

**BENCHMARK POSITION DESCRIPTION – BM #19
MINISTRY OF ENVIRONMENT**

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|--------------------------------|--------------------------------|
| 1. POSITION TITLE | 2. CLASSIFICATION LEVEL |
| Regional Hydrologist Engineer | LSO 3 |
| 3. DIVISION | 4. BRANCH |
| Water Stewardship | Regional Operations |
| 5. IMMEDIATE SUPERVISOR | 6. LOCATION |
| Section Head | Various |

Program Function Describe the purpose of the program and organization in which the position operates.

The Division leads innovative approaches to water governance, develops legislation and non-regulatory tools, and is responsible for administering several Acts. Other program areas include water planning, source drinking water protection, and water utility regulation.

Purpose of Position and Summary of its Functions This may be used for POSTING purposes.

As the regional hydrology expert, the position is responsible for providing expert technical advice to program managers, ministry staff and others and planning and conducting a variety of hydrology and/or fluvial geomorphology studies. The position also participates in the review of applications for water reserves for First Nation Treaty Settlement Lands and a variety of other plans and exercises statutory authority under current legislation.

Organizational Structure and Working Environment

This is one of up to six positions reporting to the Section Head who in turn reports to the Regional Manager, Water Stewardship. The position functions with minimal direction and interacts with Ministry management and staff, local government, First Nations, industry, resource and other agencies, public interest groups, media, universities, federal government and external consultants/contractors.

Position's Specific Functions and How They are Performed

- 1. 30% Plans and conducts a variety of hydrology and/or fluvial geomorphology studies by:**
 - Defining terms of reference for studies to resolve complex and/or controversial land-water interface and water resource applications, problems and conflicts
 - Compiling, estimating and analyzing climatic and hydrometric data to assess hydrologic risks associated with complex water applications
 - Reviewing and providing expert technical advice on the implementation of hydrometric and climatologic data collection programs proposed by applicants
 - Developing and/or adapting complex hydrologic computer design models
 - Consulting with research agencies, hydro-technical experts, geo-morphologists, hydro-geologists, geotechnical engineers and other specialists
 - Developing solutions and writing and presenting technical reports

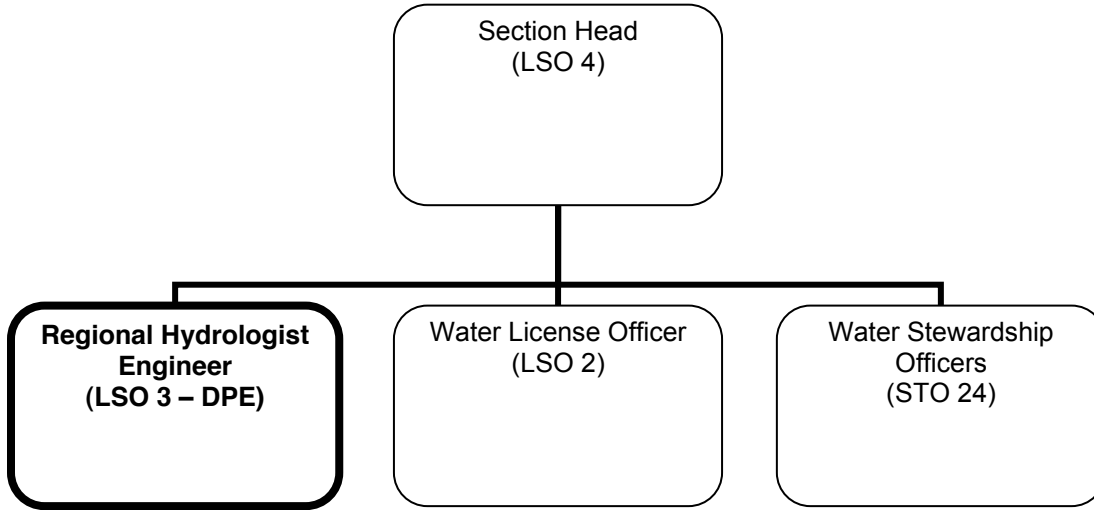
- 2. 35% Provides technical advice to program managers, ministry staff, other provincial ministries, other agencies, local governments, engineering consultants, industry and the general public by:**
 - Evaluating, analyzing and interpreting data and information
 - Designing, organizing and delivering training sessions for ministry staff
 - Holding field demonstrations on the collection of hydrometric and meteorological information
 - Writing procedural manuals and handbooks
 - Representing the region and/or the ministry on inter-governmental and/or other technical committees
 - Providing expert advice on the implementation of proposed hydrometric and climatologic data collection programs

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- Assessing the hydrological risk implications on design and operation of works associated with major projects
 - Leading and directing negotiations required to resolve complex water use problems and conflicts
 - Developing, maintaining and distributing hydrological and meteorological databases
 - Issuing or supporting staff in the process of issuing complex or controversial approvals and licenses for water use under the water act
 - Representing the ministry as the regional hydrology expert in often high profile, contentious and/or politically sensitive meetings
 - Advising on the appropriate equipment, specific site conditions, collection, analysis and interpretation of hydrologic and meteorological data
 - Interpreting a variety of meteorological and other information for risk assessments of floods and droughts and providing expertise to emergencies
 - Attending seminars, workshops and national/international symposia
- 3. 20% Participates in the review of applications for water reserves for First Nation Treaty Settlement Lands and a variety of other plans and planning exercises by:**
- Ensuring water availability issues and opportunities for water use are clearly identified within the planning area
 - Preparing and updating all new/existing water allocation plans
 - Providing plans to clients, staff and other agencies to promote economic diversity, growth and opportunity
- 4. 10% Exercises statutory authority pursuant to current legislation as an engineer under the Act by:**
- Issuing Engineers Orders directing others regarding the inspection, regulation, alteration and installation of works
 - Issuing Orders regulating the diversion, storage and use of water by licensees and others
 - Issuing Orders regarding the placement in or removal of materials from a stream
 - Defending Orders that may be appealed by testifying at Environmental Appeal Board Hearings
- 5. 5% Performs other related duties**

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ORGANIZATION CHART – REGIONAL HYDROLOGIST ENGINEER



**BENCHMARK CLASSIFICATION RATIONALE – BM #19
MINISTRY OF ENVIRONMENT**

TITLE: Regional Hydrologist - Engineer

LEVEL: LSO 3

DIVISION/BRANCH: Water Stewardship/Regional Operations

| FACTOR | POINTS |
|--|---------------|
| <p><u>PURPOSE OF POSITION</u> The position is responsible for providing expert technical advice to program managers, ministry staff and others and planning and conducting a variety of hydrology and/or fluvial geomorphology studies. The position also participates in the review of applications for water reserves for First Nation Treaty Settlement Lands and a variety of other plans and exercises statutory authority under current legislation.</p> <p><u>KNOWLEDGE</u> The work requires a considerable depth of knowledge of hydrology to plan and conduct a variety of hydrology and/or fluvial geomorphology studies and develop complex hydrologic computer design models. Assessing the hydrological risk implications on design and operation of works associated with major projects and undertaking risk assessments of floods and droughts is interpretive and analytical work which requires the position to make some judgements based on considerable field experience.</p> <p>Requires registration as a Professional Engineer.</p> | D(2) 113 |
| <p><u>JUDGEMENT</u> <u>Originality and Complexity:</u> The position makes major adaptations to previously developed hydrological solutions by developing and/or adapting complex hydrologic design models. The position analyzes a variety of complex hydrometric and climatologic data and interprets the results to define terms of reference for studies to resolve complex and/or controversial land-water interface problems. The position also uses the results of the analysis of that data to provide expert advice on data collection program proposals, and risk assessments of floods and droughts.</p> <p><u>Technical Supervision Received:</u> The position's work is reviewed upon completion for adequacy and completeness and to ensure any proposals for major adaptations to the alteration and installation of works or regulating the diversion, storage and use of water by licensees and others is consistent with ministry policy.</p> | C2 86 |
| <p><u>ORGANIZATION AND PROGRAM ROLE</u> The position makes authoritative decisions when issuing Engineers Orders directing others regarding the inspection, regulation, alteration and installation of works, regulating the diversion, storage and use of water by licensees and others, and or issuing Orders regarding the placement in or removal of materials from a stream.</p> | III(a) 50 |
| <p><u>ADMINISTRATIVE SUPERVISORY RESPONSIBILITY</u> The position does not administratively supervise.</p> | 0 |

TOTAL POINTS 249

| LEVEL | POINT RANGE |
|-----------------|-------------------------|
| 1 | 168 – 203 |
| 2 | 204 – 237 |
| <u>3</u> | <u>238 – 267</u> |
| 4 | 268 – 295 |
| 5 | 296 – 365 |