

# COMPETENCIES - NATURAL RESOURCES STEWARDSHIP - PROGRAM MANAGER

## Scientific Knowledge

	PROGRAM MANAGER Entry/Development Level	PROGRAM MANAGER Journey Level	PROGRAM MANAGER Advanced Level
	<b>SCIENTIFIC KNOWLEDGE:</b> Broad knowledge of ecological principles in a variety of natural resource fields, with advanced knowledge in a specific natural resource discipline.	<b>SCIENTIFIC KNOWLEDGE:</b> In-depth knowledge of ecological principles and scientific methods in a variety of natural resource fields, with advanced knowledge and experience in a specific natural resource discipline and an ability to synthesize information across disciplines.	<b>SCIENTIFIC KNOWLEDGE:</b> In-depth knowledge of ecological principles and scientific methods, with mastery and experience in a natural resource discipline (biological or physical science) and demonstrated ability to integrate information across disciplines to effectively address highly complex and potentially controversial NPS natural resource issues.
PM-1a	Advanced knowledge in a specific natural resource field as would be obtained through completion of a MS/MA program in a scientific or natural resource-based discipline, or the ability to obtain such a degree in 4 years.	Advanced, current knowledge of a natural resource discipline.	Mastery of a natural resource discipline, including current knowledge of state-of-the-art concepts.
PM-1b	Knowledge of ecological principles as they relate to a variety of natural resource fields.	Knowledge of ecosystem principles.	In-depth knowledge of ecosystem principles.
PM-1c	Basic knowledge of a variety of natural resource disciplines, including air quality, water quality, geomorphic and hydrologic processes, fire and vegetation management, fish and wildlife management, aquatic and terrestrial ecology, conservation biology, and restoration ecology.	General knowledge of a broad spectrum of natural resource disciplines.	
PM-1d		Ability to transfer relevant concepts from one discipline to another.	
PM-1e		Ability to integrate and synthesize knowledge from a variety of disciplines in identifying relations and patterns.	Ability to integrate information across natural resource disciplines, to recognize patterns and draw conclusions, and to use and adapt the results in innovative ways to resolve diverse and complex park resource issues.
PM-1f		Ability to distinguish fact from value-based judgement.	Knowledge of environmental ethics and philosophy as applied to natural resource management.

## Scientific Method

	PROGRAM MANAGER Entry/Development Level	PROGRAM MANAGER Journey Level	PROGRAM MANAGER Advanced Level
	<b>SCIENTIFIC METHOD:</b> Knowledge of scientific approaches and methods relevant to natural resources management.	<b>SCIENTIFIC METHOD:</b> Ability to apply sound scientific approaches and methods in overseeing resource management activities and research, and evaluating the management implications of scientific information.	<b>SCIENTIFIC METHOD:</b> Ability to apply sound scientific approaches and methods to resource management activities, including the design and conduct of complex inventory, monitoring, and research projects.
PM-2a	Basic knowledge of scientific method.	Knowledge of scientific methods.	
PM-2b	Basic knowledge of the principles of problem-solving.	Knowledge and skill in problem-solving.	Advanced ability to apply scientific approaches and problem-solving techniques in developing innovative solutions to complex natural resource problems, involving long-term and/or large-scale programs that cross jurisdictional boundaries and involving diverse interests.
PM-2c	Ability to apply standard techniques and to follow scientific methods in conducting inventory, monitoring, and applied research projects.	Basic knowledge of sampling methods, research design, and quality assurance/control (QA/QC).	Ability to develop and coordinate complex multi-faceted programs of research, inventory, monitoring, and resource management based on scientific knowledge.
PM-2d	Ability to follow protocols designed by others in analyzing data and maintaining databases in accordance with accepted standards.	Ability to develop and coordinate research, inventory, monitoring, and resource management projects based on scientific knowledge.	
PM-2e		Ability to evaluate research proposals and reports for their applicability to specific natural resource issues.	Ability to evaluate research reports and scientific publications, as well as diverse agency documents and legislation for their applicability to specific natural resource issues and their more general implications for natural resource stewardship.
PM-2f	Knowledge and proficiency in field skills and measurements.	Broad knowledge of data management, analytical methods, and statistics, as well as knowledge and ability to apply accepted standards for database management.	
PM-2g	Basic knowledge of standard computer use, and ability to reliably collect, computer input, and summarize natural resource data.	Functional knowledge of standard computer systems, use, and application.	

## Resource Stewardship

	PROGRAM MANAGER Entry/Development Level	PROGRAM MANAGER Journey Level	PROGRAM MANAGER Advanced Level
	<b>NPS RESOURCE STEWARDSHIP:</b> Basic familiarity with the broad range of laws, policies, regulations, and guidelines, and ability to apply them in concert with scientific knowledge in relatively simple or routine situations to protect natural systems.	<b>NPS RESOURCE STEWARDSHIP:</b> Ability to effectively apply a broad range of laws, policies, regulations, and guidelines, as well as knowledge of other NPS programs, in concert with scientific knowledge to protect natural systems..	<b>NPS RESOURCE STEWARDSHIP:</b> Ability to apply in-depth knowledge of specific provisions of laws, including case law, policies, regulations, and guidelines, in concert with scientific knowledge in resolving particularly difficult and complex threats to parks' natural systems.
PM-3a	Basic knowledge of the NPS mission, goals, guidelines, and policies.	Advanced knowledge of NPS missions, goals, policies, and guidelines.	Advanced broad knowledge of the mission, goals, guidelines, and policies of the NPS, as well as knowledge of the mission and purpose of other agencies, organized groups, and private industry.
PM-3b	Ability to apply NPS guidelines to routine or relatively simple situations.	Ability to apply NPS guidelines to most situations that are encountered.	Ability to develop innovative solutions, consistent with NPS policy and guidelines, to complex situations.
PM-3c	General knowledge of environmental law.	Knowledge of environmental law, compliance procedures, and regulations.	Knowledge of case law as it relates to specific natural resource issues.
PM-3d	With guidance, ability to set up relatively simple programs aimed at protection of a resource.	Ability to plan and direct resource stewardship programs involving a multi-disciplinary approach.	Ability to plan and direct largescale resource stewardship programs requiring a multidisciplinary approach and often considerable potential for controversy.
PM-3e	Ability to provide natural resource expertise as input to routine policy and management decisions and in resolving routine or limited threats, in consultation with higher-level natural resource professionals.	Ability to provide a broad range of subject matter expertise as it relates to policy.	Through interpretation of existing law and precedent, as well as available scientific information, ability to develop new policies, regulations, guidelines, programs, and concepts with broad application.
PM-3f	Ability to incorporate concepts and principles from multiple natural resource disciplines in formulating recommendations and providing input into planning and management.	Ability to incorporate scientific information into new policies, regulations, decision-making, and management actions.	Ability to provide sound advice to upper-level managers on needed resource stewardship programs and actions at a landscape-level or servicewide scale.
PM-3g		Ability to synthesize results of relevant scientific studies across multiple disciplines in developing possible options and formulating management programs.	Ability to evaluate and synthesize results of relevant scientific studies, and develop solutions to complex situations where scientific information, laws, policies, or guidelines may be conflicting or lacking.
PM-3h		Ability to work with others in developing new resource-related regulations and policies, consistent with laws and available scientific information.	

## Resource Stewardship

	<b>PROGRAM MANAGER Entry/Development Level</b>	<b>PROGRAM MANAGER Journey Level</b>	<b>PROGRAM MANAGER Advanced Level</b>
	<p><b>NPS RESOURCE STEWARDSHIP:</b> Basic familiarity with the broad range of laws, policies, regulations, and guidelines, and ability to apply them in concert with scientific knowledge in relatively simple or routine situations to protect natural systems.</p>	<p><b>NPS RESOURCE STEWARDSHIP:</b> Ability to effectively apply a broad range of laws, policies, regulations, and guidelines, as well as knowledge of other NPS programs, in concert with scientific knowledge to protect natural systems..</p>	<p><b>NPS RESOURCE STEWARDSHIP:</b> Ability to apply in-depth knowledge of specific provisions of laws, including case law, policies, regulations, and guidelines, in concert with scientific knowledge in resolving particularly difficult and complex threats to parks' natural systems.</p>
PM-3i	Ability to work with project-specific or broad established networks of cooperators.	Ability to form effective relationships with diverse groups to address natural resource issues, including issues that transcend jurisdictional boundaries.	Ability to take the lead in setting up effective interagency programs for critical resource protection on a landscape scale that crosses jurisdictional boundaries.
PM-3j	Basic knowledge of principles of negotiation.	Skill in negotiating and conflict resolution related to natural resource issues.	Ability to form effective partnerships with diverse and potentially hostile groups to address complex natural resource issues, including issues that transcend regional boundaries.
PM-3k	Ability to use tact and diplomacy and to effectively handle stressful situations.	Leadership ability and skill.	Highly developed leadership skills, including skill in effective team-building.

## Planning and Compliance

	PROGRAM MANAGER Entry/Development Level	PROGRAM MANAGER Journey Level	PROGRAM MANAGER Advanced Level
	<b>PLANNING AND COMPLIANCE:</b> Ability to incorporate scientific knowledge from multiple disciplines in helping to define issues, formulate management strategies, evaluate alternatives, prepare management plans, and meet compliance requirements.	<b>PLANNING AND COMPLIANCE:</b> Ability to incorporate scientific knowledge across a wide range of disciplines in defining issues, formulating and evaluating alternative management strategies, evaluating alternatives, preparing management plans, and meeting compliance requirements.	<b>PLANNING AND COMPLIANCE:</b> Ability to apply advanced scientific concepts across a wide range of disciplines in developing and applying innovative solutions to complex issues involving resource stewardship, helping to ensure that NPS management is based on the best information possible.
PM-4a	Knowledge of basic environmental laws and NPS planning guidelines.	Knowledge of environmental laws, regulations, executive orders, guidelines, and policies related to planning and compliance.	Knowledge of precedent and case law related to planning and compliance.
PM-4b		Knowledge of NPS mission and purpose, with in-depth knowledge of natural resources, planning, environmental monitoring, and assessment (LAC/VERP process, etc.).	
PM-4c		Ability to work with others to develop and implement park SOPs that facilitate effective compliance.	
PM-4d		Ability to identify threats and other management needs.	
PM-4e	Ability to write basic plans, or sections of plans, where issues and strategies have been defined by others.	Ability to define objectives and formulate plans.	Ability to orchestrate the development, completion, and implementation of complex strategies and plans, consisting of several distinct component parts and sequential actions, addressing complex and controversial issues.
PM-4f		Ability to work with diverse groups to define viable management strategies and options.	Ability to develop innovative solutions to complex or intractable issues.
PM-4g	Ability to write basic environmental assessments, sections of EISs, and other compliance documents on relatively simple issues.	Ability to work as a member of interagency interdisciplinary planning/EIS teams addressing complex and controversial issues.	
PM-4h		Ability to apply scientific knowledge to NPS issues.	
PM-4i		Ability to define information needs, including needs for research, inventory, baseline studies, and follow-up monitoring.	
PM-4j		Ability to develop and synthesize natural resource information across multiple disciplines.	

## Planning and Compliance

	PROGRAM MANAGER Entry/Development Level	PROGRAM MANAGER Journey Level	PROGRAM MANAGER Advanced Level
	<p><b>PLANNING AND COMPLIANCE:</b> Ability to incorporate scientific knowledge from multiple disciplines in helping to define issues, formulate management strategies, evaluate alternatives, prepare management plans, and meet compliance requirements.</p>	<p><b>PLANNING AND COMPLIANCE:</b> Ability to incorporate scientific knowledge across a wide range of disciplines in defining issues, formulating and evaluating alternative management strategies, evaluating alternatives, preparing management plans, and meeting compliance requirements.</p>	<p><b>PLANNING AND COMPLIANCE:</b> Ability to apply advanced scientific concepts across a wide range of disciplines in developing and applying innovative solutions to complex issues involving resource stewardship, helping to ensure that NPS management is based on the best information possible.</p>
PM-4k	Ability to provide natural resource input into planning processes as a member of interdisciplinary teams.	Ability to assess cumulative effects.	
PM-4l	Ability to contact members of the public, NPS, and other agencies as directed by others.	Ability to work as a team with other NPS divisions, as well as with other agencies and organizations to achieve shared objectives.	Ability to develop and carry out a public involvement program, working with public information personnel as appropriate, for plans that may include complex and controversial issues.

## Professional Credibility

	PROGRAM MANAGER Entry/Development Level	PROGRAM MANAGER Journey Level	PROGRAM MANAGER Advanced Level
	<b>PROFESSIONAL CREDIBILITY:</b> Scientific knowledge and developmental abilities in program management and a natural resource discipline that are recognized by peers as providing a strong foundation for the work performed and for the development of journey-level capabilities.	<b>PROFESSIONAL CREDIBILITY:</b> Professional standing in a natural resource management discipline, and abilities that are recognized by peers in agencies, the academic community, and industry or interest groups as providing a strong foundation for the work performed.	<b>PROFESSIONAL CREDIBILITY:</b> Scientific knowledge and professional standing, as well as management and leadership abilities that are widely recognized by peers in agencies and the academic community as providing leadership in the work performed.
PM-5a	Ability to establish and maintain networks in fields outside own discipline as directed or with guidance.	Ability to develop and maintain an active network of professional interaction with peers in other NPS programs, as well as other agencies, institutions, and organizations.	Recognized ability to effectively represent NPS on a multiagency task force to address natural resource issues.
PM-5b	Ability to participate in professional meetings in field of expertise.	Knowledge and ability that is recognized by agency and academic peers as professionally credible and providing a strong foundation for the work performed.	Knowledge and ability that is recognized by agency and academic peers as leading in the natural resource field.
PM-5c		Ability to publish syntheses and thought-provoking concepts in agency publications and popular press.	Ability to publish syntheses and thought-provoking concepts in journals, which are recognized as providing leadership in advancing natural resource stewardship.
PM-5d		Recognized ability to integrate all park divisions into an effective program of natural resource stewardship.	Recognized ability to integrate representatives of agencies, academic institutions, and diverse interest groups into an effective program of cooperation in achieving shared objectives for natural resource stewardship.

## Communication

	PROGRAM MANAGER Entry/Development Level	PROGRAM MANAGER Journey Level	PROGRAM MANAGER Advanced Level
	<b>COMMUNICATION:</b> Ability to effectively communicate natural resource information to diverse audiences through a variety of media.	<b>COMMUNICATION:</b> Ability to effectively communicate a broad range of technical natural resource information to diverse audiences through a variety of media.	<b>COMMUNICATION:</b> Well-developed ability to effectively communicate, negotiate, and persuade on a broad range of highly complex, technical, or controversial natural resource issues to diverse and sometimes hostile audiences through all available media. Consequential management decisions are made based on this communication.
PM-6a	Ability to communicate effectively, in writing, orally, and electronically.	Ability to communicate -- orally, in writing, graphically, and electronically -- technical information, such as the results of research, to NPS managers and non-specialists.	
PM-6b		Ability to synthesize information on complex and controversial issues, from a variety of sources and across multiple disciplines, and draw valid conclusions.	Ability to evaluate and synthesize information from diverse and conflicting sources.
PM-6c	Ability to write and orally present management summaries of research information.	Ability to give oral and written briefings, using good judgment to make sound recommendations, from which park management decisions are made.	Ability to give oral and written briefings from which decisions are made by high-level agency personnel and Congress.
PM-6d	Ability to write natural resource action plans, sections of agency documents, and relatively simple technical reports, in accordance with existing guidelines and subject to review by others.	Ability to write complex natural resource management plans, other agency documents, scientific reports, reports for non-technical audiences, and a variety of other documents.	Ability to write highly complex documents dealing with natural resource issues and technical information, drawn from a variety of sources.
PM-6d		Ability to review and edit written work of others.	
PM-6e	Ability to present oral briefings to agency personnel. Ability to give off-site presentations on non-controversial issues.	Ability to organize and orally communicate complex natural resource information, formally and informally, to scientific and non-technical audiences.	Ability to effectively convey complex information concerning politicized or controversial issues to potentially hostile audiences.
PM-6f			Ability to persuade, effectively negotiate, and solve problems with diverse individuals and organizations.

## Program/Project Management

	PROGRAM MANAGER Entry/Development Level	PROGRAM MANAGER Journey Level	PROGRAM MANAGER Advanced Level
	<b>PROGRAM/PROJECT MANAGEMENT:</b> Ability to plan, implement, and administer scientifically based natural resource programs of fairly limited scope.	<b>PROGRAM/PROJECT MANAGEMENT:</b> Ability to lead a program that is accountable in achieving resource stewardship objectives, including the ability to define priorities, set goals, formulate, define and obtain needed personnel and fiscal resources, monitor work, and ensure its completion in pursuit of the NPS mission.	<b>PROGRAM/PROJECT MANAGEMENT:</b> Ability to lead a complex program, consisting of several subprograms, that is accountable in achieving resource stewardship objectives, including the ability to define priorities, set long- and short-term goals, formulate innovative strategies, define and obtain needed personnel and fiscal resources, monitor work, and ensure its completion in pursuit of the NPS mission.
PM-7a	Ability to manage a simple resource management program for a park, or a program in field of expertise.	Ability to effectively set direction and carry out a natural resource program, including organizing staff and partners to achieve shared objectives.	Ability to develop and oversee innovative programs, involving multiple components and a need for careful coordination and sequencing, to address complex and controversial resource management issues.
PM-7b		Leadership ability.	
PM-7c		Ability to identify needs and set priorities, including facilitation of group efforts to define and prioritize broad natural resource program needs.	
PM-7d	Ability to define objectives for simple projects in a variety of disciplines and to develop and implement basic work plans.	Ability to set long- and short-term goals, and to develop work plans.	Ability to manage multiple programs including those in natural resource disciplines outside the field of expertise.
PM-7e		Knowledge and skill in supervision and personnel management.	
PM-7f	Ability to draft and monitor program budget, including status of staff and fiscal resources.	Ability to effectively utilize funding and personnel to accomplish goals.	
PM-7g		Knowledge of budget cycles and procedures.	
PM-7h	Basic knowledge of administrative functions and programs.	Knowledge of administrative processes.	
PM-7i		Knowledge of funding and staffing options.	
PM-7j	Ability to draft proposals, funding requests, and requests for proposals.	Ability to prepare proposals, funding requests, and requests for proposals.	Ability to effectively compete for funding through development of well-founded, compelling, and persuasive arguments.
PM-7k	Ability to set up small-scale partnerships at a local level with advice from park management.	Ability to seek and obtain funding and partners from a variety of sources.	Knowledge of potential partners which allows the development of large-scale partnerships that may include diverse and opposing viewpoints.
PM-7l	Basic knowledge of types of agreements and ability to draft simple agreements or contract outlines.	Knowledge of cooperative agreements, MOUs, contracts, and other agreement instruments.	Ability to develop complex or innovative cooperative agreements, MOUs, and other agreement instruments.