**Request for review – ISSR-800 – Intermediate Scale SSURGO/STATSGO2 Raster Soil Property and Interpretations Map – 800m cells**

The SSD Database Focus Team has reviewed this proposal to provide continuous soil property and interpretations maps for CONUS, based on SSURGO and back-filled with STATSGO2. We are requesting that the NSSC approves these products for publication on the Geospatial Data Gateway before the end of the fiscal year. Prior to publication, we seek further input from NSSC staff. Attached is a background document that outlines the rationale and timeline for the project.

What is ISSR-800?

* A collection of raster maps for CONUS that provide soil property and interpretations information by 800m pixel
* A continuous coverage soil information product aggregated within profiles and across mapunits using SSURGO AND STATSGO2

The product proposed here provides soil property and interpretation information for 800m grid raster files. Values for a selected set of soil properties at specified depths, as well as selected interpretation, are provided for each 800m pixel. Depending on the property, depth interval used, and interpretation, different methods are used to aggregate within the profile, across the map unit, and across the 800m cell. An Excel spreadsheet is available on this [NCSS GitHub site](https://github.com/ncss-tech/ISSR-800/tree/master/files) or a [Database Focus Team SharePoint page](https://ems-team.usda.gov/sites/NRCS_SSRA/ssd/Programs/Forms/AllItems.aspx?RootFolder=%2Fsites%2FNRCS%5FSSRA%2Fssd%2FPrograms%2FSoil%20Survey%20Database%20Team%2FWorking%20Documents%2F800m%20SSURGO%5FSTATSGO2%20Rasters&FolderCTID=0x012000EB94E4930208B34D83D4C04D39D821BC&View=%7B4657EAB6%2D97A9%2D4818%2DBDF6%2D7FAAD3C56869%7D) for examination of the different values and methods used. Some pixels will represent information across map unit boundaries contained in the original vector maps. For this project, the 800m pixel size was chosen to provide a product for LRU to MLRA to continental scale projects that are small enough for rapid analysis and display. Another reason for the 800m pixel size is to approximate the size of the 800m PRISM climate products that are commonly available and used as climate proxies in many regional to continental scale analyses.

**Resources to review, evaluate, and provide feedback**

Tracking sheet on the Database Focus Team SharePoint site to register support or not for this project - [Working Documents/800m SSURGO\_STATSGO2 Rasters folder](https://ems-team.usda.gov/sites/NRCS_SSRA/ssd/Programs/Forms/AllItems.aspx?RootFolder=%2Fsites%2FNRCS%5FSSRA%2Fssd%2FPrograms%2FSoil%20Survey%20Database%20Team%2FWorking%20Documents%2F800m%20SSURGO%5FSTATSGO2%20Rasters&FolderCTID=0x012000EB94E4930208B34D83D4C04D39D821BC&View=%7B4657EAB6%2D97A9%2D4818%2DBDF6%2D7FAAD3C56869%7D)

Review the maps online – this website will soon be pushed to the main SoilWeb Apps page:

<http://soilmap2-1.lawr.ucdavis.edu/soil-properties/>

Look at the maps in ArcMap - download the Geotiff files and associated raster attribute tables here:

<http://soilmap2-1.lawr.ucdavis.edu/dylan/grid/FY2018-800m-rasters.zip>

Raster attribute tables as CSV:  
<http://soilmap2-1.lawr.ucdavis.edu/dylan/grid/FY2018-800m-RAT.zip>

A [Github repository](https://github.com/ncss-tech/ISSR-800) is set up to coordinate issues, perform code review, and other such activities:

View the current metadata- <https://github.com/ncss-tech/ISSR-800/tree/master/files>

View the SQL code used to generate the rasters: <https://github.com/ncss-tech/ISSR-800/tree/master/code/SQL>

View issues and feedback here: <https://github.com/ncss-tech/ISSR-800/issues>

Some more details are spelled out in our presentation given at the NCSS meetings in Boise:

<https://docs.google.com/presentation/d/1O6---8uhSka91WJNleaZr9fgm-dOxZ3t0S0ZU1bKPkQ/edit?usp=sharing>

You can [request access to the GitHub site](mailto:dylan.beaudette@ca.usda.gov?subject=Permission%20requested%20to%20the%20GitHub%20site%20for%20ISSR-800%20project%20feedback) to provide comments there, or send them via email to Dylan who will compile them on the GitHub site.  Please don’t hesitate to contact one of us with questions or help accessing any of the materials.