**Simple Estimator Training Session - Level 1**

1. Opening (10 minutes) (<https://stormwater.pca.state.mn.us/index.php?title=Guidance_and_examples_for_using_the_MPCA_Estimator>)
	1. Introductions (name, organization, how you will use the Estimator)
	2. Prequisites
		1. Downloaded the Estimator workbook
		2. Know the basic structure of the Estimator
		3. Know the basic functionality of the Estimator
2. Problem 1 (10 minutes)
	1. Area 1:
		1. One acre each of residential, commercial, industrial, mixed, park, and transportation
		2. In each land use implement 0.5 acres of biofiltration
	2. Area 2:
		1. One acre each of residential, commercial, industrial, mixed, park, and transportation
		2. In each land use implement 0.5 acres of infiltration
	3. Review the summary sheet



1. Problem 2 (10 minutes)
	1. Areas 1 and 2 the same but assume street sweeping on transportation land use reduces sediment load by 50%. How is this accounted for?
	2. Area 3
		1. One acre of agricultural land
		2. Convert agricultural land to residential in Section 2 of worksheet
		3. Implement infiltration across entire one acre
	3. Review the summary sheet



1. Problem 3 (20 minutes)
	1. Use the same areas and acreages as Problem 2
	2. Keep the one acre transition to residential in Area 3
	3. Delete the BMPs in Area 1 and Area 2
	4. Section 2: adjust emcs and/or runoff coefficients and note the results
	5. Sections 3 and 4: implement BMPs and note the results
	6. Report out
2. Open exercise (10 minutes)
	* 1. Keep the inputs the same as when you reported out but change BMP removal efficiency
		2. Keep the inputs the same as when you reported out but change annual fraction treated
		3. Keep the inputs the same as when you reported out but change the amount infiltrated
3. Discussion questions (15 minutes)
	1. What practices might result in a change in emc?
	2. What practices might result in a change in runoff coefficient?
	3. What conditions apply when removal efficiency changes?
	4. What conditions apply when fraction treated changes?
	5. What conditions apply when fraction infiltrated changes?
4. Problem 4 – drainage is to the lake (45 minutes (25-10-10)
	1. Area 1: C and D soils
	2. Area 2: A and B soils
	3. Area 3: C soils up in watershed; A and B soils in lower watershed
	4. Must reduce phosphorus loading by 30 percent
	5. Report out
	6. Wrap up



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| **Land use** | **Acres** |
| **Area 1** | **Area 2** | **Area 3** |
| **Commercial** | 75 |   |   |
| **Industrial** | 80 |   | 110 |
| **Multi-use** | 975 | 275 | 235 |
| **High canopy res** | 200 | 200 | 80 |
| **Park** | 70 |   |   |
| **Agriculture** |   | 220 | 240 |
| **Transportation** | 75 |   | 60 |
| **Low canopy res** | 400 |   |   |