



National Experience. Local Focus.

GIS Tool for SGMA Water Budgets (CWEMF 2017)

March, 20, 2017

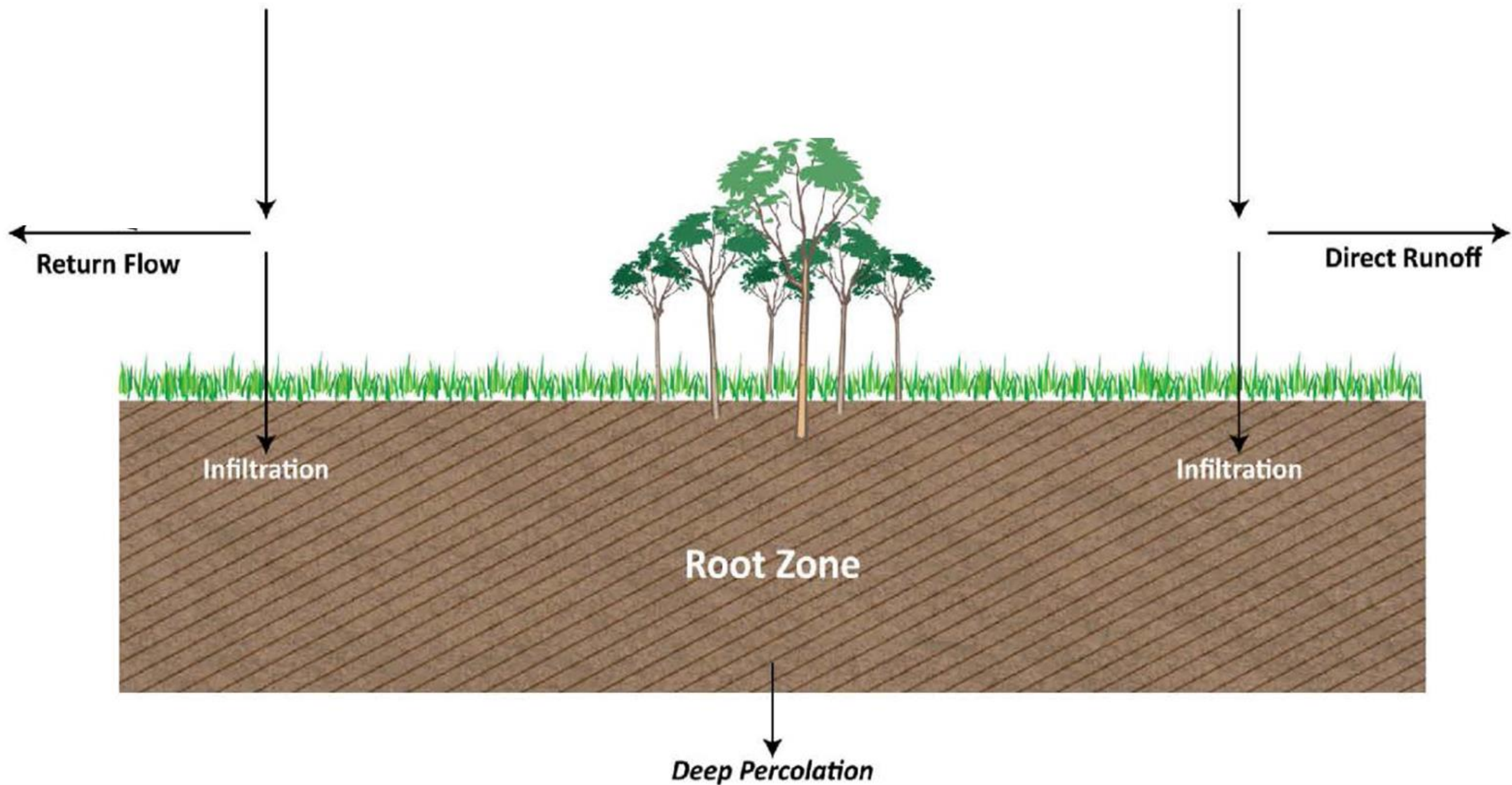
PRESENTERS

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Water Sales

Rain



Return Flow

Direct Runoff

Infiltration

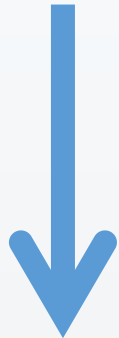
Infiltration

Root Zone

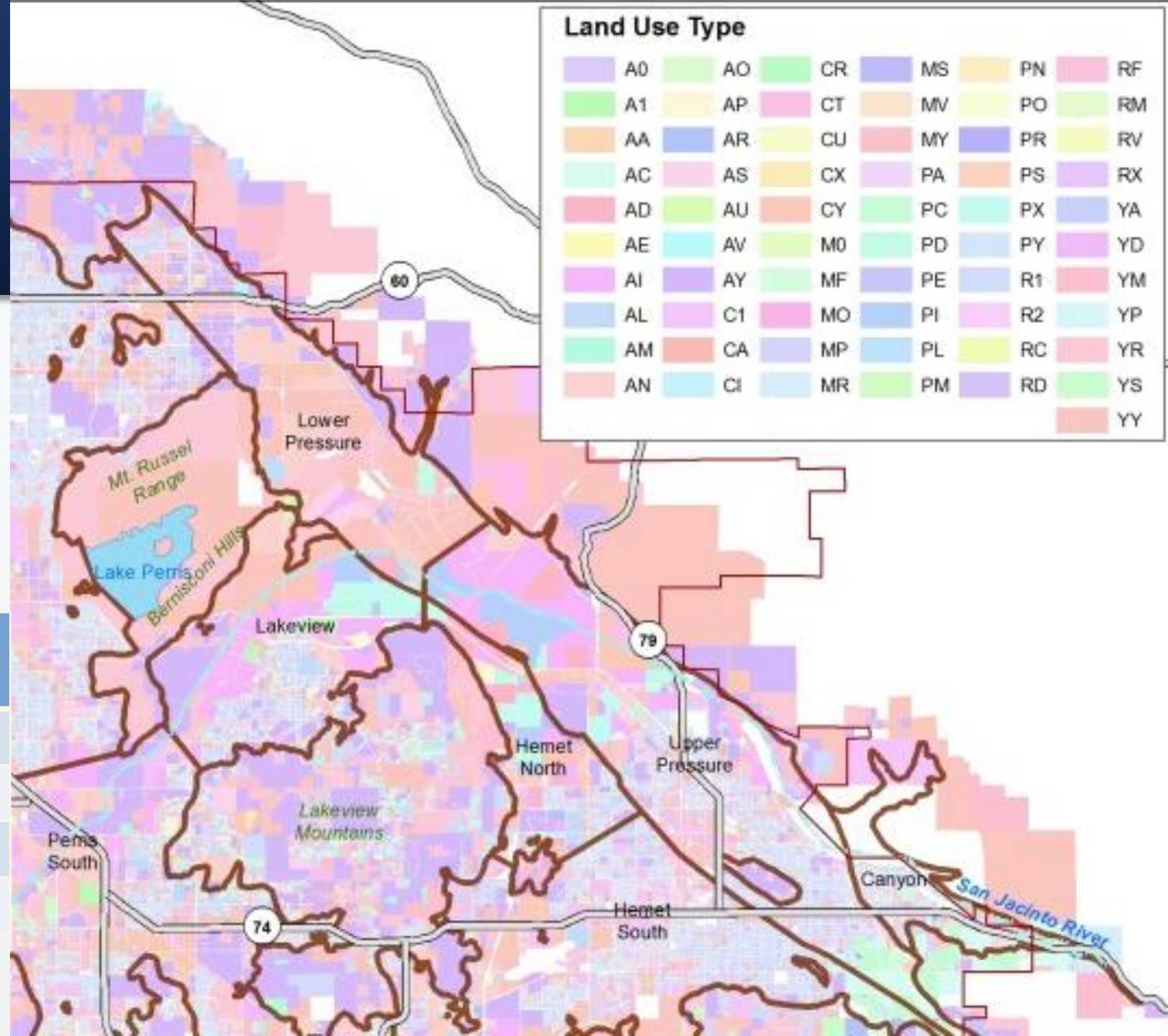
Deep Percolation

Available Information

- Land Use Shapefiles



Land Use Classification	Pervious Factor
Agriculture	0.96
Commercial	0.3
Residential	0.45
Vacant	0.98



Available Information

- Soil Maps
 - Hydrologic Soil Groups
 - A, B, C & D



Hydrologic Soil Group

Drainage Factor

A

0.4

B

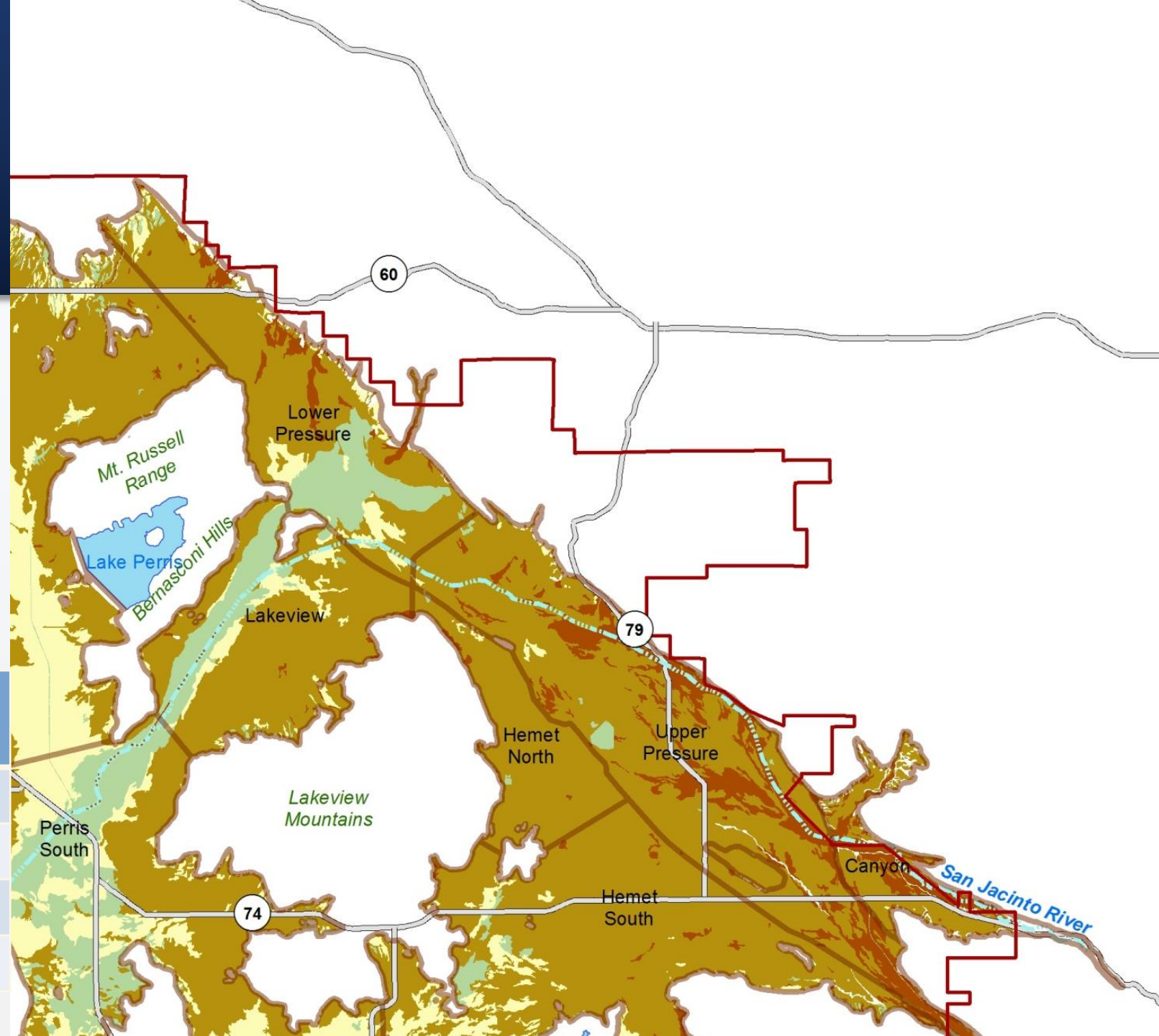
0.3

C

0.2

D

0.1






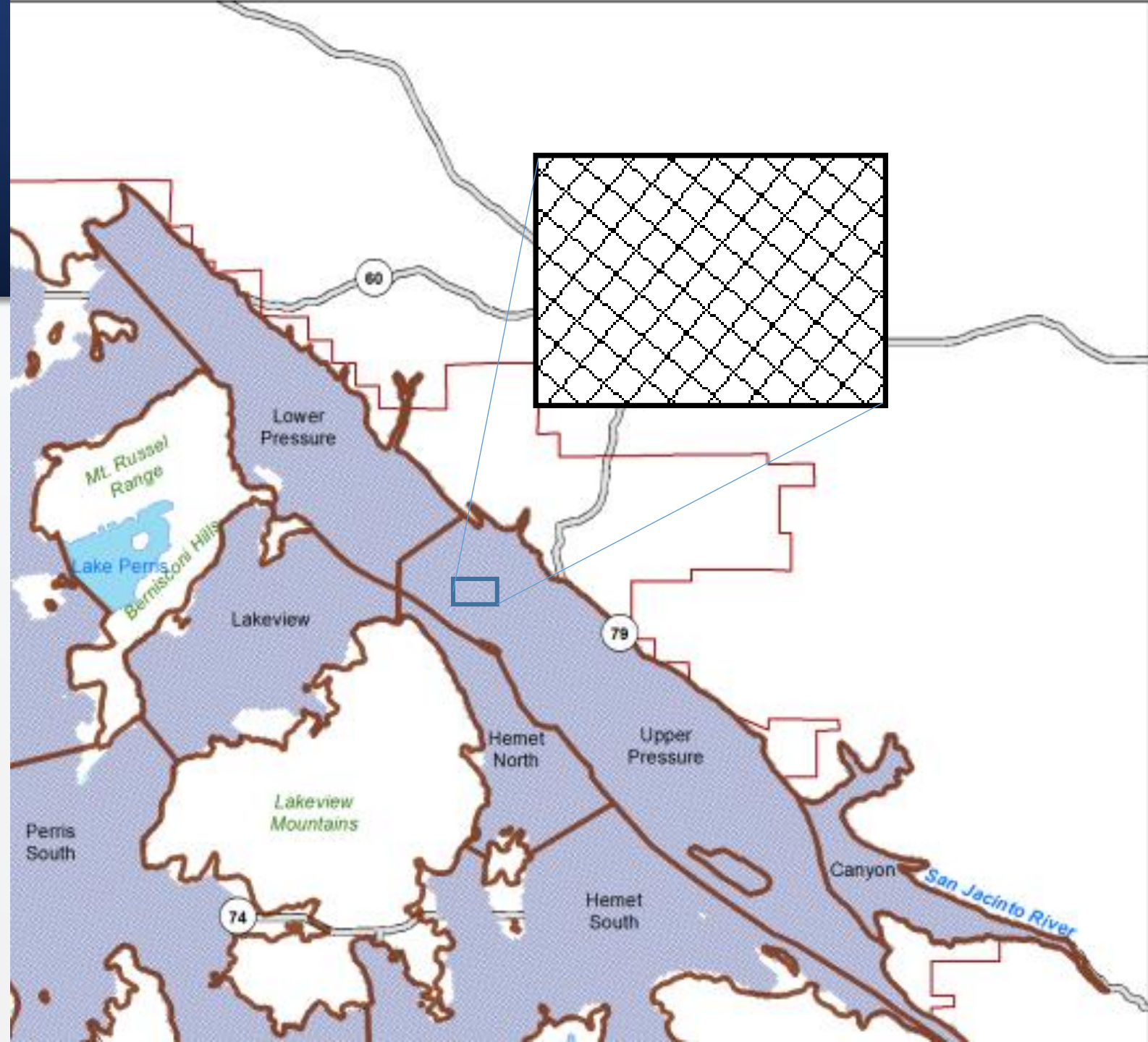
Percolation Factors

Percolation Factor =

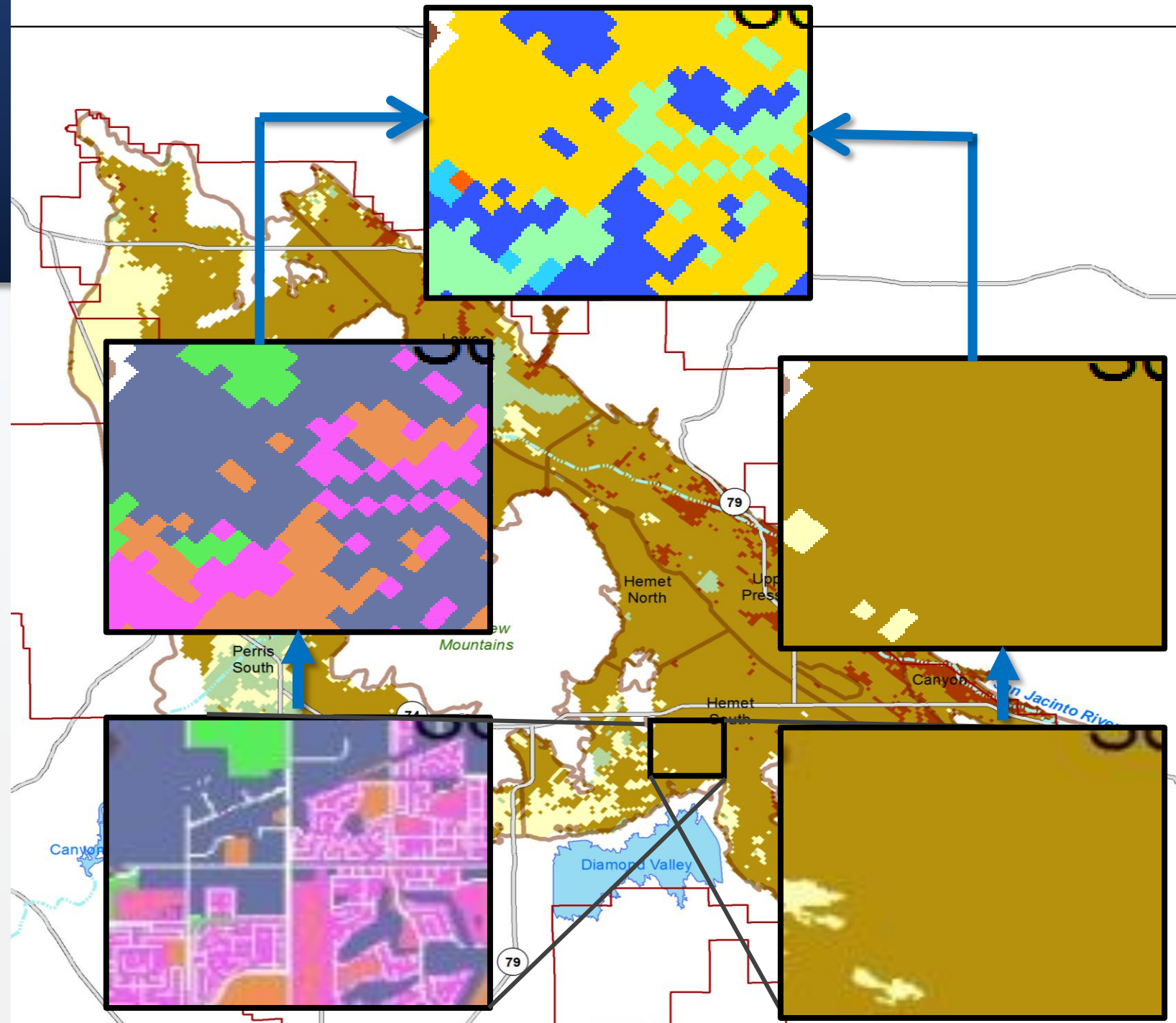
Pervious Factor (land use) * Drainage Factor (soil)



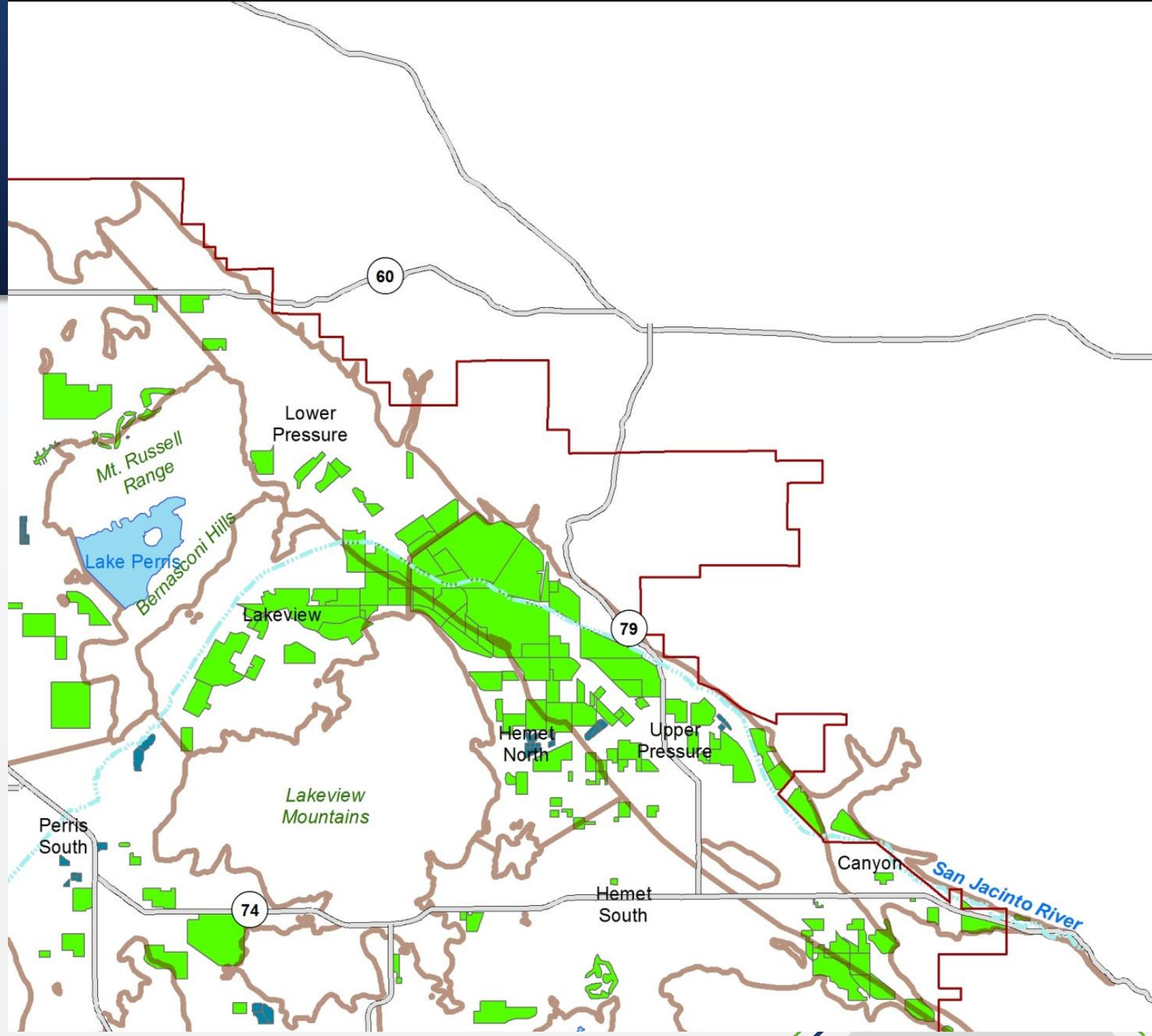
Generate a Grid for Study Area



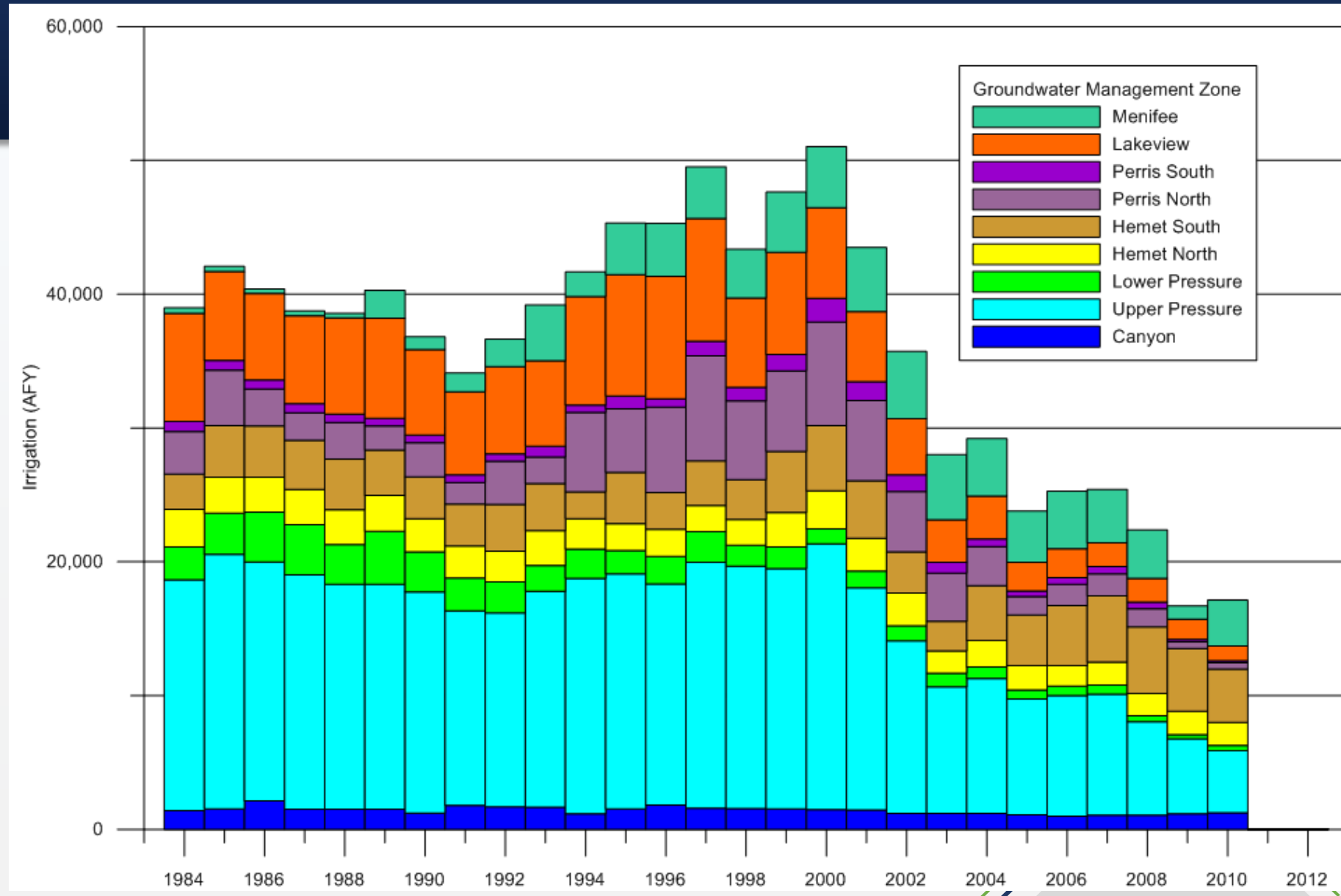
Generate Percolation Factor Shapefile



Applied Water – Irrigation



Applied Water – Irrigation



Applied Water – Irrigation

