Decisions for Jan 6th Laboratory Prioritization Meeting

1. Archive hzn\_desg\_old and lable it Archive\_Hzn\_desg. (ACCEPTED)

2. Copy the data from the hzn\_desgn to the Archive\_Hzn\_desg where the records in the ARchive\_Hzn\_desg are null.

2. Create a new hzn\_desg\_old and populate it from the NCSS\_Lab\_Layer table in NASIS

3. Where the hzn\_desg\_old (new table) records are null, populate them from the Archive\_Hzn\_desg.

~~4. Move non horizon designations to Field Layer 3 if that field is empty. Henry will supply Rick with a spreadsheet of records to null out in the Archive hzn\_desg\_old table and to move to the Field Layer 3 field.~~

5. There is a table in the repository called non-hzn\_desgn. The contents of that table should be replicated in the field lable columns as close to field lable 1 as possible.

2014 Review

Statement of Problem: To deliver the NCSS Soil Characterization Database along with the most up to date descriptions from NASIS.

1. Need to deliver the Most Accurate Location Possible in WGS84 Decimal Degrees

2. Need to deliver the Sampled as and Latest Correlated Classification

3. Layer Depths need to Match 1993 Standards. (Measuring from the top of the first horizon that can support root growth.)

4. Made the Laboratory Data more Accessible by adding the NCSS Lab Pedon and the NCSS Lab Layer tables to NASIS

5. Populated the Original Horizon Designation field with the oldest horizon designation available, and populated the Horizon Designation field with the newest horizon designation available.

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2015 Goals

1. Actually get the National Cooperative Soil Survey Characterization Database Website out to reflect goals 1 and 2 above for 2014.

2. Clean up the Original Horizon DesignationField in NASIS so that it matches the standards in place at the time the descriptions were taken

3. Request review of the NCSS Lab Layer table by the SDQS and consider delivering the depths and horizon designations from that table on the Primary Characterization Reports.

**Review of the Status of the Horizon Designation Fields.**

1. In LIMS there is one field for the combined parts of the horizon designation. Since that field is filled out at the time that the samples come into the lab it can be assumed to contain the "Sampled As" horizon designation.

2. In the NCSS Lab Layer table in NASIS there are two fields for horizon designations. One is called "Designation" and the other is called "Designation - Orig". Currently the field called "Designation" is being populated with the latest horizon designation available, and the "Designation - Orig" is being populated with the Oldest horizon Designation available. The goal is for the "Designation - Orig" to reflect the "sampled as" condition of the horizon designation.

3. In the Repository or Lab Data Mart there currently are two fields for horizon designation.

One is called hzn\_desig\_old and the other is called hzn\_desgn.

hzn\_desig\_old contains the horizon designations for a subset of the database in their original condition before being converted to a newer classification system.

Hzn\_desgn contains both horizon designations that were converted from the original horizon designations, as well as horizon designations from LIMS which would be considered "Sampled as" horizon designations.

Proposal to be implemented by June 2015:

1. Archive hzn\_desg\_old and lable it Archive\_Hzn\_desg. (ACCEPTED)

2. Archive hzn\_desgn as Archive\_hzn\_desgn\_Sampled\_as\_designations from LIMS (NO copy contents of this table into the Archive hzn\_desg\_old where the field is null.

3. Populate hzn\_desg\_old from NCSS\_Lab\_Layer "Designation\_Orig" and Archive\_hzn\_desg\_old for fields that are null. (With the exception of layers for which there is no real horizon designation available)

4. Populate hzn\_desgn from NCSS\_Lab\_Layer table "Designation".

What is the goal/result? There will then be a record of the oldest horizon designation and the newest horizon designation for each sample.

What has to happen before this can take place?

The horizon designations in the "Designation\_Orig" field in NASIS need to be brought back to the standards in place at the time the pedons were described. An example is that the Lithologic Discontinuities described prior to August of 1985 need to revert to Roman numberals.

The pieces and parts of the horizon designations that are artifacts of past storage systems have to be manipulated to make them clear again. All upper case T's have to go to t's. The B's have to be checked to verify if they are really B horizons or (b) suffix. Same with the C's and D's.

2. Several years ago Thomas Reinsch performed some global changes to update horizon designations in the Laboratory Database. Those updates currently are being displayed in the Current Horizon Designation field in the Repository.

In addition, there is a field for the horizon designation. That field either contains the updates that Thom made to the original horizon designations, or the horizon designations from the “sampled as” pedon descriptions owned by KSSL.

**The Layer Depths issues:**

The NCSS\_Lab\_Layer table has two fields for horizon designations and two fields for top depth and bottom depth.

The following updates have been performed to the information in those 4 fields.

1. The top depths have been adjusted to Post 1993 standards so that the top of the soil is measured to the top of the 1st horizon that supports root growth, which is the Oi, Oe or Oa for soils with O horizons, or the top of the mineral for those that do not.
2. The bottom depths have been adjusted so that the absolute value of the thicknesses of the horizons/sampled layers stays the same.
3. The Original Horizon Designation field has been populated with the horizon designations from the Sampled as Pedons, or the Original Horizon Designation from the Repository when there was no sampled as pedon from NASIS.
4. The horizon designation has been populated first by the horizon designation from the field owned pedon, then if there is no field owned pedon, from the Sampled as Pedon in NASIS, and if there is no pedon description in NASIS then from the Repository Layer table.

**Diagram of the issues above**

NASIS Site

Classification and Location

**Not Implemented**

Pedon

Description

**Implemented**

MLRA SSO Owned

NASIS

Pedon

Containing

Correlated Classification

Laboratory Data in the Data Sheet

Designations

Sampled As Pedon

Depths

Taxonomic History Table

NCSS Lab Layer Table in NASIS