New Mexico State Personnel Office



2600 Cerrillos Road Santa Fe, New Mexico87505-0127

Classification Description

CONSERVATION SCIENTISTS

Class Title	Class Code	Pay Band	Alt Pay Band*
Conservation Scientists-B	F1031B	50	
Conservation Scientists-O	F1031O	55	
Conservation Scientists-A	F1031A	60	

*In accordance with SPB Rule 1.7.4.10 NMAC, the assignment to alternative pay bands shall be reviewed annually to determine their appropriateness.

Occupation Description

Manage, improve and protect natural resources to maximize their use without damaging the environment. May conduct soil surveys and develop plans to eliminate soil erosion or to protect rangelands from fire and rodent damage. May instruct farmers, agricultural production managers or ranchers in best ways to use crop rotation, contour plowing or terracing to conserve soil and water, in the number and kind of livestock and forage plants best suited to particular ranges and in range and farm improvements, such as fencing and reservoirs for stock watering.

Nature of Work

Conservation scientists manage, improve, and protect the country's natural resources. They work with landowners and Federal, State, and local governments to devise ways to use and improve the land while safeguarding the environment. Conservation scientists advise farmers, farm managers, and ranchers on how they can improve their land for agricultural purposes and to control erosion. A growing number of conservation scientists also are advising landowners and governments on recreational uses for the land.

Distinguishing Characteristics of Levels

Note: Examples of Work are intended to be cumulative for each progressively higher level of work. The omission of specific statements does not preclude management from assigning other duties which are reasonably within the scope of the duties.

Basic

 Employees in this Role assist in the management, improvement, and protection of natural resources and in the planning for elimination of soil erosion and protection of rangeland from fire and rodent damage.

Recommended Education and Experience for Full Performance

Associates Degree in Forestry, Range Management, or Ecology and two (2) years of experience in Forestry or Range Management, Ecology, Hydrology, Geology or Watershed Management.

Minimum Qualifications

High school diploma or GED and one (1) year work experience in Forestry or Range Management, Ecology, Hydrology, Geology or Watershed Management.

Operational

- Employees in this Role instruct farmers, agricultural production managers, or ranchers in crop rotation, contour plowing, or terracing.
- Employees assist in facility planning, design and construction; employ research techniques; and review pertinent regulations, laws, manuals, and procedures.

Recommended Education and Experience for Full Performance

Associate's degree in Forestry, Range Management, or Ecology and four (4) years of experience in Forestry or Range Management, Ecology, Hydrology, Geology or Watershed Management.

Minimum Qualifications

High school diploma or GED and two (2) years of experience in Forestry or Range Management, Ecology, Hydrology, Geology or Watershed Management.

Advanced

- Employees in this Role provide consultation on number and kind of livestock and forage plants best suited to particular ranges.
- Employees use water, wastewater, and solid waste treatment method tools, equipment, and materials used in grounds and facilities maintenance and construction; prepare budget and procurement and prepare reports including analysis of existing conditions and recommendations for improvement procedures; conduct interviews, and surveys; identify and research complex management problems; compose or revise policies and procedures.

Recommended Education and Experience for Full Performance

Bachelor's degree in Forestry, Range Management, or Ecology and two (2) years of experience in Forestry or Range Management, Ecology, Hydrology, Geology or Watershed Management.

Minimum Qualifications

Associates Degree in Forestry, Range Management, or Ecology and two (2) years of experience in Forestry or Range Management, Ecology, Hydrology, Geology or Watershed Management. Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling four (4) years may substitute for the required education and experience.

Knowledge and Skills

Note: This information has been produced by compiling information and documentation provided by O*NET. $O*NET^{TM}$ is a trademark of the U.S. Department of Labor, Employment and Training Administration.

Knowledge

Biology — Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.

Law and Government — Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process.

Customer and Personal Service — Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

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Geography — Knowledge of principles and methods for describing the features of land, sea, and air masses, including their physical characteristics, locations, interrelationships, and distribution of plant, animal, and human life.

English Language — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Administration and Management — Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.

Public Safety and Security — Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.

Food Production — Knowledge of techniques and equipment for planting, growing, and harvesting food products (both plant and animal) for consumption, including storage/handling techniques.

Education and Training — Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.

Chemistry — Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.

Skills

Active Listening — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Speaking — Talking to others to convey information effectively.

Judgment and Decision Making — Considering the relative costs and benefits of potential actions to choose the most appropriate one.

Reading Comprehension — Understanding written sentences and paragraphs in work related documents.

Complex Problem Solving — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Coordination — Adjusting actions in relation to others' actions.

Monitoring — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

Negotiation — Bringing others together and trying to reconcile differences.

Active Learning — Understanding the implications of new information for both current and future problem-solving and decision-making.

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Persuasion — Persuading others to change their minds or behavior.

Service Orientation — Actively looking for ways to help people.

Social Perceptiveness — Being aware of others' reactions and understanding why they react as they do.

Writing — Communicating effectively in writing as appropriate for the needs of the audience.

Statutory Requirements: N/A

Conditions of Employment: Working Conditions for individual positions in this classification will vary based on each *agency's utilization*, *essential functions*, and the *recruitment needs* at the time a vacancy is posted. All requirements are subject to possible modification to reasonably accommodate individuals with disabilities.

Default FLSA Status: Non-Exempt. FLSA status may be determined to be different at the agency level based on the agency's utilization of the position.

Bargaining Unit: This position may be covered by a collective bargaining agreement and all terms/conditions of that agreement apply and must be adhered to.

Established: 07/07/2001 Revised: 9/20/2011

*Adapted from the United States Bureau of Labor Statistics and are intended to illustrate the typical education and experience required for this occupation.

Note: Classification description subject to change. Please refer to the SPO website <u>www.spo.state.nm.us</u> to ensure this represents the most current copy of the description.