

Position Number: **Benchmark Job #370**

Ministry: Environment, Lands and Parks

Branch: Hydrology

Location: Victoria

Working Title: **Snow Survey Technician**

Level: Range 18

NOC Code: 2213

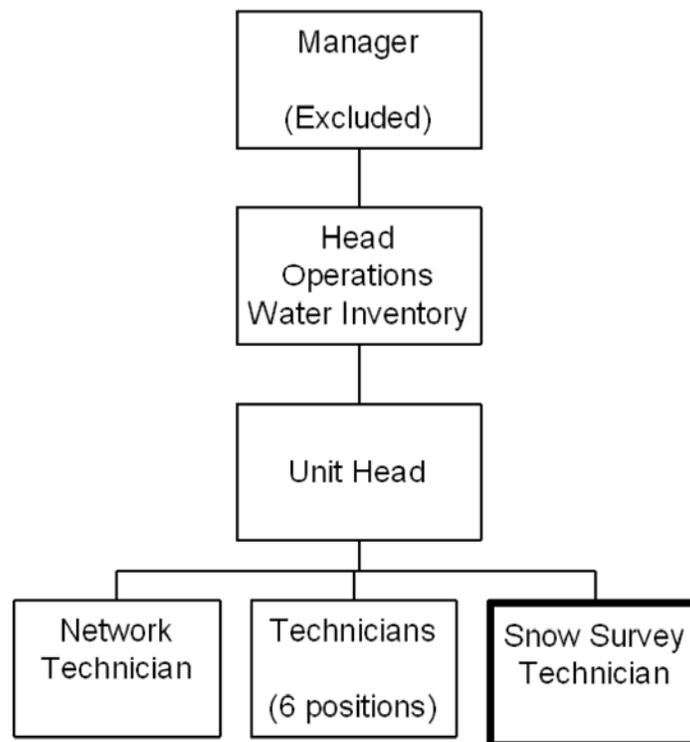
## PRIMARY FUNCTION

To coordinate the operation of the provincial manual snow survey data collection network.

## JOB DUTIES AND TASKS

1. Operates the manual snow survey network data collection and dissemination centre
  - a. collates and assesses snow survey field reports from over 260 snow courses and checks incoming data for quality
  - b. advises regional staff, external agencies and contract snow surveyors of corrective action required to maintain data integrity
  - c. monitors the regional snow survey programs and prepares an annual performance report with a region by region analysis of accomplishments and technical difficulties and provides recommendations for remedial action to identified problems
  - d. provides snow data and related information to internal and external agencies and organizations
  - e. liaises with staff from regions, external agencies, private industry and other levels of government to procure snow survey data and provide advice and guidance on snow survey data collection
  - f. examines and recommends changes to the provincial snow survey policy and procedures, operational guidelines, and support publications
  - g. prepares snow survey instructional material and guidelines to guide regional staff and contractors in snow survey duties and creates and delivers instructional material in workshops
  - h. coordinates the preservation of all original snow survey notes for archival purposes
2. Monitors and assesses the manual snow survey operations for assigned regional and cooperator networks
  - a. attends field site locations by travelling in 4x4 vehicles, snowmobiles or helicopter, often in severe weather conditions in areas of potential avalanche hazard
  - b. monitors snow survey problems based on snow surveyor's reports and responds to identified problems with equipment, vandalism, data sampling, encroachment, and related problems
  - c. inspects the condition of snow courses and ensures standards are met and legal protection is established in compliance with various acts and regulations
  - d. recommends snow course upgrade requirements and plan and installs new snow courses by accessing maps, air photos and access points, and recommends the deactivation of existing sites
  - e. prepares and updates preliminary snow survey station reference maps and individual station location plots
  - f. provides technical advice and training in the areas of snow surveying techniques, snow course maintenance, data quality control standards, and work-site hazard evaluation

- g. supports snow pillow station construction, installation and testing
- 3. Maintains the provincial snow survey equipment inventory
  - a. monitors the snow survey equipment inventory, tracks the location of equipment, monitors its use in the field and ensures equipment is recovered.
  - b. assigns equipment to regions and ensures that users are apprised of handling procedures for valuable precision equipment
  - c. checks and calibrates weigh scales and cutter heads to provincial standards, repairs and cleans snow equipment, and assembles survey sampling kits
  - d. prepares requisitions for purchase orders for snow survey and related equipment and ensures that equipment is received in working order and meets specifications
- 4. Performs related duties
  - a. participates in technical conferences
  - b. reads applicable journals and literature for relevant information



FACTOR	REASON FOR CLASSIFICATION	DEGREE	POINTS
1	<p><b>JOB KNOWLEDGE</b></p> <p>Have a practical understanding of hydrology data collection with an emphasis on snow pack measurement to operate a provincial snow survey network and collect snow survey data.</p>	F	190
2	<p><b>MENTAL DEMANDS</b></p> <p>Judgement to apply structured study, analysis and interpretation of data collected through the snow survey network to assess snow survey field reports and evaluate manual snow survey operations using a combination of accepted procedures and measurement equipment to support the snow pack information needs of the ministry and various external agencies.</p>	E	150
3	<p><b>INTERPERSONAL COMMUNICATIONS SKILL</b></p> <p>Discretion required to exchange information needing explanation regarding snow survey data that is collected by others and to provide instruction on collection methodologies.</p>	C	30
4	<p><b>PHYSICAL COORDINATION AND DEXTERITY</b></p> <p>Significant coordination and dexterity is required to use precision snow survey station equipment to precise tolerances.</p>	D	22.5
5	<p><b>RESPONSIBILITY FOR WORK ASSIGNMENTS</b></p> <p>Guided by hydrological data collection guidelines and standards, applies accepted work methods in a different way to collect snow survey information required by various agencies, determine new snow survey geographic courses, and determine snow course upgrade requirements.</p>	E	120
6	<p><b>RESPONSIBILITY FOR FINANCIAL RESOURCES</b></p> <p>Moderate financial responsibility to certify that equipment orders arrive in acceptable condition and meet specifications.</p>	D	22.5

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7	<b>RESPONSIBILITY FOR PHYSICAL ASSETS/INFORMATION</b> Significant responsibility to perform temporary repairs to snow survey station equipment.	D	22.5
8	<b>RESPONSIBILITY FOR HUMAN RESOURCES</b> Responsibility to provide formal training to others on snow survey data collection.	B	9
9	<b>RESPONSIBILITY FOR WELL BEING/SAFETY OF OTHERS</b> Moderate care and attention to operate 4x4 vehicles as a designated driver.	C	15
10	<b>SENSORY EFFORT/MULTIPLE DEMANDS</b> Focused sensory concentration requirement frequently to visually focus on snow survey data reports.	C	12
11	<b>PHYSICAL EFFORT</b> Heavy physical effort to frequently hike and climb to data collection sites carrying measurement equipment in a pack.	E	24
12	<b>SURROUNDINGS</b> Exposure on a regular basis to isolated field conditions with no available shelter.	C	6
13	<b>HAZARDS</b> Moderate exposure to hazards from performing work on field trips to remote areas on a regular basis where hazards of avalanches exist.	C	6

Total Points: 629.5

Level: Range 18