

HYDROLOGIST 4

KIND OF WORK

Advanced supervisory work in hydrology, hydraulics, and water resource management.

NATURE AND PURPOSE

Under administrative direction, supervises professional and technical staff in broad areas of assignments to ensure the wise use, conservation, and preservation of the state's water resources. This position requires a seasoned technical proficiency gained through wide exposure or experiences combining a broad grasp of involved practices and precedents and hydrologic theory and principles plus an ability to understand, select, develop, motivate and supervise people; develops procedures and long-term goals and projects for lower level hydrologists and other staff and often solves problems requiring inductive thinking to develop new solutions; has a primary accountability for programs within practices and procedures covered by precedents or policies; performs related work as required.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Supervises surface water investigations and analyses to determine impacts of proposed withdrawals or diversions of on bodies of water and to establish limits on use in order to protect these resources for recreational, aesthetic, pollution control, and other reasons.

Supervises studies and preparation of reports describing the availability, distribution, use, quality, and problems of Minnesota's groundwater supplies so that groundwater allocation decisions are based on sound technical information.

Provides or supervises the preparation of expert testimony on technical aspects of water allocation and management for presentation at meetings, court proceedings or hearings involving Minnesota's ground and surface water resources so that the DNR's Waters Division position is clearly described for the record and its scientific basis documented.

Supervises Industrial Minerals Section staff responsible for identification and evaluation of sand and gravel, clay, crushed rock, industrial sand, marl, and other industrial mineral resources so that the programs are prioritized and handled in an efficient and orderly manner.

Supervises the implementation and administration of a statewide permit system in order to provide for the wise management of protected waters and wetlands consistent with DNR's legislative authority to control all projects which will affect the course, current, or cross-section of protected waters and wetlands.

Supervises the development and implementation of statewide water appropriation management and allocation plans for surface and groundwater resources including the development of conservation and drought contingency plans so that the resource is protected and water supplies are appropriately allocated for existing and future needs.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

Knowledge of:

Principles of hydrology, hydraulics, geohydrology, geochemistry, and groundwater quality protection.

Principles and practices of land use planning, groundwater protection, and land use controls.

Principles and practices of water resource management and groundwater quality protection.

Water law.

Principles and practices of electronic data processing.

Local, state and federal water resource programs.

Ability to:

Coordinate and direct activities related to several large water resources projects or programs of considerable complexity.

Supervise the work of others.

Communicate effectively verbally and in writing.

Est.: 12/15/76

Rev.: 3/81 Former Title(s):

T.C.: 4/84

Hydrologist Principal