

PD Tracking Number 0000015

Incumbent of this position serves as a student trainee under the Student Career Experience Program. This program is designed to provide the student with work experience directly related to their academic field of study and to orient and expose the student to the mission and work of the U.S. Geological Survey and the benefits and conditions of Federal employment. It provides formal periods of work and study while the student is enrolled in school, the conditions of which are outlined in the Working Agreement that must be signed by the student, the school, and the employing Office.

Major Duties

The incumbent, as an entry level trainee hydrologist, is assigned duties directed toward providing practical experience in hydrologic data collection and analysis and training for the development of professional competence in the scientific areas of and related to hydrology. Typical assignments may include:

- Uses a variety of methods and equipment to: collect hydrologic data including stage records for streams, lakes, and wells; collect and preserve water samples for the analysis of chemical, sediment, or biological characteristics; make discharge measurements; run levels to gages and wells.
- Checks discharge measurement computations; computes mean daily gage heights or prepares digital recorder tapes for computer processing; develops rating curves depicting the relationship between stage and discharge; and computes and compiles daily discharge values.
- Assists higher grade hydrologist on project work by performing duties such as:
 1. Measuring flood peaks indirectly by using transits or levels;
 2. Collecting and logging geologic samples at well sites; observing well drilling operations, or, performing pump test;
 3. Preparing graphic representation of hydrologic data by way of maps, charts, hydrographs, and frequency curves;
 4. Determining the chemical or biological components of water for QW studies; and
 5. Preparing changes to standard computer programs or spot-checking printouts to detect sources of errors.
- Writes reports on non-complex hydrologic studies or writes selected sections of broader, complex investigative reports.
- Operates a Government vehicle as an incidental driver.

Factor Statements

FACTOR 1 - KNOWLEDGE REQUIRED BY THE POSITION (Level 1-5, 750 points)

- Knowledge of theories, principles, practices and techniques of hydrology, hydraulics, geology,

and/or engineering (as would be obtained through a Bachelor's Degree) to aid in the proper interpretation of scientific and technical data.

- Knowledge of Survey principles, methods, and practices in order to collect, adjust, correlate and interpret hydrologic data by Survey standards.

- Skill in using hydrologic-data collection and analysis equipment in the field and in the office.

- Skill in writing clear presentations of scientific data.

STUDENT TRAINEE (HYDROLOGY), GS-1399-5

FACTOR 2 - SUPERVISORY CONTROLS (Level 2-2, 125 points)

Supervisor clearly assigns work orally or in writing; exercises direct control over work; determines objectives, priorities and deadlines; and instructs on new, unusual, or difficult procedures. Routine assignments may be performed independently. New assignments or work situations are discussed with the supervisor. Thorough review of work is made in progress and upon completion.

FACTOR 3 - GUIDELINES (Level 3-1, 25 points)

Survey policies, regulations, and standard practices generally dictate procedures to be followed. USGS TWRI Handbooks provide specific guidelines for data collection and analysis activities. Previous hydrologic studies and records may also serve as guides. Specific instructions from the supervisor and USGS policy and procedures limit the interpretation of available guides. Supervisors are consulted when unclear or conflicting guidelines exist. However, in the field, situations will arise that require the adaptation of normally standard methods of hydrologic data collection.

FACTOR 4 - COMPLEXITY (Level 4-2, 75 points)

Work assignments provide a variety of experience and training to extend knowledge and to develop an understanding of hydrologic and the complex interrelations of hydrologic systems. Incumbent determines methodology for routine assignments that are well-defined and which require the use of a few sequential procedures to accomplish work.

FACTOR 5 - SCOPE AND EFFECT (Level 5-1, 25 points)

The purpose of the work is to provide unbiased hydrologic data for inclusion in the annual report and/or a hydrologic study. The work contributes to hydrologic information that serves as a basis for the responsible management of water resources by local, state, and other Federal agencies.

FACTOR 6 - PERSONAL CONTACTS (Level 6-1, 10 points)

Personal contacts are typically limited to co-workers in the District except, while in the field, the incumbent may be required to deal with the general public.

FACTOR 7 - PURPOSE OF CONTACTS (Level 7-1, 20 points)

Purpose of contacts within the organization is to obtain or exchange information on assignment; and, in the field, to obtain from landowners access to hydrologic data collection sites.

FACTOR 8 - PHYSICAL DEMANDS (Level 8-2, 20 points)

The position requires moderate periods of standing and sitting while in the office. While in the field, considerable walking, lifting, bending, climbing and stream wading is necessary to collect data.

FACTOR 9 - WORK ENVIRONMENT (Level 9-2, 20 points)

Office conditions are normal; field conditions may include extreme heat or cold, rain or snow, and

hazardous conditions such as ice or flooding.

TOTAL POINTS - 1070

GRADE CONVERSION - GS-05

GS-1300, Job Family Standard for Professional Physical Science Work, 10/97

Introduction to the Position Classification Standards

Primary Standard (Source Document Std PD S00228)