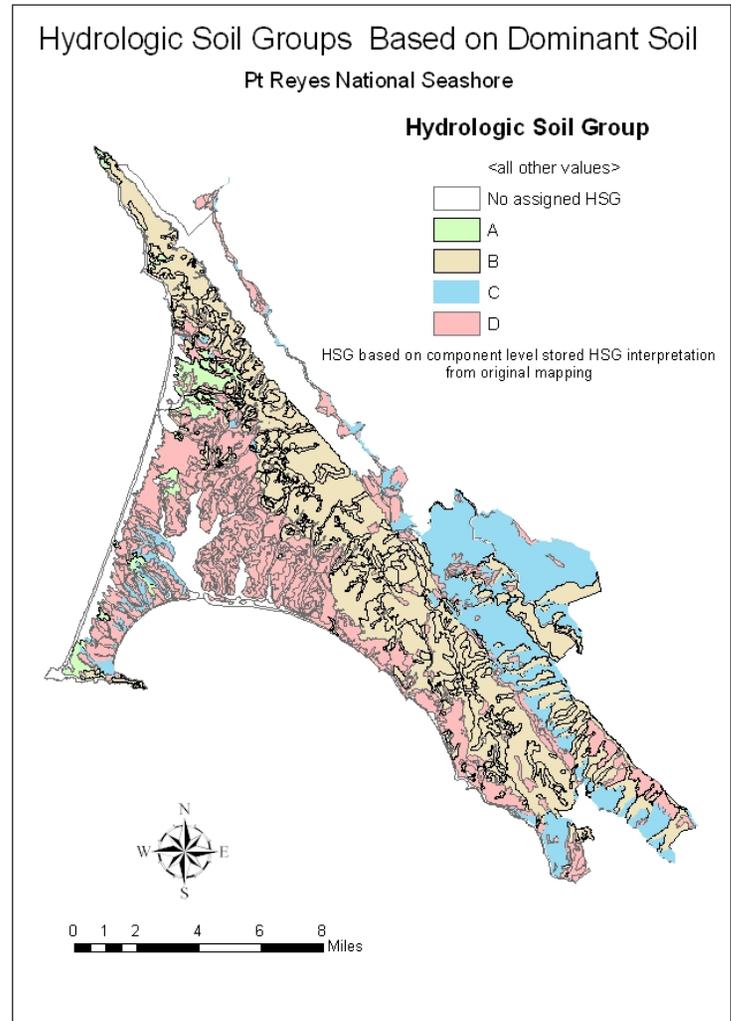


Ad Hoc Committee on Interpretations



Why Ad Hoc?

**NCSS Structure and
Functions Task Force Report
NCSS National Conference
Corpus Christi, Texas
May 25, 2005**

Recommendation from Corpus Christi....

1. **Standing committees on 1) standards, 2) research priorities, and 3) new technology should be identified in the bylaws of all conferences. Other committees that function at a conference will be ad hoc.**

MEMBERS

Chair - Susan Southard, Soil Data Quality Specialist, NRCS, Davis, CA

Members:

**Lisa Bryant, Soil Scientist, BLM,
Salt Lake City**

**Steve Campbell, Soil Data Quality Specialist,
NRCS, Portland, OR**

**Lee Neve, Soil Scientist, Project Leader, NRCS,
Trinidad, CO**

Agenda from Tuesday's work session

- **Overview of charges**
- **Review Charge #1 and make recommendations**
- **Review Charge #2 and make recommendations**
- **Breakout - What are the Interpretation Needs for the Western States?**
- **Summary**

Charge #1

- **Recommend a process that involves state or regional technical review of NASIS interpretation criteria changes initiated by the National Soil Survey Center before they are implemented.**

Charge #1

BACKGROUND: The National Soil Survey Handbook section 617.04(a) outlines the process by which changes to standard interpretations are made.

These standard interpretations are included for all soil datasets posted to the WEB SOIL SURVEY and SOIL DATAMART.

Charge #1

- **The NSSH section 617.04(a) does not address a process by which changes made at the National level are reviewed by states or regional committees prior to implementation.**

Presently this is a one-way process only.

Charge #1

Criteria changes have involved new requirements for a new minimum data set that the states are not made aware of until a national need for that interpretation arises.

Charge #1

- **SSURGO datasets are affected by these changes to criteria and states are not made aware of these changes in a timely manner that allows for adequate technical review and science-based data population.**

Charge #1 Recommendation

add **red** to NSSH 617.04(a):

- (ii) For criteria changes initiated at the National Soil Survey Center (NSSC), the NSSC acts as the sponsor. A representative from each region is selected as a review coordinator for NSSC sponsored criteria changes. One regional reviewer is selected to summarize all the regional feedback.

Charge #1 Recommendation

add **red** to NSSH 617.04(a):

- (iii) The sponsor prepares a “full description” as described in part 617.10; assembles documentation, copies of technical references supporting the current and proposed criteria, **for any NSSC**, State or regional variation to the interpretation.

Charge #1 Recommendation

add **red** to NSSH 617.04(a):

- (v) The National Leader for Soil Interpretations provides for a comment period before the standard interpretation is finalized **and before it is implemented in NASIS.**

Charge #1

Ad Hoc Recommendation from Tuesday meeting

Terry Aho, Portland Regional Center has volunteered to review and add comments/rewrites to Sue's NSSH 617 recommended changes... He suggested that there needs to be language regarding how a partner agency can ask for review or new interp or report an error in interps; and then add business processes for this review and finally how to publish decisions/outcomes for this review –

Agenda - Charge #2

- **Issue One: Is septic tank seepage not a problem in the aridic regime due to evapotranspiration?**
- **Issue Two: Gravel source-when is a duripan a restriction?**
- **Issue Three: Are pond reservoir areas an absolute limitation only above 50% slopes?**

Issue 1

In July 2005 changes were made to NSSC septic tank interpretation that excluded soils in aridic regimes from seepage limitations.

No western state requested this criteria change.

Issue 1

Since the change was made aridic soils have not been rated as having seepage concerns below the typical septic tank leach field even if the soil is sandy or if it is sandy and has a fluctuating water table within 6 feet of soil surface.

Issue 1

If the soil has xeric, ustic or any other regime the NSSC septic tank interpretation rates the soil as having a limitation for seepage. So, this Torripsamment has no seepage limitation but if it was a Xeropsamment it would....



“No seepage due to aridic condition”

- Polacca in the Hopi Area, AZ fi-lo over sandy Typic Haplocambid
 - Wardwell in Gem County Area, ID
 - Ethete in Riverton Area, WY
- Oreanna in Harney County, OR – Cambid with sandy substratum
- San Arcacio in Saguache County Area, CO
 - Also Milsand, Cajon (a Psamment), Roswell, Quincy, and Appian soils

Issue #1

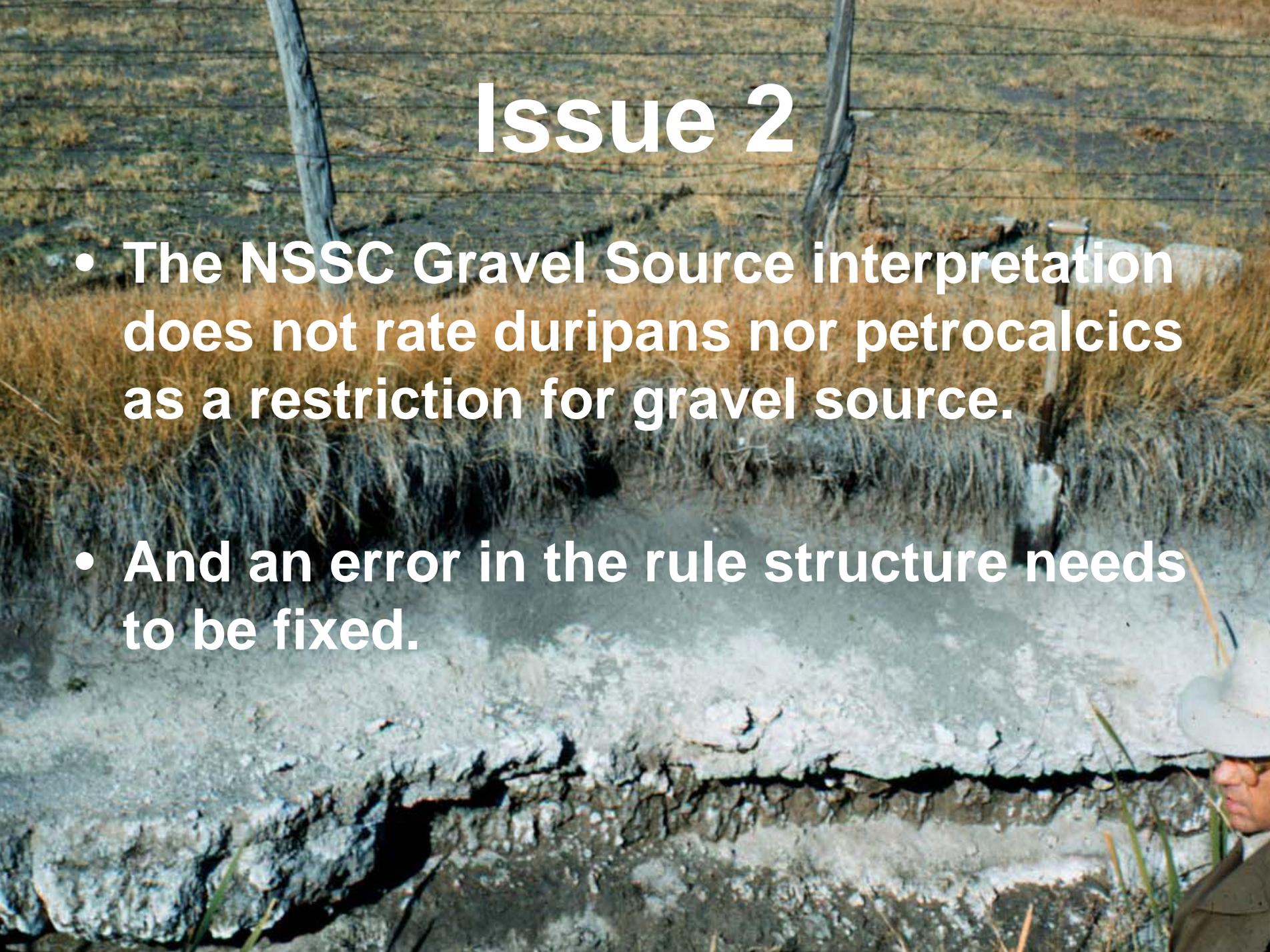
Recommendation from Tuesday's meeting

**Group agreed national interpretation should be changed as recommended –
06/20/2006**

Change NSSC septic tank interpretation to rates soils in aridic regime as those in xeric, ustic, udic moisture regimes.

Issue 2

- The NSSC Gravel Source interpretation does not rate duripans nor petrocalcics as a restriction for gravel source.
- And an error in the rule structure needs to be fixed.



Issue 2

An example of the error is that a Vertisol with an indurated duripan rates as a “GOOD SOURCE” in the NSSC Gravel Source interpretation.



Issue 2 Recommendation from Tuesday meeting

- If you have a duripan or orstein layer but there is gravel below, the soil could still be a good gravel source**
- There may be more than the error causing the problem, it was mentioned that sometimes a very gravelly soil doesn't rate as "good"; this interpretation, it was agreed, needs a thorough review and fix.**

Issue 3

The upper slope limit of the fuzzy realm for POND RESERVOIR AREAS has been changed from 8% to 50%.

Result: Soils with slopes up to 50% are not considered an absolute limitation for ponds.

Issue 3 Recommendation from Tuesday's meeting

- Issue 4: Pond Reservoir Areas – 50% is way too steep – all agreed; not sure what the cut off should be 8%? 15%**
- Until further investigation can be made recommend slope returned to original criteria which was 8% on NSSC version.**

Other comments on Charges 1 and 2:

- there may be bigger question for all interps that use duripan and densic layers in their interp criteria**
- petrocalcic horizons should also be considered in the same light as duripans with respect to this review of gravel source**

Other comments on Charges 1 and 2:

- In Canada, various soil survey leaders in provinces send out recommended interpretation changes through a review process to areas and feedback is provided before interpretation is finalized – and interps are “versioned” to track changes in them.**
- Back prior to 1995, NTC had a person with responsibility to do this type of review; possibly this role can be reinstated as part of the responsibilities.**

Other comments on Charges 1 and 2:

- Critical for Web Soil Survey to have accurate interpretations, otherwise we risk losing credibility.**
- States sometimes find these errors, but because there's no good way to fix them, the states will fix it by developing a local/state interp when the national interp isn't fixed.**

Interpretation Needs and Issues for the Western States

- **Site index interp requires a datafield that isn't populated for many soils, yet other data related to this interp exists; DOD especially needs this interp for forestry management. Can use the tabular version (access database) of soil dataviewer (not the arc extension) to tease out the data.**
- **Desert pavement soils, WEG is rated only for surface layer, yet if you run a tracked vehicle over this pavement and expose the subsurface, its highly susceptible to wind erosion**

Interpretation Needs and Issues for the Western States

- **Potential hydrophobicity after fire – would use vegetation and soil criteria; of use for BLM and USFS**
- **HEL classification currently used as a surrogate for soil resiliency – using k and slope; -- Bill Ypsilantis has developed some draft criteria for BLM interps including one for resiliency, that might be helpful for DOD;**
- **Sue says MO2 has these but are in a draft or “not ready for prime time” since they haven’t been approved/reviewed yet.**

Finally...and most important!

We as a committee recognize that.....

- A key justification for soil survey has been that we provide interpretations with our maps, we need to make this a priority and dedicate enough resources to do the job, not just 1 or 2 people at the NSSC writing and maintaining them...**
- Interpretations are a key product for our end users and are used to measure the quality of our work and credibility.**

Thank you!

