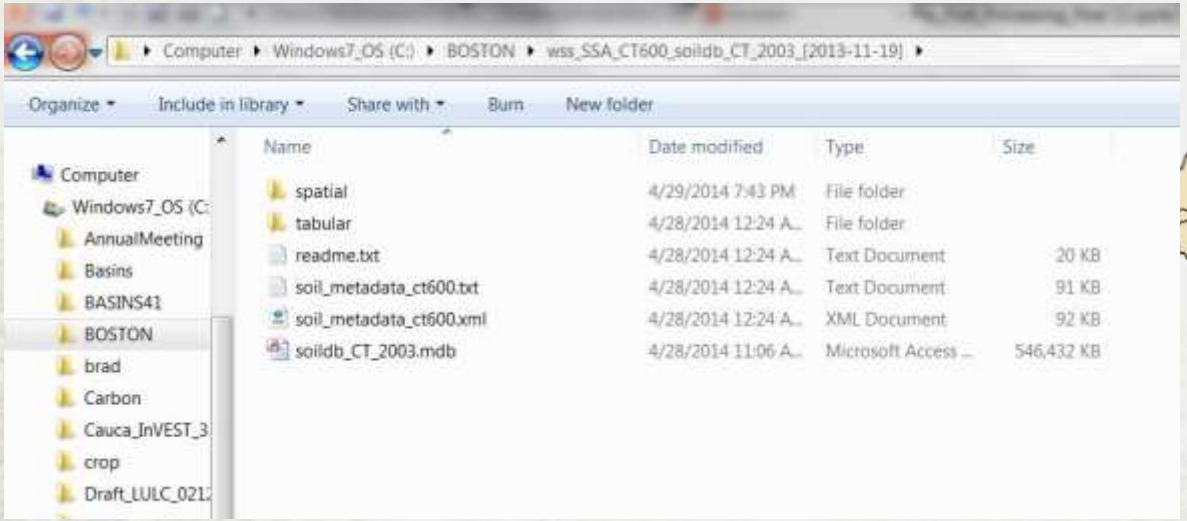
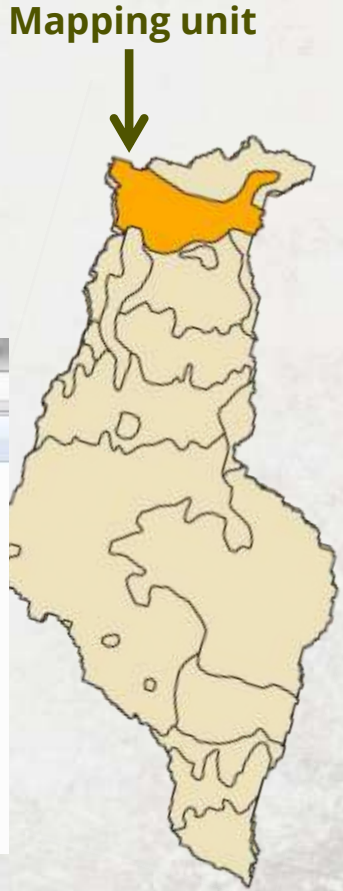
WORKING WITH SOILS DATA AND DERIVING MODEL INPUTS

SOILS

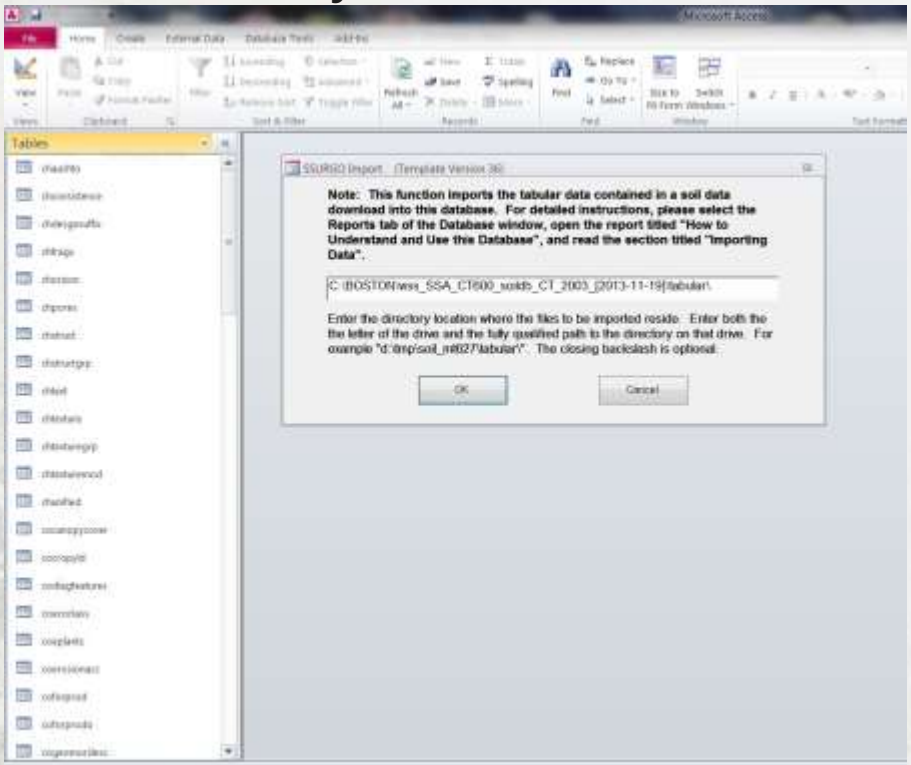
- If in the U.S., try USDA Soil Data Viewer
  - Download Viewer from USDA
  - Download county/state soil data from NRCS

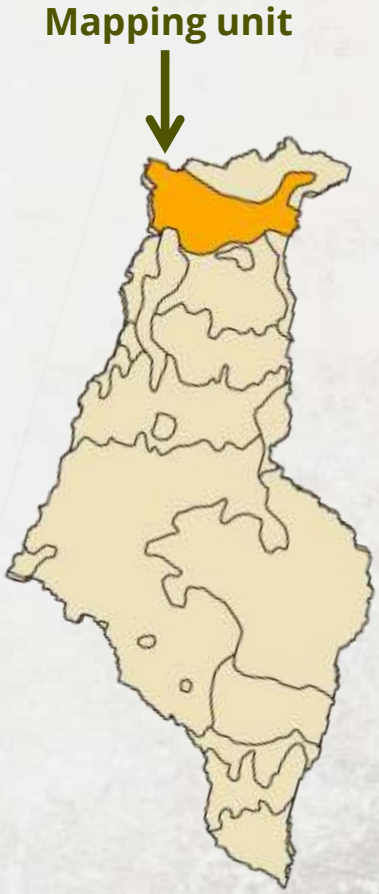




SOILS

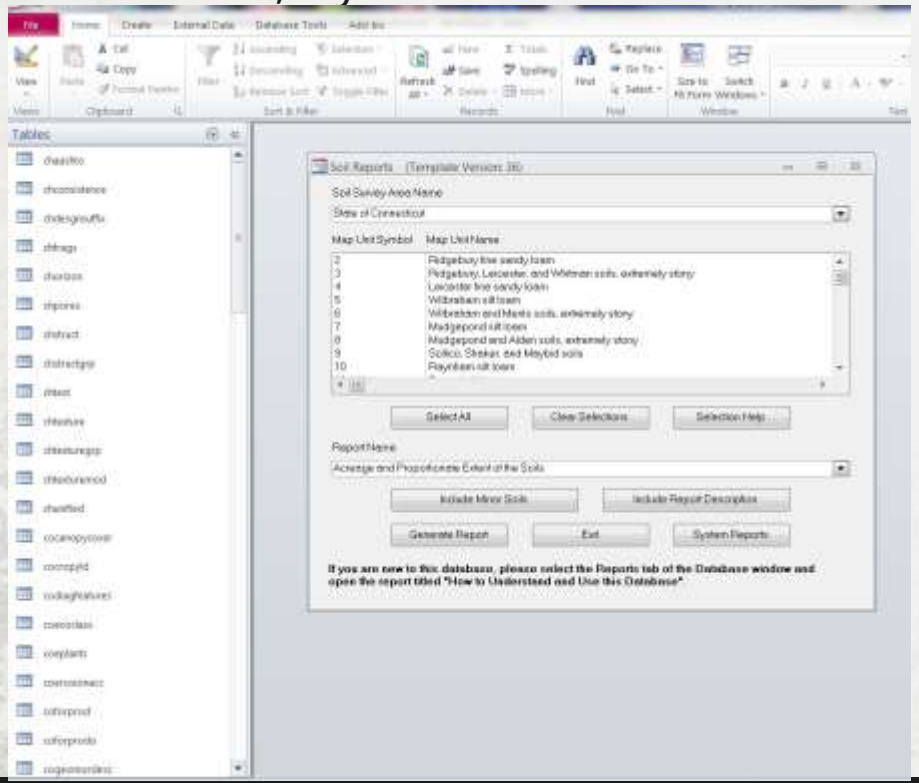
- If in the U.S., try USDA Soil Data Viewer

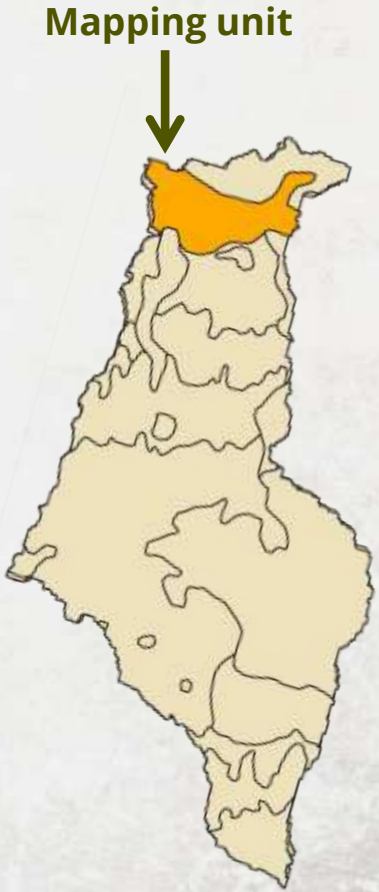




SOILS

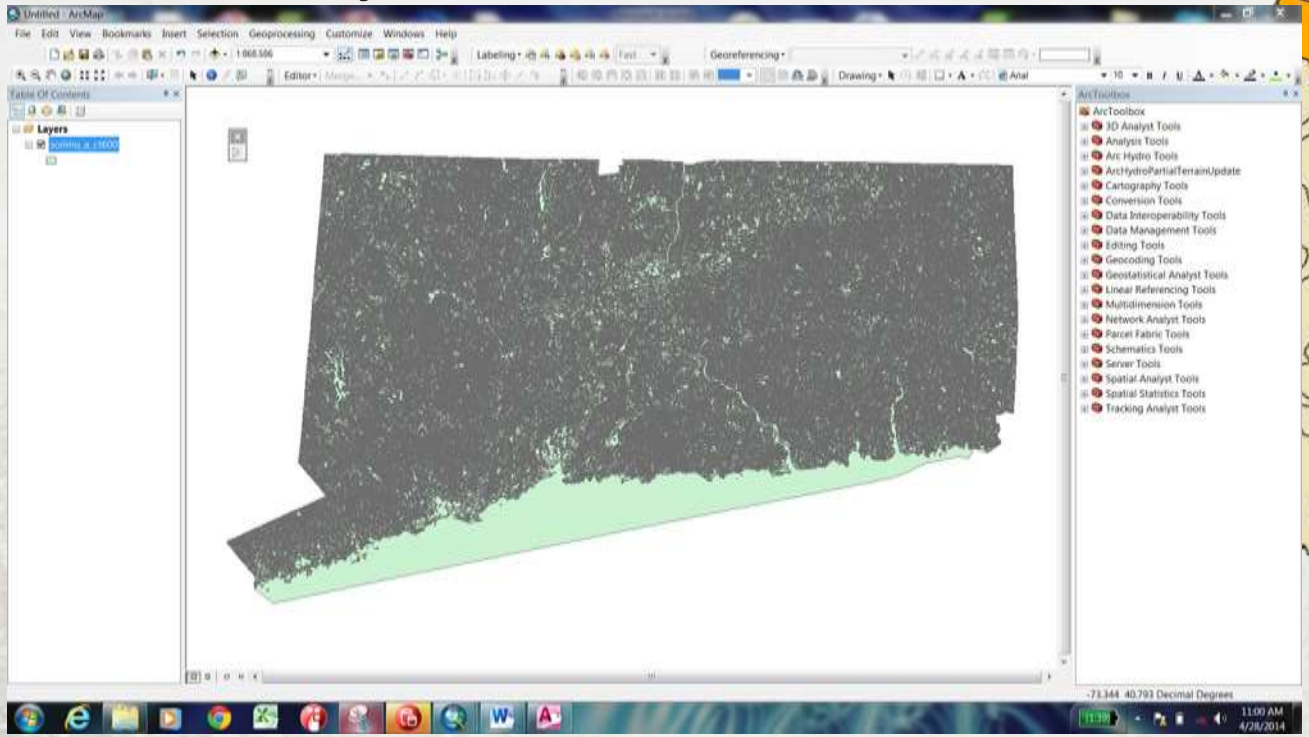
- If in the U.S., try USDA Soil Data Viewer



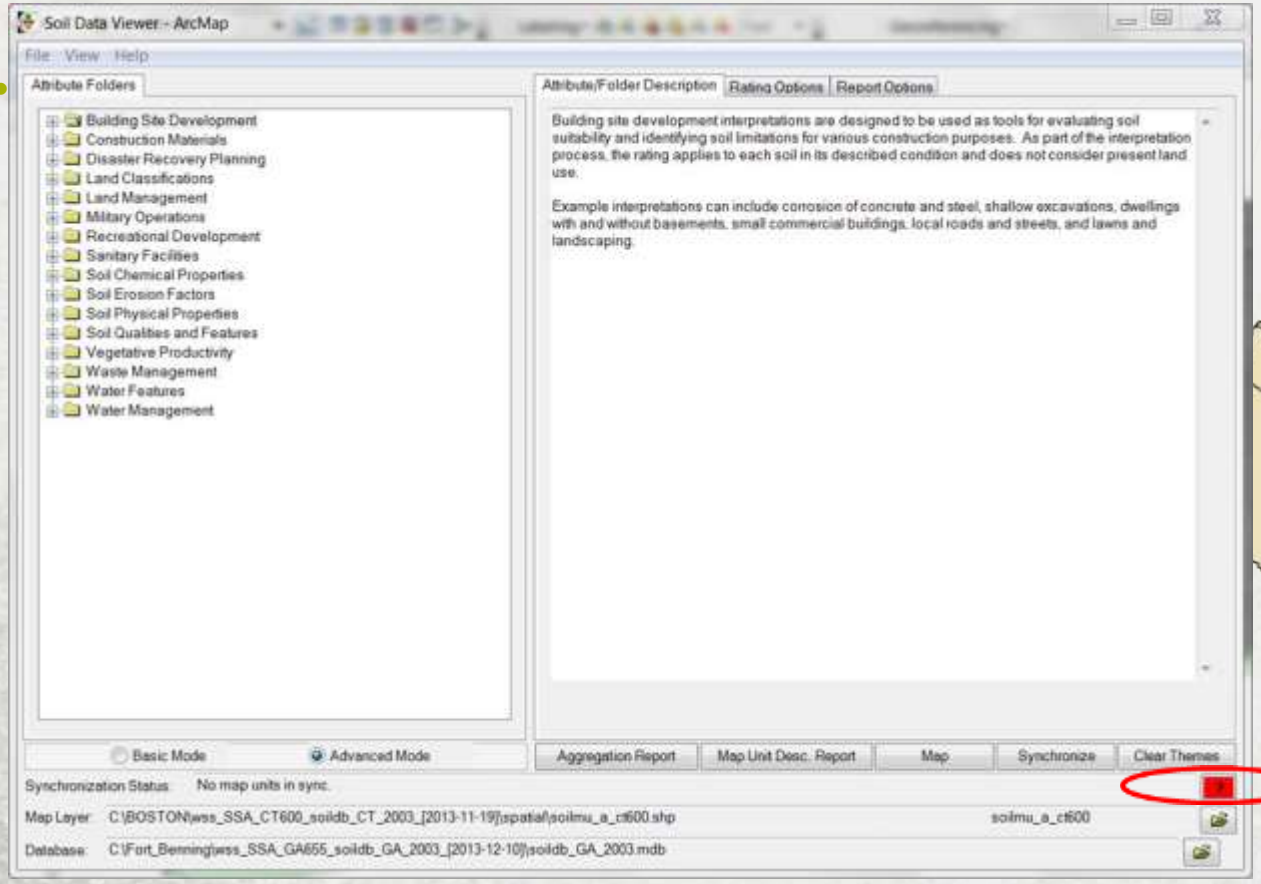


SOILS

- If in the U.S., try USDA Soil Data Viewer

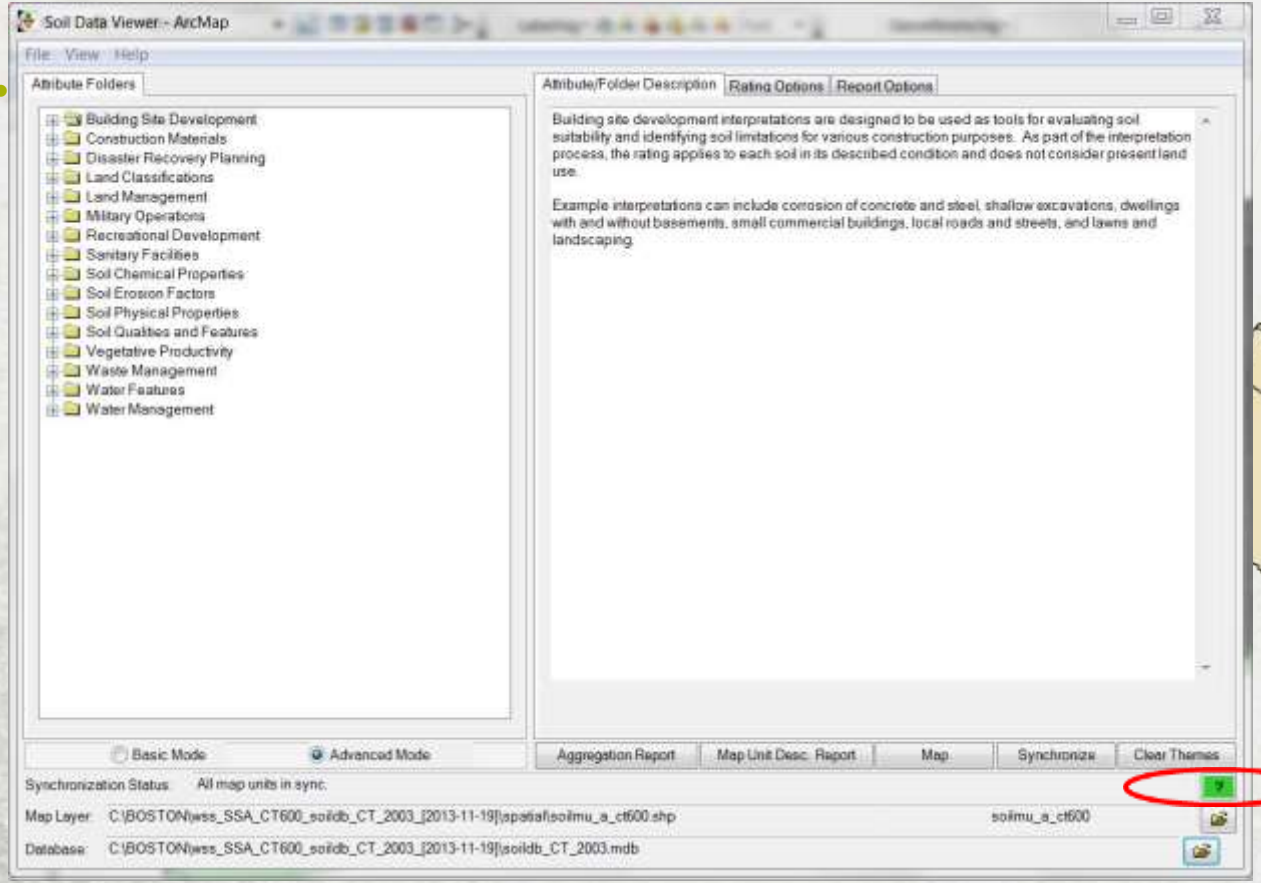


SOILS



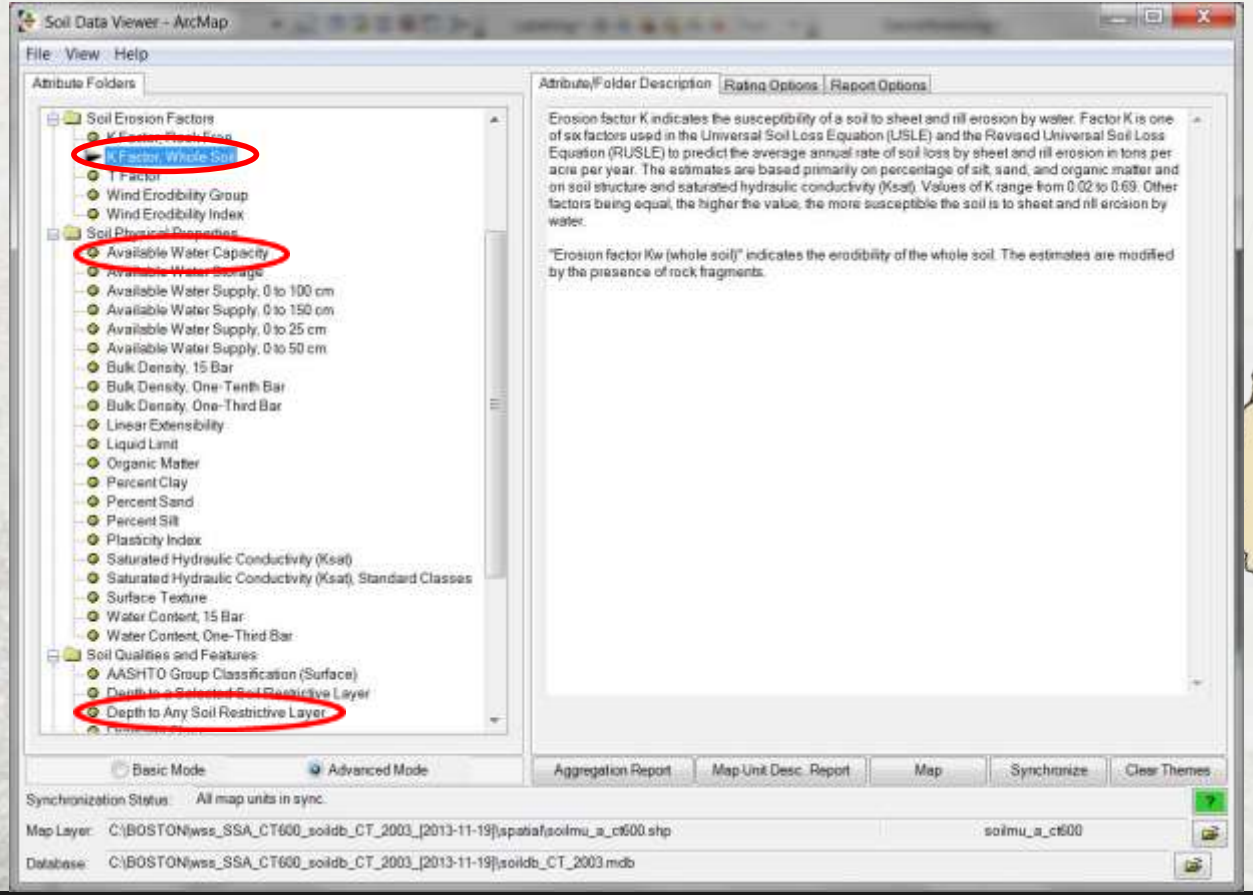
Mapping unit

SOILS

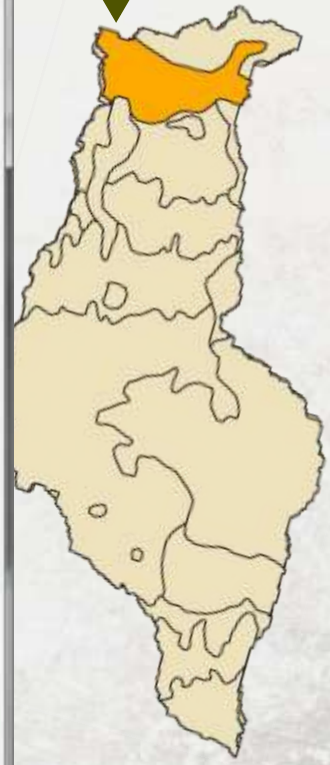


Mapping unit

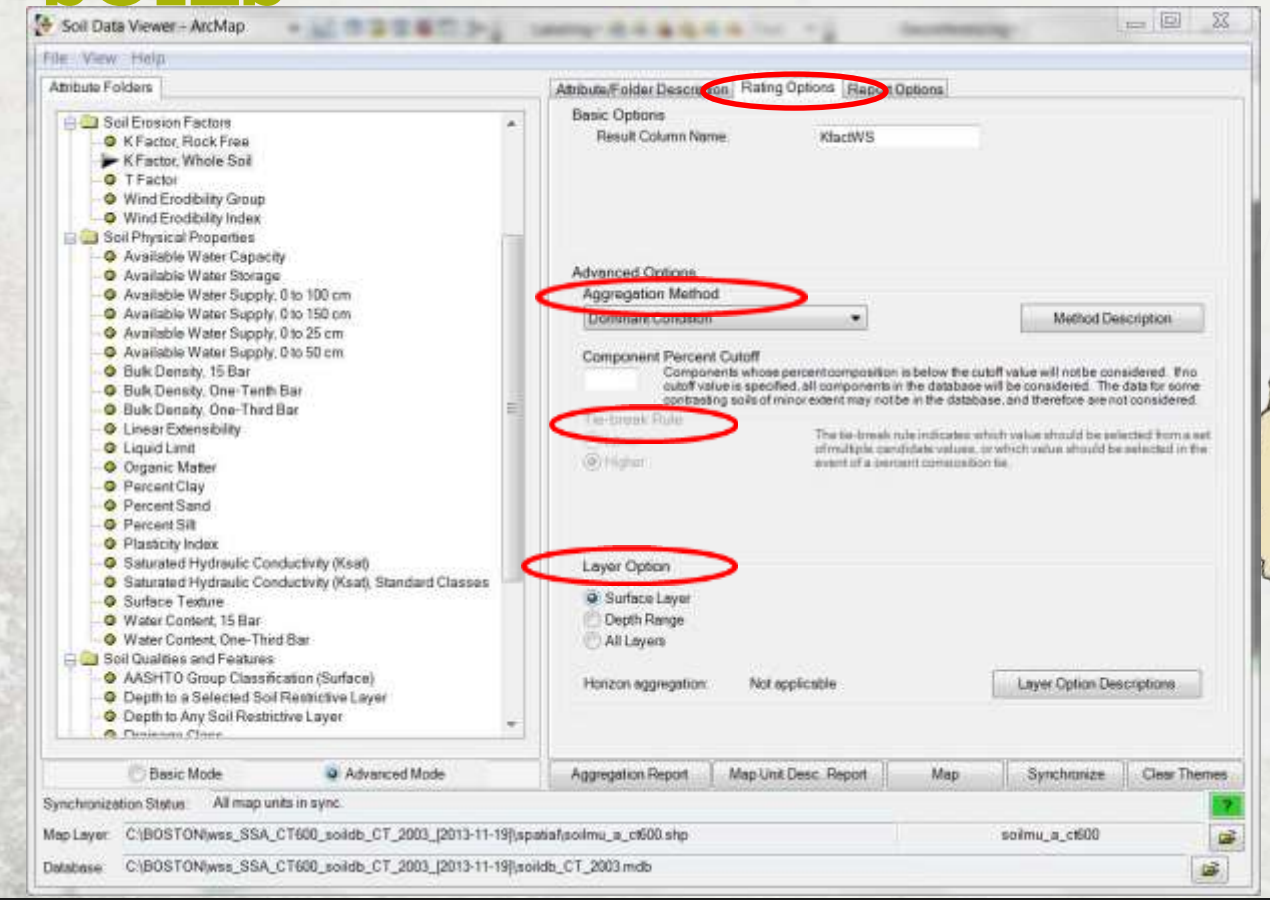
SOILS



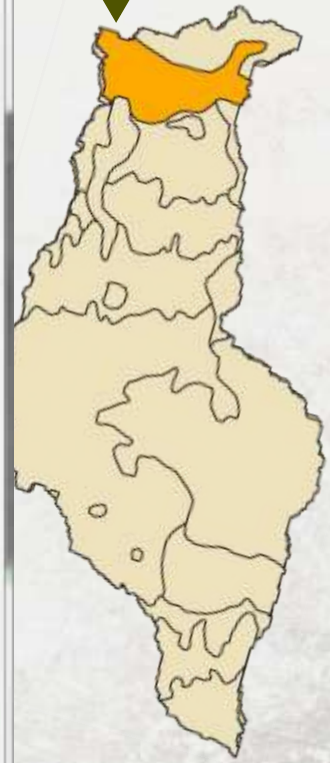
Mapping unit



SOILS

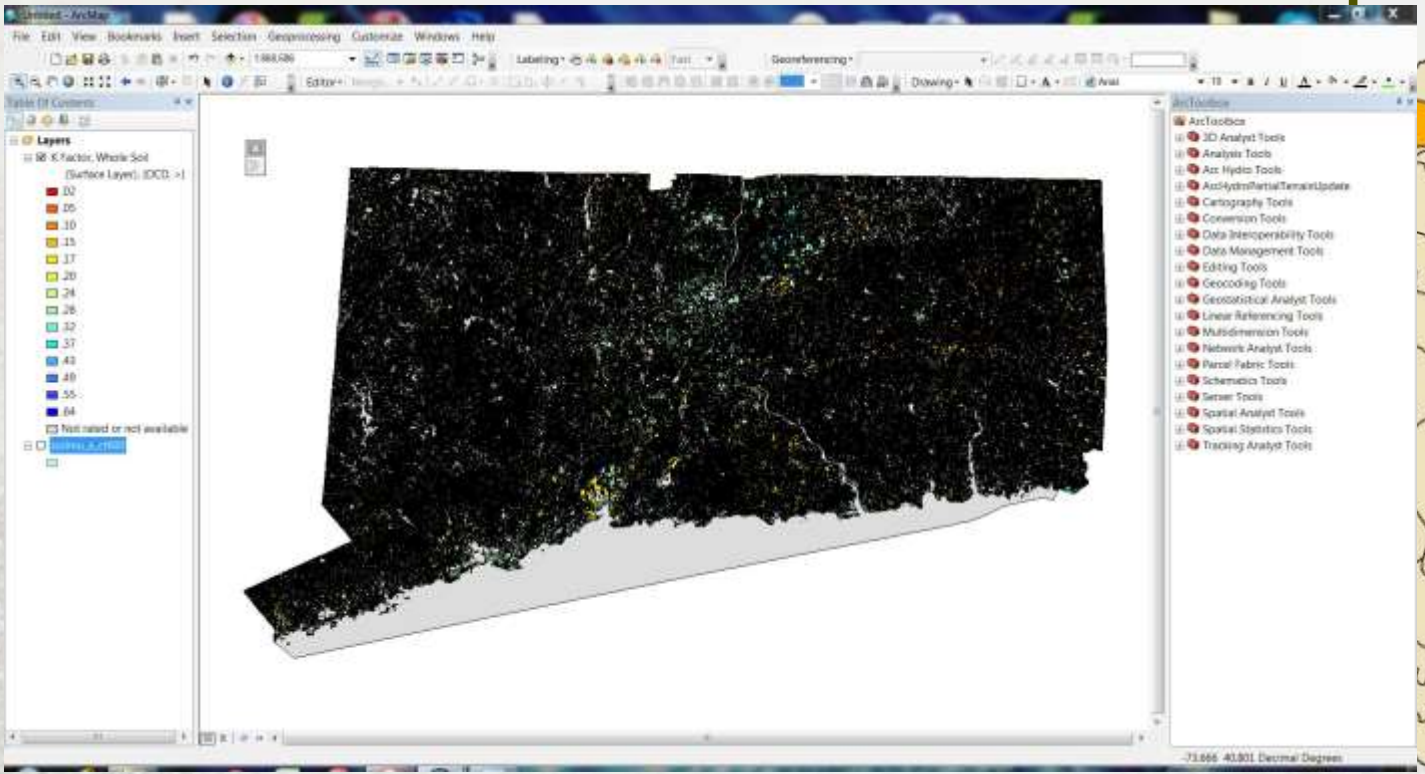


Mapping unit



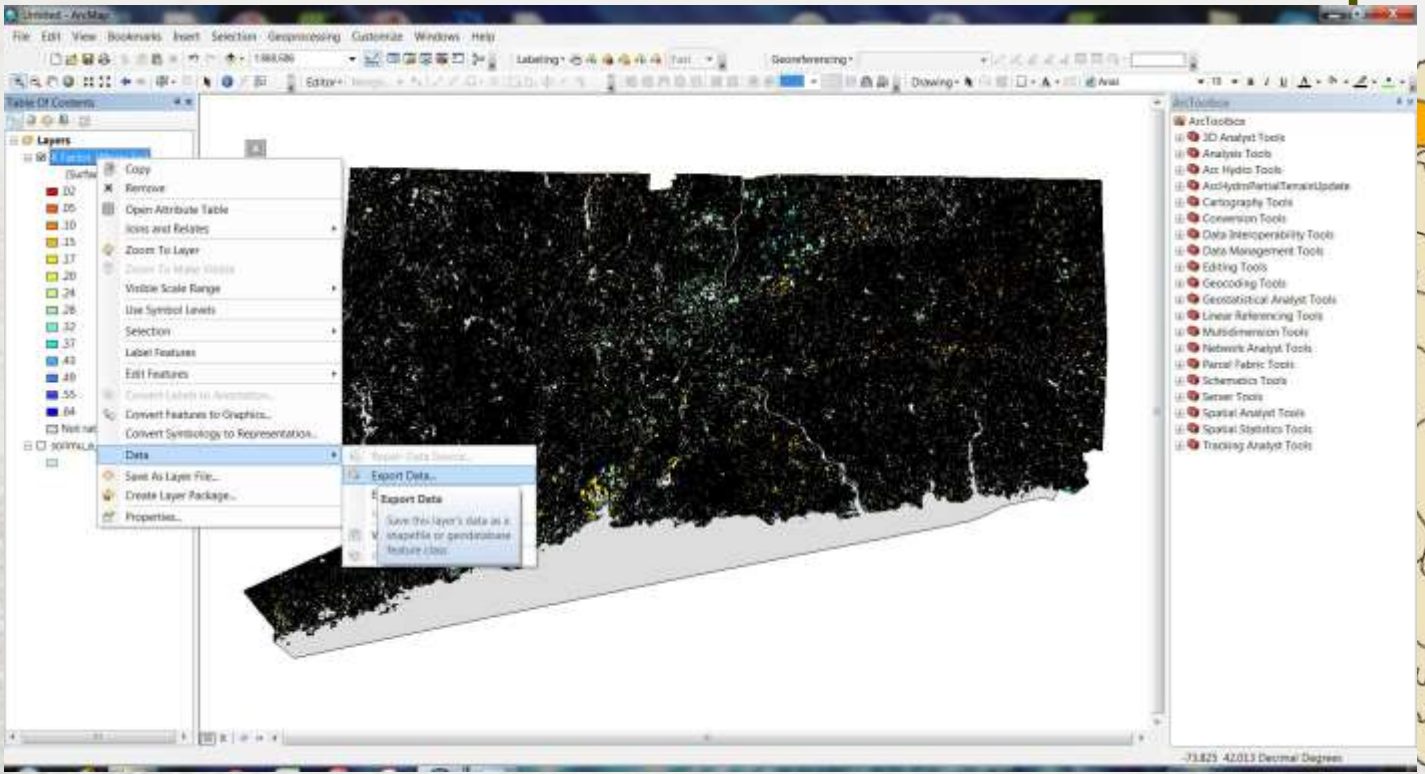
SOILS

Mapping unit



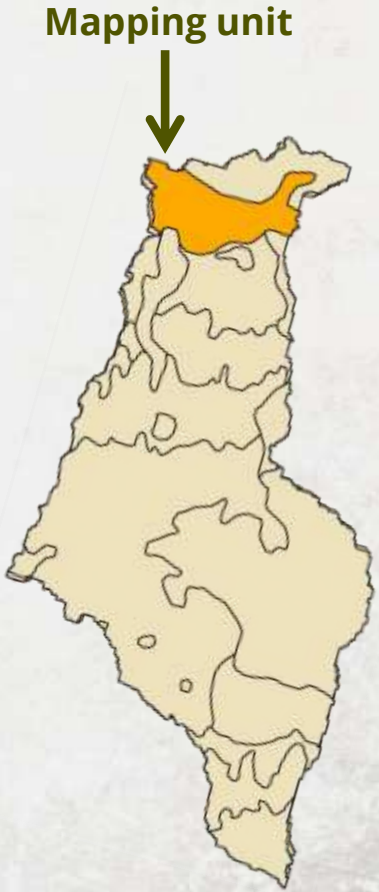
SOILS

Mapping unit



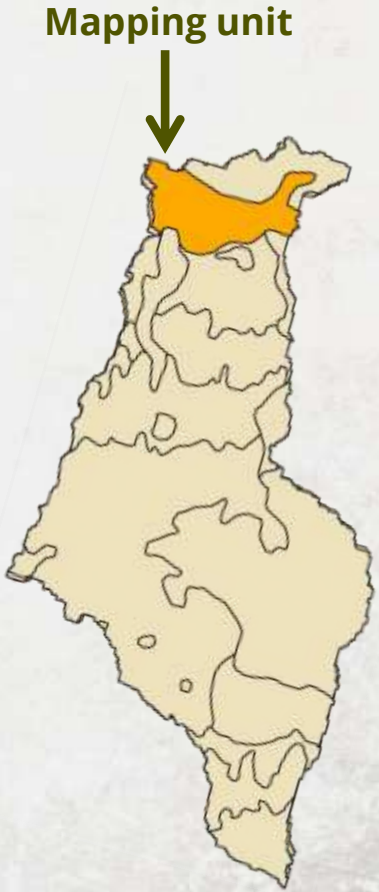
SOILS

- If in the U.S., try USDA Soil Data Viewer
  - Soil depth: Weighted Average, Tie-break - lower
    - 200 cm default for null values
  - AWC: Weighted average, Tie-break - lower, All layers
  - Erodibility: Dominant condition, Surface layer



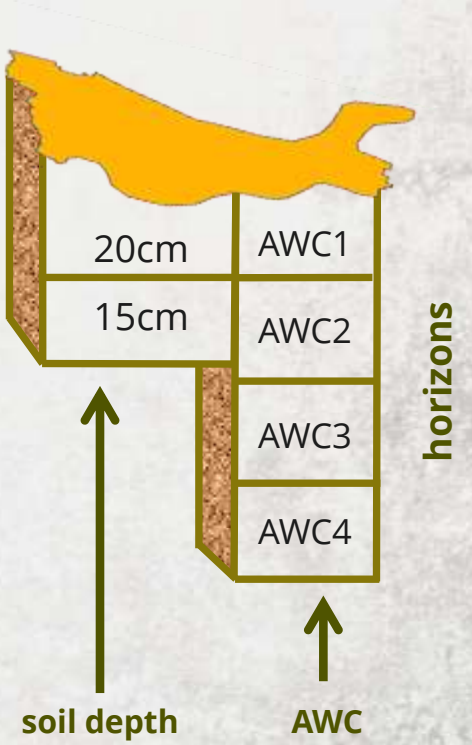
SOILS

- If in the U.S., try USDA Soil Data Viewer
- If working with other soil databases…



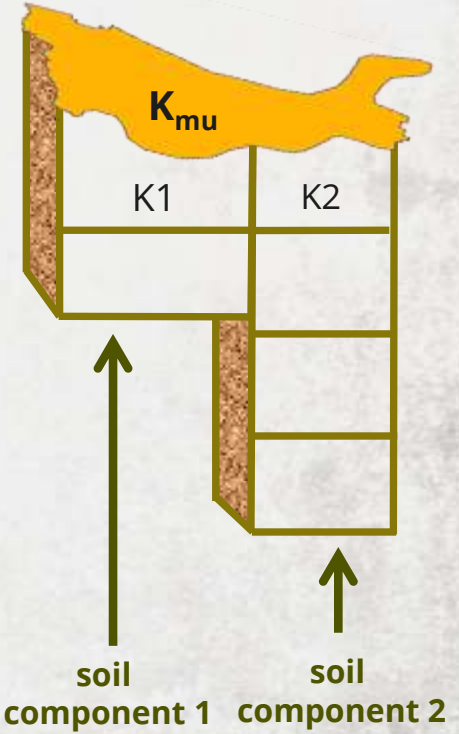
SOILS

- If in the U.S., try USDA Soil Data Viewer
- If working with other soil databases…
  - Soil depth: add up horizons or find max depth field
  - AWC: Sum of provided AWC values across horizons



SOILS

- If in the U.S., try USDA Soil Data Viewer
- If working with other soil databases…
  - Soil depth: add up horizons or find max depth field
  - AWC: Sum of provided AWC values across horizons
  - Erodibility: %sand/silt/clay/organic in top horizon; use Roose table to convert to K values



SOIL S

- If in t
- If wor
  - S
  - A
  - E

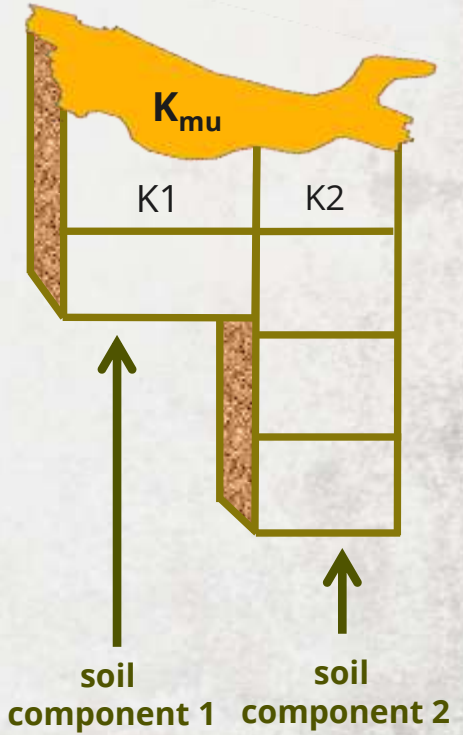
eld

ons

n;

Estimating soil erodibility (K) based on soil texture and organic material content.

Textural Class	Spanish Texture Class	Soil composition			Mean K (based on % organic material)		
		Sand	Silt	Clay	unknown	< 2%	≥ 2 %
Clay	*Arcilloso*	0-45	0-40	40-100	0.22	0.24	0.21
Sandy Clay	*Arcilloso arenoso*	45-65	0-20	35-55	0.2	0.2	0.2
Silty Clay	*Arcilloso limoso*	0-20	40-60	40-60	0.26	0.27	0.26
Sand	*Arenoso*	86-100	0-14	0-10	0.02	0.03	0.01
Sandy Loam	*Franco arenoso*	50-70	0-50	0-20	0.13	0.14	0.12
Clay Loam	*Franco - arcilloso*	20-45	15-52	27-40	0.3	0.33	0.28
Loam	*Franco*	23-52	28-50	7-27	0.3	0.34	0.26
Loamy Sand	*Franco arenoso*	70-86	0-30	0-15	0.04	0.05	0.04
Sandy Clay Loam	*Franco arenso arcilloso*	45-80	0-28	20-35	0.2	0.2	0.2
Silty Clay Loam	*Franco limoso arcilloso*	0-20	40-73	27-40	0.32	0.35	0.3
Silt	*Limoso*	0-20	88-100	0-12	0.38	0.41	0.37
Silty Loam	*Franco limoso*	20-50	74-88	0-27	0.38	0.41	0.37



SOILS

- If in the U.S., try USDA Soil Data Viewer
- If working with other soil databases…
  - Soil depth: add up horizons or find max depth field
  - AWC: Sum of provided AWC values across horizons
  - Erodibility: %sand/silt/clay/organic in top horizon; use Roose table to convert to K values
  - Mapping unit value = weighted average across compenents