Background

The National Vegetation Classification Standard (NVCS) was drafted in 1997. This standard will be adhered to by the HSA protocol in order to maintain consistency with the eventual publication of the NVCS spatial database. The HSA protocol is similar to the field data forms used by NVCS contributors but is more detailed. Below are two excerpts from published literature dealing with the objectives of creating this standard.

Vegetation Classification and Information Standards http://www.fgdc.gov/standards/status/sub2 1.html

The overall objective of the Vegetation and Information Standards is to support the use of a consistent national vegetation classification system (NVCS) to produce uniform statistics in vegetation resources from vegetation cover data at the national level. It is important that, as agencies map or inventory vegetated Earth cover, they collect enough data accurately and precisely to translate it for national reporting, aggregation, and comparisons. Adoption of the Vegetation Classification and Information Standards in subsequent development and application of vegetation mapping schemes will facilitate the compilation of regional and national summaries. In turn, the consistent collection of such information will eventually support the detailed, quantitative, geo-referenced basis for vegetation cover modeling, mapping, and analysis at the field level.

Excerpt from the Executive Summary of the NBS/NPS Vegetation Mapping Program (Final Draft) Regarding the use of the Standardized National Vegetation Classification System.

The objective of the National Biological Survey/National Park Service (NBS/NPS) Vegetation Mapping Program is to develop a uniform hierarchical vegetation classification standard and methodology on a Service-wide basis and, using that classification standard and methodology, to generate vegetation maps for most of the park units under NPS management. This Program is in response to the National Park Service's Natural Resources Inventory and Monitoring Guideline (NPS-75) issued in 1992. The vegetation data are to be automated, in a GIS-compatible format, which will provide great flexibility in map design and production, data analysis, data management, and maintenance activities. Deliverable products will include a digital file of vegetation maps, digital metadata files, textual descriptions and keys to the vegetation classes, hard-copy maps, and map accuracy verification reports.

The use of a standard national vegetation classification scheme and mapping protocols will facilitate effective resource stewardship by ensuring compatibility and widespread use of the information throughout the NPS as well as by other federal and state agencies. These vegetation maps and associated information will support a wide variety of resource assessment, park management, and planning concerns. They will provide a structure for framing and answering critical scientific questions about vegetation types and their relationship to environmental processes across the landscape. They will provide a consistent means for the inventory and monitoring of plant communities and, they will support "ecosystem management" by providing a consistent basis for the characterization of the biological components of different ecosystem units.

Choosing the appropriate alliance to describe HSA habitat types

We have provided Appendices 2-6 to help you determine the NVCS Alliance level corresponding to any habitat type associated with your MAPS station. Depending upon your location only the appropriate one or two Appendices 4, 5 or 6 is (are) included in your HSA packet.

- **Appendix 2:** LEVELS OF THE CLASSIFICATION HIERARCHY: Description to Formation Level This document outlines the upper levels of the NVCS hierarchical classification system and will help you narrow down your search for the appropriate alliance to describe a habitat type.
- **Appendix 3:** Provides a glossary of terms used in the NVCS descriptions.
- **Appendix 4:** Provides a hierarchical list of NVCS alliance names and codes for the Eastern North American region covering: AL, AR, CT, DE, FL, GA, IA, IL, IN, KY, LA, MA, MD, ME, MI, MN, MS, MO, NC, NH, NJ, NY, OH, PA, RI, SC, TN, VA, VT, WI, and WV.
- **Appendix 5:** Provides a hierarchical list of NVCS alliance names and codes for the Central North American region covering: AR, CO, IA, KS, LA, MN, MO, MT, ND, NE, NM, OK, SD, TX, and WY.
- **Appendix 6:** Provides a hierarchical list of NVCS alliance names and codes for the Western North American region covering: AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, and WY.
- **Step 1**. Study the first page of HSA Appendix 2 and make sure you understand the NVCS hierarchy and how codes are constructed.
- **Step 2**. Use Appendix 2 to first narrow the search down to the FORMATION level code (e.g. IA8Nc Giant temperate or subpolar needle-leaved evergreen forest). In Appendix 2 we provide a list of CLASS (e.g. I Forest) level codes and their definitions. Under this there is a list of SUBCLASS level (e.g. IVA Dwarf-shrubland) codes and the page numbers corresponding to the starts of the lists of GROUP/Subgroup and FORMATION level codes under that SUBCLASS. Choose the appropriate FORMATION code that describes the habitat type you are interested in.
- **Step 3.** Once you have selected the FORMATION level code that corresponds to the general type of habitat you are trying to define move to Appendix 4, 5 or 6 (depending which region you are in see above). To help you search the regional ALLIANCE lists for the alliance that describes your habitat type we have provided the page numbers upon which each CLASS (I-VII) level starts. Scan the list until you find the FORMATION code you selected from Appendix 2, under which is a list of the component ALLIANCES for that FORMATION (e.g. IIBNa1 *Sequoiadendron giganteum* forest). **Enter the chosen NVCS Alliance code in the space provided at the top of HSA Form H1.**
- If, however, the habitat type you are considering is not described by any of the NVCS Alliances it is either not yet defined by NVCS, or is atypical for your region but may exist in a neighboring region. Firstly ensure that you record at least the FORMATION code, species names (please provide scientific names if possible), and an appropriate description of the habitat on HSA Form H1. You may also contact Phil Nott in case the alliance is atypical of your region but appears in a neighboring region obviously it is cost limiting to send all persons the entire North American list of alliances.