

### **How to assign a unique database code for NVCS plant alliances and associations:**

A standardized approach has been adopted for coding plant alliances and associations for storing as valid values in a reference table. This is needed for the development of a Forest Service standard geospatial database for existing vegetation, and for documenting the results of any formal vegetation classification work. The following approach is to use a fixed format with standard sub-items, and column referencing. It is likely that a unique table structure will be necessary to develop the standard alliance and association codes, allowing other constraint tables for ecological sections and NRCS Plants Master table constraints, as well as including other useful information as common names and descriptions. Once the codes are developed, then they are to be used as valid values for existing vegetation map attributing.

The first sub-item (5 characters) is the **ecological zone** where the alliance or association is found. This reference area should correspond to where the plot data was gathered for classifying the vegetation type. The intent is to document what section the existing vegetation type exists. As classification work progresses, users can reference classifications found with ecological zones, and if the same vegetation type is found in more than one section, then the type can be assigned a higher level province. For widely distributed plant alliances, ecological divisions may be found useful as the reference area; however, it is unlikely for plant associations.

The second, third and fourth sub-items (each 7 characters in size) are used for coding the dominant and or diagnostic species found in the uppermost stratum of a **plant alliance**. Three sub-items are provided for mixed types, to allow for naming of more than one plant species in the coding convention. Each sub-item has a leading number (1, 2, or 3) followed by 6-digit code where the NRCS Plants Master table codes are to be used as valid values. The resulting code for a plant alliance is 26 characters in size.

The fourth, fifth and sixth sub-items (each 7 characters in size) are used for coding the common species composition and or diagnostic species found in the understory. Three sub-items are provided for mixed types, to allow for naming of more than one plant species in the coding convention. Each sub-item has a leading number (4, 5, or 6) followed by 6-digit code where the NRCS Plants Master table codes are to be used as valid values. This allow for up to six species in naming **plant associations**. The resulting code for a plant association is 47 characters in size.

All plant associations belonging to the same plant alliance must share the same coding of species in the second, third and fourth sub-items. Using this database protocol, will allow for the selection of all related plant associations, through the selection of the plant alliance within an ecological zone.

An example of the coding convention and fixed format columns is shown below with an example of a plant association found in the Sierra Nevada's of California.

Province or Seccion	Plant Alliance						Plant Association					
<i>code</i>	<i>1 species code</i>	<i>2 species code</i>	<i>3 species code</i>	<i>4 species code</i>	<i>5 species code</i>	<i>6 species code</i>	<i>1 species code</i>	<i>2 species code</i>	<i>3 species code</i>	<i>4 species code</i>	<i>5 species code</i>	<i>6 species code</i>
xxxxx	1 xxxxxx	2 xxxxxx	3 xxxxxx	4 xxxxxx	5 xxxxxx	6 xxxxxx						
5	1 6	1 6	1 6	1 6	1 6	1 6						
26												
47												
M261E	1 PIPO	2 _____	3 _____	4 ARVI4	5 _____	6 _____						
Sierra Nevada Section	Ponderosa Pine				whiteleaf manzanita							