - Green button at top of BMPs worksheet
  - Calculates the combined BMP efficiencies for BMPs working together in a HUC-12.
  - Easier to use!
  - Assumes BMPs are working parallel to each other.

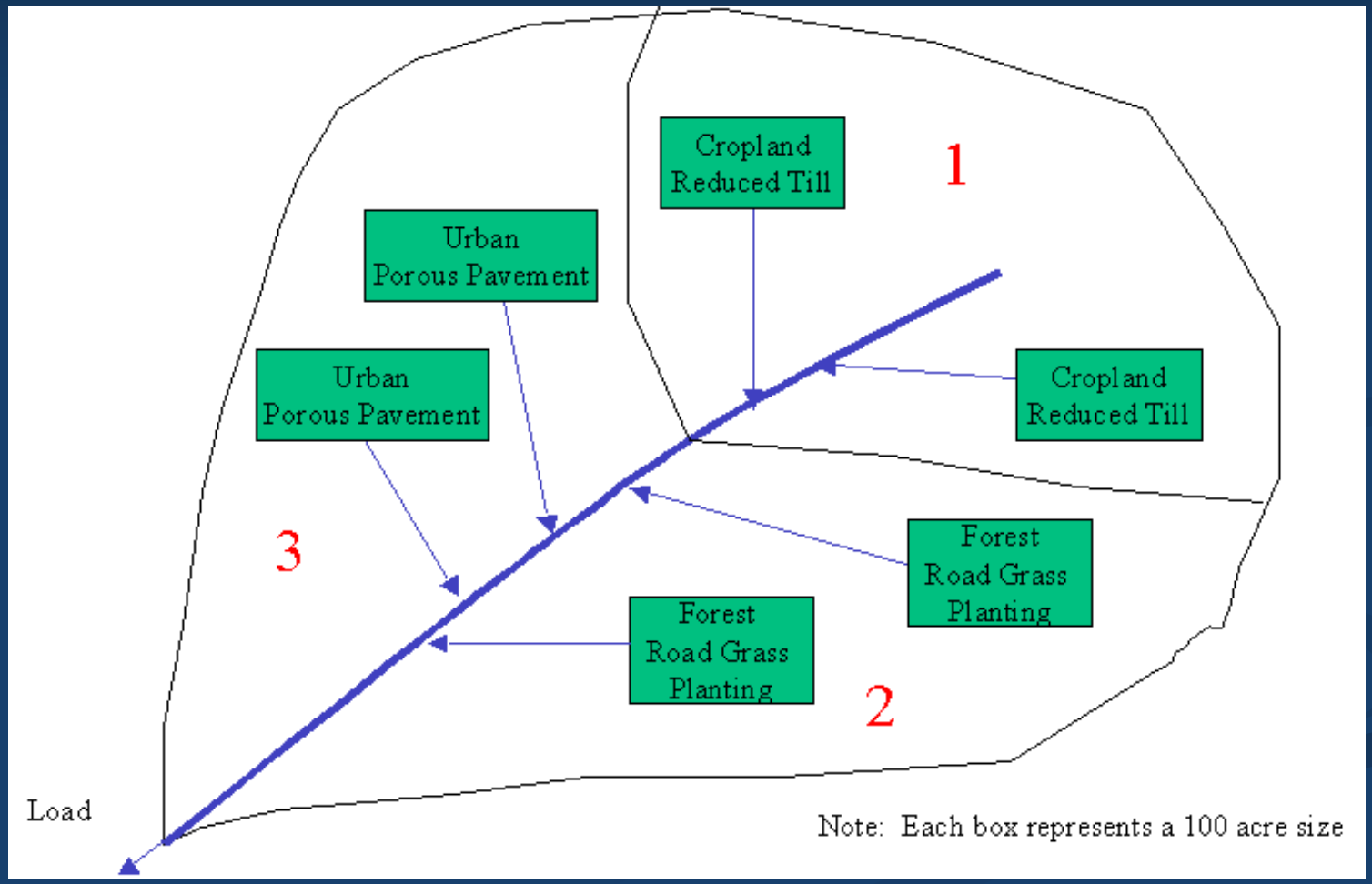
STEPL BMP Calculator

- Examples of Multiple BMPs in a watershed and their relationship to one another.



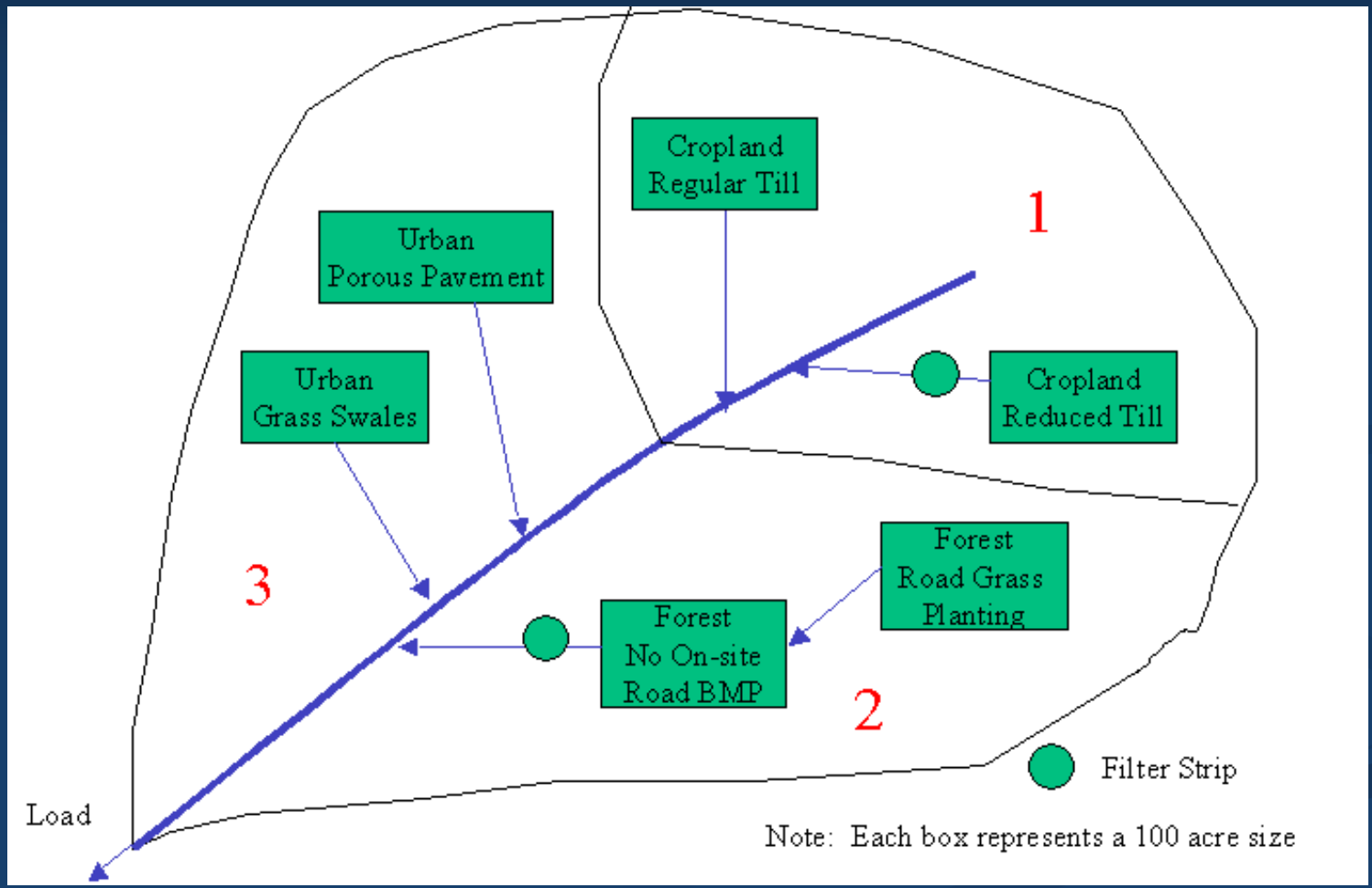
Example: BMP Calculator Not Needed

A land use category only has one type of BMP in a subwatershed/HUC-12.

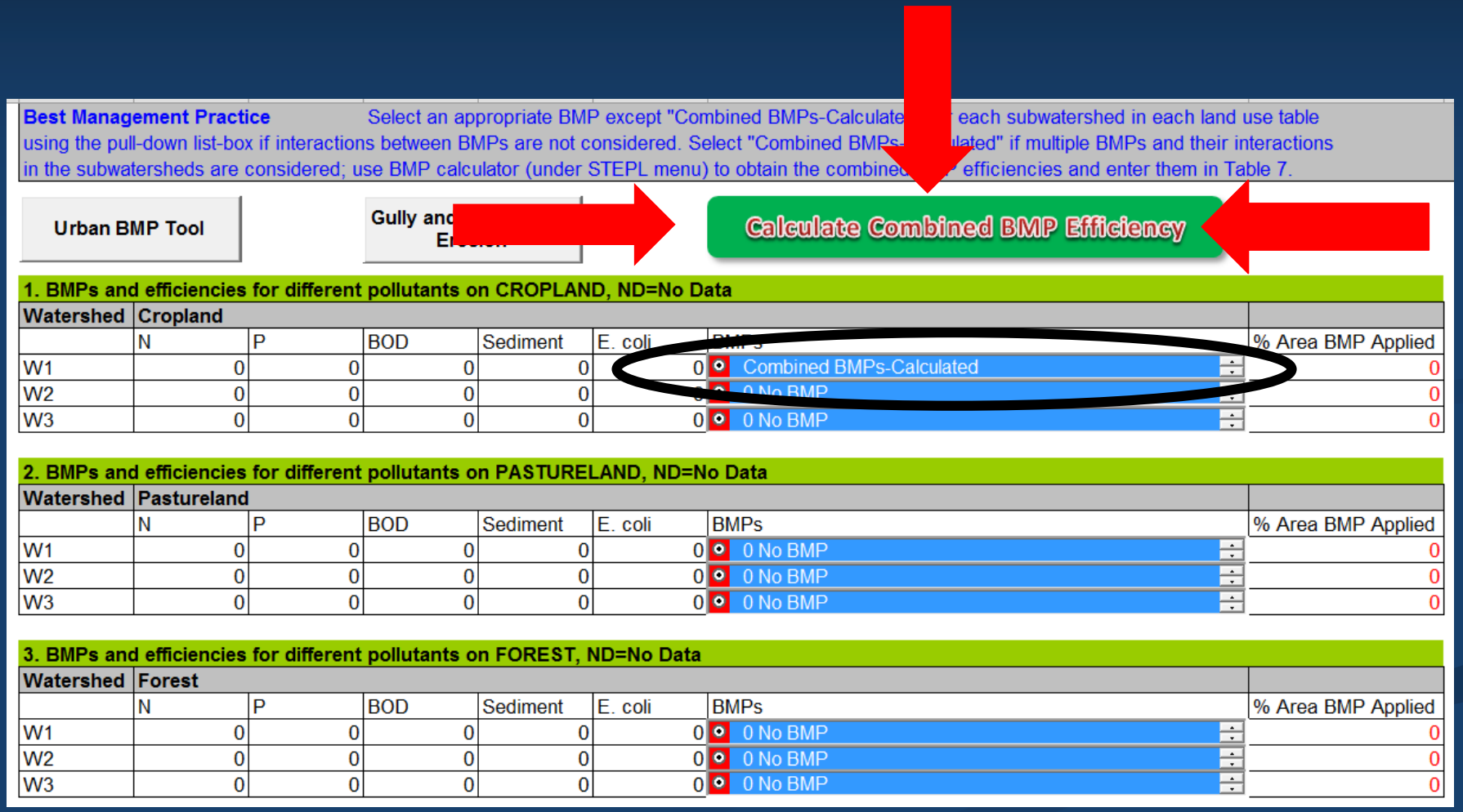


Example: BMP Calculator Is Needed

A land use category has more than one type of BMP in a subwatershed/HUC-12.



BMP Calculator



Best Management Practice Select an appropriate BMP except "Combined BMPs-Calculate… each subwatershed in each land use table using the pull-down list-box if interactions between BMPs are not considered. Select "Combined BMPs-…ulated" if multiple BMPs and their interactions in the subwatersheds are considered; use BMP calculator (under STEPL menu) to obtain the combined … efficiencies and enter them in Table 7.

Urban BMP Tool

Gully and … Erosion

Calculate Combined BMP Efficiency

1. BMPs and efficiencies for different pollutants on CROPLAND, ND=No Data

Watershed	Cropland						
	N	P	BOD	Sediment	E. coli	BMPs	% Area BMP Applied
W1	0	0	0	0	0	Combined BMPs-Calculated	0
W2	0	0	0	0	0	0 No BMP	0
W3	0	0	0	0	0	0 No BMP	0

2. BMPs and efficiencies for different pollutants on PASTURELAND, ND=No Data

Watershed	Pastureland						
	N	P	BOD	Sediment	E. coli	BMPs	% Area BMP Applied
W1	0	0	0	0	0	0 No BMP	0
W2	0	0	0	0	0	0 No BMP	0
W3	0	0	0	0	0	0 No BMP	0

3. BMPs and efficiencies for different pollutants on FOREST, ND=No Data

Watershed	Forest						
	N	P	BOD	Sediment	E. coli	BMPs	% Area BMP Applied
W1	0	0	0	0	0	0 No BMP	0
W2	0	0	0	0	0	0 No BMP	0
W3	0	0	0	0	0	0 No BMP	0

Running the STEPL Program

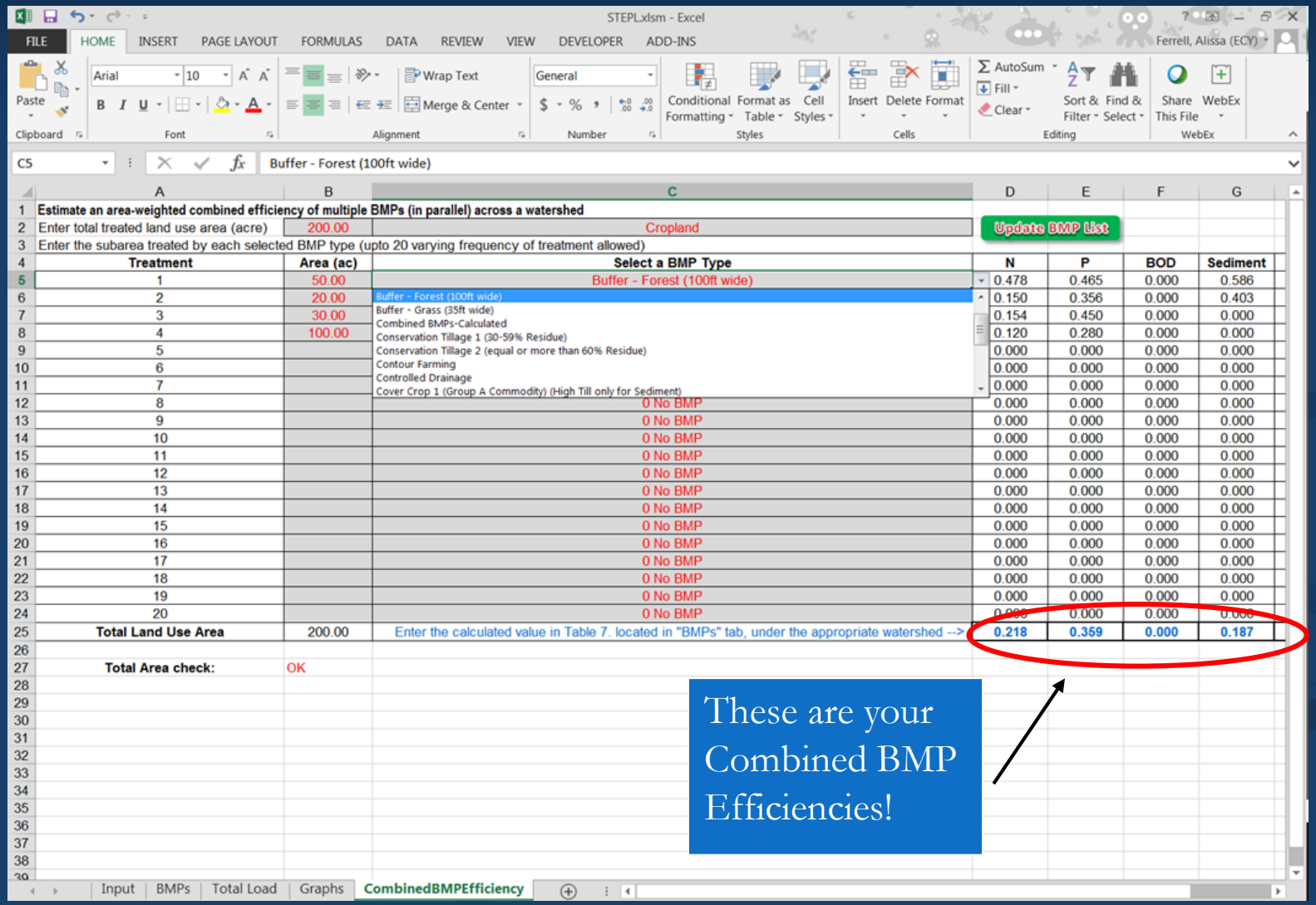
11. Running the BMP Calculator (if needed):

- Select "Combined BMPs-Calculated" under the appropriate land use area (table #1, 2, 3, 4, or 5 on the BMPs worksheet tab).
- Open the Combined BMP Efficiency calculator worksheet (green button). Must change the default entries (red font fields).
- Use the drop down to select the land use type where BMPs were installed and enter the total treated land use acreage.
- Use drop downs to select each of the BMPs for the subwatershed and enter the total acreage.

Running the STEPL Program

11. Running the BMP Calculator (continued):
    - Click green “Updated BMP List” button on right. This runs the BMP Calculator.
    - Enter the Total Land Use Area numbers (blue font) into respective N, P, BOD, and Sediment fields in table #7 on the BMPs tab worksheet.
    - Repeat these steps if you need to run the calculator for a different land use category and subwatershed/HUC-12.

Combined BMP Calculator Worksheet



Running the STEPL Program

12. Enter "% Area BMP Applied" in the last column. Equals the percentage of that particular land use type (in acres), that is benefiting from the BMP.

- Defaults to 100%, so need to change. This is usually a small number since BMP likely does not cover the entire land use area of the county.

Example: If the pastureland (from Data Server) totals 65.94 acres and your riparian buffer covers 1.5 acres, then (1.5 / 65.94) x 100 = 2.27%

Example: Completed BMPs Tab

All the required spaces should now be complete under the STEPL “Input” and “BMPs” worksheet tabs.

Watershed	Cropland						
	N	P	BOD	Sediment	E. coli	BMPs	% Area BMP Applied
W1	0.0090342	0.0087885	ND	0.0110754	ND	Buffer - Forest (100ft wide)	1.89
W2	0.0067632	0.0077792	0	0.0012896	0	Combined BMPs-Calculated	3.2
W3	0	0	0	0	0	0 No BMP	0

2. BMPs and efficiencies for different pollutants on PASTURELAND, ND=No Data

Watershed	Pastureland						
	N	P	BOD	Sediment	E. coli	BMPs	% Area BMP Applied
W1	0.0011165	0.001672	ND	0.00341	ND	Livestock Exclusion Fencing	0.55
W2	0	0	0	0	0	0 No BMP	0
W3	0	0	0	0	0	0 No BMP	0

3. BMPs and efficiencies for different pollutants on FOREST, ND=No Data

Watershed	Forest						
	N	P	BOD	Sediment	E. coli	BMPs	% Area BMP Applied
W1	0	0	0	0	0	0 No BMP	0
W2	0	0	0	0	0	0 No BMP	0
W3	0	0	0	0	0	0 No BMP	0

4. BMPs and efficiencies for different pollutants on USER DEFINED land use, ND=No Data

Watershed	User Defined						
	N	P	BOD	Sediment	E. coli	BMPs	% Area BMP Applied
W1	0	0	0	0	0	0 No BMP	0
W2	0	0	0	0	0	0 No BMP	0
W3	0	0	0	0	0	0 No BMP	0

5. BMPs and efficiencies for different pollutants on FEEDLOTS, ND=No Data

Watershed	Feedlots						
	N	P	BOD	Sediment	E. coli	BMPs	%Area BMP Applied
W1	0	0	0	0	0	0 No BMP	0
W2	0	0	0	0	0	0 No BMP	0
W3	0	0	0	0	0	0 No BMP	0

6. BMPs and efficiencies for different pollutants on URBAN

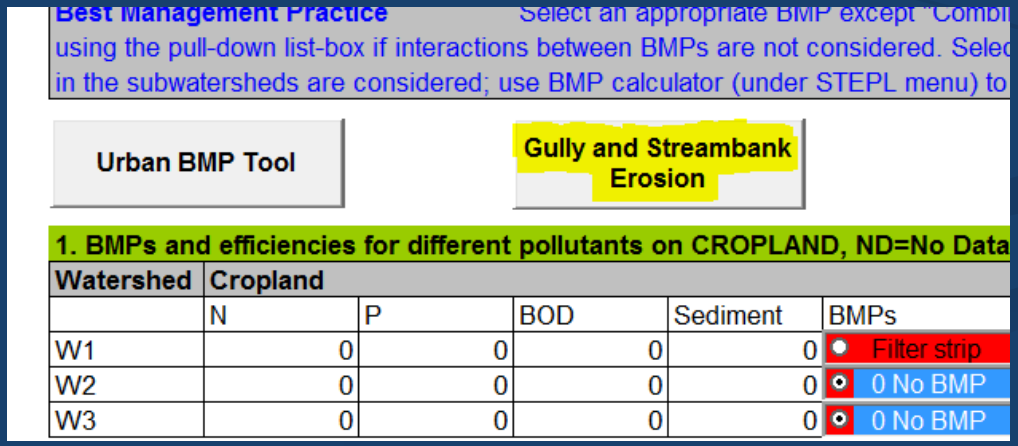
To change/set BMP/LID for urban land uses, click the 'Urban BMP Tool' button on the top-left of this sheet.

7. Combined watershed BMP efficiencies from the BMP calculator

Watershed	Watershed Combined BMP Efficiencies					
	N	P	BOD	Sediment	E. coli	BMPs
W1-Crop	0	0	0	0	0	Combined BMPs
W2-Crop	0.21135	0.2431	0	0.0403	0	Combined BMPs
W3-Crop	0	0	0	0	0	Combined BMPs
W1-Pasture	0	0	0	0	0	Combined BMPs
W2-Pasture	0	0	0	0	0	Combined BMPs
W3-Pasture	0	0	0	0	0	Combined BMPs

Running the STEPL Program

13. Using the Stream bank and Gully Tool
    - Use this tool for any stream bank stabilization project that was implemented, otherwise ignore.
    - In the BMP tab click on the "Gully and Stream bank Erosion" button
    - There should be the same number of rows available as the number of stream bank projects you indicated when first starting the STEPL software.



Running The STEPL Program

13. Using the Stream bank and Gully Tool

- Select the corresponding watershed/HUC (W1, W2, etc.) where the project occurred from the dropdown. Same as watershed from the Input tab.
- You can change the default name of the stream bank (from Bank1, Bank 2, etc.) if you want.
- Input the length and height of the stream bank in ft.
- Select the appropriate description of the amount of lateral recession (Link at the top provides definitions). Recession rate will auto-populate.

Example of Gully and Stream bank Tool

- Select the dominant type of soil that composes the stream bank.
- This information will be reflected in the load reduction estimate when you are finished.

Gully and Streambank Pollutant Load Reduction

This sheet contains two input tables: the first table is for inputing the gully dimensions, and the second is for inputing the eroding streambank dimensions.

Gully:	**Step 1**. Specify the gully dimensions and assign each gully to a watershed. **Step 2**. Specify the time (number of years) that the gully has taken to form the current size. **Step 3**. Specify the gully stabilization (BMP) efficiency (0-1) and the gully soil textural class.
Streambank:	**Step 1**. Specify the stream bank dimensions and assign each bank to a watershed. **Step 2**. Specify the lateral recession rate (ft/yr) of the eroding streambank. Click to see "Streambank Lateral Recession Rate" table **Step 3**. Specify the streambank stabilization (BMP) efficiency (0-1) and the streambank soil textural class.

Close this sheet

1. Gully dimensions in the different watersheds

Watershed	Gully	Top Width (ft)	Bottom Width (ft)	Depth (ft)	Length (ft)	Years to Form	BMP Efficiency (0-1)	Soil Textural Class	Soil Dry Weight (ton/ft3)	Nutrient Correction Factor	Annual Load (ton)	Load Reduction (ton)

2. Impaired streambank dimensions in the different watersheds

Watershed	Strm Bank	Length (ft)	Height (ft)	Lateral Recession	Rate Range (ft/yr)	Rate (ft/yr)	BMP Efficiency (0-1)	Soil Textural Class	Soil Dry Weight (ton/ft3)	Nutrient Correction Factor	Annual Load (ton)	Load Reduction (ton)
W2	Deschutes	425	4	3. Severe	0.01 - 0.05	0.03	0.95	Loams, sandy clay loams	0.045	0.85	2.2950	2.1803

Using the STEPL Results

Now all the steps are complete and you've run the model.

1. Click the "Total Load" worksheet tab to get the results for the load reduction estimates. These were calculated based on what you entered in the Input and BMPs tabs.

Report the numbers from purple shaded (middle) boxes on your annual load reduction form. These are your pollutant load reduction estimates.

Total Load This is the summary of annual nutrient and sediment load for each subwatershed. This sheet is initially protected.

1. Total load by subwatershed(s)

Watershed	N Load (no BMP)	P Load (no BMP)	BOD Load (no BMP)	Sediment Load (no BMP)	E. coli Load (no BMP)	N Reduction	P Reduction	BOD Reduction	Sediment Reduction	E. coli Reduction	N Load (with BMP)	P Load (with BMP)	BOD (with BMP)	Sediment Load (with BMP)	E. coli Load (with BMP)
	lb/year	lb/year	lb/year	t/year	Billion MPN/ye	lb/year	lb/year	lb/year	t/year	Billion MPN/ye	lb/year	lb/year	lb/year	t/year	Billion MPN/ye
W1	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W2	3.1	1.2	6.2	2.3	0	3.0	1.1	5.9	2.2	0.0	0.2	0.1	0.3	0.1	0.0
W3	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.1	1.2	6.2	2.3	0	3.0	1.1	5.9	2.2	0.0	0.2	0.1	0.3	0.1	0.0

2. Total load by land uses (with BMP)

Sources	N Load (lb/yr)	P Load (lb/yr)	BOD Load (lb/yr)	Sediment Load (t/yr)	E. coli Load (Billion MPN/yr)
Urban	0.00	0.00	0.00	0.00	0.00
Cropland	0.00	0.00	0.00	0.00	0.00
Pastureland	0.00	0.00	0.00	0.00	0.00
Forest	0.00	0.00	0.00	0.00	0.00
Feedlots	0.00	0.00	0.00	0.00	0.00
User Defined	0.00	0.00	0.00	0.00	0.00
Septic	0.00	0.00	0.00	0.00	0.00
Gully	0.00	0.00	0.00	0.00	0.00
Streambank	0.16	0.06	0.31	0.11	0.00
Groundwater	0.00	0.00	0.00	0.00	0.00
Total	0.16	0.06	0.31	0.11	0.00

E.Coli numbers will not appear until next STEPL update (TBD).

Using the STEPL Results

3. Enter the numbers from the middle purple section onto the Load Reduction Reporting Form
4. Submit to Ecology no later than January 15th

Relax-It's over!

Assistance

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Training materials can be found online-
Nonpoint Source Project Resources:
www.ecology.wa.gov