

Soils Workgroup Meeting, DAS, Salem, Sept 3, 2014, 1:00pm – 3:00pm

Attendees: Bob DenOuden (GEO), Ian Reid (NRCS), Thor Thorson (NRCS), Steve Campbell (NRCS), Diana Walker (ODA), Phil McClellan (DOR)

By telephone: Myrica McCune (INR), Don Pettit (DEQ), Ian Madin (DOGAMI), Bill Clingman (LCOG), Sarah Marvin (DLCD),

A=action items:

Ian Reid started the meeting off with an overview of what the soils workgroup has set out to do; provide access to a statewide soils framework dataset. Steve Campbell then led the meeting by presenting an overview of the primary NRCS soil data resources; SSURGO and STATSGO. Steve noted where SSURGO data does not exist there is STATSGO data available. He and IanR have combined the two sources into a single seamless file geodatabase for Oregon along with an Access database containing detailed attribute data. He then noted the complexities of the one:many relationships embedded within the database. A map unit will often contain multiple soil components and each of those contains multiple horizons (layers). Steve provided a diagram showing the table relationships in the soils database. Steve also provided a document outlining sources for electronic soil survey information.

Steve then showed the Soil Data Viewer (SDV) ArcGIS application. This is built as an extension to ArcGIS. The input spatial data must be in the format of a shapefile – so subsets of data must first be exported from the geodatabase to shapefile format. Trying to work with the entire Oregon dataset will cause problems in the SDV (too many polygons). Steve walked us through the functionality offered by the SDV, pointing out the various methods available for aggregation (dominant component, dominant capability, weighted average), the metadata/documentation, and report results. He also showed that the spatial data can be directly joined to the database tables, in some instances, for mapping and analysis.

Steve and Thor discussed the annual update cycle for the data, with a target date of October 1 for new data. Since there is about a day of work required to refresh the Oregon product, we can expect a new version of that around mid to late October. **A** The workgroup should discuss whether it is better to wait until then to publish the data to OSDL, or publish now and refresh the data in October.

We also discussed data hosting. Steve and Ian noted that NRCS does not have the capability to host the data. Bob suggested that GEO could host it – or it could possibly be hosted by the Oregon Explorer team for the OSDL. **A** We will need to make a decision on hosting prior to acquiring the data. The combined size of the file geodatabase and Access file is less than 2 Gb.

Ian Madin asked about how the soils data might be used in support of liquefaction and landslide susceptibility modeling. Thor noted it could be possible if the correct expertise were put to the task, noting that a team recently completed a project using soils data, among other data, in an analysis of juniper encroachment potential in eastern Oregon. Steve noted a number of attributes that are available that might inform a landslide model including grain size and monthly average distance to groundwater. IanM will follow up with ODA, DEQ. And others on this.

Don Pettit also discussed some potential for this soils layer in DEQ's work on stream water quality/TMDLs.

Thor noted that it would be helpful to get the word out on the availability of this dataset to local (County level) staff. A series of workshops/education sessions could be helpful. BobD noted that a framework forum is coming on November 5 at Silver Falls Lodge and Conference Center which might provide an opportunity for outreach. Separate dedicated workshops could also be supported by GEO in the future.

Phil McClellan asked about the existence of a soils data standard. IanR and BobD noted that work was done in the past to develop a new soils data standard. The current standard is the FGDC Soils Geographic Standard (<http://www.oregon.gov/DAS/CIO/GEO/standards/docs/soilgeodatastandard.pdf>) A number of years ago a group, led by Jay Noller at OSU, developed a site specific soils survey standard which was designed for very large scale soils mapping efforts. There was some discussion on how these types of soil surveys might be collected and made available.

The meeting adjourned with BobD and IanR agreeing to begin the process of scheduling an additional soils workgroup meeting to discuss possible additions/modifications to the statewide soils data resource produced by Steve. **A** BobD will set up a Doodle poll to find a date that meeting.