

SOLE SOURCE DETERMINATION

The Purchasing Division has been requested to approve a sole source purchase for the commodity or service described below. Pursuant to West Virginia Code 5A-3-10c, the Purchasing Division is attempting to determine whether the commodity or service is a sole source procurement. If you believe your company meets the required experience and qualification criteria stated below, please e-mail the Purchasing Division at team@wvadmin.gov to express your interest in the project. Please forward any and all information that will support your company's compliance with required qualification and eligibility criteria along with any other pertinent information relative to this project to the Purchasing Division no later than 09/26/2006.

Requisition Number: TAX07005

Department/Agency: WV State Tax Department

Detailed Description of Project:

Valuation of Forest Resources and Managed Timberlands in West Virginia per the attached scope of work.

Proposed Sole Source Vendor: West Virginia University Research Corporation

Specific Eligibility Criteria:

Vendor must be able to:

Provide background in natural resource analysis and mapping (utilizing GIS); understand data base design issues and methods; understand parcel based mapping; and understand the intent and specific methodology requirements that are mandated by relevant state regulations for completing forest land and managed timberlands for land appraisals.

Specific Qualification Criteria:

Combination of expertise, technical support and efficient manpower deployments utilizing highly skilled employees (may use graduate students and faculty) which will allow the project to be completed in a timely manner. An organization that can undertake and complete this project at a deliberate pace over a number of years (2006-2011) is required due to the projected availabilities of the required data (digital SSURGO soils and surface parcel data) to involve a number of years.

PROPOSAL

INITIATION OF DATA COLLECTION AND ANALYSIS FOR

VALUATION OF FOREST RESOURCES

AND MANAGED TIMBERLANDS IN WEST VIRGINIA

WEST VIRGINIA DEPARTMENT OF TAX AND REVENUE
PROPERTY TAX DIVISION

Introduction

This proposal is for initiating efforts for implementing methods that were developed in a pilot study in 2001 for implementing methodological prescriptions that were outlined in "TITLE 110 – WEST VIRGINIA LEGISLATIVE RULE STATE TAX COMMISSION – SERIES 1H- VALUATION OF TIMBERLAND AND MANAGED TIMBERLANDS." The prior feasibility study, which was completed utilizing the Lockwood 7.5 minute quadrangle map, demonstrated methods for utilizing geographic information systems (GIS) and remote sensing for completing the required forest appraisals. Those methods in combination with digital soils (SSURGO) and surface parcel data that are becoming available now make the methodological framework that was prescribed in TITLE 110 now feasible to implement in an efficient and timely fashion.

Brief Background

The appraised value of forestland and in particular managed timberlands is determined on the basis of the potential of the land to produce future income according to its current use and productive potentials. The actual appraised value of timberland is determined on the basis of market comparability analysis through comparison with sales prices of comparable timberland properties. SERIES 1H – VALUATION OF TIMBERLAND AND MANAGED TIMBERLANDS outlines a series of prescribed methods and procedures for completing these appraisals. These prescriptions range from using specific data (e.g. site index data from the NRCS SSURGO soil surveys) to general statements of "best available data." However, digital site index data are available or will be available in the next few years so use of the site index data from the SSURGO data should be possible in nearly all cases.

In addition, the high resolution imagery from the SAMB mapping effort that has been initiated in West Virginia is available for completing forest / non-forest assessments that are at least time stamped to the 2003-2004 time period of the imagery. However, a number of statewide mapping efforts are using this imagery to provide baseline mapping on which subsequent mapping efforts might be based for revision and updating.

Proposed Scope of Work

This first mapping effort will be completed during 2006 – 2007. Financial support is available to complete only a small portion of West Virginia. This work will focus on a number of heavily forested counties in the central portion of West Virginia that are less heavily populated. First phase counties must have both digital SSURGO and digital surface parcel maps available. A tentative list of potential counties for this first phase of the project includes:

- Randolph
- Upshur
- Webster
- Nicholas
- Wyoming
- Boone County

Specific tasks include:

1. Building integrated data set including parcel information (obtained from Tax) and site index data (obtained from digital SSURGO data). The site index portion of the soils survey will be extracted and reclassified according to the prescribed levels of site quality. Maps and tables will be developed summarizing site quality tabulations for each parcel greater than ten acres in area. Parcels with current managed timberland designations will be separately identified and tabulated.
2. Assembling a forest / non-forest mask for the areas being studied. The SAMB data will be classified for forest and non-forest land cover types. Historic data will be used to roughly verify forest maturity to separate woodland from forestland conditions. So the resulting classification will likely be forestland, non-forestland, and woodland. Acreage estimates will be developed for each forested and woodland patch that is identified. Again this mapping will be time-stamped to the 2003-2004 imagery dates. Combining tasks 1 and 2 new tabulations and maps will be developed summarizing each parcel by cover type and site quality.
3. Developed maps and data tables will be sent to Tax for review on a county-to-county basis. Final data tabulations will also be completed on a county basis so large parcels that may extend through multiple counties will actually be tabulated on a county basis and not on a total parcel basis though those tabulations will be able to be produced from the data base.

4. The Lockwood pilot study also discussed application of remote sensing for timberland classification for the classes required in the timberland classification schedule. The SAMB high-resolution imagery, though of high quality in terms of spectral and spatial resolution does not allow for the measurement of tree crown diameters for correlation of those values with DBH. New imagery would have to be collected to precisely complete such measurements. However, assessments of relative forest age and maturity and general species composition can be completed using available ancillary data such as historic forest type mapping from the 1950's and 1970's and other imagery from the 1990's and satellite data classification from 2000 – 2002. USDA Forest Service FIA data may prove to be useful for sizing and providing species for the areas that are identified.
5. Will also identify and map features of note including recent clear-cuts, partial cuts and plantations.
6. Limited fieldwork will be completed to verify and estimate accuracies of results.

Reporting

Upon project initiation a revised / detailed work plan will be developed and submitted for review. Once efforts are underway draft mapping and tabular data will be submitted to Tax on a county basis. Quarterly updates will also be prepared and submitted.