

Recommendations from Value Added Products Group

1. NACP SSG appoint a committee for the purpose of identifying, prioritizing and overseeing the production of value-added products (VAPs) relevant to NACP objectives.
 - a) Committee is point of contact for NACP community to propose new VAPs.
 - b) Committee determines whether a proposed VAP meets criteria:
 - i. Product is required to meet NACP objectives
 - ii. Production is not currently funded
 - iii. Production does not involve new research effort, but rather only implementation of existing, accepted (published) methods.
 - c) If basic criteria are met, and if proposed VAP is given a high priority, then committee recommends (to CCIWG?) formation of a product-specific working group tasked with creating the new product.
 - d) The working group should be formed to take advantage of existing capabilities.

Recommendations from Value Added Products Group (cont.)

- e) Working Group generates VAP and associated metadata, submits new dataset for registration and storage in the NACP data system.
2. All data products that are necessary to meet the NACP objectives (including any VAPs) should be indexed in a central NACP database. The data should be stored either in a central NACP archive or in another existing archive. The time horizon for archive stability should be at least as long as the time horizon for the NACP effort (20 yrs?).
 3. The NACP data system should include some core functionality in addition to the centralized indexing capability.
 - a) GIS, spatial/temporal subsetting, and format conversion capability
 - b) Support for real-time data ingest, processing, and distribution (UniData could support some of this).
 - c) Quantitative support for synthesis activities (cross-discipline translator?)
 - d) Scaling tools for intensive -> continental -> global
 - e) Dedicated staff with expertise in these areas.
 4. Interagency and intergovernmental agreements are required to take full

Recommendations from Value Added Products Group (cont.)

5. The NACP effort needs to include consideration of human dimension
 - a) NACP SSG should form a working group for stakeholder community.
 - b) Put out RFP to enhance human dimension engagement on carbon science issues.

6. We have identified the following high-priority value-added products that meet the criteria laid out above (1.b.).
 - a) Continental elevation and elevation-derivatives at multiple resolutions (1km and 90).
 - b) Continental gridded surface weather products (1km, daily, through present with annual updates)
 - c) Continental land-use and disturbance history datasets (50-100 yrs)
 - d) Landsat data analyzed to include land cover, disturbance, and LAI (is any of this research mode?)
 - e) Soil C and N from STATSGO, SSURGO, other field datasets (1km, 5-year updates)

Recommendations from Value Added Products Group (cont.)

- f) Biogenic and anthropogenic GHG emissions (CO_2 , CH_4 , CO)
 - g) Manuals for field and lab processing, description of QA/QC techniques and standards.
 - h) Forest Inventories
 - i. Historical data need to be digitized
 - ii. NACP needs to streamline relationship with USFS.
 - i) Gridded annual crop type data
7. The data system organization should allow both interactive and automated (service) access to data holdings.
 8. A standard set of projection and grid registration parameters should be adopted for continental-scale analyses and datasets, with the possibility of multiple parameter sets for multiple spatial resolutions.
 9. NACP should adopt standards for data formats that optimize the use of existing tool sets for common data processing operations like subsetting and aggregation. NetCDF??

How capable should the data system be?

Recommendations that argue for a more-capable data system:

1. Recommendations encompass the identification, prioritization, and implementation of two categories:
 1. Value-added products
 2. Value-adding services
 3. High-priority value-added products and services have already been identified by subset of PI community.
2. Take steps to include human dimensions in the NACP effort
3. Allow both interactive and service-based access to data system

Summary recommendations from Value Added Products Group (cont.)

5. Take steps to include human dimensions in the NACP effort
6. Allow both interactive and service-based access to data system

- These share some common criteria for inclusion in the NACP effort:
 - Product is required to meet NACP objectives
 - Production is not currently funded
 - Production does not involve new research effort, but rather only implementation of existing, accepted (published) methods.
- Also some criteria unique to the value-adding services, related to cost-effectiveness:
 - Implementation or application of the service is time-consuming
 - Service has a broad user community
 - Committee of NACP SSG charged with identifying and prioritizing value-added efforts.