AMENDMENT FOUR TO
COOPERATIVE and JOINT VENTURE AGREEMENT

between

DEPARTMENT OF THE INTERIOR
Bureau of Land Management
U.S. Fish and Wildlife Service
U.S. Geological Survey
National Park Service

DEPARTMENT OF AGRICULTURE
U.S. Forest Service (Southern Research Station)
Natural Resources Conservation Service

DEPARTMENT OF DEFENSE
Office of the Deputy Under Secretary of Defense
(Installations and Environment)

and

UNIVERSITY OF TENNESSEE (HOST)
Appalachian State University
Florida A&M University
Lincoln Memorial University
Middle Tennessee State University
Tennessee Technological University
University of Kentucky
Western Carolina University
Western Kentucky University
Great Smoky Mountains Conservation Association
Institute for a Secure and Sustainable Environment
Oak Ridge National Laboratory
Southern Appalachian Man and the Biosphere
Virginia Polytechnic Institute and State University

Adding
With the exception of the changes below, all terms and conditions of the Southern Appalachian Mountains CESU agreement apply to this Amendment, and this Amendment is hereby made part of the agreement.

ARTICLE I. BACKGROUND AND OBJECTIVES
A.3. The US Army Corps of Engineers-Civil Works (USACE-CW) is included in the Southern Appalachian Mountains CESU as a Federal Agency Partner under agreement number W912HZ-08-2-0005 for a cumulative amount not-to-exceed $25,000,000.00.

J.2. The Joint Institute for Energy and the Environment hereby replaces its former name with its new name: Institute for a Secure and Sustainable Environment.

M.1. The US Army Corps of Engineers – Civil Works (hereinafter called USACE-CW) provides assistance in the development and management in the nation’s water resources. The main missions of USACE-CW, i.e., the Corps, are 1) to facilitate commercial navigation, 2) to protect citizens and their property from flood and storm damages, and 3) to protect and restore environmental resources. The Corps carries out most of its work in partnership with Tribal, state and local governments and other non-federal entities. The Corps must rely upon using the best available science in the evaluation of water resources needs and in the development of recommendations for water resource management. The university and scientific advances will assist the Corps in reaching sound, scientifically based decisions. In accordance with 10 U.S.C. 2358, USACE-CW is authorized to enter into the cooperative agreement with the Southern Appalachian Mountains CESU enabling the USACE-CW to receive direct scientific support from regional CESU members. USACE-CW is authorized to cooperate with other agencies in accordance with Title 33 U.S.C. 2323a and 10 U.S.C. 3036(d).

M.2. Pursuant to the authorities specified in this amendment for USACE-CW, the last sentence in Article I. Paragraph L.2. of Amendment Two to the Southern Appalachian Mountains CESU Cooperative and Joint Venture Agreement—“ACE is not authorized to use this agreement for Civil Works projects.”—is hereby rescinded.

ARTICLE II. STATEMENT OF WORK

ARTICLE III. TERM OF AGREEMENT
A.1. The effective date of the Southern Appalachian Mountains CESU Cooperative and Joint Venture Agreement is 18 June 2004.

A.4. The effective date of this amendment to the Southern Appalachian Mountains CESU Cooperative and Joint Venture Agreement shall be determined from the date of the last signature on this amendment.

ARTICLE IV. KEY OFFICIALS
A.4.1. The technical representative for the National Park Service is:

Paul Hartwig
Associate Regional Director, Cultural Resources & Partnerships
National Park Service, Southeast Region
Atlanta Federal Center, 1924 Building
1000 Alabama Street SW
Atlanta, GA 30303
Phone: 404-562-3110 x552
Fax: 404-562-3263
Paul_Hartwig@nps.gov

(Raymond Albright remains as a technical representative for the NPS.)

A.7.1. The technical representative for the Natural Resources Conservation Service is:

Lillian Woods, National Technology Support Coordinator
Acting National CESU/COE Coordinator
USDA - Natural Resources Conservation Service
P.O. Box 2890
Room 6227-S
Washington, D.C. 20013
Phone: 202-690-2010
Fax: 202-720-4839
Lillian.Woods@wdc.usda.gov

A.9. The technical representative for the Department of the Army, US Army Corps of Engineers-Civil Works is:

Dr. Alfred F. Cofrancesco
Technical Director, Civil Works, Environmental Engineering & Science
Department of the Army
Engineering Research and Development Center
Corps of Engineers
Environmental Laboratory
Waterways Experiment Station, 3909 Halls Ferry Road
Vicksburg, MS 39180-6199
B.1. The technical representative for the Host University is:

Keith Belli  
Professor and Department Head  
Department of Forestry, Wildlife and Fisheries  
The University of Tennessee  
Knoxville, TN 37996  
Phone: 865-974-7989  
Fax: 865-974-2085  
kbelli@utk.edu

C.10.1. The technical representative for the Institute for a Secure and Sustainable Environment (ISSE) is:

Randall Gentry  
Director  
Institute for a Secure and Sustainable Environment  
311 Conference Center Bldg.  
Knoxville, TN 37996-4134
C.12.1. The technical representative for the Southern Appalachian Man and Biosphere (SAMAB) is currently:

Susan Schexnayder  
Program Manager  
Southern Appalachian Man and Biosphere  
311 Conference Center Bldg.  
Knoxville, TN 37996-4134  
Phone: 865-974-5912  
Fax: 865-974-1838  
schexnayder@utk.edu

ARTICLE V. AWARD  
A.4. Upon signature of all parties to this amendment, Department of the Army, US Army Corps of Engineers-Civil Works will commit $10,000 in funds to the Host University in furtherance of the agreement, to be authorized by a modification issued against the agreement.

A.5. Also, in accordance with 22 CFR Part 518 (Department of Defense), 10 U.S.C. 2358, 33 U.S.C. 2323a, 10 U.S.C. 3036(d), and DoD 3210.6-R, Department of Defense Grant and Agreement Regulations (US Army Corps of Engineers-Civil Works).

ARTICLE VI. PRIOR APPROVAL  
A.3. Also, in accordance with 22 CFR Part 518 (Department of Defense), 10 U.S.C. 2358, 33 U.S.C. 2323a, 10 U.S.C. 3036(d), and DoD 3210.6-R, Department of Defense Grant and Agreement Regulations (US Army Corps of Engineers-Civil Works).

ARTICLE VII. REPORTS AND DELIVERABLES  
A.3. Also, in accordance with 22 CFR Part 518 (Department of Defense), 10 U.S.C. 2358, 33 U.S.C. 2323a, 10 U.S.C. 3036(d), and DoD 3210.6-R, Department of Defense Grant and Agreement Regulations (US Army Corps of Engineers-Civil Works).

ARTICLE VIII. PROPERTY UTILIZATION AND DISPOSITION  
A.3. Also, in accordance with 22 CFR Part 518 (Department of Defense), 10 U.S.C. 2358, 33 U.S.C. 2323a, 10 U.S.C. 3036(d), and DoD 3210.6-R, Department of Defense Grant and Agreement Regulations (US Army Corps of Engineers-Civil Works).
ARTICLE IX. TERMINATION
A.3. Also, in accordance with 22 CFR Part 518 (Department of Defense), 10 U.S.C. 2358, 33 U.S.C. 2323a, 10 U.S.C. 3036(d), and DoD 3210.6-R, Department of Defense Grant and Agreement Regulations (US Army Corps of Engineers-Civil Works).

ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES
The following authorizing signatures are attached to this amendment:

U.S. DEPARTMENT OF THE INTERIOR
A. Bureau of Land Management
B. U.S. Fish and Wildlife Service
C. U.S. Geological Survey
D. National Park Service

U.S. DEPARTMENT OF AGRICULTURE
E. USDA Forest Service
F. Natural Resources Conservation Service

U.S. DEPARTMENT OF DEFENSE
G. Office of the Deputy Under Secretary of Defense (Installations and Environment)
   U.S. Army Engineer Research and Development Center (Representing ODUSD)

U.S. DEPARTMENT OF THE ARMY
H. US Army Corps of Engineers-Civil Works
I. UNIVERSITY OF TENNESSEE
J. Appalachian State University
K. Florida A&M University
L. Lincoln Memorial University
M. Middle Tennessee State University
N. Tennessee Technological University
O. University of Kentucky
P. Western Carolina University
Q. Western Kentucky University
R. Great Smoky Mountains Conservation Association
S. Institute for a Secure and Sustainable Environment
T. Oak Ridge National Laboratory
U. Southern Appalachian Man and Biosphere
V. Virginia Polytechnic Institute and State University
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

A. Bureau of Land Management

[Print Name]:             Date
[Print Title]:

[Print Name]:             Date
[Print Title]:

ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

B. U.S. Fish and Wildlife Service

[Signature]

[Print Name]: Donald Calder
[Print Title]: Chief, Contracting & Grant Services Division

3-6-08
Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

C. U.S. Geological Survey

______________________________   __________________
[Print Name]:             Date
[Print Title]:
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

D. National Park Service

[Print Name]:
[Print Title]:

Date

Paul Hartwig
Associate Regional Director
Cultural Resources & Partnerships, Southeast Region

3/6/08

Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

E. USDA Forest Service, Southern Research Station

[Signature]

Jimmy L. Reaves
Station Director

[Signature]

3-28-08
Date
Agreement Number 05-JV-11330101-267, Amendment 4

The authority and format of this instrument has been reviewed and approved for signature.

Kathy M. Rich 3/29/18
Southern Research Station DATE
FS Agreements Coordinator
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

F. Natural Resources Conservation Service

___________________________________   ______________
[Print Name]:           Date
[Print Title]:

______________________________   ______________
[Print Name]:
[Print Title]: Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

G. Department of Defense – Office of the Deputy Under Secretary of Defense  
(Installations and Environment)

[Print Name]: 
[Print Title]:  
(Representing ODUSD (I&E))
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

H. US Army Corps of Engineers-Civil Works

Michael J. Lee

[Print Name]:
[Print Title]:

20 February 2008
Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

I. The University of Tennessee

Keith Belli
Professor and Department Head
Department of Forestry, Wildlife, and Fisheries

3/11/08
Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

J. Appalachian State University

[Print Name]:
[Print Title]:

Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

K. Florida A&M University

Larry Robinson, PhD

[Print Name]: PROFESSOR/DIRECTOR OF ECSC
[Print Title]:

3/19/08 Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

L. Lincoln Memorial University

Ronald S. Caldwell
RONALD S. CALDWELL

[Print Name]: PROFESSOR OF BIOLOGY
[Print Title]: DIRECTOR, CUMBERLAND RESEARCH CENTER
LMU

12 April 2008
Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

M. Middle Tennessee State University

[Signature]

[Print Name]: John W. Cothern
[Print Title]: Senior Vice President

[Date]: 3/12/08
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

N. Tennessee Technological University

[Print Name]:
[Print Title]: Francis Otuonye, Ph.D.
Assoc. VP for Research/Graduate Studies

3/17/08
Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

O. University of Kentucky

[Signature]

(Print Name): Jeffrey W. Stringer

(Print Title): Professor, Department of Forestry

(Date): 3/29/08
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

P. Western Carolina University

[Print Name]:
[Print Title]: Scott E. Higgins, Dean Graduate School and Research

3/19/08
Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

Q. Western Kentucky University

PHILLIP E. MYERS, Ph.D.
DIRECTOR, OSP

3-24-08
Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

R. Great Smoky Mountains Conservation Association

[Signature]

[Print Name]: Edgar M. Faust
[Print Title]: ASST. SEC.

13 March 08
Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

S. Institute for a Secure and Sustainable Environment

[Signature]
Randall Gentry
Director

4-8-08
Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

T. Oak Ridge National Laboratory

[Print Name]: ___________________________ Date
[Print Title]
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

U. Southern Appalachian Man and the Biosphere

Susan Schexnayder
Program Manager

3/12/07
Date
ARTICLE XII. AMENDMENT AUTHORIZING SIGNATURES (cont.)

V. Virginia Polytechnic Institute and State University

__________________________________________   ________  
Brad Fenwick          Date
Vice President for Research