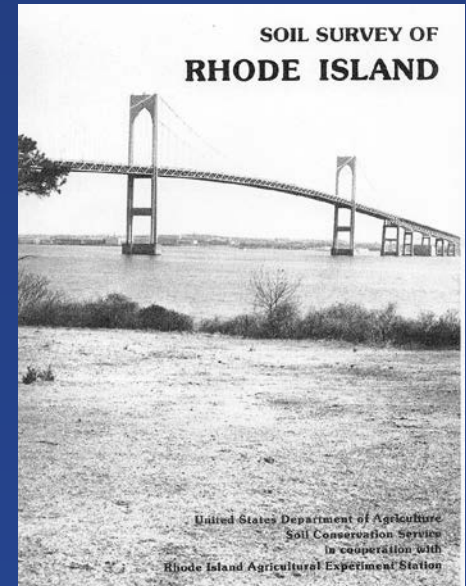


Dean Rector, RI SS Party Leader



RI Soil Survey History

- 1904 – State-wide survey
- 1930's County Soil Surveys
- 1981 – Soil Survey of RI
 - Major field work 1965-75
 - Over 25 mappers worked on it.
 - Most descriptions only down to 30-40 inches.
 - Mapped at 1:12,000 – published at 15,840 (unrectified imagery).
 - All old paper surveys are online with maps.

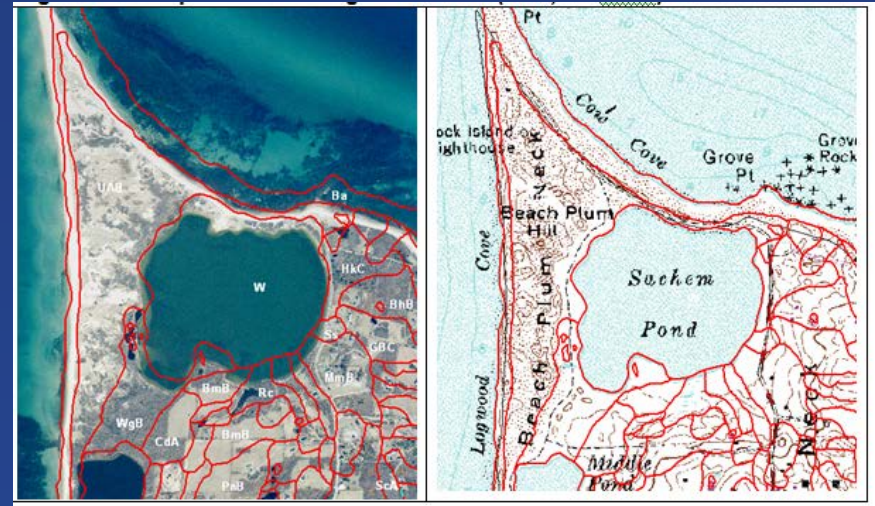


1981 RI Soil Survey - continued

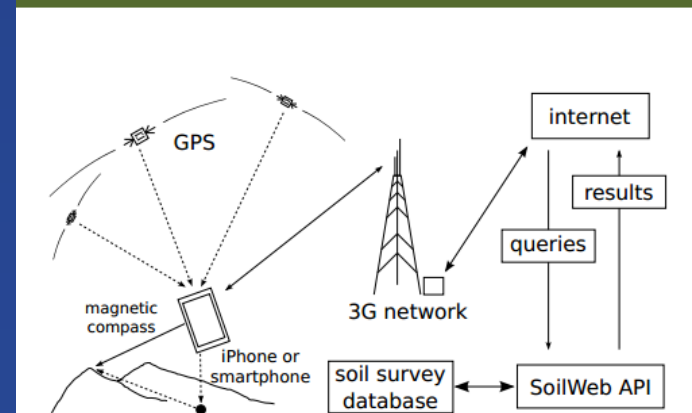
- Digitizing conducted during 90's by URI-EDC and Private Firm – topo based used for hydro, polygons (pre ortho).
- SSURGO Certified in 1996 RI600.
- Attribute tables added to RIGIS soil – 29 interpretations, url link to MUDs, metadata (most users use RIGIS soils).
- Long range plan developed to modernize the survey.
- 2004-09 tabular changes made in NASIS to correct/update data.
- 2010 First spatial edits made – 1st example of a Coastal Zone, fixed numerous errors...
- 2012 Second round of spatial edits, 1st Freshwater Soil Survey
- 2014 **Ongoing edits**, completed coastal zone, RIGIS attributes added.

Why Spatial Edits?

- Original digitizing used USGS Topo (NAD-27) as basemap.
- When overlaid onto orthophotography there is a spatial shift in the polygons. Cannot be corrected.
- If the polygon is in wrong location the tabular is **USELESS!**
- SoilWeb is game changer.

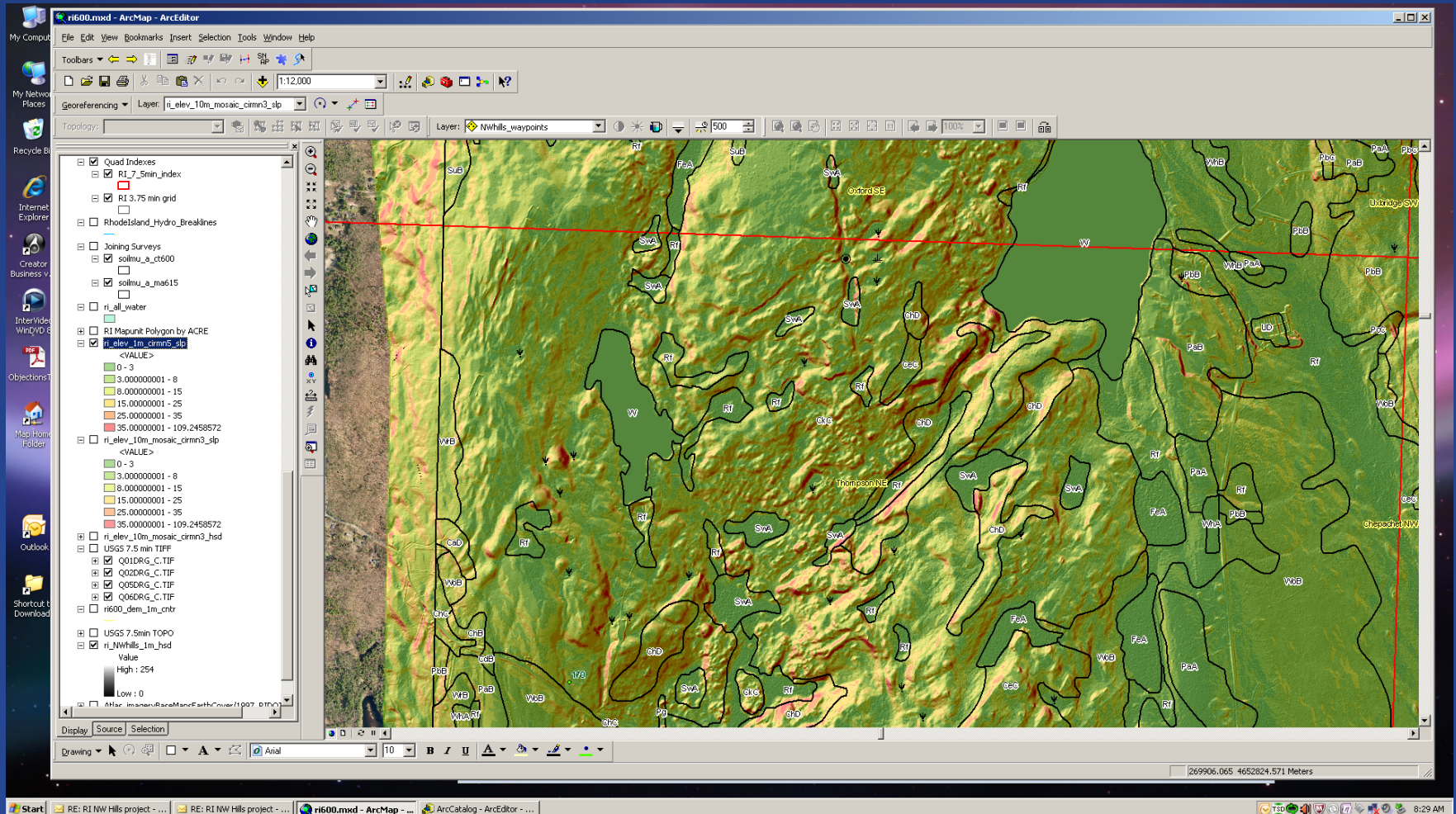


SoilWeb API: Generalized for GPS-enabled Smartphones

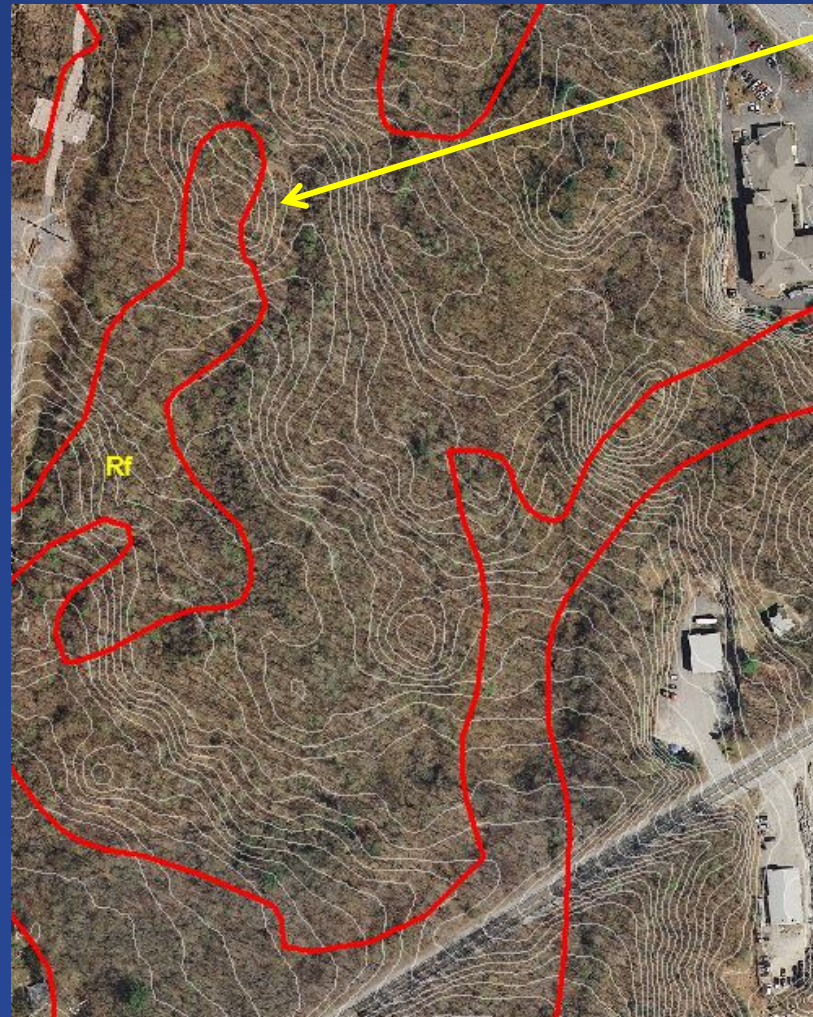


Data used: Lidar and products, NWI, Historic Imagery, Geo maps, Pictometry, High res imagery, old soil maps...

LiDAR Baby!

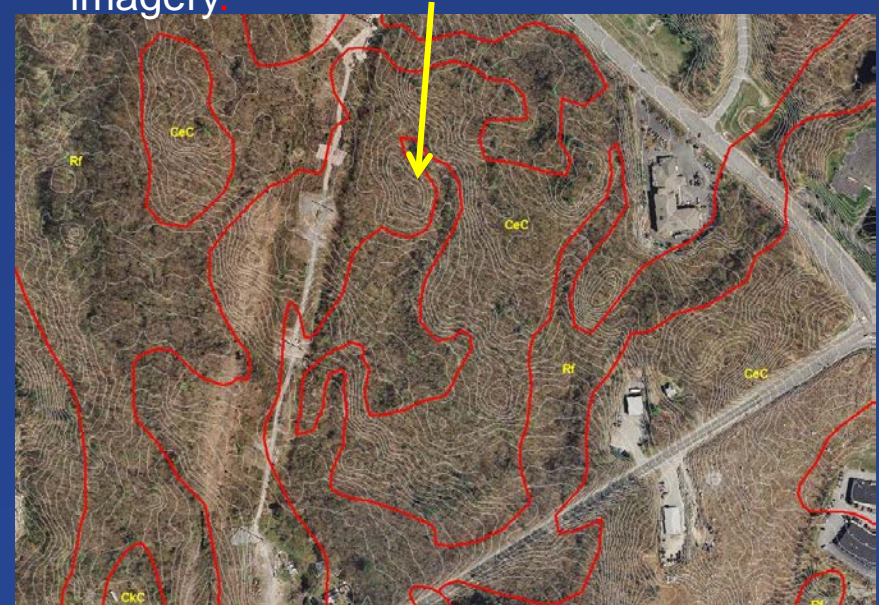


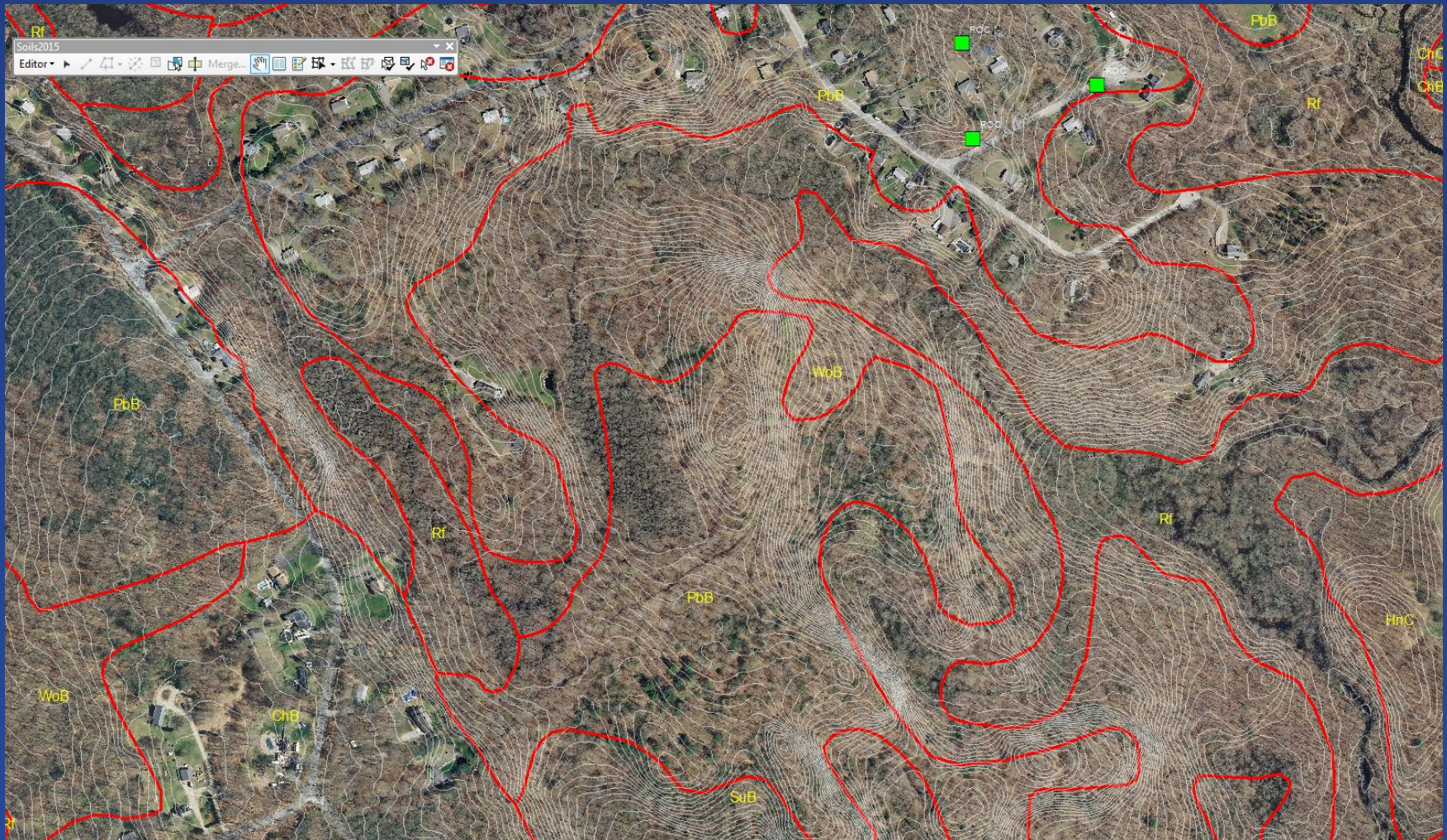
Spatial Edit Pre/Post



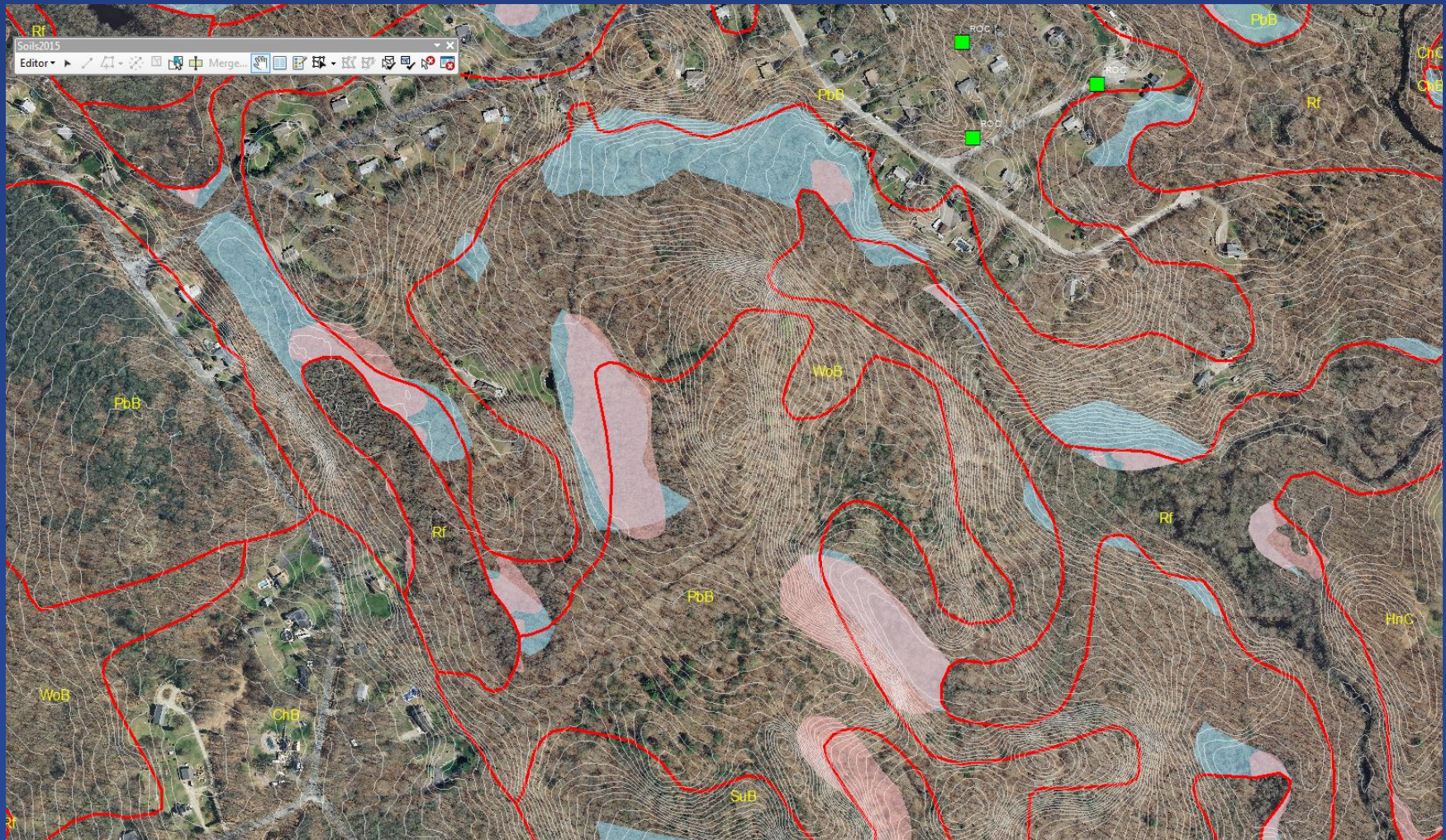
Rf unit cut through a convex hill – current
RI600 SSURGO

Problem fixed in 2013 thanks to Lidar and
imagery.

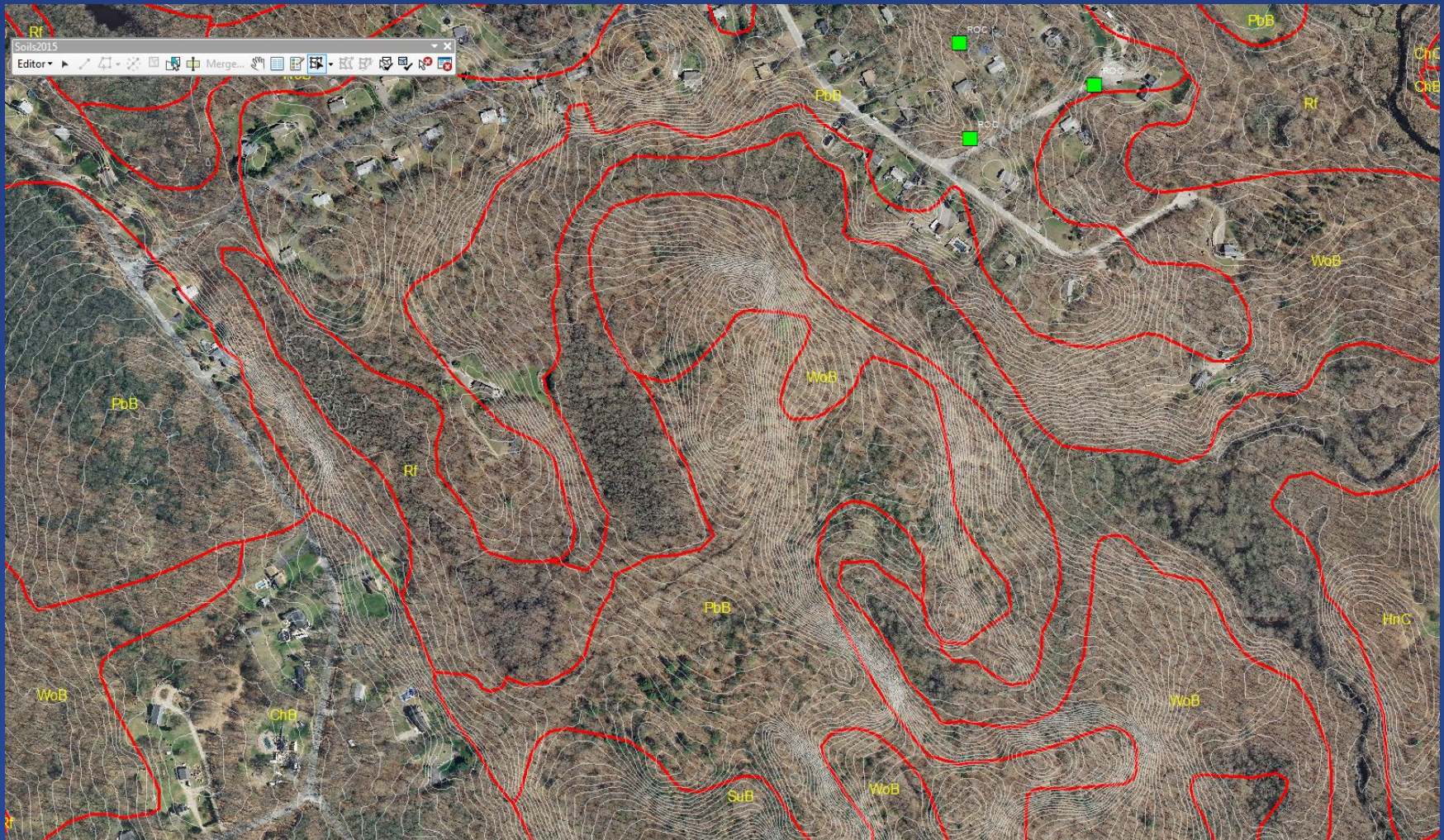


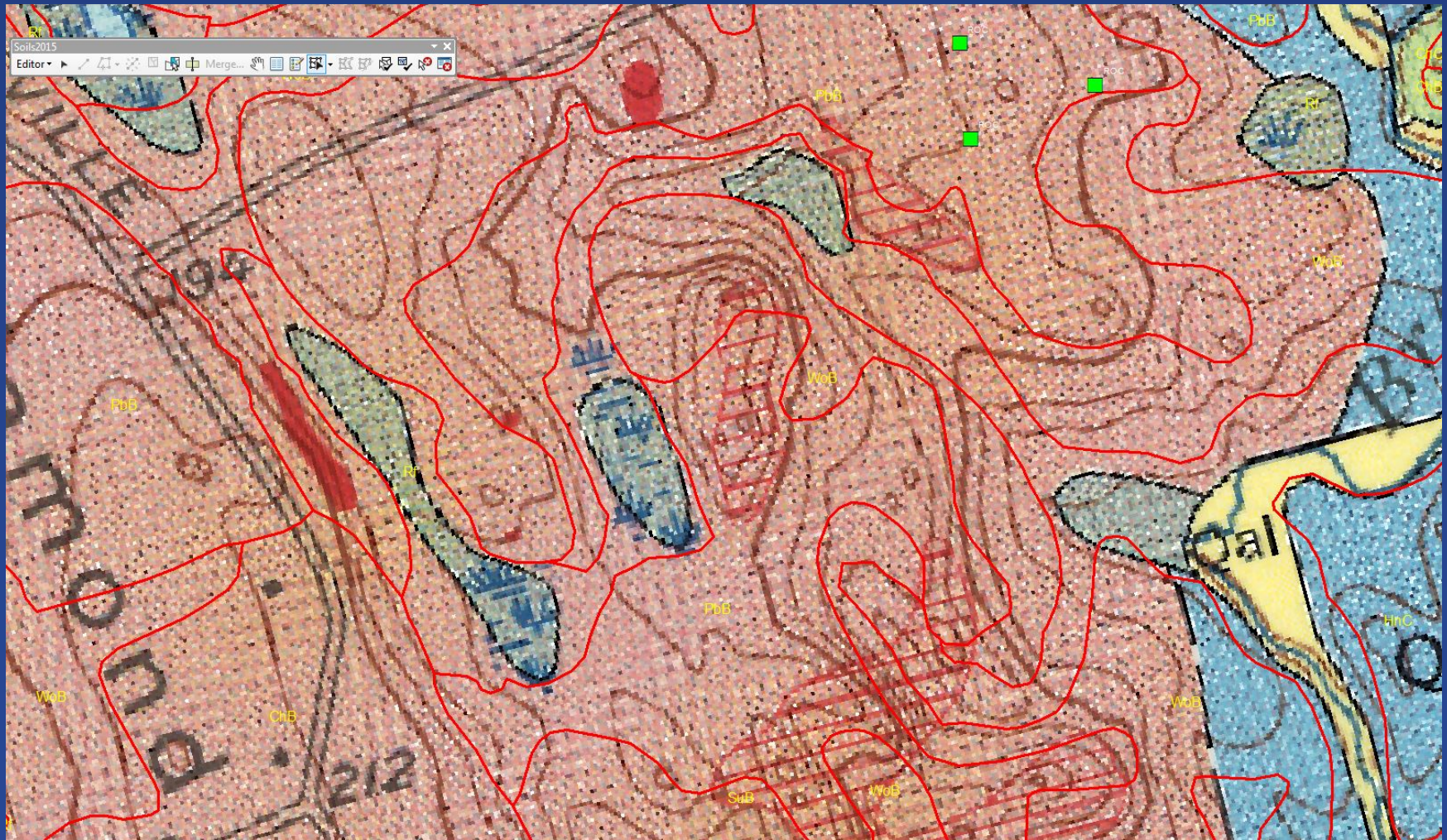


Spatial Edit Process



Spatial Edit Process

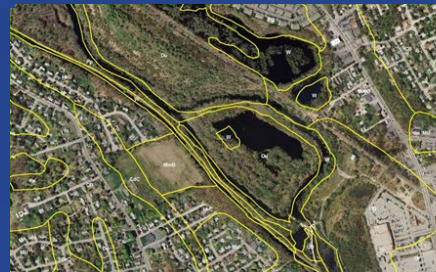
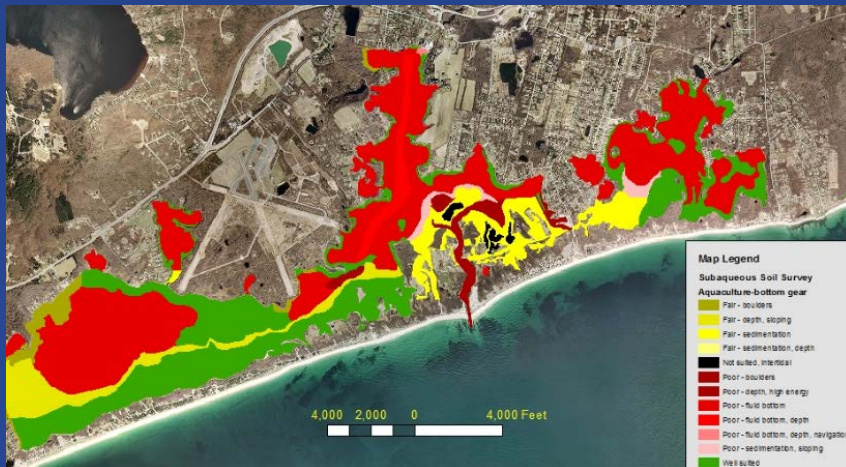




Other improvements/fixes

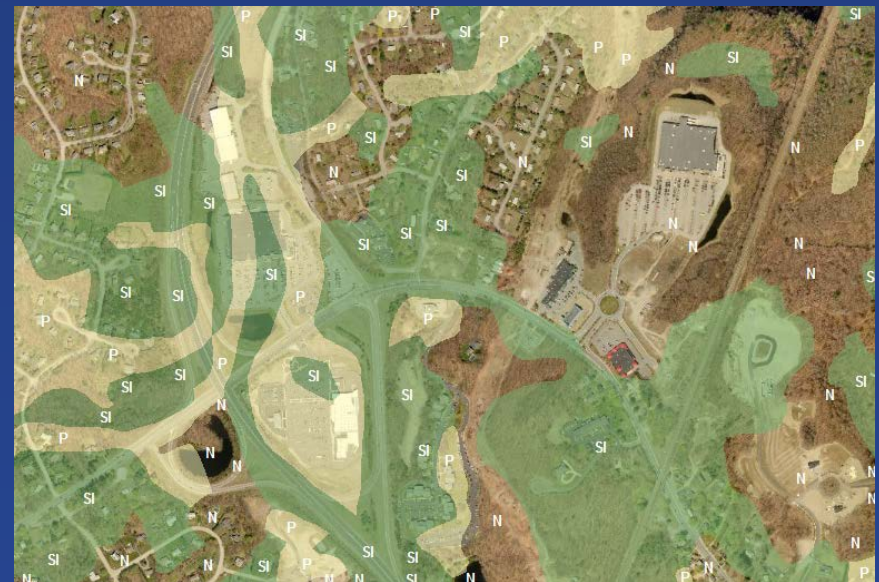
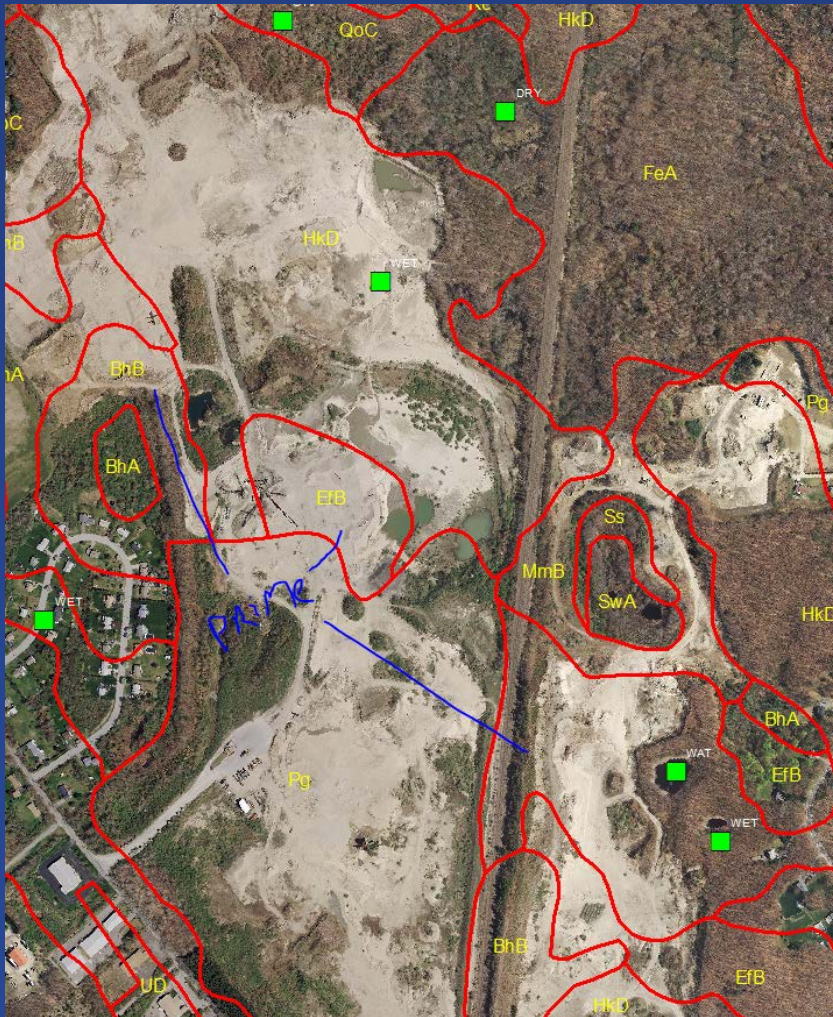


Area of Swansea (really Saco) labeled UD incorrectly.
VPD Floodplain mapped Merrimac
Water not cut and extends to upland – oops.



Also - Flooding interps,
coastal, Urban, ESD, Ksat,
water-tables.

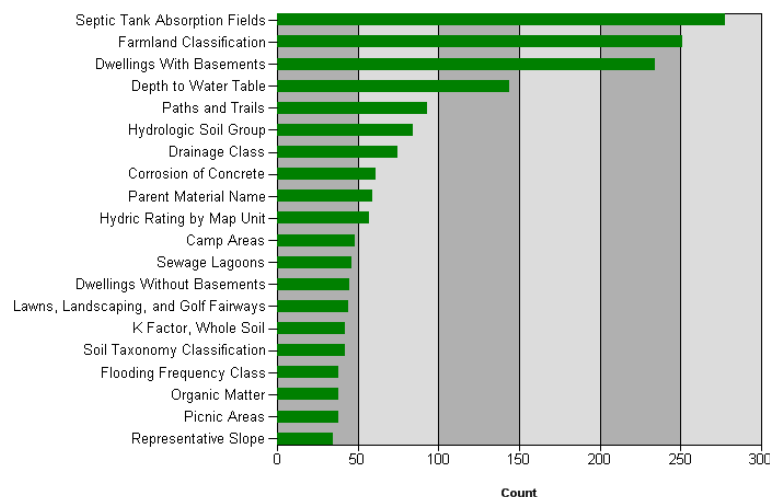
My Dilemma – adjust land-use?



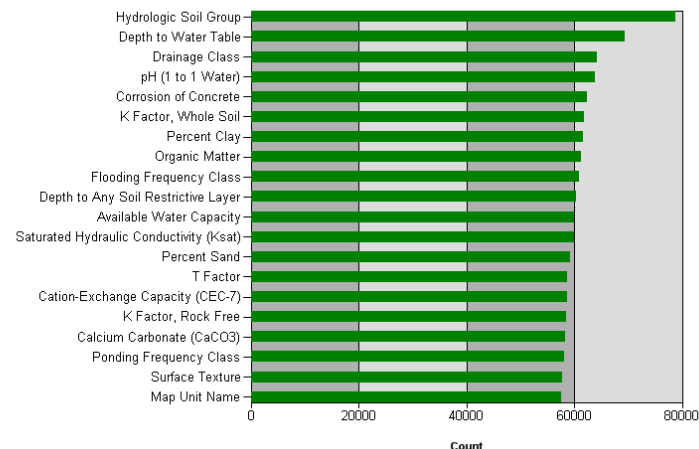
Uses of Soils Data

- Top requests – is it wet and does it perc!
- Most interps deal with water-table, water movement.
- Farmland classification.
- Town ordinances.
- Recreational.
- Drainage classes.

Usage of Ratings (Top 20)

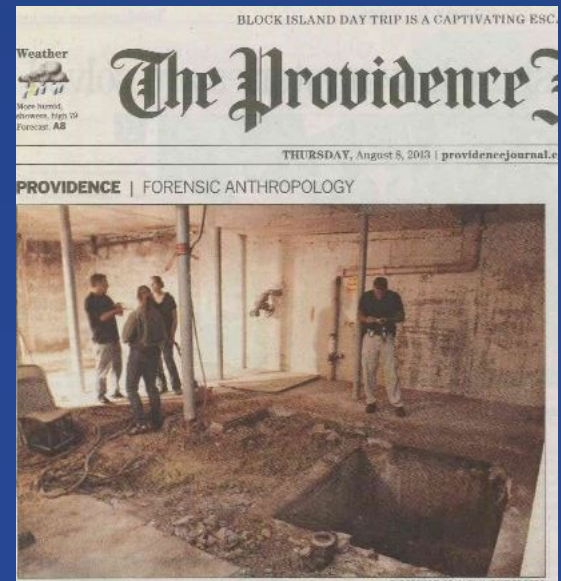


Usage of Ratings (Top 20)

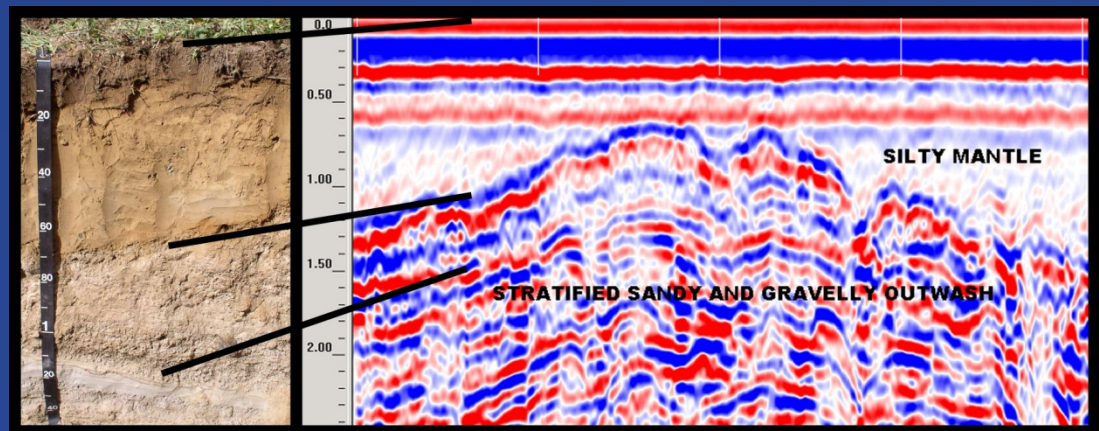
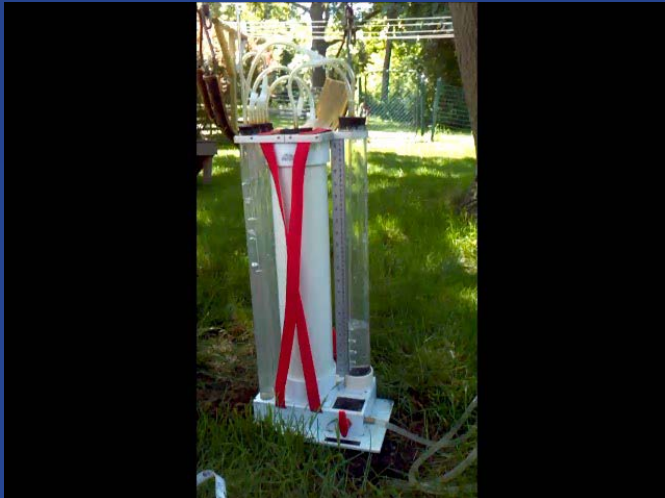
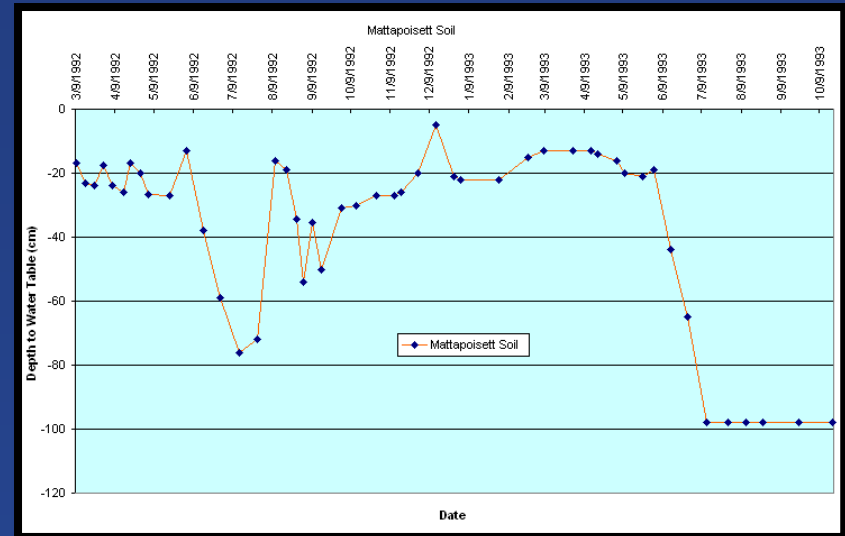


Technical Soil Services

- A major responsibility of Technical Soil Services within NRCS is to assist users with understanding and properly using the soil survey and to provide users with predictions and interpretations about the behavior of each kind of soil mapped or identified under defined situations.
- Technical soil services are offered to our partners, cooperators, towns/state/federal and general public – anyone looking for information about soils.
- TSS includes on-site investigations, remote sensing, hydric soils, soil quality, interpretations, customized maps, education/outreach/training, special studies...



“All we do in Soil Survey is Collect Data”



Demo – ways to get soil data.

- Soil Maps for Google Earth: http://casoilresource.lawr.ucdavis.edu/soil_web/kml/SoilWeb.kmz
- Soil Maps using Google Maps: <http://casoilresource.lawr.ucdavis.edu/gmap/>
- Web Soil Survey: <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- State GIS Portals – RIGIS, MASSGIS, CT MAGIC, ArcGIS.com
- All of the above: <http://nesoil.com>

Set the desired GPS accuracy with the slider, and click "Done" to return to the main view.

Click to start application

Application starts with GPS disabled. Click "GPS" to start acquiring location data. Click on the "info" button for application details.

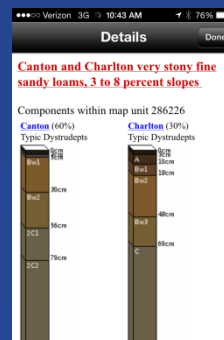
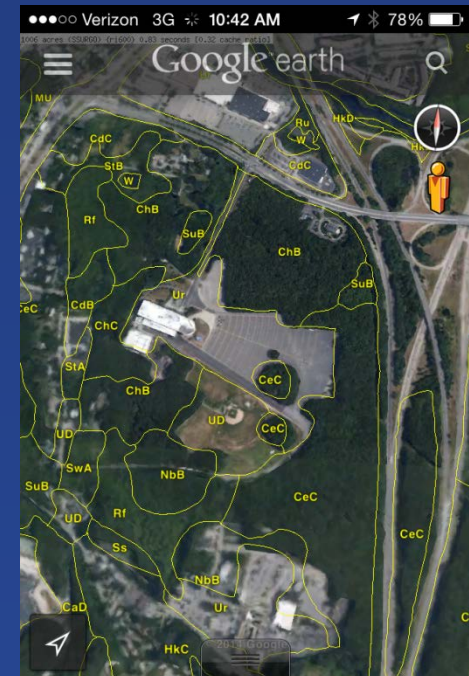
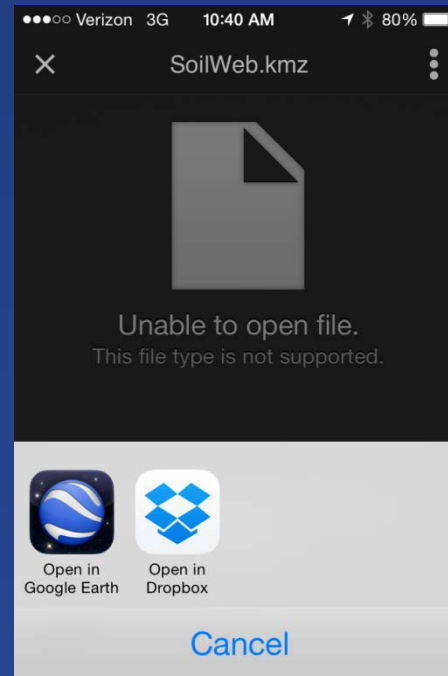
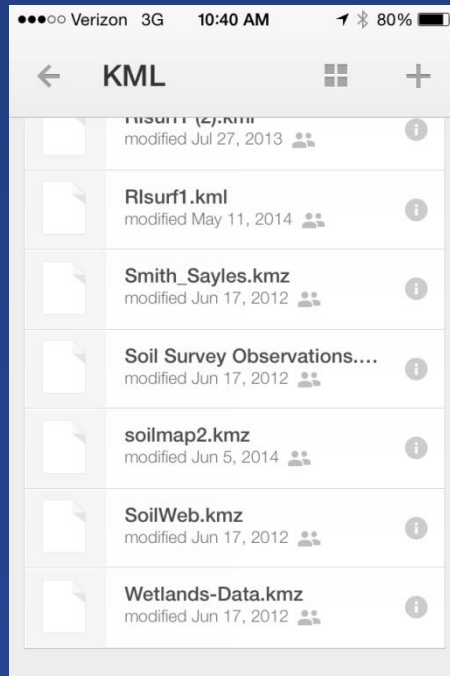
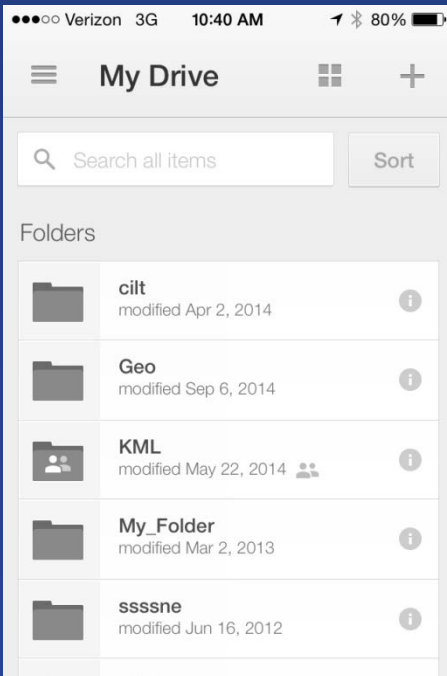
Once a location with sufficient accuracy is acquired, map unit components are displayed. Soil profiles link to their Official Series Description

Component names are linked to their details on the CA Soil Resource page. Use the "back" arrow to return to the main view.

POLLASKY SERIES

The Pollasky series consists of moderately deep, well drained, moderately coarse textured Regosols formed in the residuum from acidity to moderately consolidated arkose sediments. They occur on undulating to steep dissected terraces under annual grasses and forbs. They have brown, slightly acid sandy loam A horizons and pale brown to yellowish brown, slightly acid to neutral, sandy loam C horizons deeply eroding consolidated granitic sediments. Pollasky soils occur in the same

SoilWeb Maps on Smartphone



Questions??

The Evening Bulletin

Providence, Rhode Island, Friday, February 16, 1979

Soil: If state needs a bug it can need dirt, too

By THOMAS E. WALSH
Journal-Bulletin Political Writer

PROVIDENCE — It was barely two years ago that the General Assembly had all it could do to restrain itself from declaring ricotta the state cheese, tuna the state fish and the praying mantis the state insect.

Now, if the Rhode Island Association of Conservation Districts has its way, the Assembly will throw caution to the wind and designate "Narragansett silt loam" as the official, bonafide, "state soil."

That's right, soil! The stuff that gets under your fingernails, into your kids' clothes, and circles your bathtub.

"Soil has a real image problem," said Lester E. Stillson, a conservationist, explaining why the association has sent letters to all 150 state legislators and Governor Garrahy to seek support for the state soil idea.

"When you think of soil what you think of is dirt," Stillson added.

"Something's dirt cheap, a house built on sand, a clod, mud. All the words related to soil are negative." But, he said, "You couldn't grow crops without the soil, everything we have is built on soil."

"The whole rationale behind this is to increase the awareness that something as basic as soil has a profound influence on everybody's life," Stillson said.

Stillson said he is not worried about the issue becoming a topic of rib-tickling legislative humor as was the case with the state cheese, tuna and bug propositions.

"No matter what happens, it would help fulfill our goals of awareness, even if it turns into a big joke in the eyes of the media and the local people," Stillson said.

And what exactly is "Narragansett silt loam?"

According to Stillson, it's one of the best types of soil to be found in Rhode



Island, and is particularly good for raising crops.

Presumably, then, one could take the official state flower (violet), or the official state tree (red maple) and expect them to prosper if their roots were buried in Narragansett loam, assuming, of course it becomes the official state soil.

79-S 527

Introduced by—
Senator Rawlings

Ordered Printed by—
Senate

Referred to—
Senate Committee on Special
Legislation

Date Printed—
March 1, 1979

State of Rhode Island and Providence Plantations

JANUARY SESSION, A. D. 1979

AN ACT Relating to State Soil.

It is enacted by the General Assembly as follows:

Section 1. Chapter 42-4 of the general laws entitled, "State Emblem," is hereby amended by adding thereto the following section:

"42-4-11. STATE SOIL.—The soil commonly known as "Narragansett soil" is hereby designated the state soil for the state of Rhode Island.

Sec. 2. This act shall take effect upon passage.