

Code: 2383

Title: HYDROLOGIST-PRINCIPAL

SUMMARY: Supervises and participates in the work of professional hydrology staff in the creation, review and analysis of hydrologic and hydraulic reports and studies, approves/disapproves floodplain use permit applications, evaluates groundwater quality and directs the study and placement of remote sensing equipment. This classification also represents the Flood Control District or Wastewater Management as a technical expert in assessment and maintenance of groundwater quality, permissible floodplain use and management, channel design and related technical issues.

DUTIES/RESPONSIBILITIES: (Work assignments may vary depending on the department's needs and will be communicated to the applicant or incumbent by the supervisor)

Supervises professional and support staff performing hydrologic and hydraulic studies and reviewing studies submitted by developers and engineering firms;
Reviews and approves/disapproves development plans, improvement plans and subdivision plats for compliance with the Floodplain Management Ordinance(s) and channel design standard;
Interprets the Floodplain Management Ordinance(s) and other laws, rules and regulations dealing with floodplains and hydrology;
Represents the Flood Control District at meetings of the Subdivision and Development Review Committee (SDRC);
Reviews floodplain use permit applications and issues/denies the permit;
Directs consultants investigating groundwater quality at county wastewater treatment facilities and waste disposal sites;
Evaluates and interprets groundwater quality data;
Determines the need for and supervises the installation and maintenance of groundwater quality monitoring, rain gauges, storm tracking and flood warning systems;
Establishes and reviews Wastewater Management standards and procedures to insure compliance with Environmental Protection Agency (EPA) guidelines;
Meets with consulting engineers to explain deficiencies in hydrologic and hydraulic reports and to resolve differences;
Determines the need for and supervises the installation and maintenance of rain, gauges, flow meters and other components of the flood warning system;
Develops and administers master drainage basin plans;
Serves as Flood Control District representative for the creation of flood control policies for area plans;
Determines the need for and coordinates the installation of special equipment such as storm tracking display and lightening detection and recording systems;
Prepares the budget for the section supervised and monitors expenditures.

KNOWLEDGE & SKILLS:

Knowledge of:

- development and management practices for long-range basin management plan and groundwater quality investigations and monitoring;
- principles and practices of surface/ground water hydrology and pollution source management;
- provisions and restrictions of the Floodplain Management Ordinance(s) or federal, state and local regulations relevant to the control of groundwater quality;
- specifications and formats for hydrologic and hydraulic reports;
- storm drainage and channel design standards in alluvial channels;
- principles and practices of supervision and management.

Skill in:

- applying hydrologic and hydraulic principles and making calculations;
- reviewing hydrologic/hydraulic reports for accuracy and technical sufficiency;
- coordinating diverse hydrological, engineering and operational activities;

- gathering and analyzing hydrologic/hydraulic data;
- use of computer-based resources to create, maintain, manipulate and report data and activities;
- reading and interpreting topographic maps, aerial photos, legal descriptions, sketches and graphs;
- reviewing and evaluating the work of other professional, paraprofessional and administrative staff;
- preparing and monitoring budgets;
- communicating effectively.

MINIMUM QUALIFICATIONS:

EITHER:

(1) A Bachelor's degree from an accredited college or university with a major in hydrology, hydrogeology, geology, watershed management or a major in civil engineering with a minor in hydrology, hydrogeology or watershed management and six years of experience in hydrology, hydrogeology or watershed management. [A Master's degree from an accredited college or university in one of the cited disciplines may substitute for one year of experience. An earned doctoral degree from an accredited college or university in one of the cited disciplines may substitute for two years of experience]

OR:

(2) Eight years of professional experience in hydrology, hydrogeology or watershed management.

OTHER REQUIREMENTS:

Licenses and Certificates: Some positions may require a valid Arizona Class D driver's license at the time of appointment or prior to completion of initial/promotional probation.

Physical/Sensory Requirements: Some positions may require working in the field in extremes of temperature, sun, wind, rain and dusty conditions for protracted periods. Additional physical and sensory abilities will be determined by position.

This class specification is intended to indicate the basic nature of positions allocated to the class and examples of typical duties that may be assigned. It does not imply that all positions within the class perform all of the duties listed, nor does it necessarily list all possible duties that may be assigned.

Pima County

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