

Appendix L: Operational Staffing Plan

Background

The Southern Colorado Plateau Network (SCPN) is one of 32 National Park Service inventory and monitoring networks nationwide developing Vital Signs Monitoring Plans to assess the condition of park ecosystems. The network approach facilitates collaboration, information sharing, and economies of scale in natural resource monitoring and will provide parks with a basic monitoring infrastructure that can be built upon in the future. This document describes the staffing plan for implementing Vital Signs Monitoring within the SCPN.

The Service has long recognized the need to conduct comprehensive inventory and monitoring of natural resources in parks. Management policies have been in effect since the 1980's which stipulate that we will undertake inventories of natural resources in parks to determine their nature and status and to monitor changes in the condition of those resources over time. In 1999, the National Park Service began the Natural Resource Challenge (NRC), which is funded by the National Park Service Omnibus Act (1998). The goals of the NRC include providing national parks with the scientific information they need to develop sound management programs. Part of the NRC, The Inventory and Monitoring Program, is designed to establish inventory and monitoring as standard practice in the National Park Service, to monitor park ecosystems to provide a scientific basis for park management, to share information from inventory and monitoring widely, and to form partnerships in order to attain program goals and objectives. Scientific information developed through these efforts must provide the basis for any successful natural resource management and preservation program. To facilitate cost sharing and leveraging efforts, parks have been organized into 32 networks linked by geography and shared resource characteristics. Each network will receive up to 8-9 new positions and a set amount of funding to conduct inventory and park vital signs monitoring projects. These positions, which will include taxonomic, ecological, and technical experts, will provide credibility for NPS in its role as a manager of park ecosystems and plants and animals species.

The SCPN is composed of 19 parks located in northern Arizona, northwestern New Mexico, southwestern Colorado and southern Utah. The parks range in size from 14 to more than 500,000 hectares. The SCPN Vital Signs Monitoring Program is base funded at the WASO level with an allocation of \$1,209,000 from the Servicewide I&M program and an additional \$124,000 from NPS-Water Resources Division (WRD) for a total base funding level of \$1,333,300. In FY2004, a NPS 2% assessment (on all funds excluding permanent salary) reduced available funds by \$22,680. FY2005 assessments reduced the available funds by \$9,000. Seven FTE have been allocated to SCPN.

During the three-phase planning process, SCPN staffing needs were somewhat different than those required for the operational monitoring program. It was important during the early development of the program for the permanent network staff to be kept to a minimum in order to ensure program flexibility as the overall monitoring design and resultant discipline and technical needs took shape. At the same time, experience has demonstrated that having a core professional NPS staff during the latter phases of the protocol development process will facilitate working with USGS/BRD and university investigators to ensure that stronger, more relevant products emerge from these cooperative relationships. A core staff also provides an essential bridge as the program moves from the planning phase to an operational program. It has been demonstrated that continuity among program staff and a programmatic history of monitoring decisions are key elements in the success of long-term monitoring or research programs. The SCPN network has the opportunity to learn from the experience of the twelve networks that are 1-2 years ahead of us in the planning process. A universal problem voiced by the network program managers has been insufficient staff to meet the heavy workload and rigorous timeframe imposed by WASO.

We partially met this challenge by accomplishing much of the initial data synthesis, conceptual modeling and protocol development work through cooperative relationships with USGS and CESU cooperators (25% of FY2004 monitoring budget; 39% of FY2005 monitoring budget). Tapping the professional expertise of our USGS and university colleagues is an excellent approach to meeting one-time research and development needs, and may also play a limited role in addressing the long-term operational requirements of the program.

We will use a three-pronged approach to meeting SCPN operational staff needs over the next five years. First, we will complete the core permanent staff of the network by adding three new positions:

- GS11-12 Terrestrial Ecologist (Vegetation, Soils)
- GS9-11 Botanist
- GS9-11 GIS Specialist

A fourth position (GS7-9 Assistant Data Manager, Term) will be converted to a permanent (STF) position.

Secondly, we will modify our term staff composition over the next few years to respond to a shifting workload. These changes include ending the term GS-7 Library Technician position early in FY2006, and ending the term GS11-12 Vegetation Ecologist position as the vegetation mapping projects draw to a close (probably in FY2007).

Finally, we propose the use of our cooperative relationship with NAU to meet the recurring need for discipline-specific crew leaders and monitoring crews (i.e. water resources crew; upland vegetation/soils crew). We may also continue to use interagency or CESU agreements to accomplish some monitoring projects (i.e. landscape, habitat-based bird and arthropod monitoring, wildland values, invasive exotic plants).

Staffing Requirements To Implement Vital Signs Monitoring

[Table L1](#) describes the network's current approach toward meeting the specific professional and technical staffing requirements associated with the SCPN core vital signs. For the majority of vital signs, protocol development has progressed sufficiently to estimate the professional workload associated with designing, implementing, and analyzing/reporting monitoring results, as well as the technical workload associated with conducting field work and processing the resulting data. In a few cases (invasive exotics, landscape components, wildland values vital signs), protocol development is in too early a stage to completely determine whether the workload is best accomplished through SCPN staff, cooperators, or a combination of the two.

Omitted from [Table L1](#) are workload components associated with data management. The Servicewide I&M Program suggests that at least one third of network resources should be dedicated to data management in order to ensure that the network monitoring program produces high-quality data that is well-maintained and accessible to park managers, cooperating scientists and the general public. [Table L1](#) also does not reflect the overall sampling design and analysis direction provided by the Quantitative Ecologist.

Table L1. Professional and technical staffing requirements associated with SCPN core vital signs.

	Vital Sign	Principal Investigators & (Contributors)	Field Work	Laboratory, Data Processing, etc.
Air and Climate	Air Quality: (Ozone, wet & dry deposition, visibility & particulate matter)	NPS Air Resources Division/ Class I Park Staff	NPS Air Resources Division/ Class I Park Staff	NPS Air Resources Division/ Class I Park Staff
	Climate conditions & soil moisture	SCPN Staff (tbd) (NPS, WRCC partners)	SCPN Staff (tbd) (NPS, park partners)	Western Region Climate Center (data archival)
Riparian & Aquatic Ecosystems	Stream and spring water quality	SCPN Hydrologist	SCPN Hydrologist NAU water resource crew	Water chemistry – laboratory tbd Macroinvertebrates – laboratory tbd
	Aquatic macroinvertebrates			
	Stream flow & depth to groundwater	SCPN Hydrologist (SCPN Botanist, Terrestrial Ecologist)	SCPN Hydrologist NAU water resource crew	SCPN Hydrologist SCPN Botanist NAU water resource crew
	Channel morphology			
	Riparian vegetation composition & structure			
	Riparian bird communities	Univ. or USGS cooperator	Univ. or USGS cooperator crew	Univ. or USGS cooperator crew
Spring ecosystems: hydrology, vegetation, invertebrates	SCPN Hydrologist (SCPN Botanist)	SCPN Hydrologist NAU water resource crew	SCPN Hydrologist SCPN Botanist NAU water resource crew	
Upland Ecosystems	Soil stability & upland hydrologic function	SCPN Terrestrial Ecologist SCPN Botanist (Program Manager)	SCPN Terrestrial Ecologist SCPN Botanist NAU uplands crew	SCPN Terrestrial Ecologist SCPN Botanist NAU uplands crew
	Vegetation composition & structure			
	Upland bird communities	Univ. or USGS cooperator	Univ. or USGS cooperator crew	Univ. or USGS cooperator crew
	Ground-dwelling arthropods	Univ. or USGS cooperator	Univ. or USGS cooperator crew	Univ. or USGS cooperator crew
Landscape	Invasive exotic plants (early detection)	Univ. or USGS Cooperator (?) (SCPN Terrestrial Ecologist, Botanist)	To be determined	Univ. or USGS cooperator (?) SCPN GIS Specialist SCPN Botanist
	Land use – land cover & landscape vegetation pattern	SCPN Quantitative Ecologist SCPN GIS Specialist Univ. or USGS cooperator (?)	To be determined	Univ. or USGS cooperator (?) SCPN GIS Specialist
	Vegetation condition & disturbance patterns	SCPN Quantitative Ecologist SCPN GIS Specialist Univ. or USGS cooperator (?)	To be determined	Univ. or USGS cooperator ? SCPN GIS Specialist
Wildland Values	Natural soundscape condition	NPS Cooperator (SCPN Staff - tbd)	To be determined	To be determined
	Night sky condition	NPS Cooperator (SCPN Staff - tbd)	To be determined	To be determined

NPS Operational Staff

Table L2 describes the NPS staffing for the SCPN. Position summaries are provided below.

Table L2. NPS staffing for the SCPN.

NPS Positions	Grade	Appointment	Incumbent
Program Manager	GS-12/13	Permanent	Lisa Thomas
Program Assistant	GS-6/7	Permanent; ½ time	Joan Harris
Data Manager	GS-9/11	Permanent	Nicole Tancreto
Quantitative Ecologist	GS-11/12	Permanent	Dr. Chris Lauver
Hydrologist	GS-11/12	Permanent	Steve Monroe
Terrestrial Ecologist (Vegetation, Soils)	GS-11/12	Permanent	vacant
Botanist	GS-9/11	Permanent	vacant
GIS Specialist	GS-9/11	Permanent	vacant
Data Manager Assistant	GS-5/7/9	Will convert to Permanent (STF)	Marguerite Hendrie
Vegetation Ecologist	GS-12	Term; propose ending position as vegetation mapping projects end	Dr. Anne Cully

Program Manager (Ecologist, GS-408-12/13, Permanent; currently filled by Lisa Thomas)

Position Summary: The Program Manager is responsible for the overall management and supervision of the program. The Program Manager is supervised by the NPS Colorado Plateau – CESU Research Coordinator. The Program Manager consults with network parks, the SCPN Technical and Science Advisory Committees, the SCPN Board of Directors, the regional I&M coordinator, and the Servicewide I&M Program Managers to establish general program direction and develop strategies for accomplishing program goals. Duties include overseeing the process for selecting indicators, coordinating the design and development of a balanced monitoring program, development and testing of monitoring protocols, development of monitoring and research designs and workplans, data assessment, analysis and management, and the publication and dissemination of program results. The Program Manager is responsible for ensuring scientific rigor and oversight to SCPN I&M program development and implementation. The Program Manager oversees the development of network data management capabilities that are critical to the collection, maintenance and accessibility of high-quality, consistent long-term data. The Program Manager is responsible for all aspects of program management including formulation and management of budgets; development, hiring and supervision of network staff; development, negotiation and management of cooperative agreements, contracts and similar instruments; and preparation of network plans, workplans and annual program reports. The Program Manager is also responsible for effectively communicating the results of the monitoring program to park managers, cooperators, scientists and the public. As needed, the incumbent is expected to establish creative partnerships to support SCPN I&M program goals.

Program Assistant (GS-6/7, permanent, ½ time share with CP-CESU; currently filled by Joan Harris)

Position Summary: The Program Assistant serves as office manager for the SCPN and CP-CESU, coordinating administrative tasks for both programs. Duties include timekeeping, travel management, procurement, property inventory, and office logistics. The Program Assistant tracks “status of funds” throughout the year and providing periodic reports. The incumbent maintains formal and informal property inventories. The incumbent assists program coordinators with special projects, such as organizing and making the logistical arrangements for meetings and workshops. The Program Assistant

organizes and maintains the program filing system that includes correspondence, meeting minutes, technical reports, NPS policy and guidelines, and other program documents.

Data Manager (Biologist, GS-401-9/11, Permanent; currently filled by Nicole Tancreto)

Position Summary: The Data Manager is responsible for the information and data stewardship of the program. The Data Manager develops and maintains a comprehensive database management system for physical, biological and environmental data associated with the SCPN. The Data Manager obtains and manages an extensive body of existing information and data from the parks, cooperating agencies and institutions, and adjoining land management agencies. The Data Manager designs databases for inventory and monitoring projects, writes data management plans and protocols, and develops appropriate linkages between related datasets. The Data Manager works with network and park staff, cooperating scientists and others to ensure that datasets are fully documented and validated. The Data Manager serves as the 'point of contact' for NPSpecies data management for SCPN parks and works with the suite of Servicewide I&M databases. The Data Manager is a key link for the dissemination of natural resource data to park managers, cooperating agencies and scientists. The Data Manager also contributes to regional and national discussions regarding data management standards, innovations and issues.

Quantitative Ecologist (Ecologist, GS-408-11/12, permanent; currently filled by Chris Lauver)

Position Summary: The Quantitative Ecologist is responsible for developing the overall sampling design, inference strategy, and analytic components of the program. The Quantitative Ecologist will provide statistical and analytic support to all network monitoring projects and develop sound statistical approaches to analyzing monitoring data. The Quantitative Ecologist will also oversee inventory and monitoring projects within his/her subject matter expertise, including the drafting and oversight (as COTR) of projects performed through contract, interagency or cooperative agreement. The Quantitative Ecologist will also provide subject matter expertise in a particular biological, environmental or physical science discipline. An integral role of the Quantitative Ecologist position is to work collaboratively with staff and cooperating scientists to ensure rigorous and integrated collection of quantitative monitoring data.

Hydrologist/Aquatic Ecologist (Interdisciplinary, GS-11/12, permanent; currently filled by Steve Monroe)

Position Summary: The Hydrologist/Aquatic Ecologist is responsible for developing and implementing monitoring program components relating to water resources. The Hydrologist/Aquatic Ecologist will work with park scientists and resource managers to identify and prioritize network monitoring needs and define the scope of related monitoring projects. The Hydrologist/Aquatic Ecologist will also develop monitoring protocols relating to water quality. This will require review and modification of existing protocols (state, EPA, etc.) and coordination with potential monitoring partners. The incumbent will oversee work by interagency and university cooperators to 1) develop riparian, aquatic macroinvertebrate and springs ecosystem monitoring protocols, 2) to complete water quality data synthesis, and 3) to complete other water resources inventories (Level I Water Quality Inventories, Spring/Seep Inventories). The Hydrologist/Aquatic Ecologist will work with SCPN Quantitative Ecologist to develop sampling designs and analytic approaches to meet monitoring objectives. The incumbent will work with SCPN Data Manager to develop databases, QA/QC procedures, and summary/analysis routines to ensure long-term quality of water resources data. Incumbent will be responsible for implementation of water resources monitoring and overall integration and reporting of monitoring results.

Terrestrial Ecologist (GS-408-11/12; permanent)

Position Summary: The Terrestrial Ecologist is responsible for developing and implementing monitoring program components relating to upland vegetation composition and structure, soil stability, and upland hydrologic function. The Terrestrial Ecologist will also contribute to monitoring projects relating to habitat-based bird communities, invertebrate communities, and early detection of invasive exotic plants.

Incumbent will work with park scientists and resource managers to identify and prioritize network monitoring needs and define the scope of related monitoring projects. The Terrestrial Ecologist will oversee interagency and university cooperators working to develop monitoring protocols relating to vegetation, soil stability, and upland hydrologic function. Incumbent will work with SCPN Quantitative Ecologist to develop sampling designs and analytic approaches to meet monitoring objectives. Incumbent will work with SCPN Data Manager to develop databases, QA/QC procedures, and summary and analysis routines to ensure long-term data quality. Incumbent will be responsible for implementation of terrestrial resources monitoring and overall integration and reporting of monitoring results.

Botanist (GS-430-9/11; permanent)

Position Summary: The Botanist serves as the plant taxonomy expert for the program. The Botanist works with the Vegetation Ecologist to implement monitoring program components relating to upland vegetation, riparian vegetation, and vegetation associated with spring ecosystems. The Botanist will work in collaboration with interagency cooperators working to develop monitoring protocols relating to vegetation. The Botanist is responsible for accurate identification of plant species from across the program's ecological range. The Botanist is also responsible for establishing and maintaining a reference collection of plant specimens and using the collection to train seasonal bio-techs. The Botanist will develop park or ecosystem-specific plant keys as needed and will maintain NPSpecies plant records. Along with the Vegetation Ecologist, the incumbent will be responsible for implementation of terrestrial resources monitoring and overall integration and reporting of monitoring results.

GIS Specialist (GS- 9/11; permanent)

Position Summary: The GIS Specialist is responsible for managing the network's spatial data and providing GIS support to network I&M projects. Duties include managing, documenting and distributing spatial data resulting from I&M projects, working with park staff to build and maintain a library of relevant park spatial data, and providing GPS assistance and training to staff and cooperators. The GIS Specialist develops and implements methods for manual (photo interpretation) or automated data extraction from disparate data sources. The GIS Specialist serves as a co-investigator on landscape monitoring projects. The incumbent provides program liaison with GIS providers to ensure appropriate development of spatial data layers, and integration of monitoring datasets and coverages. The incumbent provides technical support for microcomputer hardware and software required to maintain GIS and data management functions, installs and integrates GIS and data management software programs, and provides basic training on new programs. The GIS Specialist works with the Data Manager to disseminate spatial data to park managers, cooperating agencies and scientists.

Data Management Assistant (Biological Technician, GS-404-7/9, Term; currently filled by Marguerite Hendrie) *Note: will convert term position to permanent (STF).*

Position Summary: The Data Management Assistant works with the Data Manager to design, build, and maintain project databases, NPS service-wide databases, geographic information systems, file management systems, digital document libraries, and information distribution systems. The Data Management Assistant will be responsible for updating, maintaining, and coordinating the certification process for the NPSpecies database. The Data Management Assistant will be responsible for maintaining the SCPN website, as well as, writing and managing its content. The Data Management Assistant will work with legacy datasets to evaluate their completeness and overall data quality, and if appropriate, will update them to current database standards and formats. The Data Management Assistant will assist with maintaining spatial datasets with metadata and performing GIS analysis. In addition, the Data Management Assistant may assist with reviewing, summarizing, and synthesizing a wide variety of published and unpublished material pertaining to the natural resources of SCPN parks.

Vegetation Ecologist (Ecologist, GS-408-12, Term; currently filled by Anne Cully)

Note: propose ending the position as vegetation mapping projects draw to a close

Position Summary: The Vegetation Ecologist is responsible for developing and implementing the network vegetation mapping and classification project, in accordance with the Servicewide Vegetation Mapping standards. Related duties include coordination among project participants, development of cooperative agreements and contracts, and oversight of work performed through contract and cooperative agreement on project tasks (e.g. classification development, photo-interpretation, DOQQ production, etc). The incumbent is also responsible for developing project budgets and work plans and producing annual reports of accomplishment. The Vegetation Ecologist is responsible for completing vascular plant inventories in network parks. The Vegetation Ecologist provides ecological expertise regarding SCPN flora and vegetation. The Vegetation Ecologist also coordinates the completion of vertebrate and vascular plant inventories for network parks.

Staffing Needs Met Through Outsourcing

Over the last few years, the SCPN has used our collaborative relationship with Northern Arizona University (host university to Colorado Plateau –CESU) to meet short-term staffing needs. We plan to continue to employ this relationship to meet the recurring need for discipline-specific crew leaders and monitoring crews (i.e. water resources crew; upland vegetation/soils crew).

Current NAU Positions

Data Mining Technicians: (NAU Research Technician positions; currently filled by Rebecca Harms and Megan Swan) *Note: Current NAU positions funded through December 2006*

Position Summary: The NAU Research Technicians will be primarily involved with data mining and inventories to support protocol development projects. Both positions will be involved in park specific data mining related to specific protocol development projects. The research technicians will visit parks and work with park staff to retrieve and evaluate relevant reports and legacy data (digital and nondigital); enter resulting information into NPS databases, and organize hardcopy and electronic files for use by staff and cooperators. The Research Technicians will write syntheses of information collected during park-specific data mining, summaries of field trials and the results of field survey trips, and summaries of meeting notes and discussions held in relation to protocol development. In addition, one NAU Research Technician position will be shared with NCPN and will assist with the inventory of seeps and springs. This will include maintaining detailed records of studies conducted, organizing data, entering data into databases, and error checking resulting records, as well as participating as part of the field crew.

Planned NAU Positions

Table L3 proposes monitoring crew positions to be met through our NAU cooperative agreement.

Table L3. Proposed NAU Temporary Positions.

NAU Temporary Positions	Grade	Type	Year Proposed
Water Resources Crew Lead	GS-7/9 equivalent	Temporary; benefit-eligible; 9 mo	FY2006
Hydro-Tech (WR Crew)	GS-7 equivalent	Temporary; 6 mo	FY2007
Bio-Tech (WR Crew)	GS-5 equivalent	Temporary; 4 mo	FY2007
Bio-Tech (Uplands Crew)	GS-7 equivalent	Temporary; 6 mo	FY2007
Bio-Tech (Uplands Crew)	GS-7 equivalent	Temporary; 6 mo	FY2007
Bio-Tech (Uplands Crew)	GS-5 equivalent	Temporary; 4 mo	FY2007

Budget Cost Projections for Operational Staffing Plan

The SCPN Board of Directors requested that multi-year budget cost projections be prepared in conjunction with the operational staffing plan. For the business planning exercises now underway in many parks, the goal is to hold projected labor and fixed non-labor cost burden under 80% of ONPS base funds. [Table L4](#) projects SCPN labor costs over a five-year timeframe for the operational staffing plan.

Tables L5 projects total program costs over a five-year timeframe; Figure L1 describes the organization chart for the staffing plan.

Budget Cost Projection Assumptions

We consulted with Justin Davis, IMR Business Management Specialist, regarding the cost projection assumptions used within the Budget Cost Projection Module of AFS 3. To be in line with those efforts, the following assumptions were used in preparing the cost projections presented below.

- Salary costs include anticipated step and grade increases
- A benefits average of 35% was used for all positions
- Annual salary growth rate of 3.0%
- Annual benefit growth rate of 3.5%
- Inflation rate of 2.7% for non-labor fixed costs
- Allocation growth rate of 0.4%.

Steve Fancy, National Monitoring Program Leader, was consulted concerning whether the networks should anticipate any growth in base funding levels. He confirmed that while these increases have not occurred in the initial years of the program, the networks should expect the same type of base increases as received by the parks.

Breakdown of SCPN Cost Categories

Network operating costs were divided into three somewhat artificial categories for this exercise:

- **NPS Personnel and Fixed Costs** – Core program costs that represent relatively stable and continuing needs throughout the life of the program. Includes labor costs for NPS permanent and term positions, general operational costs (i.e. facility, utilities, vehicles, equipment), and travel costs for NPS staff.
- **Monitoring Project Costs** – 1) For those projects that will be implemented under NPS direction by NAU affiliated staff, includes NAU labor costs, project-specific operational costs (i.e. supplies, processing of laboratory sample), crew travel costs and CESU overhead rates. 2) For those projects that will be implemented through cooperative or interagency agreements, includes total (inflation-adjusted) amounts.
- **Inventory, Research and Development Costs** – During the initial years of an operational program, it is expected that some inventories to support monitoring and protocol development projects will continue. Once the program is fully implemented, we propose that the network maintain 5% of base funds to meet periodic R&D needs.

Table L4. Labor Costs Associated with SCPN Staffing Plan.

NPS Staff			FY06	FY07	FY08	FY09	FY10
Type	Grade	Position					
Permanent	GS12/13	Program Manager	110,300	117,200	124,400	132,000	95,400
Permanent	GS6/7: 1/2 time	Program Assistant	30,900	31,900	32,900	23,500	26,900
Permanent	GS9/11	Data Manager	75,100	79,800	84,800	90,000	95,500
Permanent	GS9/11	GIS Specialist	58,200	72,600	77,300	82,300	87,600
Permanent	GS11/12	Quant. Ecologist	90,000	95,700	101,700	107,900	114,500
Permanent	GS11/12	Hydrologist	70,400	87,000	92,700	98,700	104,900
Permanent	GS11/12	Terrestrial Ecologist	35,200	72,600	89,700	95,600	101,800
Permanent	GS9/11	Botanist	0	60,000	74,800	79,800	84,900
Permanent	GS5/7/9	Assistant Data Manager	58,200	62,000	40,800	43,500	53,800
Term	GS-11/12	Plant Ecologist (Veg Map)	95,600	101,500			
NPS Staff Subtotal			623,900	780,300	719,100	753,300	765,300
Percent of Operational Base			47%	59%	54%	56%	57%
NAU Water Resources Crew			FY06	FY07	FY08	FY09	FY10
NAU (Benefit-eligible)*	GS7/9 equiv; 9 mo	WR Crew Leader	41,900	44,700	54,500	60,000	47,400
NAU (Temporary)*	GS7 equiv; 6 mo	Hydro-Tech		22,900	23,600	24,300	25,100
NAU (Temporary)*	GS5 equiv; 4 mo	Bio-Tech		12,300	12,700	13,100	13,500
<i>subtotal</i>			<i>41,900</i>	<i>79,900</i>	<i>90,800</i>	<i>97,400</i>	<i>86,000</i>
NAU Upland Crew (veg, soils)			FY06	FY07	FY08	FY09	FY10
NAU (Temporary)*	GS7 equiv; 6 mo	Bio-Tech		22,900	23,600	24,300	25,100
NAU (Temporary)*	GS7 equiv; 6 mo	Bio-Tech		22,900	23,600	24,300	25,100
NAU (Temporary)*	GS5 equiv; 4 mo	Bio-Tech		12,300	12,700	13,100	13,500
<i>subtotal</i>				<i>58,100</i>	<i>59,900</i>	<i>61,700</i>	<i>63,700</i>
NAU GIS Project Support			FY06	FY07	FY08	FY09	FY10
NAU (Benefit-Eligible)*	GS7 equiv; 1/2 time	Carto-Tech	27,900	29,800	35,100		
<i>subtotal</i>			<i>27,900</i>	<i>29,800</i>	<i>35,100</i>		
Monitoring Crews & Support Subtotal			69,800	167,800	185,800	159,700	149,700
Percent of Operational Base			5%	13%	14%	12%	11%

Table L5. Total Program Costs Associated with SCPN Staffing Plan.

SCPN Base Funding	FY06	FY07	FY08	FY09	FY10
SCPN ONPS Base Funding (assumes 0.4% growth)	1,333,300	1,338,600	1,344,000	1,349,400	1,354,800
Regional assessment (1%; excludes salary costs)	-9000	-7,300	-7,900	-7,700	-7,600
SCPN Operational Base	1,324,300	1,331,300	1,336,100	1,341,700	1,347,200
NPS Personnel and Fixed Costs	FY06	FY07	FY08	FY09	FY10
Permanent & Term Staff	623,900	780,300	719,100	753,300	765,300
Base Operations/Equipment	28,000	46,000	47,200	48,500	49,800
Base Travel	27,000	27,700	28,500	29,200	30,000
Personnel and Fixed Cost Subtotal	678,900	854,000	794,800	831,000	845,100
Percent of Operational Base	51%	64%	59%	62%	63%
Monitoring Project Costs	FY06	FY07	FY08	FY09	FY10
Water Resource Projects (water quality, riparian, macroinvertebrates, springs)					
Water Resources Crew	41,900	79,900	90,800	97,400	86,000
Project Operations/Equipment		7,500	7,700	7,900	8,100
Project Crew Travel	3,000	10,000	10,300	10,500	10,800
Water Chemistry Analysis		25,000	25,700	26,400	27,100
Macroinvertebrate ID		12,500	12,800	13,200	13,500
Water Resource Projects Subtotal	44,900	134,900	147,300	155,400	145,500
Upland Project (vegetation, soils)					
Uplands Crew		58,100	59,900	61,700	63,700
Project Operations/Equipment		5,000	5,100	5,300	5,400
Project Crew Travel	3,000	10,000	10,300	10,500	10,800
Upland Subtotal	3,000	73,100	75,300	77,500	79,900
Other Monitoring Projects (may be implemented through partnership):					
Landscape			70,000	71,900	73,800
Climate		25,000	25,700	26,400	27,100
Birds/Terrestrial Arthropods		50,000	51,400	52,700	54,200
Invasive Exotic Plants			25,000	25,700	26,400
Wildland Values		25,000	25,700	26,400	27,100
GIS Support (all projects): Carto-Tech	27,900	29,800	35,100	0	0
Other Projects Subtotal	27,900	129,800	232,900	203,100	208,600
Monitoring Projects Subtotal	75,800	337,800	455,500	436,000	434,000
Percent of Operational Base	6%	25%	34%	32%	32%
Inventory, Research and Development	FY06	FY07	FY08	FY09	FY10
Inventory to Support Monitoring	269,600	39,500			
Protocol Development	300,000	100,000			
Research, Analysis, and Protocol Revision			85,800	74,700	68,100
Inventory, R&D Subtotal	569,600	139,500	85,800	74,700	68,100
Percent of Operational Base	43%	10%	6%	6%	5%
Total Costs	1,324,300	1,331,300	1,336,100	1,341,700	1,347,200

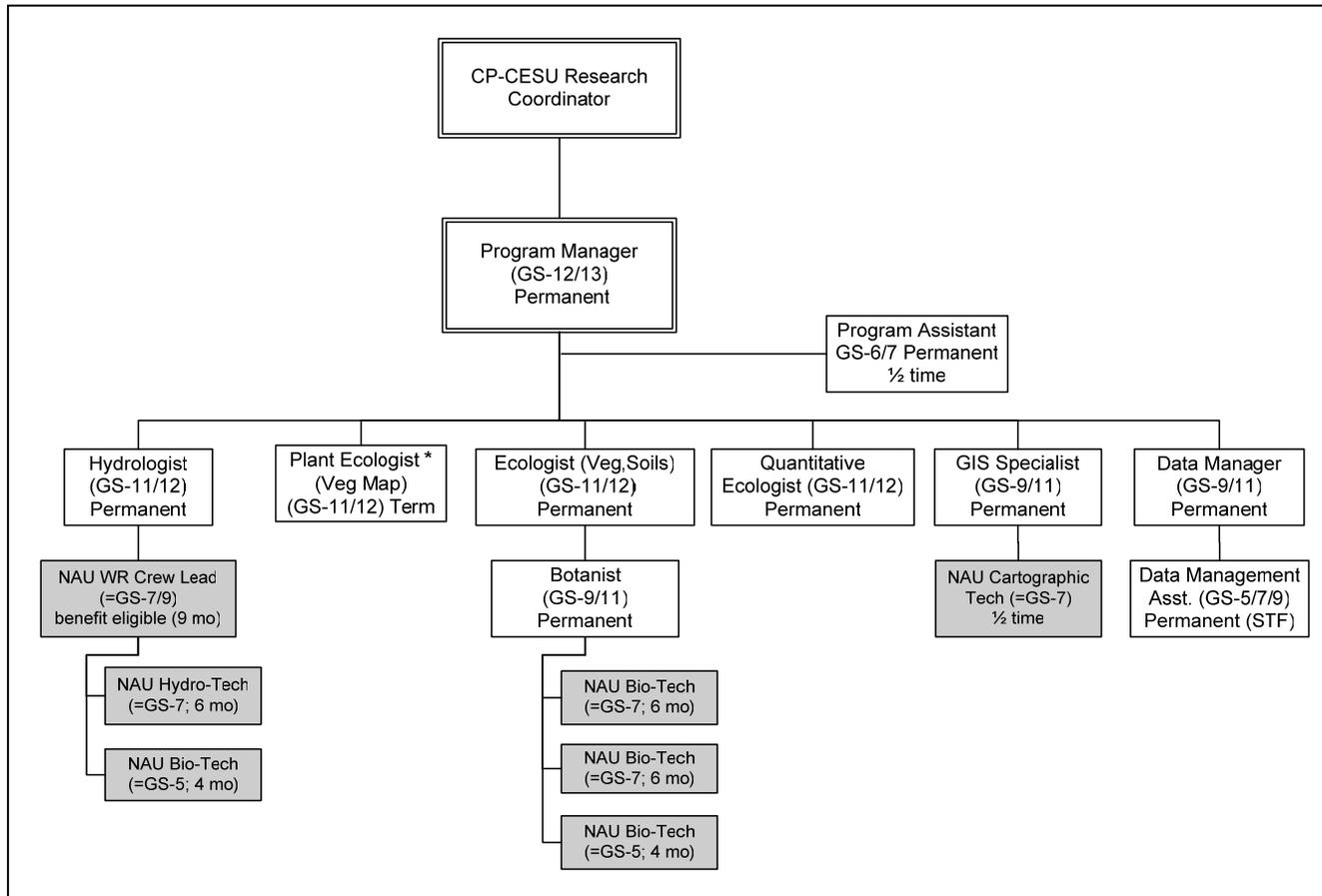


Figure L1. SCPN organization chart.

* Propose ending position as vegetation mapping projects are completed (FY2007).