

SECN Program Summary

National Park Service
U.S. Department of the Interior

Inventory & Monitoring Program
Southeast Coast Network



Status of SECN Basic Natural Resource Inventories

Natural Resource Inventories in National Parks

The Inventory and Monitoring Program provides guidance, funding, and technical assistance for parks to complete a set of twelve "basic" natural resource inventories. These basic inventories are common to all parks with significant natural resources, and are intended to provide park managers with the minimum information needed to effectively manage the natural resources of their park (NPS 2009).

Status of Inventories in Southeast Coast Network Parks

Inventory	CAHA	CALO	CANA	CASA	CHAT	CONG	CUIS	FOCA	FOFR	FOMA	FOPU	FOSU	HOBE	KEMO	MOCR	OCMU	TIMU	Legend
Air Quality Data	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	● Complete
Air Quality Related Values	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	● In Progress
Base Cartography Data	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	× Not Yet Scheduled
Baseline Water Quality Data	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Climate Inventory	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Geologic Resources Inventory	●	●	●	●	×	●	●	●	●	●	●	●	●	×	×	●	×	
Natural Resource Bibliography	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Soil Resources Inventory	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Species Lists	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Species Occurrence and Distribution	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Vegetation Map Inventory	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Water Body Location and Classification	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

Natural Resource Bibliography Inventories also complete at CHPI, FORA, and WRBR.

Air Quality Data

The quality of air in national parks can significantly affect park resources such as vegetation, soils, water, and buildings and monuments, as well as park visitors. Visibility, for example, has a strong impact on a visitor's experience and the perception of a national park. In some instances, air pollutants such as ozone, sulfur dioxide, or particulate matter can reach concentrations that injure plants or cause adverse health effects for persons visiting or working in parks.

The Air Quality Inventory focuses on indicator pollutants regulated under the Clean Air Act. Trends and spatial variability are important for assessing the potential impact of air quality on natural resources.

Air Quality Related Values

Air quality related values (AQRVs) are resources sensitive to air quality and include a wide array of vegetation, soils, water, fish and wildlife, and visibility. The goal of the AQRV inventory is to provide park-specific information on the location, distribution, and relative sensitivity of AQRVs. And, where possible, the AQRV inventory will provide information on the types and amounts of air pollutants that cause harmful changes to AQRVs.

Base Cartography Data

Cartographic information from this inventory provides geographic information systems (GIS) data layers to National Park resource management staff, researchers, and research partners. The inventory acquires, processes, and distributes

GIS data that complement other inventory projects, as well as many GIS mapping and analysis projects throughout NPS.

Baseline Water Quality Data

Parks need to ensure that the physical, chemical, and biological characteristics of their waters sustain healthy aquatic ecosystems, support the purposes of the park, and attain all state-designated beneficial uses. To accomplish this task, data retrievals were made from the primary national water quality databases: EPA's STORET Data Warehouse and the USGS National Water Information System. When a park's Baseline Water Quality Data Inventory and Analysis Report revealed an absence or paucity of data or only very old data for key park water bodies, parks were funded to collect baseline water quality data.

Climate Inventory

Understanding current and historical climate trends is essential for interpreting ecological conditions and changes in national parks, and for determining associated management strategies and actions. Access to climate data, especially in light of climate change, is fundamental to our understanding of the status of ecosystems and species and their response to climate variability. In addition, weather and climate profoundly influence everyday park operations such as fire management, search and rescue, visitor services, and maintenance of park infrastructure.

Geologic Resources Inventory

The Geologic Resources Inventory aims to raise awareness of geology and the role it plays in the environment, and to provide park staff and researchers with information that can help them make informed management decisions.

Geologic resources for management consideration include both the processes that act upon the Earth (such as erosion and sedimentation; seismic activity, and shoreline change.) and the features formed as a result of these processes (minerals, rocks, fossils, beaches, dunes, and faults)

Natural Resource Bibliography

The Natural Resource Bibliography has been developed to catalog and manage natural resource-related information products pertaining to national parks. The focus of these records is primarily on reports, articles, conference proceedings, theses and dissertations, gray literature, and other documents that contain information on park natural resources. In particular, the inventory captures references that may not be easily located via commercial on-line reference services or via public or academic libraries.

Soil Resources Inventory

Soil surveys conducted throughout lands under NPS stewardship provide an orderly, on-the-ground, scientific inventory of soil resources. The Soil Resources Inventory includes maps of the locations and extent of soils, data about physical, chemical, and biological properties of those soils, and information derived from those data about potentialities and problems of use on each kind of soil

Species Lists

The core of the Species Lists inventory is a compilation of existing species lists and evidence records (vouchers, scientific documents, and observation records that support the species occurrences) sufficient to develop species lists for vertebrate and vascular plant taxa that are 90% complete. The data are quality-checked and certified by subject-matter experts.

The inventory includes standardized information associated with the occurrence of species in parks, including scientific names and their synonyms, common names, abundance, residency, nativity, T&E status, and reasons why a species may be of particular management interest to a park.

Species Occurrence and Distribution

Initial funding provided in 2000-2005 allowed most parks to conduct field studies to determine the occurrence of vertebrates and vascular plants. These are groups for which methodology and taxonomy were better developed at the time, and therefore could be surveyed more efficiently; however, only limited work on the distribution and abundance of the park's highest-priority species could be undertaken.

Vegetation Mapping Inventory

The Vegetation Mapping Inventory is an effort by the National Park Service (NPS) to classify, describe, and map detailed vegetation communities in more than 270 national park units across the United States.

The primary objective of the Vegetation Mapping Inventory is to produce high-quality, standardized maps and associated data sets of vegetation and other land-cover occurring within parks. This information fills and complements a wide variety of resource assessment, park management, and conservation needs.

Literature Cited

National Park Service. 2009. Strategic plan for natural resource inventories: FY 2008 - FY 2012. Natural Resource Report NPS/NRPC/NRR—2009/094. National Park Service, Fort Collins, Colorado.

For More Information

Southeast Coast Network –
<http://science.nature.nps.gov/im/units/secn/>

Inventory & Monitoring Home –
<http://science.nature.nps.gov/im/inventory/>

Inventory Home –
<http://science.nature.nps.gov/im>

Search Inventory Information – adf
<http://science.nature.nps.gov/im/tracking/InventorySearch.aspx>.

National Park Service. 2011. Status of 12 Basic Natural Resource Inventories, July 2011. Southeast Coast Network Program Summary, National Park Service, Athens, GA.