

**SCIENCE NEEDS RANKING GUIDANCE**  
**APPALACHIAN LCC, WORKSHOP PLANNING TEAM**  
**November 2011**

- 1. MEETS BASIC TENET OF LCC PURPOSE - Science Need represents big picture thinking (large scale and/or long-term and multi-taxa) inherent to the LCC vision.**

ADDRESSES LANDSCAPE SCALE (LCC) ISSUES - The activities or research contribute toward addressing global or regional threats which require a landscape-level (LCC-scale) spatial approach in order to formulate a coordinated response or investigation (*"No single entity has the capacity or resources to address the issue alone"*).

**2a. IMPROVES RESEARCH OR SCIENCE KNOWLEDGE BASE - Science Need reduces uncertainty in one of 3 ways:**

- i. **ENHANCE RISK MANAGEMENT** - Activity or research investigation helps remove or resolve some uncertainty that is currently an impediment to the conservation community in planning, prioritizing, and taking action but must be integrated to manage risk to valued resources.
- ii. **TEST PROMISING PROOF OF CONCEPT** - Supporting the deployment of larger-scale/wider ranging system of experimental treatment or manipulation that reflect the application of promising result from a more narrow pilot study or demonstration activity.
- iii. **SYNTHESIS AND EVALUATION** - Activities or research support strategic review, evaluation, and synthesis describing the relative merits, proper application, and bounds of uncertainty of tools, methodologies, and strategies currently being applied with the intent of providing guidance to land and resource managers across the Appalachian LCC.

**2b. ENHANCES CONSERVATION PROGRAM MANAGEMENT - Science Need improves our conservation efforts in terms of better decision-making and increased effectiveness by either:**

- iv. **ENHANCE CONSERVATION PLANNING AND DECISION-MAKING TO ENHANCE DELIVERY** - Production of a broad landscape-planning analytical or decision support tool or integration of existing data to standardize and link across administrative or state boundaries and serve the needs of multiple conservation delivery members across the LCC.
- v. **SUPPORTS ADAPTIVE MANAGEMENT** - Activity or research advances LCC joint efforts to identify and incorporate effectiveness measures into landscape-level conservation planning, design, delivery, or monitoring and helps establish conservation targets.

**3. GETS THE TIMING RIGHT - Science Need represents the next logical step in a sequence.**

EXECUTES A BUILDING BLOCK FOR THE PORTFOLIO - Identified activity or research investigation fits within the broader Appalachian LCC Conservation Priorities Science Needs Portfolio, both in terms of outcomes, products, timeline and sequence (i.e., a foundational elements or components already in place and this represents the next integrative step).