

Ministry: Environment, Lands and Parks
Branch: Hydrology
Location: Victoria

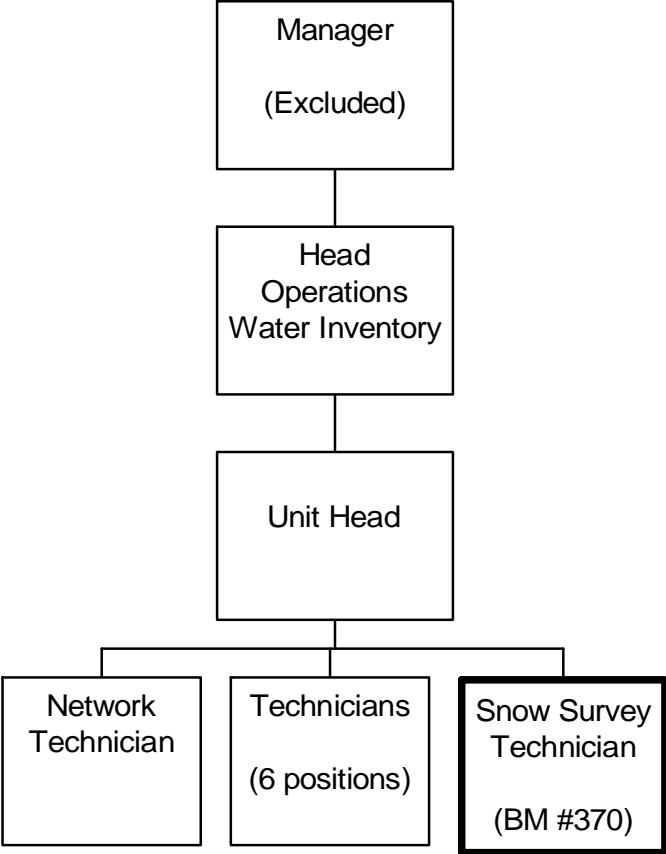
Working Title: **Snow Survey Technician**
Level: Range 18
Classification: Scientific Technical Officer

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



REASON FOR CLASSIFICATION

Benchmark Job #370

Job Title: Snow Survey Technician

FACTOR NO.	REASON FOR CLASSIFICATION	DEGREE	CLASS. POINTS
1	<p>JOB KNOWLEDGE 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>MENTAL DEMANDS 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>INTERPERSONAL COMMUNICATIONS SKILL 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>PHYSICAL COORDINATION AND DEXTERITY Significant coordination and dexterity is required to use precision snow survey station equipment to precise tolerances.</p>	D	22.5
5	<p>RESPONSIBILITY FOR WORK ASSIGNMENTS 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>RESPONSIBILITY FOR FINANCIAL RESOURCES Some financial responsibility to certify that equipment orders arrive in acceptable condition and meet specifications.</p>	C	15
7	<p>RESPONSIBILITY FOR PHYSICAL ASSETS/INFORMATION Considerable responsibility to provide training and advice to regional staff, external agencies and contract snow surveyors on the snow survey data collection network including corrective action required to maintain data integrity.</p>	E	33

REASON FOR CLASSIFICATION

Benchmark Job #370

Job Title: Snow Survey Technician

FACTOR NO.	REASON FOR CLASSIFICATION	DEGREE	CLASS. POINTS
8	RESPONSIBILITY FOR HUMAN RESOURCES Responsibility to provide formal training to others on snow survey data collection.	B	9
9	RESPONSIBILITY FOR WELL BEING/SAFETY OF OTHERS Moderate care and attention to operate 4x4 vehicles as a designated driver.	C	15
10	SENSORY EFFORT/MULTIPLE DEMANDS Focused sensory concentration requirement frequently to visually focus on snow survey data reports.	C	12
11	PHYSICAL EFFORT Heavy physical effort to frequently hike and climb to data collection sites carrying measurement equipment in a pack.	E	24
12	SURROUNDINGS Exposure on a regular basis to isolated field conditions with no available shelter.	C	6
13	HAZARDS 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: 632.5

Level: Range 18