

Terra-NASIS Project

- Terra (USFS) and NASIS (NRCS) both contain similar soil attributes
- Two independent databases cause problems:
 - ✓ Data redundancy
 - ✓ Inefficiency
 - ✓ Difficulty in data sharing
 - ✓ Data congruency issues
 - ✓ Difficult if not impossible to keep synchronized

- USFS and NRCS agree that some linkage of the soils portion of these databases are needed
- Several technical challenges exist:
 - ✓ Data formats (Informix vs. Oracle)
 - ✓ Database hierarchy (table structure, parent/child relationships, etc.)
 - ✓ Agency firewalls (i.e., communicating through each agencies security measures)
 - ✓ Terra is a distributed database (potentially every USFS district office can have an instance of Terra)

- Proposed a prototype web service:
 - ✓ Develop proof of concept before attempting linkage of applications
 - ✓ USFS and NRCS will each develop web services that will test our ability to communicate between applications on a small scale project
 - ✓ Will test a process for importing USFS Terra Potential Vegetation Classifications into NASIS Component Other Vegetative Classification table as a choice list

USFS Web Services Page

NRIS Terra Web Services Test Page version: 1.02
last update date: April 4, 2006 14:05:00

Please enter parameters for: **getClassifications overload#1**

Parameter Name	Value	Description
piSearchString	ARTR2/LEK2	Search string
piClassTypeList		List of classification types to search through. Default is ALL.

Result

```

getClassifications overload#1
<?xml version="1.0"?>
<CLASSIFICATIONS>
  <CLASS>
    <ECOCLS_CN>4910010291</ECOCLS_CN>
    <ECOCLS_TYPE>PVEOCLS</ECOCLS_TYPE>
    <CLASS_SET_NAME>JOHN97</CLASS_SET_NAME>
    <CLASS_CODE>30508</CLASS_CODE>
    <CLASS_SHORT_NAME>ARTR2/LEK2</CLASS_SHORT_NAME>
    <CLASS_NAME>big sagebrush/spike-fescue</CLASS_NAME>
    <CLASS_LEVEL_CODE>PVPAC</CLASS_LEVEL_CODE>
  
```

NRCS Web Services Page

NASIS Terra Pilot

Survey Area Symbol: C0645 Map Unit Symbol: 2704D Search

Component	Percent	Class Type	Reference	ID Class
Typic Haplustolls	55	Plant Associations, Region 2 Forest Service	Plant Associations of Region Two, Edition 4, Johnston, B. C., 1987.	72 Ponderosa pine/Arizona fescue (PIPO/FEAR2)
Typic Haplustolls	55	Plant Associations, Region 2 Forest Service	Plant Associations of Region Two, Edition 4, Johnston, B. C., 1987.	74 Ponderosa pine/true mountain mahogany (PIPO/CERCO)
Typic Haplustolls	55	Plant Associations, Region 2 Forest Service	Plant Associations of Region Two, Edition 4, Johnston, B. C., 1987.	81 Rocky mountain juniper/true mountain mahogany (JUSC2/CERCO)
Cathedral family	15	Plant Associations, Region 2 Forest Service	Plant Associations of Region Two, Edition 4, Johnston, B. C., 1987.	71 Ponderosa pine/antelope bitterbrush (PIPO/PUTR2)
Cathedral family	15	Plant Associations, Region 2 Forest Service	Plant Associations of Region Two, Edition 4, Johnston, B. C., 1987.	74 Ponderosa pine/true mountain mahogany (PIPO/CERCO)

NASIS with Imported Terra Choices

NASIS (18018) - MLRA06 Office

Object Status: Modified Edit Setup: Default Default Group: A-R NF

Cell Status: -

Data Mapunit: 440397 C0645-1701D RATAKE FAMILY-ROCK

Seq	Low	Comp X	RV	High	Component Name	Kind	Major Component	SIR phas
1		50			Ratake family	M	Family	yes

Choice List

Other Veg Class ID	Other Veg Class Name
3	Ponderosa pine-Rocky Mountain Douglas fir/mountain whily (PIPO-PS...)
2	Ponderosa pine-Rocky Mountain juniper/Gambel's oak (PIPO-JUSC/QUA)
10	Ponderosa pine-Rocky Mountain juniper/Gambel's oak/western wheatg...
6	Ponderosa pine-Rocky Mountain juniper/blue grama (PIPO-JUSC/BOGR2)
9	Ponderosa pine-twoneedle piñon/Gambel's oak (PIPO-PIED/QUGA)
1	Ponderosa pine/Gambel's oak (PIPO/QUGA)
8	Subalpine fir-Engelmann's spruce/Rocky Mountain whortleberry (ABL...
7	White fir-Rocky Mountain Douglas fir/Gambel's oak (ABCO-PSME/QUGA)
6	White fir-Rocky Mountain Douglas fir/Rocky Mountain whortleberry ...
4	White fir/Gambel's oak (ABCO/QUGA)

Next Steps:

- ✓ Install NRCS web services page on Web Farm (in process)
- ✓ Develop process and queries that select potential vegetation classifications from Terra
- ✓ Develop process to populate the NASIS Other Vegetative Classification table with choices from a Terra domain list
- ✓ If successful, develop business needs of both agencies and begin design of the linkage

