Future Directions – Comments from the Request

Larry F. Baldwin, CPSS/Sc

President National Society of Consulting Soil Scientists

- web soil survey - very useful and user friendly
- other data into this format such as topographical, different aged aerial photo
- Make data useful for programs such DrainMod, SWS, wetlands, drainage equations, crop simulations, nutrient / contaminant flow
- Much of the soil survey is non-agronomic

Ron Myhrum - U.S.D.A – NRCS Spokane, WA

- Ecolgical Site Descriptions (ESDs) are becoming important.
- Consider staffing employees to work with ESD’s

Bill Ypsilantis & Jim Renthal – BLM Denver, CO

- Digital soil mapping needs to be utilized to its full extent to accomplish mapping
- Geospatial data in a raster format offers exciting possibilities for enhanced capabilities for delineation of soil and vegetation properties and interpretations
- 3-D illustrations of soil-landscape-vegetation relationships
- Ecological Site descriptions

Steve Blanford - USDA-NRCS Lexington, KY

- Focus on suburban expansion.
- Educate the public and advertise. People are amazed what we know when they find out.

Bernard Hoyer – USDA-NRCS Des Moines, IA

- Embrace the new technology and use it wisely.
- Iowa is getting LiDAR with ½ foot vertical accuracy.
- These technologies will improve the survey.

Gene Pixley, Soil Scientist California Department of Water Resources

- Farmland is increasingly becoming important for food and energy.
- Developing prime farmland.
- Create thematic maps of prime farmland for planners to use.
- Explain the imortance of retaining productive lands.

Peter Sundt - Rangeland Consultant
Safford, AZ

- principal use of soil survey is to better understand the distribution and abundance of native vegetation
- improvement depends on accurate and site-specific soils information
- emphasize plant-soil relationships in the development of series and other taxons, with particular emphasis in the Southwest on plant moisture relations

Bill Elliot, PE, PhD, Team Leader
Rocky Mountain Research Station
Moscow, ID

- continually work toward a common database and format with other federal agencies for compatibility between the National Soil Survey, and the surveys carried out by other federal agencies
- all soil survey data needs to be digitized to make it readily available without ArcGIS
- use the data in certain formats includes RUSLE2, WEPP, Drainmod, and likely several other models

Daniel Johnson- USDA-NRCS Monroe, LA

- If we field Soil Scientists are to achieve and maintain competency along with the advance of technology, I think some of us will need a little more specialization in our assigned duties
- Some states have three different staffs for these functions, and others require the same Soil Scientist to do them all concurrently.

Wade D. Bott,Soil Data Quality Specialist Bismark, ND

- interpretations are going to be a key product delivered by the NCSS in the future
- development of our NASIS data dictionary in the Site and Pedon objects to the point data to provide more consistent application of conservation planning practices
- As we integrate our database with spatial capability, incorporating spatial criteria such as adjacency and proximity will make major contributions to the improvement and utility of our soil interpretations
- Passing our skills on to the next generation is also a key to the future of soil science

D. S. Fanning, Emeritus Professor
University of Maryland

- Soil surveys are needed to greater depths in part to learn the depth to the unoxidized zone where there are sulfides that give rise to acid sulfate problems if they are exposed to oxidizing conditions
- soil scientists should not be promoting the idea that the soil survey or the once-over is going to be complete by some date

Garrett Liles NRCS Soil Scientist, Lassen Volcanic National Park Survey

- Assessment, quantification and representation of soil resources has been of vital importance to the development of our nation over the last century
- Common Datum for Natural Resources Assessment – National LIDAR Coverage
- Soil C Inventories and a More Physical Base
- Standardization of Field Methods

Marc J. Bordelon Soil Scientist/Project Leader Ringgold Soil Survey

- Soil Survey Program should move to another agency
- soil survey is a product that can be marketed to the public, with special emphasis being applied when requested for special projects
- Charge for the product

Jerry Schaar, et al.
USDA-NRCS
Huron, South Dakota

- let people know about the Web Soil Survey
- updating states need to concentrate on the future by hiring and training new people, helping other states with details to complete their initials, collecting base data, utilizing new technology (IFSAR,LiDAR
- Promote soil science as a respected profession that has products the world uses and relies on

Continued

- Rather than MLRA, a better concept may be that we work off project plans. Each MLRA Soil Survey Office develops a long range plan, project plans, and an annual plan
- NRCS needs to rebuild the confidence that was lost during competitive sourcing
- We need to work close with universities to let students know about soils and what we do with the data and information that we collect

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- Tailoring data population requirements, as well as interpretations should be on a regional (whether LRA or MLRA) basis rather than a “one size fits all” nationwide basis is important
- With less emphasis on publication, there will be less emphasis on manuscript preparation and mapping. Field work will be geared to correlation of landscapes, soil series and soil properties of existing Non-MLRA (County) soil survey map units into MLRA wide map units

Susan Edinger Marshall
Humboldt State University

- Low student numbers, NRCS attends job fairs. Nice work.
- The SCEP program has been very good
- Need reliable student trainee programs
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Philip Small, NSCSS Secretary

- far fewer qualified students than position openings
- The solution is to reinvigorate undergraduate soil science capacity