**Update Mapping Sub-Team Meeting**

**02/26/2019 – 11:00am**

**Call-in information:        Toll Free:** 1-888-844-9904;**Access Code:** 2450204

**Welcome and Roll Call (from Skype) –**

Joe Brennan

Tom D’Avello

Adolfo Diaz

Matthew Duvall

Chad Ferguson

Rabecca Fox

Linda Harring

Jamin Johanson

Suzann Kienast

Jessica Philippe

Chance Robinson

Stephen Roecker

Alexander Stum

Brianna Wegner

Dave White

**Review of topics from last meeting.**

**2-year MLRA Field Project Template Updates** (Joe Brennan)

* Updated to project template since December
  + [Milestone Descriptions](https://docs.google.com/spreadsheets/d/1pulKrJOO7sCRbvRk_xfEB3uoDclQUotfl_djc1ZRWtQ/edit?usp=sharing)’
  + ‘[Descriptive Document](https://docs.google.com/document/d/1L7vteZIDInXqfROSKkgqiMKrUwDEFX81tAkd6fTjFSI/edit)’
* Refined some of the milestones in the template and revised order, still the same core process that was outlined before.
* More descriptive information in the accompanying document.
* This document is proposed as a template for update projects in NASIS.
* Milestone update team. SRSS modernizing the milestones and descriptions to be more relevant. Teams are established, but there has been no movement since.
* Sub-teams, or people to help with creating job aids for each milestone. If you are interested in helping, or already have something made please feel free to contribute.
* Time line for job aids.
  + Work sequentially. One milestone at a time to ensure all job aids are created.
  + Reference material to complete tasks related to milestones
  + First Job Aid – Green – Define Project Area – End of April, next meeting (April 23)
    - Joe Brennan, Chance Robinson, Tom D’Avello, Wade Bott
  + Second Job Aid – Blue – Scope and Field Correlation – End of May meeting (May 28)
    - Jeff Hellerich, Dan Wing, Stephen Roecker, Tom D’Avello, Dave White, Betsy Schug – finalize team member for during April meetings

**Product Updates** (Chad Ferguson)

* Current published databases on Gateway – the soil databases for the current RaSS published on Geospatial Data Gateway are corrupt from the export and would not be able to produce interpretations from the soil data toolbox. Working on trying to repair the databases and get them back online.
* Have the State level raster soil survey areas for raster soil surveys been approved? Is the raster soil survey area an official type in NASIS? Follow-up needs to happen with George Teachman.
  + Will we have to request on a state by state basis, or by project?
* GNATSGO – update:
  + The database team is putting together a complete coverage class data set for the US.
  + It will combine GSSURGO with STATSGO and existing RaSS products.
  + This will be the best available data for the U.S. and will be updated annualy.
  + It can be updated as NOTCOM areas are filled in, and can give a starting point for filling in NOTCOM areas with coarse order 4 data.
  + First version of GNATSGO will be released this year.

**Seamless Soil Survey in the West Cross Timbers** (Chance Robinson)

[Knox, Ellis G. "Soil Individuals and Soil Classification 1." *Soil Science Society of America Journal* 29.1 (1965): 79-84.](https://casoilresource.lawr.ucdavis.edu/w/images/9/9c/Soil_Individuals_and_Soil_Class._Knox_1965.pdf)

[Hudson, Berman D. "Concepts of soil mapping and interpretation." *Soil Survey Horizons* 31.3 (1990): 63-72.](https://dl.sciencesocieties.org/publications/sh/pdfs/31/3/63)

**Concepts of Soil Mapping and Interpretation**

* Using DSM to redesign map units to fit soil landscape units
* MLRA 84B – Central Part Update Project
  + Sharp consistent boundaries between sandstone and limestone mapping.
    - Not as consistent within the sandstone and limestone areas
  + Southern Extent
    - 3 county lines – divergent soil survey models adjoin
  + Each model is valid but different due to age, extent, and importance of land uses at the time of mapping.
  + Overview of Soil-Landscape Relationships
* Modelling landscape specific geomorphic components using a priori knowledge?
  + Modeling geomorphic components – 57 observations – 47 remotely interpreted points to generate a landform map. Map used as an input into final class model
  + Final model of mapunit classes – 29 covariates, 57 training observations, 35 “polypedon” points. Overall model accuracy increased.
  + OOB error may be influenced by using same training data points to derive landform map and class map.
  + Geomorphons from GRASS may be useful to generate a landform map, to have a independent data source for landforms.
    - Link to geomorphons : <http://sil.uc.edu/geom/app>