

## Table of Contents

**Appalachian LCC Vision, Mission and Cooperative Structure** ..... Error! Bookmark not defined.

**PART I. Appalachian LCC Overview**..... Error! Bookmark not defined.

**SECTION 1. A Shared Conservation Mission in the Appalachians** .Error! Bookmark not defined.

1.1. Landscape Conservation Cooperatives..... **Error! Bookmark not defined.**

1.2. Open Standards for Measuring Conservation Outcomes ..... **Error! Bookmark not defined.**

1.3. Biodiversity “Hotspot” in the Appalachian Region..... **Error! Bookmark not defined.**

1. 4. Key Species and Habitats ..... **Error! Bookmark not defined.**

**SECTION 2. LANDSCAPE-LEVEL CHALLENGES**.....Error! Bookmark not defined.

2.1. Land Use in the Appalachians ..... **Error! Bookmark not defined.**

**SECTION 3. CLIMATE CHANGE**.....Error! Bookmark not defined.

3.1. Strategic Planning for Climate Change ..... **Error! Bookmark not defined.**

3.2. Climate Change Observed..... **Error! Bookmark not defined.**

3.4. Highly Sensitive or Vulnerable Habitats and Species ..... **Error! Bookmark not defined.**

3.5. Appalachian LCC as a Climate Refugia and Continental-scale Connectivity Corridor ..... **Error! Bookmark not defined.**

**PART II. SCIENCE CAPACITY RESOURCES**..... Error! Bookmark not defined.

**SECTION 4. SCIENCE CAPACITIES FOR SUPPORT OF THE APPALACHIAN LCC.** .Error! Bookmark not defined.

4.1. Existing Science Capacities within DOI..... **Error! Bookmark not defined.**

4.2 Other Existing Science Capacities within the Appalachian LCC Region . **Error! Bookmark not defined.**

4.3. Regional Collaborative Science Partnerships or Initiatives ..... **Error! Bookmark not defined.**

4.4. Science Capacity at State Agencies..... **Error! Bookmark not defined.**

4.5. Science Capacity at Academic Settings (universities, colleges, etc.)..... **Error! Bookmark not defined.**

4.6. Other Science Capacity in the Private Sector..... **Error! Bookmark not defined.**

**PART III. MANAGEMENT CAPACITY RESOURCES** ..... Error! Bookmark not defined.

**SECTION 5. MANAGEMENT CAPACITY** .....Error! Bookmark not defined.

5.1. Federal Agencies ..... **Error! Bookmark not defined.**

5.2. State Agencies ..... **Error! Bookmark not defined.**

5.3. Tribes..... **Error! Bookmark not defined.**

5. 4. Non-Governmental Conservation Organizations ..... **Error! Bookmark not defined.**

5.5. Public-Private Partnerships ..... **Error! Bookmark not defined.**

**PART IV. SCIENCE NEEDS AND ACTION ITEMS** ..... Error! Bookmark not defined.

**SECTION 6. LCC ACTIONS AT THE NATIONAL NETWORK LEVEL**....Error! Bookmark not defined.

**SECTION 7: ACTIVITIES LAUNCHING THE APPALACHIAN LCC**.....Error! Bookmark not defined.

7.1. Continue to Update the Science Needs Portfolio to Ensure Comprehensiveness..... **Error! Bookmark not defined.**

7.2. Pursue Data Integration ..... **Error! Bookmark not defined.**

7. 3. Share and Support Climate Change Monitoring and Research **Error! Bookmark not defined.**

**Literature Cited**..... Error! Bookmark not defined.

**Maps**..... Error! Bookmark not defined.

**Map 1. Map of the Appalachian LCC** .....Error! Bookmark not defined.

**Map 2. National LCC Network Boundaries**.....Error! Bookmark not defined.

Map 3. U.S. Biodiversity Diversity Hotspots ..... **Error! Bookmark not defined.**

**Map 4. Land Use within the Appalachian LCC** .....Error! Bookmark not defined.

**Map 5. Distribution of Marcellus shale and Coalfields within Appalachian LCC** Error! Bookmark not defined.

**Map 6. Formal Conservation Partnerships within and adjacent to the Appalachian LCC boundaries** .....Error! Bookmark not defined.

**Appendices** ..... Error! Bookmark not defined.

**Appendix I. List of Key Species of Federal, State, and Partner Importance** ...Error! Bookmark not defined.

**Appendix IIa. List of Recovery Plans** .....Error! Bookmark not defined.

**Appendix IIb. List of National Recovery Plan Leads** .....Error! Bookmark not defined.

**Appendix III. CESUs Operating in the Appalachian LCC** .....Error! Bookmark not defined.

**Appendix IV. List of Acronyms Relevant to the Appalachian LCC** ..Error! Bookmark not defined.

**Appendix V. Case Study**.....Error! Bookmark not defined.

Confidential