

Hydrologist, GS-1315-11

Position Number: FS0075 A5068

Introductory Statement: This position is located on a Forest Service unit. This position will work in a team to accomplish field work, data management and analysis, report writing and administration of current oil and gas developments on the Forest.

Collects and Analyzes Hydrology Data 25%

Studies involve analysis of a number of complex variables for a well-defined area. Studies involve such projects as collecting ground water data and analyzing trends; analyzing and interpreting stream flow data, or developing forecasts for simpler hydrologic areas. Assesses and evaluates diverse conditions using various sampling procedures, equipment and analysis methods. Novel problems maybe referred to higher-level hydrologists.

Makes hydrologic analysis for cooperative watershed projects authorized under public law. Assesses the impacts of proposed programs and projects on watershed values.

Establishes and maintains an up-to-date inventory of proposed rehabilitation projects by priorities.

Carries Out Hydrology-Related Study Procedures 25%

Position has wide latitude for exercising independent judgment in performing work that involves complex, intensive investigations into one or more recognized phenomena, such as performing field investigations following wildland fires to appraise damages to the watershed and to assess the effectiveness of watershed rehabilitation projects. Conducts surveys of the water resources of the forest. These surveys include collecting original data, assembling previously collected records, and analyzing and evaluating assembled data to determine water yield in terms of quantity, quality, and distribution over time and area.

Assignments do not involve radical departures from past practices or require the development of new, novel or innovative approaches, methods or techniques.

Prepares Hydrology-Related Reports and Recommendations 25%

Participates in the land management planning process by providing input into the development of the management plan, which involves gathering data, analyzing data, and making recommendations. Participates as required in the development of environmental assessments of environmental impact statements.

Records the results of studies involving extensive hydrologic data. Records study results that include evaluation of data, trend analysis, and recommendations; and interprets the findings in terms of scientific significance. Reports reflect technical adequacy, fulfillment of objectives, and compliance with USDA FS policy.

Reviews Hydrology -Related Literature and Develops Study or Testing Methodology 25%

Adapts conventional methods and techniques for work beyond clear precedents. Plans complex

studies involving intensive investigations into one or more recognized phenomena such as analysis of river volume for flood forecasting or other purposes. Applies conventional methods and techniques, although going beyond clear precedents to adapt methods to the problems at hand. Plans projects or studies which are conventional in nature but of considerable scope.

OTHER SIGNIFICANT FACTS:

Bargaining Unit Status: Eligible.

Performs other duties as assigned.

Performs wildfire suppression support as directed within training and physical capabilities.

Factor 1- 7 Knowledge Required by the Position

The position requires a knowledge of a wide range of hydrologic concepts, principles, and methods applicable to varied and complex problems, projects, or studies that may include diverse geologic, biologic, chemical, or other environmental conditions; and varying hydrologic processes.

Problems encountered demand skill sufficient to modify standard practices adapt precedents, and make significant departures from existing approaches and techniques.

The position requires a knowledge of applicable environmental statutes and regulations.

Factor 2- 4 Supervisory Controls

The supervisor sets the overall objectives and resources available. The Hydrologist and supervisor, in consultation, develop the deadlines, projects, and work to be done, or, in some cases, the Hydrologist may have continuing responsibility for a particular organizational area or specialization.

The Hydrologist, having developed expertise in the specialty area, is responsible for planning and carrying out the assignment; resolving most conflicts as they arise; coordinating the work with others as necessary; and using judgment in interpreting and adapting policies, regulations, and precedents on own initiative in terms of established objectives. In some assignments, such as special studies or evaluations, also determines the approach to be taken and the methodology to be used.

Completed work is reviewed only from an overall standpoint in terms of feasibility, compatibility with other work, or effectiveness in meeting requirements or expected results.

Factor 3- 3 Guidelines

Evaluates, interprets, selects, and applies scientific guidelines to specific cases and requirements; and adapts and modifies existing guides in applying established methods and practices to new situations or in relating new assignments to precedent ones.

Factor 4- 4 Complexity

Plans and coordinates various projects and studies, and makes recommendations/decisions

regarding a range of multifaceted problems. Precedents must be applied to new work situations and guidelines adapted to reconcile conflicting demands.

Factor 5- 3 Scope and Effect

The purpose of the work is to apply established scientific techniques to investigate and analyze various conventional problems and questions or to investigate and analyze discrete aspects of more complex problems.

Work products contribute materially to the effectiveness of completed projects.

Factor 6- 3 Personal Contacts

Personal contacts include a wide range of professional and administrative personnel throughout the agency, at other federal agencies, in state and local government, private industry, academia, and environmental advocacy groups.

Factor 7- 3 Purpose of Contacts

The purpose of contacts is to influence or negotiate with others who may be skeptical or uncooperative or whose interests differ from those of the program represented. Issues to be resolved are sensitive or controversial. Contacts are also undertaken to plan, coordinate, or advise on work efforts or resolve operating problems in dealings with others who are working toward mutual goals.

Factor 8- 2 Physical Demands

The work regularly requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky terrain; recurring bending, crouching, stooping, stretching, or reaching; or recurring moving, lifting and carrying of moderately heavy items.

Factor 9- 2 Work Environment

The work regularly involves moderate risks or discomforts associated with visiting field sites that require special safety precautions.