New Technology Standing Committee Report

NCSS Conference
Madison, Wisconsin
June 7, 2007

New Technology Standing Committee Report

Co-Chairs:

- Pete Biggam, National Park Service
- Jon Hempel, National Geospatial Development Center, Natural Resources Conservation Service

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Participants

- 49 participants with great representation within the NCSS
- They will be documented in the final report

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Overall Charge

To develop and document procedures, processes, and standards that will be used to integrate GIS, remote sensing, landscape modeling, and other similar technologies into the mainstream of the soil mapping and landscape inventory program.

Individual Charges for FY07 for New Technology Committee

1. Review and document progress on recommendations from 2005 report.

2. Review recommendations from the 2006 Regional Cooperative Soil Survey Conference reports.

3. Participate in the NCSS Digital Soil Mapping Challenge process, providing input and direction as requested.

4. Identify several outstanding New Technology Projects within the NCSS partnership to present at the 2007 National Cooperative Soil Survey Conference.

5. The NCSS New Technology Standing Committee will be required to report its activities at the 2007 National Cooperative Soil Survey Conference.

6. Provide Committee recommendations to the Director, Soil Survey Division, USDA-NRCS

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1. Review and document progress on recommendations from the 2005 report

Completed

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2. Review recommendations from the 2006 Regional Cooperative Soil Survey Conference reports

Recommendations from the 4 Regional Committees focused on issues regarding standards for digital soils mapping that will also be forwarded to the Standards Committee for review

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1. *Establish a NCSS working group to review existing NCSS mapping standards for soil and terrestrial ecosystem inventories, and their applicability to digital soil mapping.*

   The working group will make recommendations for revisions and additions as needed to meet evolving technologies and available data sources.

   Committee recommends interaction with the Standards Committee

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2. *Commit the resources needed for the NCSS partnership to enhance the delivery, application, and visualization of soil survey information.*

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3. Participate in the NCSS Digital Soil Mapping Challenge process, providing input and direction as requested.

Committee recommends continuing support to this effort as it evolves

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4. Identify several outstanding New Technology Projects within the NCSS partnership to present at the 2007 National Cooperative Soil Survey Conference.

These were presented within a joint New Technology and Research Forum in two separate sessions

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1. SEM Tool – Brian Bils
2. Purposeful Sampling, DEM Neighborhood Size Sampling –A-Xing Zhu and Jim Burt
3. Legacy Soil Data Use in Digital Soil Mapping – Florence Carre
4. Using Scientific Visualization to Represent Soil Hydrology Dynamics – Jay Bell and Holly Dolliver
5. Digital Soil Mapping Initiatives – Amanda Moore

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- *Committee would like to recommend to the NCSS Conference Steering Committee that a more formal process be developed for future meetings to solicit a request for New Technology projects, such as a call for papers, presentations, posters, etc.*

- *This may also be applicable to other Committees*

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Other Issues the Committee is recommending continued work on

- Define "Digital Soil Mapping"
- Create a Bibliography of published or developmental Digital Soil Mapping efforts
- Provide recommendations to Regional New Technology Committees to improve forwarding of charges to National New Technology Committee
- Address training needs to support use of New Technology applications and Digital Soil Mapping techniques
- Support the use SharePoint technology to keep the New Technology Committees involved and informed between meetings

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Review of Recommendations Forwarded to the Director, Soil Survey Division

1. Establishment of a NCSS working group to review existing NCSS mapping standards for soil and terrestrial ecosystem inventories, and their applicability to digital soil mapping.

   The working group will make recommendations for revisions and additions as needed to meet evolving technologies and available data sources.

   Committee recommends interaction with the Standards Committee

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Review of Recommendations Forwarded to the Director, Soil Survey Division (continued)

2. Commit the resources needed for the NCSS partnership to enhance the delivery, application, and visualization of soil survey information.

3. Committee recommends the National and Regional New Technology Committees continue on.

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