

POSITION DESCRIPTION (Please Read Instructions on the Back)

1. Agency Position No.

2. Reason for Submission

3. Service

4. Employing Office Location

5. Duty Station

6. OPM Certification No.

☐ Redescription
☐ Reestablishment☐ New
☒ Other☐ Hdqtrs ☒ Field

Explanation (Show any positions replaced)

NPS Standard Position Description
Resources Careers

7. Fair Labor Standards Act

☐ Exempt ☒ Nonexempt

8. Financial Statements Required

☐ Executive Personnel Financial Disclosure ☐ Employment and Financial Interest

9. Subject to IA Action

☒ Yes ☐ No

10. Position Status

☒ Competitive
☐ Excepted (Specify in Remarks)
☐ SES (Gen.) ☐ SES (CR)

11. Position is

☐ Supervisory
☐ Managerial
☒ Neither

12. Sensitivity

☒ 1-Non-Sensitive ☐ 3-Critical
☐ 2-Noncritical Sensitive ☐ 4-Special Sensitive

13. Competitive Level Code

14. Agency Use

*R61

15. Classified/Graded by

Official Title of Position

Pay Plan

Occupational Code

Grade

Initials

Date

a. Office of Personnel Management

b. Department, Agency or Establishment

c. Second Level Review

Physical Science Technician

GS

1311

07

d. First Level Review

e. Recommended by Supervisor or Initiating Office

16. Organizational Title of Position (if different from official title)

Physical Science Technician

17. Name of Employee (if vacant, specify)

18. Department, Agency, or Establishment

Department of the Interior

c. Third Subdivision

a. First Subdivision

National Park Service

d. Fourth Subdivision

b. Second Subdivision

e. Fifth Subdivision

Signature of Employee (optional)

19. Employee Review-This is an accurate description of the major duties and responsibilities of my position.

20. **Supervisory Certification.** I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships, and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that

this information is to be used for statutory purposes relating to appointment and payment of public funds, and that false or misleading statements may constitute violations of such statutes or their implementing regulations.

a. Typed Name and Title of Immediate Supervisor

b. Typed Name and Title of Higher-Level Supervisor or Manager (optional)

Signature

Date

Signature

Date

21. **Classification/Job Grading Certification.** I certify that this position has been classified/graded as required by Title 5, U.S. Code, in conformance with standards published by the U.S. Office of Personnel Management or, if no published standards apply directly, consistently with the most applicable published standards.

Typed Name and Title of Official Taking Action

J. LYNN SMITH
HUMAN RESOURCES PROGRAM MANAGER

Signature

Date

JUN 30 1999

22. Position Classification Standards Used in Classifying/Grading Position

Physical Science Technician Series, GS-1311, 04/67; Grade Level Guide for Aid and Technician Work in the Biological Sciences, GS-400, 12/91.

Information for Employees. The standards, and information on their application, are available in the personnel office. The classification of the position may be reviewed and corrected by the agency or the U.S. Office of Personnel Management. Information on classification/job grading appeals, and complaints on exemption from FLSA, is available from the personnel office or the U.S. Office of Personnel Management.

23. Position Review

Initials

Date

Initials

Date

Initials

Date

Initials

Date

Initials

Date

a. Employee (optional)

b. Supervisor

c. Classifier

24. Remarks *Agency Use Code should be entered in FPPS as last three spaces of position allocation number.

25. Description of Major Duties and Responsibilities (See Attached)

**NATIONAL PARK SERVICE
BENCHMARK POSITION DESCRIPTION**

**Physical Science Technician
GS-1311-07**

Introduction

This position is located in a National Park Service organization. The purpose of the position is to perform a variety of complex physical science technical support functions (e.g., in chemistry, geology, geophysics, oceanography, hydrology, physics, and/or other physical sciences).

Technician work is typically associated with and supportive of a professional field; work may involve substantial elements of the work of the professional field, but requires less than full knowledge of the field involved. This position is intended to report to a specialist or resources manager in the same or a related field. If the incumbent is not supervised by a professional specialist in a related profession, then technical direction must be obtained from a specialist in a central office or center.

This position is distinguished from similar positions at the GS-06 level in the following ways: assignments require that the incumbent have greater knowledge, experience, and judgment in order to complete a variety of conventional projects of relatively limited scope; independently resolve problems for which precedents exist; select, from several alternatives, the most appropriate course of action for planning and executing work; and apply a wide range of conventional methods and solutions to new situations. As a result, the position has a broader scope and effect; unlike lower-graded positions, this position directly affects the design, operation, and adequacy of natural resource activities.

Major Duties (80-100%)

Organizes, schedules, and conducts a wide variety of established projects, such as field examinations, field surveys, and inventories. Collects and organizes field data using standardized data collection procedures and equipment; uses judgment to apply precedents and established techniques to new situations. Ensures adequate quality control of data collected.

Performs field and laboratory analysis of collected samples. Records appropriate data and provides preliminary analysis of the information. Takes necessary precautions to prevent the loss or contamination of samples.

Monitors and evaluates conditions in assigned program area. Determines compliance with established guidelines (e.g., threshold limits, etc.), interprets variables, trends, correlations, and interrelationships among data and conditions. Recommends management actions based on prescribed guidelines in existing park plans.

Drafts professional quality maps and generates computerized digital maps. Prepares graphs, computations, engineering curves, mathematical calculations, and illustrations for technical studies and presentations.

Utilizes a variety of computer programs to compile, reduce, store, retrieve, analyze, and report data and

other related information, including research and long-term monitoring projects. Runs computer

analysis of data and prepares statistical reports or portions of reports. Maintains and organizes computer databases.

Installs, operates, and maintains complex sampling, monitoring, and laboratory equipment and instruments. Inventories equipment, evaluates quality assurance compliance, and calibrates equipment as necessary.

Compiles and summarizes information. Prepares draft project reports which include literature research, descriptions of methods, preliminary data analysis, graphs and charts, results, and recommendations for planning, protection, and mitigation activities. Performs research and assists in writing scientific reports

Provides logistical support and area orientation for contract or cooperating scientists; provides technical information, ensures quality control and adherence to policies, and solves logistical or operational problems within the scope of the incumbent's authority.

Provides advice, assistance, and training to students, student conservation assistants, and volunteers involved in projects and field research.

Provides information to other employees and visitors about park resources and the physical science management program. May develop and present related interpretive programs to the public.

Performs a variety of administrative duties in support of resource management and research projects. This may include completing requisitions for supplies and equipment, maintaining office files and records, etc.

Factor 1. Knowledge Required by the Position Level 1-5; 750 points

Substantial practical and technical knowledge of the methods, procedures, and technology of one or more of the physical sciences, and the skill to apply that knowledge with only general supervision in order to solve practical problems in a wide range of functions.

Knowledge of sampling and data collection techniques, including operation of testing and sampling equipment, physical analysis methods, etc.

Knowledge of NPS and park objectives, practices, policies, and procedures for the management of natural resources.

Ability to follow detailed sampling and laboratory procedures, train others to accurately follow procedures, and recognize departures from established quality control/quality assurance guidelines.

Ability to recognize, record, and adapt to unusual conditions or data readings encountered in the normal course of work.

Basic understanding of the principles and techniques of one or more of the physical sciences to support

the broader natural resource function.

Ability to make mathematical calculations; generate graphs, curves, and charts; draft maps; and produce illustrations for broader studies.

Knowledge of research techniques and ability to perform research.

Ability to communicate information in a clear and concise manner, including the ability to develop reports and present information.

Knowledge of database management, word processing, and specialized software programs essential to resource management activities.

Factor 2. Supervisory Controls Level 2-3; 275 points

The supervisor defines objectives, priorities, and deadlines for assignments, and provides assistance on the more complex assignments. The incumbent is relied upon to use cumulative experience and training in making judgments and in planning phases of work, and is expected to exercise initiative and independent judgment. Completed work is reviewed for appropriateness and technical soundness. Methods are not typically reviewed in detail.

Factor 3. Guidelines Level 3-2; 125 points

Guidelines include regulations, administrative policies, objectives, goals, specific project statements and plans, and field and laboratory procedures. The incumbent uses considerable judgment in selecting and applying the proper guidelines to be used, and must modify or improvise to adapt to unusual situations.

Factor 4. Complexity Level 4-3; 150 points

The work involves performing a variety of technical duties (e.g., collecting, summarizing, and interpreting widely disparate types of data from sampling programs), each of which involves different and unrelated procedures and methods. Each function may involve a variety of possible actions. The incumbent evaluates each situation and identifies and considers interrelationships in order to select the most appropriate methodology from among several alternatives.

Factor 5. Scope and Effect Level 5-3; 150 points

The purpose of the position is to perform complex resource management support work. The work directly affects the design and execution of projects, the accuracy and acceptability of findings and recommendations, and provides an essential basis for management conclusions and plans.

Factor 6. Personal Contacts Level 6-2; 25 points

Contacts are with co-workers and at times employees of other parks and central offices as well as with the general public, partners, and contract and cooperating scientists.

Factor 7. Purpose of Contacts Level 7-1; 20 points

The purpose of contacts is to obtain, relay, and exchange information.

Factor 8. Physical Demands Level 8-2; 20 points

The work is partially sedentary with prolonged standing, walking, and bending often required. Heavy items (e.g., equipment and packs up to 50 pounds) must be lifted and carried on a routine basis.



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Factor 9. Work Environment Level 9-2; 20 points

The work is performed in an office, laboratory, and in the field. Field work includes exposure to extreme weather and terrain conditions, poisonous plants, biting insects, and wild animals. Laboratory work may involve exposure to hazardous chemicals.



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POSITION EVALUATION STATEMENT

Title, Series, and Grade: Physical Science Technician, GS-1311-07

Standards Used: Physical Science Technician Series, GS-1311, 4/67

Grade Level Guide for Aid and Technician Work in the Biological Sciences,
GS-400, 12/91

Factors assigned using the Physical Science Technician Standard: Level IV, Degree D

Factors assigned using the GLG for Aid and Technician Work in Biological Sciences:

EVALUATION FACTORS	POINTS ASSIGNED	FACTOR LEVEL	COMMENTS
1. Knowledge Required	750	1-5	Knowledge of standard, professionally accepted techniques and methods of one or more of the physical sciences to perform complex support work.
2. Supervisory Controls	275	2-3	Supervisor assists with unusual situations; incumbent plans and carries out steps; work reviewed for appropriateness and technical soundness.
3. Guidelines	125	3-2	Incumbent must choose the most appropriate from several guidelines; makes minor deviations.
4. Complexity	150	4-3	Work involves various duties with different and unrelated procedures and methods in support of major natural resources management functions; incumbent identifies problems, considers precedents, and recognizes differences, similarities, and interrelationships before choosing an approach.
5. Scope and Effect	150	5-3	Work affects the accuracy and acceptability of the organization's natural resource management program.
6. Personal Contacts	--	2	Contacts with employees from other organizations and the public in moderately structured setting.
7. Purpose of			Exchange information.

Contacts	45	A	
8. Physical Demands	20	8-2	Prolonged standing, bending, and lifting.
9. Work Environment	20	9-2	Encounters moderate risks which require safety precautions.
TOTAL POINTS	1535		
Grade Conversion	GS-07		



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Other Specializations: Please check if this position is involved in any of these program areas. Because other series and/or standard position descriptions exist to cover the following types of work, none should be the primary focus of the position. Further, it is NOT recommended that any of these specializations be used as a parenthetical to the basic title.

_____ **WATER RESOURCES:** Positions concerned with watershed management and subsurface water; monitors water quality and recommends methods and programs to maintain quality; monitors and/or recommends mitigating actions for land uses.

_____ **AIR QUALITY:** Positions concerned with monitoring and recording air quality data; monitoring and maintenance of testing and data collection equipment; and coordinating data exchange with the EPA and the state.

_____ **GIS:** Positions concerned with mapping, simple data analysis, and some data development using Geographic Information Systems and related equipment.

_____ **CAVES:** Positions concerned with monitoring, researching, and conserving cave and karst management resources.

_____ **GEOLOGY:** Positions concerned with surficial or Quaternary geology, geomorphology, engineering geology, structural geology, stratigraphy, mineralogy, paleontology, and historical geology to apply the associated standard field and laboratory methods to monitor, research, and collect data to support the conservation or understanding of mineralogic, geologic, and related resources; monitors and/or recommends mitigating actions for land uses; and coordinates data exchange with other entities.

_____ **OCEANOGRAPHY:** Positions concerned with monitoring, researching, and conserving the chemical, biologic, and geologic aspects of oceanic environments.

_____ **GEOPHYSICS:** Positions concerned with physics of the structure, composition, and physical properties of the earth and its atmosphere, i.e., science that deals with weather, winds, tides, etc.

_____ **PHYSICS:** Positions concerned with the properties, changes, interactions, etc. of matter and energy; physics is subdivided into mechanical, thermodynamics, optics, acoustics, etc.

_____ **MINING AND MINERALS:** Positions concerned with examining, surveying, inventorying, and sampling abandoned mines and mineral sites.

_____ **CHEMISTRY:** Positions concerned with the investigation, analysis, and interpretation of the composition, molecular structure, and properties of substances; the transformation which they undergo; and the amounts of matter and energy included in these transformations.

_____ **VOLCANOLOGY:** Positions concerned with researching, monitoring, and recording data about volcanoes.