

*Code: 2382*

*Title: HYDROLOGIST - SENIOR*

**SUMMARY:** This classification reviews and approves hydrologic and hydraulic reports submitted with or accompanying development plans, improvement plans, subdivision plats and floodplain use permits; analyzes hydrology/hydraulic and groundwater data from field inspections, remote sensing equipment, geographic information systems, and inspects sites for compliance with Floodplain Management Ordinance(s) and related rules, regulations and standards.

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

Reviews and approves hydrologic and hydraulic reports submitted with development plans, improvement plans, subdivision plats and floodplain use permits;  
Inspects subdivision and development sites to verify accuracy of hydrologic data;  
Reviews and recommends approval/disapproval of development plan waiver requests;  
Investigates drainage complaints and cites violators of the Floodplain Management Ordinance(s);  
Assists in the development of groundwater monitoring programs and implements approved programs;  
Compiles and reviews groundwater quality data;  
Monitors groundwater quality at County wastewater treatment facilities and landfills;  
Assists in the direction of outside consultants investigating groundwater quality at County wastewater treatment facilities and landfills;  
Coordinates and oversees the drilling of groundwater quality monitor wells;  
Conducts groundwater pumping tests and interprets pumping test data;  
Assists in the establishment and review of liquid and solid waste management standards and procedures to insure compliance with state and Federal Environmental Protection Agency guidelines;  
Conducts hydrologic and hydraulic studies and prepares reports;  
Identifies flood status of land parcels and delineates permitted uses and restrictions in accordance with Floodplain Management Ordinance(s) and channel design standards;  
Estimates flood hazards and develops floodplain maps using computerized hydrologic and hydraulic analysis;  
Reviews hydrologic and hydraulic aspects of flood control improvement projects for compliance with the Floodplain Management Ordinance(s) and channel design standards;  
Monitors the flood control warning system and interprets system data;  
Inspects flood control improvement projects to insure compliance with design specifications;  
Reviews and approves/disapproves site analyses submitted with rezoning applications.

**KNOWLEDGE & SKILLS:**

Knowledge of:

- backwater and other hydraulic computations;
- principles and practices of surface water hydrology or groundwater 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;
- field investigation and inspection techniques;
- specifications and formats for hydrologic and hydraulic reports;
- drainage and channel design standards.

Skill in:

- gathering and analyzing hydrologic data;
- reading and interpreting topographic maps, aerial photos, legal descriptions, sketches and graphs;
- applying hydrologic and hydraulic principles and making calculations;
- communicating effectively;
- technical writing and editing;
- reviewing reports for format, content and completeness.

MINIMUM QUALIFICATIONS:

EITHER:

(1) A Bachelor's degree from an accredited college or university with a major in hydrology, hydrogeology, geology or watershed management (or a Bachelor's degree from an accredited college or university in civil engineering with a minor in hydrology, hydrogeology or watershed management), and two 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.)

OR:

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

OR:

(3) Three years of experience with Pima County as a Hydrologist.

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

Pima County

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