



United States Department of the Interior
NATIONAL PARK SERVICE
INVENTORY AND MONITORING PROGRAM
APPALACHIAN HIGHLANDS NETWORK
67 Ranger Dr
Asheville, NC 28805



January 26, 2016

To: Kirsten Gallo, Inventory and Monitoring Division Chief

From: Brian Witcher, Appalachian Highlands Network Program Manager

Re: Monitoring Protocol Reprioritization

In accordance with your memo dated 2 July 2015, “Completion Deadline for Monitoring Protocols”, this memorandum documents a revision to the monitoring plan for the Appalachian Highlands Network. The network's Vital Signs Monitoring plan was published in 2005 and presented a list of vital signs that were considered “core” in Table 3.1, designated as “The final resulting hierarchical “short list” of Vital Signs for protocol development, presented in Table 3.1, was agreed upon by the STC and approved by the Board of Directors in the summer of 2004.” The monitoring plan was published prior to completion of protocols, and prior to a clear understanding of the magnitude of the data management, data analysis, safety, and other operational costs and staff time required to implement scientifically sound and effective monitoring of the network's vital signs. The network cannot sustainably implement the original list of “core” vital signs described in the monitoring plan because the operational costs were underestimated.

The network followed the guidance in your memo and in the follow-up guidance developed for the Southeast Region (Guidance of Vital Signs Reprioritization for the Southeast Region I&M Program, 25 September 2015) distributed nationally. Specifically, the network convened a series of internal meetings of network staff to consider the original “core” vital signs and propose revisions. This evaluation also explicitly considered tasks that were not directly related to monitoring – such as science communication and technical assistance to parks – that are considered central to the network’s mission. The evaluation further considered the overall operations of the network, from details of protocol implementation to administration, and developed a list of potential cost-saving options that can be implemented if necessary to ensure the network’s core vital signs can be monitored even if there is some budget erosion in the coming years.

Following the internal prioritization process, the revised priorities and cost-saving options were distributed to the network's Technical Committee and Board of Directors for review and approval.

Several protocols that were core in the network’s monitoring plan have been revised to secondary protocols. In the language of the 2 July 2015 memo, these protocols will remain implemented but are “deferrable,” meaning they are protocols that may have reduced or cancelled implementation as funding for the network gets tight. These “deferrable” protocols include Aquatic

macroinvertebrates, Invasive exotic plants, Forest Vegetation, T&E species and communities (Fish), Veg impacts from recreational rock climbing. Finally, the land cover and land use vital sign was replaced with the national IMD NPScape protocol, and most of the Air Quality vital signs (Ozone, Wet and Dry Deposition, and Visibility and Particulate Matter) are the responsibility of the Air Resources Division.

The following pages contain a table of the network's vital signs, original priorities, and new priorities (where they are different from the original priority), as approved by the network Board of Directors:

Table is a subset of vital signs originally identified for development into protocols by the network.

Protocol (Vital Signs)	Current Cost (2015)	Original Priority	Current Priority	Updated Status (Cost Savings if Deferred)	Explanation
Weather	N/A	Core Protocol	Primary	Protocol in development	National I&M responsibility
Ozone	N/A	Core Protocol	Primary	Implemented	
Wet and dry deposition	N/A	Core Protocol	Primary	Implemented	National ARD responsibility
Visibility and particulate matter	N/A	Core Protocol	Primary	Implemented	National ARD responsibility
Air contaminants	N/A	Core Protocol	Secondary	Deferred	
Continuous Water Quality (Surface water dynamics, Water chemistry)	\$53,600	Core Protocol	Primary	Implemented	Protocol submitted for final editing
Discrete Water Quality (Water chemistry, Nutrient dynamics, Toxics, Microorganisms)	\$71,200	Core Protocol	Primary	Implemented	Protocol in review
Aquatic macroinvertebrates	N/A	Core Protocol	Secondary	Deferred	Requires additional resources and protocol development
Invasive exotic plants	N/A	Core Protocol	Secondary	Deferred	
Riparian communities-Cumberlandian cobblebars	\$23,400	Core Protocol	Primary	Implemented	Includes monitoring of Cumberland Rosemary
Forest Vegetation	N/A	Core Protocol	Secondary	Deferred	
Freshwater invertebrates	\$6,000	Core Protocol	Primary	Protocol in development	
T&E species and communities – Fish	N/A	Core Protocol	Secondary	Deferred	Require additional resources and protocol development
Plant poaching	\$38,689+\$41,704	Core Protocol	Primary	Implemented	Split into Galax and Rich Cove protocols
Veg impacts from	N/A	Core	Secondary	Cancelled	

<i>Protocol (Vital Signs)</i>	<i>Current Cost (2015)</i>	<i>Original Priority</i>	<i>Current Priority</i>	<i>Updated Status (Cost Savings if Deferred)</i>	<i>Explanation</i>
recreational rock climbing		Protocol			
Land cover and use	N/A	Core Protocol	Primary	Protocol in development	National protocol

Recommended by:

Brian Witcher 2/5/2016
Brian Witcher, Appalachian Highlands Program Manager Date

Concurrence:

Brian A. Mitchell Digitally signed by BRIAN
MITCHELL
Date: 2016.02.09 12:09:49 -05'00' 2/9/2016
Brian Mitchell, Southeast Region I&M Division Chief Date

Niki Stephanie Nicholas 2-4-16
Niki Stephanie Nicholas, Chair, APHN Board of Directors Date

Approval:

Kirsten Gallo 18 Feb 2016
Kirsten Gallo, Chief, Inventory and Monitoring Division Date